June 2017

Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration

Final Report—Appendices

Prepared for

Suzanne G. Wensky, PhD
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop WB-06-05
Baltimore, MD 21244-1850

Prepared by

RTI International
3040 Cornwallis Road
Research Triangle Park, NC 27709

The Urban Institute
National Academy for State Health Policy

RTI Project Number 0212790.005

RTI INTERNATIONAL

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Final Report—Appendices

by

RTI International

Donald Nichols, Project Director
Susan Haber, Deputy Project Director
Melissa Romaire, Deputy Project Director

Joshua M. Wiener
Musetta Leung
Kevin Smith
Nathan West
Asta Sorensen
Kathleen Farrell
Leila Kahwati
Jerry Cromwell
Pamela Spain
Noëlle Richa Siegfried
Amy Kandilov
Vincent Keyes
Will Parish
Chris Beadles
Ann Larsen
Carol Urato

Ellen Wilson
Lisa Lines
Stephanie Kissam
Rebecca Perry
Patrick Edwards
Shellery Ebron
Mark Graber
Yiyan (Echo) Liu
Benjamin Koethe
Jenna Brophy
Andrew Kueffer
Amy Mills
Denise Clayton
Lindsay Morris
Rebecca Lewis

Sarah Arnold
Sophia Kwon
Konny Kim
Heather Beil
Denise Clayton
Kent Parks
Rose Feinberg
Timothy O'Brien
Matt Urato
Alon Evron
Elise Hooper
Huiling Pan
Laxminarayana Ganapathi
Brendan DeCenso*
Martijn Van Hasselt*

The Urban Institute

Stephen Zuckerman
Nicole Cafarella Lallemand

Rachel Burton
Rebecca Peters

Robert Berenson
Kelly Devers**

National Academy for State Health Policy

Kathy Witgert
Neva Kaye
Diane Justice

Barbara Wirth
Charles Townley

Rachel Yalowich
Mary Takach***

Federal Project Officer: Suzanne G. Wensky

RTI International
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*Formerly with RTI International
**Formerly with the Urban Institute
***Formerly with the National Academy for State Health Policy

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APPENDIX A
RESEARCH QUESTIONS, METHODS, AND DATA SOURCES

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Table A-1
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Measuring State Initiative Implementation and Evolution		
1. What are the features of the state initiative? 2. Which features of the state initiative (e.g., community-based resources, learning collaborative, feedback reports) are used by participating PCMHs and Medicare and Medicaid beneficiaries and to what extent? What impacts resulted from their use? Which features were most useful? What features were not as helpful or need improvement? 3. Does Medicare's participation in the state initiative have any spillover effects on states' Medicaid programs or private payers? For example, did Medicare's participation in the state initiative cause any cost shifting from one program to another? 4. What changes did payers make in order to take part in the state initiative and meet the participation requirements? What was involved in making these changes? How long did it take to implement these changes? What challenges did they face? What lessons were learned from the experience? 5. What kinds of structural and/or organizational changes were made to accommodate Medicare's participation in the state initiative and to better serve the needs of Medicare beneficiaries? How did administrative burdens and resource allocations change as a result of Medicare's participation? What new features did the states add to their initiative and what new partnerships did they establish to better serve the needs of Medicare beneficiaries? 6. What were participants' experiences with the MAPCP Demonstration? What lessons were learned from the experience? What advice do they have if the demonstration were to be extended or expanded? Participants include initiative staff and their contractors/vendors, payers. 7. How do the state agency and participating communities use the PCMH payments? For example, with the additional funds, do they increase the number of participating practices or communities, expand the size or scope of the initiative, implement additional interventions, or add staff?	• Within-state qualitative data analyses using case study methods and NVivo software for data management and analysis of four domains: scope of the demonstration; requirements of participating practices; supports to improve the delivery of care; and payment model, amounts, and uses • Descriptive analyses establishing the scope of the demonstration: number and characteristics of participating practices, number and characteristics of participating Medicare and Medicaid beneficiaries, and population served (patient eligibility requirements and patient attribution process) • Development of state initiative-level variables for inclusion in within- and cross-state modeling of selected outcomes using mixed methods (see quantitative outcomes analyses and cross-state qualitative and quantitative analyses below)	• Key informant interviews with state officials, MAPCP Demonstration program staff, state program evaluators, Medicaid state program officials, participating private payers, and other key informants (e.g., Office of Aging staff, patient advocates) • State- or state evaluator-provided information or data • Review of source documentation from each state's MAPCP Demonstration application and modifications • Review of state quarterly progress reports • Review of state policymakers' exchange through the NASHP medhome-builder electronic mailing list • Scan of national reports, including daily digests and research journals, newsletters, and newspapers • Ongoing communication with state policy staff • Medicare EDB and claims data

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Practice Transformation Evaluation		
8. What are the features of participating PCMHs? How do features of the participating PCMHs vary? 9. Which features of the state initiative (e.g., community-based resources, learning collaborative, feedback reports) are used by participating PCMH practices and to what extent? What impacts resulted from their use? Which features were most useful? What features were not as helpful or need improvement? 10. What changes did practices make in order to take part in the state initiative and meet the participation requirements? What was involved in making these changes? How long did it take to implement these changes? What challenges did they face? What lessons were learned from the experience? 11. What kinds of structural and/or organizational changes were made to accommodate Medicare's participation in the state initiative and to better serve the needs of Medicare beneficiaries? How did administrative burdens and resource allocations change as a result of Medicare's participation? 12. What were participants' experiences with the MAPCP Demonstration? What lessons were learned from the experience? What advice do they have if the demonstration were to be extended or expanded? Participants include community-based and practice staff. 13. How do the participating practices use the PCMH payments? 14. Which payment methods and payment amounts are most effective in producing positive impacts? What problems occurred in implementing the payment methodologies and how were they resolved? 15. How much does it cost to implement and sustain the various features of a PCMH practice? What payment amount is sufficient to offset those costs? What payment methodology is best suited for financially supporting practices in their medical home transformation? 16. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in more efficient delivery of health services to Medicare and Medicaid beneficiaries? If so, what features facilitate more efficient delivery of health care services and what outcomes result from these efficiency improvements?	• Within-state qualitative data analyses using case study methods and NVivo software for data management and analysis of domains related to practice transformation activities and the perceived effects that the state initiative's features have on their transformation and performance (see proposed additional analyses below related to patient safety, access to and coordination of care, and special populations) • Within-state qualitative analysis of process transformation activities related to efficiency • Development of practice-level variables, including CHTs, for inclusion in within- and cross-state modeling of selected outcomes (see quantitative outcomes analyses and cross-state qualitative and quantitative analyses below)	• Key informant interviews with participating practices, CHTs, other relevant clinical staff, state officials, and program staff • PCMH recognition surveys, including practice transformation assessments collected by states • Provider practice transformation survey • State-level variables

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Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Quality of Care, Patient Safety, and Health Outcomes		
17. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in: (a) Safer delivery of health services to Medicare and Medicaid beneficiaries? If so, what features facilitate safer delivery of health care services and what outcomes result from these safety improvements? (b) Better quality of care provided to Medicare and Medicaid beneficiaries? If so, what features facilitate better quality of care and what outcomes result from these quality improvements? (c) Improved adherence to evidence-based guidelines? If so, what features facilitate improved compliance and what outcomes result from these improvements? (d) Health outcomes of Medicare and Medicaid beneficiaries? If changes occurred, for which health outcomes were these effects seen?	• Within-state univariate, bivariate, and multivariate quantitative analyses of adherence to evidence-based measures using claims data • Within-state univariate, bivariate, and multivariate quantitative analyses of health outcomes as measured by ambulatory care-sensitive conditions (or "composite prevention quality indicators") and avoidance of serious medical events • Within-state qualitative analysis using case study methods and beneficiary focus groups and semistructured interviews with providers to assess beneficiaries' and providers' perceptions of changes in care quality and patient safety • Within-state quantitative analysis of practice transformation activities from practice transformation questionnaire to assess changes in quality of care and patient safety features of the practice	• Key informant interviews with participating practices, CHTs, and other relevant clinical staff • Practice transformation questionnaire • Focus groups with beneficiaries • Medicare and Medicaid claims data • Medicare EDB and Medicaid eligibility files • MAPCP Demonstration participation files

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Access to Care and Coordination of Care		
18. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in: (a) More timely delivery of health services to Medicare and Medicaid beneficiaries? If so, what features facilitate more timely health care delivery and what outcomes result from these improvements? (b) Enhanced access to Medicare and Medicaid beneficiaries' PCMH providers? If so, what features facilitate better or enhanced access and what outcomes result from these improvements? (c) Better coordination of care for Medicare and Medicaid beneficiaries? If so, what features make health care delivery better coordinated and what outcomes result from this better coordinated care? (d) Improved continuity of care for Medicare beneficiaries? If so, what features facilitate improvements in care continuity and what outcomes result from these continuity improvements?	• Within-state qualitative analysis using case study methods to assess practice transformation activities and state initiative features (such as CHTs) designed to improve access to and coordination of care • Within-state qualitative analysis using case study methods to assess beneficiaries' perceptions of changes in access to and coordination of care • Within-state univariate, bivariate, and multivariate quantitative analyses of beneficiary survey data • Within-state univariate, bivariate, and multivariate quantitative analyses of access to and coordination of care: – Visit rates by primary care physicians and medical and surgical specialists – Primary care visits as a percentage of total visits – Rate of follow-up visits within 14 days after hospitalization – 30-day readmission rate – COC index	• Key informant interviews with participating practices, CHTs, other relevant clinical staff, state officials, and program staff • Practice transformation questionnaire • Focus groups with beneficiaries • Beneficiary survey data • Medicare and Medicaid claims data • Medicare EDB and Medicaid eligibility files • MAPCP Demonstration participation files

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Special Populations		
19. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in: (a) Reductions in or elimination of health care disparities among Medicare and Medicaid beneficiaries? If so, what features facilitate these reductions, which populations (e.g., racial/ethnic, socioeconomic) or geographic regions (e.g., rural, urban) are affected, and what are impacts on these populations? (b) Reductions in or elimination of variations in utilization and/or expenditure patterns which are not attributable to differences in health status? If so, what features help minimize these variations, what health services or expenditures are affected, and how are they affected? (c) What are the impacts of Medicare's participation on dually eligible beneficiaries and other key subpopulations (e.g., beneficiaries with multiple chronic conditions, beneficiaries with mental or behavioral conditions)?	• Within-state qualitative analysis using case study methods to assess challenges and perceptions of changes for the special populations across a range of domains • Within-state quantitative analyses stratified by special population (e.g., race, dually eligible beneficiaries) and analyses conducted within special population subgroups (e.g., those participating in SASH, those with multiple chronic conditions, and those with behavioral health conditions).	• Key informant interviews with state officials, CHTs, and other community resources that provide services to special populations • Key informant interviews with practices with heavy concentrations of targeted special populations • Beneficiary focus groups with special populations • Medicare and Medicaid claims data • Medicare EDB and Medicaid eligibility files • MAPCP Demonstration participation files

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Beneficiary Experience with Care		
20. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in better experiences with the health care system for Medicare and Medicaid beneficiaries and their families and caregivers? If so, what features facilitate improved care experiences and what outcomes result from these experiences? 21. Are Medicare and Medicaid beneficiaries, their family members, and/or their caregivers able to participate more effectively in decisions concerning their care as a result of the state initiative? How does the state initiative facilitate this and what impacts are seen as a result of this more effective participation? 22. Are Medicare and Medicaid beneficiaries better able to self-manage their health conditions or more likely to engage in healthy behaviors as a result of the state initiative? How does the state initiative facilitate this and what impacts are seen as a result? 23. Which features of the state initiative (e.g., community-based resources, community health teams, SASH team) are used by participating Medicare and Medicaid beneficiaries and to what extent? What impacts resulted from their use? Which features were most useful? What features were not as helpful or need improvement?	• Within-state qualitative analyses of beneficiary experience with care, with some targeting of special populations • Within-state quantitative analyses of Medicare beneficiary experience with care. Self-reported experience for 6 composite scales will be compared with national data deposited in the National CAHPS Benchmarking Database and the 2011 MHQP study	• Focus groups with beneficiaries and caregivers • Key informant interviews conducted through in-person site visits with participating practices, CHTs, and other relevant clinical staff • State-level variables • Practice-level variables • Medicare beneficiary survey data • Medicare EDB and Medicaid eligibility files • MAPCP Demonstration participation files

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Effectiveness: Patterns of Utilization and Expenditures		
24. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in delivery of more effective health services to Medicare and Medicaid beneficiaries? If so, what features facilitate the delivery of more effective health care services and what outcomes result from these improvements? 25. How do features of the state initiative affect utilization of services covered by Medicare and Medicaid? If changes in utilization patterns occurred, for what services were these effects seen and what features of the state initiative were most responsible for these changes? 26. How do features of the state initiative affect expenditures for services covered by Medicare and Medicaid? If cost reductions or changes in cost patterns occurred, for which cost categories were these effects seen and what features of the state initiative were most responsible for these changes? 27. Is Medicare's participation in the state initiative budget neutral? If not, why not? If so, how soon into the demonstration are cost savings seen?	• Initial descriptive analysis of Medicare and Medicaid baseline beneficiary characteristics and patterns of utilization and expenditures within each state for intervention beneficiaries • Within-state Medicare and Medicaid descriptive statistics and multivariate analyzing change over time in selected measures: – Utilization and payments by major types of providers – Rates of hospitalizations and ER visits • Within-state multivariate analysis of gross savings and budget neutrality	• Medicare and Medicaid claims data • Medicare EDB and Medicaid eligibility files • MAPCP Demonstration Participation files • Key informant interviews conducted through in-person site visits with state officials, MAPCP Demonstration program staff, Medicaid state program officials, participating private payers, participating practices, and other key informants (e.g., Office of Aging staff, patient advocates) • Review of secondary documents • Medicare claims data • Medicare EDB files • MAPCP Demonstration participation files
Cross-State Qualitative Analyses		
28. What are the commonalities among the state initiatives? How do they differ from one another? 29. What features of state initiatives are most responsible for the positive impacts seen? 30. What are some commonalities among the high-performing state initiatives? For instance, do state initiatives with CHTs have better outcomes than those without CHTs? Do state initiatives with a greater state role have better outcomes than those with a lesser state role? Do state initiatives with shared savings as a component of the payment methodology have better outcomes than those that do not share savings with the practices?	• Cross-state qualitative analysis of state-level commonalities and differences – Traditional comparative case-study methods – Exploration of variation across states to support qualitative comparative analysis	• State-level variables • Beneficiary-level outcomes data

(continued)

Table A-1 (continued)
Research questions, methods, and data sources

Substantive area research questions	Methods	Data sources
Cross-State Quantitative Analyses of Outcomes		
31. Does Medicare's participation in state initiatives decrease overall utilization of, and expenditures for, services covered by Medicare and Medicaid? For what services are these reductions or increases seen? 32. Is the demonstration budget neutral, that is, did any cost savings resulting from Medicare's participation in the state initiatives exceed CMS's total PCMH payments? What features of PCMH practices participating in the state initiative are responsible for the positive impacts?	• Cross-state multivariate analysis of outcomes separately conducted for Medicare. Outcomes variables include – Total Medicare expenditures – Acute care expenditures – All-cause admissions – ER visits – Unplanned readmissions – Chronic PQI admissions – Outpatient expenditures – Post-acute care expenditures	• Medicare claims data • Medicare EDB eligibility files • MAPCP Demonstration Participation files • State-level variables • Practice-level variables

CAHPS = Consumer Assessment of Healthcare Providers and Systems; CHT = community health team; CMS = Centers for Medicare & Medicaid Services; COC = Continuity of Care; EDB = Enrollment Data Base; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; MHQP = Massachusetts Health Quality Partners; NASHP = National Academy for State Health Policy; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator; SASH = Support and Services at Home.

APPENDIX B
MAPCP DEMONSTRATION MEDICARE AND MEDICAID BENEFICIARY ASSIGNMENT ALGORITHMS BY STATE

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MEDICARE BENEFICIARY ASSIGNMENT ALGORITHMS

Maine

1. Use a look-back period of the most recent 24 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day of the look-back period:

    - Reside in Maine.

    - Have both Medicare Parts A & B.

    - Are covered under the traditional Medicare Fee-For-Service (FFS) Program and are not enrolled in a Medicare Advantage or other Medicare health plan.

    - Have Medicare as the primary payer.

3. Select all claims for beneficiaries identified in Step 2 with the following qualifying *Current Procedural Terminology* (CPT) codes in the look-back period (most recent 24 months) in which the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant, or where the provider is a federally qualified health center (FQHC).

    1. Check for the CPT codes on the physician file. Keep the date of visit and performing National Provider Identifier (NPI) from the physician claim.

    2. **Critical access hospital (CAH) and rural health clinic (RHC) identification**: Check for the following CPT codes on the outpatient department (OPD) file where the provider is a CAH or an RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

    3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

    4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

    5. Combine the OPD and physician claims to create one file for beneficiary assignment.

    6. Merge on specialty code from the National Plan and Provider Enumeration Systems (NPPES) file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

4. Assign beneficiaries to the practice where they had the greatest number of qualifying claims. Identify a practice by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying visits to more than one practice, assign them to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
Evaluation and Management—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211–99215
Consultations—Office or Other Outpatient Consultations • New or Established Patient: 99241–99245
Nursing Facility Services • E&M New/Established Patient: 99304–99306 • Subsequent Nursing Facility Care: 99307–99310
Domiciliary, Rest Home (e.g., Boarding Home), or Custodial Care Service • Domiciliary or Rest Home Visit New Patient: 99324–99328 • Domiciliary or Rest Home Visit Established Patient: 99334–99337
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Prolonged Services—Prolonged Physician Service With Direct (Face-to-Face) Patient Contact • 99354 and 99355
Prolonged Services—Prolonged Physician Service Without Direct (Face-to-Face) Patient Contact • 99358 and 99359
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
Counseling Risk Factor Reduction and Behavior Change Intervention • New or Established Patient Preventive Medicine, Individual Counseling: 99401–99404 • New or Established Patient Behavior Change Interventions, Individual: 99406–99409 • New or Established Patient Preventive Medicine, Group Counseling: 99411–99412
Other Preventive Medicine Services—Administration and Interpretation • 99420
Other Preventive Medicine Services—Unlisted Preventive • 99429
Transitional Care Management Services • 99495 • 99496
FQHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

Michigan

1. Use a look-back period of up to 24 months based on the presence of claims for a given beneficiary (see tiers below under #3).

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

   - Reside in Michigan.
   - Have both Medicare Parts A & B.
   - Are covered under the traditional Medicare FFS Program and not enrolled in a Medicare Advantage or other Medicare health plan.
   - Have Medicare as the primary payer.

3. Use the following five-tier process for assigning beneficiaries to participating providers:

   - **Tier 1**—Select all claims in the most recent 12 months of the look-back period for beneficiaries identified in Step 2 with the "Base E&M Office Visit Codes" listed below, where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, or pediatrics.

     1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.

     2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or an RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

     3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

     4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

     5. Combine the OPD and physician claims to create one file for beneficiary assignment.

     6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialty listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

        a. Assign beneficiaries to the individual provider with whom they had the greatest number of qualifying claims. Identify and define a provider by the tax ID (physician) or provider ID (OPD).

        b. If beneficiaries had an equal number of qualifying claims to more than one provider, assign them to the one with the most recent visit.

- **Tier 2—**If a beneficiary does not have any claims during the most recent 12-month period, extend the look-back period to 18 months and assign the beneficiary to the provider based on the same rules in Tier 1 above.

- **Tier 3—**If a beneficiary does not have any claims during the most recent 18-month period, extend the look-back period to 24 months and assign the beneficiary to the provider based on the same rules in Tier 1 above.

- **Tier 4—**If a beneficiary meeting the criteria in Step 2 is still not assigned to a provider, select all claims in the most recent 12 months of the look-back period for beneficiaries identified in Step 2 with, in addition to the "Base E&M Office Visit Codes" listed below, the inclusion of procedure codes for consultations, preventive counseling, and immunizations where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, or pediatrics.

- **Tier 5—**If beneficiaries meeting the criteria in Step 2 are still not assigned to a provider, select all claims meeting the criteria for Tier 4, but for the most recent 18 months of the look-back period.

- Beneficiaries not assigned after being screened through the five tiers described above will not be assigned to any provider.

4. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
E&M Office Visit Codes • New Patient: 99201–99205 • Established Patient: 99211–99215
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam ("Welcome to Medicare" Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
FQHC Global Visit Code (from institutional claim form) Revenue Codes • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Office Visit Preventive • 99381–99387 • 99391–99397 • 99401–99404 • 99420 • 99429
Consultations • 99241–99245
Immunizations • G0008, G0009, G0010

(continued)

Qualifying CPT codes (continued)
Transitional Care Management Services • 99495–99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

Minnesota

Minnesota is the only MAPCP Demonstration state that does not use a claims-based attribution algorithm for beneficiary assignment and subsequent billing for MAPCP Demonstration fees. Rather, Minnesota relies upon the individual Health Care Homes (HCHs) to submit a claim for HCH care coordination services each month for each eligible patient. Because few practices had been submitting claims for HCH services, RTI developed an alternative assignment algorithm for purposes of monitoring and evaluation.

1. Use a look-back period of the most recent 24 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day of the look-back period:

    - Reside in Minnesota, but NOT in Fillmore, Houston, Olmstead, or Winona counties, as identified by the ZIP code on the submitted claim.

    - Are eligible for coverage under the Medicare FFS program on the date of service billed.

    - Are not deceased.

    - Have both Medicare Part A & Part B.

    - Have Medicare as their primary insurer.

3. For Medicare patients with a HCH care coordination claim:

    a. Where there are care coordination claims at only one HCH certified practice during the look-back period, the beneficiary will be assigned to that practice.

    b. Where there are care coordination demonstration claims at more than one HCH certified practice, the beneficiary is assigned to the practice with the greatest number of such claims.

    c. Where there are an equal number of care coordination claims at more than one HCH certified practice, the beneficiary will be assigned to the practice having the claim with the most recent date of service.

4. For Medicare patients without a HCH care coordination claim:

    a. For recipients with no care coordination claims, a beneficiary is assigned to the HCH certified practice having the most evaluation and management (E&M) claims performed by HCH certified providers during the look-back period.

    b. If the number of E&M claims by any non-HCH certified provider (regardless of specialty) is greater than the visit count at a certified health care home practice, then the recipient is not assigned.

c. If there is an equal number of E&M claims between any non-HCH certified provider and HCH certified practice, or between two HCH certified practices, then the recipient is assigned based on the most recent E&M date of service.

5. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes for Step 3
S0280, S0281
Qualifying CPT codes for Step 4
E&M—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211–99215
Nursing Facility Services • E&M New/Established Patient: 99304–99306 • Subsequent Nursing Facility Care: 99307–99310
Domiciliary, Rest Home (e.g., Boarding Home), or Custodial Care Service • Domiciliary or Rest Home Visit New Patient: 99324–99328 • Domiciliary or Rest Home Visit Established Patient: 99334–99337
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
FQHC and RHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner • 0524 = Visit by RHC/FQHC practitioner to a member, in a covered Part A stay at the SNF • 0525 =Visit by RHC/FQHC practitioner to a member in an SNF (not in a covered Part A stay) or NF or ICF MR or other residential facility
Transitional Care Management Services • 99495 • 99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

New York

1. Use a look-back period of most recent 24 months for which claims were available, with the look-period shall generally ending on either June 30th or December 31st of any given year.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

   - Reside in New York.
   - Have both Medicare Parts A & B.
   - Are covered under the traditional Medicare FFS Program and not enrolled in a Medicare Advantage or other Medicare health plan.
   - Have Medicare as the primary payer.

3. Select all claims for beneficiaries identified in Step 2 with qualifying CPT Codes in the look-back period (most recent 24 months) where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant, or where the provider is an FQHC.

   1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.
   2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or a RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.
   3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).
   4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.
   5. Combine the OPD and physician claims to create one file for beneficiary assignment.
   6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

4. Assign beneficiaries to the provider with whom they had the greatest number of qualifying claims. Identify and define a provider by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying claims to more than one provider, assign them first to the one with the most preventive office visit claims and, if that is equal, to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
Office/Outpatient Visit E&M • 99201–99205 • 99211–99215 • 99354–99355
Office Visit Preventive • 99381–99387 • 99391–99397 • 99401–99404 • 99420, 99429
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
Consultations • 99241–99245
Nursing Home and Home Care • 99304–99310 • 99315–99316, 99318 • 99324–99328 • 99332, 99334–99350 • 99374–99380
Telemedicine • 99444
FQHC Global Visit Code (from institutional claim form) Revenue Codes • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Transitional Care Management Services • 99495-99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

North Carolina

1. Use a look-back period of the most recent 18 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

    - Reside in North Carolina.

    - Not be dually eligible (i.e., not have both Medicare & Medicaid).

    - Have both Medicare Parts A & B.

    - Are covered under the traditional Medicare FFS Program and not enrolled in a Medicare Advantage or other Medicare health plan.

    - Have Medicare as the primary payer.

3. Select all claims for beneficiaries identified in Step 2 with qualifying CPT Codes in the look-back period (most recent 18 months) where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant, or where the provider is an FQHC.

    1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.

    2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or a RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

    3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

    4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

    5. Combine the OPD and physician claims to create one file for beneficiary assignment.

    6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

4. Assign beneficiaries to the practice where they had the greatest number of qualifying claims. Define a practice by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying claims to more than one practice, assign them to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
Office/Outpatient Visit E&M • 99201–99205 • 99211–99215
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
FQHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Transitional Care Management Services • 99495-99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

Pennsylvania

1. Use a look-back period of the most recent 12–24 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

   - Reside in Pennsylvania.

   - Have both Medicare Parts A & B.

   - Are covered under the traditional Medicare FFS Program and not enrolled in a Medicare Advantage or other Medicare health plan.

   - Have Medicare as the primary payer.

3. Use a two-tiered approach to beneficiary assignment:

   - **Tier 1**—Select all claims for beneficiaries identified in Step 2 with the following qualifying CPT Codes in the most recent 12 months where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant, or where the provider is an FQHC.

     1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.

     2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or a RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

     3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

     4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

     5. Combine the OPD and physician claims to create one file for beneficiary assignment.

     6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

   - **Tier 2**—If no claims are identified for a beneficiary identified in Step 2 above, look at all claims in the past 24 months meeting the above criteria.

4. Assign beneficiaries to the practice where they had the greatest number of qualifying claims (either in the past 12 months as identified in Tier 1 or in the past 24 months as identified in Tier 2, if the beneficiary had no claims in the most recent 12 months). Identify a practice by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying visits to more than one practice, assign them beneficiary to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
E&M—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211–99215
Consultations—Office or Other Outpatient Consultations • New or Established Patient: 99241–99245
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam ("Welcome to Medicare" Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
Counseling Risk Factor Reduction and Behavior Change Intervention • New or Established Patient Preventive Medicine, Individual Counseling: 99401–99404 • New or Established Patient Behavior Change Interventions, Individual: 99406–99409 • New or Established Patient Preventive Medicine, Group Counseling: 99411–99412
FQHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Transitional Care Management Services • 99495 • 99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

Rhode Island

1. Use a look-back period of the most recent 24 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

   - Reside in Rhode Island.

   - Have both Medicare Parts A & B.

   - Are covered under the traditional Medicare FFS Program and are enrolled in a Medicare Advantage or other Medicare health plan.

   - Have Medicare as the primary payer.

3. Select all claims for beneficiaries identified in Step 2 with the following qualifying CPT Codes in the look-back period (most recent 24 months) where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant, or where the provider is an FQHC.

   1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.

   2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or a RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

   3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

   4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

   5. Combine the OPD and physician claims to create one file for beneficiary assignment.

   6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

4. Assign beneficiaries to the practice where they had the greatest number of qualifying claims. Identify a practice by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying visits to more than one practice, assign them to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
E&M—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211–99215
Consultations—Office or Other Outpatient Consultations • New or Established Patient: 99241–99245
Nursing Facility Services • E&M New/Established Patient: 99304–99306 • Subsequent Nursing Facility Care: 99307–99310
Domiciliary, Rest Home (e.g., Boarding Home), or Custodial Care Service • Domiciliary or Rest Home Visit New Patient: 99324–99328 • Domiciliary or Rest Home Visit Established Patient: 99334–99337
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Prolonged Services—Prolonged Physician Service With Direct (Face-to-Face) Patient Contact • 99354 and 99355
Prolonged Services—Prolonged Physician Service Without Direct (Face-to-Face) Patient Contact • 99358 and 99359
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” Visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
Counseling Risk Factor Reduction and Behavior Change Intervention • New or Established Patient Preventive Medicine, Individual Counseling: 99401–99404 • New or Established Patient Behavior Change Interventions, Individual: 99406–99409 • New or Established Patient Preventive Medicine, Group Counseling: 99411–99412
Other Preventive Medicine Services—Administration and Interpretation • 99420
Other Preventive Medicine Services—Unlisted Preventive • 99429
FQHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Transitional Care Management Services • 99495 • 99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

Vermont

1. Use a look-back period of the most recent 24 months for which claims are available.

2. Identify all Medicare beneficiaries meeting the following criteria as of the last day in the look-back period:

    - Reside in Vermont.

    - Have both Medicare Parts A & B.

    - Are covered under the traditional Medicare FFS Program and not enrolled in a Medicare Advantage or other Medicare health plan.

    - Have Medicare as the primary payer.

3. Select all claims for beneficiaries identified in Step 2 with the following qualifying CPT Codes in the look-back period (most recent 24 months) where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, nurse practitioner, or physician assistant or where the provider is an FQHC.

    1. Check for the CPT codes on the physician file. Keep the date of visit and performing NPI from the physician claim.

    2. **CAH/RHC identification:** Check for these CPT codes on the OPD file where the provider is a CAH or a RHC: 1300–1399, 3400–3499, 3800–3999, or 8500–8599.

    3. **FQHC:** Check revenue codes for the visit codes listed below where the provider is an FQHC (facility type 7 and service type 1, 3, or 7).

    4. Keep the date of visit, attending NPI, group NPI, and the provider ID from the OPD claim.

    5. Combine the OPD and physician claims to create one file for beneficiary assignment.

    6. Merge on specialty code from NPPES file (taxonomy code). Drop claims that don't match specialties listed above. This will remove claims from all nonspecified specialties (e.g., psychiatric FQHC providers).

4. Assign beneficiaries to the practice where they had the greatest number of qualifying claims. Identify a practice by the tax ID (physician) or provider ID (OPD).

5. If beneficiaries had an equal number of qualifying visits to more than one practice, assign them to the one with the most recent visit.

6. Run this beneficiary assignment algorithm every 3 months.

Qualifying CPT codes
E&M—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211–99215
Consultations—Office or Other Outpatient Consultations • New or Established Patient: 99241–99245
Nursing Facility Services • E&M New/Established Patient: 99304–99306 • Subsequent Nursing Facility Care: 99307–99310
Domiciliary, Rest Home (e.g., Boarding Home), or Custodial Care Service • Domiciliary or Rest Home Visit New Patient: 99324–99328 • Domiciliary or Rest Home Visit Established Patient: 99334–99337
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Prolonged Services—Prolonged Physician Service With Direct (Face-to-Face) Patient Contact • 99354 and 99355
Prolonged Services—Prolonged Physician Service Without Direct (Face-to-Face) Patient Contact • 99358 and 99359
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Medicare Covered Wellness Visits • G0402—Initial Preventive Physical Exam (“Welcome to Medicare” visit) • G0438—Annual Wellness Visit, First Visit • G0439—Annual Wellness Visit, Subsequent Visit
Counseling Risk Factor Reduction and Behavior Change Intervention • New or Established Patient Preventive Medicine, Individual Counseling: 99401–99404 • New or Established Patient Behavior Change Interventions, Individual: 99406–99409 • New or Established Patient Preventive Medicine, Group Counseling: 99411–99412
Other Preventive Medicine Services—Administration and Interpretation • 99420
Other Preventive Medicine Services—Unlisted Preventive • 99429
FQHC—Global Visit (billed as a revenue code on an institutional claim form) • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner
Transitional Care Management Services • 99495 • 99496

E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

MEDICAID BENEFICIARY ASSIGNMENT ALGORITHMS

Maine

In Maine, Medicaid beneficiaries are enrolled in primary care case management and each beneficiary must select a primary care provider (PCP). If a beneficiary does not select a PCP, he/she is assigned a provider. Attribution of a Medicaid beneficiary to a Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration intervention or comparison group practice was based on assigned PCP under the primary care case management program. This assignment algorithm is similar to how Maine remits payment to PCPs under the Maine Patient-Centered Medical Home (PCMH) Pilot initiative.

Primary Care Case Management Attribution Methodology:

1. Identify all beneficiaries who meet the following criteria in the quarter of attribution:
   a. Reside in Maine
   b. Be enrolled in Medicaid
2. Use state-provided data files to attribute every member to their assigned primary care case management site.
   a. In the Maine Integrated Health Management Solution (newer data system): Link beneficiary ID with Affiliation ID (a Maine-specific identifier representing affiliation with a primary care case management site). The affiliations file links Affiliation ID with ProvID (Maine's Medicaid-specific provider ID). The provider file then links ProvID with Provider Name.
3. For the demonstration group—Use Provider Name to identify demonstration providers and the MAPCP practice with which they are associated, as listed in an MAPCP Demonstration participating provider-practice file that Maine submits quarterly to CMS. This file includes both the names of demonstration practices and the names of providers associated with those practices. (Note: This names-based matching was done manually in order to accurately match names even when there were minor differences in the format and/or spelling.)
4. For the comparison group—Use Provider Name to assign the beneficiary to a designated comparison group practice. The comparison group lists included NPIs; practice and provider names were added by using the National Plan and Provider Enumeration System to obtain the names associated with these NPIs. (Note: as described above, this names-based matching was done manually.)
5. Run attribution quarterly.

The Maine-specific provider identification numbers in Maine's Medicaid information systems could not be linked with national provider identifiers—national provider identifier (NPI) or tax ID number (TIN)—commonly used for attribution the provider data. As a result, we had to use a names-based matching approach. Also, the names of practices and providers are not always complete in the current Maine provider data. As a result, although we were able to assign

beneficiaries to a PCP, we were not always able to link the provider to a designated MAPCP Demonstration intervention or comparison practice. Additionally, demonstration attribution was more comprehensive than comparison group attribution. For demonstration attribution, Maine provided a list of names of all providers associated with the MAPCP Demonstration practices, and we used those names in our names-based attribution approach. In contrast, the comparison group list was primarily identified by TIN and group NPI of a practice and, if available, practice name. To the extent we could identify individual providers affiliated with those TINs or group NPIs using online national data from the National Plan and Provider Enumeration System, we did, but in some cases we could not identify individual providers. Therefore, the names-based attribution could only occur at the level of the practice name for some of the comparison group practices. We attributed beneficiaries using practice name for about 65 percent of comparison group practices and individual provider name for about 35 percent of comparison group practices.

Michigan

In Michigan, attribution to a MAPCP Demonstration intervention or comparison group practice is based on a beneficiary's designated PCP. In Michigan, the state requires all beneficiaries be assigned to a PCP. The intervention group in Michigan is composed of Medicaid beneficiaries whose assigned PCP is in a participating MAPCP Demonstration practice, and the comparison group is composed of Medicaid beneficiaries whose assigned PCP is in a designated comparison group practice.

For MAPCP Demonstration group attribution, the University of Michigan's Child Health Evaluation and Research (CHEAR) provided RTI with two monthly files: (1) NPIs for PCPs linked to MAPCP Demonstration intervention practices, and (2) lists of Medicaid beneficiaries and their assigned PCP's NPI. Using these two lists, RTI mapped MAPCP Demonstration intervention beneficiaries to intervention practices. For the adult MAPCP Demonstration comparison group, RTI provided CHEAR with a list of comparison group practices and the NPIs associated with those practices. The NPIs associated with those practices were pulled from Medicare claims data. CHEAR then provided RTI with a list of beneficiaries assigned to the list of comparison group NPIs. The list of adult comparison group practices was supplemented with a list of pediatric comparison group practices. Because these were pediatric practices, the NPIs in these practices do not bill frequently to Medicare. Therefore, RTI used commercial data on providers to find one NPI associated with each pediatric practice. This list was given to CHEAR staff, who used this list to help identify other NPIs associated with those pediatric practices. Once they identified other NPIs, they provide RTI with a list of beneficiaries assigned to those NPIs.

To be attributed to the intervention or comparison group for a given quarter of analysis, a recipient must simultaneously meet the following criteria:

- Be enrolled in Medicaid
- Be assigned at some point in the quarter to a PCP associated with an intervention or comparison group practice

Minnesota

The Minnesota Health Care Home (HCH) initiative required individual HCHs to submit a claim for HCH services each month for each eligible patient. Because few practices submitted claims for HCH services, RTI developed an alternative Medicaid assignment algorithm for purposes of monitoring and evaluation. Attribution to an MAPCP Demonstration intervention or a comparison group practice was based on a plurality of claims for E&M services or HCH services over a 24-month look-back period.

To be attributed to the intervention or comparison group for a given quarter of analysis, a recipient had to meet the following criteria:

- Reside in Minnesota but *not* in Fillmore, Houston, Olmstead, or Winona counties as identified by the ZIP code on the Medicaid eligibility file. At Minnesota's request, these four counties in the southeast corner of the state were excluded from the MAPCP Demonstration evaluation because they were included the Gunderson Health System, which was participating in another demonstration.

- Be eligible for Medicaid coverage on the date applicable attribution services are billed (HCH and selected E&M services).

- Not be deceased based on date of death on the Minnesota Medicaid enrollment file.

To attribute beneficiaries to the intervention group, a two-pronged assignment algorithm was developed that assigns a Minnesota Medicaid beneficiary to a participating HCH, if in the prior 24 months (1) the participating HCH submitted a claim to Minnesota Medicaid for HCH services on their behalf, or (2) a Minnesota Medicaid beneficiary was determined to be loyal to a participating HCH based on a plurality of claims for E&M services. To operationalize this assignment algorithm:

1. We first determined whether a Medicaid claim for HCH services (Healthcare Common Procedure Coding System codes S0280 or S0281) was submitted by an actively participating HCH. If so, then the organizational (group practice) NPI with the most HCH payments submitted for a beneficiary was linked to the participating HCH associated with that organizational (group practice) NPI, and the beneficiary was assigned to that HCH. To link the NPI with the HCH practice, we used a list of NPIs associated with HCHs that was provided by Minnesota.
2. For each remaining beneficiary who was not assigned in Step 1, we determined if the plurality of the beneficiary's E&M visits to PCPs were billed by an actively participating HCH. Organizational NPI was used to attribute a beneficiary to an HCH. The E&M codes of interest are 99201–99215, 99304–99350, 99381–99387, 99391–99397, 99495–99496, G0402, G0438, and G0439, and the FQHC/RHC revenue codes are 0521, 0522, 0524, and 0525.
3. Run attribution quarterly.

To attribute beneficiaries to the comparison group:

1. We determined if the plurality of the beneficiary's E&M visits to PCPs in the prior 24 months were billed by a designated comparison group practice. The E&M codes of interest are 99201–99215, 99304–99350, 99381–99387, 99391–99397, 99495–99496, G0402, G0438, and G0439, and the FQHC/RHC revenue codes are 0521, 0522, 0524, and 0525. All claims submitted by PCPs with these codes were selected, and based on the organizational (group practice) NPI for payment, beneficiaries were attributed to comparison practices with the most claims.
2. Run attribution quarterly.

Minnesota has both fee-for-service (FFS) and Medicaid managed care enrollees participating in this initiative, and the same attribution process outlined above was applied to both types of enrollees. Because Minnesota does not have a comprehensive list of Medicaid participating providers and the practices with which they were associated, the attribution process focused on assigning beneficiaries to an organizational NPI that was associated with one of the designated intervention or comparison group practices. This contrasts with some of the other states (e.g., New York, Rhode Island, and North Carolina) in which the attribution process assigned beneficiaries to individual medical providers (not organizations) who were then determined to be associated with either an intervention or comparison group practice.

New York

For New York, RTI attributed Medicaid beneficiaries to MAPCP Demonstration intervention or comparison group practices based on a plurality of claims for E&M services over a 24-month look-back period for FFS Medicaid beneficiaries and based on a beneficiary's designated PCP for managed care Medicaid beneficiaries. Each attribution approach is summarized below:

Attribution Methodology for Managed Care Enrollees:

1. To be attributed to the intervention or comparison group for a given quarter of analysis, a beneficiary must:

    a. Reside in New York.

    b. Be enrolled in Medicaid.

2. Match beneficiaries to a file containing the designated PCP for each managed care enrollee in each calendar quarter. New York provided quarterly files of beneficiary-PCP assignments.

3. Assign the beneficiary to a specific intervention or comparison group practice based on whether or not their assigned PCP was associated with an intervention or comparison group practice. New York provided RTI the list of participating providers practicing in intervention practices. The list of providers associated with comparison group practices was generated using provider data submitted by New York. Because providers may be associated with multiple practices, if a beneficiary's assigned provider practices at both an intervention and comparison group practice, we assigned the beneficiary to the intervention practice.

4. Run attribution quarterly.

Attribution Methodology for FFS Enrollees:

1. To be attributed to the intervention or comparison group for a given quarter of analysis, a beneficiary must:

    a. Reside in New York.

    b. Be enrolled in Medicaid

    c. Not be enrolled in Medicaid managed care.

2. The look-back period is the most recent 24 months for which claims are available.

3. Select all qualifying primary care claims for beneficiaries identified in Step 2. These are identified by the following:

    a. CPT code includes: 99201–99205, 99211–99215, 992381–99386, or 99391–99396.[1]

    b. Professional or outpatient claim is submitted by a PCP practicing in one of the designated intervention or comparison group practices.

    c. For the comparison group providers, the medical specialty of the rendering provider was restricted to internal medicine, general medicine, family medicine, nurse practitioner, or pediatrician. For the intervention group providers, New York provided a list of providers assigned to intervention practices, and the assumption was made that these providers' medical specialty was associated with primary care.

4. Assign each beneficiary to the PCP as follows:

    a. Select the provider (identified by NPI) with whom the beneficiary has the greatest number of qualifying claims.

    b. If there is a tie in the providers identified in (a), select the provider with whom the beneficiary has the greatest number of nonqualifying professional and outpatient claims.

5. As described in Step 3, assign the beneficiary to a specific intervention or comparison group practice based on whether or not their assigned PCP is associated with an intervention or comparison group practice.

6. Run attribution quarterly.

[1] These CPT codes are the ones used by New York's evaluators who are evaluating their medical home initiative. RTI decided to follow as much as possible the approach taken by these evaluators.

North Carolina

In North Carolina, attribution to an MAPCP Demonstration intervention or comparison group practice was based on a beneficiary's designated PCP. In North Carolina, Medicaid beneficiaries are enrolled in primary care case management, and each beneficiary must select a PCP. If a beneficiary does not select a PCP, he/she is assigned a provider. The intervention group in North Carolina was composed of Medicaid beneficiaries whose assigned PCP is in a participating MAPCP Demonstration practice, and the comparison group is composed of Medicaid beneficiaries whose assigned PCP was in a designated comparison group practice. Community Care of North Carolina provided RTI with a file containing the designated PCP for each beneficiary in each month of Medicaid enrollment. Community Care of North Carolina also provided crosswalk files allowing RTI to link intervention and comparison practices to beneficiary PCP assignments.

To be attributed to the intervention or comparison group for a given quarter of analysis, a recipient must simultaneously meet the following criteria:

- Be enrolled in Medicaid.
- Be assigned at some point in the quarter to a PCP associated with an intervention or comparison group practice.

PCP assignment and eligibility information is recorded on a monthly level. To be comparable with other states that are calculating quarterly attribution, we use a plurality of monthly PCP assignments to determine eligibility in the quarter—that is, if a recipient is assigned to a PCP or is Medicaid-eligible for 2 out of the 3 months in the quarter, or 1 month in a quarter where the recipient is only eligible for 2 out of the 3 months, we consider the recipient to be assigned to the intervention or comparison group practice for the entire quarter.

Pennsylvania

The Pennsylvania Department of Public Welfare (DPW) and one of its Medicaid managed care partners provided RTI with the following Medicaid data files: (1) FFS claims for Medicare-Medicaid beneficiaries enrolled in MAPCP Demonstration intervention and comparison group practices, and (2) encounter data for Medicaid beneficiaries enrolled in the AmeriHealth Medicaid managed care plan whose assigned PCP practiced at an MAPCP Demonstration intervention or comparison group practice. These two populations are a subset of all Medicaid enrollees participating in the MAPCP Demonstration, so RTI does not have a comprehensive sample of Medicaid MAPCP Demonstration participants.

For dually eligible beneficiaries, RTI provided DPW with identifying information about dually eligible beneficiaries attributed to MAPCP Demonstration intervention and comparison group practices derived from the Medicare data, and DPW pulled the Medicaid enrollment and claims data for these participants. Attributed Medicare-Medicaid beneficiaries were identified using the Medicare attribution algorithm for Pennsylvania detailed above.

For the AmeriHealth enrollees, RTI provided a list of intervention and comparison group practices, and AmeriHealth staff identified the beneficiaries assigned to those practices. AmeriHealth provided RTI with a list of beneficiaries assigned to these PCPs. PCP assignment information was recorded to the day. If a beneficiary was assigned to multiple PCPs in the quarter of interest, the most recent PCP assignment was chosen. PCPs were then crosswalked back to their associated intervention or comparison group practice based on provider and practice data provided by AmeriHealth.

In both populations, to be attributed to the intervention or comparison group for a given quarter of analysis, a beneficiary must simultaneously meet the following criteria:

- Be enrolled in Medicaid.
- Be assigned at some point in the quarter to a PCP associated with an intervention or comparison group practice.

Rhode Island

In Rhode Island, attribution to an MAPCP Demonstration or comparison group practice was based on a beneficiary's designated PCP. Medicaid managed care enrollees must select a PCP. If a beneficiary does not select a PCP, he/she is assigned a provider. The intervention group was composed of Medicaid beneficiaries whose designated PCP was in a participating MAPCP Demonstration practice, and the comparison group was composed of Medicaid beneficiaries whose designated PCP was in a comparison group practice. Rhode Island provided RTI with a list of the start and stop dates of all PCP assignments and managed care eligibility periods for each of the state's Medicaid managed care enrollees. State-provided crosswalk files allow us to link intervention and comparison group practices to recipient PCP assignments.

To be attributed to the intervention group for a given quarter of analysis, a recipient must simultaneously meet the following criteria:

- Be enrolled in Medicaid managed care; FFS Medicaid enrollees are not eligible for participation in Rhode Island's medical home initiative.

- Be 18 years of age or older; only individuals ages 18 and older are eligible for Rhode Island's medical home initiative.

- Be assigned at some point in the quarter to a PCP associated with an intervention group practice.

To be attributed to the comparison group for a given quarter of analysis during the intervention period, a recipient had to meet the following criteria:

- Be enrolled in Medicaid managed care; FFS Medicaid enrollees are not eligible for participation in Rhode Island's MAPCP Demonstration.

- Be 18 years of age or older; only individuals ages 18 and older are eligible for Rhode Island's MAPCP Demonstration.

- Be assigned at some point during the quarter to a PCP associated with a comparison group practice, and never assigned during the same quarter to a PCP associated with a demonstration group practice.

State-provided crosswalk files allowed us to link intervention and comparison practices to recipient PCP assignments. In the course of linking PCP assignments to intervention practices, a PCP occasionally matched multiple practices presumably due to the PCP practicing at multiple facilities. Any PCPs practicing at both demonstration and comparison practices are considered intervention only (i.e., comparison practices associated with those PCPs are ignored).

Vermont

Vermont attributed Medicaid beneficiaries to MAPCP Demonstration practices based on a plurality of claims for E&M services over a 24-month look-back period or based on a beneficiary's designated PCP. Vermont provided RTI with a file that has monthly records identifying Medicaid beneficiaries attributed to intervention practices and the practice to which they are attributed. Vermont's attribution methodology is described below. Because there are few primary care practices in Vermont not participating in the MAPCP Demonstration, the comparison group for the Medicaid analysis was New York. See the comparison group attribution methodology for New York for more details.

Intervention Group Attribution Methodology:

1. The look-back period is the most recent 24 months for which claims are available.

2. Identify all beneficiaries who reside in Vermont as of the last day in the look-back period and who have Medicaid as the primary payer.

3. For beneficiaries in Medicaid managed care who are required to select a PCP, attribute those beneficiaries to that provider if the provider is in an MAPCP Demonstration practice.

4. For other beneficiaries not required to select a PCP, select all claims for beneficiaries identified in Step 2 with the following qualifying CPT codes in the look-back period (most recent 24 months) for PCPs who are participating in the MAPCP Demonstration, where the provider specialty is internal medicine, general medicine, geriatric medicine, family medicine, pediatrics, naturopathic medicine, nurse practitioner, or physician assistant; or where the provider is an FQHC or RHC.

5. Assign a beneficiary to the practice where s/he had the greatest number of qualifying claims. A practice shall be identified by the NPI of the individual providers associated with it.

6. If a beneficiary has an equal number of qualifying visits to more than one practice, assign the beneficiary to the one with the most recent visit.

7. Vermont's Medicaid agency runs attribution monthly.

CPT-4 Code Description Summary
E&M—Office or Other Outpatient Services • New Patient: 99201–99205 • Established Patient: 99211-99215
Consultations—Office or Other Outpatient Consultations • New or Established Patient: 99241–99245
Nursing Facility Services • E&M New or Established Patient: 99304–99306 • Subsequent Nursing Facility Care: 99307–99310

(continued)

CPT-4 Code Description Summary (continued)
Domiciliary, Rest Home (e.g., Boarding Home), or Custodial Care Service • Domiciliary or Rest Home Visit, New Patient: 99324–99328 • Domiciliary or Rest Home Visit, Established Patient: 99334–99337
Home Services • New Patient: 99341–99345 • Established Patient: 99347–99350
Prolonged Services—Prolonged Physician Service with Direct (Face-To-Face) Patient Contact 99354 and 99355
Prolonged Services—Prolonged Physician Service Without Direct (Face-To-Face) Patient Contact • 99358 and 99359
Preventive Medicine Services • New Patient: 99381–99387 • Established Patient: 99391–99397
Counseling Risk Factor Reduction and Behavior Change Intervention • New or Established Patient Preventive Medicine, Individual Counseling: 99401–99404 • New or Established Patient Behavior Change Interventions, Individual: 99406–99409 • New or Established Patient Preventive Medicine, Group Counseling: 99411–99412
Other Preventive Medicine Services—Administration and Interpretation • 99420
Other Preventive Medicine Services—Unlisted Preventive • 99429
Newborn Care Services • Initial and Subsequent Care for E&M of Normal Newborn Infant: 99460–99463 • Attendance At Delivery (When Requested by the Delivering Physician) and Initial Stabilization of Newborn: 99464 • Delivery/Birthing Room Resuscitation: 99465
FQHC—Global Visit *(Billed As A Revenue Code On An Institutional Claim Form)* • 0521 = Clinic Visit by Member to RHC/FQHC • 0522 = Home Visit by RHC/FQHC Practitioner • 0525 = Nursing Home Visit by RHC/FQHC Practitioner

CPT = *Current Procedural Terminology*; E&M = evaluation and management; FQHC = federally qualified health center; RHC = rural health clinic.

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APPENDIX C
DETAILED DESCRIPTION OF QUANTITATIVE CLAIMS ANALYSES

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In this appendix, we describe in more detail the Medicare and Medicaid data and the approach to regression modeling.

C.1 Medicare Data

Historical Denominator File. Actuarial Research Corporation (ARC) provided a Denominator File containing CMS Hierarchical Condition Category (HCC) risk scores. The file covers a 2-year period before the start of each state MAPCP Demonstration and includes all beneficiaries alive at the start of the historical period who either (1) lived in each state's demonstration area at any point during the time period covered or (2) were assigned to one of the state demonstration practices at the start of each state demonstration period. We specifically used this file to determine the cut-off points across all states for the baseline HCC score categorization.

Medicare Enrollment Data Base (EDB). We used the EDB to identify days of eligibility for the MAPCP Demonstration and provide an estimate of the fraction of the demonstration period for which beneficiaries are eligible. This file also provides beneficiary demographic and Medicare eligibility information for the analyses (e.g., date of birth, sex, race, date of death).

Medicare TAP files. The TAP files contain inpatient, hospital outpatient, physician, skilled nursing facility (SNF), home health agency (HHA), hospice, and durable medical equipment (DME) claims for demonstration and comparison beneficiaries from January 2010 forward. These files do not include Medicare Part D (prescription drug) or Medicare Advantage billing data, or Medicaid claims for Medicare and Medicaid dual enrollees. These claims are provided to ARC monthly, and ARC "nets" the claims files to identify final transaction claims quarterly, allowing for a 4-month claims run-out period at the end of each payment quarter. At each quarterly processing, prior quarterly netted claims files are updated with claims data processed after the prior cut-off dates for up to a 2-year run-out period, virtually ensuring that all paid claims are included.

Medicare National Claims History (NCH) files. RTI extracts data directly from the NCH files using the claim *discharge date* to obtain claims for hospital inpatient services and *through date* to obtain claims for outpatient services, physician, DME, HHA, and hospice services before 2011.[1] For this report, NCH claims with dates of service from January 1, 2006, through December 31, 2010, were obtained.

Lists of practices and beneficiaries in other Centers for Medicare & Medicaid Services (CMS) demonstrations that are excluded from comparison group practices and beneficiaries. Practices and beneficiaries identified in these lists are excluded from the comparison group, as described in more detail in ***Section 1.2.2***:

- RAND provides a list of federally qualified health centers (FQHCs) participating in the CMS FQHC Advanced Primary Care Practice Demonstration.

[1] RTI used the ARC TAP data from January 2011 forward.

- The Master Data Management (MDM) system contains identification and payment information for beneficiaries, providers, and organizations participating in CMS-sponsored accountable care organizations and coordinated care organizations. Programs identified in the MDM for exclusion from the comparison group for the Second Annual Report were the following:
  - Independence at Home Practice Demonstration,
  - Medicare Health Care Quality Demonstration,
  - Health Quality Partners,
  - Physician Group Practice Transitional Demonstration, and
  - Comprehensive Primary Care Initiative.

C.2 Medicaid Data

The evaluation draws on Medicaid administrative data for Medicaid beneficiaries assigned to demonstration and comparison group practices. We received the following types of files from states.

Enrollment and eligibility files. These files include information used to identify periods of Medicaid enrollment and other information, such as why an individual is enrolled in Medicaid (i.e., low income or disability), date of birth, sex, and race/ethnicity.

Fee-for-service (FFS) claims. These files detail the services rendered to a beneficiary, including the type of service rendered, the dates on which services were rendered, the service provider, and the amount paid to the provider.

Managed care encounter files. Managed care encounters can be thought of as a "dummy" claim, and the managed care encounter data include the same types of information available in FFS claims. The one significant difference between claims and encounter data is that some states do not record the amount paid to the provider on encounter claims; this is the case for data from Michigan, Pennsylvania, and Minnesota.

Attribution files. Vermont, Michigan, Pennsylvania, and North Carolina provided files to identify the MAPCP Demonstration intervention or comparison group providers or practices with which a beneficiary was associated.

Primary care provider (PCP) assignment files. New York, Rhode Island, and Maine provided files linking Medicaid beneficiaries to an assigned primary care provider. These files were used in attributing beneficiaries to demonstration or comparison group practices.

Provider and practice files. These contain data on individual providers and/or practices and were used to attribute beneficiaries to demonstration or comparison group practices.

For states where MAPCP Demonstration participants are enrolled in Medicaid managed care, we requested data for both managed care enrollees and FFS enrollees. In all states except Pennsylvania and Maine, data for both FFS enrollees and managed care enrollees were provided either by the Medicaid agency or by the entity that maintains an all-payer claims database. In the Southeast Pennsylvania region, where all Medicaid recipients—except those dually eligible for Medicare and Medicaid—are enrolled in managed care, data for managed care enrollees were provided by the largest Medicaid managed care organization in the region. Medicaid does not participate in the MAPCP Demonstration in the Northeast Pennsylvania region. In Maine, Medicaid data were provided by the University of Southern Maine.

Time periods for Medicaid data. We requested Medicaid enrollment data, FFS claims data, and managed care encounter data for each state's baseline period, pilot period, and MAPCP Demonstration period. RTI received usable data as follows:

- Maine: January 1, 2008 through December 31, 2014
- Minnesota: January 1, 2007 through December 31, 2014
- Michigan: January 1, 2007 through December 31, 2014
- New York: January 1, 2008 through December 31, 2014
- North Carolina: October 1, 2009 through March 31, 2013
- Pennsylvania: May 1, 2006 through December 31, 2014
- Rhode Island: October 1, 2006 through December 31, 2014
- Vermont: January 1, 2007 through December 31, 2014

North Carolina changed its Medicaid Management Information System (MMIS) in 2013. As a result, we were unable to obtain complete Medicaid data files for the period from April 2013 through December 2014 in time to clean and analyze the remaining data for this report.

Data issues. Data issues arose with the Medicaid data files. ***Table C-1*** highlights several key issues and our approach to addressing them.

Table C-1
State-specific Medicaid data issues

State	Key Medicaid data issues	Approaches to addressing the issues
Maine	The state was unable to provide comprehensive Medicaid provider data, including NPIs of primary care physicians treating Medicaid patients. The state changed its MMIS in September 2010. We have 11* quarters of claims data after the start of MAPCP Demonstration from the old MMIS system, and 17 quarters of claims data from the new system. As a result, specification of outcome measures is not completely comparable over time. Rates of missingness among key variables (such as revenue code, bill type, diagnosis code) are substantially higher in the old data files (through August 2010) than in the new data files (September 2010 and later). This results in underreporting of many measures for the first 11 quarters of the analysis, and then an increase in the 12th quarter.	Because the NPI data obtained from the state had high levels of missingness, we used a names-based attribution approach (as described in ***Appendix B***) for attributing Medicaid beneficiaries. All access to care, quality, utilization, and expenditure outcomes were specified two different ways, one corresponding to data available in the old MMIS system and one corresponding to data from the new MMIS system. Although most measures are underreported in the first 11 quarters and then increase after September 2010, this inconsistency had the same impact on demonstration and comparison group (CG) beneficiaries.
Minnesota	The state was unable to provide paid amounts for the managed care encounter data. The state was unable to provide comprehensive Medicaid provider data. Because of this, RTI could not link individual providers to practices.	The distribution of FFS claims among the demonstration beneficiaries and the CG beneficiaries was examined. Because distributions were markedly different, an assessment of marginal costs would be unduly influenced by the fact that one group has more FFS claims. Therefore, analyses of effectiveness were limited to utilization only. We attributed Medicaid beneficiaries to intervention group and CG practices on the basis of the organizational NPI. This contrasted with other states that attribute beneficiaries to specific PCPs and then attribute that provider to an intervention or CG practice.
Michigan	The state was unable to provide paid amounts for the managed care encounter data.	The distribution of FFS claims among the demonstration beneficiaries and the CG beneficiaries was examined. Because distributions were markedly different, an assessment of marginal costs would be unduly influenced by the fact that one group has more FFS claims. Therefore, analyses of effectiveness were limited to utilization only.

(continued)

Table C-1 (continued)
State-specific Medicaid data issues

State	Key Medicaid data issues	Approaches to addressing the issues
North Carolina	The state switched its MMIS in July 2013. We have 6 complete quarters of claims data after the start of MAPCP Demonstration from the old MMIS system. The state was unable to provide any additional data from the new MMIS system because the state has had challenges implementing the new system.	We examined access to care, quality, utilization, and expenditure outcomes using the data available.
New York	The state provided both denied and paid claims, with no clear way to distinguish between the two types of claims. Over the course of the ADK Demonstration, New York rolled out managed care in the Adirondack region and, as a result, long-term care expenditures significantly decreased. The decrease was more significant among beneficiaries in the ADK Demonstration because fewer beneficiaries were enrolled in managed care at the beginning of the ADK Demonstration relative to the beneficiaries in PCMH and non-PCMH practices. Therefore, differences in the overall change in long-term care expenditures could not be attributed solely to the ADK Demonstration.	We have assumed that when the paid amount on the claim equals $0, the claim was denied. This does not affect our expenditure estimates, and counts of certain types of health care visits (e.g., ambulatory visits or inpatient admissions) decrease slightly. We did not analyze long-term care expenditures.
Pennsylvania	Pennsylvania was unable to provide enrollment and claims data for all Medicaid MAPCP Demonstration participants. One of Pennsylvania's Medicaid managed care partners, AmeriHealth, provided Medicaid encounter data for Medicaid beneficiaries enrolled in the AmeriHealth Medicaid managed care plan whose assigned primary care physician practiced at a MAPCP Demonstration intervention or CG practice. At the beginning of the MAPCP Demonstration, AmeriHealth's CCI members accounted for a little over half of the Medicaid managed care members enrolled in CCI. Because two Medicaid managed care plans terminated their participation in CCI over the course of the demonstration, by December 2014 AmeriHealth members accounted for 100% of Pennsylvania's Medicaid managed care enrollment in CCI. The state was unable to provide paid amounts for the managed care encounter data.	We conducted the Medicaid analyses on the AmeriHealth study sample only, and analyses of effectiveness were limited only to utilization.

(continued)

Table C-1 (continued)
State-specific Medicaid data issues

State	Key Medicaid data issues	Approaches to addressing the issues
Rhode Island	Provider specialty information is missing for the 837 electronic transaction system managed care claims from July 7, 2013, through December 31, 2014 (Quarters 28–33). Specific dates when providers were associated with a given CG practice were not incorporated in the process of attributing beneficiaries to CG practices, because the document containing the list of CG practices could not be merged with the list containing the dates due to data missingness.	We calculated outcomes using provider specialty information for Quarters 1–27.
Vermont	The state provided incomplete claims data for December 2014, so the number of claims is considerably lower than for all other previous months. Provider specialty information is inadequate for calculating results stratified by type of specialty because the vast majority of provider specialty data were reported as primary care.	We calculated outcomes using the data available after determining that 1 month of incomplete claims data would not unduly affect results. Outcomes related to provider specialty (e.g., primary care and medical specialty visits, primary care and specialty expenditures) were not calculated.

ADK = Adirondack Medical Home; CCI = Chronic Care Initiative; CG = comparison group; FFS = fee-for-service; MAPCP = Multi-Payer Advanced Primary Care Practice; MMIS = Medicaid Management Information System; NPI = National Provider Identifier; PCMH = patient-centered medical home; PCP = primary care provider.

* Quarter 3 2010 (July–September) includes 2 months (July and August 2010) of data from the old system and 1 month (September 2010) of data from the new system, due to the timing of the system change.

Information on paid amounts is not available for managed care encounter records in Michigan, Pennsylvania, and Minnesota. RTI assessed the distribution of FFS claims in Michigan and Minnesota among the demonstration beneficiaries and the comparison group beneficiaries. Because distributions were markedly different (e.g., the comparison group has far more FFS claims than the intervention group), the assessment of marginal costs would be unduly influenced by the fact that one group has more FFS claims. Therefore, we restricted the effectiveness analyses for Michigan and Minnesota and for managed care enrollees in Pennsylvania to utilization only.

C.3 Additional Details on Regression Modeling

The main component of the quantitative analysis is estimation of the regression models. The models are estimated using two distinct comparison groups: beneficiaries assigned to comparison PCMHs and beneficiaries assigned to comparison non-PCMHs. As a general overview of the modeling approach, we first describe the linear version of the regression model used for the payment outcomes. The model is written as follows:

$$Y_{ijt} = \alpha_0 + \alpha_1 I_{ij} + \beta_{0,t} Q_t + \beta_1 Pilot_j + \delta X_{ij} + \lambda Assign_{ijt} + \gamma_1 Assign_{ijt} * I_{ij} * Q_{t=dq\_1}$$

$$+ \gamma_2 Assign_{ijt} * I_{ij} * Q_{t=dq\_2} + \ldots + \gamma_s Assign_{ijt} * I_{ij} * Q_{t=dq\_s} + \varepsilon_{ijt}. \quad (C.1)$$

In ***Equation C.1*** we define the following variables:

Y_{ijt}—the outcome in quarter t for beneficiary i assigned to practice j.

I_{ij} (= 0,1)—a time-invariant indicator equal to 1 if the beneficiary i is assigned to a MAPCP Demonstration practice, and 0 otherwise.

Q_t (= 0,1)—a series of indicators identifying each calendar quarter of data.

$Pilot_j$ (= 0,1)—a time-invariant indicator equal to 1 if practice j participated in the state PCMH initiative. Before CMS joined each state's initiative, PCMH activities were ongoing in each state. These activities involved payment redesign and practice transformation efforts supported by state and private payers. For practices in the comparison group, $Pilot_j = 0$ in each quarter. In New York, North Carolina, and Pennsylvania, $Pilot_j$ was not included in the regression model, because all MAPCP Demonstration practices had participated in pilot activities before the start of the demonstration.[2]

$Assign_{ijt}$ (= 0,1)—for a beneficiary assigned to a MAPCP Demonstration, this is an indicator that switches from 0 to 1 in the first quarter t that beneficiary i was assigned to the MAPCP Demonstration practice, which is also the quarter t that MAPCP Demonstration fees were first were paid for beneficiary i. The indicator remains = 1 for all subsequent quarters. For beneficiaries assigned to comparison practices, $Assign_{ijt} = 0$ for all quarters before the start of the MAPCP Demonstration in the state, and then switches to 1 in the first quarter after the start of the demonstration where the beneficiary was assigned to a comparison practice. The indicator remains = 1 for all subsequent quarters.

$Q_{t=dq\_1}$, $Q_{t=dq\_2}$,…,$Q_{t=dq\_s}$—indicators for the 1st through sth demonstration quarters. The first quarter in our sample, January–March 2006, is counted as t = 1. For the Cohort 1 states (New York, Rhode Island, Vermont,) we had data from 22 baseline quarters and 14 demonstration quarters, for a total of 36 quarters of data. For the Cohort 2 state (North Carolina), we had data from 23 baseline quarters and 13 demonstration quarters, for a total of 36 quarters of data, and for Cohort 3 states (Minnesota,[3] Maine, Michigan, Pennsylvania), we had data from 24 baseline quarters and 12 demonstration quarters, for a total of 36 quarters of data. The demonstration quarter indicators are interacted with the indicator for assignment to a practice after the start of the MAPCP Demonstration, $Assign_{ijt}$, and with the indicator for being in the demonstration group, I_{ij}. Because of the rolling entry of beneficiaries into the demonstration, $Assign_{ijt}$ switches from 0 to 1 at different points in time for different beneficiaries. For example, for a beneficiary attributed to a MAPCP Demonstration practice during the first demonstration quarter, $Assign_{ijt} = 1$ for the first demonstration quarter and all quarters thereafter. For a beneficiary who was attributed during the second demonstration quarter, $Assign_{ijt} = 1$ for the second demonstration quarter and all quarters thereafter.

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[2] Hence, I_{ij} and $Pilot_j$ are collinear and could not be included simultaneously as covariates in the model.

[3] Minnesota started the MAPCP Demonstration with North Carolina, in Cohort 2. Attribution for Minnesota, however, was done only back to Quarter 3. For this reason, it is considered a member of Cohort 3.

X_{ij}— This notation represents a series of beneficiary- and practice-level covariates, as described below.

Beneficiary-level variables. *Medicare:* age, sex, HCC score (prospective, based on a beneficiary's preassignment claims), Charlson comorbidity score, and indicators for White, disability status, Medicaid, end-stage renal disease (ESRD), and institutionalization; *Medicaid:* age, sex, Chronic Illness & Disability Payment System (CDPS) score, low birthweight/perinatal conditions (for the child-specific models), and indicators for race, disability status, institutionalization, and if someone was continuously enrolled from the time they first entered the Medicaid data through their last month of Medicaid enrollment.

Practice-level variables. An indicator of solo practitioner practice, proportion of associated billing providers with primary care specialties, FQHCs, critical access hospitals (CAHs), and rural health clinics (RHCs).

County-level variables. Median household income (in increments of $10,000) and population density in the beneficiary's most recent county of residence.

State-level variables. In the three states that include some out-of-state practices in their comparison groups for Medicare, we include a variable identifying the out-of-state practices to control for any time-invariant differences between the outcomes across the states. In New York, the model includes a state fixed effect for the Michigan practices included in the comparison group. In North Carolina, the model includes a variable for the Maine practices included in the comparison group. In Vermont, the majority of comparison practices came from New Hampshire, with the addition of several practices from Maine, Massachusetts, and Michigan. State fixed effects for these latter three states were included in the Vermont analyses.

ε_{ijt}—a residual term representing unobserved heterogeneity in the outcome unexplained by any of the other covariates.

The key coefficients of interest measure the following:

- α_1—the difference in the quarterly average outcome, controlling for other covariates, between the MAPCP Demonstration and comparison groups before the demonstration or state initiative activities.

- $\beta_{0,t}$—the quarterly effect for (calendar) quarter t. We also refer to ***Equation C.1*** as a quarterly fixed effects (QFE) model. The quarterly effects track performance (e.g., total Medicare expenditures) for the comparison group and could accommodate arbitrary trends (e.g., linear, quadratic) in the outcome. They also provide a benchmark for demonstration impacts discussed below.

- $\gamma_1, \gamma_2, \ldots, \gamma_s$—measures the change during the first s quarters of the MAPCP Demonstration.

The $\gamma_1, \gamma_2, \ldots, \gamma_s$ coefficients are interpreted as follows. Consider first a beneficiary in the comparison group (PCMH or non-PCMH), so that $I_{ij} = 0$ and $Pilot_{ijt} = 0$. If t = b denotes a

particular baseline quarter and t = dq_1 is the first demonstration quarter, the predicted change in average outcome (setting $\varepsilon_{ijt} = 0$ in ***Equation C.1***) is

$$\Delta_{CG} = (\alpha_0 + \beta_{0,dq\_1} + \delta X_{ij} + \lambda) - (\alpha_0 + \beta_{0,b} + \delta X_{ij}) = \lambda + \beta_{0,dq\_1} - \beta_{0,b}.$$

Consider also a beneficiary assigned to a MAPCP Demonstration practice in the first demonstration quarter (t = dq_1) and suppose that the practice participated in pilot activities during quarter t = b. For this beneficiary, $I_{ij} = 1$, $Pilot_{ij,b} = Pilot_{ij,dq\_1} = 1$ and $Assign_{ij,dq\_1} = 1$ and the predicted change in average outcome from ***Equation C.1*** is

$$\Delta_{MAPCP} = (\alpha_0 + \alpha_1 + \beta_{0,dq\_1} + \beta_1 + \delta X_{ij} + \lambda + \gamma_1) - (\alpha_0 + \alpha_1 + \beta_{0,b} + \beta_1 + \delta X_{ij})$$

$$= (\lambda + \beta_{0,dq\_1} - \beta_{0,b}) + \gamma_1.$$

Comparing the change or trend in predicted average outcome between the beneficiary assigned to the MAPCP Demonstration practice and the beneficiary assigned to the comparison practice, we see that $\Delta_{MAPCP} - \Delta_{CG} = (\lambda + \beta_{0,dq\_1} - \beta_{0,b}) + \gamma_1 - (\lambda + \beta_{0,dq\_1} - \beta_{0,b}) = \gamma_1$. Hence, γ_1 represents the regression-adjusted between-group difference (i.e., demonstration versus comparison) of the difference in outcome between the baseline quarter and the first quarter of the demonstration. This interpretation is independent of the choice of baseline quarter t = b, and it continues to hold if the MAPCP Demonstration practice did not participate in pilot activities during baseline quarter t = b (so that $Pilot_{ij,b} = 0$). For example, suppose that between a given baseline quarter and the first quarter of the demonstration, the regression-adjusted outcome difference is +$5 for beneficiaries assigned to demonstration practices (and for whom fees were paid in the first demonstration quarter) and +$10 for beneficiaries assigned to comparison PCMHs. The difference-in-difference (D-in-D) coefficient for the first demonstration quarter is then $\gamma_1 = \$5 - \$10 = -\$5$. The negative sign indicates that the growth in the outcome was smaller for beneficiaries assigned to demonstration practices than for the comparison group. We generally interpret this as a positive change associated with the MAPCP Demonstration.

Estimates of $\gamma_1, \gamma_2, \ldots, \gamma_s$ show whether the MAPCP Demonstration was associated with slower outcome growth and whether the change associated with the demonstration changed over time. It is important to note, however, that the estimates apply to different subgroups of demonstration beneficiaries. The interaction term $Assign_{ijt} * I_{ij} * Q_{t=dq\_1}$ in ***Equation C.1*** could only ever be nonzero for beneficiaries assigned to a demonstration practice during the first quarter of the demonstration. For the purpose of estimating γ_1, those beneficiaries then form the demonstration group. Similarly, the interaction term $Assign_{ijt} * I_{ij} * Q_{t=dq\_2}$ could only ever be nonzero for beneficiaries assigned to a demonstration practice during the first or second quarter of the demonstration. This group of beneficiaries is then the demonstration group for estimating γ_2, etc. To summarize, estimates of the γ coefficients in ***Equation C.1*** represent changes for each of the demonstration quarters, but are based on a changing composition of the demonstration group (because of rolling entry and exit).

In addition, the D-in-D estimates for total Medicare expenditures were used to calculate the estimated total difference in total expenditures between beneficiaries assigned to MAPCP Demonstration practices and those assigned to comparison practices. These total differences were calculated by multiplying the D-in-D estimate in a given quarter by the number of eligible

demonstration beneficiaries in that quarter. Finally, we reported a cumulative D-in-D estimate, or cumulative difference, which is simply the total difference aggregated across all demonstration quarters. A positive cumulative D-in-D number for total Medicare expenditures indicates that expenditures increased faster for beneficiaries assigned to demonstration practices than for beneficiaries in the comparison group. At least in the short term (i.e., for the initial demonstration quarters considered in the analysis), this is considered evidence for a detrimental association between the MAPCP Demonstration and payment growth. Negative numbers indicate that the demonstration was associated with lower payment growth and suggest that the MAPCP Demonstration is associated with gross cost savings.[4]

The linear version of the QFE model in ***Equation C.1*** is less appropriate for the utilization measures, which are count variables. For these outcomes in Medicare, we first estimate a negative binomial model and then use the estimated coefficients to calculate the change associated with the demonstration during each quarter of the demonstration.[5] Specifically, the changes were calculated as follows (Puhani, 2012):

$$\tau_1 = \exp(\alpha_0 + \alpha_1 + \beta_{0,dq\_1} + \beta_1 + \delta X_{ij} + \lambda) * [\exp(\gamma_1) - 1],$$

$$\tau_2 = \exp(\alpha_0 + \alpha_1 + \beta_{0,dq\_2} + \beta_1 + \delta X_{ij} + \lambda) * [\exp(\gamma_2) - 1],$$

$$\tau s = \exp(\alpha 0 + \alpha 1 + \beta 0,dq\_s + \beta 1 + \delta Xij + \lambda) * [\exp(\gamma s) - 1]. \quad \text{(C.2)}$$

Unlike the linear version of the QFE model, ***Equation C.2*** shows that the changes associated with the demonstration vary with the value of X_{ij}. In this report, we estimate τ_1, τ_2, …, τ_s by setting X_{ij} equal to its sample mean in the intervention group. Further, because of the nonlinearity of the negative binomial specification, the coefficients τ_1, τ_2, …, τ_s no longer have a D-in-D interpretation. Instead, they measure, in each demonstration quarter, the increase or decrease in average utilization associated with the demonstration among beneficiaries assigned to MAPCP Demonstration practices.[6] The delta method, implemented in Stata with the command "nlcom," was used to calculate standard errors of the estimates. The estimated changes in average utilization and standard errors were multiplied by 1,000 to express them in rates per 1,000 Medicare FFS beneficiary quarters (or, in the case of 30-day unplanned readmissions, per 1,000 Medicare FFS beneficiaries with a live discharge).

For the Final Report, we also estimated two other nonlinear models: a logit model for the utilization/visit outcomes in Medicaid and binary quality of care outcomes and an ordered logit

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[4] Gross savings do not account for the payment of demonstration fees. Even if there are gross savings, these may be insufficient to cover the amount of fees paid out (in which case the demonstration is not budget-neutral).

[5] For the negative binomial models, the linear combination of covariates on the right-hand side of ***Equation C.2***—excluding the error term ε_{ijt}—is the "linear index." The predicted outcome, conditional on the covariates, is exp(linear index), where exp(.) is the exponential function.

[6] This is the more general way to define an intervention effect (see Puhani, 2012). If the QFE model is linear, this definition becomes equivalent to the D-in-D interpretation.

model for two access and coordination of care outcomes grouped into quintiles for the purpose of ranking.

Visit outcomes for the Medicaid analysis were analyzed using logit regression. Because the non-elderly adults and children comprising our sample use services less frequently than the elderly Medicare population, negative binomial models did not fit the Medicaid data well. Therefore, we modeled visit outcomes as a binary indicator of whether or not the Medicaid beneficiary had ever used a service in a quarter. For these outcomes, we first estimate a logit model and then use the estimated coefficients to calculate the change associated with the demonstration during each quarter of the demonstration. The delta method, implemented in Stata with the command "nlcom," was used to calculate standard errors of the estimates. Similar to the negative binomial specification, the logit specification no longer has a D-in-D interpretation. Instead, the estimated coefficients measure, in each demonstration quarter, the increase or decrease in the likelihood of an outcome occurring among beneficiaries assigned to MAPCP Demonstration practices.

Because of the relatively infrequent observations of quality of care outcomes in quarterly claims data, the quality of care outcomes were modeled using Medicare and Medicaid claims for an entire year. Because of the rolling entry into the MAPCP Demonstration occurring quarterly, the use of annual claims did not allow us to classify calendar years as occurring entirely before or after a beneficiary's assignment. In other words, if a beneficiary was attributed to a demonstration practice in July 2012, then 2012 cannot be considered as exclusively being a pre-demonstration or a post-demonstration observation. For outcomes using annual claims, therefore, we grouped claims data into 4-quarter intervals leading up to and following a beneficiary's assignment. For example, regardless of the calendar quarter when a beneficiary was assigned, their first "year" of post-treatment claims represents the first 4 quarters after assignment, the second "year" represents the fifth through eighth quarters after assignment, and so forth. These "years" may or may not coincide with actual calendar years. Baseline observations were handled in the same way, with the 4 quarters immediately preceding the beneficiary's assignment representing the last baseline "year," the fifth to eighth quarters preceding assignment representing the second-to-last baseline "year," and so forth. For example, the first year post-assignment for a beneficiary assigned to a demonstration practice in the third quarter of 2012 contained their claims data from the third quarter of 2012 through the second quarter of 2013.

Because calendar time has been removed from the structure of the data, rolling entry is no longer a factor (though censoring is present, because some beneficiaries have been attributed longer than others and so have more "years" of post-assignment data to use). A model similar to ***Equation C.1*** was estimated for these annual outcomes, with year indicator variables substituted for quarterly ones. The most important difference, however, is that the $Assign_{ijt}$ variable is dropped from the model, because all beneficiaries are now assigned in the same relative time period. This makes the $Assign_{ijt}$ variable completely collinear with the indicator for the first post-treatment year, and so it could not be included in the model.

$$Y_{ijt} = \alpha_0 + \alpha_1 I_{ij} + \beta_{0,t} Y_t + \beta_1 Pilot_j + \delta X_{ij}$$

$$+ \gamma_1 I_{ij} * Y_{t=dy\_1} + \gamma_2 I_{ij} * Y_{t=dy\_2} + \ldots + \gamma_s I_{ij} * Y_{t=dy\_s} + \varepsilon_{ijt}. \quad \text{(C.3)}$$

Similar to the nonlinear count models, we define the change of interest in the logit and ordered logit models as the percentage point change in the predicted probability of an outcome associated with the demonstration among beneficiaries assigned to MAPCP Demonstration practices. As outlined in Puhani (2012), this interpretation differs slightly from the traditional D-in-D framework. Specifically, the changes associated with the demonstration in the logit models were calculated as:

$$\tau_1 = \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_1} + \beta_1 + \delta X_{ij} + \gamma_1)/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_1} + \beta_1 + \delta X_{ij} + \gamma_1))$$

$$- \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_1} + \beta_1 + \delta X_{ij})/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_1} + \beta_1 + \delta X_{ij})),$$

$$\tau_2 = \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_2} + \beta_1 + \delta X_{ij} + \gamma_2)/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_2} + \beta_1 + \delta X_{ij} + \gamma_2))$$

$$- \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_2} + \beta_1 + \delta X_{ij})/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_2} + \beta_1 + \delta X_{ij})), \quad \text{(C.4)}$$

…

$$\tau_s = \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} + \gamma_s)/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} + \gamma_s))$$

$$- \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij})/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij})),$$

The changes associated with the demonstration in the ordered logit models are calculated as:

The change in the predicted probability of falling in the lowest quintile:

$$\tau_s = 1/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} + \gamma_s - K_1))$$

$$- 1/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} - K_1)), \quad \text{(C.5)}$$

The change in the predicted probability of falling in the highest quintile:

$$\tau_s = [1 - 1/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} + \gamma_s - K_4))]$$

$$- [1 - 1/(1 + \exp(\alpha_0 + \alpha_1 + \beta_{0,dy\_s} + \beta_1 + \delta X_{ij} - K_4)), \quad \text{(C.6)}$$

where K_1 and K_2 are so-called cut-off values corresponding to the 20th and 80th percentiles of the distribution of the outcome measures.

The values of the two access and coordination of care measures (continuity of care and primary care visits as a percentage of total ambulatory care visits) were modeled using ordered logit, and demonstrated a highly skewed distribution between 0 and 1. After exploring deciles, quartiles, and quintiles of the distribution, we chose to operationalize these measures using quintiles for the Medicare analysis. Doing so allowed for sufficient variation in the distribution of values for regression modeling. Among Medicaid beneficiaries who are adults, the percentage of total ambulatory care visits in primary care settings was high. Therefore, we categorized the outcome as follows: fewer than 70 percent of visits in primary care settings, at least 70 percent but fewer than 100 percent of visits in primary care settings, and exactly 100 percent of visits in primary care settings. Among Medicaid beneficiaries who are children, the average percentage of total ambulatory care visits in primary care settings was close to 100 percent; given the minimal variation, this outcome was not analyzed for children.

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APPENDIX D
DETAILED MEASURE SPECIFICATIONS FOR MEDICARE AND MEDICAID BASELINE DEMOGRAPHIC AND HEALTH STATUS CHARACTERISTICS AND PAYMENT, UTILIZATION, QUALITY OF CARE, ACCESS TO CARE, AND COORDINATION OF CARE MEASURES

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Table D-1
Sociodemographic characteristics, practice- and area-level characteristics, and outcomes by Medicare and Medicaid analysis

Variable	Medicare	Medicaid
Sociodemographic Characteristics		
Age	X	X
Race	X	X
Urban place of residence	X	X
Gender	X	X
Dually enrolled in Medicare and Medicaid	X	X
Enrolled due to disability	X	X
Enrolled due to ESRD	X	
Institutionalized	X	X
HCC risk score	X	
Charlson Index	X	
Count of comorbid conditions	X	X
CDPS score		X
Presence of perinatal conditions		X
Continuously enrolled in Medicaid		X
Child		X
Enrolled in FFS or managed care		X
Practice- and Area-Level Characteristics		
Practice type	X	X
Percentage of providers in the practice who were primary care providers	X	X
Size of the assigned practice	X	X
Household income	X	X
Population density	X	X
MAPCP Demonstration Payments and Expenditures		
Medicare MAPCP Demonstration fee payments	X	
Total expenditures	X	X
Total expenditures for services with a primary diagnosis of a behavioral health condition	X	X
Total expenditures for services with a secondary diagnosis of a behavioral health condition	X	
ER visits and observation stays	X	X
Post-acute care	X	
Laboratory	X	
Imaging	X	
Home health	X	
Other	X	
Services provided by primary care and specialty physicians	X	X
Long-term care expenditures		X
Prescription expenditures		X

(continued)

Table D-1 (continued)
Sociodemographic characteristics, practice- and area-level characteristics, and outcomes by Medicare and Medicaid analysis

Variable	Medicare	Medicaid
Utilization		
All-cause hospitalizations	X	X
Behavioral health inpatient hospitalizations	X	X
ER visits and observation stays	X	X
Behavioral health ER visits and observation stays	X	X
Behavioral health outpatient visits	X	X
30-day unplanned readmissions	X	X
Quality of Care		
Hospitalizations for potentially avoidable chronic conditions	X	
Hospitalizations for potentially avoidable acute conditions	X	
Hospitalizations for potentially avoidable conditions	X	
Diabetes quality of care	X	X
Comprehensive IVD care	X	
Rate of admission for a serious medical or avoidable catastrophic event	X	
Breast cancer screening		X
Cervical cancer screening		X
Appropriate use of asthma medications		X
Percent of births that are low birth weight		X
Appropriate use of antidepressant medication during an acute and a continuous treatment phase		X
Access to and Coordination of Care		
COC Index	X	
Primary care visits	X	X
Specialist care visits	X	X
Surgical specialty visits	X	X
Primary care visits as a percentage of total visits	X	X
Follow-up visits within 14 days after discharge from the hospital	X	

CDPS = Chronic Illness and Disability Payment System; COC = Continuity of Care; ER = emergency room; ESRD = end-stage renal disease; FFS = fee-for-service; HCC = Hierarchical Condition Category; IVD = ischemic vascular disease; MAPCP = Multi-Payer Advanced Primary Care Practice.

D.1 Demographic Characteristics

The following information was obtained from the Medicare Enrollment Data Base for the Medicare analysis and the state-specific Medicaid Enrollment Files for the Medicaid analysis:

- Beneficiary age at the time of first assignment to an intervention or comparison group
  - Medicare only:
    - Age less than 65 (%)
    - Ages 65 to 75 (%)
    - Ages 76 to 85 (%)
    - Age greater than 85 (%)
  - Medicare and Medicaid:
    - Mean age
- White (%)
- Urban place of residence (%)—based on ZIP code of residence at the time of first assignment to a Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration or comparison group practice and the U.S. Census Bureau's definition of "urban"
- Female (%)
- Medicaid (%)—for the Medicare analysis, enrolled in Medicaid at any time the year before first assignment
- Disabled (%)—based on Medicare's or Medicaid's original reason for entitlement
- End-stage renal disease (ESRD) (%)—for the Medicare analysis, at any time the year before first assignment
- Institutionalized (%)—for the Medicare analysis, two nursing home visits (Current Procedural Terminology [CPT] codes 99324–99337) within 120 days using Medicare claims data for the first year before first assignment; for the Medicaid analysis, the beneficiary had to have had at least a 90-day period or more in an institutional setting the year before entering the MAPCP demonstration. While the definition varied by state as to what constituted an institutional setting in Medicaid, the primary settings identified were nursing facilities or intermediate care facilities.

- Continuously enrolled—for the Medicaid analysis, we controlled for whether or not the beneficiary was continuously enrolled (i.e., no breaks in enrollment) from the time the beneficiary first entered the Medicaid data during the study period of interest to when the beneficiary was no longer in the Medicaid data at all; this covariate was used to control for churning in and out of Medicaid.

- Child—for the Medicaid analysis, we stratified analyses by adults and children; a child was defined as less than 19 years of age at the beneficiary's first assignment to a demonstration or comparison group practice.

- FFS versus managed care—for the Medicaid analyses for New York and Minnesota, a beneficiary enrolled in Medicaid managed care or Medicaid FFS could be enrolled in the MAPCP Demonstration. Therefore, we created a binary variable indicating if the beneficiary was enrolled in managed care or FFS at the time of first assignment to a demonstration or comparison group practice. No covariate was needed for Vermont, Maine, and North Carolina, which only have FFS Medicaid delivery systems, and Rhode Island, Pennsylvania, and Michigan, which only had managed care delivery systems.

D.2 Health Status Characteristics

Baseline Hierarchical Conditions Category (HCC) risk score. The HCC risk adjustment model uses beneficiary demographic information (e.g., gender, age, Medicaid status, disability status) and diagnosis codes reported in Medicare claims data from the previous year to predict payments for the current year. This risk score often is used as a proxy for a beneficiary's health status (severity of illness). It is based on the average of all Medicare FFS beneficiaries' health risk scores, which is calculated using the Centers for Medicare & Medicaid Services (CMS) HCC risk adjustment model.

The community HCC risk score was calculated for beneficiaries using claims 1 year before their initial assignment to a MAPCP Demonstration practice or a comparison group practice, unless one or more of the following criteria were met:

- New enrollee: If the beneficiary met the MAPCP Demonstration eligibility criteria[1] during the baseline year for fewer than 9 months (75%), a new enrollee HCC score was calculated using only the demographic characteristics.

- Institutionalized: Beneficiaries were assigned an institutional risk score if they had two or more nursing home evaluation and management (E&M) visits within 120 days.

[1] Beneficiaries did not have to reside in the MAPCP Demonstration area during the baseline period to be considered eligible. All other MAPCP Demonstration eligibility criteria were applicable.

- ESRD: For beneficiaries with ESRD during the baseline period, the HCC community risk score was multiplied by the ESRD factor (8.937573), and they automatically were assigned to the highest HCC risk score quartile.

Beneficiaries then were assigned to one of the following three HCC risk score categories created using the 2011 HCC risk scores provided in the Historical Denominator File from Actuarial Research Corporation (ARC). The cut-off points were determined to contain 25 percent of the predicted healthiest beneficiaries in the low category; 25 percent of the predicted sickest beneficiaries in the high category; and the remaining 50 percent of beneficiaries in the medium category.

Charlson index. Claims were searched for the following diagnosis codes in the Charlson categories (Charlson, Pompei, Ales, & MacKenzie, 1987). If any were found, the category had a value of 1, everything else had a value of 0. Weighted categories were added to create the Charlson score.

- AMI (acute myocardial infarction) = 410, 412
- CHF (congestive heart failure) = 428
- PVD (peripheral vascular disease) = 441, 4439, 7854, V434
- CVD (cerebrovascular disease) = 430, 431, 432, 433, 434, 435, 436, 437, 438
- Dementia = 290
- COPD (chronic obstructive pulmonary disease) = 490, 491, 492, 493, 494, 495, 496, 500, 501, 502, 503, 504, 505, or 5064
- conn_tissuedz (connective tissue disease) = 710, 714, 725
- ulcer (ulcer disease) = 531, 532, 533, 534
- liverdz_mild (mild liver disease) = 571
- Diabetes (diabetes without complications) = 249, 7915, 9623, 250, 2500, 2501, 2502, 2503, V5867, 99657
- Hemiplegia = 342, 3441
- CRF (moderate or severe chronic renal failure) = 582, 583, 585, 586, 588
- DMwcc (diabetes with complications) = 2504, 2505, 2506, 2507, 2508, 2509
- Neoplasia = 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 170, 171, 172, 174, 175,

176, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

- Leukemia = 205, 206, 207, 208
- Lymphoma = 200, 201, 202, 203, 204
- liverdz_modsev (moderate or severe liver disease) = 5722, 5723, 5724, 5728, 4560, 4561, 4562
- cancer_mets (metastatic solid tumor) = 196, 197, 198, 199
- HIV = 042, 043, 044
- CHARL= SUM (AMI CHF PVD CVD Dementia COPD conn_tissuedz ulcer liverdz_mild Diabetes) + 2 *(Hemiplegia + CRF + DMwcc + Neoplasia + Leukemia + Lymphoma) + 3 *(liverdz_modsev) + 6 * (cancer_mets + HIV)

Comorbid conditions. Beneficiaries were identified as having a comorbid condition if they had one inpatient claim with the clinical condition as the primary diagnosis or two or more physician or outpatient department (OPD) claims for an E&M service (CPT codes 99201–99429) with an appropriate primary or secondary diagnosis. The physician and/or OPD claims had to occur on different days. For each comorbid condition, a binary variable was created indicating if the beneficiary had the condition or not. Below is the list of *International Classification of Diseases, 9th ed.–Clinical Modification* (ICD-9-CM) diagnosis codes associated with the chronic conditions:

- Heart failure = 4280
- Coronary artery disease = 41400–41407, 41000–41092, 4142, 4143, 4148, 4149, 4110–41189, 4130–4139, 412
- Other respiratory disease = 496, 492, 493, 494, 4912
- Diabetes without complications = 2500, 2490
- Diabetes with complications = 2501–2509, 2491–2499, 7915, 9623, V5867, 99657
- Essential hypertension = 401
- Valve disorders = 404
- Cardiomyopathy = 425
- Acute and chronic renal disease = 2504, 4039, 5811, 5818, 5819, 5829, 5939, 5996, 7100, 7531, 7910, 582, 585, 58381

- Renal failure = 584, 586
- Peripheral vascular disease = 4439
- Lipid metabolism disorders = 272
- Cardiac dysrhythmias and conduction disorders = 427, 426
- Dementia = 290
- Stroke = 434, 433, 431, V1259
- Chest pain = 7865
- Urinary tract infection = 5990, 5999
- Anemia = 285
- Malaise and fatigue (including chronic fatigue syndrome) = 7807
- Dizziness, syncope, and convulsions = 78002, 78009, 78093, 78097, 78039, 7802, 7804
- Disorders of joint = 719
- Hypothyroidism = 244

Chronic Illness and Disability Payment System (CDPS). CDPS is a diagnostic classification system originally developed for states to use in adjusting capitated payments for Temporary Assistance for Needy Families (TANF) and disabled Medicaid beneficiaries and used to predict Medicaid costs. CDPS was developed by researchers at the University of California, San Diego.[2] The CDPS model assigns diagnostic categories (e.g., psychiatric, cardiovascular, nervous system conditions) to beneficiaries based on the presence of ICD-9-CM diagnosis codes in combination with demographic information (age and gender) and TANF/Supplemental Security Income (SSI) (aid) status. There are 20 diagnostic categories considered in the CDPS. ICD-9-CM codes assigned to these diagnostic categories are further assigned a severity level: extra low, very low, low, medium, high, very high, and extra high. For example, within the cardiovascular category, heart transplantation is assigned to the "very high" severity level, and hypertension is assigned to the "extra low" severity level. After these assignments are the made, the CPDS scoring system considers only the single most severe diagnosis within a diagnostic category. Once a beneficiary's claims are run through the algorithm to assign diagnoses to categories and severity levels, the CDPS algorithm converts this diagnosis information in

[2] http://cdps.ucsd.edu/

combination with the demographic and aid status information into a recipient risk-adjusted score using CDPS regression weights.

The CDPS score was calculated for beneficiaries using claims from 1 year prior to their initial assignment to a MAPCP Demonstration practice or a comparison group practice. If a beneficiary was not enrolled for at least 6 months before demonstration practice assignment, we used the median score for their age, gender, and aid category group. If we could not assign an aid category to a beneficiary, they were excluded.

Presence of perinatal conditions. The CDPS also was used to create an indicator of perinatal conditions. Our measure created a flag for newborns categorized by CDPS as extremely low birthweight, very low birthweight, or with serious perinatal problems, as indicated by one or more of the following ICD-9-CM diagnosis codes:

Extremely low birthweight	Very low birthweight	Serious perinatal problem
76401–76403, 76411–76413, 76421–76423, 76491–76493, 76501–76503, 76511–76513, 76521–765234, V2131, V2132	76404, 76405, 76414, 76415, 76424, 76425, 76494, 76495, 76504, 76505, 76514, 76515, 76525, V2133	7607, 76070–76079, 764, 7640, 76400, 76406–76409, 7641, 76410, 76416, 74619, 7642, 76420, 76426–76429, 7649, 76490, 76496–76499, 765, 7650, 76500, 76506–76509, 7651, 76510, 76516–76519, 76526, 76527, 7670, 7674, 769, 7700, 7701, 77010, 77012, 77014, 77016, 77018, 7702–7705, 7707, 7708, 77081–77084, 77086–77089, '7721, 77210–77214, 7722, 7724, 7725, 777, 7771–7775, 77750–77753, 7776, 7778, 7779, 7790–7792, 7794, 7795, 7797, 77981, 77982, 77985, V213, V2130, V2134, V2135, 7650, 76500, 76506–76509, 7651, 76510, 76516–76519, 76526, 76527, 7670, 7674, 769, 7700, 7701, 77010, 77012, 77014, 77016, 77018, 7702–7705, 7707, 7708, 77081–77084, 77086–77089, 7721, 77210–77214, 7722, 7724, 7725, 777, 7771–7775, 77750–77753, 7776, 7778, 7779, 7790, 7792, 7794, 7795, 7797, 77981, 77982, 77985, V213, V2130, V2134, V2135

D.3 Practice- and Area-Level Characteristics

Practice type. A dummy indicator was created using the provider ID in the Medicare claims data to determine if the beneficiary's assigned practice was office based, a federally qualified health center (FQHC), a rural health clinic (RHC), or a critical access hospital (CAH). For the Medicaid analysis, we used SK&A data and online research to determine practice type for pediatric practices in the MAPCP Demonstration and pediatric practices in the comparison group. For the nonpediatric practices, we used the same designation used in the Medicare analysis.

Percentage of providers in the practice who were primary care providers. This is a measure of the proportion of providers in a beneficiary's assigned practice who were primary care providers. For the Medicare analyses, this measure was created from the Medicare claims data, using provider specialty data for the unique providers who billed to a practice. For the Medicaid analyses, we used the same designation used in the Medicare analysis for the

nonpediatric practices. For the pediatric practices, we assumed that all providers in the practice were primary care providers.

Size of the assigned practice. A binary variable was constructed to indicate whether or not a beneficiary's assigned practice had more than one provider (i.e., was or was not a solo practice). This measure was created from the Medicare claims data, using the number of unique providers who billed to a practice. For the Medicaid analysis, we used SK&A data and online research to determine practice size for pediatric practices in the MAPCP Demonstration and pediatric practices in the comparison group. For the nonpediatric practices, we used the same designation used in the Medicare analysis.

Household income. This is a measure of the median household income for the beneficiary's county of residence in 2010 in the Area Resource File.

Population density. This is a measure of the median population density for the beneficiary's county of residence in 2010 in the Area Resource File.

D.4 Medicare MAPCP Demonstration Payments and Medicare Expenditures

MAPCP Demonstration payments. We removed claims for MAPCP Demonstration payments before calculating the Parts A and B expenditures. The Healthcare Common Procedure Coding System (HCPCS) code for the MAPCP Demonstration claims are shown in ***Table D-2***.

Table D-2
MAPCP Demonstration HCPCS codes for attributed Medicare beneficiaries

State	Procedure code
Maine	G9008 G9152
Minnesota	S0280 S0281
Michigan	G9008 G9153 G9152 G9151
New York	G9008
North Carolina	G9148 G9149 G9150 G9152
Pennsylvania	G9008 G9002 G9005 G9009 G9010

(continued)

Table D-2 (continued)
MAPCP Demonstration HCPCS codes for attributed Medicare beneficiaries

State	Procedure code
Rhode Island	G9002 G9005 G9151 G9152
Vermont	G9008 G9152

HCPCS = Healthcare Common Procedure Coding System; MAPCP = Multi-Payer Advanced Primary Care Practice.

Quarterly expenditures. Per beneficiary per month (PBPM) expenditure calculations included Medicare and Medicaid expenditures only and excluded third-party and beneficiary liability payments. Medicare fee-for-service (FFS) expenditure calculations were inclusive of disproportionate share and indirect medical education payments. The sum of per beneficiary per quarter expenditures (PBPQs) was divided by three to create PBPMs:

1. *Total expenditures*. In Medicare, overall expenditure amounts were derived from the physician, inpatient, skilled nursing facility (SNF), outpatient department (OPD), home health, hospice, and durable medical equipment files. In Medicaid, overall expenditure amounts were derived from the summation of paid amounts across all claim types available in each state's Medicaid claims. Paid amount was used in all expenditure calculations.

2. *Total expenditures for services with a primary diagnosis of a behavioral health condition*. Total expenditure amounts for which the claim had a principal diagnosis of a behavioral health condition (identified through diagnosis codes 291, 292, 303, 304, 305, 293–302, 306–316).

3. *Total expenditures for services with a secondary diagnosis of a behavioral health condition*. Total expenditure amounts for which the claim had a secondary diagnosis of a behavioral health condition (identified through diagnosis codes 291, 292, 303, 304, 305, 293–302, 306–316).

4. *Acute-care inpatient hospitals, including CAHs*. In Medicare, this was identified using provider numbers 0001–0879 (traditional acute-care hospitals) and 1300–1399 (CAHs). In Medicaid, inpatient claims were defined in accordance with the information available in each state's Medicaid claims.

5. *Emergency room (ER) visits and observation stays*. This was defined as facility and physician expenditures for ER visits and observation stays that did not lead to hospitalization. For Medicare, facility expenditures for ER visits that did not lead to a hospitalization were identified in the Medicare OPD file using revenue center line items equal to 045X or 0981 (ER care) or 0762 (treatment or observation room). If the procedure code on the line item of the ER claims equals 70000 through 79999 or

80000 through 89999, we excluded these claims (thus excluding claims for only radiological or pathology/laboratory services). In Medicare, physician claims were identified on the physician file using BETOS [Berenson-Eggers Type of Service] = M3x. In Medicaid, ER claims were defined in accordance with the information available in each state's Medicaid outpatient and professional claims, but the same revenue codes and procedure codes were used in Medicaid analysis that were used in the Medicare analysis.

6. *Post-acute care*. Combined expenditures for SNFs, long-term care hospitals (LTCHs), rehabilitation hospitals, and distinct part units; SNFs identified in the SNF file and when the third digit of the provider number in the inpatient file was U, W, Y or Z (to capture swing beds); LTCHs identified in the inpatient file when the provider number = 2000–2299; rehabilitation hospitals and distinct part units identified in the inpatient file when the provider number = 3025–3099 (rehabilitation hospitals) or 4500–4599 (comprehensive outpatient rehabilitation facilities) or when the third digit of the provider number was R or T (distinct part unit).

7. *Hospital OPD*. Payments from the OPD file including FQHCs and RHCs and ER/observation beds and including ESRD clinics (type of bill = 72x) from the inpatient file. FQHC and RHCs were identified using the OPD file, selected payments for claims with provider numbers = 1800–1989, 3400–3499, 3800–3999, 8500–8999.

8. *Laboratory*. Payments in the physician file in which BETOS = T1x.

9. *Imaging*. Payments in the physician file in which BETOS = Ixx.

10. *Home health*. Sum of payments in the home health file.

11. *Other*. Other Part B, durable medical equipment, or hospice not otherwise specified.

12. *Services provided by primary care and specialty physicians*. Payments on the physician file for services provided by the following specialty care providers, excluding laboratory, imaging, and ER. (See ***Table D-3*** for specialist codes included in Medicare analyses. Medicaid specialist codes were state-specific, but were mapped as closely as possible to the Medicare lists.)

13. *Long-term care expenditures.* Total expenditure amounts for long-term care services, which include nursing facilities, intermediate care facilities for individuals with mental retardation and developmental disabilities (ICF/MRDD), psychiatric hospitals, home and community-based waiver or state plan services, and personal care attendant services. The degree to which we could operationalize these types of services comprehensively within each state's medical claims differed, and RTI worked with Medicaid staff in every state to best define long-term care expenditures.

14. *Prescription expenditures.* Total paid amounts for Medicaid claims identified as prescription drug claims.

Table D-3
Primary care and specialty care provider specialties in Medicare

Primary Care	
01 = General practice	08 = Family practice
11 = Internal medicine	37 = Pediatric medicine
38 = Geriatric medicine	84 = Preventive medicine
50 = Nurse practitioner	97 = Physician assistant
89 = Certified clinical nurse specialist	—
Specialty Care Providers	
02 = General surgery	03 = Allergy/immunology
04 = Otolaryngology	05 = Anesthesiology
06 = Cardiology	07 = Dermatology
10 = Gastroenterology	13 = Neurology
14 = Neurosurgery	16 = Obstetrics/gynecology
18 = Ophthalmology	19 = Oral surgery (dentists only)
20 = Orthopedic surgery	22 = Pathology
24 = Plastic and reconstructive surgery	25 = Physical medicine and rehabilitation
26 = Psychiatry	28 = Colorectal surgery
29 = Pulmonary disease	30 = Diagnostic radiology
33 = Thoracic surgery	34 = Urology
39 = Nephrology	40 = Hand surgery
41 = Optometry	44 = Infectious disease
46 = Endocrinology	48 = Podiatry
66 = Rheumatology	70 = Multispecialty clinic or group practice
76 = Peripheral vascular disease	77 = Vascular surgery
78 = Cardiac surgery	81 = Critical care (intensivists)
82 = Hematology	83 = Hematology/oncology
85 = Maxillofacial surgery	86 = Neuropsychiatry
90 = Medical oncology	91 = Surgical oncology
92 = Radiation oncology	93 = Emergency medicine
98 = Gynecologist/oncologist	

D.5 Utilization

All-cause hospitalizations. In Medicare, this was defined as the count of all admissions reported in the inpatient claims file for that quarter. Some records in the inpatient claims file may appear to be multiple admissions, but these were actually transfers between acute-care facilities; these records were counted as a single admission. Multiple claims for acute admissions from traditional acute-care and CAHs that represented transfers between hospitals were combined into a single record identified using provider numbers 0001–0879 (traditional acute-care hospitals) and 1300–1399 (CAHs). In Medicaid, acute-care hospitalizations were defined in accordance with the information available in each state's Medicaid claims.

Behavioral health inpatient hospitalizations. Defined as described above for all-cause hospitalizations, but with the additional criterion that the primary diagnosis had to be for a behavioral health condition (diagnosis codes 291, 292, 303, 304, 305, 293–302, 306–316).

Emergency room visits and observation stays. Count of ER visits and observation stays not leading to hospitalization. ER visits that did not lead to hospitalization were identified on the OPD claims file using revenue center line items equal to 045X or 0981 (ER care) or 0762 (treatment or observation room). If the procedure code on the line item of the ER claims was from 70000 through 79999 or 80000 through 89999, we excluded these claims (thus excluding claims for only radiological or pathology/laboratory services). This was only applicable for OPD claims.

Behavioral health ER visits and observation stays. Defined as described above for ER visits and observation stays, but with the additional criterion that the primary diagnosis had to be for a behavioral health condition (diagnosis codes 291, 292, 303, 304, 305, 293–302, 306–316).

Behavioral health outpatient visits. Count of visits identified using selected E&M CPT codes in the physician file for which the primary diagnosis had to be for a behavioral health condition (diagnosis codes 291, 292, 303, 304, 305, 293–302, 306–316). CPT codes include 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99339, 99340, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99358, 99359, 99366, 99367, 99368, 99374, 99375, 99376, 99377, 99378, 99379, 99380, 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99405, 99406, 99407, 99408, 99409, 99410, 99411, 99412, 99420, 99421, 99422, 99423, 99424, 99425, 99426, 99427, 99428, 99429, 99441, 99442, 99443, 99444, G0402, G0438, and G0439.

Thirty-day unplanned readmissions. Count of unplanned hospitalizations occurring within 30 days following a live discharge. The number of live discharges included beneficiaries with an index admission as follows:

- For demonstration Quarter 1, use 7/1/11–9/30/11 to identify the index admission and look through 10/31/11 for any readmission within 30 days of discharge.
- For demonstration Quarter 2, use 10/1/11–12/31/11 to identify the index admission and look through 1/31/12 for any readmission within 30 days of discharge.
- For demonstration Quarter 3, use 1/1/12–3/31/12 to identify the index admission and look through 4/30/12 for any readmission within 30 days of discharge.
- For demonstration Quarter 4, use 4/1/12–6/30/12 to identify the index admission and look through 7/31/12 for any readmission within 30 days of discharge.
- For demonstration Quarter 5, use 7/1/12–9/30/12 to identify the index admission and look through 10/31/12 for any readmission within 30 days of discharge.
- For demonstration Quarter 6, use 10/1/12–12/31/12 to identify the index admission and look through 1/31/13 for any readmission within 30 days of discharge.

- For demonstration Quarter 7, use 1/1/13–3/31/13 to identify the index admission and look through 4/30/13 for any readmission within 30 days of discharge.

- For demonstration Quarter 8, use 4/1/13–6/30/13 to identify the index admission and look through 7/31/13 for any readmission within 30 days of discharge.

- For demonstration Quarter 9, use 7/1/13–9/30/13 to identify the index admission and look through 10/31/13 for any readmission within 30 days of discharge.

- For demonstration Quarter 10, use 10/1/13–12/31/13 to identify the index admission and look through 1/31/14 for any readmission within 30 days of discharge.

- For demonstration Quarter 11, use 1/1/14–3/31/14 to identify the index admission and look through 4/30/14 for any readmission within 30 days of discharge.

- For demonstration Quarter 12, use 4/1/14–6/30/14 to identify the index admission and look through 7/31/14 for any readmission within 30 days of discharge.

- If applicable, for demonstration Quarter 13, use 7/1/14–9/30/14 to identify the index admission and look through 10/31/14 for any readmission within 30 days of discharge.

- If applicable, for demonstration Quarter 14, use 10/1/14–12/31/14 to identify the index admission and look through 1/31/15 for any readmission within 30 days of discharge.

The number of live discharges **did not** include the following:

- Deceased discharge status = 20, 07;

- Beneficiary did not remain eligible for the demonstration for the full 30-day follow-up period;

- Admissions related to psychiatric unit or psychiatric facility claims; and

- Admissions for rehabilitation.

The number of unplanned hospitalizations within 30 days of a live discharge **did not** include the following:

- Admissions for maintenance chemotherapy.

- Readmissions identified as being potentially planned and without a primary diagnosis identified as either acute or indicative of a complication of care.

To discriminate between planned and unplanned admissions, we used a list of inpatient procedures considered "potentially planned," developed by researchers at Yale (Horwitz et al., 2011). Using the Agency for Healthcare Research and Quality (AHRQ) Clinical Classification

Software (CCS), we collapsed ICD-9-CM codes into 231 mutually exclusive procedure categories. Next, 33 CCS procedure code categories and five additional ICD-9-CM procedure codes were identified as indicative of a planned admission (see ***Table D-4***).

Table D-4
List of potentially planned procedures

Procedure code in CCS	Description
1	Incision and excision of central nervous system
3	Laminectomy; excision intervertebral disc
10	Thyroidectomy; partial or complete
36	Lobectomy or pneumonectomy
43	Heart valve procedures
44	Coronary artery bypass graft
45	Percutaneous transluminal coronary angioplasty
48	Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator
51	Endarterectomy; vessel of head and neck
52	Aortic resection; replacement or anastomosis
55	Peripheral vascular bypass
60	Embolectomy and endarterectomy of lower limbs
64	Bone marrow transplant
74	Gastrectomy; partial and total
78	Colorectal resection
84	Cholecystectomy and common duct exploration
85	Inguinal and femoral hernia repair
99	Other OR gastrointestinal therapeutic procedures
104	Nephrectomy; partial or complete
105	Kidney transplant
113	Transurethral resection of prostate
114	Open prostatectomy
119	Oophorectomy; unilateral and bilateral
124	Hysterectomy; abdominal and vaginal
152	Arthroplasty knee
153	Hip replacement; total and partial
154	Arthroplasty other than hip or knee
157	Amputation of lower extremity
158	Spinal fusion
166	Lumpectomy; quadrantectomy of breast
167	Mastectomy
176	Other organ transplantation
211	Therapeutic radiology for cancer treatment
ICD-9-CM codes 30.4, 31.74, 34.6	Radical laryngectomy, revision of tracheostomy, scarification of pleura
94.26, 94.27	Electroshock therapy

CCS = Clinical Classification Software; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*; OR = operating room.

To determine which of these potentially planned readmissions actually were planned, we used the primary diagnosis to determine whether the readmission was an acute condition or complication of care. To identify readmissions for acute conditions or for complications of care, we used a list of ICD-9-CM codes developed by the Yale researchers. The AHRQ CCS was used to collapse the ICD-9-CM codes into 285 mutually exclusive condition categories. Next, 34 CCS condition categories were identified as indicative of an acute condition or complication of care (see ***Table D-5***).

Table D-5
List of acute conditions and complications of care

Condition CCS	Definition
2	Septicemia (except in labor)
55	Fluid and electrolyte disorders
97	Peri-, endo-, and myocarditis; cardiomyopathy (except that caused by tuberculosis or sexually transmitted disease)
100	Acute myocardial infarction
105	Conduction disorders
106	Cardiac dysrhythmias
108	CHF; nonhypertensive
109	Acute cerebrovascular disease
112	Transient cerebral ischemia
116	Aortic and peripheral arterial embolism or thrombosis
122	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
127	COPD and bronchiectasis
130	Pleurisy; pneumothorax; pulmonary collapse
131	Respiratory failure; insufficiency; arrest (adult)
139	Gastroduodenal ulcer (except hemorrhage)
145	Intestinal obstruction without hernia
146	Diverticulosis and diverticulitis
153	Gastrointestinal hemorrhage
157	Acute and unspecified renal failure
159	Urinary tract infections
160	Calculus of urinary tract
201	Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)
207	Pathological fracture
225	Joint disorders and dislocations; trauma-related
226	Fracture of neck of femur (hip)
227	Spinal cord injury
229	Fracture of upper limb
230	Fracture of lower limb
231	Other fractures
232	Sprains and strains
233	Intracranial injury
237	Complication of device; implant or graft
238	Complications of surgical procedures or medical care
245	Syncope

CCS = Clinical Classification Software; CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease.

The number of unplanned hospitalizations within 30 days of a live discharge included all readmissions remaining after applying the exclusion restrictions.

D.6 Quality of Care

Hospitalizations for potentially avoidable chronic conditions. Rate (per 1,000 beneficiaries) of admissions occurring for one of the nine ambulatory care sensitive conditions (ACSCs). ACSCs are based on AHRQ Prevention Quality Indicators (PQIs).[3] The nine ACSCs are as follows:

- PQI 01: Diabetes short-term complications (ketoacidosis, hyperosmolarity, coma)
- PQI 03: Diabetes long-term complications (renal, eye, neurological, or circulatory)
- PQI 05: COPD or asthma in older adults
- PQI 07: Hypertension
- PQI 08: Congestive heart failure (CHF)
- PQI 13: Angina without procedure
- PQI 14: Uncontrolled diabetes
- PQI 15: Asthma in younger adults
- PQI 16: Lower-extremity amputation among patients with diabetes

Hospitalizations for potentially avoidable acute conditions. Rate (per 1,000 beneficiaries) of admissions occurring for one of the three ACSCs. ACSCs are based on AHRQ PQIs. The three ACSCs are:

- PQI 10: Dehydration admission rate
- PQI 11: Bacterial pneumonia admission rate
- PQI 12: Urinary tract infection admission rate

Hospitalizations for potentially avoidable conditions. Rate (per 1,000 beneficiaries) of admissions occurring for one of the 12 acute and chronic ACSCs described above. ACSCs are based on AHRQ PQIs.

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[3] PQIs can be used as a screening tool to help flag potential health care quality problem areas needing further investigation. For more information, see http://www.qualityindicators.ahrq.gov/Modules/pqi_overview.aspx.

Diabetes quality of care. Our evaluation aimed to provide the percentages of MAPCP Demonstration and comparison group beneficiaries who received one of the following seven recommended evidence-based quality of care measures during the measurement year. For beneficiaries from 18 to 75 years of age in Medicare and 18 to 64 years of age in Medicaid with a type 1 or type 2 diabetes claims-based diagnosis of diabetes, we present the percentage that had:

- Low-density lipoprotein cholesterol (LDL-C) screening
- Hemoglobin A1c (HbA1c) testing
- Retinal eye examination
- Medical attention for nephropathy
- All four diabetes tests
- None of the four diabetes tests
- Total lipid panel (although this measure was created for Medicare beneficiaries only)

See ***Tables D-6*** and ***D-7*** for the detailed specifications for these measures.

In Medicare, to ensure that we had a full picture of tests received by beneficiaries, we restricted our sample to those beneficiaries with a full year of Medicare FFS eligibility. We also included quality of care services billed by any Medicare FFS provider, including laboratories, without the restrictions of Medicare as the primary payer for health care and the beneficiary having to reside in the MAPCP Demonstration area. If the service was provided by an entity that did not bill Medicare, however, such as a free clinic providing LDL-C screening services, the provision of the service was not captured in the reported rate. Patients were considered to have diabetes if they had, in the demonstration year *or* the year before the demonstration year (2 years), at least two outpatient or nonacute encounters with a diabetes diagnosis, or at least one acute inpatient visit with a diabetes diagnosis. In Medicaid, the analysis was done using claims from the measurement year only (rather than the measurement year and prior year), which undercounts the measure. Because of more frequent churning into and out of health coverage in Medicaid, as compared to Medicare, we decided to restrict the identification of diabetes, as well as diabetes-related receipt of services, to the measurement year only. HbA1c and LDL-C screening tests were identified using procedure codes. Eye screening for diabetic retinal disease included a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist). Medical attention for nephropathy was determined by a nephropathy screening test or evidence of nephropathy. The nephropathy screening test was identified using procedure codes, and evidence of nephropathy was based on specific diagnosis and procedure codes. Evidence of nephropathy was identified in three ways:

- ESRD bill type
- Revenue center codes indicating kidney transplant or dialysis

- Specialty provider code (no restriction on the diagnosis or procedure code submitted) for a nephrologist visit

D.6.1 Comprehensive Adult Diabetes Care (CDC)

For consistent comparisons over time, 2013 Health Effectiveness Data and Information Set (HEDIS) specifications were used across all years. The example specification in ***Table D-6*** is Medicare specific, but the same general approach, including the use of diagnosis codes and diabetes-related service codes, was used in the Medicaid analyses. The significant differences in the specification between Medicare and Medicaid were the ages of interest and the use of the measurement year versus the measurement year plus 1 year prior to identify diabetes. The measure is defined as the percentage of patients 18–75 years of age with type 1 or type 2 diabetes who had each of the following:

- HbA1c testing
- Eye exam (retinal) performed
- LDL-C screening
- Medical attention for nephropathy
- All four measures
- None of the four measures

Table D-6
Specifications for diabetes quality of care measures

Measure characteristic	Specification
Age	18–75 years of age in the measurement year
Patient inclusion criteria	Had to have continuous FFS Part A and Part B enrollment in the measurement year, and Medicare had to be the primary payer (not a secondary payer).
Event/diagnosis	Beneficiaries were considered to have diabetes if, in the measurement year or the year prior, they had: • at least two outpatient or nonacute encounters (see ***Table D-7***) in claims with a diabetes diagnosis (ICD-9-CM codes 250, 357.2, 362.0, 366.41, 648.0), or • at least one acute inpatient or ER visit (see ***Table D-7***) in the claims with a diabetes diagnosis (ICD-9-CM codes 250, 357.2, 362.0, 366.41, 648.0).
Exclusions	Exclude from the sample if the following diagnoses are found: polycystic ovaries (any time in the patient's history); gestational diabetes (during the measurement period or year prior); or steroid-induced diabetes (during the measurement period or year prior). See ***Table D-8***.

ER = emergency room; FFS = fee for service; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Table D-7
Diabetes quality of care measures: CPT and revenue center codes to identify visit type

Description	CPT code	Revenue center code
Outpatient	92002, 92004, 92012, 92014, 99201–99205, 99211–99215, 99217–99220, 99241–99245, 99341–99345, 99347–99350, 99384–99387, 99394–99397, 99401–99404, 99411, 99412, 99420, 99429, 99455, 99456	051x, 0520–0523, 0526–0529, 057x–059x, 082x–085x, 088x, 0982, 0983
Nonacute inpatient	99304–99310, 99315, 99316, 99318, 99324–99328, 99334–99337	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x
ER	99281–99285	045x, 0981
Acute inpatient	99221–99223, 99231–99233, 99238, 99239, 99251–99255, 99291	010x, 0110–0114, 0119, 0120–0124, 0129, 0130–0134, 0139, 0140–0144, 0149, 0150–0154, 0159, 016x, 020x, 021x, 072x, 080x, 0987

CPT = Current Procedural Terminology; ER = emergency room.

Table D-8
Diabetes quality of care measures: codes to identify exclusions

Description	ICD-9-CM diagnosis
Polycystic ovaries	256.4
Steroid-induced diabetes	249, 251.8, 962.0
Gestational diabetes	6488

ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

D.6.2 Diabetes Quality of Care Measures: Numerators

- *HbA1c testing.* An HbA1c test performed during the measurement year as identified by claim/encounter with CPT codes 83036 or 83037.

- *Eye exam.* An eye screening for diabetic retinal disease as identified by claims data. This included diabetics who had one of the following: a retinal or dilated eye exam by an eye care professional [optometrist (specialty = 41) or ophthalmologist (specialty = 18)] in the measurement period, as identified by an eye care specialist claim in the physician file. The following codes were used to identify eye exams:[4]

  – CPT: 67028, 67030, 67031, 67036, 67039–67043, 67101, 67105, 67107, 67108, 67110, 67112, 67113, 67121, 67141, 67145, 67208, 67210, 67218, 67220, 67221, 67227, 67228, 92002, 92004, 92012, 92014, 92018, 92019, 92134, 92225–92228, 92230, 92235, 92240, 92250, 92260, 99203–99205, 99213–99215, 99242–99245

[4] Eye exams provided by eye care professionals were a proxy for dilated eye examinations because there is no way to determine that a dilated exam was performed via claims data.

- HCPCS: S0620, S0621, S0625,[5] S3000
- ICD-9-CM procedure: 14.1–14.5, 14.9, 95.02–95.04, 95.11, 95.12, 95.16

- *LDL-C screening.* An LDL-C test performed during the measurement year, as identified by a claim/encounter with CPT codes 80061, 83700, 83701, 83704, or 83721.

- *Medical attention for nephropathy.* Nephropathy screening test ***or*** evidence of nephropathy, as documented in claims data.
  - *Nephropathy screening test.* Nephropathy screening test during the measurement year, as identified by a claim in the physician and OPD files. Used code 82042, 82043, 82044, or 84156.
  - *Evidence of nephropathy*. Evidence of nephropathy during the measurement period, as identified by (1) a claim in the physician file with a specialty provider code = 39 (no restriction on the diagnosis or procedure code submitted), or (2) a claim with one of the following codes to indicate treatment for nephropathy:
    - CPT codes: 36145, 36147, 36800, 36810, 36815, 36818, 36819–36821, 36831–36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90935, 90937, 90940, 90945, 90947, 90957–90962, 90965, 90966, 90969, 90970, 90989, 90993, 90997, 90999, 99512
    - HCPCS codes: G0257, G0392, G0393, S9339
    - ICD-9-CM diagnosis: 250.4, 403, 404, 405.01, 405.11, 405.91, 580–588, 753.0, 753.1, 791.0, V42.0, V45.1
    - ICD-9-CM procedure: 38.95, 39.27, 39.42, 39.43, 39.53, 39.93–39.95, 54.98, 55.4–55.6
    - Uniform billing (UB) revenue codes: 0367, 080x, 082x–085x, 088x
    - UB type of bill codes: 72x (ESRD claims)

Comprehensive ischemic vascular disease (IVD) care. For beneficiaries 18 years of age and older in Medicare with a diagnosis of IVD, we present the percentage that had a total lipid panel test. Beneficiaries were considered to have IVD if they had, in the demonstration year or the year before the demonstration year (2 years) at least one outpatient or nonacute encounter with an IVD diagnosis, or at least one acute inpatient visit with an IVD diagnosis. A complete lipid profile was identified using procedure codes. See ***Table D-9*** for the detailed specifications

[5] The organization did not need to limit HCPCS S0625 to an optometrist or an ophthalmologist. These codes indicated an eye exam that was performed by an eye care professional.

for this measure. For consistent comparisons over time, 2013 HEDIS specifications were used across all years. The measure is defined as the percentage of patients 18 years of age and older who had a diagnosis of IVD during the measurement year and/or the year before the measurement year and who had a complete lipid profile conducted during the measurement year.

Table D-9
Specifications for IVD quality of care measure

Measure characteristic	Specification
Age	18 years of age or older at the beginning of the measurement year
Patient inclusion criteria	Had to have continuous FFS Part A and Part B enrollment in the measurement year, and Medicare had to be the primary payer (not a secondary payer).
Event/diagnosis	Beneficiaries had to meet at least one of the two criteria below, during the measurement year or the year prior. • at least one outpatient visit (see ***Table D-10***) in the Part A outpatient claims or Part B Carrier claims with an IVD diagnosis (ICD-9-CM diagnosis codes 410.x1, 411, 413, 414.0, 414.2, 414.8, 414.9, 429.2, 433, 434, 440.1, 440.2, 440.4, 444, 445), *or* • at least one acute inpatient visit (see ***Table D-10***) in the Part A inpatient claims with an IVD diagnosis (ICD-9-CM diagnosis codes 410.x1, 411, 413, 414.0, 414.2, 414.8, 414.9, 429.2, 433, 434, 440.1, 440.2, 440.4, 444, 445).
Exclusions	None

FFS = fee for service; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*; IVD = ischemic vascular disease.

Table D-10
IVD quality of care measure: CPT and revenue center codes to identify visit type

Description	CPT codes	Revenue center codes
Outpatient	99201–99205, 99211–99215, 99217–99220, 99241–99245, 99341–99345, 99347–99350, 99384–99387, 99394–99397, 99401–99404, 99411, 99412, 99420, 99429, 99455, 99456	051x, 0520–0523, 0526–0529, 057x–059x, 0982, 0983
Acute inpatient	99221–99223, 99231–99233, 99238, 99239, 99251–99255, 99291	010x, 0110–0114, 0119, 0120–0124, 0129, 0130–0134, 0139, 0140–0144, 0149, 0150–0154, 0159, 016x, 020x–021x, 072x, 0987

CPT = Current Procedural Terminology; IVD = ischemic vascular disease.

D.6.3 IVD Quality of Care Measure: Numerator

The following procedure codes were used to identify the numerator for the measure, having a complete lipid profile performed during the measurement year:

- CPT code 80061 (lipid panel)

  Or

- CPT code 82465 (total cholesterol) and CPT code 83701 (high-density lipoprotein [HDL]) and CPT code 84478 (triglycerides)

Rate of admission for a serious medical event. Rate per 1,000 beneficiaries of admissions for acute myocardial infarction, fracture of the hip and upper femur, sepsis, or ischemic stroke, based on the primary diagnosis: Acute myocardial infarction = 410.x1; Fracture of hip and upper femur = 820x, 821x; Sepsis = 038.xx; Ischemic stroke = 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, and 434.913.

Breast cancer screening. Percentages of MAPCP Demonstration and comparison group beneficiaries who had a mammogram to screen for breast cancer. This measure is based on the 2013 HEDIS specification, although analysis was done using claims from the measurement year only (rather than the measurement year and prior year), which undercounts the measure. See ***Tables D-11***, ***D-12,*** and ***D-13*** for the detailed specifications for this measure. The measure is defined as the percentage of women 40–64 years of age who had a mammogram to screen for breast cancer.

Table D-11
Specifications for breast cancer screening quality of care measure

Measure characteristic	Specification
Age	Women 42–64 years as of December 31 of the measurement year.
Patient inclusion criteria	Continuous medical benefit enrollment for the measurement year, with no more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
Event/diagnosis	None
Exclusions	Patients who had a bilateral mastectomy (***Table D-13***) and for whom claims data do not indicate that a mammogram was performed. Look for evidence of a bilateral mastectomy as far back as possible in the beneficiary's Medicaid claims to identify the mastectomy. Note that we looked back using all the Medicaid claims we had for an individual for this particular evaluation. Therefore, the look-back period varied by woman. Any of the following meet criteria for bilateral mastectomy: • A bilateral mastectomy code • A unilateral mastectomy code with a bilateral modifier • Two unilateral mastectomy codes on different dates of service • A unilateral mastectomy code with a right side modifier and a unilateral mastectomy code with a left side modifier (may be on the same date of service)

Table D-12
Codes to identify breast cancer screening

CPT	HCPCS	ICD-9-CM procedure	UB revenue
77055–77057	G0202, G0204, G0206	87.36, 87.37	0401, 0403

CPT = Current Procedural Terminology; HCPCS = Healthcare Common Procedure Coding System; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*; UB = Uniform Billing code.

Table D-13
Codes to identify exclusions

Description	CPT	ICD-9-CM procedure
Bilateral mastectomy		85.42, 85.44, 85.46, 85.48
Unilateral mastectomy	19180, 19200, 19220, 19240, 19303–19307	85.41, 85.43, 85.45, 85.47
Bilateral modifier (a bilateral procedure performed during the same operative session)	50, 09950	
Right side modifier	RT	
Left side modifier	LT	

CPT = Current Procedural Terminology; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Cervical cancer screening. Percentages of MAPCP Demonstration and comparison group beneficiaries who had a Pap test to screen for cervical cancer. This measure is based on the 2013 HEDIS specification, although analysis was done using claims from the measurement year only (rather than the measurement year and prior year), which undercounts the measure. See ***Tables D-14, D-15,*** and ***D-16*** for the detailed specifications for this measure. The measure is defined as the percentage of women 24–64 years of age who received one or more Pap tests to screen for cervical cancer.

Table D-14
Specifications for cervical cancer screening quality of care measure

Measure characteristic	Specification
Age	Women 24–64 years as of the measurement year.
Patient inclusion criteria	Continuous medical benefit enrollment for the measurement year, with no more than one gap in continuous enrollment of up to 1 month during each year of continuous enrollment.
Event/diagnosis	None
Exclusions	Patients who had a hysterectomy with no residual cervix and for whom the claims data do not indicate that a Pap test was performed. The hysterectomy must have occurred by December 31 of the measurement year. Refer to ***Table D-16*** for codes to identify a hysterectomy. Look for evidence of a hysterectomy as far back as possible in the patient's history, using claims data. Note that we looked back using all the Medicaid claims we had for an individual for this particular evaluation. Therefore, the look-back period varied by woman.

Table D-15
Codes to identify cervical cancer screening

CPT	HCPCS	ICD-9-CM procedure	UB revenue
88141–88143, 88147, 88148, 88150, 88152–88155, 88164–88167, 88174–88175	G0123, G0124, G0141, G0143–G0145, G0147, G0148, P3000, P3001, Q0091	91.46	0923

CPT = Current Procedural Terminology; HCPCS = Healthcare Common Procedure Coding System; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*; UB = Uniform Billing code.

Table D-16
Codes to identify exclusions

Description	CPT	ICD-9-CM procedure
Hysterectomy	51925, 56308, 57540, 57545, 57550, 57555, 57556, 58150, 58152, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290–58294, 58548, 58550–58554, 58570–58573, 58951, 58953, 58954, 58956, 59135	68.4–68.8

CPT = Current Procedural Terminology; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Appropriate use of asthma medications. Percentages of MAPCP Demonstration and comparison group beneficiaries with persistent asthma who were prescribed medication appropriately during the measurement year. This measure is based on the 2013 HEDIS specification, although analysis was done using claims from the measurement year only (rather than the measurement year and prior year), which will undercount the measure. See ***Tables D-17, D-18, D-19,*** and ***D-20*** for the detailed specifications for this measure. The measure is defined as the percentage of patients 5–64 years of age during the measurement year who were identified as having persistent asthma and were dispensed at least one prescription for an asthma controller medication during the measurement year (***Table D-20***).

Table D-17
Specifications for appropriate use of asthma medications quality of care measure

Measure characteristic	Specification
Age	5–64 years in the measurement year.
Patient inclusion criteria	Continuous medical benefit enrollment for the measurement year, with no more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
Event/diagnosis	Identify patients as having persistent asthma who met at least one of the following criteria during the measurement year: • at least one ER visit (as identified in medical claims), with asthma as the principal diagnosis (***Table D-18***), • at least one acute inpatient discharge (as identified in medical claims), with asthma as the principal diagnosis (***Table D-18***), • at least four outpatient visits (as identified in medical claims) on different dates of service, with asthma as one of the listed diagnoses (***Table D-18***) and at least two asthma medication dispensing events (***Table D-19***), • at least four asthma medication dispensing events (***Table D-19***). Note: A patient identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers were the sole asthma medication dispensed in that year, must also have at least one diagnosis of asthma, in any setting, in the measurement year.

(continued)

Table D-17 (continued)
Specifications for appropriate use of asthma medications quality of care measure

Measure characteristic	Specification
Exclusions	Exclude from the eligible population any patient who had at least one encounter, in any setting, with any code to identify a diagnosis of emphysema, COPD, cystic fibrosis, or acute respiratory failure any time on or prior to December 31 of the measurement year. Exclusion codes (ICD-9-CM diagnosis) are as follows: • emphysema: 492, 518.1, 518.2 • COPD: 491.2, 493.2, 496, 506.4 • cystic fibrosis: 277.0 • acute respiratory failure: 518.81

COPD = chronic obstructive pulmonary disease; ER = emergency room; ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Table D-18
Codes to identify asthma

Description	ICD-9-CM diagnosis
Asthma	493.0, 493.1, 493.8, 493.9

ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Table D-19
Asthma medications

Description	Prescriptions		
Antiasthmatic combinations	Dyphylline-guaifenesin	Guaifenesin-theophylline	Potassium iodide-theophylline
Antibody inhibitor	Omalizumab		
Inhaled steroid combinations	Budesonide-formoterol	Fluticasone-salmeterol	Mometasone-formoterol
Inhaled corticosteroids	Beclomethasone Budesonide Ciclesonide	Flunisolide Fluticasone CFC free Mometasone	Triamcinolone
Leukotriene modifiers	Montelukast	Zafirlukast	Zileuton
Long-acting, inhaled beta-2 agonists	Aformoterol Indacaterol	Formoterol Salmeterol	
Mast cell stabilizers	Cromolyn	Nedocromil	
Methylxanthines	Aminophylline Dyphylline	Oxtriphylline Theophylline	
Short-acting, inhaled beta-2 agonists	Albuterol Levalbuterol	Metaproterenol Pirbuterol	

CFC = chlorofluorocarbon.

Table D-20
Asthma controller medications[1]

Description	Prescriptions		
Antiasthmatic combinations	Dyphylline-guaifenesin	Guaifenesin-theophylline	Potassium iodide-theophylline
Antibody inhibitor	Omalizumab		
Inhaled steroid combinations	Budesonide-formoterol	Fluticasone-salmeterol	Mometasone-formoterol
Inhaled corticosteroids	Beclomethasone Budesonide Ciclesonide	Flunisolide Fluticasone CFC free Mometasone	Triamcinolone
Leukotriene modifiers	Montelukast	Zafirlukast	Zileuton
Mast cell stabilizers	Cromolyn	Nedocromil	
Methylxanthines	Aminophylline Dyphylline	Oxtriphylline Theophylline	

NOTE:

[1] This list of medications is used to create the numerator and is a subset of the medications used in creating the denominator. Long-acting, inhaled beta-2 agonists can be included in the denominator, but not in the numerator.

CFC = chlorofluorocarbon.

Percentage of births that are low birth weight. Percentage of live births classified as less than 2,500 grams (i.e., low birth weight) based on inclusion of any of the following ICD-9-CM diagnosis codes: 76400–76409, 76410–76418, 76420–76428, 76490–76498, 76500–76508, 76510–76518. The denominator of all live births was identified by diagnosis codes v30xx–v39xx or 630x–679x.

Appropriate use of antidepressant medication during an acute and a continuous treatment phase. Percentage of MAPCP Demonstration and comparison group beneficiaries who were diagnosed with a new episode of major depression and treated with antidepressant medication and who remained on an antidepressant medication treatment for at least 84 days/12 weeks (Effective Acute Phase Treatment) and for at least 180 days/6 months (Effective Continuation Phase Treatment). The numerator for the acute treatment phase was beneficiaries who had at least 84 days of continuous treatment with antidepressant medication beginning on the Index Prescription Start Date (IPSD) through 114 days after the IPSD (115 total days). The numerator for the continuous treatment phase was beneficiaries who had at least 180 days of continuous treatment with antidepressant medication beginning on the IPSD through 231 days after the IPSD (232 total days). This measure is based on the 2013 HEDIS specification. See ***Tables D-21, D-22, D-23,*** and ***D-24*** for the detailed specifications for this measure. The measure is defined as the percentage of patients 18 years of age and older who were diagnosed with a new episode of major depression (***Table D-22***) and treated with antidepressant medication and who remained on an antidepressant medication treatment. Two rates are reported:

- Effective Acute Phase Treatment. The percentage of newly diagnosed and treated patients who remained on an antidepressant medication for at least 84 days (12 weeks).

- Effective Continuation Phase Treatment. The percentage of newly diagnosed and treated patients who remained on an antidepressant medication for at least 180 days (6 months).

Table D-21
Specifications for appropriate use of antidepressant medication quality of care measure

Measure characteristic	Specification
Age	18 years in the measurement year.
Patient inclusion criteria	Continuous Medicaid enrollment 90 days (3 months) prior to the IPSD through 245 days after the IESD, with no more than one gap in enrollment of up to 45 days from the 90 days prior to the IESD through 245 days after the IESD. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, there may not be more than a 1-month gap in coverage (i.e., a patient whose coverage lapses for 2 months [60 days] is not continuously enrolled). The patient must be enrolled on the IESD.
Event/diagnosis	Identify patients who met any of the following criteria: • at least one principal diagnosis of major depression (***Table D-22***) in any outpatient, ER, intensive outpatient, or partial hospitalization setting (***Table D-23***), *or* • at least two visits in an outpatient, ER, intensive outpatient, or partial hospitalization setting (***Table D-23***) on different dates of service with any diagnosis of major depression (***Table D-21***), *or* • at least one inpatient (acute or nonacute) claim/encounter with any diagnosis of major depression (***Table D-22***). Determine the IESD, which is the date of the earliest encounter during the Intake Period with any diagnosis of major depression. If the patient had more than one encounter during the Intake Period, include only the first encounter. Determine the IPSD, which is the date of the earliest dispensing event for an antidepressant medication (***Table D-24***) during the period of 30 days prior to the IESD (inclusive) through 14 days after the IESD (inclusive). Restrict to patients with a Negative Medication History.
Exclusions	Beneficiaries were excluded from the denominator if they did not have a diagnosis of major depression in an inpatient, outpatient, ER, intensive outpatient, or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD through the 60 days after the IPSD, or if they filled a prescription for an antidepressant medication within 105 days prior to the IPSD.

ER = emergency room; IESD = Index Episode Start Date; IPSD = Index Prescription Start Date.

Table D-22
Codes to identify major depression

Description	ICD-9-CM diagnosis
Major depression	296.20–296.25, 296.30–296.35, 298.0, 311

ICD-9-CM = *International Classification of Diseases, 9th ed.—Clinical Modification*.

Table D-23
Codes to identify visit type

Description	CPT code	HCPCS	UB revenue
ER	99281–99285		045x, 0981
Outpatient, intensive outpatient, and partial hospitalization	90804–90815, 98960–98962, 99078, 99201–99205, 99211-99215, 99217–99220, 99241–99245, 99341–99345, 99347–99350, 99384-99387, 99394–99397, 99401–99404, 99411, 99412, 99510 *-or-* 90801, 90802, 90816–90819, 90821–90824, 90826–90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90875, 90876, 99221–99223, 99231–99233, 99238, 99239, 99251–99255 *with* Place of service code: 03, 05, 07, 09, 11, 12, 13 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72	G0155, G0176, G0177, G0409–G0411, H0002, H0004, H0031, H0034–H0037, H0039, H0040, H2000, H2001, H2010–H2020, M0064, S0201, S9480, S9484, S9485	0510, 0513, 0515–0517, 0519-0523, 0526–0529, 0900, 0901, 0902–0905, 0907, 0911–0917, 0919, 0982, 0983

CPT = Current Procedural Terminology; ER = emergency room; HCPCS = Healthcare Common Procedure Coding System; UB = Uniform Billing code.

Table D-24
Antidepressant medications

Description	Prescriptions		
Miscellaneous antidepressants	Bupropion	Vilazodone	
Monoamine oxidase inhibitors	Isocarboxazid Phenelzine	Selegiline Tranylcypromine	
Phenylpiperazine antidepressants	Nefazodone	Trazodone	
Psychotherapeutic combinations	Amitriptyline-chlordiazepoxide Amitriptyline-perphenazine	Fluoxetine-olanzapine	
SSNRI antidepressants	Desvenlafaxine	Duloxetine	Venlafaxine
SSRI antidepressants	Citalopram Escitalopram	Fluoxetine Fluvoxamine	Paroxetine Sertraline
Tetracyclic antidepressants	Maprotiline	Mirtazapine	
Tricyclic antidepressants	Amitriptyline Amoxapine Clomipramine	Desipramine Doxepin Imipramine	Nortriptyline Protriptyline Trimipramine

SSNRI = selective norepinephrine reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor.

D.7 Access to and Coordination of Care

Continuity of Care (COC) index. The measure was defined as

$$COC = \frac{\sum_{j=1}^{s} n_j^2 - N}{N(N-1)} \quad \text{(D.1)}$$

where

N = total number of ambulatory visits a beneficiary had;

n_j = number of visits to provider j; and

s = number of providers, where providers at the beneficiary's assigned practice or providers seen through a referral from the assigned practice were counted as a single provider, and all unreferred providers were counted individually.

The COC index produces a score between 0 and 1, where 1 is the highest care continuity.[6] The index was constructed based on utilization during 12-month periods. Beneficiaries were not required to meet the criteria for the study population for all months of the

[6] To illustrate the concept, two individuals each had 12 visits. Person A had the 12 visits across four providers, and Person B had the 12 visits across two providers. Because Person B's are more concentrated among a smaller number of providers, Person B's COC index score is 0.455. Because Person A's visits involve more providers, Person A's COC index score is 0.197. Person B has greater continuity of care than Person A.

12-month period, but they must have had at least three ambulatory visits during the 12-month period to calculate the index.

Primary care visits. In Medicare, counts of visits were identified using selected E&M CPT codes in the physician file provided by selected primary care specialties—i.e., when physician specialty = 01, 08, 11, 38, 84, 50, 89, 97, or 70. (The CPT codes included in the definition are described in the behavioral health visit measure.) Medicaid specialist codes were state-specific, but were mapped as closely as possible to the Medicare lists. To the extent visits to FQHCs and RHCs could be readily identified in a state's Medicaid data, they were included as primary care visits. However, for the Medicaid analysis, there is variation in the number of states that could readily identify these services for inclusion. See ***Appendix L*** of the final report for an analysis of visits to the FQHCs, RHCs, and CAHs in Medicare.

Specialist care visits. In Medicare, counts of visits were identified using selected E&M CPT codes in the physician file provided by selected medical care specialties—i.e., when physician specialty = 03, 04, 06, 07, 10, 13, 16, 18, 22, 25, 26, 29, 30, 34, 39, 41, 44, 46, 48, 66, 76, 81, 82, 83, 86, 90, 92, 93, or 98. (The CPT codes included in the definition are described in the behavioral health visit measure.) Medicaid specialist codes were state-specific, but were mapped as closely as possible to the Medicare lists.

Surgical specialty visits. In Medicare, counts of visits were identified using selected E&M CPT codes in the physician file provided by selected surgical care specialties—i.e., when physician specialty = 02, 05, 14, 19, 20, 24, 28, 33, 40, 77, 78, 85, or 91. (The CPT codes included in the definition are described in the behavioral health visit measure.) Medicaid specialist codes were state-specific, but were mapped as closely as possible to the Medicare lists.

Primary care visits as a percentage of total visits. Number of primary care visits (defined above) divided by the total number of E&M visits.

Follow-up visits within 14 days after discharge from the hospital. Percentage of short-term general, rehabilitation, and SNF live medical discharges without a readmission within 14 days that had a clinical follow-up visit within 14 days of discharge.

Institutional providers of interest and their provider ID listed in the National Claims History (NCH) inpatient file included the following:

a. Description of facility
    i. Short-term (general and specialty) hospitals (provider ID: 0001–0879)
    ii. CAH (provider ID: 1300–1399)
    iii. Rehabilitation hospitals (provider ID: 3025–3099)
    iv. Rehabilitation distinct part unit (provider ID: R or T in third digit)
    v. Swing-bed hospital designation (provider ID: U, W, Y, Z in third digit)
    vi. SNF (provider ID: all providers in the NCH SNF file)

Medical discharges included in denominator:

a. Short-term (general and specialty) hospitals: excluded discharge for chemotherapy/radiation (MS-DRGs 837–839, 846–848, 849)

b. CAHs: excluded discharge for chemotherapy/radiation (MS-DRGs 837–839, 846–848, 849)

c. Rehabilitation hospitals: all discharges

d. Rehabilitation distinct part unit: all discharges

e. Swing-bed hospital designation: all discharges

f. SNFs: all discharges

Exclusions of discharges from denominator:

a. Transfer or discharge from one institutional provider to another institutional provider using the following list of discharge statuses. We already linked transfers for inpatient prospective payment system (IPPS) providers, but included the acute hospital transfer discharge status for completeness. Discharge or transfer was:

   02: To a short-term general hospital for inpatient care

   03: To an SNF with Medicare certification in anticipation of skilled care

   05: To a designated cancer center or children's hospital

   43: To a federal hospital

   50, 51: To hospice

   61: To hospital-based Medicare-approved swing bed

   62: To inpatient rehabilitation facility, including distinct part units of a hospital

   63: To LTCH

   65: To psychiatric hospital or distinct part unit of a hospital

   66: To CAH

   70: To health care institution, not defined elsewhere

b. Deceased discharge status = 20, 41.

c. Readmission to any institutional provider within 14 days, if there was no follow-up visit, as defined below, before readmission.

d. Beneficiary did not remain eligible for the demonstration for the full 14-day follow-up period.

Claims to be included in follow-up visit numerator:

a. Include Medicare claims for CPT procedure E&M services listed below from Part A OPD file or Part B physician file:

   i. New patient, office: 99201–99205, or established patient, office: 99211–99215

   ii. Consultations, office or outpatient: 99241–99245

   iii. Nursing facility, new or established: 99304–99310, 99315–99316, 99318

   iv. Domiciliary and assisted living, new: 99324–99328, or established: 99334–99337 and 99339–99340

   v. Home care, new: 99341–99345, or established: 99347–99350

   vi. Telephone services: 99441–99443

   vii. Care plan oversight: 99374–99380

   viii. FQHC visits: revenue center codes 521 or 522

b. Include claims with dates of service the day after discharge plus 13 days (for a 14-day period) using ***discharge date*** on the institutional record and ***from date*** on the outpatient and physician claims.

D.8 Utilization and Expenditures Targeted by State

In addition to the utilization and expenditure categories analyzed across all eight MAPCP Demonstration states, we also analyzed categories that states expected to be affected by the demonstration, as noted specifically in their demonstration applications. The categories in this section do not map directly to expenditure and utilization outcomes described in the sections above. This analysis was limited to Medicare data only.

Maine

- Hospital professional expenditures
- ER professional expenditures
- Office/home visit expenditures
- Hospitalization for respiratory illness

- Hospitalization for cardiovascular illness
- Specialist visits (consultations)
- Standard imaging
- Advanced imaging
- Ultrasound imaging

Michigan

- Hospital readmissions expenditures
- Expenditures for office visits/preventive services

Minnesota

- Hospital professional expenditures
- Nursing home professional expenditures
- Nursing home facility expenditures
- ER professional expenditures
- Office/home visit expenditures
- Hospital professional
- Nursing home professional
- ER professional
- Office/home visits

North Carolina

- Hospital professional expenditures
- ER professional expenditures
- E&M visits (inpatient)
- E&M visits (outpatient)
- Imaging

- Laboratory

Pennsylvania

- Hospital professional expenditures
- Office/home visit expenditures
- Hospital professional
- Office visits
- Laboratory

Rhode Island

- Inpatient physician expenditures
- Outpatient physician expenditures
- Outpatient ER expenditures
- Outpatient mental health
- Hospital-based care for ACSCs
- Psychiatric hospital
- Respiratory system
- Circulatory system
- Digestive system

Vermont

- Inpatient physician expenditures
- Outpatient physician expenditures
- Outpatient ER expenditures
- Outpatient mental health
- Hospital-based care for ACSCs
- Psychiatric hospital

- Respiratory system
- Circulatory system
- Digestive system
- Musculoskeletal
- Skin
- Endocrine
- Kidney/urology
- Infection
- Mental
- Rehabilitation
- Ambulance services
- Laboratory tests
- Advanced imaging
- Nursing home
- SNFs, long-term care
- Home health
- Durable medical equipment
- Hospice

APPENDIX E
WEIGHTED QUARTERLY AVERAGE MEDICARE EXPENDITURES AND UTILIZATION AMONG BENEFICIARIES ASSIGNED TO MAPCP DEMONSTRATION AND COMPARISON GROUP PRACTICES

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In this appendix, we present weighted averages of the outcomes measures examined in the individual state chapters. Averages are presented for beneficiaries assigned to the MAPCP Demonstration, the patient-centered medical home (PCMH) comparison group, and the non-PCMH comparison group. These averages were weighted by the final analytic weight but are not regression-adjusted values. The final analytic weight equals the product of the beneficiary's quarterly eligibility fraction and, for the comparison groups, their entropy balanced weight. In some quarters within a state, there may be an outlier weighted average that does not align with averages preceding the quarter or following the quarter; this is due to changing sample sizes between quarters and outlier utilization.

Averages for each measure were grouped into time periods identical to those used in the regression analysis in the individual state chapters. For most measures, this means calendar quarters, but for the quality of care measures, this means 4-quarter intervals directly preceding and following a beneficiary's assignment to a practice. For the averages grouped by calendar quarter, rolling entry into the MAPCP Demonstration was not taken into account in presenting these quarterly averages. Therefore, in quarters during the demonstration period, no distinction was made between beneficiaries attributed to a practice and those not yet attributed.

New York E1-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.2	90.2	87.0	62.0	57.0	60.6	85.6	83.8	81.5	53.6	49.4	46.6
Pre-3	89.2	89.7	87.9	63.8	57.1	56.4	84.0	84.7	83.6	55.6	52.4	48.9
Pre-2	89.0	89.8	84.1	63.3	56.1	56.0	84.7	83.4	79.4	56.6	57.5	48.7
Pre-1	89.1	89.0	83.0	59.1	54.5	54.6	83.2	81.4	79.7	59.3	60.2	48.7
Post-1	90.1	88.8	86.0	59.8	52.8	52.5	83.0	80.9	76.0	59.6	60.3	53.2
Post-2	89.7	88.4	85.1	61.4	55.6	48.3	83.1	82.3	76.7	60.2	65.0	49.1
Post-3	90.5	90.6	88.5	60.5	54.1	57.1	85.0	83.0	83.5	63.3	67.2	57.0

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	33.8	27.8	28.9	3.5	3.8	5.1	79.4	80.0	78.3
Pre-3	34.2	29.9	26.6	3.9	3.3	3.5	77.0	79.5	78.9
Pre-2	35.3	30.6	25.9	3.7	3.6	6.7	76.5	79.0	74.7
Pre-1	34.8	31.3	25.3	3.8	3.3	5.8	75.8	75.6	73.8
Post-1	34.8	29.6	27.3	3.7	3.9	5.8	73.1	74.1	70.3
Post-2	36.9	35.4	23.5	4.1	4.0	6.7	72.3	73.5	72.2
Post-3	37.0	34.8	31.0	3.0	3.1	3.3	72.8	74.4	72.0

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.8	5.1	3.3	9.6	8.6	10.0	3.8	4.1	3.6	5.7	4.5	6.4
2009:Q4	5.1	4.5	7.1	10.6	10.9	9.8	4.1	5.9	4.6	6.5	5.0	5.2
2010:Q1	5.5	5.8	7.1	12.2	11.1	10.1	4.9	4.9	3.9	7.3	6.2	6.2
2010:Q2	4.1	5.9	4.5	11.9	10.6	11.5	4.6	4.1	3.7	7.2	6.5	7.8
2010:Q3	6.5	4.8	5.4	10.4	9.9	9.4	4.6	4.5	4.4	5.7	5.4	5.0
2010:Q4	5.8	5.6	6.7	11.3	14.9	10.7	5.2	6.2	3.9	6.1	8.6	6.8
2011:Q1	6.3	5.6	6.7	12.9	14.0	15.2	5.3	5.2	6.0	7.7	8.8	9.2
2011:Q2	6.7	6.9	5.7	14.3	16.2	16.5	5.6	6.4	6.9	8.7	9.8	9.6
2011:Q3	7.5	7.0	6.6	12.6	13.9	14.3	4.9	5.9	5.6	7.6	8.0	8.7
2011:Q4	8.7	7.9	8.0	15.1	16.8	16.9	6.2	7.9	8.0	8.8	8.9	9.0
2012:Q1	8.4	8.6	8.5	17.1	21.5	20.1	6.0	9.2	9.0	11.0	12.4	11.2
2012:Q2	9.6	7.8	9.9	14.6	15.7	15.0	5.6	7.3	4.6	8.9	8.4	10.4
2012:Q3	8.6	7.7	8.8	13.8	14.2	13.5	5.3	6.2	6.3	8.5	8.0	7.2
2012:Q4	8.6	9.4	13.5	16.3	16.4	18.7	5.9	6.7	8.7	10.4	9.7	10.0
2013:Q1	9.7	11.2	9.9	18.9	18.3	18.5	7.6	6.6	8.7	11.2	11.7	9.8
2013:Q2	9.5	8.7	12.5	14.5	15.2	14.0	6.5	6.1	6.9	7.9	9.1	7.2
2013:Q3	8.2	10.0	10.1	13.2	12.9	12.0	5.2	5.0	5.5	8.0	7.9	6.6
2013:Q4	10.7	9.4	10.5	13.2	15.3	13.5	4.8	5.2	5.6	8.3	10.2	7.9
2014:Q1	9.5	11.0	8.6	14.9	13.9	15.2	5.4	5.5	5.4	9.4	8.4	9.8
2014:Q2	9.5	10.2	11.0	13.3	17.3	13.8	5.0	7.2	4.8	8.3	10.1	8.9
2014:Q3	9.7	8.2	10.3	11.6	14.0	14.7	3.7	5.7	5.5	7.8	8.3	9.1
2014:Q4	10.0	9.7	12.7	12.6	16.2	13.6	5.2	6.2	4.3	7.5	10.1	9.3

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	770	843	895	570	568	558	126	142	132	146	156	174	667	662	645
2009:Q4	790	869	897	605	585	585	127	135	124	141	129	190	567	703	687
2010:Q1	782	838	857	635	595	594	154	157	138	152	131	138	625	717	714
2010:Q2	833	932	959	704	702	693	171	174	150	131	165	132	609	671	667
2010:Q3	778	848	889	646	658	637	158	172	151	144	156	143	589	677	730
2010:Q4	780	879	875	680	672	649	152	162	139	144	168	122	597	645	629
2011:Q1	757	838	839	641	636	599	157	160	133	146	150	137	706	744	664
2011:Q2	815	914	909	702	723	684	166	175	147	177	169	167	749	757	759
2011:Q3	760	833	850	640	642	631	161	164	143	180	180	184	710	755	692
2011:Q4	768	856	814	681	691	661	154	158	139	179	194	269	744	757	726
2012:Q1	738	812	765	638	639	606	155	157	131	175	208	205	726	806	732
2012:Q2	794	880	785	672	691	670	160	165	146	174	221	194	747	796	720
2012:Q3	721	807	730	625	619	601	151	162	138	185	177	176	782	793	696
2012:Q4	752	877	782	657	644	643	153	157	135	187	220	198	708	797	680
2013:Q1	710	805	757	665	661	652	144	151	131	169	232	174	751	789	732
2013:Q2	765	883	827	738	749	716	163	171	145	149	186	203	728	776	767
2013:Q3	702	833	801	706	684	673	158	166	140	170	202	186	723	781	730
2013:Q4	713	853	812	705	686	706	155	162	136	169	211	155	720	691	688
2014:Q1	659	801	761	656	652	653	150	157	134	158	182	187	716	752	715
2014:Q2	738	965	885	732	746	738	164	180	150	179	164	222	720	722	788
2014:Q3	692	913	830	659	686	706	162	174	157	196	157	227	693	727	825
2014:Q4	731	935	808	651	671	723	142	163	139	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

New York E1-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	513	504	484	178	153	153	29	31	29	20	18	23
2009:Q4	533	527	533	194	174	195	33	32	31	22	18	20
2010:Q1	535	491	480	213	162	166	38	38	31	24	17	19
2010:Q2	562	575	519	199	189	165	38	35	33	23	21	23
2010:Q3	555	577	538	194	180	156	36	37	39	26	21	25
2010:Q4	582	623	540	207	226	178	38	45	37	24	21	21
2011:Q1	569	575	543	215	215	189	47	40	49	27	21	25
2011:Q2	650	683	569	236	242	180	57	58	46	31	21	25
2011:Q3	655	679	627	228	230	206	57	57	53	36	23	27
2011:Q4	699	756	674	266	284	240	55	57	52	34	24	28
2012:Q1	706	716	690	277	284	262	56	53	57	35	22	28
2012:Q2	733	754	750	267	283	269	58	48	53	36	25	33
2012:Q3	709	697	732	250	255	257	53	43	64	31	26	31
2012:Q4	722	748	741	257	285	275	61	55	56	32	26	30
2013:Q1	736	729	738	289	294	297	68	55	67	36	27	30
2013:Q2	731	743	760	257	282	287	61	49	69	35	30	31
2013:Q3	708	725	701	249	262	235	50	55	64	36	31	32
2013:Q4	752	762	726	269	287	256	65	60	56	38	31	28
2014:Q1	718	756	710	261	304	259	67	68	66	37	33	29
2014:Q2	790	776	799	281	288	306	65	54	66	40	33	33
2014:Q3	767	775	757	267	275	246	65	62	62	44	36	34
2014:Q4	765	808	793	259	304	280	72	69	72	40	36	34

(continued)

New York E1-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	113	88	82	62	74	67	24	26	27	14	14	16
2009:Q4	105	89	90	65	72	73	25	28	28	14	19	15
2010:Q1	104	79	83	59	64	64	19	22	19	14	21	19
2010:Q2	118	91	92	71	80	73	25	32	27	13	20	20
2010:Q3	117	94	99	67	80	71	27	32	29	13	20	19
2010:Q4	118	89	91	71	82	73	28	37	31	12	19	20
2011:Q1	115	88	89	62	67	68	22	28	23	13	20	18
2011:Q2	129	103	100	72	83	74	29	37	30	13	21	19
2011:Q3	138	106	103	71	85	77	30	36	32	12	20	19
2011:Q4	132	106	107	75	97	85	32	43	35	15	21	22
2012:Q1	141	112	110	69	88	79	27	32	27	16	22	24
2012:Q2	152	120	116	77	94	93	31	39	34	17	24	25
2012:Q3	158	109	119	74	90	90	30	37	33	16	18	22
2012:Q4	150	109	114	76	90	89	31	43	37	18	22	24
2013:Q1	145	105	117	66	81	73	24	30	28	20	21	25
2013:Q2	163	116	126	75	92	85	29	38	34	21	22	26
2013:Q3	160	120	129	76	93	85	29	37	34	19	19	23
2013:Q4	163	116	139	78	99	91	32	40	36	20	22	22
2014:Q1	157	109	129	68	88	76	24	27	27	22	26	24
2014:Q2	175	120	140	82	105	87	30	36	37	27	28	30
2014:Q3	167	128	161	75	104	88	30	36	37	23	23	28
2014:Q4	166	120	135	76	103	95	32	41	39	24	24	26

(continued)

New York E1-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	20	22	26	6	12	10	18	19	17	0	0	1
2009:Q4	21	23	25	6	13	10	17	19	17	0	0	0
2010:Q1	19	21	25	6	13	10	15	17	15	0	0	0
2010:Q2	22	24	28	6	14	10	18	21	19	0	0	0
2010:Q3	23	24	30	6	13	9	17	19	17	0	0	0
2010:Q4	23	24	28	7	13	10	17	21	17	0	0	0
2011:Q1	20	23	24	7	13	9	15	18	15	0	0	0
2011:Q2	24	27	26	7	14	9	16	21	17	0	0	0
2011:Q3	24	27	30	6	12	9	15	20	17	0	0	0
2011:Q4	26	28	31	7	14	10	16	21	17	0	0	0
2012:Q1	24	26	30	7	13	9	14	18	15	0	0	0
2012:Q2	27	29	33	7	14	10	15	21	17	0	0	0
2012:Q3	26	28	33	6	12	10	14	19	17	0	0	0
2012:Q4	28	29	33	7	13	10	14	19	17	0	0	0
2013:Q1	26	28	34	6	12	10	12	17	15	0	0	0
2013:Q2	26	29	33	7	13	10	14	20	17	0	0	0
2013:Q3	29	30	33	6	12	10	14	20	17	0	0	0
2013:Q4	28	31	36	6	12	11	14	18	17	0	0	0
2014:Q1	26	29	31	6	11	9	12	17	15	0	0	0
2014:Q2	28	32	38	7	13	10	14	21	17	0	0	0
2014:Q3	32	32	35	6	12	10	14	20	17	0	0	0
2014:Q4	32	34	47	7	13	10	14	20	17	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	62	50	57	129	125	171
2009:Q4	61	59	62	121	118	155
2010:Q1	67	57	58	126	117	147
2010:Q2	63	61	59	132	130	157
2010:Q3	62	60	55	135	133	175
2010:Q4	61	69	62	128	129	154
2011:Q1	65	67	67	128	131	163
2011:Q2	73	77	69	147	136	166
2011:Q3	71	68	69	155	148	177
2011:Q4	79	84	83	148	138	182
2012:Q1	82	88	86	143	131	182
2012:Q2	79	84	83	158	143	201
2012:Q3	72	77	76	157	149	203
2012:Q4	74	78	85	153	141	182
2013:Q1	80	82	85	151	149	172
2013:Q2	75	79	81	157	157	184
2013:Q3	71	75	72	163	159	193
2013:Q4	72	76	76	148	152	152
2014:Q1	71	80	80	147	154	143
2014:Q2	73	79	86	160	153	167
2014:Q3	71	71	72	164	155	173
2014:Q4	72	77	77	151	160	170

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	580	573	561	491	468	384	579	582	602
2009:Q4	566	562	604	527	466	469	599	592	628
2010:Q1	593	520	543	497	400	403	596	564	574
2010:Q2	608	600	545	533	569	478	629	662	573
2010:Q3	600	629	736	504	501	465	622	658	706
2010:Q4	634	678	592	590	584	474	651	669	595
2011:Q1	632	633	656	535	496	465	643	639	651
2011:Q2	731	708	658	624	593	488	727	737	671
2011:Q3	714	728	743	602	607	488	726	778	735
2011:Q4	737	790	737	652	769	532	781	812	809
2012:Q1	797	725	833	683	669	565	778	777	852
2012:Q2	781	777	846	732	681	583	819	801	892
2012:Q3	759	751	855	716	594	598	781	811	794
2012:Q4	767	800	761	783	788	630	798	831	758
2013:Q1	844	876	775	715	733	598	822	842	779
2013:Q2	834	859	759	694	649	549	825	811	827
2013:Q3	781	791	776	716	659	658	779	767	736
2013:Q4	759	774	858	720	790	687	820	748	801
2014:Q1	773	841	726	694	743	668	813	833	787
2014:Q2	937	810	768	753	746	834	909	844	862
2014:Q3	845	857	816	770	759	614	895	867	793
2014:Q4	839	862	912	736	854	687	865	831	833

(continued)

New York E1-6 (continued)
Quarterly weighted average total Medicare expenditures among special populations

Period	Pod 1 beneficiaries			Pod 2 beneficiaries			Pod 3 beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	460	504	484	471	504	484	562	504	484
2009:Q4	498	527	533	508	527	533	563	527	533
2010:Q1	488	491	480	522	491	480	557	491	480
2010:Q2	495	575	519	524	575	519	613	575	519
2010:Q3	480	577	538	515	577	538	610	577	538
2010:Q4	625	623	540	543	623	540	604	623	540
2011:Q1	564	575	543	535	575	543	600	575	543
2011:Q2	648	683	569	608	683	569	687	683	569
2011:Q3	658	679	627	616	679	627	688	679	627
2011:Q4	714	756	674	652	756	674	734	756	674
2012:Q1	671	716	690	651	716	690	762	716	690
2012:Q2	711	754	750	701	754	750	767	754	750
2012:Q3	669	697	732	627	697	732	792	697	732
2012:Q4	734	748	741	696	748	741	741	748	741
2013:Q1	662	729	738	725	729	738	766	729	738
2013:Q2	648	743	760	692	743	760	790	743	760
2013:Q3	718	725	701	658	725	701	749	725	701
2013:Q4	719	762	726	702	762	726	806	762	726
2014:Q1	667	756	710	644	756	710	797	756	710
2014:Q2	733	776	799	739	776	799	852	776	799
2014:Q3	751	775	757	707	775	757	825	775	757
2014:Q4	666	808	793	725	808	793	829	808	793

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; Pod 1 = Tri-Lakes region; Pod 2 = Lake George region; Pod 3 = Plattsburgh region.

New York E1-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	87.8	89.9	85.0	64.1	57.6	58.4	84.1	81.2	78.3	59.6	53.9	48.2
Pre-3	88.4	87.9	86.7	63.5	58.2	56.7	82.3	82.2	79.9	61.2	57.8	55.2
Pre-2	89.1	88.2	82.9	62.9	56.8	56.5	82.8	80.5	73.4	64.3	62.5	57.5
Pre-1	88.9	87.1	82.0	61.7	56.3	59.7	82.8	76.9	77.1	66.6	67.0	63.6
Post-1	87.3	85.5	82.7	59.6	51.6	55.1	79.2	73.5	71.8	65.1	67.6	58.3
Post-2	86.3	85.7	88.7	62.1	54.5	47.9	78.7	75.7	69.3	65.7	68.6	57.0
Post-3	89.2	87.3	83.4	63.4	51.2	54.2	82.5	75.8	79.1	68.2	68.2	64.3

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	37.6	29.9	27.8	3.9	3.9	7.8	77.6	78.6	75.4
Pre-3	36.1	31.2	30.7	3.6	3.1	3.0	74.8	78.3	74.9
Pre-2	37.5	32.8	28.3	3.2	3.9	6.9	74.3	76.9	69.4
Pre-1	38.7	32.4	30.4	2.7	2.7	4.2	72.8	73.2	69.9
Post-1	35.9	28.5	28.5	4.0	4.3	4.7	68.4	68.8	65.8
Post-2	39.2	31.9	25.6	5.4	4.1	3.5	67.5	69.4	67.5
Post-3	41.3	31.6	35.9	3.4	4.0	5.7	69.8	66.9	68.6

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	11.0	12.4	8.2	25.2	24.7	19.7	8.2	11.4	7.5	16.8	13.3	12.2
2009:Q4	10.9	9.2	14.0	28.8	28.8	20.8	9.5	14.5	9.6	19.1	14.3	11.2
2010:Q1	11.0	14.3	16.6	32.1	29.6	28.4	12.0	11.8	10.5	20.1	17.9	17.9
2010:Q2	10.0	15.6	12.3	33.7	31.0	25.6	11.8	11.2	10.5	21.8	19.8	15.0
2010:Q3	20.9	13.8	16.4	34.2	33.4	24.7	13.8	15.0	11.1	20.0	18.4	13.6
2010:Q4	18.8	17.9	18.9	35.1	48.4	36.9	14.6	19.5	13.7	20.2	28.9	23.2
2011:Q1	21.7	18.6	22.7	42.1	44.1	48.7	15.9	15.9	19.0	26.1	28.2	29.7
2011:Q2	23.0	22.8	18.8	47.2	54.9	53.8	18.3	19.6	20.0	28.8	35.3	33.7
2011:Q3	19.5	17.9	18.4	35.7	41.5	42.1	11.4	15.9	16.0	24.4	25.6	26.1
2011:Q4	21.6	17.2	20.1	42.9	47.6	50.4	16.5	20.8	23.3	26.4	26.7	27.2
2012:Q1	20.7	21.2	22.8	49.5	61.9	57.6	16.2	24.3	24.1	33.2	37.7	33.5
2012:Q2	22.0	20.1	23.6	38.8	45.1	39.3	12.2	19.7	11.0	26.5	25.3	28.3
2012:Q3	19.8	19.7	25.8	39.4	39.0	36.2	14.4	13.5	16.7	25.1	25.5	19.4
2012:Q4	19.8	23.2	40.5	46.4	45.0	51.3	13.5	16.8	24.5	33.0	28.1	26.8
2013:Q1	21.5	27.3	26.5	50.8	49.4	51.2	18.0	14.6	23.5	32.6	34.8	27.7
2013:Q2	25.3	21.3	29.7	40.0	45.7	45.1	16.9	19.0	22.8	22.9	26.7	22.5
2013:Q3	20.7	24.6	20.0	36.5	39.6	31.4	13.6	14.2	14.0	22.9	25.4	17.4
2013:Q4	24.8	22.5	24.6	34.3	39.4	35.3	11.4	10.2	12.7	23.0	29.2	22.6
2014:Q1	21.1	23.9	23.4	41.6	36.7	42.3	14.6	12.4	15.7	26.9	24.3	26.6
2014:Q2	24.4	23.2	25.7	40.9	48.4	35.8	15.8	17.5	11.5	24.9	30.9	24.3
2014:Q3	26.2	19.0	22.8	34.0	46.9	39.7	10.2	18.4	15.5	23.8	28.4	24.2
2014:Q4	26.2	22.8	26.4	38.1	45.0	33.6	14.3	15.2	11.2	24.0	30.2	22.5

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1,020	1,144	1,117	904	914	854	180	201	187	200	203	215	752	726	717
2009:Q4	1,053	1,142	1,064	952	936	868	182	184	152	195	162	235	628	759	752
2010:Q1	1,064	1,160	1,090	1,024	953	928	214	215	192	207	165	177	690	820	701
2010:Q2	1,126	1,286	1,191	1,138	1,106	1,094	247	231	230	168	214	157	684	734	704
2010:Q3	1,101	1,217	1,143	1,097	1,095	1,046	244	258	223	183	196	180	646	725	765
2010:Q4	1,115	1,216	1,102	1,159	1,115	1,048	228	248	207	175	214	153	641	714	683
2011:Q1	1,091	1,242	1,111	1,107	1,091	995	252	232	207	183	187	185	754	795	701
2011:Q2	1,164	1,286	1,131	1,192	1,217	1,115	253	265	233	224	211	219	833	813	839
2011:Q3	1,053	1,178	1,031	1,058	1,079	1,033	249	225	210	236	240	253	815	820	734
2011:Q4	1,011	1,110	966	1,080	1,128	1,022	240	216	200	232	261	386	802	799	818
2012:Q1	978	1,087	953	1,018	1,037	981	216	217	189	215	263	281	791	887	758
2012:Q2	1,024	1,134	938	1,051	1,102	978	221	219	184	218	274	278	809	824	756
2012:Q3	956	1,090	873	963	1,004	900	206	198	174	255	214	239	859	889	790
2012:Q4	999	1,134	900	1,009	1,027	910	199	199	159	261	297	245	797	894	688
2013:Q1	904	1,101	927	1,006	1,014	962	186	186	189	220	298	244	791	896	839
2013:Q2	959	1,180	981	1,134	1,144	1,045	212	220	182	161	237	288	742	834	822
2013:Q3	908	1,092	931	1,071	1,067	1,003	210	220	192	206	286	257	773	846	779
2013:Q4	926	1,078	931	1,046	1,060	972	210	209	183	227	270	164	775	782	717
2014:Q1	863	1,027	921	990	979	914	201	189	183	219	265	311	763	855	712
2014:Q2	941	1,235	1,004	1,072	1,083	996	205	194	176	215	259	281	806	746	875
2014:Q3	882	1,194	974	985	982	989	211	221	193	288	220	197	718	756	786
2014:Q4	920	1,190	875	955	990	994	203	191	177	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; ; — = not created for this period; PCMH = patient-centered medical home.

New York E1-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	966	963	997	356	317	349	63	68	80	34	37	46
2009:Q4	1,036	1,022	1,070	415	378	437	76	76	74	37	35	43
2010:Q1	1,065	1,016	1,018	456	374	366	87	98	75	46	34	41
2010:Q2	1,155	1,199	1,071	450	464	384	100	91	81	39	43	47
2010:Q3	1,337	1,319	1,256	569	500	446	108	103	124	56	44	57
2010:Q4	1,438	1,529	1,278	626	677	505	120	145	97	50	47	48
2011:Q1	1,502	1,480	1,372	674	669	552	147	126	137	59	47	53
2011:Q2	1,661	1,737	1,488	717	745	576	196	190	151	65	50	58
2011:Q3	1,466	1,514	1,553	561	552	584	168	172	163	69	44	63
2011:Q4	1,461	1,577	1,570	617	660	632	122	124	147	62	49	58
2012:Q1	1,533	1,574	1,555	657	691	607	150	121	156	61	46	64
2012:Q2	1,501	1,627	1,577	591	690	579	147	119	142	62	52	71
2012:Q3	1,441	1,452	1,543	551	597	616	125	108	121	60	49	64
2012:Q4	1,502	1,599	1,598	604	693	647	143	155	130	59	49	63
2013:Q1	1,530	1,615	1,612	663	719	718	156	152	157	66	52	65
2013:Q2	1,527	1,533	1,630	583	669	648	151	124	189	59	58	68
2013:Q3	1,413	1,472	1,476	539	615	523	114	126	164	63	61	64
2013:Q4	1,507	1,560	1,342	600	646	476	149	145	150	75	64	46
2014:Q1	1,427	1,478	1,446	530	654	547	172	143	157	69	61	56
2014:Q2	1,624	1,452	1,644	653	602	702	154	120	191	74	64	55
2014:Q3	1,567	1,542	1,377	585	667	451	185	145	151	73	77	65
2014:Q4	1,536	1,555	1,435	597	672	525	154	152	121	80	69	52

(continued)

New York E1-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	211	156	146	98	132	113	39	41	42	34	31	40
2009:Q4	193	156	165	104	122	121	41	45	44	35	43	37
2010:Q1	189	146	166	97	115	116	37	47	35	35	46	49
2010:Q2	223	166	165	120	142	124	46	66	45	35	53	48
2010:Q3	233	192	193	124	152	137	53	66	52	37	61	48
2010:Q4	242	180	188	130	157	137	57	79	54	38	54	55
2011:Q1	246	179	178	131	139	146	53	71	52	40	61	54
2011:Q2	270	212	212	134	164	146	63	86	58	43	62	64
2011:Q3	288	214	214	120	159	151	58	76	58	36	59	59
2011:Q4	258	212	229	121	176	160	60	86	64	41	57	63
2012:Q1	280	231	245	119	167	139	56	72	58	40	54	58
2012:Q2	274	222	234	123	170	151	59	79	68	43	61	60
2012:Q3	300	208	240	117	155	138	54	75	60	40	44	50
2012:Q4	277	203	226	120	159	140	56	85	69	46	54	55
2013:Q1	257	196	213	108	152	118	50	65	58	50	57	65
2013:Q2	304	205	233	121	153	136	53	71	61	56	55	61
2013:Q3	286	207	241	118	147	148	53	71	58	49	44	59
2013:Q4	279	214	232	120	164	121	57	70	58	52	55	49
2014:Q1	277	189	203	109	140	120	50	51	55	54	61	51
2014:Q2	297	209	216	131	144	130	57	63	67	70	67	66
2014:Q3	295	210	240	109	143	123	56	62	59	65	55	64
2014:Q4	282	203	224	112	151	124	57	65	58	61	60	48

(continued)

New York E1-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	32	31	56	8	19	17	27	29	27	1	0	3
2009:Q4	38	34	59	10	18	13	26	28	25	0	0	0
2010:Q1	34	33	60	9	21	15	25	27	24	0	0	0
2010:Q2	42	41	66	9	22	15	29	35	30	0	0	0
2010:Q3	44	42	71	10	21	14	31	33	30	0	0	0
2010:Q4	45	45	66	11	21	16	31	37	29	0	0	0
2011:Q1	44	45	62	11	21	14	28	32	27	1	0	0
2011:Q2	50	52	62	10	22	14	29	38	29	0	0	0
2011:Q3	45	48	72	9	19	13	25	33	27	0	0	0
2011:Q4	51	46	71	10	20	13	26	33	25	0	0	0
2012:Q1	48	47	73	10	19	14	23	29	24	0	0	0
2012:Q2	53	49	79	8	19	12	24	33	26	0	0	0
2012:Q3	51	49	74	7	18	12	21	31	24	0	0	0
2012:Q4	53	45	74	9	17	12	22	30	26	0	0	0
2013:Q1	52	50	76	8	18	13	19	26	23	0	0	0
2013:Q2	56	46	82	8	18	13	22	31	24	0	0	0
2013:Q3	60	51	82	8	16	12	23	29	24	0	0	0
2013:Q4	52	54	79	8	16	13	22	27	21	0	0	0
2014:Q1	52	51	78	9	15	12	20	25	22	0	0	0
2014:Q2	57	53	87	9	16	13	24	28	23	0	0	0
2014:Q3	64	48	90	8	15	12	21	29	22	0	0	0
2014:Q4	68	53	148	9	16	14	22	32	22	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	125	108	121	199	223	352
2009:Q4	133	127	132	196	204	336
2010:Q1	146	126	127	203	207	304
2010:Q2	143	146	131	216	238	294
2010:Q3	174	160	147	243	256	389
2010:Q4	176	197	176	237	258	318
2011:Q1	192	193	196	242	259	341
2011:Q2	213	228	210	277	270	351
2011:Q3	169	163	184	257	243	373
2011:Q4	188	196	220	255	246	358
2012:Q1	191	212	214	248	230	387
2012:Q2	179	200	191	256	265	435
2012:Q3	158	175	183	268	271	396
2012:Q4	171	185	211	268	253	360
2013:Q1	179	193	203	245	269	334
2013:Q2	172	183	194	262	278	386
2013:Q3	156	170	166	270	280	385
2013:Q4	161	167	155	264	300	231
2014:Q1	159	174	173	251	292	250
2014:Q2	180	174	183	271	277	283
2014:Q3	158	170	142	261	295	312
2014:Q4	169	168	144	257	273	261

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	692	731	853	211	181	268	38	43	72	50	87	96	126	126	159
2009:Q4	743	732	886	242	219	359	34	44	57	51	76	94	125	143	239
2010:Q1	755	763	791	280	225	227	39	40	49	48	77	99	127	160	168
2010:Q2	805	872	778	252	247	251	48	51	53	63	104	100	139	169	160
2010:Q3	790	916	955	265	251	281	48	49	67	63	92	105	134	152	205
2010:Q4	803	927	827	252	324	266	40	51	55	54	91	105	133	184	182
2011:Q1	865	815	840	318	234	282	42	49	54	52	77	82	215	210	246
2011:Q2	892	1,074	862	290	346	271	49	49	63	67	85	103	221	265	251
2011:Q3	857	987	1,014	266	292	304	55	53	75	58	89	95	209	222	250
2011:Q4	861	1,001	970	283	322	374	55	53	62	67	82	107	244	286	334
2012:Q1	875	878	1,022	297	306	359	51	46	78	57	72	115	254	247	354
2012:Q2	891	974	1,046	297	313	307	51	55	83	67	96	123	261	270	300
2012:Q3	857	1,000	941	257	327	294	53	55	74	70	95	107	219	283	293
2012:Q4	818	954	1,016	230	324	344	48	52	68	66	86	125	219	280	344
2013:Q1	850	1,018	986	300	393	386	50	56	60	70	87	97	278	345	366
2013:Q2	896	907	871	294	308	234	50	57	71	81	93	139	255	275	246
2013:Q3	836	879	837	271	268	260	51	65	70	81	94	115	238	270	275
2013:Q4	818	1,003	799	264	376	231	49	65	52	85	99	103	224	342	250
2014:Q1	865	933	899	284	312	274	52	65	60	79	105	128	245	295	267
2014:Q2	957	868	883	311	276	334	68	59	54	93	82	138	285	252	346
2014:Q3	933	835	860	299	255	259	60	61	68	94	85	123	261	251	270
2014:Q4	891	816	956	276	264	272	59	59	58	83	72	113	259	233	270

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	95	76	115	282	345	648	7	14	15	31	51	174	335	455	419
2009:Q4	99	88	114	254	323	534	6	10	11	24	37	135	329	456	506
2010:Q1	103	95	91	278	302	453	6	10	8	24	48	134	365	536	566
2010:Q2	99	102	96	316	341	432	6	18	11	34	56	102	385	530	567
2010:Q3	93	95	96	306	336	571	9	15	8	27	45	120	357	556	524
2010:Q4	89	119	110	278	338	465	3	16	18	30	57	101	336	540	507
2011:Q1	108	91	129	286	338	461	6	9	17	27	41	91	355	530	494
2011:Q2	104	124	122	326	346	498	6	10	19	30	60	73	410	597	538
2011:Q3	92	95	134	329	379	576	6	12	15	27	67	105	366	561	532
2011:Q4	103	116	156	305	348	483	5	9	21	26	50	77	378	561	538
2012:Q1	99	102	145	288	309	541	5	9	17	20	52	108	360	615	574
2012:Q2	103	108	119	319	351	597	6	15	18	30	65	140	353	695	578
2012:Q3	87	102	110	313	354	565	6	16	13	36	59	90	340	654	610
2012:Q4	86	97	132	292	313	478	6	10	19	32	40	103	340	638	601
2013:Q1	94	104	106	301	358	413	9	13	11	31	58	51	325	673	658
2013:Q2	99	98	90	301	339	512	11	13	26	38	54	130	354	723	735
2013:Q3	90	91	100	322	365	522	8	12	21	36	58	108	351	617	672
2013:Q4	84	106	101	277	391	335	12	12	16	28	82	47	352	579	824
2014:Q1	88	98	85	273	380	336	7	11	25	26	84	54	300	574	776
2014:Q2	96	93	122	331	330	366	10	6	33	37	53	60	319	655	798
2014:Q3	85	78	103	323	344	401	9	8	28	36	67	33	314	646	807
2014:Q4	82	75	90	297	339	404	6	3	13	30	63	56	310	594	717

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-14
Quarterly weighted average expenditures and utilization among beneficiaries in Pod 2

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Specialty physician			Primary care physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	139	153	153	19	18	23	59	74	67	17	26	27
2009:Q4	152	174	195	19	18	20	66	72	73	17	28	28
2010:Q1	190	162	166	20	17	19	58	64	64	14	22	19
2010:Q2	149	189	165	19	21	23	66	80	73	16	32	27
2010:Q3	159	180	156	20	21	25	63	80	71	17	32	29
2010:Q4	165	226	178	20	21	21	68	82	73	19	37	31
2011:Q1	186	215	189	18	21	25	58	67	68	17	28	23
2011:Q2	199	242	180	22	21	25	68	83	74	21	37	30
2011:Q3	197	230	206	22	23	27	64	85	77	22	36	32
2011:Q4	221	284	240	23	24	28	70	97	85	23	43	35
2012:Q1	226	284	262	24	22	28	65	88	79	20	32	27
2012:Q2	232	283	269	26	25	33	72	94	93	23	39	34
2012:Q3	188	255	257	26	26	31	65	90	90	20	37	33
2012:Q4	225	285	275	27	26	30	69	90	89	21	43	37
2013:Q1	259	294	297	26	27	30	63	81	73	18	30	28
2013:Q2	209	282	287	27	30	31	66	92	85	18	38	34
2013:Q3	202	262	235	29	31	32	69	93	85	18	37	34
2013:Q4	228	287	256	30	31	28	73	99	91	20	40	36
2014:Q1	204	304	259	29	33	29	58	88	76	16	27	27
2014:Q2	242	288	306	31	33	33	73	105	87	19	36	37
2014:Q3	235	275	246	35	36	34	67	104	88	19	36	37
2014:Q4	235	304	280	33	36	34	71	103	95	21	41	39

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmission*s,* which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-15
Quarterly weighted average utilization among beneficiaries in Pod 2

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	54	50	57	134	125	171	145	156	174
2009:Q4	55	59	62	122	118	155	157	129	190
2010:Q1	62	57	58	122	116	147	148	131	138
2010:Q2	56	61	59	125	130	156	107	165	132
2010:Q3	55	60	55	130	133	175	123	156	143
2010:Q4	54	69	62	122	129	154	134	168	122
2011:Q1	67	67	67	116	131	163	172	150	137
2011:Q2	71	77	69	143	136	166	193	169	167
2011:Q3	69	68	69	143	148	177	182	180	184
2011:Q4	71	84	83	140	138	182	176	194	269
2012:Q1	74	88	86	137	131	182	156	208	205
2012:Q2	77	84	83	153	143	201	190	221	194
2012:Q3	67	76	76	145	149	203	155	177	175
2012:Q4	75	78	84	143	141	182	211	220	198
2013:Q1	78	82	85	144	149	172	155	232	174
2013:Q2	76	78	81	157	157	184	159	186	203
2013:Q3	69	75	72	160	159	193	170	202	186
2013:Q4	66	76	76	142	152	152	181	210	155
2014:Q1	61	80	80	146	154	143	163	182	187
2014:Q2	69	79	86	159	153	167	185	164	222
2014:Q3	65	71	72	162	155	173	213	157	227
2014:Q4	69	76	77	145	160	170	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

New York E1-16
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			ER professional expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	21	20	19	5	5	7
2009:Q4	22	21	22	5	5	6
2010:Q1	24	21	22	5	5	5
2010:Q2	23	24	21	5	6	6
2010:Q3	23	22	21	6	6	7
2010:Q4	24	26	21	6	6	7
2011:Q1	27	25	26	5	6	6
2011:Q2	27	27	21	6	7	7
2011:Q3	27	24	26	7	7	8
2011:Q4	31	32	30	7	7	9
2012:Q1	33	32	31	6	7	8
2012:Q2	31	29	32	7	7	10
2012:Q3	29	28	29	7	8	9
2012:Q4	28	31	31	7	8	9
2013:Q1	29	30	31	6	8	8
2013:Q2	27	28	28	6	8	9
2013:Q3	27	27	24	7	8	8
2013:Q4	29	29	26	7	8	8
2014:Q1	30	31	29	6	8	7
2014:Q2	30	29	31	7	8	9
2014:Q3	28	26	29	8	8	9
2014:Q4	28	29	33	8	9	9

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	80.1	86.1	84.5	61.6	59.7	59.2	80.9	80.7	81.7	59.9	52.9	52.6
Pre-3	80.3	86.7	85.3	64.6	60.8	60.2	80.3	83.0	81.3	61.8	58.0	52.7
Pre-2	80.0	84.3	86.9	61.2	60.1	58.8	79.4	82.2	81.1	61.3	58.9	51.7
Pre-1	90.6	87.2	85.6	64.4	57.9	60.2	81.8	83.0	81.0	65.2	62.0	55.1
Post-1	90.1	89.3	86.4	62.0	57.9	58.4	81.8	84.8	81.6	63.0	66.1	52.5
Post-2	91.6	87.0	87.3	64.9	61.2	61.7	84.4	83.1	81.9	63.1	64.8	54.8
Post-3	91.7	90.4	88.0	62.1	61.6	63.7	82.4	83.0	80.4	60.0	63.1	55.0

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	33.1	30.4	28.8	6.3	6.0	5.4	78.8	79.2	78.5
Pre-3	36.3	34.4	30.7	4.9	4.9	4.1	78.7	81.6	77.1
Pre-2	33.1	36.0	30.2	5.7	6.7	5.7	75.1	80.0	75.6
Pre-1	39.7	35.1	32.2	3.4	5.2	4.4	77.3	77.0	75.4
Post-1	38.1	37.4	30.3	3.9	3.3	5.8	74.2	74.3	73.9
Post-2	39.1	37.8	33.8	2.6	4.3	5.0	73.4	75.3	73.0
Post-3	35.4	38.2	33.2	3.3	4.1	3.8	70.1	75.5	71.5

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	2.8	5.7	3.7	7.5	6.4	10.3	4.2	3.1	3.5	3.3	3.3	6.8
2009:Q4	3.1	3.8	4.4	9.7	9.4	10.8	3.1	4.1	3.8	6.3	5.3	7.0
2010:Q1	3.6	4.4	5.3	9.8	12.3	14.2	4.4	4.3	4.5	5.2	8.0	9.7
2010:Q2	3.6	3.2	4.6	9.9	7.3	11.3	3.9	2.9	4.2	5.8	4.3	7.0
2010:Q3	4.4	3.3	5.6	10.1	7.2	10.9	3.7	2.8	4.2	6.4	4.4	6.8
2010:Q4	4.0	2.5	4.3	11.4	10.6	11.4	3.3	5.4	3.3	7.9	5.1	8.2
2011:Q1	4.9	4.6	5.7	13.3	14.3	15.7	4.9	5.2	7.2	8.3	9.1	8.5
2011:Q2	4.2	6.3	5.1	13.0	17.0	14.1	5.1	2.8	5.7	7.9	14.2	8.4
2011:Q3	4.9	4.7	6.9	11.2	13.6	13.8	4.9	5.3	5.8	6.3	8.3	8.0
2011:Q4	5.7	7.1	7.5	14.7	14.3	14.6	4.9	4.9	6.4	9.8	9.5	8.2
2012:Q1	6.9	6.2	8.1	13.2	13.1	14.5	5.5	5.2	5.4	7.7	7.9	9.1
2012:Q2	7.6	4.6	7.0	10.7	11.0	12.8	4.1	4.8	5.0	6.6	6.2	7.8
2012:Q3	6.8	6.7	7.3	11.3	11.6	10.5	4.5	5.5	5.2	6.8	6.1	5.4
2012:Q4	7.0	7.3	8.1	14.7	12.7	11.8	4.7	5.9	4.3	9.9	6.8	7.5
2013:Q1	7.6	11.2	9.8	16.4	13.1	13.6	4.7	5.7	5.8	11.7	7.4	7.7
2013:Q2	7.2	5.6	7.5	14.0	12.3	9.9	4.0	3.4	3.6	10.1	8.9	6.3
2013:Q3	7.4	6.7	7.2	12.7	12.1	11.0	3.4	2.7	3.5	9.2	9.4	7.5
2013:Q4	9.1	6.4	9.5	11.5	14.7	11.0	3.0	4.2	2.9	8.3	10.6	8.0
2014:Q1	8.1	8.9	8.6	15.7	15.3	11.9	4.4	4.8	3.5	11.0	10.6	8.4
2014:Q2	8.3	7.8	5.7	11.7	11.8	12.7	4.4	4.0	4.8	7.2	7.8	7.8
2014:Q3	7.1	8.0	6.7	11.5	11.6	13.1	4.4	4.5	4.5	7.0	7.1	8.6
2014:Q4	8.8	8.8	8.8	12.8	8.4	13.8	3.9	2.4	4.2	8.8	6.0	9.5

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	906.1	915.0	873.5	788.1	767.4	754.5	164.6	150.0	145.6	94.7	125.8	187.8	642.9	579.9	516.1
2009:Q4	914.7	913.0	866.4	821.1	799.8	773.9	155.4	157.6	140.4	141.6	144.1	153.0	545.4	595.3	560.8
2010:Q1	900.2	902.5	831.0	819.7	847.0	804.6	178.7	185.6	162.2	163.7	134.8	200.9	655.1	674.1	626.7
2010:Q2	957.6	957.0	909.9	903.3	957.0	906.0	192.7	212.4	184.8	138.6	191.4	191.8	647.4	610.8	630.5
2010:Q3	920.6	908.1	872.9	864.1	857.3	835.0	190.6	191.9	171.9	142.6	118.2	152.2	643.3	661.4	586.5
2010:Q4	924.6	940.8	869.9	868.9	877.0	854.0	184.0	177.4	156.1	155.9	187.4	195.5	650.6	613.0	587.0
2011:Q1	895.5	889.8	839.0	824.1	813.4	813.4	197.8	174.4	165.3	160.4	146.8	184.4	684.5	653.9	655.3
2011:Q2	978.8	963.9	905.3	922.0	946.9	925.8	224.3	192.5	178.0	169.4	215.1	170.6	708.5	722.7	610.5
2011:Q3	895.1	872.7	821.9	858.4	850.1	862.0	214.0	190.7	179.6	195.3	209.3	218.0	708.9	688.1	687.5
2011:Q4	911.1	904.0	836.8	870.3	903.8	889.1	216.4	192.6	174.4	179.8	286.8	204.6	676.8	769.7	633.9
2012:Q1	913.1	885.8	794.3	875.6	891.5	847.2	209.7	176.1	168.4	201.8	176.9	228.8	730.4	705.5	608.5
2012:Q2	947.7	934.7	813.4	944.4	942.8	885.9	222.7	191.7	168.9	196.0	221.6	170.3	714.9	727.0	677.9
2012:Q3	852.7	864.6	765.3	881.6	884.1	836.1	212.4	183.8	163.6	174.6	223.9	196.0	751.8	710.6	655.8
2012:Q4	894.6	890.4	789.2	876.8	880.5	834.1	201.0	181.4	160.6	191.3	196.4	201.1	733.1	685.1	645.2
2013:Q1	862.6	858.1	755.4	890.6	943.6	864.2	187.5	176.9	155.1	220.4	272.0	214.8	753.7	766.3	678.6
2013:Q2	959.5	949.8	805.2	1,010.9	1,083.2	959.0	217.5	207.7	175.4	193.7	180.1	172.4	709.0	733.7	687.7
2013:Q3	884.8	873.6	777.8	903.9	979.2	904.3	203.5	192.0	166.3	206.7	196.6	137.6	742.2	757.6	653.6
2013:Q4	902.3	922.9	775.3	955.1	965.7	929.1	184.7	179.0	162.7	205.9	222.4	188.8	680.1	585.8	663.0
2014:Q1	831.6	886.0	736.3	881.2	901.3	863.5	182.3	178.9	157.4	248.1	137.4	202.2	748.0	632.6	599.1
2014:Q2	958.8	984.5	813.1	1,039.3	1,005.8	993.1	191.6	221.9	171.4	204.3	170.8	160.2	682.7	697.7	698.5
2014:Q3	926.2	925.1	756.1	969.4	985.3	932.2	185.3	202.4	153.1	201.6	153.5	220.9	665.7	682.8	674.6
2014:Q4	934.0	955.7	789.6	966.0	1003.5	937.3	163.3	175.2	142.7	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Rhode Island E2-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	553	628	642	164	209	210	38	42	64	32	28	27
2009:Q4	595	616	629	179	204	189	35	38	68	27	26	32
2010:Q1	535	574	618	155	207	195	35	33	64	31	26	27
2010:Q2	610	644	687	170	201	208	29	34	67	35	37	32
2010:Q3	629	629	689	185	186	202	41	41	69	36	33	37
2010:Q4	667	690	682	198	223	200	49	41	78	39	30	33
2011:Q1	644	573	711	192	177	234	61	50	95	33	28	32
2011:Q2	723	718	758	205	215	212	72	64	95	37	30	39
2011:Q3	720	735	767	201	227	215	59	61	103	42	36	37
2011:Q4	775	833	814	246	302	251	65	74	83	40	36	35
2012:Q1	798	703	826	255	220	276	77	64	97	39	33	35
2012:Q2	801	741	849	232	240	274	58	50	94	41	37	38
2012:Q3	765	746	773	222	227	218	67	69	80	41	46	37
2012:Q4	830	754	814	258	259	245	76	49	85	41	34	37
2013:Q1	854	836	844	283	311	302	88	82	94	41	35	36
2013:Q2	852	799	796	266	241	245	73	61	86	46	52	39
2013:Q3	820	761	829	262	243	269	61	62	68	42	37	44
2013:Q4	867	805	834	289	267	253	65	58	78	49	38	44
2014:Q1	825	770	811	293	276	264	70	74	80	41	42	40
2014:Q2	850	794	841	261	267	255	70	60	88	49	35	43
2014:Q3	876	797	865	271	254	272	72	85	80	49	32	42
2014:Q4	884	793	839	275	255	269	79	58	82	45	45	44

(continued)

Rhode Island E2-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	82	83	79	83	86	86	30	33	33	24	25	28
2009:Q4	91	73	74	90	89	82	30	32	33	32	26	33
2010:Q1	82	72	79	74	74	77	24	25	25	31	22	31
2010:Q2	101	83	89	93	92	94	31	34	33	34	27	35
2010:Q3	92	94	82	88	86	93	33	35	35	33	27	35
2010:Q4	94	92	82	95	95	91	35	39	37	36	33	33
2011:Q1	101	80	79	82	72	83	29	27	32	35	28	38
2011:Q2	106	111	96	97	94	98	38	41	40	39	27	36
2011:Q3	108	102	102	99	94	89	38	39	41	37	33	35
2011:Q4	112	92	111	99	104	96	40	41	43	38	34	37
2012:Q1	119	102	104	92	88	94	34	30	35	43	35	40
2012:Q2	124	100	111	108	102	106	38	38	39	45	40	40
2012:Q3	111	97	119	105	96	93	38	39	37	42	34	37
2012:Q4	116	104	106	105	100	95	42	41	40	45	37	41
2013:Q1	119	102	110	93	89	84	34	32	33	47	43	45
2013:Q2	129	111	106	107	106	94	42	40	38	47	44	44
2013:Q3	120	110	117	100	100	99	39	40	38	47	39	49
2013:Q4	128	114	121	106	105	98	42	43	39	50	45	46
2014:Q1	117	103	121	88	84	87	33	31	32	46	39	39
2014:Q2	129	115	121	108	106	97	39	40	38	46	38	42
2014:Q3	133	117	128	107	106	100	39	39	36	47	33	42
2014:Q4	136	111	123	107	108	101	43	45	39	45	36	36

(continued)

Rhode Island E2-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	29	33	29	13	15	15	24	25	26	0	0	2
2009:Q4	29	31	29	13	16	15	25	24	24	0	0	0
2010:Q1	30	29	30	14	16	15	21	22	20	0	0	0
2010:Q2	33	33	33	14	18	16	25	26	23	3	0	0
2010:Q3	35	32	35	14	16	16	23	26	24	0	1	0
2010:Q4	31	35	35	16	16	17	23	26	23	0	0	0
2011:Q1	30	29	32	13	15	15	21	21	20	0	0	0
2011:Q2	33	36	35	15	17	16	23	26	24	0	0	0
2011:Q3	36	38	38	15	17	15	23	25	22	0	0	0
2011:Q4	36	38	38	16	17	15	23	28	23	0	0	0
2012:Q1	37	35	37	17	17	16	21	23	21	2	0	0
2012:Q2	40	37	39	19	18	16	23	25	23	0	0	0
2012:Q3	38	37	37	18	17	16	21	23	20	0	0	0
2012:Q4	39	38	38	15	15	16	21	22	21	0	0	0
2013:Q1	38	39	38	13	15	15	17	20	19	0	0	0
2013:Q2	39	40	39	15	17	15	20	22	20	0	0	0
2013:Q3	40	43	39	14	15	16	18	23	20	0	0	0
2013:Q4	42	43	41	15	16	15	19	21	20	0	0	0
2014:Q1	38	40	38	15	15	16	16	19	16	0	0	0
2014:Q2	45	44	41	19	16	22	19	22	20	0	0	0
2014:Q3	43	44	41	18	17	18	20	21	18	0	0	0
2014:Q4	45	45	42	15	18	16	19	22	19	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	56.4	55.9	61.5	190.5	165.1	153.0
2009:Q4	54.9	59.6	61.2	162.8	147.5	151.2
2010:Q1	52.3	60.2	62.6	168.6	138.9	148.7
2010:Q2	55.7	62.4	64.6	181.1	153.4	157.2
2010:Q3	57.8	56.3	60.7	202.6	153.0	174.1
2010:Q4	60.9	65.3	60.9	173.3	147.9	152.9
2011:Q1	66.4	62.3	72.3	163.1	145.1	147.5
2011:Q2	64.2	68.4	68.8	188.0	148.5	162.8
2011:Q3	68.5	69.6	70.0	207.5	172.7	161.0
2011:Q4	71.5	85.7	74.4	190.3	151.9	159.9
2012:Q1	76.0	70.5	79.7	199.2	153.1	168.2
2012:Q2	68.6	72.5	70.0	208.9	150.7	176.7
2012:Q3	68.6	68.3	68.8	208.7	170.7	177.6
2012:Q4	72.8	71.0	71.0	199.7	143.3	174.1
2013:Q1	77.8	81.8	78.7	202.2	150.9	165.5
2013:Q2	72.7	73.2	67.8	204.5	161.8	188.2
2013:Q3	68.4	67.0	72.2	214.3	159.4	196.7
2013:Q4	72.9	73.4	67.6	196.0	146.3	173.8
2014:Q1	75.8	76.8	72.0	176.1	143.3	173.3
2014:Q2	70.3	69.9	68.8	194.1	141.6	177.6
2014:Q3	73.6	63.0	72.1	200.4	132.5	182.4
2014:Q4	76.4	69.8	70.4	173.6	131.9	171.0

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	612	675	700	525	627	460	637	720	742
2009:Q4	663	688	715	611	618	459	662	707	745
2010:Q1	618	583	672	600	671	440	634	626	709
2010:Q2	728	704	703	667	822	500	750	786	724
2010:Q3	711	676	759	593	712	465	725	698	795
2010:Q4	727	737	666	633	694	502	743	758	721
2011:Q1	677	609	676	535	641	429	716	617	735
2011:Q2	769	767	707	618	788	502	792	769	784
2011:Q3	788	822	778	599	818	602	797	798	767
2011:Q4	875	833	823	712	1070	589	803	891	830
2012:Q1	840	724	810	623	822	516	860	795	828
2012:Q2	827	909	901	620	845	509	899	872	829
2012:Q3	817	859	722	676	782	576	824	849	755
2012:Q4	915	924	806	694	914	566	953	885	831
2013:Q1	920	1099	886	864	869	517	981	988	907
2013:Q2	897	887	809	713	890	584	937	883	810
2013:Q3	875	872	885	754	801	711	938	841	914
2013:Q4	928	840	825	710	850	597	973	765	882
2014:Q1	837	806	809	702	773	478	961	751	887
2014:Q2	985	835	817	709	775	528	966	802	881
2014:Q3	1028	835	880	815	720	662	1035	774	961
2014:Q4	994	764	816	653	699	613	966	773	829

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	79.9	83.5	82.6	62.0	60.0	60.2	80.5	77.3	80.3	65.4	53.0	56.2
Pre-3	78.0	88.0	83.1	64.7	59.0	62.4	78.9	80.0	77.6	66.0	65.8	54.8
Pre-2	76.2	84.4	87.5	61.1	59.8	57.9	76.1	81.0	78.3	65.1	61.7	56.5
Pre-1	89.0	86.9	86.8	63.8	60.5	59.4	79.5	80.7	79.5	68.9	68.2	60.7
Post-1	86.5	84.1	84.3	60.6	58.5	62.8	76.8	79.0	79.5	64.4	67.8	60.8
Post-2	89.9	81.4	84.4	67.9	58.5	62.6	82.0	73.0	75.5	66.6	67.5	61.5
Post-3	89.6	88.9	86.6	60.2	61.2	60.9	76.5	81.5	77.7	65.1	61.8	67.7

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	33.0	29.7	31.2	4.8	7.9	4.4	78.4	80.4	77.4
Pre-3	36.6	37.7	29.7	4.2	5.7	4.2	77.0	80.6	74.9
Pre-2	31.3	36.3	29.7	5.9	6.2	4.8	73.2	80.6	73.4
Pre-1	40.5	39.1	32.5	3.9	5.5	2.0	74.2	73.8	71.1
Post-1	36.9	37.1	34.4	4.3	4.5	4.5	70.1	70.7	69.0
Post-2	41.1	33.5	33.6	1.7	4.5	4.7	69.0	72.3	67.6
Post-3	33.2	38.5	36.0	3.5	5.8	4.3	63.1	71.9	64.3

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.3	18.1	9.3	21.6	16.2	31.2	11.5	8.3	10.1	10.1	7.9	21.1
2009:Q4	6.6	7.5	9.3	28.5	29.5	31.8	6.6	11.3	10.6	21.4	18.3	21.2
2010:Q1	9.8	7.1	13.8	29.4	40.1	40.3	12.5	13.0	12.9	16.9	27.1	27.3
2010:Q2	10.1	8.8	13.0	29.4	20.1	33.6	7.9	6.1	9.8	21.5	14.1	23.8
2010:Q3	14.2	7.2	19.2	37.4	24.1	36.4	12.1	9.1	11.6	25.4	15.0	24.8
2010:Q4	14.8	7.9	16.8	37.8	38.5	42.2	10.2	19.6	11.0	27.6	19.0	31.2
2011:Q1	17.2	15.3	23.0	47.7	49.3	54.6	16.3	20.0	21.9	31.4	29.3	32.8
2011:Q2	13.7	22.2	18.7	47.5	57.5	48.2	17.3	8.1	17.2	30.2	49.4	31.0
2011:Q3	15.5	14.1	20.8	34.8	45.5	45.0	15.1	17.8	17.9	19.6	27.6	27.2
2011:Q4	16.3	17.1	23.7	47.3	43.1	47.6	12.7	12.9	20.6	34.5	30.2	27.0
2012:Q1	17.8	15.2	22.5	42.0	36.1	42.4	14.4	14.0	13.3	27.6	22.1	29.1
2012:Q2	23.0	13.6	19.1	35.8	36.4	39.6	12.4	15.3	12.4	23.4	21.0	27.1
2012:Q3	14.8	15.5	19.5	37.7	40.4	29.8	10.9	15.3	12.9	26.8	25.1	16.9
2012:Q4	16.0	20.4	25.3	51.2	37.9	35.2	16.4	16.9	11.5	34.7	21.0	23.7
2013:Q1	18.4	34.3	23.0	53.4	37.1	43.4	15.5	13.9	14.3	37.9	23.2	29.0
2013:Q2	17.6	16.1	26.3	47.6	45.8	31.6	10.9	11.2	10.6	36.7	34.6	21.0
2013:Q3	16.4	13.6	17.8	41.6	39.5	39.9	10.4	7.1	12.6	31.2	32.5	27.3
2013:Q4	24.5	11.0	22.7	37.1	49.0	32.3	8.6	13.0	10.3	28.5	36.1	22.0
2014:Q1	22.4	19.8	16.2	53.3	45.6	41.9	11.5	12.2	10.2	41.2	33.4	31.6
2014:Q2	23.1	27.8	12.7	43.0	32.6	47.6	14.7	12.1	12.9	28.2	20.5	34.7
2014:Q3	19.2	17.5	15.6	36.5	38.1	31.6	11.7	15.8	11.2	24.8	22.3	20.4
2014:Q4	18.5	27.3	21.8	41.3	25.3	40.9	10.0	6.7	10.5	31.4	18.6	30.5

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1,226.2	1,178.6	1,162.5	1,274.7	1,151.6	1,219.3	235.9	229.4	216.0	126.8	136.9	290.9	751.4	632.3	582.9
2009:Q4	1,202.7	1,161.0	1,116.6	1,282.3	1,225.6	1,200.2	224.6	227.6	216.7	164.0	164.9	212.5	609.0	597.9	649.9
2010:Q1	1,252.1	1,208.7	1,092.3	1,350.8	1,296.4	1,321.5	241.6	291.8	248.4	240.7	188.9	276.6	730.2	744.5	676.7
2010:Q2	1,313.7	1,236.5	1,222.9	1,425.1	1,436.8	1,486.5	269.2	287.1	280.3	193.0	282.7	282.9	690.0	651.3	687.0
2010:Q3	1,308.0	1,220.6	1,206.5	1,431.1	1,342.5	1,435.2	293.5	267.2	260.9	171.3	162.1	204.9	685.6	696.9	622.4
2010:Q4	1,279.9	1,269.0	1,166.7	1,436.3	1,406.7	1,420.7	284.0	257.0	238.7	203.5	252.8	253.8	718.4	674.8	673.1
2011:Q1	1,302.0	1,153.2	1,133.1	1,414.5	1,326.1	1,412.4	309.5	266.0	246.9	203.4	181.5	253.0	742.1	694.0	697.4
2011:Q2	1,411.8	1,277.1	1,181.4	1,555.0	1,542.7	1,588.3	330.5	264.7	284.3	226.4	268.4	244.4	798.6	769.8	697.9
2011:Q3	1,269.9	1,160.7	1,075.4	1,431.0	1,333.3	1,458.0	331.8	267.7	268.5	261.8	265.6	305.5	786.8	765.4	734.2
2011:Q4	1,172.8	1,166.8	1,084.1	1,393.2	1,378.8	1426.8	321.5	232.7	269.4	236.3	282.4	249.1	743.3	772.0	684.3
2012:Q1	1,217.7	1,147.1	1,082.6	1,434.2	1,421.4	1,389.9	289.2	245.3	239.1	284.2	248.2	330.9	799.2	826.1	707.0
2012:Q2	1,234.6	1,161.9	1,052.8	1,509.9	1,487.4	1,380.4	308.9	271.0	236.5	238.3	338.8	208.1	760.9	851.6	772.5
2012:Q3	1,173.2	1,095.9	1,062.4	1,460.4	1,408.0	1,360.9	290.4	243.7	245.2	238.5	305.7	218.9	839.0	798.2	718.9
2012:Q4	1,171.5	1,108.7	974.2	1,400.0	1,452.2	1,298.4	267.5	239.3	237.2	237.4	221.7	242.8	797.4	677.5	642.9
2013:Q1	1,119.9	1,105.3	997.3	1,389.4	1,457.9	1,351.4	248.5	241.2	223.1	312.9	386.2	250.5	868.5	905.7	705.3
2013:Q2	1,278.6	1,211.2	1,026.7	1,611.0	1,672.5	1,456.7	312.5	289.9	254.7	226.7	286.4	255.4	743.5	815.9	715.1
2013:Q3	1,145.6	1,086.2	1,033.7	1,427.7	1,517.5	1,379.6	285.9	242.7	232.7	266.6	252.3	205.0	801.9	764.7	743.0
2013:Q4	1,127.5	1,154.1	1,011.5	1,482.6	1,424.1	1,374.8	248.3	238.2	217.7	287.0	277.3	237.3	816.0	632.8	755.7
2014:Q1	1,017.8	1,071.9	918.5	1,375.3	1,344.4	1,327.1	250.1	217.8	222.1	328.6	176.1	247.9	745.5	640.7	619.6
2014:Q2	1,170.4	1,151.5	1,042.0	1,608.2	1,413.5	1,501.1	254.0	236.2	236.2	289.3	248.4	226.7	766.9	728.5	758.9
2014:Q3	1,161.4	1,139.2	1,003.5	1,544.2	1,425.8	1,440.1	246.8	264.9	214.2	300.0	177.7	266.5	703.7	772.4	657.0
2014:Q4	1,108.1	1,155.5	997.1	1,454.2	1,469.6	1,447.8	241.7	207.4	209.9	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Rhode Island E2-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1,095	1,311	1,472	352	490	576	87	96	186	63	60	50
2009:Q4	1,215	1,240	1,364	418	437	431	76	105	189	55	55	63
2010:Q1	1,149	1,210	1,382	362	502	480	95	95	174	54	49	54
2010:Q2	1,351	1,355	1,611	448	500	550	78	89	207	68	78	67
2010:Q3	1,608	1,393	1,825	594	452	640	135	128	236	73	77	75
2010:Q4	1,715	1,767	1,874	631	704	649	170	142	286	92	78	75
2011:Q1	1,712	1,455	2,060	600	544	770	227	149	357	72	62	64
2011:Q2	1,899	1,931	2,078	634	728	683	273	250	347	88	73	98
2011:Q3	1,746	1,711	1,952	544	591	596	197	161	340	91	81	77
2011:Q4	1,798	2,000	1,984	645	837	659	201	201	267	87	88	68
2012:Q1	1,920	1,696	2,089	695	562	770	229	200	302	83	86	77
2012:Q2	1,862	1,711	2,100	596	704	720	167	138	328	86	65	75
2012:Q3	1,776	1,646	1,771	562	605	517	188	221	215	98	82	74
2012:Q4	1,922	1,781	1,959	662	730	657	215	141	272	87	80	66
2013:Q1	1,877	1,877	2,164	656	764	881	224	216	289	89	73	77
2013:Q2	1,932	1,738	1,950	689	597	651	192	153	258	110	141	80
2013:Q3	1,703	1,654	1,858	569	614	610	126	141	195	90	83	84
2013:Q4	1,907	1,769	1,855	717	648	624	188	151	219	94	78	78
2014:Q1	1,855	1,803	1,818	705	735	624	196	195	212	91	92	80
2014:Q2	1,913	1,550	1,921	706	556	645	177	176	212	103	71	91
2014:Q3	1,955	1,655	1,810	674	575	597	220	257	217	94	53	78
2014:Q4	1,887	1,634	1,848	658	546	603	218	126	272	92	128	81

(continued)

Rhode Island E2-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	167	175	152	134	148	156	51	55	63	62	65	81
2009:Q4	191	137	150	151	141	147	47	52	58	78	65	92
2010:Q1	167	142	172	134	128	148	49	50	53	77	46	83
2010:Q2	221	167	194	162	156	176	58	64	67	96	71	104
2010:Q3	206	224	194	169	149	196	64	67	72	91	77	105
2010:Q4	212	221	203	180	187	197	68	75	77	112	90	114
2011:Q1	236	189	198	167	145	195	67	60	75	111	86	127
2011:Q2	244	259	222	189	185	205	78	84	85	117	77	128
2011:Q3	262	238	248	175	162	177	75	76	83	115	99	115
2011:Q4	246	202	257	171	214	178	73	82	86	108	85	114
2012:Q1	266	249	249	169	160	178	70	63	78	121	102	114
2012:Q2	286	214	258	188	171	193	74	70	83	130	121	124
2012:Q3	256	186	258	183	162	168	70	73	76	127	94	119
2012:Q4	279	236	254	178	181	168	80	72	79	116	101	108
2013:Q1	242	236	237	166	148	165	69	68	77	123	119	132
2013:Q2	282	241	242	182	184	167	76	70	78	125	115	139
2013:Q3	250	235	262	164	176	164	67	66	73	128	92	145
2013:Q4	255	251	236	178	179	175	73	75	73	127	114	127
2014:Q1	239	221	247	160	155	143	64	59	66	118	109	109
2014:Q2	238	221	257	188	156	158	68	66	72	121	94	125
2014:Q3	256	226	233	181	170	160	68	66	64	126	84	123
2014:Q4	252	240	244	175	168	168	69	67	72	119	97	111

(continued)

Rhode Island E2-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	46	48	52	20	23	23	36	37	39	0	0	5
2009:Q4	49	49	54	19	24	23	37	37	38	0	0	0
2010:Q1	56	44	58	21	26	29	33	34	34	0	0	0
2010:Q2	59	55	63	22	29	27	40	45	41	0	0	0
2010:Q3	70	53	74	22	24	27	38	42	45	0	4	0
2010:Q4	59	60	72	25	25	28	39	43	43	0	0	0
2011:Q1	62	54	73	21	25	26	38	35	39	0	0	0
2011:Q2	65	71	78	22	29	25	39	44	44	0	0	0
2011:Q3	74	76	78	22	25	24	36	38	38	0	0	0
2011:Q4	62	69	80	24	26	24	36	47	39	0	0	0
2012:Q1	78	64	80	26	24	24	36	38	38	0	0	0
2012:Q2	78	66	79	28	25	25	37	37	39	0	0	1
2012:Q3	79	59	72	27	23	24	33	35	34	0	0	0
2012:Q4	79	63	76	21	24	23	32	35	36	0	0	0
2013:Q1	67	78	79	18	24	25	25	32	34	0	0	0
2013:Q2	70	62	80	21	24	24	30	33	35	0	0	0
2013:Q3	74	77	78	22	23	25	28	33	31	0	0	0
2013:Q4	75	75	77	21	23	22	28	29	30	0	0	0
2014:Q1	72	74	75	20	21	23	23	32	24	0	0	0
2014:Q2	75	73	78	24	24	33	29	27	31	0	0	0
2014:Q3	74	71	74	22	26	28	32	30	28	0	0	0
2014:Q4	74	67	77	20	29	25	28	29	30	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	120.9	127.3	151.2	310.0	336.2	246.0
2009:Q4	123.1	134.0	147.2	266.6	281.0	237.2
2010:Q1	126.3	148.6	153.4	285.8	253.7	240.4
2010:Q2	135.9	150.2	159.5	307.1	303.3	265.4
2010:Q3	172.3	140.5	185.2	357.9	312.6	290.5
2010:Q4	179.5	196.4	191.9	325.3	315.6	272.3
2011:Q1	201.0	187.0	226.9	286.9	283.3	255.3
2011:Q2	197.3	212.4	214.2	364.0	298.0	285.8
2011:Q3	184.0	185.9	186.8	387.5	344.7	279.9
2011:Q4	181.2	224.5	193.8	355.7	312.9	276.6
2012:Q1	202.2	185.7	204.8	394.1	303.1	298.1
2012:Q2	183.5	195.6	183.3	399.8	281.2	288.7
2012:Q3	173.7	185.1	165.5	424.0	332.7	302.8
2012:Q4	189.3	205.7	192.4	412.2	299.1	264.0
2013:Q1	198.4	217.7	206.5	379.1	304.3	277.0
2013:Q2	181.6	182.9	183.6	406.9	343.7	305.7
2013:Q3	171.0	167.0	177.9	429.9	317.5	323.1
2013:Q4	184.9	181.8	170.9	361.6	296.2	285.3
2014:Q1	192.0	201.0	180.1	348.8	303.0	263.1
2014:Q2	192.4	174.5	185.8	379.7	274.8	287.8
2014:Q3	182.6	154.6	156.9	383.6	226.0	304.0
2014:Q4	187.5	162.0	177.6	363.4	259.2	270.7

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	783	871	1,158	241	257	407	66	52	56	78	84	112	130	184	210
2009:Q4	802	923	1,215	220	268	371	53	48	69	72	99	105	143	198	254
2010:Q1	754	951	1,162	214	322	358	62	51	65	78	95	120	159	157	232
2010:Q2	954	1,021	1,246	292	301	384	71	72	68	95	111	111	174	200	211
2010:Q3	950	876	1,303	280	223	389	76	58	72	85	92	100	178	161	267
2010:Q4	933	929	1,177	244	264	327	67	51	67	84	95	101	201	171	207
2011:Q1	1,000	805	1,199	302	227	361	60	55	59	81	68	102	244	203	305
2011:Q2	1,082	1,203	1,309	309	369	357	69	56	71	91	96	105	282	277	310
2011:Q3	1,043	1,043	1,197	294	293	287	75	56	66	87	89	81	279	241	246
2011:Q4	1,020	1,285	1,214	301	475	324	75	64	66	94	92	99	284	420	279
2012:Q1	1,058	1,021	1,209	312	279	355	66	61	63	92	85	88	274	217	321
2012:Q2	1,036	1,133	1,127	262	387	294	76	59	60	109	101	84	248	324	265
2012:Q3	980	1,128	1,110	272	323	258	72	72	68	94	98	96	222	295	243
2012:Q4	964	1,076	1,221	253	366	340	75	55	61	93	101	91	229	296	287
2013:Q1	1,108	1,102	1,260	319	387	430	80	67	60	83	81	84	308	379	376
2013:Q2	1,066	1,057	1,187	288	325	338	79	114	75	103	106	115	279	328	324
2013:Q3	1,061	1,003	1,163	301	337	324	80	62	78	118	83	118	297	278	299
2013:Q4	1,052	1,066	1,111	329	285	294	74	68	80	105	83	111	330	242	272
2014:Q1	1,046	858	1,130	344	254	361	68	56	63	100	103	109	340	232	305
2014:Q2	1,076	775	1,171	342	206	313	81	53	71	98	99	114	331	189	269
2014:Q3	1,033	862	1,063	272	283	275	76	51	70	125	83	115	294	254	247
2014:Q4	1,028	787	991	283	206	263	63	52	65	110	92	96	277	203	242

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	88	87	125	448	358	350	12	15	26	59	51	63	243	239	66
2009:Q4	87	102	121	370	331	373	11	18	23	49	43	40	294	301	83
2010:Q1	85	102	131	388	306	372	13	17	30	60	62	67	264	314	91
2010:Q2	93	108	116	427	338	358	15	19	24	66	56	58	281	284	116
2010:Q3	92	84	114	479	337	396	8	14	14	74	52	80	271	336	79
2010:Q4	90	89	108	387	315	338	10	17	21	50	57	45	267	323	68
2011:Q1	105	86	129	361	332	335	14	7	26	51	48	52	245	310	63
2011:Q2	98	124	129	421	331	356	11	11	21	54	56	73	222	371	93
2011:Q3	107	103	106	456	351	339	11	10	11	54	62	52	249	298	55
2011:Q4	101	140	112	410	330	339	14	15	17	49	43	54	249	312	59
2012:Q1	106	101	114	419	316	369	14	12	15	61	56	76	254	344	79
2012:Q2	98	115	96	447	319	340	14	21	13	72	46	46	265	364	84
2012:Q3	100	111	96	453	374	363	12	21	20	75	56	53	282	372	74
2012:Q4	93	116	107	430	296	355	12	13	13	58	39	62	312	356	78
2013:Q1	101	127	115	447	307	330	7	12	12	77	52	53	321	328	87
2013:Q2	99	109	108	450	342	426	12	20	21	86	62	82	334	300	60
2013:Q3	92	95	103	467	332	437	15	12	19	77	45	78	340	250	92
2013:Q4	90	92	88	399	303	369	15	8	17	54	53	61	329	269	69
2014:Q1	102	87	100	365	297	302	13	15	19	62	56	42	319	272	70
2014:Q2	95	76	95	368	245	341	11	21	18	63	35	59	289	220	68
2014:Q3	84	83	81	385	233	342	15	10	12	82	32	46	282	208	52
2014:Q4	93	74	93	334	257	338	12	9	14	60	35	47	267	208	76

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-14
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			ER professional expenditures			Office/Home visit expenditures			Hospitalizations for respiratory system conditions			Hospitalizations for circulatory system conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	21.47	24.30	25.99	7.86	7.12	7.46	103.24	102.50	97.18	0.01	0.00	0.01	0.01	0.02	0.01
2009:Q4	21.95	23.47	25.53	7.13	6.92	7.92	106.14	107.30	99.56	0.01	0.01	0.01	0.01	0.01	0.01
2010:Q1	20.78	23.55	26.46	6.74	6.55	6.99	79.83	82.33	73.16	0.01	0.01	0.01	0.01	0.01	0.01
2010:Q2	22.74	25.47	27.65	8.61	7.75	8.28	121.13	127.78	117.05	0.01	0.01	0.01	0.01	0.01	0.01
2010:Q3	24.39	23.69	29.39	9.49	8.00	9.22	125.22	126.41	118.65	0.01	0.00	0.01	0.01	0.01	0.01
2010:Q4	26.26	27.72	25.92	8.89	8.28	8.60	127.12	131.51	120.73	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q1	26.19	22.77	31.58	7.56	7.38	7.60	83.14	81.08	80.30	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q2	26.28	27.95	28.27	9.28	8.36	8.91	127.41	132.52	123.19	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q3	27.71	28.39	28.96	10.23	9.62	8.98	124.43	126.27	120.27	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q4	30.01	38.11	33.06	9.93	9.34	9.42	123.89	127.32	121.79	0.01	0.01	0.01	0.01	0.02	0.01
2012:Q1	31.05	30.41	34.29	9.14	8.30	8.51	95.21	95.04	88.34	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q2	28.09	27.48	33.16	10.06	8.47	9.31	133.96	134.99	120.29	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q3	27.22	28.36	29.02	10.11	9.36	9.35	128.03	129.82	117.09	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q4	30.43	29.66	29.84	10.40	8.59	9.51	129.70	133.47	119.09	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q1	32.58	36.65	32.98	9.78	8.66	8.49	92.01	95.76	84.16	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q2	31.05	29.60	28.56	10.26	8.97	9.67	137.81	141.47	122.84	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q3	28.82	27.87	31.33	10.64	9.42	10.92	130.56	135.13	123.04	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q4	34.07	31.17	27.60	10.70	8.40	9.75	135.35	136.99	124.50	0.01	0.01	0.01	0.02	0.01	0.01
2014:Q1	32.00	30.04	30.62	9.59	8.53	9.47	91.39	91.79	83.30	0.01	0.01	0.01	0.01	0.02	0.01
2014:Q2	28.90	30.29	29.07	10.61	9.01	10.24	141.21	141.20	127.14	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q3	30.51	31.86	29.42	11.20	8.38	10.75	141.00	140.49	125.51	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q4	30.73	28.15	27.81	10.62	8.88	10.18	139.44	141.90	127.40	0.01	0.01	0.01	0.02	0.01	0.01

(continued)

Rhode Island E2-14 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

	Hospitalizations for endocrine system conditions			E&M visits (office)			E&M visits (hospital)			E&M visits (ER)		
Period	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.00	0.00	0.00	1.86	1.83	1.77	0.00	0.00	0.00	0.40	0.35	0.34
2009:Q4	0.00	0.00	0.00	1.89	1.87	1.78	0.00	0.00	0.00	0.36	0.32	0.34
2010:Q1	0.00	0.00	0.00	1.90	1.94	1.80	0.00	0.00	0.00	0.37	0.31	0.34
2010:Q2	0.00	0.00	0.00	2.05	2.13	2.00	0.00	0.00	0.00	0.40	0.35	0.35
2010:Q3	0.00	0.00	0.00	1.98	1.96	1.88	0.00	0.00	0.00	0.44	0.34	0.39
2010:Q4	0.00	0.00	0.00	1.98	2.00	1.88	0.00	0.00	0.00	0.38	0.33	0.35
2011:Q1	0.00	0.00	0.00	1.92	1.88	1.82	0.00	0.00	0.00	0.37	0.33	0.34
2011:Q2	0.00	0.00	0.00	2.13	2.10	2.01	0.00	0.00	0.00	0.41	0.34	0.37
2011:Q3	0.00	0.00	0.00	1.97	1.91	1.86	0.00	0.00	0.00	0.45	0.39	0.36
2011:Q4	0.00	0.00	0.00	2.00	2.00	1.90	0.00	0.00	0.00	0.42	0.36	0.37
2012:Q1	0.00	0.00	0.00	2.00	1.95	1.81	0.00	0.00	0.00	0.44	0.36	0.38
2012:Q2	0.00	0.00	0.00	2.11	2.07	1.87	0.00	0.00	0.00	0.45	0.35	0.39
2012:Q3	0.00	0.00	0.00	1.95	1.93	1.76	0.00	0.00	0.00	0.45	0.38	0.40
2012:Q4	0.00	0.00	0.00	1.97	1.95	1.78	0.00	0.00	0.00	0.44	0.33	0.39
2013:Q1	0.00	0.00	0.00	1.94	1.98	1.77	0.00	0.00	0.00	0.46	0.35	0.38
2013:Q2	0.00	0.00	0.00	2.19	2.24	1.94	0.00	0.00	0.00	0.45	0.37	0.42
2013:Q3	0.00	0.00	0.00	1.99	2.04	1.85	0.00	0.00	0.00	0.47	0.35	0.44
2013:Q4	0.00	0.00	0.00	2.04	2.07	1.87	0.00	0.00	0.00	0.43	0.33	0.39
2014:Q1	0.00	0.00	0.00	1.90	1.97	1.76	0.00	0.00	0.00	0.40	0.33	0.39
2014:Q2	0.00	0.00	0.00	2.19	2.21	1.98	0.00	0.00	0.00	0.43	0.32	0.40
2014:Q3	0.00	0.00	0.00	2.08	2.11	1.84	0.00	0.00	0.00	0.44	0.31	0.41
2014:Q4	0.00	0.00	0.00	2.06	2.13	1.87	0.00	0.00	0.00	0.39	0.30	0.38

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; E&M = evaluation and management; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	92.3	88.4	90.2	59.5	66.5	59.9	83.5	81.9	83.2	53.5	58.6	54.6
Pre-3	91.1	91.4	89.7	59.7	63.8	56.4	81.5	85.5	82.2	55.9	59.0	54.5
Pre-2	91.2	93.0	89.9	57.7	61.9	56.6	80.7	83.7	81.5	56.2	59.2	58.1
Pre-1	91.5	90.4	89.3	55.1	59.4	55.2	78.3	81.5	79.7	59.2	62.4	57.0
Post-1	91.2	92.3	89.7	55.2	59.7	55.6	77.1	85.4	78.1	59.8	65.3	58.8
Post-2	90.6	89.9	91.2	56.3	64.7	55.9	77.1	80.9	78.9	61.0	65.3	61.2
Post-3	91.5	90.0	88.7	57.7	64.9	55.6	75.7	83.0	76.7	62.9	67.7	57.4

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	31.3	37.8	32.7	3.1	2.7	3.7	74.8	75.3	74.8
Pre-3	32.4	37.2	30.7	3.4	2.0	4.3	73.5	78.4	72.9
Pre-2	31.0	36.7	30.7	3.2	3.1	3.4	73.3	77.4	71.5
Pre-1	30.4	35.4	30.3	2.9	4.3	3.7	70.5	76.2	69.1
Post-1	30.4	38.3	29.4	3.4	2.2	4.0	66.6	73.6	67.1
Post-2	31.6	40.3	32.5	3.8	4.7	3.6	64.1	70.7	66.4
Post-3	34.1	43.1	29.4	3.2	3.2	3.9	62.8	72.0	62.5

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	3.6	4.4	3.3	5.6	7.9	7.8	3.0	3.1	3.4	2.6	4.9	4.4
2009:Q4	3.4	4.1	4.0	7.7	6.6	9.0	3.6	3.2	4.1	4.1	3.5	4.9
2010:Q1	4.3	4.2	3.7	7.2	6.8	9.5	3.4	3.0	4.2	3.7	3.8	5.2
2010:Q2	4.1	4.2	4.3	8.6	6.3	9.1	4.3	2.4	4.3	4.3	3.9	4.8
2010:Q3	4.5	4.1	3.2	6.7	7.6	7.2	3.7	2.5	3.0	3.0	5.1	4.2
2010:Q4	4.7	4.9	4.2	8.4	9.8	11.2	4.0	4.0	5.1	4.4	5.8	6.1
2011:Q1	4.5	4.2	4.1	9.6	10.9	11.1	4.6	5.1	4.9	5.0	5.8	6.2
2011:Q2	4.9	5.1	4.5	10.1	9.8	12.1	5.0	4.9	5.8	5.0	4.9	6.3
2011:Q3	5.0	5.0	5.5	8.9	9.3	9.6	3.9	4.3	4.2	5.0	5.1	5.4
2011:Q4	6.3	7.8	6.2	10.2	11.8	12.5	4.8	5.9	5.3	5.4	5.9	7.2
2012:Q1	6.3	7.9	7.3	13.4	13.8	12.6	6.2	4.5	5.8	7.2	9.3	6.8
2012:Q2	6.7	6.7	6.0	11.8	10.9	14.1	5.4	6.7	5.7	6.4	4.1	8.4
2012:Q3	6.9	6.1	5.0	10.0	8.5	10.7	4.4	3.7	4.1	5.5	4.8	6.6
2012:Q4	6.4	8.8	7.0	10.2	13.2	13.5	4.8	5.1	6.5	5.4	8.1	7.0
2013:Q1	7.2	7.1	7.3	13.2	11.8	14.4	6.0	5.2	6.8	7.1	6.7	7.6
2013:Q2	7.3	10.2	7.4	11.7	10.7	13.0	5.3	3.6	5.9	6.3	7.2	7.1
2013:Q3	7.2	5.8	6.4	9.6	10.5	9.1	4.7	3.8	3.5	4.9	6.6	5.6
2013:Q4	7.5	9.1	7.0	10.8	11.3	10.5	4.9	3.9	4.2	5.9	7.4	6.3
2014:Q1	7.2	9.1	7.2	11.9	13.3	12.7	5.2	5.6	5.0	6.7	7.7	7.7
2014:Q2	7.9	9.0	6.4	11.8	12.6	13.8	5.3	4.6	4.8	6.5	8.0	8.8
2014:Q3	7.8	11.8	8.2	9.3	11.4	10.8	3.8	3.4	4.5	5.5	8.0	6.3
2014:Q4	7.7	8.5	8.2	10.3	15.8	12.6	4.3	5.8	4.8	6.0	10.0	7.8

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	666.1	603.6	616.7	473.7	480.0	415.3	105.6	126.6	118.2	131.0	88.8	128.5	667.4	580.7	686.6
2009:Q4	680.1	608.6	653.1	488.2	513.6	446.8	97.5	116.2	117.2	113.5	74.0	128.1	612.3	557.9	635.0
2010:Q1	670.9	621.3	643.7	544.2	573.2	480.9	127.1	148.5	142.2	120.4	130.9	133.7	644.6	582.5	636.9
2010:Q2	726.5	651.4	687.3	586.0	595.7	533.5	138.6	165.5	154.5	115.1	108.3	126.3	641.6	562.5	662.0
2010:Q3	672.6	599.3	654.9	549.5	577.5	495.2	131.7	156.8	146.9	121.9	142.4	127.8	614.0	517.3	648.1
2010:Q4	681.1	648.9	658.9	539.2	565.0	521.8	122.6	150.1	139.8	133.1	150.5	115.3	590.7	569.1	645.0
2011:Q1	645.1	623.9	635.2	515.7	516.8	496.5	120.7	153.8	136.2	128.9	134.3	119.1	674.8	605.6	643.2
2011:Q2	697.9	672.3	687.3	543.0	609.1	527.3	132.6	154.5	156.2	142.2	136.5	147.7	690.4	717.1	720.8
2011:Q3	641.1	631.0	652.3	503.4	537.5	484.2	125.2	148.7	146.6	160.7	195.4	146.1	738.5	696.6	713.4
2011:Q4	651.9	626.7	652.4	522.3	571.9	502.1	125.8	137.1	135.6	153.8	165.2	171.3	703.5	676.1	688.3
2012:Q1	654.8	626.3	614.6	524.4	557.0	503.2	123.5	145.0	129.3	149.2	160.7	152.1	747.7	719.9	774.7
2012:Q2	681.9	599.3	653.2	548.7	563.3	525.1	131.8	141.9	143.8	154.4	115.5	131.1	757.9	720.2	755.1
2012:Q3	625.3	558.7	611.7	513.3	507.7	469.8	113.3	128.9	135.8	162.6	196.7	156.0	744.5	673.5	701.0
2012:Q4	645.9	572.2	626.5	523.6	539.5	496.4	109.0	138.6	136.1	137.9	138.3	182.8	711.4	715.6	754.4
2013:Q1	648.9	642.4	621.6	553.4	563.7	521.7	103.6	129.3	130.7	135.8	140.7	138.0	747.3	737.8	756.8
2013:Q2	691.6	697.0	616.7	599.0	615.9	568.2	112.8	144.1	149.7	140.4	162.5	125.1	753.2	724.7	769.7
2013:Q3	653.0	658.8	585.0	550.4	596.8	530.4	105.6	145.0	145.8	167.7	87.1	160.0	762.3	662.7	769.8
2013:Q4	667.0	698.8	589.9	558.2	640.9	551.4	104.3	147.1	134.2	140.7	172.3	161.0	672.7	726.8	710.3
2014:Q1	639.4	682.3	579.5	517.3	620.4	535.9	98.8	140.4	132.6	151.6	193.2	133.3	711.6	714.1	766.3
2014:Q2	707.0	747.5	653.0	586.9	698.1	595.2	112.8	195.9	146.7	151.5	204.2	185.9	729.4	828.7	763.1
2014:Q3	677.3	677.3	610.7	559.7	618.0	559.4	103.2	166.3	146.9	145.4	171.1	167.4	705.5	813.5	698.1
2014:Q4	683.7	714.7	627.5	559.0	642.0	571.9	98.2	147.4	132.2	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Vermont E3-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	502	552	554	161	168	160	42	51	61	22	27	32
2009:Q4	519	493	586	167	129	170	42	41	62	23	27	32
2010:Q1	503	488	537	176	128	165	44	50	65	22	26	29
2010:Q2	545	579	584	175	168	167	44	62	55	25	29	32
2010:Q3	548	561	560	173	155	145	50	51	65	25	31	34
2010:Q4	577	558	589	197	147	157	48	53	69	24	29	36
2011:Q1	534	520	589	176	144	174	59	61	80	24	28	34
2011:Q2	601	609	668	194	170	187	63	68	90	27	33	38
2011:Q3	603	643	667	194	178	196	61	90	84	27	29	40
2011:Q4	658	694	789	224	206	248	64	93	125	27	33	38
2012:Q1	673	745	750	245	238	249	68	105	109	29	34	39
2012:Q2	693	724	740	238	205	216	68	86	94	30	34	41
2012:Q3	661	677	722	220	197	205	66	71	91	30	32	43
2012:Q4	697	748	814	241	244	265	68	85	103	31	33	46
2013:Q1	674	680	787	244	222	258	68	80	119	29	31	44
2013:Q2	708	753	772	242	253	229	69	90	103	31	33	44
2013:Q3	702	694	730	238	200	217	74	81	92	32	33	43
2013:Q4	723	733	761	243	217	234	75	85	92	33	35	45
2014:Q1	701	773	747	247	264	237	79	113	110	33	39	41
2014:Q2	741	822	800	247	238	251	73	98	102	36	43	47
2014:Q3	720	746	795	240	220	240	69	76	103	34	42	45
2014:Q4	731	809	836	241	241	268	68	84	114	35	41	48

(continued)

Vermont E3-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	126	121	137	52	63	52	18	21	20	23	25	23
2009:Q4	131	120	140	52	63	55	19	21	22	25	24	23
2010:Q1	124	112	127	46	55	48	14	16	16	25	24	27
2010:Q2	141	124	143	54	65	58	19	22	21	28	27	30
2010:Q3	139	134	141	54	65	53	19	22	21	27	26	25
2010:Q4	141	133	145	54	65	55	21	23	24	30	32	27
2011:Q1	134	121	141	46	52	50	15	18	18	28	29	25
2011:Q2	151	136	159	54	67	58	20	25	25	31	32	30
2011:Q3	153	134	156	52	66	55	20	27	25	29	32	28
2011:Q4	161	135	162	56	67	59	23	29	28	32	38	30
2012:Q1	157	142	158	53	64	55	19	26	22	33	36	31
2012:Q2	166	147	172	59	73	60	22	26	26	34	44	33
2012:Q3	161	151	170	55	67	55	22	25	26	31	36	31
2012:Q4	165	137	170	57	71	63	23	27	28	32	36	32
2013:Q1	157	129	163	51	64	54	18	23	22	35	40	35
2013:Q2	175	143	176	56	72	64	23	28	25	35	38	32
2013:Q3	172	156	178	54	67	58	23	27	25	33	38	29
2013:Q4	177	143	180	56	74	61	24	29	27	37	38	33
2014:Q1	164	133	161	49	70	54	19	27	21	37	41	31
2014:Q2	185	170	184	57	82	62	25	32	26	37	53	36
2014:Q3	180	150	192	55	72	62	25	30	27	35	47	30
2014:Q4	184	169	184	57	81	63	27	32	30	36	53	35

(continued)

Vermont E3-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	21	27	22	6	7	6	9	17	10	0	0	0
2009:Q4	22	26	24	6	7	7	10	16	10	0	0	0
2010:Q1	19	24	20	6	7	6	8	15	9	0	0	0
2010:Q2	22	30	24	6	8	7	10	16	10	0	0	0
2010:Q3	22	28	23	6	8	6	9	16	9	0	0	0
2010:Q4	22	29	25	6	7	6	9	15	10	0	0	0
2011:Q1	20	25	23	5	7	6	8	13	9	0	0	0
2011:Q2	23	28	25	4	7	6	8	17	10	0	0	0
2011:Q3	24	30	26	4	7	6	8	17	9	0	0	0
2011:Q4	25	33	28	5	6	6	8	16	10	0	0	0
2012:Q1	24	30	26	5	7	6	7	15	9	0	0	0
2012:Q2	27	31	27	5	7	7	8	16	9	0	0	0
2012:Q3	26	30	28	5	6	6	8	14	9	0	0	0
2012:Q4	27	30	30	5	6	7	8	15	9	0	0	0
2013:Q1	25	29	27	5	6	7	7	14	8	1	0	0
2013:Q2	27	32	29	5	6	7	8	14	9	0	0	0
2013:Q3	27	32	28	5	5	6	7	14	9	0	0	0
2013:Q4	29	34	30	5	8	7	8	16	9	0	0	0
2014:Q1	27	33	28	4	5	7	7	13	8	0	0	0
2014:Q2	30	35	31	5	6	8	8	17	9	0	0	0
2014:Q3	31	35	33	5	6	7	7	14	9	0	0	0
2014:Q4	31	37	32	5	6	7	8	15	10	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	43.3	53.6	48.7	135.8	175.7	175.3
2009:Q4	43.1	46.6	52.4	125.5	178.8	164.5
2010:Q1	44.4	47.7	49.1	125.2	162.1	151.1
2010:Q2	46.2	54.5	50.7	137.7	192.2	171.7
2010:Q3	44.3	52.5	44.1	142.4	180.4	183.1
2010:Q4	47.0	49.5	47.9	131.7	167.1	178.1
2011:Q1	46.6	52.8	50.8	135.3	156.1	171.2
2011:Q2	50.2	56.3	55.3	145.7	182.8	188.6
2011:Q3	51.4	56.7	54.5	153.9	173.3	195.7
2011:Q4	55.1	63.5	63.4	141.5	180.2	178.2
2012:Q1	60.8	73.3	62.3	153.8	178.9	178.5
2012:Q2	58.4	62.1	60.2	158.8	163.7	187.9
2012:Q3	53.7	57.0	55.7	157.9	168.8	193.3
2012:Q4	56.1	64.0	64.5	146.1	165.1	192.8
2013:Q1	59.1	62.9	64.7	144.5	155.6	183.7
2013:Q2	58.0	65.6	60.8	154.2	167.6	192.1
2013:Q3	56.8	54.4	56.3	160.6	165.3	186.0
2013:Q4	55.6	59.7	59.4	143.0	152.3	177.0
2014:Q1	56.7	66.8	63.6	142.9	166.0	166.7
2014:Q2	58.6	71.0	62.8	161.3	173.8	184.7
2014:Q3	54.9	62.5	60.1	155.8	171.6	187.8
2014:Q4	56.4	72.4	68.0	147.1	168.9	184.0

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries			SASH		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	606	626	682	490	485	555	642	597	708	637	552	554
2009:Q4	621	571	784	515	508	550	623	503	723	674	493	586
2010:Q1	605	583	696	481	453	505	606	562	634	640	488	537
2010:Q2	644	679	728	562	533	584	640	606	724	756	579	584
2010:Q3	658	650	664	543	667	559	667	622	683	767	561	560
2010:Q4	676	636	717	558	574	589	701	618	674	721	558	589
2011:Q1	624	533	661	509	489	598	635	544	679	633	520	589
2011:Q2	696	681	811	560	638	678	697	617	764	724	609	668
2011:Q3	713	732	781	570	590	667	711	582	765	700	643	667
2011:Q4	749	695	958	640	599	723	742	636	928	744	694	789
2012:Q1	786	773	873	650	706	656	808	767	869	752	745	750
2012:Q2	784	712	826	650	704	712	787	670	846	842	724	740
2012:Q3	775	705	826	671	650	673	771	688	814	904	677	722
2012:Q4	796	778	945	673	674	758	800	758	904	939	748	814
2013:Q1	789	738	891	663	746	731	771	776	874	978	680	787
2013:Q2	812	897	841	706	740	784	835	920	815	995	753	772
2013:Q3	823	818	819	695	745	766	807	733	763	987	694	730
2013:Q4	804	805	829	704	729	770	855	699	827	1,091	733	761
2014:Q1	818	756	871	675	979	677	828	760	824	1,091	773	747
2014:Q2	839	831	910	700	848	779	862	1,036	924	1,072	822	800
2014:Q3	805	856	912	674	735	744	842	995	864	1,156	746	795
2014:Q4	815	1,020	945	711	729	786	857	1,053	897	1,071	809	836

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = Support & Services at Home.

Vermont E3-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	92.3	85.4	89.5	60.8	64.1	59.5	81.7	80.3	80.7	57.6	63.6	52.8
Pre-3	90.3	90.2	89.3	60.9	65.9	56.7	78.3	82.6	79.5	59.8	65.0	56.9
Pre-2	90.5	91.2	89.1	58.3	61.1	56.1	77.8	76.6	75.3	60.9	60.5	61.1
Pre-1	89.8	92.1	87.7	56.5	60.7	57.1	76.0	79.7	76.4	66.3	70.5	61.4
Post-1	88.3	86.8	86.0	54.5	58.8	52.4	70.6	79.0	73.6	64.1	66.3	62.9
Post-2	87.1	87.8	88.3	55.7	64.4	54.4	70.7	78.9	70.7	64.2	71.8	61.9
Post-3	88.7	85.5	84.7	54.7	60.5	55.1	67.7	73.3	69.8	66.3	71.6	63.5

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	34.1	38.7	31.2	2.9	2.2	3.6	73.3	72.9	71.7
Pre-3	33.8	40.2	30.1	3.5	1.5	3.2	70.6	74.9	71.1
Pre-2	31.9	35.2	31.2	3.2	5.0	4.0	70.5	73.5	68.9
Pre-1	33.2	35.6	32.2	2.5	2.4	3.3	65.8	71.6	65.4
Post-1	29.9	35.5	26.5	3.7	2.4	4.4	59.7	66.5	61.9
Post-2	29.6	41.3	30.0	4.4	4.0	4.3	57.4	64.4	60.4
Post-3	31.0	41.3	28.3	3.9	4.2	4.3	55.8	64.7	57.1

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	7.6	10.2	7.2	16.6	17.6	21.2	8.2	8.0	7.9	8.5	9.6	13.4
2009:Q4	8.5	9.1	9.0	22.0	14.7	25.4	9.6	4.9	10.2	12.5	9.7	15.2
2010:Q1	9.5	11.2	8.0	20.6	22.7	27.5	8.7	10.0	12.2	11.9	12.8	15.3
2010:Q2	9.3	9.9	10.2	26.3	18.6	24.4	12.5	6.5	9.5	13.8	12.1	15.0
2010:Q3	12.7	13.0	10.3	21.2	25.2	25.0	11.3	7.8	10.0	10.0	17.4	15.0
2010:Q4	15.1	11.9	14.8	28.2	30.8	37.8	12.6	12.9	15.4	15.6	17.9	22.5
2011:Q1	15.2	12.9	14.0	32.0	34.2	36.4	14.8	18.8	15.0	17.1	15.4	21.4
2011:Q2	16.0	18.2	16.5	35.3	35.2	42.6	16.9	17.3	19.2	18.5	17.9	23.4
2011:Q3	12.9	12.6	13.1	27.8	31.1	29.5	11.3	12.4	13.2	16.6	18.7	16.3
2011:Q4	15.6	18.8	16.6	32.1	32.5	36.6	14.7	17.3	14.2	17.5	15.2	22.4
2012:Q1	16.1	16.9	19.2	41.7	40.3	36.4	18.4	12.4	15.0	23.3	27.9	21.4
2012:Q2	16.6	16.2	14.7	35.9	33.4	41.6	15.3	20.0	14.4	20.6	13.3	27.2
2012:Q3	16.2	12.0	12.2	30.1	23.9	31.8	12.1	7.0	11.1	18.0	16.9	20.7
2012:Q4	16.4	26.6	14.4	32.4	41.1	39.9	14.4	14.5	17.2	18.0	26.6	22.6
2013:Q1	18.4	13.6	19.8	41.5	29.2	41.3	17.4	11.9	18.5	24.1	17.2	22.8
2013:Q2	18.5	18.5	17.5	36.8	35.1	35.3	15.5	9.2	15.2	21.3	25.8	20.2
2013:Q3	17.1	14.1	11.4	30.8	25.7	23.0	13.0	9.8	9.9	17.7	16.0	13.1
2013:Q4	17.1	17.2	17.8	32.2	38.5	31.5	14.3	16.0	11.4	18.0	22.5	20.0
2014:Q1	16.8	17.2	16.3	35.7	41.5	34.6	14.0	11.2	14.2	21.7	30.3	20.5
2014:Q2	19.6	15.4	14.5	35.9	33.6	39.4	15.4	11.8	12.1	20.5	21.8	27.3
2014:Q3	19.0	19.1	17.3	28.3	22.9	31.8	11.2	5.3	13.6	17.2	17.5	18.2
2014:Q4	20.3	18.8	18.8	31.3	39.7	31.9	12.1	16.4	9.0	19.3	23.3	22.9

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	912.7	795.3	846.2	762.2	736.8	673.1	153.8	170.1	169.2	182.8	143.3	163.3	774.0	706.6	778.1
2009:Q4	928.2	842.8	855.5	772.7	815.2	707.7	143.2	165.2	169.9	163.1	105.1	122.9	717.1	645.3	724.6
2010:Q1	937.4	865.7	876.4	882.3	918.2	771.9	185.6	192.3	208.6	175.3	168.8	186.2	743.8	616.1	746.0
2010:Q2	1,006.2	880.4	949.8	946.2	955.6	871.1	207.1	245.2	238.9	149.7	143.3	176.4	731.4	591.5	774.5
2010:Q3	967.0	827.6	945.2	916.4	958.6	819.7	202.1	226.3	229.2	154.2	193.8	156.3	680.6	551.7	710.4
2010:Q4	955.3	921.8	919.0	915.0	944.5	863.5	187.0	223.9	232.0	161.2	200.4	150.9	668.3	672.5	731.3
2011:Q1	934.3	897.4	921.0	896.9	885.4	856.7	196.0	232.6	225.5	165.3	162.9	159.3	755.7	731.5	726.0
2011:Q2	995.0	948.1	976.1	945.9	1,017.1	884.2	201.5	223.1	249.2	173.9	167.7	188.8	773.0	826.9	799.9
2011:Q3	919.4	847.2	892.7	859.8	885.0	793.5	186.0	242.9	216.9	201.0	265.1	185.1	847.6	799.9	776.2
2011:Q4	894.1	817.8	858.4	868.1	904.7	814.2	192.4	194.7	193.8	210.3	236.1	210.3	791.3	748.8	756.6
2012:Q1	917.7	832.5	836.9	888.0	897.7	814.9	178.1	191.7	197.7	195.7	181.6	186.2	850.8	829.7	848.4
2012:Q2	937.5	792.8	878.2	917.0	899.0	824.0	189.9	168.9	213.7	194.1	146.9	179.4	855.2	807.1	801.5
2012:Q3	880.4	710.6	791.3	859.5	824.8	747.7	172.1	162.2	197.3	199.6	309.6	224.3	809.4	867.9	813.1
2012:Q4	877.1	732.0	807.5	860.0	820.1	783.6	157.7	172.6	187.6	176.6	173.5	255.9	784.6	811.5	889.7
2013:Q1	892.3	774.1	833.7	905.7	859.7	797.0	155.3	176.5	187.2	179.0	140.1	160.7	824.0	780.5	792.9
2013:Q2	948.4	943.0	784.0	970.0	916.9	878.7	163.5	200.6	210.9	188.0	217.8	151.2	821.5	777.5	867.5
2013:Q3	897.6	847.0	783.8	880.0	878.1	792.4	152.4	185.9	207.1	219.0	115.7	236.3	823.2	741.5	831.8
2013:Q4	893.5	936.7	752.6	887.1	971.2	813.7	150.6	180.8	172.5	194.7	221.0	224.5	740.3	787.5	773.6
2014:Q1	863.3	912.1	748.4	799.9	1,003.5	797.2	134.9	181.7	196.2	211.9	238.6	150.5	761.5	749.4	816.9
2014:Q2	918.6	820.9	821.1	884.5	1,035.7	894.2	155.5	252.4	196.9	180.2	144.8	199.9	787.7	789.3	740.1
2014:Q3	915.8	791.7	795.2	850.0	815.1	831.3	146.0	186.6	194.2	191.8	132.9	198.6	765.3	758.7	671.9
2014:Q4	883.7	810.3	776.3	835.0	824.1	784.3	130.9	145.9	182.5	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Vermont E3-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	965	1,119	1,090	341	416	341	89	122	142	40	44	62
2009:Q4	1,028	909	1,120	364	255	335	106	93	147	45	49	62
2010:Q1	1,040	999	1,109	395	307	380	107	139	159	43	49	58
2010:Q2	1,141	1,143	1,243	403	323	395	115	178	153	51	52	64
2010:Q3	1,276	1,324	1,340	481	470	419	145	151	216	55	60	75
2010:Q4	1,359	1,236	1,422	542	381	454	146	154	232	54	59	81
2011:Q1	1,350	1,222	1,538	512	390	526	187	175	275	57	61	81
2011:Q2	1,521	1,556	1,742	579	533	587	211	239	316	63	74	93
2011:Q3	1,404	1,482	1,478	499	476	474	178	225	243	57	58	81
2011:Q4	1,491	1,487	1,708	573	490	573	171	228	329	56	65	80
2012:Q1	1,522	1,657	1,699	605	522	621	187	291	281	60	63	82
2012:Q2	1,528	1,422	1,556	583	433	480	183	195	251	63	63	86
2012:Q3	1,448	1,388	1,533	532	435	478	170	173	240	63	69	88
2012:Q4	1,521	1,726	1,719	581	683	653	182	247	257	64	70	95
2013:Q1	1,544	1,384	1,735	616	443	614	188	195	301	63	63	92
2013:Q2	1,550	1,594	1,644	574	597	531	192	231	297	65	69	87
2013:Q3	1,497	1,423	1,432	543	433	451	193	214	211	63	58	83
2013:Q4	1,495	1,585	1,517	543	536	490	190	187	239	67	65	89
2014:Q1	1,522	1,407	1,464	587	424	470	208	240	251	68	77	82
2014:Q2	1,542	1,576	1,495	560	463	484	197	274	227	74	76	81
2014:Q3	1,509	1,401	1,484	561	387	454	174	203	238	72	80	89
2014:Q4	1,487	1,447	1,650	556	470	596	168	216	266	70	76	98

(continued)

Vermont E3-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	219	200	242	82	98	85	29	38	34	58	65	53
2009:Q4	226	199	249	84	98	88	31	36	35	61	56	48
2010:Q1	232	190	224	81	92	82	26	33	31	63	59	65
2010:Q2	263	222	263	93	107	100	34	41	39	71	68	74
2010:Q3	264	265	265	99	116	95	35	44	42	74	67	70
2010:Q4	268	259	280	99	111	100	38	44	45	88	83	79
2011:Q1	274	244	295	93	100	104	32	40	41	82	77	75
2011:Q2	302	279	318	105	132	112	40	55	52	92	85	89
2011:Q3	306	279	292	93	121	93	37	52	45	89	92	82
2011:Q4	310	258	307	98	108	98	40	54	50	90	89	75
2012:Q1	302	283	305	98	113	99	37	56	45	89	101	78
2012:Q2	305	255	311	103	117	97	42	46	48	92	105	85
2012:Q3	300	274	302	94	119	88	40	44	47	87	88	75
2012:Q4	300	246	291	99	119	96	42	54	51	87	89	83
2013:Q1	299	214	313	92	116	88	37	45	45	95	107	88
2013:Q2	322	236	315	96	114	93	42	52	46	101	96	75
2013:Q3	321	274	302	90	105	86	40	46	43	89	99	72
2013:Q4	311	246	306	88	121	88	42	51	46	97	87	77
2014:Q1	286	238	277	81	104	80	38	48	41	100	105	76
2014:Q2	308	247	298	87	118	89	44	52	46	102	120	87
2014:Q3	306	239	318	86	101	90	44	44	48	98	125	66
2014:Q4	301	213	299	85	108	91	45	55	50	92	131	74

(continued)

Vermont E3-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	33	43	37	9	9	9	15	24	16	0	0	0
2009:Q4	34	38	39	8	10	10	16	27	17	0	2	0
2010:Q1	32	42	35	10	13	9	13	26	15	0	0	0
2010:Q2	38	49	42	9	14	10	16	27	17	0	0	0
2010:Q3	39	47	45	9	12	10	16	31	17	1	0	0
2010:Q4	40	45	46	10	13	11	16	27	18	0	0	0
2011:Q1	40	46	44	8	11	10	15	25	17	0	0	0
2011:Q2	46	54	50	7	10	10	15	32	19	0	0	0
2011:Q3	46	53	48	6	11	9	13	27	15	0	0	0
2011:Q4	45	58	50	8	8	9	15	24	16	0	0	0
2012:Q1	46	51	51	7	11	9	13	24	15	0	0	0
2012:Q2	49	48	49	7	9	9	14	22	15	0	0	0
2012:Q3	48	52	51	7	10	8	13	20	14	0	0	0
2012:Q4	49	53	53	7	9	9	13	21	14	1	0	0
2013:Q1	47	49	49	7	8	8	11	23	13	3	0	0
2013:Q2	49	49	49	7	8	8	13	19	15	0	0	0
2013:Q3	49	50	48	6	8	9	12	19	14	0	0	0
2013:Q4	51	51	51	7	16	9	12	24	13	0	0	0
2014:Q1	48	49	48	6	8	9	11	21	13	0	0	0
2014:Q2	53	56	51	7	8	10	12	22	14	0	0	0
2014:Q3	53	51	58	7	7	10	12	17	14	0	0	0
2014:Q4	51	49	53	7	6	10	11	19	14	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

	All-cause inpatient admissions			ER visits not leading to hospitalizations		
Period	**MAPCP**	**PCMH**	**Non-PCMH**	**MAPCP**	**PCMH**	**Non-PCMH**
2009:Q3	91.4	110.5	104.0	223.2	280.2	294.4
2009:Q4	93.8	89.5	107.6	228.1	273.0	277.3
2010:Q1	99.1	109.8	115.0	228.2	297.6	269.8
2010:Q2	107.6	112.9	117.3	255.6	319.9	305.4
2010:Q3	117.7	150.8	124.9	283.8	352.5	357.8
2010:Q4	128.8	125.8	134.0	266.0	311.2	356.8
2011:Q1	133.4	143.6	148.3	272.9	296.7	335.1
2011:Q2	144.1	167.6	168.9	302.0	380.2	372.2
2011:Q3	131.2	146.7	130.1	292.3	306.2	358.7
2011:Q4	138.6	147.7	148.8	274.6	337.6	323.5
2012:Q1	152.6	172.6	151.4	286.0	299.1	329.9
2012:Q2	144.7	131.2	140.6	303.8	262.0	350.3
2012:Q3	131.3	134.3	132.2	300.1	319.4	359.1
2012:Q4	138.7	166.5	153.1	279.4	297.7	357.7
2013:Q1	150.5	131.3	151.4	279.6	277.3	370.2
2013:Q2	141.8	143.2	134.3	290.5	301.0	340.1
2013:Q3	134.6	110.1	125.5	297.8	254.6	337.2
2013:Q4	131.1	140.1	130.6	272.8	271.5	322.8
2014:Q1	136.8	133.4	135.8	267.4	292.3	302.9
2014:Q2	136.5	152.7	129.1	306.9	293.4	312.9
2014:Q3	129.1	112.0	129.1	296.7	297.8	345.9
2014:Q4	131.9	141.7	137.7	276.0	265.3	332.9

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	806	661	921	237	174	273	47	58	64	74	98	59	144	147	165
2009:Q4	758	654	1,021	211	158	290	44	51	63	75	66	60	137	127	200
2010:Q1	792	741	835	269	194	232	45	59	57	61	96	54	158	134	180
2010:Q2	783	911	948	225	252	251	46	54	62	71	110	68	153	146	152
2010:Q3	838	852	872	265	223	181	49	64	71	77	86	60	169	132	150
2010:Q4	878	779	942	286	213	244	47	51	72	78	78	58	191	154	192
2011:Q1	842	680	927	267	170	269	46	51	66	59	80	50	212	150	224
2011:Q2	913	818	978	294	221	240	49	50	68	73	100	63	242	188	217
2011:Q3	896	1,006	885	284	296	229	51	58	69	72	101	61	242	216	215
2011:Q4	872	970	1,091	280	303	314	48	54	63	69	96	61	240	255	281
2012:Q1	925	847	1,004	310	237	292	49	52	65	60	78	64	276	208	299
2012:Q2	907	935	975	283	246	283	51	61	64	72	71	69	248	199	278
2012:Q3	860	859	913	264	224	212	53	55	73	65	73	63	242	161	216
2012:Q4	914	980	1,077	292	299	316	50	54	74	70	94	60	249	270	287
2013:Q1	884	792	1,021	285	204	301	51	47	69	63	115	56	255	204	281
2013:Q2	904	766	998	290	189	245	50	59	69	77	94	73	265	197	236
2013:Q3	880	724	869	269	165	227	52	52	69	73	76	66	250	160	214
2013:Q4	902	908	881	272	216	246	53	57	70	71	79	62	244	210	231
2014:Q1	887	804	838	278	213	214	53	66	66	69	64	59	260	208	204
2014:Q2	900	1,063	979	260	237	318	58	79	71	84	86	75	241	240	317
2014:Q3	892	1,130	960	262	306	262	56	86	72	88	71	70	241	257	267
2014:Q4	904	1,063	940	282	306	255	56	67	77	90	94	72	277	291	262

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	69	87	81	324	420	398	8	25	7	30	71	40	326	183	187
2009:Q4	66	60	84	294	400	364	6	12	6	28	49	38	312	179	168
2010:Q1	70	89	82	289	386	339	5	19	6	27	60	34	296	219	179
2010:Q2	68	91	81	305	387	368	6	22	8	30	56	34	324	247	201
2010:Q3	73	92	72	336	434	420	8	11	6	34	79	35	361	285	203
2010:Q4	75	71	79	300	383	405	7	11	5	31	46	36	354	251	188
2011:Q1	74	72	79	300	329	368	7	17	4	32	36	34	362	250	191
2011:Q2	76	87	80	313	366	386	8	20	6	33	50	43	404	249	212
2011:Q3	80	100	73	338	376	406	8	22	7	34	43	41	368	214	166
2011:Q4	77	102	85	293	346	343	5	14	5	30	39	40	352	164	167
2012:Q1	81	88	83	308	354	355	4	13	6	29	51	31	362	163	191
2012:Q2	75	83	78	317	317	364	7	7	7	30	51	35	397	189	187
2012:Q3	76	71	70	321	366	382	5	12	3	32	45	32	369	169	202
2012:Q4	71	104	85	292	333	377	5	15	3	28	58	28	361	194	181
2013:Q1	74	64	83	291	285	369	4	16	4	26	26	28	358	150	226
2013:Q2	74	58	72	305	341	375	6	16	7	28	28	31	391	164	212
2013:Q3	71	58	65	322	316	375	4	6	6	29	29	33	375	170	225
2013:Q4	66	75	68	275	267	341	3	9	5	24	18	30	388	142	168
2014:Q1	68	64	68	273	325	332	2	4	4	24	32	26	370	128	180
2014:Q2	70	82	74	316	352	343	4	9	4	27	32	31	411	190	200
2014:Q3	68	90	73	302	375	352	6	1	4	31	58	45	387	183	176
2014:Q4	64	110	65	286	317	329	5	12	3	28	30	33	380	136	178

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-14
Quarterly weighted average expenditures and utilization among rural beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Specialty physician			Primary care physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	151	135	156	24	27	27	50	57	55	13	13	14
2009:Q4	155	167	144	24	27	28	50	61	58	14	12	16
2010:Q1	148	148	152	24	19	28	42	54	46	10	10	12
2010:Q2	178	163	174	28	33	29	55	64	62	14	12	16
2010:Q3	165	244	150	26	40	29	53	71	55	14	13	16
2010:Q4	181	143	176	28	42	28	53	63	59	15	14	17
2011:Q1	159	128	183	27	33	32	43	53	58	11	10	15
2011:Q2	165	179	184	30	48	35	49	70	60	14	12	19
2011:Q3	169	152	184	29	32	32	49	61	56	14	12	17
2011:Q4	218	159	206	30	33	34	54	65	60	18	14	20
2012:Q1	234	178	201	30	38	32	51	60	56	15	12	16
2012:Q2	208	212	195	33	41	35	56	67	65	17	14	18
2012:Q3	223	174	171	34	43	39	54	57	56	17	13	18
2012:Q4	224	228	232	37	46	44	54	66	57	18	14	20
2013:Q1	236	275	230	34	41	46	48	68	55	14	15	17
2013:Q2	237	238	232	35	39	44	53	65	64	16	16	20
2013:Q3	230	247	248	38	49	41	51	61	64	17	17	19
2013:Q4	222	243	232	39	47	41	53	68	64	18	14	21
2014:Q1	226	435	195	37	49	38	45	89	52	14	19	17
2014:Q2	214	235	211	40	55	45	53	67	62	17	17	22
2014:Q3	209	224	213	36	54	39	50	58	58	17	14	20
2014:Q4	222	183	237	39	45	47	52	53	66	19	15	21

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Vermont E3-14 (continued)
Quarterly weighted average utilization among rural beneficiaries

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	41	44	51	143	172	143	103	76	103
2009:Q4	40	54	46	133	165	143	88	97	112
2010:Q1	41	46	47	136	132	133	112	119	116
2010:Q2	45	47	54	152	193	147	86	197	128
2010:Q3	44	47	48	145	185	148	109	162	89
2010:Q4	44	49	45	151	170	143	133	131	66
2011:Q1	45	39	53	153	145	157	111	92	79
2011:Q2	45	51	54	166	168	179	113	71	114
2011:Q3	48	47	56	168	161	168	150	98	169
2011:Q4	55	50	58	160	161	159	158	88	145
2012:Q1	58	53	60	173	171	138	152	130	125
2012:Q2	53	61	52	179	176	159	140	98	141
2012:Q3	50	48	53	178	198	161	127	152	110
2012:Q4	52	59	63	169	179	166	124	102	172
2013:Q1	54	65	59	166	174	168	128	164	142
2013:Q2	52	64	61	167	181	165	108	189	168
2013:Q3	54	61	53	181	179	155	173	83	124
2013:Q4	50	69	61	157	162	153	134	169	134
2014:Q1	52	73	55	158	206	158	130	198	96
2014:Q2	53	68	61	177	220	172	141	240	140
2014:Q3	50	59	53	173	205	159	134	110	129
2014:Q4	51	56	59	161	179	172	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Vermont E3-15
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			Outpatient physician expenditures			Outpatient ER expenditures			Outpatient mental health			Hospital-based ACSC care		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	15.77	18.07	17.49	25.94	24.20	21.07	25.86	33.02	35.79	61.40	74.77	64.81	0.01	0.02	0.02
2009:Q4	15.12	15.73	18.57	25.92	23.97	20.44	26.20	32.87	35.71	61.94	61.47	74.24	0.02	0.02	0.02
2010:Q1	16.93	17.29	17.28	21.93	19.03	17.66	25.41	31.55	32.49	66.52	65.27	73.69	0.02	0.02	0.02
2010:Q2	16.81	18.38	19.19	27.77	23.93	22.43	28.57	35.37	35.98	68.73	79.98	67.00	0.02	0.02	0.02
2010:Q3	17.10	18.02	16.61	27.70	24.54	21.95	28.74	37.59	38.39	70.56	64.28	63.78	0.02	0.02	0.02
2010:Q4	17.32	17.43	16.83	28.16	24.02	21.23	28.11	35.46	39.32	80.03	71.72	72.85	0.02	0.02	0.02
2011:Q1	17.52	17.93	19.44	22.88	20.54	18.01	27.56	33.56	37.59	90.33	81.40	88.34	0.02	0.02	0.02
2011:Q2	17.08	20.86	20.22	28.52	24.20	22.40	30.66	39.40	41.93	102.23	104.84	104.39	0.02	0.02	0.03
2011:Q3	16.74	21.20	20.21	28.18	24.64	22.28	31.28	35.65	43.84	103.92	111.85	106.24	0.02	0.02	0.02
2011:Q4	19.17	23.80	24.54	29.39	25.10	21.97	31.31	40.21	42.56	120.12	124.29	135.56	0.02	0.03	0.03
2012:Q1	21.50	25.45	25.71	24.88	22.39	19.76	32.83	40.56	42.54	131.06	130.34	136.70	0.03	0.03	0.02
2012:Q2	20.79	25.39	22.17	31.30	28.14	24.22	34.53	40.46	45.27	129.28	123.28	126.89	0.02	0.02	0.03
2012:Q3	19.53	23.09	20.45	29.83	26.86	23.33	34.81	38.39	46.65	121.00	115.41	122.34	0.02	0.02	0.03
2012:Q4	20.54	24.44	25.51	31.30	25.15	23.89	34.94	39.93	50.06	136.26	166.93	135.90	0.02	0.03	0.03
2013:Q1	20.96	26.55	22.77	24.80	21.38	19.50	33.21	36.94	47.67	132.50	153.82	135.34	0.03	0.02	0.03
2013:Q2	19.87	27.15	22.93	30.80	27.10	24.17	35.91	38.82	48.35	135.10	148.25	135.22	0.02	0.02	0.03
2013:Q3	19.78	22.40	20.57	30.91	26.78	23.68	36.60	39.10	46.99	128.80	138.07	108.35	0.02	0.02	0.02
2013:Q4	19.32	23.00	22.56	31.61	29.69	23.84	37.06	41.50	48.64	126.77	126.88	124.31	0.02	0.03	0.02
2014:Q1	20.18	30.30	24.34	25.97	23.10	20.77	37.26	46.04	44.90	128.78	142.25	123.32	0.02	0.03	0.02
2014:Q2	20.55	25.29	23.05	33.77	33.59	26.32	41.45	50.30	51.23	131.49	125.68	145.68	0.03	0.03	0.02
2014:Q3	19.44	21.86	24.86	33.07	29.14	26.39	39.26	49.28	49.43	126.23	122.34	117.11	0.02	0.02	0.03
2014:Q4	19.77	24.74	25.09	32.99	31.83	25.94	39.57	48.35	52.88	133.64	156.38	141.22	0.02	0.03	0.03

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Vermont E3-15 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	Psychiatric hospital			Respiratory system			Circulatory system			Digestive system			Musculoskeletal		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
2009:Q4	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
2010:Q1	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2010:Q2	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
2010:Q3	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
2010:Q4	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
2011:Q1	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01
2011:Q2	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q3	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2011:Q4	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q1	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q2	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q3	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2012:Q4	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q1	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q2	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q3	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2013:Q4	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q1	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q2	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q3	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2014:Q4	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01

(continued)

Vermont E3-15 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	Skin			Endocrine system			Kidney			Infection			Mental health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010:Q1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010:Q2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011:Q1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011:Q2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012:Q1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012:Q2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013:Q1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013:Q2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
2013:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014:Q1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014:Q2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
2014:Q3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
2014:Q4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Vermont E3-15 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	Rehabilitation			Ambulance services			Laboratory tests			Advanced imaging			Nursing home		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.00	0.00	0.00	0.06	0.07	0.06	0.83	0.86	0.93	0.10	0.14	0.10	0.03	0.05	0.07
2009:Q4	0.00	0.00	0.00	0.06	0.06	0.07	0.85	0.83	0.97	0.09	0.12	0.10	0.03	0.05	0.08
2010:Q1	0.00	0.00	0.00	0.06	0.06	0.06	0.89	0.92	0.98	0.10	0.13	0.09	0.04	0.06	0.08
2010:Q2	0.00	0.00	0.00	0.06	0.08	0.06	0.89	0.91	1.05	0.10	0.13	0.11	0.04	0.08	0.08
2010:Q3	0.00	0.00	0.00	0.07	0.07	0.07	0.87	0.99	0.93	0.10	0.13	0.10	0.04	0.07	0.08
2010:Q4	0.00	0.00	0.00	0.07	0.07	0.07	0.87	1.06	1.00	0.10	0.12	0.10	0.04	0.08	0.10
2011:Q1	0.00	0.00	0.00	0.07	0.08	0.07	0.86	0.95	1.00	0.10	0.13	0.10	0.05	0.09	0.10
2011:Q2	0.00	0.00	0.00	0.07	0.09	0.08	0.80	1.06	1.01	0.10	0.13	0.11	0.05	0.11	0.12
2011:Q3	0.00	0.01	0.00	0.08	0.09	0.08	0.74	0.85	0.90	0.11	0.14	0.11	0.05	0.13	0.12
2011:Q4	0.00	0.01	0.00	0.08	0.10	0.09	0.82	0.81	0.95	0.11	0.14	0.11	0.06	0.16	0.14
2012:Q1	0.00	0.00	0.00	0.09	0.10	0.09	0.90	1.03	0.98	0.12	0.14	0.11	0.06	0.19	0.14
2012:Q2	0.00	0.01	0.00	0.09	0.08	0.08	0.86	0.94	1.01	0.12	0.15	0.11	0.06	0.12	0.12
2012:Q3	0.00	0.00	0.00	0.08	0.08	0.09	0.78	0.86	0.95	0.11	0.13	0.11	0.06	0.12	0.12
2012:Q4	0.00	0.00	0.00	0.08	0.09	0.09	0.81	0.90	1.02	0.11	0.14	0.11	0.06	0.12	0.13
2013:Q1	0.00	0.01	0.00	0.09	0.08	0.09	0.84	0.97	1.05	0.11	0.15	0.11	0.06	0.14	0.14
2013:Q2	0.00	0.01	0.00	0.08	0.08	0.08	0.82	0.87	1.00	0.12	0.14	0.12	0.06	0.12	0.13
2013:Q3	0.00	0.00	0.00	0.09	0.08	0.08	0.72	0.76	0.96	0.12	0.15	0.11	0.06	0.11	0.14
2013:Q4	0.00	0.01	0.00	0.09	0.08	0.09	0.77	0.87	1.01	0.12	0.15	0.11	0.06	0.11	0.13
2014:Q1	0.00	0.01	0.00	0.09	0.10	0.09	0.78	0.82	1.01	0.11	0.15	0.12	0.06	0.14	0.14
2014:Q2	0.00	0.01	0.00	0.09	0.09	0.09	0.85	0.80	1.10	0.12	0.16	0.13	0.06	0.14	0.12
2014:Q3	0.00	0.00	0.00	0.09	0.09	0.09	0.77	0.76	1.02	0.12	0.16	0.13	0.06	0.15	0.13
2014:Q4	0.00	0.01	0.00	0.09	0.10	0.09	0.78	0.81	1.04	0.12	0.15	0.13	0.06	0.15	0.13

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Vermont E3-15 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	SNF, LTC			Home health			Durable medical equipment			Hospice		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.02	0.02	0.02	0.03	0.03	0.03	0.36	0.36	0.41	0.00	0.00	0.00
2009:Q4	0.02	0.02	0.03	0.03	0.03	0.03	0.36	0.37	0.41	0.00	0.00	0.00
2010:Q1	0.02	0.02	0.03	0.03	0.03	0.03	0.31	0.31	0.35	0.00	0.00	0.00
2010:Q2	0.02	0.03	0.02	0.03	0.03	0.03	0.37	0.36	0.43	0.00	0.00	0.00
2010:Q3	0.02	0.02	0.02	0.03	0.03	0.03	0.38	0.37	0.43	0.00	0.00	0.00
2010:Q4	0.02	0.02	0.02	0.04	0.04	0.03	0.39	0.40	0.45	0.00	0.00	0.00
2011:Q1	0.02	0.03	0.03	0.04	0.03	0.03	0.33	0.33	0.39	0.00	0.00	0.00
2011:Q2	0.02	0.03	0.03	0.04	0.04	0.04	0.40	0.39	0.45	0.00	0.00	0.01
2011:Q3	0.02	0.03	0.03	0.04	0.04	0.03	0.41	0.40	0.46	0.00	0.01	0.01
2011:Q4	0.03	0.04	0.04	0.04	0.04	0.04	0.42	0.43	0.48	0.01	0.01	0.01
2012:Q1	0.03	0.05	0.04	0.04	0.04	0.04	0.35	0.36	0.40	0.01	0.01	0.01
2012:Q2	0.03	0.03	0.03	0.04	0.05	0.04	0.42	0.41	0.47	0.01	0.02	0.01
2012:Q3	0.03	0.03	0.03	0.04	0.04	0.03	0.42	0.40	0.46	0.01	0.02	0.02
2012:Q4	0.03	0.03	0.04	0.04	0.04	0.04	0.42	0.39	0.47	0.01	0.02	0.01
2013:Q1	0.03	0.03	0.04	0.04	0.05	0.04	0.41	0.38	0.45	0.01	0.02	0.01
2013:Q2	0.03	0.03	0.04	0.04	0.04	0.04	0.42	0.40	0.45	0.01	0.02	0.01
2013:Q3	0.03	0.03	0.03	0.04	0.04	0.03	0.42	0.41	0.46	0.01	0.02	0.01
2013:Q4	0.03	0.03	0.03	0.04	0.04	0.04	0.42	0.39	0.46	0.01	0.01	0.01
2014:Q1	0.03	0.04	0.04	0.04	0.05	0.03	0.40	0.36	0.43	0.01	0.02	0.01
2014:Q2	0.03	0.04	0.03	0.04	0.06	0.04	0.42	0.39	0.45	0.01	0.02	0.01
2014:Q3	0.03	0.03	0.03	0.04	0.05	0.03	0.42	0.41	0.46	0.01	0.02	0.01
2014:Q4	0.03	0.04	0.04	0.04	0.06	0.04	0.42	0.40	0.47	0.01	0.02	0.01

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ACSC = ambulatory care sensitive condition; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SNF = skilled nursing facility.

North Carolina E4-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.8	90.2	88.2	57.2	58.5	55.5	85.5	82.5	80.3	45.9	50.5	39.7
Pre-3	89.2	89.7	88.7	57.6	57.0	56.1	83.9	81.3	81.0	45.5	50.9	44.0
Pre-2	89.7	91.1	88.6	56.1	57.2	53.4	83.5	82.3	80.5	45.1	54.2	44.5
Pre-1	92.2	91.7	89.0	56.0	57.2	52.9	86.4	84.2	80.6	51.8	58.0	47.7
Post-1	91.3	90.8	88.3	51.6	55.1	50.2	85.6	83.1	80.7	54.8	61.6	50.5
Post-2	90.7	92.4	89.4	54.3	58.0	52.0	85.8	85.0	82.1	57.0	60.6	51.8
Post-3	89.9	89.5	86.1	54.2	52.1	49.3	84.2	79.2	78.8	62.3	66.6	50.3

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	25.2	28.0	20.4	3.4	2.6	4.3	80.1	77.9	75.6
Pre-3	24.9	26.6	22.5	3.6	2.9	3.6	79.9	77.9	75.6
Pre-2	24.4	28.7	21.4	3.4	2.7	4.1	79.7	78.5	75.8
Pre-1	27.4	32.2	23.4	2.4	2.6	3.8	80.5	78.6	75.3
Post-1	26.3	32.2	23.7	2.8	2.8	4.1	78.4	74.5	72.1
Post-2	29.4	33.1	25.0	3.1	2.4	3.8	78.5	77.2	72.6
Post-3	32.1	31.5	23.3	3.4	3.8	5.1	75.9	71.1	69.7

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	4.4	5.0	4.6	10.5	10.7	11.5	4.3	4.3	4.0	6.1	6.5	7.5
2010:Q1	5.4	4.7	5.5	11.2	12.7	13.6	4.8	4.6	5.5	6.4	8.2	8.1
2010:Q2	5.2	5.2	5.9	11.9	11.2	12.1	5.4	3.5	5.1	6.5	7.7	7.1
2010:Q3	5.0	4.8	6.2	9.8	9.2	10.8	4.4	3.8	3.9	5.4	5.4	6.9
2010:Q4	6.2	5.9	6.0	12.3	11.3	11.1	5.1	4.1	4.0	7.3	7.2	7.1
2011:Q1	5.8	5.5	6.7	15.0	10.6	15.6	5.8	4.0	6.3	9.2	6.6	9.2
2011:Q2	5.4	4.7	6.8	13.4	11.4	12.5	6.0	4.6	4.9	7.4	6.8	7.7
2011:Q3	7.2	4.8	6.8	12.9	10.3	11.5	6.3	4.1	4.2	6.6	6.2	7.3
2011:Q4	7.6	7.0	7.1	16.1	14.4	14.5	7.8	5.4	5.3	8.2	9.1	9.2
2012:Q1	8.8	9.3	9.1	17.8	14.0	16.8	8.0	5.5	6.6	9.7	8.4	10.2
2012:Q2	8.3	9.0	9.2	16.4	15.3	15.1	7.8	6.5	6.2	8.6	8.8	8.8
2012:Q3	8.0	8.8	8.5	16.7	13.6	13.9	8.3	4.7	5.7	8.3	8.9	8.2
2012:Q4	8.3	10.8	11.0	17.2	13.5	15.0	8.5	5.9	6.0	8.7	7.6	8.9
2013:Q1	9.3	9.4	9.4	18.3	16.3	16.8	8.8	6.7	6.4	9.5	9.6	10.4
2013:Q2	8.7	8.6	10.0	15.3	14.3	14.0	6.8	5.0	5.6	8.5	9.3	8.3
2013:Q3	8.2	9.3	10.8	15.8	13.2	11.1	7.0	4.0	3.9	8.8	9.1	7.1
2013:Q4	9.4	11.8	11.8	15.8	14.1	14.3	6.5	4.6	5.0	9.2	9.5	9.2
2014:Q1	9.2	8.4	11.0	18.5	16.1	16.2	8.2	6.3	6.2	10.2	9.8	10.0
2014:Q2	10.7	11.6	10.2	17.6	14.9	15.9	6.8	5.4	6.2	10.7	9.5	9.7
2014:Q3	9.8	10.7	10.3	13.7	11.1	13.9	5.4	4.4	5.1	8.2	6.6	8.8
2014:Q4	10.7	11.1	11.5	16.3	17.8	14.5	6.3	4.6	5.2	10.0	13.3	9.3

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	993.7	1,002.6	976.9	571.9	668.2	668.9	193.3	160.5	185.4	131.1	154.9	141.7	664.6	699.5	676.2
2010:Q1	1,006.5	987.1	1,010.4	613.9	769.0	747.1	220.8	182.6	207.2	130.8	137.1	143.3	706.6	692.1	667.9
2010:Q2	1,038.7	1,029.7	1,021.5	669.6	736.3	747.1	233.3	195.2	215.5	131.0	180.0	149.7	733.9	638.9	713.0
2010:Q3	1,004.2	1,023.7	1,013.6	663.5	729.9	755.9	236.7	197.9	227.0	130.2	144.6	149.8	714.9	656.3	718.2
2010:Q4	982.0	999.3	998.1	615.9	725.1	723.8	215.3	172.5	203.2	156.2	137.8	140.5	671.8	613.4	656.7
2011:Q1	1,034.1	1,092.1	1,068.1	678.9	757.0	775.3	238.2	182.5	211.2	142.2	188.8	146.7	709.0	737.0	723.9
2011:Q2	1,047.1	1,050.4	1,054.2	679.1	770.1	777.5	237.7	177.0	204.5	153.9	141.1	141.5	752.5	760.5	700.5
2011:Q3	1,041.9	998.2	1,000.9	672.2	732.3	774.5	235.3	168.3	206.3	170.6	166.8	161.0	746.8	731.6	717.5
2011:Q4	1,024.3	1,030.5	977.5	648.0	730.5	754.4	227.9	171.2	191.4	175.4	187.0	171.0	743.6	688.0	703.8
2012:Q1	1,046.3	1,060.2	1,014.8	676.3	753.7	778.2	237.9	179.5	200.1	187.3	147.6	171.6	718.4	649.7	712.8
2012:Q2	1,055.3	1,049.7	1,005.5	654.7	730.5	759.8	226.2	163.7	192.3	182.1	171.9	178.1	773.3	733.4	703.8
2012:Q3	1,029.7	1,030.8	1,020.8	636.8	703.6	768.1	230.6	159.8	195.3	194.5	177.5	168.5	739.0	749.8	760.8
2012:Q4	1,009.4	1,081.0	1,014.2	617.4	694.3	743.6	211.7	160.2	181.3	181.8	165.9	174.4	677.6	704.7	696.0
2013:Q1	1,024.2	1,049.0	1,029.2	643.8	739.6	802.7	212.5	170.1	189.4	168.4	132.7	154.8	717.2	677.4	692.9
2013:Q2	1,061.4	1,094.7	1,038.2	658.5	778.7	828.7	221.5	174.9	186.5	180.0	144.2	160.2	737.7	681.8	695.0
2013:Q3	1,021.0	1,065.4	1,019.7	644.8	754.4	818.8	237.7	158.9	194.1	166.7	214.1	159.8	717.6	779.8	681.1
2013:Q4	1,025.3	1,084.1	1,046.2	613.3	757.1	813.2	223.2	156.5	184.7	170.9	240.2	173.1	690.2	717.8	680.9
2014:Q1	967.8	1,022.7	1,026.5	593.7	716.0	798.7	223.7	159.0	182.9	179.5	167.6	178.3	649.2	592.2	708.3
2014:Q2	1,054.1	1,102.9	1,077.0	668.0	780.7	848.7	248.9	175.4	192.9	179.2	205.3	180.3	714.4	681.1	715.6
2014:Q3	1,048.8	1,075.3	1,095.3	646.5	785.2	866.5	251.5	170.7	200.2	178.2	171.2	170.1	704.9	733.1	690.5
2014:Q4	1,065.9	1,092.3	1,096.9	621.0	709.3	826.1	223.8	173.1	194.8	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

North Carolina E4-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	519	551	540	161	174	169	29	33	38	24	24	23
2010:Q1	541	532	537	194	179	189	40	36	36	24	24	23
2010:Q2	578	583	584	183	184	189	42	34	43	25	25	26
2010:Q3	584	565	592	180	167	187	41	33	40	26	24	26
2010:Q4	595	631	599	189	204	185	42	47	47	26	25	26
2011:Q1	596	603	605	200	189	205	50	58	51	26	25	26
2011:Q2	652	677	640	200	224	197	51	50	52	29	27	28
2011:Q3	691	642	647	224	176	189	59	57	57	30	26	29
2011:Q4	698	663	659	226	199	198	62	56	61	29	26	29
2012:Q1	744	744	714	260	252	246	72	68	68	32	29	31
2012:Q2	761	737	747	245	224	260	72	75	62	33	31	32
2012:Q3	754	710	694	246	213	219	63	70	53	35	29	31
2012:Q4	766	717	732	257	232	244	68	60	66	35	29	30
2013:Q1	768	732	735	271	250	256	83	68	68	33	32	31
2013:Q2	773	732	742	256	240	237	74	61	65	34	30	31
2013:Q3	743	756	729	232	266	228	66	65	58	34	32	31
2013:Q4	786	804	762	257	285	256	72	69	61	36	32	33
2014:Q1	773	767	725	267	259	248	82	89	64	38	34	38
2014:Q2	849	816	756	278	259	232	75	81	63	39	39	39
2014:Q3	813	768	783	251	225	239	69	70	71	42	38	37
2014:Q4	850	738	793	272	216	247	78	56	73	41	37	38

(continued)

North Carolina E4-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	93	89	84	72	80	78	29	31	31	22	26	20
2010:Q1	92	91	86	66	74	73	21	21	22	22	23	20
2010:Q2	101	106	93	77	81	84	30	31	30	25	30	21
2010:Q3	103	107	96	81	81	88	32	32	32	24	24	22
2010:Q4	101	107	95	80	81	88	34	34	34	26	32	23
2011:Q1	108	110	98	76	77	83	25	27	26	26	24	22
2011:Q2	124	121	107	89	89	93	32	35	34	28	27	24
2011:Q3	122	125	110	89	84	93	36	34	35	27	29	23
2011:Q4	120	119	106	87	85	91	39	38	37	29	27	24
2012:Q1	127	135	114	83	84	90	30	30	30	31	33	25
2012:Q2	133	133	116	88	83	95	37	36	36	30	32	25
2012:Q3	134	126	112	88	83	97	37	38	38	30	29	25
2012:Q4	133	116	107	87	86	99	39	42	41	28	28	25
2013:Q1	131	117	116	81	83	93	29	29	30	29	30	25
2013:Q2	133	122	119	91	90	104	37	38	37	31	33	27
2013:Q3	138	120	121	92	91	104	39	40	39	27	31	25
2013:Q4	137	135	121	89	92	101	43	44	42	30	31	26
2014:Q1	137	127	116	78	81	91	31	31	31	29	29	25
2014:Q2	152	140	127	96	91	102	40	40	40	35	32	26
2014:Q3	150	136	131	97	93	110	41	41	42	34	32	25
2014:Q4	153	133	130	96	92	103	46	45	47	35	33	26

(continued)

North Carolina E4-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	19	20	23	20	19	18	16	20	20	0	1	0
2010:Q1	21	20	22	20	19	19	14	17	17	0	0	0
2010:Q2	21	23	24	20	19	19	17	18	19	0	0	0
2010:Q3	22	23	24	20	21	20	16	18	19	0	0	0
2010:Q4	23	25	24	20	19	19	16	18	19	0	0	0
2011:Q1	22	23	25	19	19	19	15	18	18	0	0	0
2011:Q2	23	25	26	19	20	19	16	20	19	0	0	0
2011:Q3	25	27	28	18	19	19	16	18	18	0	0	0
2011:Q4	26	27	29	16	19	19	15	19	19	0	0	0
2012:Q1	27	27	29	19	20	20	14	18	18	0	0	0
2012:Q2	28	28	30	18	20	20	15	18	18	0	0	0
2012:Q3	28	30	28	18	19	20	14	18	18	0	0	0
2012:Q4	29	30	29	16	19	20	14	18	18	0	0	0
2013:Q1	27	31	28	17	18	19	12	16	16	0	0	0
2013:Q2	28	29	29	18	18	20	14	19	18	0	0	0
2013:Q3	27	30	29	17	19	20	14	18	18	0	0	0
2013:Q4	29	34	30	17	18	20	14	18	18	0	0	0
2014:Q1	28	31	28	17	19	20	12	15	16	0	0	0
2014:Q2	31	33	31	22	28	22	15	18	18	0	0	0
2014:Q3	29	32	32	22	26	23	14	18	19	0	0	0
2014:Q4	31	32	31	22	23	23	15	18	19	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	54.5	61.3	59.8	128.0	132.2	134.1
2010:Q1	62.6	59.9	65.2	129.7	137.2	136.1
2010:Q2	62.1	61.9	64.2	145.6	151.6	154.6
2010:Q3	60.0	55.4	62.9	141.3	137.1	155.2
2010:Q4	63.5	63.4	61.1	133.4	132.7	146.6
2011:Q1	68.2	62.3	70.9	143.8	142.6	152.7
2011:Q2	68.2	71.3	67.4	151.0	148.9	162.5
2011:Q3	72.7	60.7	64.9	166.6	143.4	168.4
2011:Q4	74.2	68.5	68.6	152.7	136.4	161.6
2012:Q1	83.6	77.8	81.3	164.5	156.2	164.3
2012:Q2	77.6	69.9	77.2	168.0	160.6	170.4
2012:Q3	75.4	70.1	73.1	170.3	150.0	161.8
2012:Q4	77.5	72.5	76.8	166.6	147.7	162.2
2013:Q1	79.7	76.1	78.1	157.2	150.3	154.8
2013:Q2	73.1	71.6	72.5	166.0	156.5	165.0
2013:Q3	74.1	74.6	69.3	161.9	158.7	160.0
2013:Q4	74.9	77.4	74.7	159.9	147.3	156.7
2014:Q1	79.8	73.2	75.3	166.1	155.9	161.0
2014:Q2	84.0	74.9	73.9	182.1	175.7	173.1
2014:Q3	76.2	68.5	72.9	180.1	165.9	168.6
2014:Q4	80.5	68.2	73.9	179.1	163.2	167.6

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries			Non-White beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	665	741	719	544	555	566	657	706	702	644	590	620
2010:Q1	725	766	737	566	509	563	668	695	697	655	575	622
2010:Q2	781	787	832	606	589	610	714	722	774	712	689	699
2010:Q3	822	735	805	626	518	566	715	705	772	737	579	684
2010:Q4	828	804	849	634	645	614	753	752	764	708	649	726
2011:Q1	819	834	838	629	598	616	745	743	756	726	641	699
2011:Q2	874	908	883	686	691	645	807	851	811	784	754	767
2011:Q3	950	841	908	739	662	664	927	819	834	816	722	787
2011:Q4	901	943	897	723	726	663	863	833	849	821	702	804
2012:Q1	1,044	1,015	975	782	786	741	919	919	895	921	785	865
2012:Q2	1,017	1,001	962	807	768	734	951	890	986	963	793	1,033
2012:Q3	1,026	931	899	795	699	651	911	867	843	899	729	815
2012:Q4	989	960	928	800	725	696	908	862	872	882	801	829
2013:Q1	995	836	917	806	778	701	930	918	884	978	798	853
2013:Q2	981	914	943	823	767	705	921	940	891	924	750	853
2013:Q3	984	916	920	786	819	727	901	976	870	904	826	803
2013:Q4	999	978	959	822	902	759	923	927	927	1,004	716	838
2014:Q1	960	926	895	815	756	701	887	971	831	945	694	807
2014:Q2	1,054	1,022	941	909	910	784	987	1,052	894	982	938	812
2014:Q3	1,024	920	946	859	821	809	965	942	919	957	707	812
2014:Q4	1,022	945	926	885	760	788	1,010	937	909	977	769	916

(continued)

North Carolina E4-6 (continued)
Quarterly weighted average total Medicare expenditures among special populations

Period	NETWORK1 beneficiaries			NETWORK2 beneficiaries			NETWORK3 beneficiaries			NETWORK4 beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	463	551	540	411	551	540	602	551	540	550	551	540
2010:Q1	453	532	537	457	532	537	645	532	537	569	532	537
2010:Q2	490	583	584	499	583	584	690	583	584	579	583	584
2010:Q3	490	565	592	458	565	592	718	565	592	591	565	592
2010:Q4	516	631	599	477	631	599	704	631	599	630	631	599
2011:Q1	512	603	605	495	603	605	703	603	605	634	603	605
2011:Q2	596	677	640	490	677	640	775	677	640	634	677	640
2011:Q3	635	642	647	508	642	647	824	642	647	665	642	647
2011:Q4	647	663	659	528	663	659	822	663	659	670	663	659
2012:Q1	670	744	714	558	744	714	897	744	714	741	744	714
2012:Q2	702	737	747	562	737	747	891	737	747	778	737	747
2012:Q3	695	710	694	574	710	694	912	710	694	687	710	694
2012:Q4	689	717	732	619	717	732	916	717	732	754	717	732
2013:Q1	677	732	735	652	732	735	901	732	735	810	732	735
2013:Q2	693	732	742	608	732	742	894	732	742	858	732	742
2013:Q3	661	756	729	596	756	729	891	756	729	741	756	729
2013:Q4	692	804	762	644	804	762	926	804	762	834	804	762
2014:Q1	708	767	725	612	767	725	888	767	725	808	767	725
2014:Q2	771	816	756	689	816	756	982	816	756	863	816	756
2014:Q3	790	768	783	675	768	783	882	768	783	864	768	783
2014:Q4	796	738	793	737	738	793	947	738	793	845	738	793

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.2	88.7	88.6	58.2	58.5	56.6	83.9	78.6	78.9	50.5	56.1	45.7
Pre-3	89.2	88.0	88.4	58.2	57.4	57.2	81.9	77.3	78.5	50.8	57.4	51.1
Pre-2	88.4	89.4	87.7	56.3	57.8	54.2	80.8	77.1	77.0	52.3	62.5	51.6
Pre-1	90.3	89.8	87.4	57.6	58.7	53.4	84.3	79.2	78.7	60.9	65.4	58.6
Post-1	88.9	86.7	85.3	50.8	53.1	50.0	81.9	78.6	75.9	62.0	65.4	58.7
Post-2	88.2	90.4	86.7	53.6	52.9	49.8	81.3	80.5	77.0	64.0	64.7	59.8
Post-3	88.3	88.1	84.0	53.7	54.2	47.2	79.0	75.8	73.0	69.8	74.7	58.3

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	27.1	29.7	22.4	3.4	2.8	3.2	78.7	73.7	74.1
Pre-3	26.3	27.1	24.7	2.9	2.5	3.0	78.1	73.4	73.1
Pre-2	25.7	32.1	22.8	3.6	3.1	3.6	75.9	74.6	72.1
Pre-1	30.2	34.6	26.9	1.6	2.4	2.8	77.8	75.8	72.3
Post-1	27.4	29.6	24.8	2.4	2.3	3.9	74.1	70.0	66.7
Post-2	31.4	29.8	25.3	2.9	3.3	3.5	73.5	73.6	68.0
Post-3	32.0	33.8	24.3	2.6	2.2	5.5	70.2	66.1	65.2

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	9.9	7.8	8.9	26.8	25.4	31.1	10.0	10.4	9.7	16.7	15.0	21.4
2010:Q1	12.4	12.2	12.7	32.7	33.0	35.9	13.3	12.3	13.8	19.4	20.7	22.1
2010:Q2	11.9	12.2	13.7	33.3	28.3	32.9	13.8	8.4	12.6	19.5	19.9	20.3
2010:Q3	12.7	9.1	13.9	27.1	27.7	30.2	9.9	12.9	9.1	17.0	14.8	21.2
2010:Q4	19.3	14.1	16.4	37.7	37.3	36.1	13.9	12.0	13.3	23.8	25.3	22.8
2011:Q1	18.9	16.5	21.2	49.1	34.1	48.6	18.3	13.6	18.6	30.9	20.5	30.0
2011:Q2	17.9	13.3	21.3	44.9	34.8	39.7	19.6	12.7	14.7	25.3	22.1	25.0
2011:Q3	24.3	16.9	22.5	42.1	33.1	38.8	19.6	12.2	13.7	22.5	20.9	25.1
2011:Q4	22.1	18.7	20.2	51.2	44.7	45.7	23.7	16.0	15.9	27.3	28.7	29.8
2012:Q1	22.8	27.3	25.5	54.0	42.4	49.4	23.0	16.2	18.2	31.0	26.1	31.2
2012:Q2	20.9	25.0	24.6	47.1	48.5	44.8	20.6	18.4	16.8	26.4	30.0	28.0
2012:Q3	18.8	23.6	20.0	47.3	41.4	41.2	21.1	13.7	14.8	26.2	27.7	26.3
2012:Q4	18.0	28.0	28.8	49.0	38.3	45.2	21.3	12.9	16.9	27.7	25.4	28.1
2013:Q1	20.1	21.7	23.5	49.2	46.9	46.2	21.3	16.0	15.4	27.9	30.9	30.8
2013:Q2	18.2	14.6	25.0	43.1	37.9	38.0	18.9	14.6	13.7	24.2	23.2	24.1
2013:Q3	18.2	24.6	25.1	48.6	47.1	32.3	22.0	12.0	9.5	26.4	35.1	22.5
2013:Q4	21.0	28.4	26.1	41.8	39.0	40.5	15.0	11.7	12.0	26.7	27.4	28.2
2014:Q1	18.7	16.6	24.2	48.1	43.8	40.8	20.7	14.0	13.4	27.4	29.8	27.4
2014:Q2	19.2	22.2	23.8	49.3	35.9	38.3	19.4	12.2	11.9	29.9	23.7	26.4
2014:Q3	21.4	22.0	20.9	33.4	25.7	39.6	11.6	7.3	13.1	21.8	18.5	26.5
2014:Q4	23.5	17.1	25.8	48.6	60.0	35.0	16.3	11.3	11.3	32.3	48.7	23.7

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	1,344.8	1,380.2	1,270.9	810.2	1,025.1	987.6	273.1	258.7	251.6	179.4	183.9	187.2	744.9	779.4	766.3
2010:Q1	1,387.0	1,361.5	1,332.0	895.5	1,175.0	1,106.9	312.9	254.1	281.3	159.8	160.6	211.0	771.1	736.5	767.2
2010:Q2	1,423.0	1,438.3	1,356.6	985.9	1,117.9	1,125.5	341.1	292.8	299.3	185.3	251.9	208.3	814.5	753.0	786.2
2010:Q3	1,408.5	1,443.6	1,357.3	989.4	1,145.0	1,134.9	351.7	291.1	330.4	183.4	186.9	219.0	798.2	710.0	815.5
2010:Q4	1,383.8	1,422.3	1,361.6	925.8	1,136.7	1,119.2	330.3	259.8	307.4	202.7	175.1	185.3	724.6	683.1	718.9
2011:Q1	1,483.8	1,575.1	1,479.4	1,068.6	1,244.2	1,217.2	383.4	273.7	315.2	183.0	250.9	189.9	772.6	820.1	806.4
2011:Q2	1,525.9	1,579.7	1,459.7	1,073.8	1,237.9	1,248.7	384.8	291.3	315.5	194.1	181.6	188.9	823.1	847.7	768.8
2011:Q3	1,523.5	1,478.3	1,418.7	1,056.6	1,219.4	1,257.4	391.6	274.2	315.6	207.6	204.3	200.6	796.8	799.8	776.1
2011:Q4	1,464.8	1,528.3	1,309.5	1,013.3	1,193.1	1,187.6	368.0	282.5	280.1	215.6	204.9	227.3	794.4	751.7	776.4
2012:Q1	1,456.6	1,564.0	1,356.8	1,030.5	1,245.0	1,222.4	371.3	279.6	293.9	240.2	193.7	221.9	784.8	754.2	786.8
2012:Q2	1,449.5	1,494.6	1,366.3	986.9	1,190.5	1,203.5	341.1	255.0	287.4	229.2	232.1	221.9	828.2	785.6	772.3
2012:Q3	1,407.9	1,512.8	1,388.2	933.4	1,122.3	1,224.6	342.8	207.7	283.2	229.8	198.5	227.1	791.2	787.7	820.9
2012:Q4	1,348.9	1,559.5	1,327.7	901.9	1,078.4	1,161.6	310.5	231.2	262.8	227.9	238.2	239.1	751.0	727.2	747.6
2013:Q1	1,405.5	1,493.5	1,379.6	932.4	1,183.2	1,239.3	301.0	247.5	269.6	224.6	167.7	205.7	782.7	735.9	778.1
2013:Q2	1,437.3	1,527.2	1,396.4	974.5	1,196.3	1,242.9	317.3	261.3	266.7	235.3	183.6	216.9	809.6	730.0	744.0
2013:Q3	1,397.3	1,472.5	1,378.6	947.5	1,125.1	1,228.3	336.4	214.2	272.8	223.6	274.8	224.3	783.2	826.0	739.7
2013:Q4	1,354.3	1,514.1	1,359.5	882.9	1,088.0	1,201.7	303.7	229.8	249.9	206.6	318.6	204.0	707.6	821.6	725.6
2014:Q1	1,285.0	1,387.1	1,309.5	850.1	1,045.7	1,178.7	327.3	210.5	240.3	233.5	280.1	230.0	677.7	687.3	751.9
2014:Q2	1,370.3	1,512.7	1,352.2	951.9	1,121.9	1,241.2	359.0	223.5	260.0	226.5	292.9	213.7	741.9	747.0	761.1
2014:Q3	1,415.3	1,498.7	1,405.5	927.2	1,174.2	1,265.1	343.2	227.2	274.8	220.6	228.4	229.0	718.4	739.5	755.6
2014:Q4	1,429.0	1,470.1	1,373.8	861.2	1,056.5	1,193.8	299.9	261.8	266.2	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

North Carolina E4-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	1,004	1,049	1,046	343	382	358	71	67	88	45	41	44
2010:Q1	1,131	1,049	1,100	453	378	411	96	95	90	44	40	46
2010:Q2	1,167	1,156	1,181	393	397	406	109	83	113	49	44	49
2010:Q3	1,232	1,189	1,249	426	412	443	107	89	104	49	46	52
2010:Q4	1,415	1,424	1,344	539	532	480	131	124	136	55	52	57
2011:Q1	1,513	1,469	1,433	594	515	544	165	187	167	62	53	57
2011:Q2	1,659	1,591	1,557	619	588	560	173	149	171	66	58	63
2011:Q3	1,807	1,593	1,628	715	548	568	201	194	193	69	60	67
2011:Q4	1,703	1,589	1,532	632	537	515	198	180	186	63	59	62
2012:Q1	1,732	1,816	1,639	652	689	615	197	216	182	69	64	65
2012:Q2	1,682	1,710	1,757	590	600	705	184	219	173	71	65	66
2012:Q3	1,601	1,512	1,493	570	486	504	161	162	142	69	60	62
2012:Q4	1,686	1,546	1,573	628	573	570	184	125	165	70	60	60
2013:Q1	1,646	1,600	1,615	617	571	606	204	187	181	64	62	63
2013:Q2	1,611	1,488	1,594	558	497	560	185	152	166	66	60	64
2013:Q3	1,531	1,635	1,485	513	655	490	157	143	139	68	64	59
2013:Q4	1,610	1,800	1,538	561	718	543	171	175	144	69	61	64
2014:Q1	1,502	1,487	1,427	515	488	510	185	194	144	71	72	72
2014:Q2	1,682	1,494	1,457	597	499	470	167	146	142	71	70	73
2014:Q3	1,580	1,478	1,466	533	483	466	155	142	167	73	66	66
2014:Q4	1,662	1,476	1,506	598	488	490	157	117	167	79	68	74

(continued)

North Carolina E4-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	178	171	171	112	127	126	47	51	47	52	56	44
2010:Q1	177	175	182	114	124	126	41	39	41	53	59	47
2010:Q2	199	220	193	126	134	142	52	54	51	61	61	52
2010:Q3	208	211	205	137	139	151	53	54	54	61	63	55
2010:Q4	214	237	205	145	140	156	62	62	58	70	86	60
2011:Q1	234	254	214	148	149	157	56	56	54	74	69	58
2011:Q2	272	277	238	171	168	177	65	64	66	82	75	69
2011:Q3	273	267	252	167	160	180	71	62	68	84	81	68
2011:Q4	262	270	236	154	158	171	74	68	63	87	78	69
2012:Q1	274	306	246	148	161	173	62	66	59	89	88	66
2012:Q2	275	289	252	150	142	176	69	67	67	79	88	69
2012:Q3	269	272	238	138	141	170	65	66	67	81	72	68
2012:Q4	269	247	229	144	144	173	66	72	69	72	69	64
2013:Q1	260	245	242	136	137	164	58	54	60	74	77	64
2013:Q2	260	253	246	149	146	176	66	61	66	75	82	69
2013:Q3	265	262	246	146	153	172	68	66	66	73	86	66
2013:Q4	266	308	239	137	150	168	71	72	69	75	83	65
2014:Q1	253	244	221	121	124	144	58	56	55	71	77	57
2014:Q2	273	264	243	149	141	158	69	63	66	81	77	59
2014:Q3	261	265	235	150	150	166	68	64	67	79	74	57
2014:Q4	271	262	239	145	151	161	76	72	70	88	83	55

(continued)

North Carolina E4-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	34	28	36	28	27	26	25	30	29	0	2	0
2010:Q1	39	29	38	28	29	27	23	25	27	0	0	0
2010:Q2	40	33	43	29	28	28	27	29	30	0	0	0
2010:Q3	40	35	44	30	32	29	28	29	31	0	0	0
2010:Q4	48	43	46	30	28	29	28	31	31	0	0	0
2011:Q1	49	42	51	27	28	28	28	31	29	0	0	0
2011:Q2	52	48	54	27	31	28	30	32	31	0	0	0
2011:Q3	59	49	59	24	29	29	29	31	32	0	0	0
2011:Q4	55	48	57	22	30	27	26	32	29	0	0	0
2012:Q1	59	51	59	24	28	28	24	31	30	0	0	0
2012:Q2	58	48	62	23	27	27	24	29	29	0	0	0
2012:Q3	56	56	50	20	26	29	22	27	29	0	0	0
2012:Q4	60	52	52	20	24	26	22	29	27	0	0	0
2013:Q1	58	58	52	23	24	26	20	23	26	0	0	0
2013:Q2	57	51	53	23	23	28	22	27	28	0	0	0
2013:Q3	53	54	53	22	28	27	21	27	27	0	0	0
2013:Q4	55	63	52	21	23	26	20	26	27	0	0	0
2014:Q1	58	50	48	21	24	27	18	21	23	0	0	0
2014:Q2	60	45	51	27	36	28	21	25	26	0	0	0
2014:Q3	54	50	57	27	35	29	22	28	27	0	0	0
2014:Q4	58	48	53	26	31	30	21	23	27	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	112.7	131.6	126.6	222.4	211.9	231.7
2010:Q1	141.8	128.4	139.8	222.7	234.5	247.0
2010:Q2	136.3	126.4	139.5	254.0	256.6	277.5
2010:Q3	136.0	131.6	144.2	257.5	247.6	294.4
2010:Q4	172.3	162.8	158.8	257.9	253.8	291.4
2011:Q1	192.8	164.8	186.8	296.8	269.9	303.5
2011:Q2	200.7	183.9	185.3	315.8	307.0	328.6
2011:Q3	214.1	182.6	191.8	341.8	288.3	354.1
2011:Q4	198.4	180.2	179.3	310.5	276.5	320.7
2012:Q1	209.0	206.4	202.1	325.3	293.4	323.1
2012:Q2	186.7	177.5	195.5	332.3	306.1	326.6
2012:Q3	169.9	167.7	174.2	320.6	295.6	303.7
2012:Q4	182.1	177.4	180.2	320.0	269.3	296.3
2013:Q1	183.2	176.5	183.7	300.4	267.7	284.1
2013:Q2	166.9	153.0	168.9	317.9	296.1	317.3
2013:Q3	175.4	184.3	152.4	305.4	298.1	282.3
2013:Q4	171.7	204.0	160.6	299.5	263.8	284.4
2014:Q1	168.9	164.7	157.7	298.0	281.5	294.0
2014:Q2	185.5	156.2	155.2	320.0	303.6	310.4
2014:Q3	162.8	144.1	149.8	313.1	279.3	298.7
2014:Q4	181.3	163.1	153.6	327.2	266.2	297.8

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	809	807	830	272	252	244	52	47	52	39	60	39	145	163	143
2010:Q1	860	739	908	288	226	321	50	52	53	36	43	34	145	144	165
2010:Q2	998	840	914	347	273	279	58	54	64	52	60	46	168	138	171
2010:Q3	1,024	911	1,018	321	271	339	58	59	64	53	52	50	149	147	163
2010:Q4	978	1,045	985	298	310	297	59	61	65	58	58	50	176	189	198
2011:Q1	999	995	1,024	342	274	338	57	60	62	50	45	44	263	229	260
2011:Q2	1,106	1,198	1,110	328	427	364	68	68	68	70	59	51	270	318	270
2011:Q3	1,195	1,105	1,153	403	299	341	65	70	74	71	68	56	327	254	264
2011:Q4	1,095	1,069	1,030	353	331	309	56	60	67	49	72	54	292	290	242
2012:Q1	1,047	1,168	1,072	338	437	357	64	60	65	48	53	44	282	300	302
2012:Q2	1,047	1,051	1,038	302	306	327	66	72	69	47	64	53	258	278	296
2012:Q3	1,064	1,097	1,001	339	337	317	64	59	64	40	65	46	300	277	283
2012:Q4	1,058	979	1,011	356	286	331	65	58	63	46	66	43	306	226	281
2013:Q1	1,066	960	1,009	363	273	331	63	58	62	36	48	36	315	246	279
2013:Q2	1,010	926	1,057	287	283	331	59	60	64	35	56	50	253	285	304
2013:Q3	995	1,034	1,012	325	358	310	56	70	61	43	61	47	254	320	279
2013:Q4	983	1,024	1,010	323	381	329	62	57	63	44	53	45	314	354	267
2014:Q1	977	968	920	323	319	312	60	73	63	40	56	39	271	285	286
2014:Q2	1,095	1,104	968	345	392	282	69	76	75	56	75	51	285	294	249
2014:Q3	1,030	1,084	1,007	272	389	298	78	72	71	59	93	54	276	338	279
2014:Q4	1,034	938	869	302	325	224	67	65	64	54	60	53	280	305	231

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	93	102	94	324	333	342	9	16	7	26	22	24	107	153	69
2010:Q1	108	92	113	330	314	343	6	7	6	30	20	22	149	184	63
2010:Q2	117	103	118	373	343	426	12	14	9	33	28	35	172	197	66
2010:Q3	117	106	116	355	331	419	10	8	9	32	24	34	181	192	71
2010:Q4	115	114	115	330	348	394	13	10	10	34	22	29	166	198	66
2011:Q1	122	106	126	351	368	394	11	8	9	38	31	30	182	204	75
2011:Q2	127	129	122	401	383	429	15	9	8	39	34	35	188	248	77
2011:Q3	135	128	127	407	367	460	18	14	11	40	33	32	190	235	83
2011:Q4	125	119	122	350	321	403	13	14	12	20	28	30	163	248	70
2012:Q1	125	117	130	384	339	400	13	9	8	31	23	34	173	251	70
2012:Q2	113	103	126	378	387	415	8	12	13	32	38	29	179	242	91
2012:Q3	105	115	114	395	334	372	6	12	9	21	48	24	171	215	63
2012:Q4	119	106	111	369	312	369	8	14	8	30	21	24	163	193	62
2013:Q1	115	91	112	362	344	341	4	7	7	28	38	23	141	211	58
2013:Q2	105	89	107	340	324	393	2	8	9	22	30	26	155	205	64
2013:Q3	111	103	105	321	378	370	6	10	8	27	47	26	176	207	58
2013:Q4	109	115	101	327	317	346	8	7	8	24	21	21	162	210	59
2014:Q1	105	97	104	305	397	338	5	8	6	20	40	19	170	226	67
2014:Q2	121	108	100	355	404	373	7	12	7	30	29	25	166	218	84
2014:Q3	96	123	93	352	365	371	9	18	7	28	38	27	174	258	84
2014:Q4	111	103	80	329	368	333	9	6	6	22	25	22	139	130	52

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-14
Quarterly weighted average expenditures and utilization among beneficiaries in Network 2

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Specialty physician			Primary care physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	102	174	169	22	24	23	68	80	78	10	31	31
2010:Q1	141	179	189	25	24	23	67	74	73	9	21	22
2010:Q2	135	184	189	27	25	26	70	81	84	10	31	30
2010:Q3	97	167	187	28	24	26	72	81	88	10	32	32
2010:Q4	113	204	185	27	25	26	83	81	88	10	34	34
2011:Q1	136	189	205	25	25	26	72	77	83	8	27	26
2011:Q2	106	224	197	30	27	28	81	89	93	8	35	34
2011:Q3	158	176	189	25	26	29	80	84	93	9	34	35
2011:Q4	160	199	198	26	26	29	76	85	91	11	38	37
2012:Q1	171	252	246	27	29	31	76	84	90	10	30	30
2012:Q2	167	224	260	30	31	32	78	83	95	11	36	36
2012:Q3	171	213	219	32	29	31	85	83	97	11	38	38
2012:Q4	166	232	244	38	29	30	80	86	99	13	42	41
2013:Q1	212	250	256	36	32	31	77	83	93	11	29	30
2013:Q2	170	240	237	38	30	31	82	90	104	12	38	37
2013:Q3	164	266	228	37	32	31	83	91	104	12	40	39
2013:Q4	201	285	256	40	32	33	81	92	101	13	44	42
2014:Q1	184	259	248	47	34	38	67	81	91	12	31	31
2014:Q2	224	259	232	46	39	39	78	91	102	15	40	40
2014:Q3	186	225	239	54	38	37	83	93	110	15	41	42
2014:Q4	206	216	247	52	37	38	87	92	103	14	45	47

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmission*s,* which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-15
Quarterly weighted average utilization among beneficiaries in Network 2

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	34	61	60	100	132	134	51	155	142
2010:Q1	44	60	65	105	137	136	109	137	143
2010:Q2	48	62	64	125	152	155	120	180	150
2010:Q3	36	55	63	128	137	155	130	145	150
2010:Q4	46	63	61	114	133	147	130	138	141
2011:Q1	48	62	71	120	143	153	86	189	147
2011:Q2	42	71	67	135	149	163	68	141	142
2011:Q3	49	61	65	149	143	168	76	167	161
2011:Q4	51	68	69	142	136	162	81	187	171
2012:Q1	57	78	81	150	156	164	103	148	172
2012:Q2	51	70	77	160	161	170	84	172	178
2012:Q3	50	70	73	160	150	162	114	177	168
2012:Q4	56	72	77	159	148	162	109	166	174
2013:Q1	56	76	78	151	150	155	102	133	155
2013:Q2	51	72	73	167	156	165	72	144	160
2013:Q3	52	75	69	155	159	160	116	214	160
2013:Q4	57	77	75	154	147	157	136	240	173
2014:Q1	55	73	75	173	156	161	111	168	178
2014:Q2	63	75	74	174	176	173	145	205	180
2014:Q3	60	68	73	183	166	169	136	171	170
2014:Q4	57	68	74	165	163	168	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

North Carolina E4-16
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			ER professional expenditures			E&M visits (hospital)			E&M visits (office)		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	18.9	22.0	20.7	4.9	5.5	5.6	0.0	0.0	0.0	1.8	1.8	1.8
2010:Q1	23.8	23.2	23.1	4.8	5.3	5.2	0.0	0.0	0.0	1.8	1.9	2.0
2010:Q2	22.3	23.0	23.0	5.8	6.3	6.2	0.0	0.0	0.0	1.9	2.0	2.0
2010:Q3	23.4	21.3	23.0	5.9	5.8	6.5	0.0	0.0	0.0	1.9	2.0	2.0
2010:Q4	24.0	25.7	23.3	5.7	6.0	6.4	0.0	0.0	0.0	1.8	1.9	1.9
2011:Q1	24.2	24.3	24.7	5.2	5.4	5.9	0.0	0.0	0.0	2.0	2.0	2.1
2011:Q2	24.8	28.7	24.0	6.1	6.4	6.7	0.0	0.0	0.0	2.0	2.0	2.0
2011:Q3	26.0	22.9	22.8	6.7	5.8	7.0	0.0	0.0	0.0	1.9	1.9	2.0
2011:Q4	27.5	25.2	24.4	6.4	6.2	7.0	0.0	0.0	0.0	1.9	1.9	1.9
2012:Q1	31.2	31.0	29.6	6.3	6.4	7.0	0.0	0.0	0.0	2.0	2.0	2.0
2012:Q2	30.7	27.5	26.9	6.8	6.7	7.7	0.0	0.0	0.0	1.9	1.9	2.0
2012:Q3	27.9	26.0	26.8	7.1	6.6	7.7	0.0	0.0	0.0	1.9	1.9	2.0
2012:Q4	28.3	28.2	28.3	7.0	6.9	7.8	0.0	0.0	0.0	1.8	1.9	1.9
2013:Q1	30.4	30.1	28.9	6.3	6.3	7.0	0.0	0.0	0.0	1.9	2.0	2.0
2013:Q2	28.4	28.3	26.2	6.7	7.1	7.8	0.0	0.0	0.0	1.9	2.0	2.1
2013:Q3	27.2	30.2	26.3	6.4	7.2	7.6	0.0	0.0	0.0	1.9	2.0	2.0
2013:Q4	28.0	31.5	28.4	6.7	7.1	7.7	0.0	0.0	0.0	1.9	2.0	2.0
2014:Q1	30.3	32.8	27.7	6.8	6.9	7.4	0.0	0.0	0.0	1.8	1.9	2.0
2014:Q2	30.8	28.7	26.7	8.1	8.0	8.4	0.0	0.0	0.0	2.0	2.1	2.1
2014:Q3	27.5	26.2	28.4	8.0	7.2	8.3	0.0	0.0	0.0	1.9	2.0	2.2
2014:Q4	29.6	27.0	28.4	8.9	7.7	8.5	0.0	0.0	0.0	1.9	2.0	2.1

(continued)

North Carolina E4-16 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	Imaging			Laboratory tests		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	1.1	1.3	1.3	3.6	3.6	3.6
2010:Q1	1.1	1.2	1.3	3.7	3.7	3.7
2010:Q2	1.2	1.3	1.3	3.7	3.8	3.8
2010:Q3	1.2	1.2	1.3	3.7	4.0	3.9
2010:Q4	1.1	1.2	1.2	3.6	3.8	3.8
2011:Q1	1.2	1.2	1.3	3.5	4.0	3.8
2011:Q2	1.2	1.3	1.3	3.2	4.1	3.8
2011:Q3	1.2	1.2	1.2	3.1	3.9	3.6
2011:Q4	1.2	1.2	1.3	2.9	3.8	3.5
2012:Q1	1.3	1.3	1.4	3.1	4.0	3.8
2012:Q2	1.2	1.3	1.3	3.1	3.9	3.6
2012:Q3	1.2	1.2	1.3	3.0	3.6	3.8
2012:Q4	1.2	1.3	1.3	2.8	3.6	3.7
2013:Q1	1.2	1.3	1.4	3.0	3.5	3.8
2013:Q2	1.2	1.3	1.4	3.1	3.8	3.9
2013:Q3	1.2	1.3	1.4	2.9	3.9	3.9
2013:Q4	1.2	1.3	1.4	2.9	3.6	3.9
2014:Q1	1.2	1.3	1.4	3.1	3.8	3.9
2014:Q2	1.3	1.4	1.4	3.4	4.2	4.1
2014:Q3	1.2	1.3	1.5	3.2	4.3	4.2
2014:Q4	1.3	1.3	1.4	3.1	4.0	4.1

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; E&M = evaluation and management; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy		Received all 4 diabetes tests		Received none of the 4 diabetes tests		Total lipid panel	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	91.9	89.4	63.1	62.7	85.9	78.4	67.7	58.6	41.9	35.4	2.8	3.5	75.8	72.6
Pre-3	92.6	89.0	61.6	59.2	86.6	79.1	69.5	57.3	41.8	33.6	2.5	4.5	74.7	73.1
Pre-2	92.9	88.5	59.2	62.2	86.5	78.2	70.7	60.3	41.0	32.3	2.6	4.1	73.0	69.8
Pre-1	94.1	89.3	57.9	58.1	87.4	77.8	72.0	59.8	40.9	30.8	2.0	3.9	71.1	68.5
Post-1	92.6	87.1	55.5	50.8	85.3	75.8	72.3	58.9	39.2	27.0	3.0	3.9	64.9	63.1
Post-2	91.9	86.9	55.8	53.2	84.9	75.7	75.4	61.8	40.8	29.8	3.0	5.7	63.9	62.4
Post-3	92.7	90.7	56.2	55.3	84.8	77.9	76.3	64.6	41.7	30.7	2.8	1.9	64.0	60.4

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events		Preventable admissions–overall		Preventable admissions–acute conditions		Preventable admissions–chronic conditions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	4.5	4.8	7.8	8.7	3.3	4.0	4.5	4.7
2010:Q2	4.7	5.1	8.1	9.1	3.9	4.6	4.3	4.5
2010:Q3	4.5	5.8	7.4	7.4	3.3	3.6	4.1	3.8
2010:Q4	5.3	6.0	8.4	10.3	3.8	6.0	4.6	4.3
2011:Q1	5.2	6.0	10.3	11.0	4.5	5.2	5.7	5.8
2011:Q2	5.5	5.5	10.0	9.0	4.3	4.1	5.7	4.9
2011:Q3	5.5	6.3	8.7	9.4	4.0	4.3	4.7	5.2
2011:Q4	6.1	7.4	10.1	10.4	4.3	4.2	5.7	6.2
2012:Q1	6.6	6.7	11.6	17.4	5.0	6.8	6.6	10.5
2012:Q2	6.9	8.5	10.3	11.6	4.3	5.5	6.0	6.1
2012:Q3	7.5	8.1	10.4	9.3	4.3	4.1	6.1	5.2
2012:Q4	8.3	9.1	12.5	13.9	5.4	7.0	7.1	6.9
2013:Q1	8.9	14.0	14.0	14.1	6.0	6.6	8.0	7.5
2013:Q2	8.2	8.8	12.2	11.3	4.6	4.8	7.6	6.5
2013:Q3	8.6	8.9	11.3	12.6	4.4	5.3	6.8	7.3
2013:Q4	8.9	8.0	11.9	10.3	4.6	4.7	7.3	5.6
2014:Q1	10.5	9.2	13.2	12.8	4.8	4.3	8.3	8.5
2014:Q2	10.4	8.3	12.9	12.6	4.9	5.1	7.9	7.5
2014:Q3	10.6	11.6	11.9	9.9	4.3	3.8	7.5	6.0
2014:Q4	12.1	11.8	12.8	11.2	4.6	4.8	8.1	6.4

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day unplanned readmissions		Follow-up visit within 14 days after discharge	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	998.4	1,031.2	487.2	540.9	113.2	126.5	153.8	121.7	709.5	736.5
2010:Q2	1,086.0	1,088.1	518.5	571.4	123.7	152.3	160.1	144.4	714.1	748.7
2010:Q3	1,054.2	1,067.4	493.3	551.4	120.7	142.1	168.1	150.7	727.7	758.6
2010:Q4	1,042.4	1,051.7	482.1	532.7	112.4	124.2	153.5	126.4	699.6	748.1
2011:Q1	1,024.9	1,004.8	480.4	534.5	111.7	126.6	152.8	141.0	727.4	689.3
2011:Q2	1,070.9	1,054.4	516.6	572.9	120.9	133.1	156.7	143.2	735.7	721.9
2011:Q3	1,025.7	998.3	483.1	549.0	114.5	119.0	163.5	182.2	720.6	788.9
2011:Q4	1,041.3	973.9	493.5	546.3	112.8	119.1	176.2	175.5	730.3	679.3
2012:Q1	1,035.7	944.2	490.5	532.5	109.9	113.0	177.1	190.0	750.0	739.3
2012:Q2	1,082.1	947.4	519.2	574.5	117.2	127.4	184.2	196.2	769.9	743.6
2012:Q3	1,051.4	934.6	485.4	534.8	108.2	128.3	173.2	187.8	762.4	688.0
2012:Q4	1,083.4	959.6	490.7	563.6	105.9	116.5	177.1	224.1	759.0	794.2
2013:Q1	1,075.5	958.1	516.0	574.3	103.2	108.3	180.7	176.5	784.4	787.9
2013:Q2	1,155.0	1,044.7	574.5	640.0	114.7	128.2	180.5	166.3	805.5	756.4
2013:Q3	1,132.2	1,060.5	552.9	578.6	112.6	129.8	181.9	148.0	793.7	788.4
2013:Q4	1,125.3	1,082.9	546.3	577.8	106.4	117.6	180.7	164.4	750.3	709.5
2014:Q1	1,086.3	980.3	517.3	543.9	100.1	117.0	190.8	172.3	749.3	772.8
2014:Q2	1,202.6	1,129.5	585.8	632.5	116.8	129.5	199.7	179.0	770.7	828.5
2014:Q3	1,161.1	1,099.0	562.4	588.1	112.0	118.3	193.1	169.9	745.9	730.2
2014:Q4	1,150.4	1,107.0	542.3	586.2	101.4	113.8	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Minnesota E5-4
Quarterly weighted average Medicare expenditures

Period	Total		Acute care		Post-acute care		ER visits not leading to hospitalizations		Outpatient		Specialty physician	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	512	555	193	190	46	54	21	27	87	98	57	70
2010:Q2	562	643	198	221	44	62	23	26	99	105	67	83
2010:Q3	567	669	195	239	48	65	23	27	100	111	67	80
2010:Q4	584	646	203	207	56	63	23	26	100	113	67	81
2011:Q1	552	639	202	215	55	86	22	27	100	107	59	70
2011:Q2	618	689	212	217	62	83	24	26	112	124	70	82
2011:Q3	623	721	216	240	61	73	25	29	112	129	67	84
2011:Q4	633	721	221	235	57	77	24	26	113	134	70	83
2012:Q1	640	751	231	257	63	73	26	29	117	135	65	85
2012:Q2	694	840	241	303	65	83	28	33	125	137	75	93
2012:Q3	694	762	242	245	62	92	29	31	125	123	73	96
2012:Q4	740	781	270	273	69	77	29	30	125	127	76	95
2013:Q1	734	859	284	326	77	116	29	31	121	124	68	89
2013:Q2	758	831	276	280	70	99	30	32	131	143	78	96
2013:Q3	761	769	271	246	73	90	31	28	136	135	78	93
2013:Q4	782	765	277	257	78	77	31	29	138	138	79	89
2014:Q1	789	791	303	286	85	97	34	33	133	140	71	79
2014:Q2	839	826	296	269	86	77	36	37	147	168	83	92
2014:Q3	854	821	310	274	83	80	38	36	142	162	85	91
2014:Q4	868	830	315	286	91	77	38	36	141	153	83	89

(continued)

Minnesota E5-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Primary care physician		Home health		Other non-facility		Laboratory		Imaging		Other facility	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	23	25	15	14	19	20	10	12	14	14	0	0
2010:Q2	31	33	16	16	22	23	11	13	16	19	0	0
2010:Q3	34	36	16	17	24	24	10	13	16	17	0	0
2010:Q4	36	37	17	19	23	23	10	12	16	17	0	1
2011:Q1	25	29	16	22	20	21	9	11	13	15	0	2
2011:Q2	34	37	17	19	24	24	10	12	16	17	0	1
2011:Q3	36	39	17	21	24	24	10	11	15	16	0	1
2011:Q4	38	39	18	20	25	25	10	11	15	16	0	1
2012:Q1	31	35	20	26	23	24	10	11	14	15	0	0
2012:Q2	39	41	21	22	26	27	10	11	16	17	0	0
2012:Q3	40	42	20	24	27	26	10	11	15	17	0	2
2012:Q4	44	44	22	23	27	26	10	11	16	17	0	0
2013:Q1	34	38	23	23	25	24	9	10	13	14	0	2
2013:Q2	41	41	24	28	27	29	10	11	15	17	0	2
2013:Q3	43	43	24	20	29	27	9	10	15	16	0	0
2013:Q4	46	46	26	23	28	27	9	11	15	15	0	0
2014:Q1	36	35	27	20	27	25	9	10	13	15	0	0
2014:Q2	46	47	29	22	31	31	10	11	16	17	0	0
2014:Q3	48	48	29	20	31	31	9	10	16	17	0	0
2014:Q4	53	54	29	23	31	30	10	12	16	17	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	60.5	60.9	110.8	117.5
2010:Q2	63.5	63.9	123.9	122.6
2010:Q3	62.5	64.7	130.3	128.7
2010:Q4	63.4	69.1	122.4	116.2
2011:Q1	64.9	70.4	119.9	122.1
2011:Q2	66.5	68.2	133.6	126.2
2011:Q3	67.0	74.4	141.2	140.4
2011:Q4	68.6	71.7	132.0	128.0
2012:Q1	73.2	80.2	139.6	133.4
2012:Q2	72.1	83.8	149.0	150.0
2012:Q3	72.2	76.0	156.8	143.0
2012:Q4	77.3	77.2	149.7	137.4
2013:Q1	79.7	86.2	146.2	129.2
2013:Q2	76.5	80.5	149.8	143.7
2013:Q3	75.9	71.9	155.8	130.6
2013:Q4	74.7	73.4	143.9	130.8
2014:Q1	79.6	78.1	145.5	140.4
2014:Q2	80.9	75.7	157.6	152.6
2014:Q3	79.3	72.1	162.3	152.1
2014:Q4	82.8	75.4	158.3	146.0

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries		Rural beneficiaries		Disabled beneficiaries		Non-White beneficiaries	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	654	742	492	593	675	710	738	845
2010:Q2	714	745	550	702	723	736	721	881
2010:Q3	709	878	547	566	729	830	751	846
2010:Q4	714	757	583	634	732	762	714	844
2011:Q1	700	788	535	598	705	778	753	890
2011:Q2	753	756	612	627	781	785	812	861
2011:Q3	767	898	628	704	796	882	795	986
2011:Q4	766	854	626	655	778	904	790	1,034
2012:Q1	791	853	630	599	807	870	802	821
2012:Q2	827	955	692	740	851	971	845	976
2012:Q3	829	902	679	639	849	907	873	868
2012:Q4	868	901	711	688	890	932	883	744
2013:Q1	878	1,038	735	1,031	892	1,059	876	963
2013:Q2	900	913	734	1,029	918	951	908	973
2013:Q3	891	889	756	771	916	931	891	829
2013:Q4	883	819	753	838	932	864	906	832
2014:Q1	950	848	798	1,073	973	913	944	880
2014:Q2	994	919	850	872	1,005	981	1,003	949
2014:Q3	971	935	860	954	1,009	904	1,016	977
2014:Q4	1,002	844	865	812	1,032	873	993	899

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy		Received all 4 diabetes tests		Received none of the 4 diabetes tests	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	91.1	90.0	63.9	58.9	83.3	77.1	70.1	64.8	42.4	35.6	2.5	3.1
Pre-3	91.3	88.4	61.7	57.4	83.3	79.5	72.4	64.6	41.8	35.8	2.4	4.8
Pre-2	91.5	89.1	59.5	58.7	82.9	73.4	73.6	64.3	41.3	26.2	2.7	2.8
Pre-1	92.7	88.7	59.2	57.5	85.5	73.4	78.1	67.7	43.3	32.1	1.5	2.6
Post-1	90.0	84.2	56.1	48.0	81.3	70.6	75.1	64.2	39.1	25.3	2.9	3.9
Post-2	89.9	83.6	56.7	51.3	81.3	70.1	78.3	65.7	40.5	29.0	2.5	5.7
Post-3	89.3	87.8	56.9	54.5	79.0	66.2	78.5	71.3	42.1	29.3	3.3	2.8

Period	Total lipid panel	
	MAPCP	Non-PCMH
Pre-4	73.2	70.1
Pre-3	71.5	70.3
Pre-2	69.6	65.4
Pre-1	66.9	63.4
Post-1	59.2	57.1
Post-2	58.0	55.9
Post-3	57.3	53.9

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events		Preventable admissions–overall		Preventable admissions–acute conditions		Preventable admissions–chronic conditions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	9.9	9.2	21.4	24.6	8.1	10.6	13.3	14.0
2010:Q2	10.0	9.6	21.9	25.4	9.2	12.1	12.7	13.3
2010:Q3	10.0	12.4	20.3	19.9	7.9	11.1	12.3	8.9
2010:Q4	12.5	20.3	25.0	33.2	9.5	17.8	15.4	15.4
2011:Q1	13.6	20.1	30.7	40.7	11.8	17.6	18.9	23.1
2011:Q2	15.3	19.4	31.1	27.8	12.4	11.8	18.6	15.9
2011:Q3	15.7	19.0	27.5	37.1	11.0	16.5	16.5	20.6
2011:Q4	18.0	17.8	33.8	31.1	13.6	9.9	20.2	21.2
2012:Q1	18.8	15.5	36.8	49.9	14.3	16.0	22.4	33.9
2012:Q2	18.6	21.7	32.3	33.7	12.7	12.4	19.7	21.3
2012:Q3	19.9	21.1	31.8	30.7	12.3	13.0	19.5	17.7
2012:Q4	23.2	24.2	37.8	38.1	14.6	16.2	23.1	22.0
2013:Q1	24.7	37.6	45.8	39.0	18.0	16.1	27.9	22.9
2013:Q2	23.3	18.2	39.2	25.0	13.8	9.5	25.5	15.5
2013:Q3	24.3	20.6	36.1	39.8	13.2	13.9	22.9	25.9
2013:Q4	22.8	15.9	34.9	30.1	12.3	10.7	22.6	19.5
2014:Q1	24.6	17.9	38.1	25.9	12.1	8.5	26.0	17.4
2014:Q2	24.4	19.8	36.1	32.0	11.8	11.4	24.2	20.6
2014:Q3	25.6	28.0	33.4	23.5	10.2	7.8	23.2	15.6
2014:Q4	27.0	27.8	34.9	32.8	10.4	13.2	24.6	19.6

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-9
Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day unplanned readmissions		Follow-up visit within 14 days after discharge	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	1,458.4	1,557.5	788.5	852.8	166.2	177.1	212.9	163.4	789.1	907.3
2010:Q2	1,580.9	1,665.0	834.4	910.7	175.4	217.3	232.5	201.3	806.2	883.2
2010:Q3	1,566.7	1,651.3	802.7	917.4	176.7	231.2	240.5	199.2	816.6	853.4
2010:Q4	1,533.9	1,715.2	793.5	905.5	165.3	199.6	225.1	165.4	805.5	847.0
2011:Q1	1,555.1	1,662.5	813.5	951.8	169.3	188.6	205.9	191.3	806.3	795.3
2011:Q2	1,620.9	1,719.8	874.9	998.2	187.5	196.4	214.3	187.3	804.1	823.0
2011:Q3	1,578.9	1,647.8	827.0	951.5	174.6	193.7	220.1	247.8	788.1	865.7
2011:Q4	1,584.9	1,482.7	853.1	932.3	183.6	178.4	233.9	233.8	811.5	734.7
2012:Q1	1,623.6	1,474.4	868.9	919.1	176.7	171.1	240.7	256.9	831.4	827.4
2012:Q2	1,671.6	1,422.5	894.1	930.4	178.4	173.5	243.9	259.4	842.6	824.4
2012:Q3	1,641.0	1,405.9	843.6	878.3	167.2	168.7	246.4	247.0	845.0	712.9
2012:Q4	1,668.2	1,472.0	840.9	882.5	160.1	171.7	236.3	331.3	828.7	811.1
2013:Q1	1,707.2	1,402.2	896.3	902.5	164.0	163.2	246.7	213.8	855.9	818.1
2013:Q2	1,823.8	1,540.9	998.4	969.3	179.7	177.3	231.5	214.0	884.9	767.4
2013:Q3	1,804.3	1,650.4	962.1	869.6	174.8	178.0	242.4	206.1	864.6	880.0
2013:Q4	1,734.1	1,596.5	930.3	829.6	160.7	177.1	236.0	264.2	804.0	780.0
2014:Q1	1,647.5	1,440.9	885.5	831.4	147.3	163.4	262.8	186.3	811.1	821.6
2014:Q2	1,761.8	1,582.7	966.4	966.5	162.3	171.3	272.5	225.1	821.3	845.1
2014:Q3	1,760.9	1,585.6	915.4	868.9	158.7	168.1	267.1	244.3	783.1	731.9
2014:Q4	1,690.9	1,604.3	879.0	861.2	139.6	182.4	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Minnesota E5-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total		Acute care		Post-acute care		ER visits not leading to hospitalizations		Outpatient		Specialty physician	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	1,053	1,147	422	428	101	140	41	47	181	187	100	125
2010:Q2	1,152	1,336	446	488	101	149	45	51	203	222	116	163
2010:Q3	1,176	1,559	438	626	114	182	46	57	208	230	117	152
2010:Q4	1,238	1,598	475	577	137	194	46	63	206	256	117	157
2011:Q1	1,264	1,753	501	655	149	287	47	71	218	257	111	160
2011:Q2	1,462	1,826	570	654	178	288	52	64	252	280	132	174
2011:Q3	1,508	2,044	598	810	179	270	55	63	254	323	125	177
2011:Q4	1,561	1,752	634	605	176	243	51	52	262	309	133	168
2012:Q1	1,598	1,809	638	662	187	184	56	57	275	325	130	181
2012:Q2	1,648	1,925	640	756	182	234	59	68	285	290	142	177
2012:Q3	1,637	1,834	635	617	178	303	61	49	288	266	134	198
2012:Q4	1,775	1,773	729	679	190	203	63	60	284	267	141	183
2013:Q1	1,873	1,977	814	818	223	303	64	59	285	248	134	184
2013:Q2	1,886	1,550	779	522	202	174	65	56	301	268	149	165
2013:Q3	1,863	1,594	749	548	205	205	70	57	308	252	147	156
2013:Q4	1,826	1,484	715	535	205	177	66	58	311	239	143	138
2014:Q1	1,809	1,439	727	548	218	181	71	49	294	239	129	115
2014:Q2	1,817	1,517	688	539	207	165	73	58	316	278	141	135
2014:Q3	1,839	1,558	725	588	192	177	75	60	304	285	138	137
2014:Q4	1,817	1,642	716	642	202	202	76	61	284	263	138	155

(continued)

Minnesota E5-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Primary care physician		Home health		Other non-facility		Laboratory		Imaging		Other facility	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	45	47	33	31	30	31	16	19	22	22	1	0
2010:Q2	56	59	38	42	33	36	17	22	26	32	0	0
2010:Q3	60	67	37	51	36	39	17	23	25	33	0	1
2010:Q4	63	73	43	53	36	35	17	21	25	30	0	6
2011:Q1	53	70	41	64	33	41	15	19	22	31	2	6
2011:Q2	68	81	46	59	40	41	16	20	26	34	1	6
2011:Q3	69	87	49	67	40	41	16	20	25	32	1	4
2011:Q4	73	75	51	58	40	40	16	17	26	30	1	3
2012:Q1	66	72	60	76	40	45	16	19	25	26	1	1
2012:Q2	77	79	59	63	42	46	17	17	26	29	0	0
2012:Q3	77	86	56	65	44	41	15	17	25	30	1	8
2012:Q4	83	88	64	55	45	43	16	16	26	30	1	0
2013:Q1	77	82	67	55	46	43	15	15	23	25	1	10
2013:Q2	86	73	71	68	48	42	16	15	27	25	1	5
2013:Q3	88	87	69	47	51	39	15	15	26	25	1	0
2013:Q4	87	84	73	44	46	41	15	16	25	21	1	0
2014:Q1	76	65	73	45	46	33	14	15	21	28	0	0
2014:Q2	86	85	73	53	48	40	15	15	24	25	0	0
2014:Q3	90	87	72	40	49	45	14	15	24	27	0	0
2014:Q4	92	93	74	41	49	42	15	16	23	30	1	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	128.8	130.3	198.8	190.1
2010:Q2	138.8	136.9	222.7	204.7
2010:Q3	138.3	154.4	235.6	234.6
2010:Q4	143.7	184.8	227.4	226.1
2011:Q1	158.1	205.5	230.2	260.7
2011:Q2	173.3	199.5	260.9	247.7
2011:Q3	175.2	235.8	278.5	273.5
2011:Q4	187.9	181.4	263.5	247.5
2012:Q1	193.9	198.4	274.0	253.0
2012:Q2	185.9	202.6	292.1	276.5
2012:Q3	183.2	176.2	302.1	223.7
2012:Q4	200.0	191.9	294.8	241.5
2013:Q1	219.6	202.4	292.3	214.5
2013:Q2	209.8	159.3	300.3	230.6
2013:Q3	205.0	162.9	317.8	225.0
2013:Q4	189.5	160.4	279.6	239.3
2014:Q1	187.7	141.1	276.2	217.8
2014:Q2	188.0	152.9	293.8	240.5
2014:Q3	185.4	155.1	307.4	240.4
2014:Q4	187.7	156.6	291.3	210.4

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures		Acute care		ER visits not leading to hospitalizations		Services with principal diagnosis of BH condition		Services with secondary diagnosis of BH condition		All-cause admissions		ER visits not leading to hospitalization	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	768	744	280	259	41	41	69	74	171	170	98	95	256	232
2010:Q2	888	896	331	281	45	46	85	56	204	194	110	86	278	257
2010:Q3	860	914	291	266	47	50	81	65	189	169	106	96	299	272
2010:Q4	903	898	330	283	45	45	81	65	213	198	108	97	278	231
2011:Q1	877	953	324	315	44	44	71	60	267	266	109	104	277	247
2011:Q2	964	994	339	306	48	54	85	55	289	271	112	100	296	269
2011:Q3	1,002	1,099	364	384	52	56	91	59	307	314	118	120	326	307
2011:Q4	1,001	1,203	371	447	49	46	87	82	323	346	118	132	303	271
2012:Q1	1,019	1,132	386	398	52	52	87	55	341	312	123	116	312	268
2012:Q2	1,072	1,174	380	412	56	55	94	58	338	326	122	125	331	295
2012:Q3	1,051	1,136	370	372	57	49	90	58	329	314	116	116	344	293
2012:Q4	1,073	1,050	394	371	56	62	90	62	359	290	118	115	324	315
2013:Q1	1,092	1,207	425	452	54	51	88	46	384	345	121	124	308	256
2013:Q2	1,122	1,027	408	348	57	51	98	58	377	289	119	102	324	280
2013:Q3	1,132	985	416	277	62	50	101	60	377	273	123	92	346	258
2013:Q4	1,113	925	404	318	58	47	95	60	373	291	114	100	307	260
2014:Q1	1,126	931	425	364	63	47	85	58	390	321	119	91	308	250
2014:Q2	1,165	1,080	407	375	67	62	104	98	393	367	117	109	338	311
2014:Q3	1,200	921	440	315	71	55	103	70	425	303	120	90	354	270
2014:Q4	1,189	910	428	327	70	56	102	66	405	293	121	93	336	242

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	BH inpatient admissions		BH ER visits		BH outpatient admissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	18	18	23	31	155	119
2010:Q2	20	10	27	21	159	108
2010:Q3	18	16	28	25	165	110
2010:Q4	19	10	24	18	161	138
2011:Q1	17	15	26	20	161	130
2011:Q2	19	8	30	30	165	128
2011:Q3	21	9	35	33	162	126
2011:Q4	19	20	31	36	165	137
2012:Q1	20	9	33	23	207	172
2012:Q2	19	7	36	27	220	162
2012:Q3	20	11	36	23	211	122
2012:Q4	18	11	31	20	207	132
2013:Q1	17	5	29	15	206	111
2013:Q2	18	6	33	29	213	143
2013:Q3	20	8	35	21	220	127
2013:Q4	16	8	31	14	211	117
2014:Q1	13	8	28	16	202	129
2014:Q2	17	17	33	26	215	141
2014:Q3	16	6	36	13	214	116
2014:Q4	15	5	27	13	204	125

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-14
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures		Nursing home professional expenditures		Nursing home facility expenditures		ER professional expenditures		Office home visit expenditures		Hospital professional		Nursing home	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	23.7	24.7	109.3	144.8	0.1	0.1	4.4	3.5	56.1	60.6	0.3	0.3	0.1	0.0
2010:Q2	24.3	28.5	107.7	149.9	0.2	0.1	5.4	4.6	87.7	92.8	0.3	0.3	0.1	0.0
2010:Q3	24.5	26.4	116.8	155.7	0.3	0.1	5.7	4.7	91.1	96.5	0.3	0.3	0.1	0.1
2010:Q4	24.1	25.7	136.1	172.6	0.3	0.1	5.8	5.0	91.4	96.6	0.3	0.3	0.1	0.1
2011:Q1	24.5	27.5	133.7	227.5	0.3	0.1	5.0	4.4	60.1	64.3	0.3	0.3	0.1	0.1
2011:Q2	25.1	26.5	151.6	223.3	0.5	0.5	5.7	5.1	91.6	94.0	0.3	0.3	0.1	0.1
2011:Q3	24.8	28.4	151.9	194.3	0.5	0.5	6.0	5.1	92.3	94.1	0.3	0.3	0.1	0.1
2011:Q4	25.1	26.3	140.8	181.7	0.6	0.5	5.9	5.1	95.3	95.0	0.3	0.3	0.1	0.1
2012:Q1	26.8	32.3	155.0	194.1	0.5	0.4	5.6	4.9	71.0	71.0	0.3	0.4	0.1	0.1
2012:Q2	28.0	33.2	155.1	208.6	0.8	0.5	6.2	5.7	99.5	96.3	0.3	0.4	0.1	0.1
2012:Q3	26.9	31.0	149.0	236.9	0.8	0.3	6.6	5.6	99.5	98.4	0.3	0.4	0.1	0.1
2012:Q4	28.7	30.5	169.9	184.8	0.9	0.3	6.8	5.8	102.6	101.3	0.4	0.4	0.1	0.1
2013:Q1	30.0	39.1	188.0	275.5	0.8	0.4	6.0	5.2	72.4	71.2	0.4	0.5	0.1	0.1
2013:Q2	29.1	30.9	172.0	239.6	1.1	0.5	6.6	5.4	106.0	104.3	0.4	0.4	0.1	0.1
2013:Q3	28.6	27.3	176.5	196.3	1.2	0.2	7.0	5.5	108.3	108.2	0.4	0.3	0.1	0.1
2013:Q4	29.4	29.5	188.5	202.8	1.3	0.4	6.8	5.4	108.5	109.8	0.4	0.3	0.1	0.1
2014:Q1	31.9	29.4	210.2	233.3	1.2	0.4	6.8	5.5	74.3	73.9	0.4	0.4	0.2	0.1
2014:Q2	31.5	30.3	210.1	202.8	1.5	0.5	7.7	6.3	111.9	113.3	0.4	0.4	0.2	0.1
2014:Q3	32.3	27.5	208.6	185.1	1.7	0.4	7.9	5.9	114.4	114.6	0.4	0.3	0.2	0.1
2014:Q4	32.7	29.5	219.6	181.8	1.6	0.6	8.1	6.4	112.6	116.2	0.4	0.3	0.2	0.1

(continued)

Minnesota E5-14 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	EM Visits (ER)		E&M Visits (Office)	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	0.2	0.2	1.6	1.7
2010:Q2	0.3	0.2	1.7	1.8
2010:Q3	0.3	0.2	1.7	1.8
2010:Q4	0.3	0.2	1.6	1.7
2011:Q1	0.3	0.2	1.6	1.7
2011:Q2	0.3	0.2	1.7	1.8
2011:Q3	0.3	0.3	1.6	1.7
2011:Q4	0.3	0.2	1.6	1.6
2012:Q1	0.3	0.3	1.6	1.6
2012:Q2	0.3	0.3	1.7	1.6
2012:Q3	0.3	0.3	1.6	1.6
2012:Q4	0.3	0.3	1.7	1.6
2013:Q1	0.3	0.3	1.7	1.6
2013:Q2	0.3	0.3	1.8	1.8
2013:Q3	0.3	0.3	1.8	1.8
2013:Q4	0.3	0.3	1.8	1.8
2014:Q1	0.3	0.3	1.7	1.6
2014:Q2	0.3	0.3	1.9	1.9
2014:Q3	0.3	0.3	1.8	1.8
2014:Q4	0.3	0.3	1.8	1.8

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; E&M = evaluation and management; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.7	84.0	91.3	65.4	56.7	63.3	83.9	81.7	84.2	64.0	48.6	59.9
Pre-3	89.8	89.6	90.1	65.0	61.9	62.1	83.8	85.9	82.8	65.1	62.2	60.9
Pre-2	90.3	88.8	88.0	64.4	59.6	62.1	82.6	83.1	82.3	67.5	56.2	63.1
Pre-1	90.9	90.0	91.0	62.0	56.6	61.3	82.7	88.2	82.1	70.1	53.3	66.6
Post-1	90.1	87.9	87.7	62.4	53.7	59.3	81.5	82.5	79.4	69.9	56.3	65.1
Post-2	90.4	92.0	91.0	63.3	63.7	60.1	80.5	85.4	80.2	70.1	59.0	68.9
Post-3	90.6	95.5	90.6	63.6	60.5	59.7	80.0	88.7	80.0	69.0	72.4	66.5

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	41.4	27.3	36.3	3.4	5.2	2.8	78.3	81.5	77.9
Pre-3	40.3	38.8	36.3	2.9	4.1	3.5	77.4	74.9	78.2
Pre-2	41.6	32.3	37.0	3.2	5.1	2.9	76.8	77.6	78.6
Pre-1	41.2	31.5	38.9	2.9	3.6	2.2	74.6	81.9	75.7
Post-1	41.2	29.0	36.6	3.0	4.4	4.1	71.4	72.1	73.0
Post-2	40.7	34.9	39.8	3.1	3.2	2.6	70.1	76.2	73.1
Post-3	40.2	44.5	37.0	3.4	1.3	3.4	68.7	77.8	72.7

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	4.8	4.8	4.6	8.5	8.9	8.2	3.8	2.8	3.2	4.6	6.0	5.0
2010:Q2	4.8	8.5	5.9	9.6	10.2	10.7	3.9	5.0	4.7	5.7	5.1	6.0
2010:Q3	4.7	2.3	5.7	7.7	12.5	8.8	3.0	2.0	4.0	4.6	10.5	4.8
2010:Q4	5.0	4.2	5.6	10.0	11.5	11.7	4.1	3.8	4.9	5.8	7.8	6.8
2011:Q1	5.2	6.5	8.2	11.1	6.8	12.8	4.6	3.5	5.5	6.3	3.3	7.3
2011:Q2	5.2	6.7	5.6	11.5	11.9	13.4	5.1	6.5	5.1	6.4	5.5	8.3
2011:Q3	5.2	4.8	6.3	9.4	12.5	12.1	3.8	4.0	4.6	5.6	8.5	7.5
2011:Q4	6.7	5.0	6.9	11.3	13.6	14.0	4.8	5.7	6.4	6.4	7.9	7.6
2012:Q1	6.0	4.1	6.3	13.1	11.6	15.5	5.9	5.5	7.2	7.2	6.1	8.3
2012:Q2	7.2	7.1	8.1	12.8	13.3	15.9	5.5	4.5	6.4	7.2	8.8	9.5
2012:Q3	7.3	4.8	8.9	11.5	6.1	12.3	4.7	1.5	5.6	6.8	4.6	6.7
2012:Q4	8.1	10.8	10.2	13.3	12.5	14.3	5.1	6.1	6.1	8.1	6.4	8.1
2013:Q1	8.9	9.5	8.6	15.9	17.3	14.0	6.6	6.8	6.8	9.3	10.4	7.2
2013:Q2	9.2	3.7	8.0	13.4	15.4	14.0	5.1	7.9	6.0	8.2	7.5	8.0
2013:Q3	8.7	10.2	6.8	11.4	10.2	11.2	4.6	4.3	4.3	6.7	5.9	7.0
2013:Q4	9.3	4.3	8.0	13.0	18.4	12.2	5.2	6.8	5.1	7.7	11.6	7.1
2014:Q1	9.3	15.0	5.8	14.4	12.2	12.4	5.8	6.6	5.2	8.6	5.6	7.2
2014:Q2	9.4	6.4	8.1	14.0	9.0	11.8	5.2	4.4	3.3	8.7	4.6	8.6
2014:Q3	9.6	12.7	8.7	12.1	12.6	10.3	4.7	5.6	4.4	7.4	7.1	5.9
2014:Q4	9.8	6.0	7.5	12.9	12.0	13.3	4.9	6.0	4.9	7.9	6.0	8.4

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	728.6	769.9	773.8	491.9	543.7	503.5	118.4	107.6	131.2	147.2	81.1	140.6	686.6	594.5	639.9
2010:Q2	759.9	845.6	804.4	509.5	615.4	537.7	135.1	141.6	140.3	146.2	124.4	141.1	692.6	557.1	641.6
2010:Q3	752.2	796.0	782.7	491.8	552.8	513.6	128.6	134.0	137.8	132.8	120.1	152.6	698.3	585.6	634.1
2010:Q4	748.5	772.9	776.8	490.1	588.4	527.9	124.1	142.1	130.7	150.8	114.3	157.6	708.6	686.1	684.1
2011:Q1	745.1	803.6	778.7	490.0	584.3	527.8	127.9	169.4	136.2	149.3	191.6	196.6	742.9	686.8	757.0
2011:Q2	771.4	792.2	797.7	526.7	662.0	559.9	132.0	134.2	143.5	158.3	178.2	145.7	750.5	840.5	709.2
2011:Q3	733.9	811.8	757.4	497.5	567.3	539.3	123.2	160.2	131.1	166.6	226.8	200.5	731.7	747.3	733.1
2011:Q4	758.6	830.0	775.4	498.3	581.9	565.8	122.6	134.6	128.7	157.0	190.2	200.6	737.1	635.9	800.3
2012:Q1	761.4	751.7	745.0	503.2	557.1	549.0	122.7	143.3	124.2	170.1	106.0	184.4	773.4	605.9	727.4
2012:Q2	794.6	799.7	784.0	527.5	647.2	534.6	127.5	137.1	130.2	171.1	169.4	194.5	787.2	563.5	730.7
2012:Q3	750.6	783.5	722.9	480.7	585.5	503.6	124.0	137.1	116.4	179.8	218.8	186.3	801.8	843.8	778.5
2012:Q4	769.6	805.3	780.6	484.4	592.2	508.3	118.8	131.2	109.6	165.1	186.1	137.0	731.9	770.7	643.2
2013:Q1	829.0	854.9	862.8	526.9	619.4	545.1	119.7	132.3	114.1	193.9	135.1	163.3	796.2	839.8	687.7
2013:Q2	883.7	967.2	901.9	572.2	690.7	599.8	128.7	144.7	127.5	170.9	217.2	140.5	769.6	784.3	729.1
2013:Q3	852.1	899.6	842.2	521.2	674.7	550.2	125.7	136.3	116.3	161.9	174.5	177.8	769.7	797.4	755.7
2013:Q4	825.0	938.8	805.2	528.9	663.0	545.2	118.9	128.1	111.3	179.4	216.1	178.9	726.1	763.8	634.3
2014:Q1	811.2	918.6	776.4	517.0	633.2	517.9	119.3	144.8	107.5	178.4	167.1	143.2	745.1	833.8	731.5
2014:Q2	900.7	1,053.4	871.5	572.0	737.7	600.1	139.1	141.3	127.5	167.3	311.3	215.9	752.3	825.2	742.3
2014:Q3	864.6	981.3	856.8	532.7	671.9	569.1	128.8	148.3	120.1	188.1	122.1	115.2	726.9	689.6	665.6
2014:Q4	855.3	1,024.8	862.8	538.5	599.4	548.4	124.9	130.2	119.5	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Maine E6-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	520	481	504	170	139	172	48	36	33	25	27	28
2010:Q2	572	646	592	174	223	188	51	49	53	27	25	28
2010:Q3	554	584	572	153	171	171	55	43	54	28	31	30
2010:Q4	581	604	625	165	182	195	60	50	63	29	28	31
2011:Q1	585	646	632	179	216	221	70	66	55	27	35	32
2011:Q2	634	686	673	178	224	210	74	45	68	30	32	33
2011:Q3	610	718	686	166	236	217	66	69	58	31	36	37
2011:Q4	647	679	694	192	195	217	65	52	61	30	33	34
2012:Q1	653	729	706	196	215	227	73	78	71	31	34	37
2012:Q2	698	648	803	204	188	265	71	30	73	35	36	44
2012:Q3	702	597	746	200	151	227	77	45	68	35	29	40
2012:Q4	727	679	751	222	225	258	75	53	64	35	35	36
2013:Q1	757	673	697	252	201	236	87	61	72	35	28	31
2013:Q2	777	677	720	237	178	206	78	39	84	37	36	38
2013:Q3	751	757	668	227	230	200	78	77	54	37	35	36
2013:Q4	777	835	692	249	260	218	79	94	60	36	32	35
2014:Q1	753	780	621	243	270	181	83	67	68	37	40	35
2014:Q2	812	794	695	246	261	195	85	50	58	41	35	37
2014:Q3	782	729	692	228	205	200	76	64	58	42	36	37
2014:Q4	789	645	704	237	170	207	82	39	55	40	29	39

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Maine E6-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	121	111	118	53	58	52	17	21	18	20	23	20
2010:Q2	138	134	134	62	89	63	21	25	22	21	18	26
2010:Q3	139	143	132	61	77	63	22	29	24	20	15	21
2010:Q4	142	123	145	64	76	68	23	27	27	21	26	21
2011:Q1	139	146	143	58	70	60	19	25	22	22	19	25
2011:Q2	158	154	158	65	85	69	24	30	28	24	24	27
2011:Q3	156	156	163	61	81	68	24	36	28	22	20	25
2011:Q4	161	175	163	65	79	71	26	31	31	24	25	28
2012:Q1	163	158	165	60	95	64	21	25	24	27	31	31
2012:Q2	175	153	179	69	95	74	26	29	31	27	25	28
2012:Q3	175	144	175	66	83	69	26	31	31	26	22	29
2012:Q4	175	128	154	69	85	69	28	36	34	27	24	29
2013:Q1	174	153	156	61	79	57	24	31	26	28	36	28
2013:Q2	192	163	174	70	90	69	29	37	32	31	31	24
2013:Q3	182	151	164	66	95	65	29	42	31	27	21	25
2013:Q4	184	165	170	70	98	63	29	41	31	29	37	26
2014:Q1	176	148	157	62	85	52	25	36	22	31	32	23
2014:Q2	202	175	187	72	98	69	30	43	30	32	34	25
2014:Q3	197	153	180	73	91	67	30	44	31	30	24	21
2014:Q4	192	140	181	72	97	66	31	43	34	32	28	25

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Maine E6-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	22	20	20	10	9	10	10	13	11	0	0	0
2010:Q2	25	29	25	10	11	11	12	15	12	0	0	0
2010:Q3	24	27	24	9	9	10	11	14	12	0	0	0
2010:Q4	25	29	24	10	13	10	12	14	12	0	0	0
2011:Q1	24	22	24	9	11	10	10	14	11	0	0	0
2011:Q2	26	30	26	9	12	10	12	14	12	0	0	0
2011:Q3	27	29	27	9	9	10	11	14	11	0	0	0
2011:Q4	27	32	29	9	11	10	11	15	12	0	0	0
2012:Q1	26	29	27	9	11	11	10	13	10	0	0	0
2012:Q2	28	29	30	10	10	11	11	13	11	0	0	0
2012:Q3	29	28	31	9	10	9	10	13	11	0	0	0
2012:Q4	29	31	31	10	12	10	10	14	11	0	0	0
2013:Q1	29	29	27	9	10	9	9	10	9	0	0	0
2013:Q2	31	32	30	10	12	10	10	13	11	0	0	0
2013:Q3	32	32	31	9	12	11	10	13	10	0	0	0
2013:Q4	33	35	32	10	12	10	10	13	10	0	0	0
2014:Q1	32	31	28	9	11	9	9	13	8	0	0	0
2014:Q2	35	34	33	11	15	11	10	14	10	0	0	1
2014:Q3	36	33	34	10	11	11	10	13	10	0	0	0
2014:Q4	37	38	32	10	11	11	10	12	10	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	56.1	52.5	52.0	167.7	166.3	183.8
2010:Q2	57.6	60.2	61.3	186.2	172.4	176.0
2010:Q3	54.2	54.8	58.1	190.9	186.5	190.7
2010:Q4	56.8	57.2	63.8	178.6	169.4	187.0
2011:Q1	62.4	54.0	71.3	178.7	196.7	191.4
2011:Q2	62.5	65.4	70.5	194.3	206.8	200.8
2011:Q3	59.5	71.0	69.1	200.0	198.7	216.8
2011:Q4	64.7	61.7	73.6	188.0	175.6	207.3
2012:Q1	66.9	66.4	74.2	192.8	190.3	198.3
2012:Q2	67.3	56.3	76.3	209.1	213.6	228.5
2012:Q3	65.9	50.1	70.7	214.8	183.8	227.6
2012:Q4	68.1	66.9	74.1	198.7	168.2	205.0
2013:Q1	76.2	70.1	69.2	199.6	182.5	176.7
2013:Q2	71.8	59.0	65.4	204.8	207.0	190.6
2013:Q3	69.6	73.8	60.5	208.7	182.4	214.7
2013:Q4	70.9	72.9	68.1	191.3	165.9	185.1
2014:Q1	72.6	85.1	58.8	183.9	193.7	182.1
2014:Q2	73.1	67.4	65.3	202.5	189.8	193.8
2014:Q3	68.9	63.8	61.8	207.5	171.2	185.4
2014:Q4	69.4	55.0	62.2	192.1	160.8	168.7

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-6
Quarterly weighted average total Medicare expenditures among special populations

	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries			Non-White beneficiaries		
Period	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	582	498	549	520	542	500	588	503	554	577	495	587
2010:Q2	647	685	667	580	695	614	634	691	672	505	527	556
2010:Q3	612	620	634	529	626	633	607	683	649	502	335	590
2010:Q4	641	809	711	573	586	649	625	836	708	532	506	734
2011:Q1	660	674	729	605	520	683	638	739	700	675	416	728
2011:Q2	702	734	727	641	790	718	679	738	689	709	410	889
2011:Q3	697	843	760	588	814	736	672	811	775	667	479	632
2011:Q4	710	756	772	624	731	728	688	861	743	682	603	607
2012:Q1	730	776	799	638	759	798	689	877	807	600	601	563
2012:Q2	768	751	900	700	673	864	743	806	898	648	512	1,028
2012:Q3	783	606	875	699	615	763	760	672	850	607	363	618
2012:Q4	801	685	837	723	662	727	771	721	793	601	599	613
2013:Q1	832	756	760	755	645	735	782	754	745	615	635	466
2013:Q2	854	762	824	754	636	711	829	742	792	608	730	536
2013:Q3	847	775	726	763	662	631	811	895	713	647	399	564
2013:Q4	873	794	730	786	925	669	811	1,177	754	731	493	495
2014:Q1	836	926	680	723	777	577	806	1,043	665	642	609	691
2014:Q2	899	928	757	802	665	619	868	1,105	731	669	478	574
2014:Q3	868	894	731	778	781	630	847	897	704	668	537	522
2014:Q4	865	713	750	818	544	556	826	761	807	795	343	482

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.8	81.7	93.1	66.4	53.7	64.8	82.7	85.4	82.0	66.9	55.5	64.1
Pre-3	89.2	89.5	92.6	66.2	61.9	64.6	82.0	82.8	83.2	68.3	61.9	65.5
Pre-2	90.0	88.4	87.3	64.5	59.8	62.2	81.5	83.2	80.3	72.1	60.3	67.1
Pre-1	90.1	92.7	90.0	63.2	55.9	61.1	82.2	89.8	80.3	77.0	59.7	72.1
Post-1	88.2	80.5	85.7	61.7	47.3	56.5	78.6	71.9	75.6	73.9	66.0	68.4
Post-2	88.6	81.2	88.3	62.5	56.8	60.5	76.3	70.6	73.3	73.8	62.2	72.6
Post-3	88.3	91.5	88.0	63.5	70.7	55.5	75.5	82.5	75.1	70.1	75.9	66.0

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	43.1	28.9	36.9	3.5	5.5	2.4	76.9	81.9	75.7
Pre-3	41.1	33.9	39.7	2.8	3.0	1.6	75.4	71.5	77.6
Pre-2	43.6	29.0	38.0	2.9	2.7	2.2	74.9	75.4	76.5
Pre-1	44.1	34.6	39.0	2.4	1.4	1.4	72.0	80.7	72.8
Post-1	41.2	25.7	34.4	2.9	5.0	3.8	66.4	66.1	68.1
Post-2	40.6	25.3	37.7	3.3	8.4	2.5	65.6	67.6	69.2
Post-3	40.5	52.9	29.2	4.6	2.0	2.8	65.0	69.9	70.5

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	9.5	13.4	8.6	22.3	23.1	25.4	9.6	10.3	9.4	12.6	12.8	16.0
2010:Q2	9.4	19.3	12.4	24.1	27.2	32.1	8.8	10.3	13.7	15.2	17.0	18.4
2010:Q3	9.5	3.8	13.1	20.1	40.6	26.7	6.8	4.6	11.4	13.3	36.0	15.4
2010:Q4	11.9	15.5	14.9	28.1	38.9	36.4	10.6	14.2	12.2	17.4	24.7	24.2
2011:Q1	13.4	25.7	30.9	33.4	17.3	46.5	12.9	9.0	18.9	20.3	8.3	27.6
2011:Q2	14.1	26.3	19.8	34.9	34.8	48.2	14.9	17.7	16.9	19.9	17.1	31.2
2011:Q3	14.8	14.7	23.1	28.1	38.0	44.9	10.3	12.0	16.2	17.8	26.0	28.7
2011:Q4	18.5	18.8	24.9	33.9	45.9	54.5	13.4	19.4	24.4	20.5	26.5	30.1
2012:Q1	16.6	11.8	16.1	40.5	38.7	50.6	17.4	16.1	20.3	23.1	22.7	30.3
2012:Q2	19.3	20.4	22.0	38.9	44.2	51.8	15.4	16.6	17.5	23.5	27.6	34.3
2012:Q3	21.0	9.2	25.2	36.3	15.3	38.6	13.6	4.4	14.8	22.7	10.9	23.7
2012:Q4	23.9	29.3	29.5	42.6	38.6	46.9	15.5	15.3	17.3	27.0	23.2	29.2
2013:Q1	22.9	29.4	23.3	45.3	57.8	46.5	18.0	15.0	20.7	27.3	42.8	25.8
2013:Q2	22.7	14.0	19.2	38.2	46.9	46.1	13.6	20.5	15.5	24.6	26.4	30.5
2013:Q3	18.9	26.2	22.3	31.8	38.7	36.5	11.8	18.7	10.0	19.9	19.9	26.6
2013:Q4	22.3	10.4	20.1	37.2	49.3	38.1	13.3	28.1	13.9	23.8	21.2	24.2
2014:Q1	21.5	37.6	14.2	42.5	43.7	36.6	15.7	22.7	13.4	26.8	21.0	23.2
2014:Q2	21.0	22.9	21.6	39.7	27.8	41.3	14.4	9.1	6.5	25.2	18.6	34.8
2014:Q3	22.6	22.2	20.6	32.8	50.7	34.9	11.6	27.0	19.1	21.3	23.7	15.8
2014:Q4	22.6	12.3	20.2	38.0	28.1	39.7	13.9	18.0	13.5	24.0	10.1	26.2

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,017.8	1,115.0	1,123.8	777.8	788.9	859.4	158.8	169.2	190.1	203.5	119.5	198.4	782.0	705.9	736.6
2010:Q2	1,066.9	1,196.0	1,162.6	812.4	952.0	888.4	186.7	182.7	211.1	185.4	160.2	180.0	781.4	787.0	739.8
2010:Q3	1,081.0	1,111.8	1,179.7	779.3	827.5	872.8	182.0	199.3	187.2	167.2	198.9	190.5	768.4	715.4	716.2
2010:Q4	1,057.8	1,067.4	1,149.4	783.5	903.0	921.3	176.5	192.2	190.8	197.9	140.7	214.7	816.0	750.8	729.2
2011:Q1	1,087.3	1,144.6	1,189.3	802.0	948.6	963.1	186.1	265.7	211.5	190.5	149.8	253.3	835.9	752.0	840.3
2011:Q2	1,121.0	1,215.3	1,240.1	872.7	1,160.8	1,033.9	197.7	182.2	226.0	206.5	209.8	189.7	833.3	862.0	779.8
2011:Q3	1,073.6	1,230.9	1,179.6	839.3	900.5	1,001.4	182.6	287.2	204.1	209.7	290.3	242.1	813.6	792.8	785.1
2011:Q4	1,103.1	1,301.2	1,200.7	844.1	962.1	1,052.1	182.7	168.7	224.1	202.2	258.2	255.4	813.5	705.4	889.2
2012:Q1	1,146.3	1,245.5	1,139.1	860.6	981.8	1,024.9	184.9	215.9	199.1	218.0	158.7	270.7	853.0	739.8	840.6
2012:Q2	1,163.2	1,210.2	1,113.9	899.8	962.4	926.7	187.3	219.9	188.5	210.3	248.9	257.9	851.4	633.2	800.3
2012:Q3	1,131.8	1,176.3	1,042.8	821.2	970.4	869.9	185.3	212.8	169.1	223.7	258.9	215.3	870.0	947.4	843.4
2012:Q4	1,135.2	1,298.2	1,143.4	827.8	856.1	859.1	178.1	253.6	156.8	206.5	143.2	170.6	796.8	791.2	680.7
2013:Q1	1,187.0	1,368.4	1,237.3	871.0	1,045.9	937.6	176.5	225.8	145.7	248.1	164.0	262.7	825.5	928.0	769.6
2013:Q2	1,249.3	1,530.1	1,294.4	926.4	1,180.5	978.8	186.3	196.0	175.8	223.2	191.3	174.0	801.5	883.2	764.0
2013:Q3	1,218.2	1,413.4	1,226.1	836.2	1,117.1	978.2	177.6	260.0	165.6	225.4	169.5	234.1	810.4	984.1	765.1
2013:Q4	1,161.2	1,419.2	1,152.6	841.2	1,052.0	887.2	166.4	189.1	150.6	230.7	270.1	185.9	778.8	821.5	697.6
2014:Q1	1,139.4	1,294.1	1,099.5	810.4	964.3	872.2	167.5	277.8	144.1	248.4	254.7	151.9	809.3	730.5	726.1
2014:Q2	1,225.1	1,525.7	1,227.7	886.3	1,188.0	922.7	180.3	252.7	189.4	219.8	342.5	352.4	782.7	877.2	788.0
2014:Q3	1,206.2	1,407.9	1,167.0	828.4	1,112.3	933.8	171.1	234.8	171.4	245.9	180.4	131.0	778.7	664.2	677.8
2014:Q4	1,186.9	1,504.5	1,163.7	817.6	821.4	818.7	157.2	209.5	147.8	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Maine E6-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,005	879	1,028	365	270	382	110	83	65	44	50	55
2010:Q2	1,069	1,229	1,291	359	487	466	113	97	142	49	44	57
2010:Q3	1,068	1,169	1,166	325	406	382	128	90	121	50	70	56
2010:Q4	1,176	1,461	1,374	385	592	482	156	135	159	53	60	67
2011:Q1	1,294	1,655	1,656	455	685	700	193	223	181	54	76	76
2011:Q2	1,400	1,761	1,796	460	722	679	204	142	228	60	70	83
2011:Q3	1,351	1,823	1,871	425	719	724	193	266	210	62	86	90
2011:Q4	1,463	1,738	1,917	497	607	736	197	196	218	61	86	84
2012:Q1	1,501	1,774	1,708	515	531	592	209	246	215	64	81	79
2012:Q2	1,573	1,526	1,901	531	528	718	202	103	205	73	96	103
2012:Q3	1,594	1,229	1,760	526	334	607	215	118	195	75	63	89
2012:Q4	1,690	1,470	1,716	604	538	669	216	153	175	76	88	76
2013:Q1	1,696	1,459	1,587	615	493	587	248	152	204	71	69	60
2013:Q2	1,642	1,569	1,668	558	514	550	195	124	261	75	78	82
2013:Q3	1,524	1,746	1,468	503	582	518	174	249	135	71	78	75
2013:Q4	1,587	1,546	1,361	558	529	441	195	102	139	74	55	69
2014:Q1	1,564	1,773	1,324	533	674	406	218	211	185	74	71	79
2014:Q2	1,612	1,937	1,596	540	761	564	200	181	182	81	71	76
2014:Q3	1,575	1,377	1,349	503	439	416	187	120	156	80	63	69
2014:Q4	1,545	1,260	1,372	518	382	433	201	82	173	78	53	73

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Maine E6-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	209	194	234	87	81	92	31	43	34	48	52	48
2010:Q2	238	242	257	100	149	114	37	43	40	45	36	68
2010:Q3	246	249	249	98	130	111	38	58	43	47	40	54
2010:Q4	248	232	296	103	133	122	42	54	48	51	70	59
2011:Q1	263	289	293	102	136	128	40	53	51	55	64	67
2011:Q2	297	320	335	116	169	150	46	63	60	64	75	87
2011:Q3	295	274	361	110	157	149	45	84	59	59	64	84
2011:Q4	316	392	362	115	135	149	48	62	64	65	79	93
2012:Q1	322	344	356	111	200	128	44	58	51	72	97	96
2012:Q2	338	305	360	124	185	135	50	58	60	75	79	74
2012:Q3	347	256	363	118	147	124	51	57	59	70	67	75
2012:Q4	348	256	301	122	135	114	55	66	61	75	74	88
2013:Q1	337	265	298	106	132	99	50	64	52	76	120	73
2013:Q2	362	334	324	115	152	115	53	73	60	82	90	74
2013:Q3	346	312	311	103	136	107	52	77	55	67	69	76
2013:Q4	336	334	302	109	127	101	53	71	53	69	119	72
2014:Q1	329	304	289	99	142	86	49	67	45	78	74	66
2014:Q2	349	386	327	112	168	114	54	77	60	78	98	71
2014:Q3	354	262	283	112	151	100	53	78	51	75	91	60
2014:Q4	330	260	287	105	140	94	56	69	57	74	116	61

(continued)

Maine E6-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	36	25	35	14	14	16	17	17	19	0	0	0
2010:Q2	40	38	41	14	15	17	19	25	21	0	0	0
2010:Q3	38	38	42	13	14	17	18	22	21	0	0	0
2010:Q4	41	44	42	13	26	15	20	23	21	0	0	0
2011:Q1	43	46	53	13	13	16	18	24	22	0	0	0
2011:Q2	46	58	52	13	16	17	20	27	24	0	0	0
2011:Q3	48	63	58	13	14	18	19	29	23	1	0	0
2011:Q4	48	60	63	14	14	17	19	26	24	0	0	0
2012:Q1	49	52	54	14	16	17	17	24	18	0	0	0
2012:Q2	51	42	60	15	14	16	19	21	19	0	0	0
2012:Q3	56	49	64	14	15	14	19	17	19	0	0	0
2012:Q4	54	44	63	14	17	13	18	21	18	0	0	0
2013:Q1	55	49	56	14	13	12	15	18	15	0	0	0
2013:Q2	57	51	56	14	17	13	18	20	19	0	0	0
2013:Q3	57	63	59	14	19	18	15	21	15	0	0	0
2013:Q4	56	53	57	14	16	18	16	19	16	0	0	0
2014:Q1	56	59	60	12	14	15	14	20	14	0	0	0
2014:Q2	62	57	64	14	24	13	16	26	19	0	0	3
2014:Q3	58	44	66	14	13	15	15	22	15	0	0	0
2014:Q4	58	57	59	13	13	17	15	15	15	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	114.8	101.8	120.1	264.0	282.4	317.7
2010:Q2	119.2	128.7	142.0	297.8	268.3	298.3
2010:Q3	114.2	134.2	131.9	297.9	365.7	326.2
2010:Q4	129.1	178.1	159.7	288.2	309.5	338.7
2011:Q1	154.7	144.1	214.0	307.9	380.2	360.5
2011:Q2	155.9	195.1	217.6	329.6	347.8	408.7
2011:Q3	147.9	212.2	219.1	343.0	415.0	423.3
2011:Q4	164.4	184.4	237.1	332.2	412.2	434.1
2012:Q1	171.2	173.3	189.9	344.8	407.5	389.3
2012:Q2	172.8	152.6	196.3	386.0	456.4	450.6
2012:Q3	171.5	119.3	181.8	392.5	356.4	441.8
2012:Q4	180.9	160.9	189.5	367.5	339.4	376.0
2013:Q1	181.2	188.1	173.0	355.3	349.1	302.9
2013:Q2	170.1	161.8	166.0	366.1	374.2	358.4
2013:Q3	156.6	200.7	153.5	359.5	394.0	402.3
2013:Q4	161.4	167.9	155.9	342.2	265.1	347.6
2014:Q1	165.3	194.1	144.9	323.7	310.9	364.3
2014:Q2	164.3	168.4	181.8	364.9	349.2	340.8
2014:Q3	152.3	168.4	136.2	365.8	285.3	328.2
2014:Q4	155.8	129.1	137.1	335.6	244.9	305.8

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	694	665	730	208	191	231	42	62	56	74	57	71	143	97	156
2010:Q2	766	969	806	219	371	246	47	40	47	80	62	77	152	276	145
2010:Q3	758	915	803	198	411	237	50	56	62	80	81	79	143	223	155
2010:Q4	768	1,177	845	210	456	271	50	56	54	77	93	87	157	320	207
2011:Q1	800	1,463	803	233	711	259	48	74	50	73	69	74	197	704	240
2011:Q2	846	1,166	824	222	455	214	53	68	62	86	68	83	191	356	184
2011:Q3	836	1,110	1,008	203	370	326	54	100	67	89	71	83	181	395	241
2011:Q4	839	1,085	902	218	317	265	51	74	64	86	99	80	196	300	250
2012:Q1	858	1,009	1,025	238	196	355	53	72	62	81	83	69	227	195	293
2012:Q2	896	801	1,116	252	181	384	59	77	74	88	60	83	239	183	371
2012:Q3	888	807	1,007	233	208	296	60	52	72	89	63	70	235	187	262
2012:Q4	914	852	885	268	228	274	58	74	56	85	60	61	266	219	241
2013:Q1	914	884	920	271	274	301	56	52	49	82	73	71	256	228	285
2013:Q2	940	959	945	269	233	282	60	70	54	92	77	80	265	166	236
2013:Q3	910	950	856	251	201	237	61	68	62	95	70	105	254	240	248
2013:Q4	865	1,133	819	250	402	218	58	63	67	91	52	89	252	404	218
2014:Q1	895	1,127	733	262	385	156	59	78	59	93	83	81	267	312	151
2014:Q2	901	1,098	854	240	295	216	60	60	53	101	96	81	243	310	200
2014:Q3	901	813	768	238	190	174	67	52	55	103	93	95	253	195	202
2014:Q4	882	884	787	233	326	183	60	39	48	97	71	94	235	253	206

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	78	89	74	328	335	403	12	11	9	44	33	51	625	369	427
2010:Q2	80	100	89	362	321	333	11	6	11	40	38	46	637	362	407
2010:Q3	78	137	90	384	368	415	12	14	13	51	30	44	639	437	442
2010:Q4	80	146	94	347	332	385	9	16	14	41	20	57	646	385	459
2011:Q1	87	118	105	356	403	361	11	22	15	43	16	42	690	350	472
2011:Q2	85	140	94	389	433	392	13	15	14	56	46	57	742	413	455
2011:Q3	84	112	112	402	502	430	13	10	13	56	41	47	713	498	471
2011:Q4	88	108	109	372	421	428	12	14	10	48	35	46	711	595	462
2012:Q1	88	113	108	365	459	399	11	13	8	49	44	45	759	545	483
2012:Q2	89	71	108	398	450	438	12	4	12	51	33	52	759	526	465
2012:Q3	88	80	88	421	398	453	12	9	7	60	45	51	726	394	459
2012:Q4	89	92	93	380	365	383	10	5	5	50	34	41	722	333	431
2013:Q1	90	102	91	376	320	334	10	16	10	48	34	37	706	436	469
2013:Q2	91	79	89	384	433	320	12	12	8	51	36	41	720	363	450
2013:Q3	88	87	82	399	441	423	12	4	12	54	46	57	701	353	480
2013:Q4	82	133	85	352	377	380	10	1	9	43	45	57	680	296	500
2014:Q1	88	120	62	340	410	345	11	18	9	38	22	45	678	355	459
2014:Q2	84	123	82	363	399	367	10	17	3	44	39	37	706	383	521
2014:Q3	83	88	61	388	305	331	10	10	6	44	32	42	705	409	543
2014:Q4	78	87	63	341	304	288	7	3	8	44	17	35	653	295	435

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-14
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			ER professional expenditures			Office home visit expenditures			Respiratory system			Hospitalization for cardiovascular illness		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	20.0	18.2	18.4	4.6	3.4	4.2	48.7	57.4	53.7	0.0	0.0	0.0	0.0	0.0	0.0
2010:Q2	20.2	25.3	20.4	5.3	4.3	4.8	71.5	90.4	75.9	0.0	0.0	0.0	0.0	0.0	0.0
2010:Q3	18.8	21.2	19.9	5.6	4.9	5.2	73.2	87.9	79.2	0.0	0.0	0.0	0.0	0.0	0.0
2010:Q4	20.2	23.4	24.0	5.7	5.0	5.3	74.1	89.6	81.0	0.0	0.0	0.0	0.0	0.0	0.0
2011:Q1	21.5	23.7	25.7	4.7	4.4	4.4	50.2	63.7	53.9	0.0	0.0	0.0	0.0	0.0	0.0
2011:Q2	20.5	27.3	24.3	5.6	5.7	5.1	73.6	92.6	81.9	0.0	0.0	0.0	0.0	0.0	0.0
2011:Q3	20.0	25.2	23.0	5.8	5.1	5.4	71.7	95.4	82.4	0.0	0.0	0.0	0.0	0.0	0.0
2011:Q4	22.1	20.9	24.1	5.8	4.7	5.4	74.0	95.2	86.1	0.0	0.0	0.0	0.0	0.0	0.0
2012:Q1	22.0	28.1	25.1	5.3	4.6	4.7	55.2	69.7	63.6	0.0	0.0	0.0	0.0	0.0	0.0
2012:Q2	22.8	20.6	26.7	6.1	4.7	5.6	75.5	99.8	83.6	0.0	0.0	0.0	0.0	0.0	0.0
2012:Q3	22.8	20.2	25.1	6.3	4.4	5.7	72.5	99.6	81.5	0.0	0.0	0.0	0.0	0.0	0.0
2012:Q4	24.1	22.7	27.6	6.2	5.8	5.8	74.5	105.3	84.5	0.0	0.0	0.0	0.0	0.0	0.0
2013:Q1	26.2	22.8	24.1	5.6	4.9	4.4	56.7	79.4	62.0	0.0	0.0	0.0	0.0	0.0	0.0
2013:Q2	25.2	19.5	23.7	6.3	5.4	5.0	80.6	116.0	91.2	0.0	0.0	0.0	0.0	0.0	0.0
2013:Q3	24.3	29.3	20.8	6.6	5.8	5.5	78.5	114.4	89.1	0.0	0.0	0.0	0.0	0.0	0.0
2013:Q4	25.1	28.2	22.0	6.1	5.7	5.1	78.7	116.8	86.2	0.0	0.0	0.0	0.0	0.0	0.0
2014:Q1	26.2	31.1	19.5	5.6	5.9	4.3	57.6	85.7	57.8	0.0	0.0	0.0	0.0	0.0	0.0
2014:Q2	25.8	28.1	21.6	6.6	6.1	5.1	84.8	124.5	92.2	0.0	0.0	0.0	0.0	0.0	0.0
2014:Q3	24.4	22.5	21.5	6.9	5.7	5.2	84.1	119.6	93.0	0.0	0.0	0.0	0.0	0.0	0.0
2014:Q4	25.0	16.4	23.2	6.4	5.0	5.1	84.1	118.8	93.3	0.0	0.0	0.0	0.0	0.0	0.0

(continued)

Maine E6-14 (continued)
Quarterly weighted average expenditures and utilization targeted by the state

Period	Specialist visits (consultations)			Standard imaging			Advanced imaging			Ultrasound		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	0.8	0.7	0.7	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1
2010:Q2	0.8	0.7	0.7	0.4	0.5	0.4	0.1	0.1	0.1	0.1	0.2	0.1
2010:Q3	0.7	0.6	0.7	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.2	0.1
2010:Q4	0.7	0.6	0.7	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1
2011:Q1	0.7	0.7	0.7	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1
2011:Q2	0.8	0.8	0.7	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.2	0.2
2011:Q3	0.8	0.7	0.7	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1
2011:Q4	0.8	0.7	0.7	0.4	0.4	0.5	0.1	0.1	0.1	0.1	0.1	0.1
2012:Q1	0.8	0.7	0.7	0.4	0.4	0.5	0.1	0.1	0.1	0.1	0.2	0.1
2012:Q2	0.8	0.7	0.8	0.4	0.4	0.5	0.1	0.1	0.1	0.2	0.2	0.1
2012:Q3	0.8	0.7	0.7	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1
2012:Q4	0.8	0.7	0.7	0.4	0.4	0.5	0.1	0.2	0.1	0.1	0.2	0.1
2013:Q1	0.7	0.6	0.7	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1
2013:Q2	0.8	0.9	0.8	0.5	0.4	0.5	0.1	0.2	0.2	0.2	0.2	0.2
2013:Q3	0.8	0.8	0.8	0.4	0.4	0.4	0.1	0.2	0.1	0.1	0.2	0.1
2013:Q4	0.8	0.9	0.8	0.4	0.4	0.4	0.1	0.2	0.1	0.1	0.1	0.1
2014:Q1	0.6	0.7	0.6	0.4	0.5	0.4	0.1	0.2	0.1	0.1	0.2	0.1
2014:Q2	0.8	0.9	0.7	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2
2014:Q3	0.8	0.9	0.7	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1
2014:Q4	0.7	0.9	0.7	0.4	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	88.8	88.3	86.2	57.2	51.4	51.2	83.1	80.5	77.4	61.1	49.8	48.9
Pre-3	89.0	87.7	86.4	57.5	54.2	53.0	83.2	80.4	76.8	64.1	53.7	52.0
Pre-2	89.4	87.8	87.0	57.3	52.9	50.6	83.3	81.0	77.0	67.9	55.3	53.1
Pre-1	89.5	87.4	87.1	56.1	51.3	49.7	82.5	80.3	76.7	69.3	55.7	55.4
Post-1	89.3	87.1	84.6	56.3	50.9	51.6	81.5	78.5	77.2	70.2	59.4	56.9
Post-2	89.6	87.8	85.5	58.2	52.6	49.5	81.9	77.4	77.7	71.7	57.9	60.0
Post-3	90.0	90.3	88.7	59.1	56.3	52.1	82.0	78.8	79.8	73.0	63.1	60.7

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	34.4	24.6	23.3	3.8	4.5	4.7	77.0	76.6	73.8
Pre-3	36.2	26.6	25.2	3.6	4.1	4.4	76.5	76.7	73.2
Pre-2	37.9	28.4	25.4	3.7	3.8	4.5	76.6	76.0	71.9
Pre-1	36.9	25.6	25.5	3.2	3.4	4.5	75.5	75.7	70.5
Post-1	38.1	28.1	27.1	3.7	4.3	4.8	71.5	72.5	69.3
Post-2	40.1	26.4	28.0	3.7	3.7	5.6	71.0	69.7	67.9
Post-3	41.0	31.8	30.4	3.5	2.9	3.2	69.4	72.4	70.2

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	5.1	5.5	5.1	10.4	12.0	9.7	3.8	4.8	2.5	6.6	7.3	7.3
2010:Q2	5.4	5.7	5.4	10.0	11.2	10.7	3.8	4.2	4.0	6.2	7.0	6.8
2010:Q3	5.6	5.6	5.4	8.8	10.2	9.4	3.2	4.4	3.1	5.5	5.8	6.3
2010:Q4	6.1	5.1	6.0	9.8	11.3	9.5	3.8	4.1	3.6	6.0	7.1	5.9
2011:Q1	6.6	7.1	6.6	11.7	12.5	11.8	4.2	4.8	3.3	7.5	7.7	8.4
2011:Q2	7.0	5.4	7.5	11.6	11.4	11.9	4.4	4.6	4.4	7.1	6.8	7.4
2011:Q3	7.1	6.9	6.5	10.4	10.7	9.9	4.0	3.8	3.9	6.3	6.9	6.0
2011:Q4	7.4	6.4	8.4	11.8	12.9	13.4	4.3	4.2	4.9	7.4	8.7	8.5
2012:Q1	8.6	8.1	8.6	14.0	16.3	14.2	5.4	6.1	5.2	8.5	10.2	8.9
2012:Q2	9.7	10.8	11.3	13.2	14.5	13.3	5.0	4.5	5.5	8.1	9.9	7.8
2012:Q3	9.7	10.3	10.4	11.7	14.4	12.2	4.5	5.7	4.6	7.2	8.7	7.5
2012:Q4	10.3	12.4	10.8	13.2	15.3	13.7	4.6	6.7	4.4	8.6	8.6	9.4
2013:Q1	10.8	10.2	12.0	14.9	18.7	17.0	5.5	7.3	5.2	9.3	11.4	11.8
2013:Q2	10.1	10.5	11.5	13.2	13.2	15.3	4.8	5.3	5.6	8.3	7.8	9.7
2013:Q3	10.1	11.2	11.5	11.8	12.0	13.0	4.4	4.7	4.9	7.3	7.3	8.1
2013:Q4	10.6	11.8	13.2	12.1	14.6	14.9	4.3	6.6	4.4	7.8	8.0	10.4
2014:Q1	10.8	12.7	13.0	12.9	13.8	15.0	4.9	4.8	4.4	7.9	9.0	10.5
2014:Q2	11.0	10.7	11.5	12.6	13.1	17.9	4.4	5.3	7.5	8.1	7.8	10.4
2014:Q3	11.3	12.1	10.8	11.7	13.0	10.1	4.3	5.6	3.9	7.4	7.4	6.2
2014:Q4	11.9	12.1	8.9	12.7	14.2	14.4	4.6	5.2	6.2	8.0	9.0	8.2

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	951.0	997.1	1,013.9	687.5	724.7	719.3	153.5	155.0	160.6	159.5	149.4	127.6	700.3	734.8	671.8
2010:Q2	1,002.6	1,035.8	1,065.2	749.4	778.3	784.1	163.5	179.6	169.0	153.4	154.0	165.5	717.6	737.4	747.0
2010:Q3	966.7	1,003.3	1,040.9	729.4	739.5	732.7	161.8	177.8	162.6	155.7	124.1	152.9	709.1	683.3	769.3
2010:Q4	970.2	1,024.9	1,055.0	726.0	742.9	730.1	151.5	155.2	156.2	147.9	157.9	144.1	685.7	706.9	691.3
2011:Q1	943.6	1,010.5	1,019.8	703.8	721.6	702.6	149.7	159.8	156.1	159.3	151.8	154.9	717.0	685.4	711.6
2011:Q2	1,018.3	1,025.5	1,108.2	760.9	788.6	777.5	162.3	172.2	167.9	171.2	148.2	159.9	737.3	706.3	735.7
2011:Q3	969.4	970.0	1,032.2	729.1	754.3	742.7	157.2	164.7	157.3	180.1	172.3	177.3	745.9	770.6	735.9
2011:Q4	984.4	1,017.8	1,049.7	745.3	762.8	760.4	151.1	151.9	151.2	179.5	192.6	177.1	727.3	703.7	725.1
2012:Q1	973.1	995.7	1,037.5	735.0	751.5	745.8	150.4	151.6	142.5	192.2	232.3	197.6	754.3	724.9	736.7
2012:Q2	1,006.7	1,004.0	1,076.1	765.8	793.1	778.4	155.6	160.6	148.9	191.1	218.4	207.8	756.5	752.4	748.3
2012:Q3	940.1	968.0	1,010.4	716.8	747.3	733.9	150.4	151.5	147.2	185.3	200.3	209.0	757.7	751.0	783.5
2012:Q4	966.6	1,019.2	1,033.0	733.1	789.5	760.2	146.5	146.8	131.2	184.5	230.8	205.7	738.9	704.1	698.1
2013:Q1	947.9	997.0	1,064.2	736.0	813.6	761.4	140.1	135.8	128.3	179.4	192.5	174.9	743.7	760.1	740.1
2013:Q2	1,010.5	1,043.9	1,137.5	807.0	895.0	855.5	153.3	153.5	138.1	179.9	198.3	199.5	745.1	718.7	733.8
2013:Q3	965.1	1,026.2	1,094.2	768.7	858.7	836.9	153.5	158.9	137.6	180.7	179.3	198.2	739.7	691.1	753.0
2013:Q4	968.0	1,037.8	1,095.2	760.7	859.3	850.5	144.7	147.8	140.8	179.4	203.2	200.7	689.7	669.1	682.2
2014:Q1	901.1	967.8	1,015.2	702.9	789.3	796.6	136.1	140.8	119.9	180.3	211.1	192.9	700.2	650.8	713.5
2014:Q2	1,022.7	1,081.8	1,089.7	789.2	902.8	908.0	152.7	159.1	146.2	189.0	180.7	217.6	721.1	660.7	809.9
2014:Q3	958.3	1,073.4	1,062.0	753.4	870.8	850.3	149.9	152.0	140.2	192.3	219.7	214.4	719.1	667.8	732.0
2014:Q4	967.0	1,065.8	1,091.5	747.8	849.2	854.1	140.6	140.3	131.1	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Michigan E7-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	592	599	609	209	201	208	43	41	47	20	21	19
2010:Q2	648	652	675	210	206	220	47	43	49	23	21	23
2010:Q3	654	666	660	207	208	204	49	46	49	24	25	22
2010:Q4	678	694	688	214	222	211	58	54	62	24	26	21
2011:Q1	657	648	627	222	213	204	64	65	57	23	20	21
2011:Q2	718	698	710	227	215	216	66	60	68	24	23	24
2011:Q3	727	707	716	225	215	216	69	58	67	25	26	24
2011:Q4	750	732	746	237	222	228	66	64	69	25	25	24
2012:Q1	782	786	783	266	264	261	75	77	85	26	25	26
2012:Q2	835	869	876	272	296	295	79	79	92	28	28	27
2012:Q3	812	845	831	263	281	269	75	83	83	29	29	28
2012:Q4	853	888	876	289	288	298	82	95	100	27	27	26
2013:Q1	830	872	835	295	307	294	89	100	105	28	28	26
2013:Q2	842	916	877	282	309	283	81	94	103	29	29	28
2013:Q3	824	891	902	269	283	300	81	102	112	29	30	30
2013:Q4	844	907	913	283	314	310	81	91	113	29	28	28
2014:Q1	809	891	867	286	328	322	87	105	94	29	29	27
2014:Q2	863	955	929	282	324	327	87	107	100	32	32	28
2014:Q3	849	931	880	278	298	279	82	96	91	32	37	31
2014:Q4	871	898	924	290	303	320	92	98	98	31	30	31

(continued)

Michigan E7-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	103	94	96	83	88	84	25	27	28	34	38	40
2010:Q2	113	100	106	96	102	101	33	37	38	39	43	43
2010:Q3	114	109	105	97	100	100	36	38	41	38	41	42
2010:Q4	116	105	105	99	103	100	38	42	43	40	42	43
2011:Q1	115	98	96	88	93	87	29	31	32	38	40	39
2011:Q2	129	112	114	103	105	101	38	39	42	40	41	43
2011:Q3	131	117	115	103	105	102	40	41	44	39	40	40
2011:Q4	134	119	121	106	108	103	42	45	47	40	43	45
2012:Q1	138	128	116	100	103	103	35	37	39	42	40	46
2012:Q2	146	132	121	111	118	117	43	46	48	43	44	47
2012:Q3	141	126	122	107	120	112	43	45	50	40	41	43
2012:Q4	142	129	121	110	125	113	46	51	53	42	42	39
2013:Q1	137	125	109	98	113	97	36	40	44	43	46	44
2013:Q2	145	138	122	108	130	117	42	48	52	43	45	45
2013:Q3	146	136	120	104	120	119	43	50	56	41	46	44
2013:Q4	148	136	118	105	121	120	45	52	58	43	47	43
2014:Q1	139	119	121	92	109	106	34	39	43	41	46	43
2014:Q2	157	140	131	106	125	123	44	51	51	45	49	47
2014:Q3	154	142	138	105	130	115	44	52	52	42	50	45
2014:Q4	152	125	127	105	120	123	47	55	53	43	46	47

(continued)

Michigan E7-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	22	27	24	10	13	13	17	21	21	0	0	0
2010:Q2	25	27	26	10	14	14	20	26	25	0	1	0
2010:Q3	26	29	26	10	14	14	19	23	24	0	0	0
2010:Q4	27	29	27	10	14	15	19	23	23	0	1	0
2011:Q1	24	24	24	9	13	13	16	20	19	0	2	0
2011:Q2	26	29	26	9	14	13	19	24	23	0	0	0
2011:Q3	28	30	27	9	13	13	18	23	23	0	0	0
2011:Q4	29	30	29	10	14	13	18	22	23	0	0	0
2012:Q1	28	34	30	10	14	14	16	21	20	0	0	0
2012:Q2	31	32	31	10	15	14	18	23	23	0	0	2
2012:Q3	31	33	32	9	14	13	17	22	22	0	0	0
2012:Q4	32	35	32	10	15	14	17	23	22	0	8	0
2013:Q1	29	33	29	9	14	14	15	20	19	0	1	0
2013:Q2	31	34	33	9	15	15	17	23	22	0	0	0
2013:Q3	32	36	34	9	14	14	16	22	22	0	1	0
2013:Q4	33	36	36	9	15	15	16	21	22	0	0	0
2014:Q1	30	36	31	8	14	14	13	17	19	0	0	0
2014:Q2	34	37	34	9	18	15	16	20	22	0	0	0
2014:Q3	35	36	37	8	20	16	15	20	21	0	0	0
2014:Q4	36	37	37	9	16	15	15	20	21	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	65.3	68.6	66.3	108.3	109.2	106.2
2010:Q2	64.8	67.7	68.0	119.4	109.9	118.9
2010:Q3	64.1	62.0	62.5	124.7	123.0	126.8
2010:Q4	65.7	68.7	67.0	117.7	119.2	111.9
2011:Q1	68.9	70.4	67.4	117.8	108.1	109.7
2011:Q2	70.5	66.9	71.7	128.0	120.3	128.4
2011:Q3	70.2	72.2	71.5	135.6	130.0	126.0
2011:Q4	73.8	72.1	77.0	126.6	124.4	124.3
2012:Q1	81.5	85.2	83.3	133.4	124.9	134.3
2012:Q2	81.3	92.0	88.5	140.9	129.7	131.1
2012:Q3	79.0	85.1	82.3	146.7	137.0	135.7
2012:Q4	81.8	86.8	84.7	134.5	125.0	125.2
2013:Q1	83.8	88.9	84.4	134.0	128.0	123.6
2013:Q2	80.6	87.7	85.2	140.7	131.7	134.4
2013:Q3	77.0	85.1	85.3	143.0	138.1	142.5
2013:Q4	76.3	85.8	85.2	133.2	120.2	123.2
2014:Q1	79.3	89.6	85.3	126.7	119.3	112.6
2014:Q2	79.3	90.6	89.5	141.6	142.6	123.3
2014:Q3	77.3	87.9	82.9	144.2	144.3	131.4
2014:Q4	81.2	88.7	82.8	137.3	119.0	129.3

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries			Non-White beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	786	775	762	497	501	461	784	804	722	785	693	839
2010:Q2	862	851	825	576	502	538	846	795	848	856	808	965
2010:Q3	871	857	868	554	580	537	846	798	827	837	824	921
2010:Q4	868	926	864	593	563	586	845	807	823	837	860	933
2011:Q1	885	800	768	558	465	489	853	735	745	852	765	829
2011:Q2	942	922	860	604	643	604	908	849	805	934	902	862
2011:Q3	937	883	909	605	618	578	913	793	811	938	889	922
2011:Q4	928	930	910	668	653	665	928	874	833	943	878	967
2012:Q1	985	963	991	656	597	614	995	922	882	1,007	993	1,005
2012:Q2	1,040	1,090	1,020	722	677	680	1,013	1,000	956	1,059	1,077	1,109
2012:Q3	1,010	1,057	1,069	687	657	691	990	1,026	975	1,038	988	1,062
2012:Q4	1,022	1,076	1,095	708	739	712	1,013	989	1,007	1,047	1,174	1,220
2013:Q1	1,010	1,017	1,114	711	805	577	1,011	997	1,015	992	1,020	1,126
2013:Q2	1,005	1,098	1,138	729	665	646	1,017	1,068	1,029	1,001	1,095	1,257
2013:Q3	981	1,095	1,169	734	646	644	990	1,068	1,081	989	1,045	1,285
2013:Q4	1,012	1,099	1,326	731	852	582	1,029	965	1,124	980	994	1,455
2014:Q1	1,006	1,170	1,061	688	752	603	990	1,004	971	970	956	1,227
2014:Q2	1,034	1,117	1,095	764	758	695	1,041	1,072	1,081	1,021	1,002	1,437
2014:Q3	1,039	1,205	1,136	774	708	635	1,048	1,013	980	1,021	1,050	1,281
2014:Q4	1,001	1,047	1,091	742	775	674	1,029	984	1,075	1,003	1,105	1,334

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	87.8	87.2	85.6	57.8	51.6	52.3	80.0	78.0	74.8	64.2	55.3	55.8
Pre-3	87.9	86.6	84.2	57.3	52.3	52.8	80.1	78.4	72.4	67.5	58.5	56.1
Pre-2	88.0	85.9	85.5	56.7	52.4	50.0	79.6	78.3	72.2	71.2	62.4	57.9
Pre-1	88.1	85.6	85.7	57.0	49.0	50.4	80.4	78.1	74.7	75.4	63.6	64.8
Post-1	85.8	84.8	82.2	54.9	48.9	49.6	76.4	76.4	72.6	73.2	66.3	64.4
Post-2	86.1	86.1	81.9	56.3	48.2	50.2	76.0	74.8	68.9	74.4	65.2	65.2
Post-3	87.2	88.3	82.9	56.5	54.3	55.2	77.2	76.2	72.8	76.0	69.2	70.9

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	34.8	25.8	25.9	3.7	4.3	4.6	75.1	76.5	71.0
Pre-3	36.0	26.9	23.9	3.3	4.0	4.7	74.1	74.4	69.6
Pre-2	37.0	30.1	25.4	3.4	4.1	4.4	73.8	74.0	68.9
Pre-1	38.1	27.4	26.5	2.3	2.9	3.4	72.1	73.1	66.9
Post-1	36.1	27.8	26.5	3.6	3.8	5.1	66.3	67.9	63.3
Post-2	37.6	26.0	27.7	4.0	3.8	6.4	65.3	65.4	61.2
Post-3	38.0	30.0	33.1	3.4	2.3	3.7	63.8	68.1	64.2

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	11.2	12.2	9.8	28.9	30.3	25.4	9.4	10.9	5.8	19.5	19.4	19.8
2010:Q2	11.5	13.4	10.1	27.4	31.4	29.0	8.9	12.1	8.1	18.4	19.3	20.8
2010:Q3	12.5	14.4	12.6	24.6	29.2	29.9	8.0	10.5	9.1	16.6	18.7	20.8
2010:Q4	15.7	13.4	15.1	27.3	34.7	28.1	9.4	11.4	10.0	17.9	23.3	18.1
2011:Q1	21.3	22.9	23.9	38.3	42.9	40.1	12.7	15.3	9.9	25.6	27.6	30.2
2011:Q2	23.2	17.7	27.3	39.2	36.1	41.6	14.0	11.9	13.5	25.1	24.2	28.1
2011:Q3	24.0	23.8	23.5	35.4	38.4	35.2	13.1	11.8	12.8	22.3	26.6	22.4
2011:Q4	25.1	21.7	30.1	40.4	46.0	47.2	13.9	14.5	15.3	26.5	31.5	31.8
2012:Q1	22.2	20.9	23.2	42.2	46.8	43.4	15.0	15.9	15.7	27.2	30.9	27.7
2012:Q2	24.3	25.0	25.2	39.3	44.2	40.0	13.8	12.6	13.6	25.5	31.7	26.4
2012:Q3	23.5	25.6	27.2	35.2	39.3	38.7	11.8	14.4	12.9	23.4	24.9	25.7
2012:Q4	25.7	29.6	33.4	38.6	45.3	45.1	11.8	18.3	12.4	26.8	27.0	32.7
2013:Q1	27.2	19.8	31.7	43.7	54.2	51.9	14.4	19.6	13.8	29.2	34.6	38.1
2013:Q2	24.7	25.7	32.6	39.3	33.1	49.6	13.1	11.4	17.0	26.1	21.7	32.7
2013:Q3	25.2	23.5	31.3	35.4	32.1	37.7	11.3	10.6	11.8	24.0	21.5	25.9
2013:Q4	25.3	26.0	39.6	36.4	36.0	47.7	11.7	12.8	12.0	24.7	23.1	35.7
2014:Q1	26.6	27.8	33.2	38.1	32.7	46.3	12.6	10.1	12.6	25.5	22.6	33.7
2014:Q2	26.5	22.5	33.9	38.4	32.1	54.1	11.9	10.8	21.8	26.5	21.3	32.3
2014:Q3	25.9	26.1	21.8	34.2	30.5	30.1	10.8	10.6	10.6	23.4	19.9	19.5
2014:Q4	28.7	31.1	21.3	37.2	44.9	43.9	11.5	14.6	18.2	25.6	30.3	25.6

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-9

Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,339.1	1,420.3	1,432.2	1,115.7	1,196.6	1,174.5	226.1	214.0	234.5	211.4	219.2	189.7	790.1	819.8	756.7
2010:Q2	1,398.5	1,436.9	1,511.8	1,209.0	1,253.3	1,264.6	235.4	251.3	243.6	210.5	211.1	221.9	811.4	818.2	836.6
2010:Q3	1,372.4	1,435.2	1,494.8	1,195.9	1,210.8	1,191.5	238.6	255.8	245.9	219.5	184.7	220.8	799.5	813.3	842.1
2010:Q4	1,372.7	1,476.0	1,500.2	1,179.7	1,214.5	1,162.0	230.1	236.6	247.0	208.0	216.3	214.8	783.0	808.1	787.2
2011:Q1	1,397.2	1,497.7	1,543.6	1,222.1	1,280.2	1,242.4	242.4	241.0	252.5	205.2	195.2	196.5	800.8	774.8	794.1
2011:Q2	1,505.3	1,534.4	1,683.1	1,313.4	1,344.2	1,349.5	259.0	265.9	273.1	216.3	183.8	207.5	817.6	769.6	821.7
2011:Q3	1,460.7	1,467.9	1,569.6	1,293.1	1,358.8	1,311.5	258.2	280.3	253.6	227.6	227.2	238.0	828.7	840.7	817.5
2011:Q4	1,459.6	1,503.5	1,601.2	1,307.3	1,359.2	1,339.5	244.3	247.9	249.2	226.5	236.7	227.1	804.3	769.1	801.3
2012:Q1	1,442.7	1,454.2	1,567.7	1,289.6	1,324.3	1,319.9	235.6	232.4	219.5	259.1	299.1	279.2	840.5	788.0	816.5
2012:Q2	1,438.1	1,406.9	1,536.2	1,281.1	1,340.7	1,289.5	236.5	250.2	237.9	256.7	291.6	297.0	836.6	860.1	808.3
2012:Q3	1,365.5	1,385.3	1,481.7	1,199.2	1,244.7	1,228.9	227.5	240.1	230.9	246.3	263.7	283.8	827.8	848.3	867.8
2012:Q4	1,364.5	1,422.2	1,541.0	1,211.4	1,317.8	1,239.4	217.2	226.1	193.0	238.0	328.2	263.0	805.8	762.4	744.6
2013:Q1	1,367.0	1,400.9	1,640.7	1,226.6	1,373.0	1,239.9	209.1	203.2	177.3	237.6	260.3	237.2	812.1	851.7	827.4
2013:Q2	1,423.5	1,457.8	1,708.6	1,314.8	1,471.9	1,402.2	225.7	226.4	215.5	244.1	252.6	279.8	812.7	784.9	821.2
2013:Q3	1,379.2	1,440.8	1,667.4	1,264.0	1,456.6	1,386.5	223.2	232.8	223.0	251.4	241.4	226.1	815.2	791.8	757.4
2013:Q4	1,349.2	1,394.6	1,588.4	1,229.8	1,400.2	1,358.9	210.0	214.2	199.6	245.1	290.2	241.8	757.2	745.9	698.4
2014:Q1	1,267.9	1,324.4	1,494.7	1,143.0	1,255.9	1,319.2	195.6	194.7	170.9	243.2	312.1	252.6	751.9	691.9	811.5
2014:Q2	1,390.6	1,419.5	1,534.7	1,260.0	1,413.5	1,498.9	215.3	223.3	215.5	258.5	246.3	264.9	788.9	710.2	870.4
2014:Q3	1,341.8	1,451.6	1,518.0	1,194.7	1,370.1	1,365.8	211.1	216.0	196.4	265.2	270.9	289.9	776.2	690.7	778.8
2014:Q4	1,310.7	1,448.7	1,471.8	1,169.3	1,307.6	1,372.3	198.7	187.9	189.6	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Michigan E7-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,200	1,193	1,237	449	412	452	101	93	108	37	41	38
2010:Q2	1,346	1,335	1,412	482	448	501	116	117	124	44	41	41
2010:Q3	1,365	1,388	1,453	471	468	511	125	124	132	47	45	44
2010:Q4	1,449	1,550	1,556	503	569	524	157	141	188	47	50	44
2011:Q1	1,664	1,632	1,679	648	603	634	205	203	195	50	45	46
2011:Q2	1,846	1,712	1,858	685	632	662	225	190	232	56	52	57
2011:Q3	1,889	1,843	1,868	686	671	656	238	203	234	57	60	53
2011:Q4	1,965	1,920	2,008	740	707	718	230	217	260	56	58	57
2012:Q1	1,904	1,870	1,955	699	629	713	226	248	248	54	52	54
2012:Q2	1,918	1,968	2,085	689	722	776	216	200	261	58	56	55
2012:Q3	1,834	1,864	1,990	649	672	722	203	193	246	59	57	57
2012:Q4	1,876	1,985	2,165	687	723	792	214	232	344	56	56	56
2013:Q1	1,893	2,067	2,110	720	794	806	230	270	340	55	54	55
2013:Q2	1,880	1,976	2,119	684	706	744	209	213	324	59	61	60
2013:Q3	1,821	2,025	2,230	644	674	807	209	281	356	58	57	63
2013:Q4	1,823	1,885	2,316	654	674	865	210	215	367	58	55	61
2014:Q1	1,786	1,909	2,088	674	755	807	220	229	246	59	56	66
2014:Q2	1,840	1,885	2,109	641	674	814	224	209	224	65	64	60
2014:Q3	1,783	1,863	1,962	622	611	659	204	217	234	64	71	62
2014:Q4	1,826	1,938	2,148	659	683	817	227	275	267	61	62	64

(continued)

Michigan E7-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	198	191	183	150	160	155	48	54	55	83	83	93
2010:Q2	219	204	207	172	179	188	62	68	72	95	96	105
2010:Q3	227	232	212	174	174	193	66	70	75	94	94	107
2010:Q4	229	234	221	180	192	191	69	78	80	98	102	111
2011:Q1	248	226	228	187	200	202	68	74	78	103	105	110
2011:Q2	281	238	263	215	208	213	82	83	93	115	110	133
2011:Q3	292	274	269	217	226	219	84	85	94	116	109	119
2011:Q4	298	280	286	221	225	224	88	93	102	120	124	137
2012:Q1	307	304	272	208	214	220	79	80	88	123	114	132
2012:Q2	304	296	261	212	229	236	86	91	102	117	111	131
2012:Q3	293	282	272	201	230	224	84	87	106	109	104	114
2012:Q4	288	291	263	200	243	226	86	98	120	111	109	106
2013:Q1	283	282	236	187	239	203	78	89	109	115	113	124
2013:Q2	296	300	262	198	249	226	83	97	120	114	114	117
2013:Q3	300	312	256	189	240	244	82	98	125	110	119	122
2013:Q4	299	299	256	184	218	253	83	91	128	115	109	131
2014:Q1	281	252	273	167	200	221	71	81	100	108	110	121
2014:Q2	307	293	266	183	204	239	84	91	106	117	116	136
2014:Q3	303	303	276	179	217	221	82	93	104	111	114	130
2014:Q4	293	269	261	178	208	233	85	102	104	111	118	136

(continued)

Michigan E7-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	35	42	37	17	21	23	29	34	36	0	0	0
2010:Q2	38	43	43	17	22	22	33	42	41	0	4	0
2010:Q3	40	43	41	17	23	22	31	38	39	0	0	0
2010:Q4	41	45	43	17	23	25	32	37	38	0	3	0
2011:Q1	43	40	45	16	20	23	30	37	37	0	4	0
2011:Q2	49	48	49	16	23	22	34	43	41	0	0	0
2011:Q3	50	55	50	16	22	21	33	43	42	0	0	0
2011:Q4	53	55	53	16	21	23	34	42	42	0	0	0
2012:Q1	52	69	55	16	22	24	29	36	36	0	0	0
2012:Q2	54	54	57	16	22	22	31	40	38	0	0	0
2012:Q3	53	58	56	14	21	20	29	37	36	0	1	0
2012:Q4	53	57	59	14	23	23	28	40	39	1	1	0
2013:Q1	52	57	57	14	21	22	26	37	33	0	0	0
2013:Q2	53	59	66	14	22	23	28	37	39	1	0	0
2013:Q3	55	59	66	13	20	24	26	39	38	0	3	0
2013:Q4	54	54	70	13	23	22	26	34	35	0	0	0
2014:Q1	52	61	63	12	20	23	23	30	36	0	0	0
2014:Q2	56	55	64	13	25	23	27	32	36	0	0	0
2014:Q3	58	57	65	13	29	24	25	31	34	0	0	0
2014:Q4	57	57	70	12	22	22	24	30	31	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	140.0	145.6	140.9	185.3	189.3	186.7
2010:Q2	144.1	151.2	156.8	208.8	201.4	207.7
2010:Q3	143.1	140.1	155.9	216.6	210.0	227.6
2010:Q4	153.0	168.1	163.5	213.8	217.7	207.1
2011:Q1	193.9	194.9	208.8	227.8	213.7	207.7
2011:Q2	207.3	194.1	223.0	257.3	231.2	259.7
2011:Q3	208.2	219.3	218.3	269.8	251.7	238.8
2011:Q4	221.7	218.4	239.6	254.9	249.5	255.5
2012:Q1	208.9	205.8	217.6	254.1	234.4	250.4
2012:Q2	201.9	220.9	225.6	266.9	228.5	246.1
2012:Q3	191.3	205.5	216.9	271.9	250.0	249.1
2012:Q4	197.1	218.8	225.4	252.2	227.3	245.9
2013:Q1	203.3	214.5	219.9	248.5	223.8	240.2
2013:Q2	195.2	201.4	224.8	261.3	228.5	257.3
2013:Q3	186.0	204.1	221.4	267.1	240.5	268.1
2013:Q4	179.5	180.6	229.1	251.3	214.0	252.0
2014:Q1	187.9	198.1	210.3	236.5	207.5	215.3
2014:Q2	184.8	204.7	231.4	261.5	252.1	239.1
2014:Q3	179.1	187.6	196.8	266.4	255.4	246.5
2014:Q4	187.3	216.7	216.5	253.4	217.9	250.6

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,008	1,065	1,123	348	355	368	45	50	42	42	49	43	171	186	154
2010:Q2	1,121	1,189	1,304	366	365	457	50	47	48	50	62	62	170	202	205
2010:Q3	1,146	1,153	1,265	368	357	427	53	55	55	52	53	53	174	173	212
2010:Q4	1,187	1,197	1,345	379	381	395	51	51	51	54	53	57	194	194	189
2011:Q1	1,206	1,176	1,279	406	386	443	49	45	44	46	51	47	269	315	305
2011:Q2	1,311	1,290	1,372	421	403	420	55	55	52	55	54	56	273	302	318
2011:Q3	1,330	1,333	1,460	411	412	468	57	52	52	59	57	59	284	290	338
2011:Q4	1,322	1,285	1,421	421	406	455	54	50	52	60	51	55	310	313	340
2012:Q1	1,293	1,281	1,351	419	402	414	54	48	54	50	51	53	327	332	331
2012:Q2	1,291	1,357	1,458	410	447	481	57	48	55	55	53	55	324	352	377
2012:Q3	1,231	1,333	1,402	385	434	474	58	53	54	56	56	50	312	352	388
2012:Q4	1,241	1,330	1,356	397	454	427	54	61	56	53	50	57	316	368	344
2013:Q1	1,207	1,248	1,480	395	457	501	54	53	53	52	56	50	316	343	389
2013:Q2	1,220	1,270	1,447	387	423	429	57	66	60	58	62	65	322	373	346
2013:Q3	1,193	1,325	1,520	372	447	492	58	62	64	61	71	66	310	371	379
2013:Q4	1,195	1,174	1,622	378	352	569	54	58	58	57	53	62	311	318	402
2014:Q1	1,164	1,249	1,245	390	444	387	58	62	57	53	47	58	324	327	344
2014:Q2	1,163	1,367	1,287	341	480	409	61	74	55	63	68	64	293	386	340
2014:Q3	1,159	1,374	1,268	355	430	419	62	74	48	62	70	63	302	354	302
2014:Q4	1,142	1,397	1,367	359	464	500	55	59	49	59	74	50	305	362	401

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	113	128	117	261	262	270	4	6	4	23	23	34	169	68	83
2010:Q2	117	133	146	294	284	299	5	11	8	25	33	29	176	62	79
2010:Q3	119	109	127	308	316	344	5	5	4	28	30	40	178	63	72
2010:Q4	121	121	131	289	277	302	5	3	5	25	30	30	180	56	72
2011:Q1	130	131	138	287	259	282	5	6	4	24	27	29	183	58	78
2011:Q2	134	126	152	315	298	312	5	5	6	28	25	29	196	63	74
2011:Q3	134	145	151	337	302	317	6	4	7	31	29	34	201	77	96
2011:Q4	137	144	158	305	282	297	6	4	7	28	29	30	212	68	92
2012:Q1	136	137	144	312	268	308	4	4	5	25	34	31	212	66	87
2012:Q2	127	143	139	322	264	296	4	7	5	29	22	31	210	77	83
2012:Q3	123	138	137	332	292	307	4	6	4	28	26	26	241	72	73
2012:Q4	120	145	124	298	280	292	4	3	6	24	24	28	234	65	76
2013:Q1	119	150	146	295	273	292	4	8	3	24	22	31	239	62	65
2013:Q2	118	129	134	309	317	306	4	7	5	27	28	36	257	59	80
2013:Q3	115	141	145	316	322	341	5	10	7	29	27	37	254	58	81
2013:Q4	110	110	155	286	272	283	4	4	5	23	18	27	229	57	102
2014:Q1	113	121	116	273	277	257	3	2	5	21	23	21	215	62	114
2014:Q2	105	139	129	302	344	290	3	5	4	26	28	23	218	88	105
2014:Q3	105	143	126	310	346	257	3	6	2	26	27	28	218	89	134
2014:Q4	109	155	130	282	253	235	2	10	1	22	20	14	206	61	122

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-14
Quarterly weighted average expenditures and utilization among dually eligible beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Primary care physician expenditures			Specialty care physician expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	276	280	245	39	43	36	77	81	76	34	39	41
2010:Q2	288	289	259	45	42	45	88	90	86	44	49	50
2010:Q3	285	279	278	46	44	46	90	90	91	46	50	55
2010:Q4	282	314	272	43	45	40	87	92	90	47	55	56
2011:Q1	313	262	247	43	40	41	84	81	81	40	44	42
2011:Q2	308	315	256	47	43	45	92	93	89	49	56	55
2011:Q3	302	284	277	49	47	46	94	99	93	50	53	58
2011:Q4	309	306	289	46	46	45	94	96	94	51	58	60
2012:Q1	344	317	322	49	47	51	93	108	98	46	50	53
2012:Q2	360	410	321	53	47	48	102	116	106	53	59	61
2012:Q3	337	388	361	55	54	51	99	118	100	53	59	69
2012:Q4	364	326	382	51	51	47	98	109	103	53	60	73
2013:Q1	367	393	394	51	51	48	90	106	100	44	52	66
2013:Q2	341	349	382	53	56	51	98	114	115	49	61	74
2013:Q3	326	359	413	54	56	54	96	118	111	50	63	77
2013:Q4	357	397	488	50	52	45	96	120	119	52	63	84
2014:Q1	381	452	359	53	59	50	87	115	95	43	50	62
2014:Q2	354	393	347	58	59	49	99	106	111	51	64	70
2014:Q3	363	422	394	58	75	57	98	122	108	52	70	72
2014:Q4	339	372	367	55	54	49	93	103	102	51	65	73

(continued)

Michigan E7-14 (continued)
Quarterly weighted average expenditures and utilization among dually eligible beneficiaries

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	91	96	83	254	264	255	227	207	152
2010:Q2	92	96	90	282	265	288	218	196	244
2010:Q3	92	90	82	294	290	312	256	149	194
2010:Q4	92	95	91	272	257	268	190	204	169
2011:Q1	95	89	87	275	261	264	216	201	163
2011:Q2	98	97	90	300	272	301	255	233	161
2011:Q3	99	98	96	316	284	298	254	253	240
2011:Q4	98	102	97	287	273	278	245	267	172
2012:Q1	107	108	107	304	272	310	279	256	286
2012:Q2	107	117	99	317	279	289	270	388	286
2012:Q3	103	122	114	330	316	304	258	228	276
2012:Q4	105	105	108	299	270	279	243	262	211
2013:Q1	104	118	108	297	282	270	237	267	224
2013:Q2	102	109	116	309	300	288	228	222	239
2013:Q3	100	112	119	314	313	308	247	173	274
2013:Q4	97	109	132	283	268	245	269	242	179
2014:Q1	102	113	106	272	272	236	244	268	143
2014:Q2	103	115	106	300	293	252	240	289	255
2014:Q3	101	123	116	304	327	278	242	322	325
2014:Q4	98	102	108	281	250	260	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Michigan E7-15
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital readmissions expenditures			Expenditures for office visits/preventive services		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	3.3	2.2	3.1	69.2	74.5	76.3
2010:Q2	3.8	1.6	2.1	106.5	113.8	114.4
2010:Q3	3.0	2.5	4.5	110.7	117.8	117.4
2010:Q4	4.0	0.4	1.6	111.2	118.6	119.1
2011:Q1	3.4	1.5	3.7	71.3	78.4	77.0
2011:Q2	4.0	3.7	5.2	109.3	116.5	118.4
2011:Q3	3.6	2.4	3.5	110.6	115.8	116.6
2011:Q4	3.6	2.2	2.0	113.6	119.5	119.9
2012:Q1	3.6	8.2	6.2	81.5	84.8	87.6
2012:Q2	5.3	3.0	7.8	113.7	117.5	120.8
2012:Q3	4.0	5.8	5.7	111.7	115.3	118.9
2012:Q4	5.6	3.9	3.7	115.4	123.8	120.6
2013:Q1	4.1	2.4	4.3	79.0	87.0	87.5
2013:Q2	3.7	3.9	8.0	114.8	126.6	126.7
2013:Q3	7.3	5.1	6.5	116.4	128.2	130.1
2013:Q4	5.3	8.5	3.5	116.9	130.6	132.3
2014:Q1	4.3	2.9	6.9	74.7	84.1	86.5
2014:Q2	4.2	4.8	12.9	116.8	132.2	131.4
2014:Q3	4.3	5.2	1.0	117.3	135.0	130.4
2014:Q4	4.8	2.7	3.3	117.9	133.8	134.7

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-1
Quarterly weighted average likelihood of receiving specific tests or examination: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	88.3	90.8	87.1	58.5	54.4	52.7	85.0	88.1	83.2	66.8	57.6	53.1
Pre-3	88.8	91.3	86.9	58.8	54.4	54.5	86.4	87.9	82.4	70.3	60.2	56.0
Pre-2	90.5	91.0	84.9	62.5	56.2	53.2	86.3	87.3	80.7	76.1	68.1	56.8
Pre-1	91.4	92.0	86.6	59.1	53.8	51.5	87.9	88.0	83.2	77.9	73.6	59.4
Post-1	90.3	91.1	84.3	59.4	53.0	51.1	87.4	87.4	80.2	77.6	77.8	60.4
Post-2	89.8	90.6	84.8	59.8	56.3	52.4	86.0	86.7	81.1	75.8	79.4	62.0
Post-3	89.5	89.8	86.5	60.0	56.3	53.1	84.7	87.4	82.0	76.5	79.2	64.2

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	39.2	30.6	27.1	4.7	2.8	5.0	78.4	80.8	73.9
Pre-3	42.1	33.8	29.6	4.5	3.5	4.7	78.2	80.8	74.5
Pre-2	47.4	38.4	28.9	3.4	3.5	6.1	78.8	81.1	73.7
Pre-1	45.7	39.5	30.7	3.0	2.9	5.2	79.7	79.6	74.5
Post-1	46.4	40.9	30.7	3.6	3.8	6.2	76.5	78.2	71.1
Post-2	45.7	45.5	32.0	3.8	4.3	6.3	74.4	74.6	70.6
Post-3	45.0	44.6	33.8	4.0	3.1	5.1	73.1	73.2	72.3

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-2
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	4.3	2.9	4.7	10.1	9.3	11.1	4.2	3.2	4.0	5.9	6.1	7.1
2010:Q2	4.8	3.6	5.1	10.4	8.6	11.8	3.6	3.8	4.0	6.8	4.9	7.7
2010:Q3	4.2	3.8	5.3	9.8	7.7	10.7	3.9	2.5	3.5	6.0	5.2	7.2
2010:Q4	4.3	3.6	4.9	11.6	11.7	12.7	4.6	3.4	4.8	7.0	8.3	7.9
2011:Q1	5.6	4.3	5.6	12.2	12.4	14.5	4.7	5.1	5.2	7.4	7.3	9.3
2011:Q2	4.6	5.1	5.9	12.5	10.4	14.4	4.7	4.0	4.8	7.8	6.4	9.6
2011:Q3	4.7	7.0	5.7	12.5	10.1	13.0	4.6	3.8	5.0	7.8	6.3	8.0
2011:Q4	5.4	6.2	5.9	13.7	9.7	15.0	4.6	3.9	5.8	9.1	5.8	9.2
2012:Q1	6.5	5.6	6.6	15.9	11.6	18.6	5.8	3.9	7.3	10.1	7.7	11.3
2012:Q2	7.6	7.6	7.8	15.5	11.3	17.1	6.1	4.2	6.4	9.4	7.2	10.5
2012:Q3	8.0	8.8	9.0	14.4	12.4	15.2	5.6	5.4	6.4	8.7	7.0	8.8
2012:Q4	7.3	8.4	9.2	15.8	11.7	17.5	6.1	4.5	6.0	9.7	7.3	11.4
2013:Q1	8.5	10.6	9.6	17.7	14.9	19.5	6.8	5.2	7.4	10.9	9.6	12.2
2013:Q2	7.2	9.7	9.3	15.2	13.8	16.4	5.3	4.1	6.1	9.8	9.7	10.2
2013:Q3	7.8	10.9	7.1	11.9	13.2	15.3	5.1	5.0	6.8	6.9	8.2	8.6
2013:Q4	8.2	10.0	10.3	13.1	13.1	15.1	3.9	4.3	4.9	9.1	8.8	10.2
2014:Q1	8.9	10.7	10.5	14.3	14.8	16.0	4.8	5.6	5.3	9.3	9.2	10.7
2014:Q2	9.9	9.3	10.8	13.5	13.9	15.6	5.1	5.3	6.1	8.4	8.6	9.5
2014:Q3	9.8	12.1	9.9	11.3	13.3	13.5	3.8	4.2	4.3	7.4	9.2	9.2
2014:Q4	10.2	9.5	9.0	12.7	15.2	14.0	4.6	4.9	4.7	8.0	10.3	9.3

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-3
Quarterly weighted average rates of access to care and care coordination

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	963.1	1,009.4	995.9	808.9	693.9	841.9	172.5	178.2	188.8	152.4	141.9	163.2	712.1	685.0	623.8
2010:Q2	1,027.8	1,053.7	1,063.4	895.0	753.5	920.0	192.2	186.0	207.4	154.0	131.4	144.3	702.3	629.9	631.6
2010:Q3	994.5	1,017.0	1,035.7	856.0	730.1	880.5	188.4	193.4	200.2	136.8	100.5	170.2	713.3	671.4	635.0
2010:Q4	995.9	1,069.5	1,046.5	873.7	737.9	885.5	173.6	181.6	187.4	152.9	129.3	188.0	734.3	664.4	610.8
2011:Q1	974.7	1,060.8	1,006.7	832.4	687.8	849.7	173.2	174.6	188.8	151.0	129.4	175.4	699.9	653.3	659.4
2011:Q2	1,015.3	1,079.1	1,051.1	904.1	749.2	940.6	194.0	193.9	203.2	171.4	146.2	168.2	739.3	648.4	647.5
2011:Q3	981.3	1,031.6	999.2	842.4	711.4	891.7	180.0	183.1	196.9	176.5	190.3	200.8	715.1	709.5	666.0
2011:Q4	1,008.8	1,070.6	1,038.9	869.1	722.5	920.9	179.7	184.0	198.0	188.7	162.1	184.4	717.0	714.6	673.6
2012:Q1	1,032.5	1,060.1	1,038.7	879.9	727.2	906.1	179.6	183.6	198.2	193.9	152.8	232.2	764.5	717.7	703.8
2012:Q2	1,036.6	1,073.8	1,010.1	904.4	739.8	931.8	187.4	191.4	204.8	192.5	176.5	202.2	745.5	755.5	660.9
2012:Q3	998.5	1,030.1	968.9	845.2	702.4	879.2	177.1	189.5	197.3	195.8	173.7	201.7	770.0	744.1	688.2
2012:Q4	995.8	1,048.8	971.9	861.5	723.7	887.1	172.5	175.7	189.0	189.3	167.7	191.8	724.0	689.9	626.9
2013:Q1	1,015.1	1,065.4	990.3	899.4	746.5	930.9	173.2	167.5	191.7	183.2	179.8	179.4	752.4	687.1	664.9
2013:Q2	1,065.1	1,093.6	1,034.1	967.0	801.6	1,023.9	186.2	179.0	206.4	181.0	170.8	188.2	757.2	608.5	654.7
2013:Q3	1,022.4	1,064.4	981.9	931.4	785.0	979.1	181.1	193.8	202.0	164.9	154.6	203.2	759.3	691.0	686.5
2013:Q4	1,025.7	1,068.5	993.9	923.7	763.4	936.8	180.3	181.7	196.4	188.3	171.9	217.9	700.9	660.8	610.1
2014:Q1	949.3	1,045.0	933.7	875.4	729.9	881.7	165.9	172.6	182.3	181.3	182.4	188.4	690.6	653.9	627.3
2014:Q2	1,073.7	1,156.2	1,032.3	966.0	811.1	995.1	191.3	196.5	209.3	202.5	161.7	187.9	709.8	590.2	638.2
2014:Q3	1,021.0	1,101.0	1,022.4	937.7	797.4	952.8	185.5	198.6	212.9	195.6	209.9	182.6	724.1	634.4	684.6
2014:Q4	1,008.7	1,123.9	1,050.1	928.1	771.8	950.4	181.6	176.9	198.6	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Pennsylvania E8-4
Quarterly weighted average Medicare expenditures

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	609	499	643	190	165	208	64	39	69	18	15	16
2010:Q2	698	592	706	211	180	208	66	53	63	19	18	18
2010:Q3	690	584	717	194	171	220	74	60	67	19	21	18
2010:Q4	710	626	749	198	183	215	78	67	91	20	20	19
2011:Q1	673	619	737	199	202	238	83	75	98	18	19	18
2011:Q2	757	664	812	209	195	240	97	80	104	20	23	20
2011:Q3	754	709	824	209	235	239	93	85	106	21	24	22
2011:Q4	804	741	870	220	227	264	108	98	109	21	21	21
2012:Q1	842	704	871	251	222	268	116	83	118	23	22	21
2012:Q2	915	766	937	270	227	281	126	97	126	24	24	23
2012:Q3	886	776	931	257	239	279	121	95	124	24	26	24
2012:Q4	918	795	930	276	239	294	132	105	129	24	23	23
2013:Q1	882	822	942	274	286	306	129	104	138	23	25	22
2013:Q2	899	840	951	274	258	294	116	120	126	24	27	23
2013:Q3	857	831	930	250	253	278	109	119	126	23	27	24
2013:Q4	899	884	968	272	300	322	116	120	130	23	23	22
2014:Q1	863	915	900	277	331	307	126	138	118	23	26	24
2014:Q2	943	915	989	294	295	307	121	118	136	27	29	25
2014:Q3	921	931	941	276	298	280	121	128	122	30	30	26
2014:Q4	933	897	918	284	284	271	120	124	118	25	28	25

(continued)

Pennsylvania E8-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	96	81	85	89	77	97	23	21	25	36	18	39
2010:Q2	111	90	94	111	97	121	33	30	35	38	22	44
2010:Q3	107	86	90	110	94	119	36	33	38	37	23	43
2010:Q4	112	94	99	111	97	120	39	38	41	39	27	43
2011:Q1	109	92	98	99	89	109	26	25	30	36	25	43
2011:Q2	120	103	109	120	100	131	36	35	39	39	27	48
2011:Q3	122	101	111	115	97	131	38	39	42	37	23	47
2011:Q4	128	109	115	121	101	135	42	44	45	41	30	50
2012:Q1	139	114	122	115	95	126	33	31	35	46	30	53
2012:Q2	141	123	126	128	108	142	41	39	43	50	33	54
2012:Q3	135	120	121	125	106	138	43	42	45	45	30	51
2012:Q4	131	125	110	127	109	137	45	46	47	48	33	51
2013:Q1	132	127	122	112	98	128	35	35	38	47	35	53
2013:Q2	137	134	130	125	103	141	41	44	45	49	37	55
2013:Q3	138	134	128	121	103	138	44	47	46	45	34	55
2013:Q4	146	135	122	124	105	141	46	52	49	47	36	56
2014:Q1	139	131	117	110	102	123	33	40	36	45	37	56
2014:Q2	156	142	138	128	117	144	43	50	47	50	39	58
2014:Q3	156	143	133	125	114	141	45	51	50	46	39	56
2014:Q4	159	133	125	128	114	140	47	56	55	45	39	57

(continued)

Pennsylvania E8-4 (continued)
Quarterly weighted average Medicare expenditures

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	29	27	36	14	14	17	21	16	22	0	0	0
2010:Q2	33	33	41	16	15	19	26	19	27	0	0	0
2010:Q3	34	32	41	15	15	18	24	18	26	0	0	0
2010:Q4	37	33	41	15	15	18	23	18	25	0	0	0
2011:Q1	31	28	35	14	14	17	20	14	22	1	0	0
2011:Q2	35	32	39	14	15	19	24	17	25	0	1	0
2011:Q3	36	35	43	13	14	17	23	17	24	0	0	0
2011:Q4	37	35	44	12	15	17	21	16	24	0	0	0
2012:Q1	37	35	45	13	15	18	19	15	22	0	0	0
2012:Q2	40	37	46	14	16	19	22	15	23	2	0	0
2012:Q3	38	36	46	13	15	18	20	14	22	0	0	0
2012:Q4	38	36	45	12	16	18	20	14	21	0	0	0
2013:Q1	39	37	44	12	15	17	17	13	20	0	0	0
2013:Q2	38	38	46	12	16	17	20	14	22	0	0	0
2013:Q3	38	38	44	12	16	17	19	14	21	0	0	0
2013:Q4	38	36	43	12	15	17	19	14	20	0	0	1
2014:Q1	37	35	41	12	15	16	16	13	18	0	0	0
2014:Q2	39	41	46	14	16	22	19	15	21	0	0	0
2014:Q3	41	39	46	13	17	18	18	15	21	0	0	0
2014:Q4	41	38	47	12	16	17	17	13	20	0	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-5
Quarterly weighted average rates of utilization

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	61.0	58.8	72.2	105.5	102.8	97.8
2010:Q2	65.0	58.5	70.3	115.1	117.6	107.2
2010:Q3	65.0	57.6	71.8	117.1	124.7	112.8
2010:Q4	66.4	61.0	75.2	117.7	126.2	110.4
2011:Q1	66.3	68.7	80.2	108.7	122.3	103.9
2011:Q2	70.6	63.0	79.7	121.0	126.0	115.6
2011:Q3	71.8	67.4	79.4	128.2	135.5	121.3
2011:Q4	73.6	69.2	83.7	126.3	128.2	117.9
2012:Q1	82.2	69.6	88.7	130.9	125.4	121.8
2012:Q2	86.6	75.5	90.4	134.9	128.2	126.5
2012:Q3	85.1	74.4	87.2	138.2	137.9	127.9
2012:Q4	84.1	76.0	88.2	133.7	125.2	118.6
2013:Q1	85.1	88.1	92.6	125.5	124.2	115.3
2013:Q2	81.3	81.5	88.8	127.8	132.6	121.8
2013:Q3	75.9	77.6	83.4	127.6	131.1	123.6
2013:Q4	75.4	79.5	85.6	118.4	118.9	106.0
2014:Q1	79.8	88.4	83.5	116.0	120.8	111.9
2014:Q2	82.6	82.0	84.5	130.9	139.0	114.9
2014:Q3	77.7	84.1	82.0	137.4	131.3	120.9
2014:Q4	77.1	78.5	80.4	122.9	128.9	118.6

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-6
Quarterly weighted average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	771	648	754	462	206	573	778	636	778
2010:Q2	857	784	891	564	388	671	881	732	897
2010:Q3	915	746	844	549	368	768	856	722	834
2010:Q4	890	718	886	597	355	749	876	774	855
2011:Q1	853	801	862	650	484	591	827	804	832
2011:Q2	975	795	979	628	345	506	961	807	967
2011:Q3	946	857	977	646	342	683	942	900	950
2011:Q4	975	858	1,017	673	915	585	988	851	1,015
2012:Q1	1,007	860	980	781	410	701	979	878	987
2012:Q2	1,084	859	1,026	787	449	835	1,075	868	1,001
2012:Q3	1,094	916	1,080	700	577	874	1,069	962	1,099
2012:Q4	1,111	952	1,014	731	555	781	1,109	920	1,001
2013:Q1	1,098	989	1,078	619	642	767	1,049	952	1,027
2013:Q2	1,089	1,076	1,044	649	729	657	1,072	1,017	1,104
2013:Q3	972	927	1,021	707	925	690	1,019	973	1,053
2013:Q4	1,049	1,015	1,061	753	1,557	778	1,083	1,045	1,129
2014:Q1	1,044	1,001	1,123	705	584	674	1,058	1,029	1,011
2014:Q2	1,126	1,047	1,126	778	647	1,052	1,121	1,053	1,160
2014:Q3	1,113	1,211	1,076	775	558	738	1,120	1,055	1,069
2014:Q4	1,094	1,056	995	737	761	809	1,147	1,031	996

(continued)

Pennsylvania E8-6 (continued)
Quarterly weighted average total Medicare expenditures among special populations

Period	Non-White beneficiaries			Northeast			Southeast		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	830	695	737	556	448	577	705	631	699
2010:Q2	862	785	867	642	534	614	798	743	785
2010:Q3	944	822	864	635	523	650	788	739	773
2010:Q4	918	818	856	661	562	687	795	788	800
2011:Q1	845	832	876	638	563	657	734	758	803
2011:Q2	958	906	931	707	580	739	842	869	870
2011:Q3	936	893	989	701	653	741	845	845	890
2011:Q4	964	952	1,059	757	684	780	883	876	941
2012:Q1	995	845	964	793	635	806	923	867	921
2012:Q2	1,133	888	983	833	706	859	1,051	907	997
2012:Q3	1,110	980	1,027	826	716	858	986	915	986
2012:Q4	1,118	910	986	854	746	854	1,024	917	984
2013:Q1	1,089	901	970	822	779	864	981	930	997
2013:Q2	1,076	1,049	1,000	837	780	855	1,002	991	1,018
2013:Q3	1,041	979	980	812	798	856	933	914	982
2013:Q4	1,111	1,036	1,090	830	852	901	1,013	963	1,013
2014:Q1	1,036	1,144	997	803	883	817	961	996	955
2014:Q2	1,108	1,142	1,129	879	863	892	1,053	1,044	1,054
2014:Q3	1,092	1,164	1,038	835	886	852	1,041	1,041	1,000
2014:Q4	1,059	1,181	946	845	845	819	1,055	1,027	986

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-7
Average likelihood of receiving specific tests or examination among beneficiaries with multiple chronic conditions: Four-quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	87.9	89.8	86.1	61.0	55.7	53.0	84.0	87.5	80.9	68.8	64.3	60.5
Pre-3	87.5	89.4	86.3	60.7	55.6	55.2	83.6	84.5	80.3	72.7	64.9	62.8
Pre-2	89.4	89.9	82.6	62.1	58.5	54.2	83.7	86.1	76.0	78.9	72.7	63.8
Pre-1	91.0	91.1	84.0	61.1	53.0	52.4	87.1	86.8	80.4	81.8	77.5	67.1
Post-1	88.0	88.1	79.2	59.3	50.3	50.6	84.2	83.3	75.4	80.1	81.4	65.5
Post-2	87.0	87.5	81.9	57.9	52.4	50.9	82.8	81.7	75.1	78.7	83.1	68.8
Post-3	86.9	86.9	87.6	57.8	55.4	51.8	80.2	80.5	78.1	80.8	82.5	71.8

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Total lipid panel		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	41.3	33.3	30.0	4.2	1.7	5.2	76.8	80.2	72.1
Pre-3	42.8	36.1	31.9	4.4	3.6	3.8	76.0	79.9	72.3
Pre-2	46.9	41.4	29.3	3.1	3.2	5.2	76.4	81.8	70.4
Pre-1	48.3	39.5	31.8	1.7	2.4	3.7	78.3	77.9	71.3
Post-1	46.1	40.1	29.5	4.0	4.4	5.4	72.2	75.2	66.4
Post-2	44.9	41.9	31.6	4.5	4.4	5.7	69.9	71.3	64.2
Post-3	43.8	41.1	32.4	4.0	3.2	3.3	69.6	68.4	67.3

NOTES:

- Numbers represent percentage of diabetic beneficiaries or beneficiaries with IVD receiving specific tests or examination during each 4-quarter interval. Percentages were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-8
Quarterly weighted average rates of avoidable catastrophic events and preventable hospitalizations among beneficiaries with multiple chronic conditions

Period	Avoidable catastrophic events			Preventable admissions–overall			Preventable admissions–acute conditions			Preventable admissions–chronic conditions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	9.4	3.9	9.9	23.6	26.1	30.7	9.5	8.6	9.9	14.2	17.5	20.8
2010:Q2	8.8	7.3	13.1	27.4	26.9	29.5	9.0	11.5	8.1	18.2	15.4	21.4
2010:Q3	9.4	6.8	12.4	23.9	23.3	28.6	8.3	7.6	8.5	15.6	15.7	20.1
2010:Q4	10.1	8.7	12.0	32.1	35.7	36.7	11.8	7.5	12.3	20.3	28.2	24.4
2011:Q1	17.1	12.5	19.1	38.9	42.0	47.6	14.4	15.9	15.7	24.5	26.1	31.9
2011:Q2	14.6	16.7	19.5	39.9	33.8	46.3	14.0	11.5	13.9	25.8	22.3	32.4
2011:Q3	15.2	21.3	19.7	39.0	29.6	43.3	14.0	9.6	15.1	25.0	19.9	28.2
2011:Q4	17.7	19.8	18.5	44.4	32.0	51.1	13.1	11.3	19.0	31.3	20.7	32.1
2012:Q1	16.7	14.6	16.6	44.9	35.8	56.6	14.9	11.1	19.8	30.0	24.7	36.8
2012:Q2	18.5	20.1	18.5	41.4	34.6	47.7	15.2	11.7	15.2	26.2	22.9	31.7
2012:Q3	17.7	22.5	22.3	36.2	38.6	43.1	11.8	16.0	17.5	24.4	22.6	25.6
2012:Q4	16.2	23.2	22.7	43.1	36.9	47.4	15.1	12.3	14.9	28.0	24.7	32.5
2013:Q1	21.4	28.6	24.7	50.4	48.4	53.9	17.5	14.1	18.4	32.9	34.2	35.6
2013:Q2	14.9	21.0	22.0	43.1	43.1	44.8	13.2	11.2	15.2	29.9	31.8	29.6
2013:Q3	16.0	31.8	16.8	31.6	39.7	46.9	10.6	13.1	16.0	21.0	26.5	30.9
2013:Q4	20.7	23.9	25.7	37.7	42.7	43.6	10.3	10.4	12.9	27.3	32.3	30.7
2014:Q1	21.0	24.0	24.8	39.4	40.7	44.5	11.8	13.7	15.6	27.4	26.9	28.9
2014:Q2	22.2	26.1	23.8	34.7	35.6	42.3	11.9	13.4	14.6	22.8	22.2	27.7
2014:Q3	22.4	27.0	21.4	32.0	39.1	36.2	9.1	9.0	10.7	22.9	30.1	25.5
2014:Q4	23.7	25.5	19.0	33.0	45.3	38.8	11.4	10.5	10.6	21.5	34.7	28.2

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-9
Quarterly weighted average rates of access to care and care coordination among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions			Follow-up visit within 14 days after discharge		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,251.5	1,290.0	1,300.1	1,250.2	1,114.0	1,308.7	236.4	254.4	257.0	189.9	203.6	200.9	750.9	818.3	676.7
2010:Q2	1,343.7	1,359.8	1,398.7	1,372.9	1,180.1	1,415.8	256.5	257.8	273.5	220.5	193.6	163.7	788.8	708.9	707.8
2010:Q3	1,317.5	1,331.6	1,375.5	1,340.6	1,148.3	1,379.0	267.5	261.8	275.6	180.1	116.6	220.9	794.0	744.9	695.6
2010:Q4	1,301.5	1,425.4	1,366.3	1,341.1	1,210.7	1,377.0	246.4	257.1	270.4	207.4	208.6	257.5	796.9	771.3	657.0
2011:Q1	1,324.3	1,429.1	1,363.5	1,342.4	1,137.3	1,409.4	255.7	254.7	274.3	182.7	160.0	218.5	739.7	726.6	717.3
2011:Q2	1,402.3	1,476.9	1,443.6	1,470.7	1,244.4	1,571.1	284.0	293.8	306.8	215.9	183.3	206.7	801.7	718.8	682.9
2011:Q3	1,374.8	1,467.8	1,381.2	1,408.5	1,189.6	1,515.8	278.7	282.0	294.6	218.3	209.1	258.0	765.1	815.2	737.6
2011:Q4	1,373.2	1,462.3	1,405.5	1,428.0	1,187.3	1,547.2	268.0	281.6	291.2	225.4	215.0	221.4	790.8	791.4	712.1
2012:Q1	1,396.9	1,442.3	1,387.5	1,428.7	1,225.6	1,552.8	259.1	300.3	279.8	255.7	190.1	309.3	816.4	820.5	791.7
2012:Q2	1,375.4	1,467.9	1,334.2	1,432.2	1,238.4	1,495.1	275.9	294.3	291.4	249.7	230.3	265.0	805.5	834.5	727.4
2012:Q3	1,353.8	1,430.3	1,273.1	1,350.1	1,180.4	1,404.8	256.8	286.6	269.8	240.8	269.8	280.4	789.1	813.6	746.3
2012:Q4	1,309.2	1,388.0	1,252.1	1,362.5	1,195.9	1,383.1	241.3	289.5	258.5	219.3	211.5	243.5	761.6	744.1	646.8
2013:Q1	1,337.2	1,400.7	1,279.4	1,389.1	1,178.8	1,441.3	245.2	256.3	248.2	237.6	204.0	246.5	785.5	731.9	707.0
2013:Q2	1,402.5	1,438.5	1,349.1	1,497.2	1,240.0	1,594.4	256.5	274.3	273.6	222.9	196.1	242.0	796.9	659.7	692.2
2013:Q3	1,387.3	1,389.0	1,293.8	1,439.8	1,248.9	1,531.6	245.7	297.8	273.9	217.3	186.0	275.0	813.2	740.3	744.8
2013:Q4	1,331.6	1,372.0	1,314.8	1,423.4	1,135.9	1,395.0	245.1	257.5	255.8	263.7	276.1	329.5	757.5	688.9	629.7
2014:Q1	1,268.0	1,328.8	1,208.4	1,353.9	1,118.3	1,324.5	216.8	232.9	232.5	243.1	224.7	254.1	723.8	687.5	664.1
2014:Q2	1,383.3	1,422.5	1,320.3	1,469.6	1,216.2	1,477.3	240.8	270.1	274.0	263.9	184.0	231.5	734.8	596.4	748.8
2014:Q3	1,374.0	1,334.0	1,336.9	1,413.5	1,162.9	1,399.0	251.3	265.9	262.0	246.5	328.2	288.5	776.2	690.4	691.0
2014:Q4	1,323.4	1,345.3	1,315.6	1,379.1	1,106.6	1,397.7	237.4	249.8	252.2	—	—	—	—	—	—

NOTE:

- All numbers represent rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions and follow-up visits within 14 days of discharge, which represent rates per 1,000 beneficiary quarters with a live discharge. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Pennsylvania E8-10
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute care			Post-acute care			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	1,230	981	1,367	407	351	475	139	82	168	31	27	28
2010:Q2	1,386	1,131	1,470	449	369	474	159	105	158	32	30	34
2010:Q3	1,403	1,136	1,532	424	359	527	174	121	164	35	39	33
2010:Q4	1,481	1,313	1,676	454	423	543	188	169	243	36	35	39
2011:Q1	1,641	1,570	1,931	566	581	715	244	236	314	36	41	36
2011:Q2	1,863	1,622	2,124	609	535	731	305	256	343	42	49	45
2011:Q3	1,883	1,789	2,204	614	684	755	299	276	355	43	48	48
2011:Q4	2,018	1,838	2,386	647	639	849	337	312	384	45	43	45
2012:Q1	1,966	1,714	2,165	628	589	704	323	260	349	45	42	43
2012:Q2	1,976	1,672	2,190	627	535	708	301	235	351	44	47	46
2012:Q3	1,920	1,786	2,131	598	626	684	296	240	311	46	58	46
2012:Q4	1,995	1,883	2,147	642	640	717	329	299	355	47	44	45
2013:Q1	1,984	2,062	2,217	665	787	745	330	302	383	44	50	45
2013:Q2	1,941	1,901	2,163	635	607	682	284	305	338	47	64	44
2013:Q3	1,812	1,976	2,142	555	616	688	271	373	334	45	60	47
2013:Q4	1,892	2,143	2,111	646	790	720	260	359	345	43	46	44
2014:Q1	1,861	2,060	1,997	640	791	672	283	368	315	45	48	46
2014:Q2	1,924	1,936	2,131	636	668	687	279	274	298	50	50	48
2014:Q3	1,912	1,942	2,070	620	691	666	274	310	310	54	53	50
2014:Q4	2,016	1,873	1,951	675	669	612	321	290	289	46	44	45

(continued)

Pennsylvania E8-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			Primary care physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	203	175	186	163	131	178	42	36	48	81	39	91
2010:Q2	224	194	193	191	155	213	55	47	60	86	50	109
2010:Q3	229	181	195	192	153	211	58	53	64	89	53	111
2010:Q4	246	210	226	193	168	215	62	61	71	95	56	111
2011:Q1	246	219	239	199	175	226	56	54	68	94	71	118
2011:Q2	266	231	263	235	190	270	70	65	81	108	81	143
2011:Q3	285	242	278	229	181	272	72	70	86	106	70	142
2011:Q4	298	267	288	242	187	288	79	78	90	119	88	159
2012:Q1	312	271	305	227	180	266	65	60	72	129	90	155
2012:Q2	310	282	298	226	190	267	73	68	83	125	93	146
2012:Q3	295	277	288	222	199	267	73	73	82	113	81	134
2012:Q4	286	293	259	220	198	256	75	79	84	120	90	142
2013:Q1	285	309	283	206	189	249	69	78	78	120	100	145
2013:Q2	292	306	302	216	174	259	72	81	85	124	109	149
2013:Q3	291	320	306	205	183	251	75	82	85	112	96	149
2013:Q4	295	329	273	205	183	241	74	88	88	118	98	149
2014:Q1	285	292	272	199	173	219	64	77	72	113	88	144
2014:Q2	303	321	336	218	186	248	74	90	87	124	97	153
2014:Q3	321	296	301	210	180	246	75	85	89	112	83	138
2014:Q4	317	276	291	211	178	235	79	85	87	118	86	146

(continued)

Pennsylvania E8-10 (continued)
Quarterly weighted average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility			Laboratory			Imaging			Other facility		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	50	48	76	21	21	28	33	26	34	0	0	0
2010:Q2	56	58	85	22	22	28	39	28	40	0	0	0
2010:Q3	60	59	85	23	24	29	38	29	40	0	0	0
2010:Q4	67	59	87	22	23	29	36	28	39	1	0	0
2011:Q1	61	55	76	20	21	27	34	27	40	0	0	0
2011:Q2	68	63	85	22	22	29	40	30	46	1	0	0
2011:Q3	72	72	99	21	22	28	40	29	45	0	0	0
2011:Q4	73	70	104	19	22	27	38	29	43	0	0	0
2012:Q1	69	72	105	19	24	28	32	25	38	0	0	0
2012:Q2	70	68	101	19	22	26	36	24	37	5	0	0
2012:Q3	69	70	102	20	22	26	32	24	35	1	0	0
2012:Q4	72	74	105	17	23	26	31	24	34	0	1	1
2013:Q1	78	77	107	17	23	25	29	23	33	0	0	0
2013:Q2	75	81	112	17	22	25	30	23	35	0	0	0
2013:Q3	68	80	98	17	23	24	29	22	33	0	0	0
2013:Q4	69	72	91	17	21	22	30	22	31	0	0	0
2014:Q1	70	68	98	17	21	23	27	22	29	0	0	0
2014:Q2	70	72	99	20	24	28	31	21	33	2	0	0
2014:Q3	71	69	98	19	23	24	28	22	32	0	0	0
2014:Q4	73	62	92	16	22	22	26	20	30	1	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-11
Quarterly weighted average rates of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	128.5	119.6	159.6	164.7	149.2	154.3
2010:Q2	134.4	121.2	158.0	179.7	182.0	181.7
2010:Q3	141.2	120.0	160.1	194.6	217.6	185.2
2010:Q4	149.2	133.9	182.1	193.3	210.5	192.8
2011:Q1	181.6	192.6	233.6	188.5	221.2	189.4
2011:Q2	194.5	175.2	234.5	212.1	210.5	227.1
2011:Q3	196.4	175.5	234.8	232.8	241.1	235.6
2011:Q4	208.4	188.2	257.0	235.0	224.6	218.1
2012:Q1	200.3	172.1	223.2	226.0	206.8	216.9
2012:Q2	196.1	180.4	218.0	231.1	217.1	221.4
2012:Q3	194.1	189.4	206.5	248.0	230.4	213.6
2012:Q4	194.6	198.1	213.7	238.9	206.5	203.1
2013:Q1	202.5	236.8	228.7	219.6	214.7	202.8
2013:Q2	186.0	187.9	211.6	229.7	244.6	222.3
2013:Q3	167.7	186.3	201.5	226.5	222.5	212.5
2013:Q4	173.5	189.5	199.4	206.7	198.2	186.5
2014:Q1	184.6	196.7	192.9	205.4	198.5	207.0
2014:Q2	181.2	181.0	188.1	225.7	218.4	193.7
2014:Q3	173.2	190.9	188.6	236.8	201.0	211.0
2014:Q4	175.5	174.9	185.3	207.9	187.2	191.9

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-12
Quarterly weighted average expenditures among beneficiaries with BH conditions

Period	Total expenditures			Acute care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition			Services with secondary diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	960	822	1,129	313	268	356	38	34	36	56	49	60	156	154	155
2010:Q2	1,113	1,091	1,286	359	380	422	43	54	44	72	64	79	158	145	224
2010:Q3	1,119	994	1,297	319	294	411	43	54	43	67	60	66	169	125	176
2010:Q4	1,142	1,041	1,487	337	317	459	48	41	46	71	53	67	198	138	237
2011:Q1	1,138	1,108	1,356	346	354	448	44	44	41	60	46	69	224	217	309
2011:Q2	1,293	1,244	1,562	372	346	515	48	50	46	77	61	70	270	187	348
2011:Q3	1,289	1,332	1,482	369	397	461	51	56	48	73	65	74	251	257	314
2011:Q4	1,370	1,315	1,682	391	389	560	51	43	49	80	65	71	283	229	403
2012:Q1	1,271	1,300	1,548	363	417	488	50	47	43	61	55	56	270	243	347
2012:Q2	1,278	1,238	1,498	348	369	458	54	49	48	64	57	64	267	282	327
2012:Q3	1,242	1,281	1,477	378	375	440	51	63	45	68	82	61	252	287	312
2012:Q4	1,238	1,132	1,353	336	292	422	50	53	43	66	70	60	248	241	321
2013:Q1	1,232	1,285	1,434	368	449	420	47	45	43	61	55	66	273	333	312
2013:Q2	1,207	1,422	1,411	347	352	432	48	53	43	71	71	70	270	268	318
2013:Q3	1,164	1,281	1,331	297	403	380	49	45	45	67	57	73	235	250	284
2013:Q4	1,182	1,340	1,352	358	471	433	46	39	40	73	57	70	277	270	281
2014:Q1	1,207	1,284	1,335	379	471	445	48	49	41	67	52	66	302	312	322
2014:Q2	1,232	1,276	1,248	365	363	349	58	60	45	80	74	75	320	228	270
2014:Q3	1,255	1,243	1,252	390	374	399	57	52	45	70	69	82	304	301	329
2014:Q4	1,244	1,448	1,158	378	536	323	46	40	45	77	65	77	309	481	282

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-13
Quarterly weighted average utilization among beneficiaries with BH conditions

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	102	106	131	258	251	252	6	10	11	35	21	25	151	157	69
2010:Q2	114	110	133	283	331	278	8	8	13	35	49	32	179	158	89
2010:Q3	114	105	141	290	357	287	7	9	8	33	42	31	169	127	85
2010:Q4	112	123	157	310	325	284	8	6	10	42	34	22	179	127	83
2011:Q1	116	129	161	276	324	265	9	5	13	35	38	28	180	125	92
2011:Q2	130	121	158	303	334	290	9	5	7	34	35	31	172	141	84
2011:Q3	125	127	153	334	376	302	7	7	10	41	43	34	182	134	81
2011:Q4	130	109	169	324	335	295	9	8	9	40	39	37	161	130	74
2012:Q1	128	117	162	318	343	270	7	7	7	33	48	31	197	132	78
2012:Q2	125	134	155	341	347	284	6	7	9	40	42	23	196	130	84
2012:Q3	131	150	140	329	371	282	8	19	7	41	33	31	192	148	77
2012:Q4	120	111	132	335	337	254	6	12	7	33	35	23	192	141	80
2013:Q1	119	164	136	299	302	259	6	8	10	31	31	28	199	131	75
2013:Q2	108	123	130	306	309	258	7	8	8	32	35	33	193	138	84
2013:Q3	103	120	130	303	281	255	6	5	10	34	32	28	186	111	78
2013:Q4	101	119	121	281	255	224	7	7	9	38	19	18	190	112	95
2014:Q1	116	126	116	266	264	231	6	4	8	29	23	20	180	126	79
2014:Q2	110	117	105	322	320	244	6	7	6	28	42	23	201	152	89
2014:Q3	108	121	118	305	280	239	3	2	5	21	31	30	203	146	105
2014:Q4	101	130	104	259	236	236	5	4	5	21	15	23	223	135	122

NOTE:

- Numbers represent rates per 1,000 beneficiary quarters. Rates were calculated using the same weights that were used in the regression estimates of changes found in the state chapters. See Appendix M for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-14
Quarterly weighted average expenditures and utilization among rural beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Specialty physician			Primary care physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	108	17	200	12	4	17	76	49	90	20	11	27
2010:Q2	156	44	192	17	3	21	111	79	132	27	22	33
2010:Q3	163	140	288	14	11	18	102	71	134	34	21	34
2010:Q4	162	76	235	12	9	14	107	81	131	34	30	40
2011:Q1	242	215	158	17	11	17	98	69	93	23	19	26
2011:Q2	164	30	111	15	6	17	116	66	96	37	21	29
2011:Q3	167	62	157	19	18	21	104	59	116	35	28	36
2011:Q4	192	451	127	21	17	15	107	109	103	40	34	36
2012:Q1	267	118	250	19	6	16	106	65	99	30	15	28
2012:Q2	216	58	277	19	13	16	121	83	139	39	31	40
2012:Q3	179	174	337	19	15	20	126	82	136	40	32	42
2012:Q4	225	135	180	17	15	20	116	92	148	40	38	34
2013:Q1	149	260	275	18	9	15	90	90	106	27	28	31
2013:Q2	142	330	156	17	11	31	108	96	111	36	39	39
2013:Q3	177	356	152	15	24	21	99	108	109	42	46	33
2013:Q4	234	859	205	20	17	15	111	182	152	42	70	38
2014:Q1	205	173	221	17	20	13	95	55	103	29	31	21
2014:Q2	194	226	477	22	22	28	111	75	141	42	44	35
2014:Q3	211	185	202	20	14	21	107	72	121	42	39	35
2014:Q4	186	292	260	16	15	21	125	68	122	45	55	48

(continued)

Pennsylvania E8-14 (continued)
Quarterly weighted average utilization among rural beneficiaries

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	37	14	94	82	32	114	297	13	134
2010:Q2	56	27	75	103	33	132	71	16	203
2010:Q3	49	39	74	78	78	117	191	0	120
2010:Q4	59	31	87	76	61	94	140	0	109
2011:Q1	64	58	63	112	66	112	172	462	115
2011:Q2	66	12	44	92	66	119	194	6	67
2011:Q3	64	35	73	117	229	136	88	6	169
2011:Q4	78	76	51	137	101	110	96	110	87
2012:Q1	87	35	71	112	79	109	176	212	84
2012:Q2	93	22	76	112	121	89	261	357	216
2012:Q3	71	40	110	107	84	116	164	343	347
2012:Q4	76	48	69	101	101	122	174	118	236
2013:Q1	65	74	83	94	96	103	85	138	157
2013:Q2	54	79	68	91	56	141	212	285	143
2013:Q3	71	127	63	91	152	139	176	348	272
2013:Q4	69	108	75	89	124	73	100	139	240
2014:Q1	62	54	71	80	106	76	78	8	9
2014:Q2	80	62	76	100	130	137	213	104	48
2014:Q3	59	70	68	96	104	89	212	101	182
2014:Q4	63	89	67	75	91	97	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Pennsylvania E8-15
Quarterly weighted average expenditures and utilization among Northeast beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits without hospitalizations			Specialty physician			Primary care physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	162	147	177	17	15	15	83	70	87	23	21	23
2010:Q2	179	154	167	19	17	16	103	88	108	33	30	32
2010:Q3	168	148	192	18	20	15	103	86	108	37	33	36
2010:Q4	174	156	187	18	19	17	104	87	110	39	38	41
2011:Q1	179	183	202	17	18	17	94	80	92	26	25	28
2011:Q2	188	164	216	18	22	18	112	86	115	36	35	37
2011:Q3	181	222	194	19	23	21	107	85	115	39	38	39
2011:Q4	193	202	216	21	20	19	110	89	120	43	45	43
2012:Q1	223	199	243	22	20	20	104	83	112	33	32	33
2012:Q2	217	204	237	22	23	20	115	96	129	41	40	41
2012:Q3	225	217	253	22	25	20	114	93	125	45	42	43
2012:Q4	244	220	255	22	23	20	114	99	117	47	47	45
2013:Q1	245	276	268	23	24	19	101	86	110	36	37	35
2013:Q2	236	231	253	22	27	21	116	87	122	42	45	42
2013:Q3	226	240	256	21	26	21	112	90	121	46	49	44
2013:Q4	237	291	289	22	22	20	113	89	126	49	55	47
2014:Q1	239	318	253	22	25	21	99	90	105	34	42	34
2014:Q2	264	274	268	25	28	23	119	102	127	44	54	44
2014:Q3	236	283	241	28	30	22	111	99	123	46	54	46
2014:Q4	245	270	224	22	27	20	114	98	117	48	59	50

(continued)

Pennsylvania E8-15 (continued)
Quarterly weighted average utilization among Northeast beneficiaries

Period	All-cause admissions			ER visits without hospitalizations			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	53	55	65	98	103	89	130	141	124
2010:Q2	61	52	61	111	118	93	118	97	132
2010:Q3	60	54	63	109	127	93	116	54	117
2010:Q4	62	54	71	107	129	91	132	89	136
2011:Q1	63	65	71	101	123	92	140	112	144
2011:Q2	65	55	74	111	121	103	153	97	148
2011:Q3	69	63	72	120	135	113	150	189	168
2011:Q4	68	63	77	122	127	103	162	133	150
2012:Q1	78	63	86	124	119	109	177	116	211
2012:Q2	83	70	87	128	122	116	171	162	181
2012:Q3	82	70	86	131	132	111	170	148	180
2012:Q4	82	73	86	125	123	109	185	158	241
2013:Q1	85	90	92	119	122	105	175	173	186
2013:Q2	79	80	88	122	132	112	161	165	185
2013:Q3	74	77	81	116	124	111	147	147	182
2013:Q4	72	80	85	111	116	95	164	162	233
2014:Q1	77	88	82	111	116	100	167	169	185
2014:Q2	83	80	83	123	140	109	184	142	157
2014:Q3	75	84	82	131	128	107	181	195	166
2014:Q4	74	76	80	112	129	102	—	—	—

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters except for 30-day unplanned readmissions, which represent rates per 1,000 beneficiary quarters with a live discharge. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not created for this period; PCMH = patient-centered medical home.

Pennsylvania E8-16
Quarterly weighted average expenditures and utilization targeted by the state

Period	Hospital professional expenditures			Office home visit expenditures			Hospital professional			E&M visits (office)			Laboratory tests		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	30.9	24.8	35.0	76.0	68.1	77.9	0.4	0.3	0.4	1.9	1.9	2.0	2.7	2.9	3.2
2010:Q2	33.8	29.4	35.9	122.1	110.3	123.4	0.4	0.3	0.4	2.1	2.0	2.2	2.8	3.0	3.4
2010:Q3	32.6	27.0	37.2	125.2	114.9	127.4	0.4	0.3	0.4	2.0	1.9	2.1	2.7	3.0	3.3
2010:Q4	31.5	29.2	36.4	127.2	118.9	128.4	0.4	0.3	0.4	2.0	2.0	2.1	2.8	3.1	3.2
2011:Q1	32.0	32.7	40.7	82.6	73.5	85.1	0.4	0.4	0.5	2.0	1.9	2.0	2.7	3.0	3.3
2011:Q2	35.5	30.9	42.7	127.7	115.7	130.3	0.4	0.3	0.5	2.1	2.0	2.2	2.5	3.2	3.4
2011:Q3	33.7	33.0	40.1	126.6	117.4	129.6	0.4	0.4	0.5	2.0	1.9	2.1	2.4	3.0	3.1
2011:Q4	35.2	34.4	44.6	131.2	122.1	134.9	0.5	0.4	0.5	2.1	2.0	2.2	2.2	3.0	3.1
2012:Q1	40.3	34.7	45.4	96.4	83.4	98.5	0.5	0.4	0.6	2.1	2.0	2.1	2.4	3.2	3.4
2012:Q2	43.2	35.1	48.6	132.7	118.6	132.1	0.5	0.4	0.6	2.1	2.0	2.1	2.4	3.2	3.3
2012:Q3	42.4	35.4	45.7	130.8	119.9	131.1	0.6	0.4	0.6	2.0	1.9	2.0	2.3	3.0	3.2
2012:Q4	42.4	36.0	47.8	132.7	122.6	133.2	0.5	0.4	0.6	2.0	1.9	2.0	2.2	3.1	3.2
2013:Q1	42.8	40.9	49.3	96.3	83.9	98.9	0.6	0.5	0.6	2.1	2.0	2.1	2.2	3.2	3.2
2013:Q2	40.9	37.2	47.4	136.8	123.5	140.0	0.5	0.5	0.6	2.2	2.1	2.3	2.3	3.3	3.3
2013:Q3	38.2	34.9	44.7	137.3	128.2	139.8	0.5	0.4	0.6	2.1	2.0	2.2	2.2	3.2	3.2
2013:Q4	38.7	38.1	48.6	138.0	127.2	138.7	0.5	0.5	0.6	2.1	2.0	2.1	2.2	3.3	3.2
2014:Q1	41.8	43.5	46.9	90.0	84.0	91.0	0.6	0.6	0.6	2.0	1.9	2.0	2.1	3.2	3.2
2014:Q2	41.7	40.2	47.6	139.8	130.8	141.5	0.5	0.5	0.6	2.2	2.2	2.2	2.3	3.6	3.5
2014:Q3	40.6	39.6	44.4	142.9	134.1	145.1	0.5	0.5	0.5	2.1	2.1	2.2	2.3	3.4	3.4
2014:Q4	41.9	38.0	43.3	141.9	133.6	148.2	0.5	0.5	0.5	2.1	2.1	2.2	2.1	3.4	3.2

NOTE:

- Numbers represent average expenditures and rates per 1,000 beneficiary quarters. Means were calculated using the same weights that were used in the regression estimates of changes given in the state chapters. See Appendix M for more information on weights.

ER = emergency room; E&M = evaluation and management; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

APPENDIX F
WEIGHTED QUARTERLY AVERAGE MEDICAID EXPENDITURES AND UTILIZATION AMONG BENEFICIARIES ASSIGNED TO MAPCP DEMONSTRATION AND COMPARISON GROUP PRACTICES

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In this appendix, we present weighted averages of the Medicaid outcome measures examined in the individual state chapters. Averages are presented for beneficiaries assigned to the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration, the patient-centered medical home (PCMH) comparison group, and the non-PCMH comparison group. These averages are weighted by the final analytic weight but are not regression-adjusted values. The final analytic weight equals the product of the beneficiary's quarterly eligibility fraction and, in the case of the comparison group, their entropy balanced weight.

In some quarters within a state, there may be a weighted average that does not align with averages preceding the quarter or following the quarter; this is due to changing sample sizes between quarters and outlier utilization. In addition, there are systematic differences in the averages between the MAPCP Demonstration group and one or more of the comparison groups, which are detailed below.

New York:

- The percentage of MAPCP Demonstration beneficiaries receiving medical specialist or surgical specialist visits was lower than both comparison groups because of the low prevalence of specialists in the rural Adirondack region of the MAPCP Demonstration.

- Utilization and expenditures were lower in 2013 Q2. This is the last quarter in a data file provided by the state, and given the timing of the data pull, claims run out was insufficient, resulting in fewer claims in that quarter.

- The prevalence of receipt of a retinal eye exam was often lower in one or both comparison groups than in the other groups. In the unadjusted data, receipt of a retinal eye exam was the least reported measure among diabetics. This relatively low prevalence, combined with smaller sample sizes for the PCMH group, resulted in the low adjusted prevalence estimates reported here.

Vermont:

- The prevalence of receipt of a retinal eye exam was often lower in one or both comparison groups than in the other groups. In the unadjusted data, receipt of a retinal eye exam was the least reported measure among diabetics. This relatively low prevalence, combined with smaller sample sizes for the PCMH group, resulted in the low adjusted prevalence estimates reported here.

- Vermont's comparison group was New York's comparison group, and despite weighting to balance the comparison groups to more closely resemble the MAPCP Demonstration group, systematic differences remain in patterns of care between Vermont and New York.

Rhode Island:

- The prevalence of receipt of a retinal eye exam was often lower in one or both comparison groups than in the other groups. In the unadjusted data, receipt of a retinal eye exam was the least reported measure among diabetics. This relatively low prevalence, combined with smaller sample sizes for the PCMH group, resulted in the low adjusted prevalence estimates reported here.

- The PCMH comparison group was relatively small, so average estimates were sensitive to outlier utilization within a quarter. Therefore, the PCMH group was less likely to have consistent estimates over time. This was most notable in analyses of special populations, which have smaller sample sizes than the general PCMH comparison group.

- Until the last 2 years of the MAPCP Demonstration, Rhode Island did not include long-term care claims in the data provided, so there are no long-term care expenditures for most of the reported quarters.

North Carolina:

- Utilization and expenditures were often higher in 2012 Q1 relative to other quarters. This was the start of a new data file from the state, and there was a spike in the number of claims in that quarter.

- Utilization and expenditures were lower in 2013 Q1. This is the last quarter in a data file provided by the state, and given the timing of the data pull, claims run out was insufficient, resulting in fewer claims in that quarter.

- The percentage of MAPCP Demonstration beneficiaries receiving medical specialist or surgical specialist visits was lower than both comparison groups because of the low prevalence of specialists in the rural region in which the MAPCP Demonstration was implemented.

- The long-term care expenditures were higher on average for the MAPCP Demonstration group than for the comparison groups, which was explained by a higher percentage of disabled beneficiaries in the MAPCP Demonstration group relative to the comparison groups.

Minnesota:

- In 2013, psychiatrists started billing for more visits using evaluation and management codes instead of codes specific to psychiatric care. These evaluation and management codes were used in defining an outpatient visit. Starting in 2013 Q1, this resulted in an increase in the percent of the study sample with a medical specialist visit and an increase in the percent of the study sample with behavioral health conditions who had an outpatient behavioral health visit.

Maine:

- The prevalence of receipt of a retinal eye exam was often lower in the comparison group than in the demonstration group. In the unadjusted data, receipt of a retinal eye exam was the least reported measure among diabetics. This relatively low prevalence, combined with smaller sample sizes for the non-PCMH group, resulted in the low adjusted prevalence estimates reported here.

- Maine switched Medicaid claims processing systems in 2010 Q4, which accounted for variations in expenditures or prevalence estimates starting in this quarter compared to the preceding quarters.

Michigan:

- The prevalence of receipt of a retinal eye exam was often lower in one or both comparison groups than in the other groups. In the unadjusted data, receipt of a retinal eye exam was the least reported measure among diabetics. This relatively low prevalence resulted in the low adjusted prevalence estimates reported here.

- Primary care, medical specialist, and surgical specialist visits drop in 2014 Q1 because Michigan followed Medicare outpatient prospective payment policies that retired certain evaluation and management codes which were used to calculate these visits in Michigan.

Pennsylvania:

- The quality of care measures are not reported here. After reviewing the claims data related to quality of care, we determined that the data were incomplete, so we did not report on these outcomes.

Averages for each measure are grouped into time periods identical to those used in the regression analysis in the individual state chapters. For most measures this means calendar quarters, but for the quality of care measures, this means 4-quarter intervals directly preceding and following a beneficiary's assignment to a practice. For the averages grouped by calendar quarter, rolling entry into the MAPCP Demonstration was not taken into account in presentation of these quarterly averages. Therefore, in quarters during the demonstration period, no distinction is made between beneficiaries who are attributed to a practice and those not yet attributed.

F.1 New York

Table F1-1
New York: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

Period	Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH
Pre-4	78.6	65.7	79.7
Pre-3	84.1	72.6	71.6
Pre-2	83.9	84.6	82.0
Pre-1	84.5	88.2	82.2
Post-1	83.3	85.1	87.2
Post-2	81.8	88.0	78.9
Post-3	85.4	86.7	77.6

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years pre-assignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-2
New York: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	68.8	83.0	75.2	32.2	14.7	37.0	62.4	73.1	71.5	81.2	85.0	85.7
Pre-3	69.0	73.4	71.3	31.7	26.5	40.6	62.0	64.2	61.3	82.1	85.0	78.9
Pre-2	69.6	78.0	75.6	36.8	26.4	35.6	64.0	69.7	64.4	82.1	86.2	79.5
Pre-1	76.5	77.3	72.6	35.0	30.2	36.1	70.5	68.6	64.7	85.2	82.7	82.5
Post-1	80.8	87.4	79.1	40.8	41.3	44.2	73.8	76.0	69.7	87.8	88.1	84.9
Post-2	85.7	88.0	87.2	32.0	35.9	43.5	81.1	76.8	76.4	88.1	89.8	83.0
Post-3	86.8	84.4	91.0	27.6	35.4	46.1	78.4	74.1	74.4	89.5	87.7	89.5

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	18.8	6.4	30.9	7.3	4.9	7.1	34.0	35.5	31.3	34.5	33.9	34.9
Pre-3	16.9	19.4	26.6	6.5	6.4	7.2	36.1	34.9	35.0	35.3	34.6	36.5
Pre-2	22.6	17.8	21.1	7.5	3.7	4.4	34.5	35.5	33.5	34.8	35.8	34.2
Pre-1	23.8	22.9	23.0	5.5	6.5	5.9	36.6	35.0	32.7	34.3	36.0	32.9
Post-1	31.5	29.4	30.2	4.1	2.1	3.6	38.1	34.1	35.6	37.9	34.0	31.8
Post-2	25.6	26.6	24.1	2.8	2.2	3.3	39.8	38.9	39.8	34.9	30.9	31.6
Post-3	20.5	27.8	30.8	1.9	3.8	0.7	40.8	34.4	37.0	31.6	26.2	25.8

(continued)

Table F1-2 (continued)
New York: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	42.0	39.7	37.7	29.3	30.3	24.0	59.7	61.1	50.2
Pre-3	33.0	45.5	36.6	19.0	32.7	22.7	63.3	68.0	67.7
Pre-2	35.4	30.9	36.4	22.8	19.5	19.0	65.7	71.4	72.0
Pre-1	45.2	15.8	39.8	25.8	6.9	29.3	66.3	73.3	67.6
Post-1	39.1	43.5	36.9	28.7	28.9	28.5	69.2	72.6	68.0
Post-2	38.2	45.4	44.4	29.9	34.2	35.3	71.0	74.5	73.8
Post-3	35.8	34.9	25.3	20.3	21.5	16.4	73.1	74.6	79.0

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-3
New York: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits			Medical specialist visits			Surgical specialist visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	36.3	42.6	44.9	0.9	2.6	3.7	0.3	0.3	0.4
2009:Q4	42.3	44.1	47.1	0.8	3.8	4.2	0.3	0.3	0.5
2010:Q1	42.9	42.9	45.7	0.9	4.7	4.3	0.3	0.6	0.6
2010:Q2	38.8	43.0	44.2	1.4	5.0	5.2	0.3	0.5	0.7
2010:Q3	35.0	43.8	44.8	1.5	4.9	4.3	0.2	0.5	0.6
2010:Q4	40.2	43.3	46.4	1.5	5.6	5.1	0.3	0.7	0.7
2011:Q1	42.7	47.8	47.7	1.7	6.3	6.7	0.4	0.6	0.7
2011:Q2	42.1	45.2	45.4	2.1	7.2	6.7	0.4	1.1	0.8
2011:Q3	39.7	42.1	45.4	2.2	6.9	5.8	0.6	1.1	0.8
2011:Q4	43.7	44.7	46.8	2.5	7.9	7.0	0.6	0.9	1.0
2012:Q1	44.7	46.3	47.7	3.3	8.6	7.1	0.8	1.2	1.1
2012:Q2	44.0	43.7	42.6	3.6	9.2	6.2	1.0	1.5	1.3
2012:Q3	44.7	44.3	43.8	2.5	8.2	6.0	0.5	1.5	1.1
2012:Q4	49.3	44.4	45.9	1.3	6.6	5.7	0.2	1.2	1.1
2013:Q1	50.2	44.4	47.2	2.0	7.7	7.2	0.2	1.9	1.0
2013:Q2	45.9	42.3	45.5	1.9	7.3	7.0	0.3	2.1	1.6
2013:Q3	46.5	45.5	47.3	2.3	7.5	6.8	0.2	1.7	1.7
2013:Q4	47.6	42.8	45.0	2.7	7.8	6.3	0.3	1.4	1.6
2014:Q1	44.6	42.3	43.5	2.2	7.3	6.0	0.2	1.1	1.2
2014:Q2	44.8	40.7	46.6	2.4	4.7	5.8	0.1	1.0	1.0
2014:Q3	45.4	45.4	48.2	2.4	5.2	5.7	0.1	1.4	1.4
2014:Q4	48.5	42.0	49.1	2.6	5.8	6.3	0.2	0.8	1.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-4a
New York: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	25.3	34.0	37.6	8.5	8.4	10.5	4.2	5.1	5.1	0.5	0.5	0.8
2009:Q4	26.0	35.8	37.2	8.0	8.9	10.7	3.8	5.1	4.3	0.4	0.4	1.0
2010:Q1	29.5	34.9	39.0	9.5	10.0	11.7	4.3	5.7	5.0	0.5	0.4	0.6
2010:Q2	29.5	36.5	37.8	10.2	11.6	12.1	5.2	6.5	6.2	0.5	0.5	0.6
2010:Q3	29.2	35.2	36.6	10.1	12.2	12.7	5.1	5.9	5.3	0.5	0.5	0.6
2010:Q4	29.4	35.8	36.7	9.8	11.9	13.9	5.5	6.1	5.5	0.5	0.4	0.6
2011:Q1	30.8	37.6	39.9	10.4	11.9	14.7	5.3	6.7	5.7	0.5	0.4	0.6
2011:Q2	31.7	37.8	40.9	10.7	14.1	16.4	5.8	6.9	6.0	0.6	0.4	0.6
2011:Q3	31.0	36.1	39.1	10.8	13.7	15.3	5.5	6.3	6.1	0.5	0.4	0.6
2011:Q4	32.5	37.0	40.0	10.9	13.4	14.9	5.5	7.0	6.3	0.6	0.5	0.5
2012:Q1	33.4	38.6	42.4	11.3	14.5	16.7	6.1	7.3	6.5	0.5	0.4	0.6
2012:Q2	34.4	38.9	40.7	12.3	14.6	16.9	6.5	7.2	7.0	0.4	0.4	0.6
2012:Q3	35.8	37.5	39.1	10.5	13.3	14.8	5.0	6.2	6.1	0.6	0.6	0.8
2012:Q4	38.0	38.3	42.7	8.3	11.7	12.2	2.9	5.6	4.5	0.6	0.5	0.5
2013:Q1	40.5	41.1	43.6	9.4	12.6	13.4	2.7	5.6	4.7	0.5	0.5	0.5
2013:Q2	41.1	42.7	42.9	9.2	12.9	13.9	3.0	5.4	5.1	0.1	0.1	0.1
2013:Q3	39.1	41.5	42.8	10.4	13.1	15.1	3.1	6.1	5.4	0.7	0.6	0.9
2013:Q4	38.8	41.6	42.8	9.8	13.4	13.2	2.8	5.7	4.9	0.5	0.4	0.7
2014:Q1	33.2	40.6	41.1	8.8	11.5	12.4	2.5	5.6	4.7	0.4	0.4	0.4
2014:Q2	35.8	40.3	44.8	9.0	10.9	13.1	2.5	4.3	3.6	0.4	0.3	0.6
2014:Q3	35.4	42.2	44.3	9.4	11.7	13.1	2.5	4.3	4.6	0.4	0.5	0.5
2014:Q4	37.6	40.2	45.4	9.3	11.4	13.6	2.2	4.5	4.7	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F1-4b
New York: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	72.1	75.6	73.5
Pre-3	71.7	74.1	70.0
Pre-2	70.1	75.6	74.4
Pre-1	72.5	74.4	75.2
Post-1	76.3	72.9	72.6
Post-2	83.0	76.3	78.7
Post-3	79.9	76.8	79.3

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-5
New York: Quarterly weighted average Medicaid expenditures for children

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	176	166	189	26	20	33	9	11	13	3	6	7
2009:Q4	186	193	192	26	31	31	9	14	12	3	7	7
2010:Q1	183	178	189	27	20	24	8	10	10	4	7	7
2010:Q2	175	175	182	21	21	27	8	8	11	4	6	7
2010:Q3	176	170	175	23	22	26	8	10	10	3	7	8
2010:Q4	196	191	200	26	29	28	8	9	12	4	6	8
2011:Q1	210	194	208	26	24	24	8	10	12	4	7	9
2011:Q2	202	189	196	27	29	32	9	11	11	5	8	9
2011:Q3	187	171	195	27	27	35	9	10	12	6	9	9
2011:Q4	200	183	201	26	25	32	8	10	11	6	9	9
2012:Q1	204	189	204	22	27	28	9	10	12	7	10	10
2012:Q2	210	172	193	25	21	23	9	11	12	9	11	10
2012:Q3	180	168	179	23	23	25	9	10	10	5	10	8
2012:Q4	197	172	192	23	19	23	9	11	12	3	7	8
2013:Q1	201	181	198	23	22	25	9	13	12	3	9	9
2013:Q2	181	172	186	10	13	12	9	13	14	4	10	10
2013:Q3	191	179	193	21	22	20	9	11	12	4	10	10
2013:Q4	207	208	210	23	23	23	8	12	12	4	9	9
2014:Q1	207	193	204	23	20	22	8	10	12	3	8	8
2014:Q2	215	191	200	21	15	21	9	11	12	4	7	7
2014:Q3	215	187	191	23	21	22	9	14	12	4	7	8
2014:Q4	211	180	189	18	11	13	8	12	10	4	7	7

(continued)

Table F1-5 (continued)
New York: Quarterly weighted average Medicaid expenditures for children

Period	Primary care physician			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	10	17	17	46	31	33
2009:Q4	12	21	19	49	33	40
2010:Q1	16	17	18	51	34	39
2010:Q2	14	17	18	47	31	36
2010:Q3	12	18	18	46	30	34
2010:Q4	15	19	19	51	36	42
2011:Q1	17	22	21	57	40	45
2011:Q2	17	20	20	51	36	41
2011:Q3	15	18	19	47	32	35
2011:Q4	18	22	20	50	35	40
2012:Q1	20	22	21	54	35	44
2012:Q2	20	21	18	46	31	37
2012:Q3	22	21	20	40	27	34
2012:Q4	27	23	22	42	32	36
2013:Q1	28	26	27	45	32	37
2013:Q2	26	26	27	40	29	33
2013:Q3	25	26	28	39	29	33
2013:Q4	27	26	29	42	32	35
2014:Q1	25	24	25	40	31	36
2014:Q2	26	23	26	40	29	35
2014:Q3	26	26	26	41	31	36
2014:Q4	27	24	26	44	35	39

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-6
New York: Quarterly weighted average Medicaid expenditures for adults

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	431	437	486	64	65	74	22	22	30	15	18	23
2009:Q4	419	425	459	61	60	67	20	22	32	14	17	21
2010:Q1	432	416	466	58	52	61	20	17	23	18	20	23
2010:Q2	444	434	476	62	57	58	21	19	25	17	20	24
2010:Q3	441	433	458	65	57	59	22	20	25	18	20	24
2010:Q4	439	427	462	65	56	63	20	20	27	17	21	23
2011:Q1	436	430	479	58	56	55	20	19	28	19	22	26
2011:Q2	448	445	504	70	66	69	22	21	27	20	23	27
2011:Q3	444	416	476	67	57	65	22	22	28	21	23	27
2011:Q4	441	428	468	65	60	65	21	20	26	21	24	28
2012:Q1	455	435	468	61	54	53	21	20	27	25	27	31
2012:Q2	450	440	479	61	59	67	21	22	25	26	27	33
2012:Q3	423	425	445	55	62	57	21	21	24	19	23	26
2012:Q4	445	423	448	55	57	52	19	21	23	14	19	21
2013:Q1	451	450	440	54	61	47	20	24	23	15	22	23
2013:Q2	399	387	407	12	15	19	21	26	26	16	24	23
2013:Q3	497	481	489	56	55	50	22	26	28	17	25	25
2013:Q4	510	488	501	61	58	56	19	24	27	16	25	24
2014:Q1	480	455	487	61	55	52	17	22	22	15	19	22
2014:Q2	494	445	501	56	51	57	18	19	23	15	18	21
2014:Q3	493	492	526	56	58	58	18	23	28	15	21	24
2014:Q4	487	461	513	51	51	48	15	19	25	14	20	22

(continued)

Table F1-6 (continued)
New York: Quarterly weighted average Medicaid expenditures for adults

Period	Primary care physician			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	12	20	22	128	124	127
2009:Q4	13	22	22	126	122	125
2010:Q1	15	20	23	131	124	127
2010:Q2	15	21	23	130	127	130
2010:Q3	15	21	22	130	125	128
2010:Q4	15	21	22	132	126	132
2011:Q1	16	22	23	135	131	142
2011:Q2	17	23	26	131	126	139
2011:Q3	18	23	25	127	120	133
2011:Q4	18	24	24	126	120	126
2012:Q1	20	26	23	129	119	125
2012:Q2	22	26	24	116	110	109
2012:Q3	27	27	26	107	105	101
2012:Q4	35	31	34	113	105	98
2013:Q1	38	35	34	115	104	102
2013:Q2	39	37	37	113	101	100
2013:Q3	37	37	36	119	108	105
2013:Q4	41	37	37	121	111	109
2014:Q1	35	37	35	111	103	107
2014:Q2	38	38	41	113	100	106
2014:Q3	39	43	40	124	118	125
2014:Q4	39	38	40	127	115	127

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-7a
New York: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	2.8	2.1	3.0	11.4	13.3	12.3
2009:Q4	2.7	3.0	3.0	12.9	17.0	12.5
2010:Q1	2.9	2.6	2.3	11.5	12.0	11.3
2010:Q2	2.6	2.7	3.1	12.5	11.8	11.8
2010:Q3	2.7	2.7	3.0	11.0	12.7	10.6
2010:Q4	2.8	3.3	2.9	10.5	10.9	11.1
2011:Q1	2.7	2.8	2.2	11.3	12.1	12.4
2011:Q2	2.7	2.8	3.0	12.1	12.5	11.5
2011:Q3	2.6	2.6	3.3	10.9	10.8	11.7
2011:Q4	2.6	2.6	3.1	10.4	11.6	10.9
2012:Q1	2.4	2.7	2.6	11.7	11.3	11.7
2012:Q2	2.6	2.2	2.3	11.4	11.3	12.1
2012:Q3	2.5	2.4	2.6	11.1	10.6	10.3
2012:Q4	2.4	2.0	2.5	11.1	12.1	12.0
2013:Q1	2.1	2.5	2.5	10.6	11.0	10.6
2013:Q2	1.4	1.7	1.7	10.4	10.4	11.0
2013:Q3	2.1	2.5	2.2	9.9	9.1	10.5
2013:Q4	2.2	2.2	2.2	9.8	10.5	9.8
2014:Q1	2.2	2.0	2.1	9.6	9.1	9.7
2014:Q2	2.0	1.7	2.0	10.2	10.2	10.7
2014:Q3	2.1	2.1	2.1	10.0	11.1	10.7
2014:Q4	1.5	0.9	1.2	10.0	11.5	9.5

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-7b
New York: Average percent of births with low birth weights: Four quarter intervals preceding and following assignment for children

Period	Low birth weight		
	MAPCP	PCMH	Non-PCMH
Pre-4	5.8	5.4	8.4
Pre-3	4.1	6.4	7.1
Pre-2	6.9	6.1	5.3
Pre-1	6.9	7.3	6.8
Post-1	5.4	4.7	7.4

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-8
New York: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.9	4.4	4.7	18.0	16.5	17.9
2009:Q4	4.7	4.1	4.7	17.8	17.1	19.5
2010:Q1	4.6	4.1	4.8	17.9	14.5	16.4
2010:Q2	4.8	4.4	4.7	19.3	16.3	17.8
2010:Q3	4.9	4.5	4.6	19.7	16.8	17.5
2010:Q4	4.7	4.0	4.7	17.7	15.3	16.6
2011:Q1	4.3	4.0	4.0	17.2	14.8	17.1
2011:Q2	4.7	4.3	4.7	18.3	15.9	17.9
2011:Q3	4.5	4.1	4.4	18.3	16.3	18.6
2011:Q4	4.5	4.2	4.3	17.6	14.8	17.1
2012:Q1	4.6	3.9	3.7	17.1	14.3	16.5
2012:Q2	4.1	4.0	4.7	17.6	14.6	16.1
2012:Q3	3.9	4.1	4.3	17.7	15.2	15.3
2012:Q4	3.9	4.0	4.1	16.4	14.5	14.7
2013:Q1	3.7	4.1	3.3	15.9	14.2	13.9
2013:Q2	1.4	1.7	2.1	15.5	14.9	14.6
2013:Q3	3.6	3.8	3.5	16.3	14.7	15.8
2013:Q4	3.9	3.9	3.9	14.4	13.3	14.0
2014:Q1	3.9	3.6	3.3	13.7	12.9	12.3
2014:Q2	3.6	3.3	3.7	14.5	12.6	14.0
2014:Q3	3.6	3.7	3.7	14.1	13.7	15.9
2014:Q4	3.4	3.6	3.3	12.5	12.2	14.6

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-9
New York: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	BH conditions only			Disabled beneficiaries only			Asthma diagnosis only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	302	239	262	634	519	602	315	363	412
2009:Q4	287	314	259	618	581	584	335	399	470
2010:Q1	339	325	222	635	541	592	334	381	390
2010:Q2	387	430	265	642	530	562	335	345	379
2010:Q3	395	370	280	645	513	558	292	350	413
2010:Q4	495	485	312	725	581	652	343	363	398
2011:Q1	541	377	438	724	581	784	371	389	560
2011:Q2	602	378	391	717	573	699	381	333	512
2011:Q3	549	269	433	681	431	685	324	321	463
2011:Q4	495	381	421	713	549	746	313	348	468
2012:Q1	550	336	362	780	508	751	318	410	523
2012:Q2	510	386	380	737	510	757	385	408	471
2012:Q3	423	216	366	604	386	669	304	386	392
2012:Q4	489	282	462	650	449	776	287	373	464
2013:Q1	443	356	400	679	487	691	326	296	451
2013:Q2	405	343	441	570	379	639	284	304	419
2013:Q3	407	350	376	606	337	697	268	244	422
2013:Q4	496	623	496	726	546	760	288	304	423
2014:Q1	475	421	424	705	468	767	303	309	382
2014:Q2	503	418	434	717	452	917	308	344	365
2014:Q3	497	329	369	677	435	758	316	354	348
2014:Q4	466	378	378	693	499	834	329	350	381

(continued)

Table F1-9 (continued)
New York: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Rural beneficiaries only			Non-White beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	172	171	191	206	150	158
2009:Q4	180	197	190	231	209	173
2010:Q1	176	179	206	227	185	158
2010:Q2	164	173	180	197	182	140
2010:Q3	170	170	186	200	175	131
2010:Q4	192	194	195	228	214	155
2011:Q1	203	196	201	242	222	184
2011:Q2	197	187	193	254	213	160
2011:Q3	179	170	181	220	200	156
2011:Q4	193	189	200	231	232	161
2012:Q1	197	197	213	233	204	166
2012:Q2	205	171	182	250	186	157
2012:Q3	181	168	177	196	169	137
2012:Q4	195	169	183	208	207	146
2013:Q1	202	176	205	214	216	140
2013:Q2	173	173	190	197	191	127
2013:Q3	188	183	201	208	215	138
2013:Q4	196	212	206	223	234	142
2014:Q1	199	199	201	211	213	136
2014:Q2	206	188	200	230	193	146
2014:Q3	208	188	192	237	169	143
2014:Q4	203	182	203	241	156	140

(continued)

Table F1-9 (continued)
New York: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Pod 1 beneficiaries			Pod 2 beneficiaries			Pod 3 beneficiaries		
	PCMH	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	150	167	189	186	166	189	254	167	189
2009:Q4	186	194	193	193	194	193	272	194	193
2010:Q1	172	178	189	187	178	189	243	178	189
2010:Q2	176	175	182	186	175	182	257	175	182
2010:Q3	151	170	175	180	170	175	307	170	175
2010:Q4	166	191	200	197	191	200	299	191	200
2011:Q1	196	194	208	220	194	208	310	194	209
2011:Q2	181	189	197	212	189	197	274	189	197
2011:Q3	155	171	195	193	171	195	259	171	195
2011:Q4	181	183	202	211	183	201	289	183	202
2012:Q1	184	189	204	218	189	204	295	189	204
2012:Q2	166	172	193	211	172	193	315	172	194
2012:Q3	162	168	180	181	168	180	298	168	180
2012:Q4	167	172	192	197	172	192	299	172	193
2013:Q1	185	181	198	196	181	198	337	181	199
2013:Q2	144	172	186	192	172	186	238	172	186
2013:Q3	155	179	193	199	179	193	268	179	194
2013:Q4	150	208	210	223	208	210	340	208	210
2014:Q1	178	193	205	217	193	205	366	193	205
2014:Q2	183	192	201	223	192	201	348	192	201
2014:Q3	177	187	192	229	187	192	359	187	192
2014:Q4	187	180	189	222	180	189	274	181	189

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-10
New York: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Multiple chronic conditions only			BH conditions only			Disabled beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	708	788	831	792	787	839	817	878	972
2009:Q4	694	798	810	689	690	761	812	859	873
2010:Q1	717	775	824	707	705	740	839	854	908
2010:Q2	724	805	849	830	730	946	849	871	915
2010:Q3	765	846	841	836	822	892	891	916	860
2010:Q4	781	825	850	924	809	1,046	848	877	844
2011:Q1	798	853	902	893	915	1,039	894	885	940
2011:Q2	809	946	980	986	1,023	1,067	911	982	969
2011:Q3	797	841	938	916	920	1,052	892	953	947
2011:Q4	801	854	924	890	882	1,046	895	920	927
2012:Q1	800	889	888	887	994	935	911	962	871
2012:Q2	794	862	931	897	912	893	913	889	976
2012:Q3	750	851	870	822	902	1,001	851	849	944
2012:Q4	826	873	869	836	917	945	940	979	957
2013:Q1	802	904	841	846	843	862	868	944	865
2013:Q2	678	729	793	706	797	773	708	768	857
2013:Q3	929	958	960	1,053	1,086	1,002	1,025	969	1,099
2013:Q4	950	996	982	994	1,169	1,050	1,004	1,061	1,081
2014:Q1	932	1,000	978	950	1,161	1,013	1,007	1,057	1,041
2014:Q2	953	959	1,040	992	1,002	898	1,081	1,008	1,132
2014:Q3	930	1,011	1,030	993	1,129	984	1,080	1,124	1,122
2014:Q4	893	924	1,002	912	971	924	981	1,039	1,168

(continued)

Table F1-10 (continued)
New York: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Asthma diagnosis only			Rural beneficiaries only			Non-White beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	PCMH	PCMH	Non-PCMH
2009:Q3	780	956	1,037	426	473	496	472	469	525
2009:Q4	753	876	854	408	457	450	478	490	393
2010:Q1	721	861	963	418	445	444	468	447	375
2010:Q2	714	885	989	429	469	455	494	498	364
2010:Q3	746	814	871	437	462	456	490	417	373
2010:Q4	715	937	959	433	455	453	521	475	367
2011:Q1	730	948	1,075	425	459	466	526	464	410
2011:Q2	745	955	1,084	436	469	502	522	509	493
2011:Q3	707	837	1,026	423	436	449	518	488	447
2011:Q4	731	868	969	429	452	463	506	498	409
2012:Q1	791	896	978	447	471	431	498	489	372
2012:Q2	756	893	973	437	464	466	489	481	439
2012:Q3	742	776	1,006	422	450	392	406	395	340
2012:Q4	742	991	937	453	434	410	426	419	367
2013:Q1	747	831	939	450	456	413	465	407	329
2013:Q2	687	773	962	399	396	380	412	401	349
2013:Q3	822	943	1,007	499	496	447	511	458	410
2013:Q4	863	1,121	941	503	510	445	482	432	386
2014:Q1	768	931	991	494	491	447	478	422	383
2014:Q2	868	812	816	504	480	489	457	451	363
2014:Q3	887	976	1,076	510	500	531	473	434	445
2014:Q4	831	1,045	1,007	500	456	487	458	415	425

(continued)

Table F1-10 (continued)
New York: Quarterly weighted average total Medicare expenditures among special populations for adults

Period	Pod 1 beneficiaries			Pod 2 beneficiaries			Pod 3 beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	387	437	487	417	437	486	464	438	487
2009:Q4	418	427	461	416	427	461	430	427	462
2010:Q1	421	416	466	422	416	466	453	416	466
2010:Q2	411	434	477	438	434	477	468	435	477
2010:Q3	420	433	458	432	433	458	462	433	459
2010:Q4	422	427	462	422	427	462	468	427	462
2011:Q1	407	430	479	425	430	479	463	430	479
2011:Q2	427	445	504	432	445	504	480	446	505
2011:Q3	412	416	476	430	416	476	476	416	477
2011:Q4	419	428	468	427	428	468	471	428	468
2012:Q1	430	435	468	441	435	468	487	436	469
2012:Q2	424	441	480	446	440	480	472	441	481
2012:Q3	423	425	446	414	425	446	441	426	446
2012:Q4	426	424	449	433	423	448	479	425	450
2013:Q1	409	451	441	449	450	440	480	451	441
2013:Q2	351	387	407	395	387	407	433	387	408
2013:Q3	454	481	489	481	481	489	547	482	490
2013:Q4	462	489	501	508	489	501	544	489	501
2014:Q1	437	455	487	461	455	487	536	456	488
2014:Q2	429	447	503	475	446	502	558	447	503
2014:Q3	445	493	527	471	493	527	557	494	527
2014:Q4	468	462	514	455	461	513	554	463	515

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-11
New York: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	68.5	82.4	74.6	33.9	14.6	41.6	62.6	71.3	70.5	82.5	84.7	85.7
Pre-3	68.4	73.9	72.9	32.2	27.1	41.7	63.1	66.1	61.8	83.3	87.4	80.4
Pre-2	69.9	78.7	79.1	38.8	25.6	38.1	64.7	71.2	68.2	82.2	87.3	81.3
Pre-1	76.5	77.6	74.2	36.4	30.9	37.2	71.6	68.3	65.7	86.1	83.1	84.5
Post-1	80.2	87.4	77.2	41.5	42.9	46.0	72.7	75.9	74.7	88.5	88.9	86.6
Post-2	86.4	90.0	91.1	35.3	38.6	47.9	82.4	80.5	79.2	88.7	90.2	92.1
Post-3	88.1	86.4	91.7	27.5	36.6	48.9	79.3	74.4	83.4	90.8	86.6	90.3

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	19.8	5.3	36.5	6.6	5.1	8.5	38.7	36.4	37.8	35.1	32.3	35.4
Pre-3	17.3	20.5	26.7	5.8	5.8	6.0	39.4	37.6	39.7	34.8	34.6	34.7
Pre-2	23.8	17.8	23.1	7.3	3.2	4.4	38.1	40.1	38.7	34.1	36.1	32.7
Pre-1	24.8	23.3	23.3	5.1	6.0	4.5	40.5	39.9	38.1	36.2	37.2	36.3
Post-1	31.2	32.4	33.4	3.9	2.0	3.6	39.5	37.0	36.4	34.1	31.1	28.4
Post-2	27.3	29.7	30.7	1.6	2.0	0.9	42.3	43.1	43.7	31.8	29.4	31.8
Post-3	20.7	29.5	38.8	1.4	4.1	0.5	44.0	37.4	41.3	29.5	23.1	26.6

(continued)

Table F1-11 (continued)
New York: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	41.2	40.5	35.9	31.1	31.9	25.2	60.8	66.4	50.7
Pre-3	34.4	42.3	34.9	19.2	32.1	24.3	64.9	73.5	69.6
Pre-2	42.3	25.9	36.8	25.0	14.0	23.1	66.9	76.7	72.6
Pre-1	47.4	16.0	36.1	36.8	6.7	28.2	66.9	78.3	68.7
Post-1	36.7	40.6	35.4	27.5	30.8	29.3	71.2	75.2	69.1
Post-2	36.7	38.4	42.2	31.1	31.0	36.9	72.8	76.7	78.4
Post-3	33.2	31.8	24.0	19.8	23.9	16.4	72.2	80.0	79.1

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-12a
New York: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	30.2	47.3	49.3	14.9	15.3	18.9	7.1	9.0	8.5	0.7	0.8	1.1
2009:Q4	31.2	48.5	49.5	14.4	15.5	18.3	6.3	8.4	6.9	0.7	0.8	1.5
2010:Q1	36.6	50.8	53.1	17.0	17.3	20.0	7.1	9.7	8.3	0.7	0.6	1.2
2010:Q2	38.4	51.9	50.7	17.8	19.7	21.4	8.9	11.8	10.3	1.0	1.0	1.3
2010:Q3	39.6	51.9	51.5	18.4	21.6	22.9	8.9	10.0	9.4	0.9	1.0	1.1
2010:Q4	39.8	52.2	53.4	18.2	21.9	24.8	9.6	11.3	9.9	0.9	0.8	1.3
2011:Q1	42.6	54.9	59.2	19.3	22.4	25.7	9.4	11.8	10.7	1.1	0.9	1.4
2011:Q2	43.5	55.8	61.1	20.2	26.4	30.4	10.4	13.6	11.3	1.2	1.0	1.4
2011:Q3	41.8	50.7	57.0	20.0	24.2	27.3	9.8	10.6	10.8	0.9	0.8	1.4
2011:Q4	43.9	50.7	55.9	19.5	23.3	26.1	9.4	12.1	11.3	1.0	0.8	1.1
2012:Q1	44.7	53.8	58.1	19.9	24.5	29.7	9.7	12.8	11.1	1.0	0.7	1.1
2012:Q2	44.7	52.5	55.2	21.9	24.7	29.3	10.3	12.5	12.3	0.8	1.0	1.1
2012:Q3	47.1	50.8	54.1	19.4	21.7	26.2	8.6	11.7	10.9	0.9	1.0	1.5
2012:Q4	48.2	52.9	58.2	14.6	21.2	20.8	5.4	9.8	7.3	1.1	1.1	1.3
2013:Q1	51.3	56.8	58.6	16.5	21.6	23.5	4.9	10.0	7.0	0.8	1.1	1.2
2013:Q2	53.7	60.0	60.7	16.5	22.0	23.9	5.5	9.1	8.1	0.1	0.3	0.1
2013:Q3	52.4	57.6	58.7	17.9	21.8	23.8	5.7	9.4	8.0	1.2	1.3	2.0
2013:Q4	51.9	60.0	60.3	16.7	22.7	21.7	5.0	9.2	6.9	0.8	1.0	1.2
2014:Q1	47.1	61.0	60.4	15.6	20.7	20.4	4.4	10.3	7.0	0.8	1.0	1.0
2014:Q2	49.0	58.4	61.8	16.3	19.9	22.1	4.3	8.1	6.0	0.6	0.7	1.2
2014:Q3	46.5	58.8	59.1	16.4	20.5	19.8	4.6	8.2	7.1	0.7	1.0	0.9
2014:Q4	47.4	56.1	60.4	15.4	18.6	20.6	4.1	8.5	7.4	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F1-12b
New York: Percentage of total visits that were primary care visits:
Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	64.9	73.9	69.7
Pre-3	64.7	70.3	66.2
Pre-2	63.7	72.4	70.5
Pre-1	67.0	71.6	71.2
Post-1	70.0	69.1	67.3
Post-2	76.7	73.2	75.0
Post-3	73.9	73.7	76.7

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-13
New York: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	662	732	750	95	90	104	30	32	43	23	32	35
2009:Q4	645	730	733	88	95	104	28	33	45	21	30	33
2010:Q1	672	718	758	86	75	96	27	26	33	28	33	39
2010:Q2	685	753	782	86	90	91	30	28	37	27	34	42
2010:Q3	702	781	765	98	98	100	32	31	38	30	39	41
2010:Q4	720	769	786	104	94	106	30	32	40	30	38	41
2011:Q1	731	795	832	98	98	98	30	30	46	33	42	47
2011:Q2	742	851	900	113	127	118	33	33	44	34	45	51
2011:Q3	734	759	847	104	103	105	33	34	44	35	39	47
2011:Q4	735	777	846	105	105	121	32	31	39	34	40	48
2012:Q1	741	797	822	90	92	82	31	34	39	39	45	53
2012:Q2	730	788	851	93	99	114	31	34	38	40	45	57
2012:Q3	688	771	792	76	102	94	31	36	35	30	38	42
2012:Q4	734	766	773	88	94	83	28	32	37	23	32	34
2013:Q1	738	822	769	83	105	82	29	40	39	24	36	38
2013:Q2	637	686	710	13	17	24	31	43	42	27	41	38
2013:Q3	838	869	869	90	97	88	32	40	43	28	41	39
2013:Q4	875	906	908	102	97	90	28	42	48	26	42	41
2014:Q1	858	911	916	103	109	89	27	39	34	24	37	35
2014:Q2	877	851	932	92	90	99	29	34	40	25	32	37
2014:Q3	860	898	939	87	94	91	29	37	45	24	37	37
2014:Q4	831	843	920	75	73	82	23	33	40	22	35	37

(continued)

Table F1-13 (continued)
New York: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Primary care physician			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	16	27	29	223	246	232
2009:Q4	16	29	29	222	239	224
2010:Q1	19	29	32	233	248	227
2010:Q2	19	29	31	232	254	234
2010:Q3	20	32	32	231	251	234
2010:Q4	21	32	33	237	252	245
2011:Q1	23	33	36	247	272	264
2011:Q2	24	36	41	242	268	269
2011:Q3	23	33	38	238	256	263
2011:Q4	24	34	34	240	258	252
2012:Q1	26	36	33	249	257	257
2012:Q2	27	35	33	225	235	221
2012:Q3	34	38	38	211	226	207
2012:Q4	45	44	48	217	226	198
2013:Q1	48	52	51	220	227	207
2013:Q2	54	58	57	214	216	208
2013:Q3	54	57	58	226	223	215
2013:Q4	59	57	59	230	231	232
2014:Q1	55	62	61	228	230	235
2014:Q2	55	59	65	234	222	224
2014:Q3	53	64	60	257	260	258
2014:Q4	51	55	59	256	254	262

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-14
New York: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	6.8	5.9	6.1	22.6	21.2	23.9
2009:Q4	6.5	6.3	6.9	22.8	23.3	24.8
2010:Q1	6.5	5.7	7.0	22.9	19.7	20.7
2010:Q2	6.3	6.7	6.9	24.8	23.0	23.7
2010:Q3	6.8	7.2	7.3	26.0	23.2	24.7
2010:Q4	7.3	6.2	7.5	24.0	21.8	23.3
2011:Q1	6.9	6.6	6.6	23.7	21.5	25.6
2011:Q2	7.3	7.8	7.5	25.6	23.6	26.5
2011:Q3	6.7	6.7	6.7	25.0	22.8	26.3
2011:Q4	6.9	6.6	7.5	24.4	21.2	24.1
2012:Q1	6.4	6.1	5.8	23.3	22.6	21.9
2012:Q2	5.8	6.3	7.7	23.7	21.5	21.6
2012:Q3	5.1	6.4	6.8	23.2	23.0	19.8
2012:Q4	5.9	6.4	6.5	22.0	21.2	21.3
2013:Q1	5.5	6.6	5.8	21.1	21.6	20.9
2013:Q2	1.4	1.8	2.7	20.8	22.3	21.4
2013:Q3	5.5	6.2	5.7	21.5	21.3	22.4
2013:Q4	6.1	5.9	6.0	19.8	20.5	22.3
2014:Q1	6.2	6.7	5.3	19.9	20.8	18.3
2014:Q2	5.5	5.8	6.2	20.8	19.8	21.2
2014:Q3	5.4	5.6	5.6	19.9	19.6	22.3
2014:Q4	4.8	4.8	5.7	18.1	18.7	21.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-15
New York: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are children

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	302	239	262	26	1	4	13	13	18	190	151	138
2009:Q4	287	314	259	20	13	2	14	24	20	167	147	93
2010:Q1	339	325	222	24	10	1	14	24	12	205	173	119
2010:Q2	387	430	265	27	41	20	14	15	27	248	270	148
2010:Q3	395	370	280	36	60	21	16	19	28	233	209	190
2010:Q4	495	485	312	44	32	9	20	28	26	347	499	267
2011:Q1	541	377	438	45	4	40	22	16	33	340	246	268
2011:Q2	602	378	391	87	7	26	22	19	30	434	344	303
2011:Q3	549	269	433	45	6	41	23	16	19	395	233	289
2011:Q4	495	381	421	32	11	46	15	30	17	374	281	408
2012:Q1	550	336	362	33	2	18	16	18	20	388	265	368
2012:Q2	510	386	380	53	28	1	19	32	36	358	364	375
2012:Q3	423	216	366	26	2	1	15	13	19	318	332	309
2012:Q4	489	282	462	55	14	27	19	18	25	415	387	362
2013:Q1	443	356	400	27	1	6	18	29	21	359	429	298
2013:Q2	405	343	441	37	1	9	18	28	17	364	457	343
2013:Q3	407	350	376	23	6	7	19	20	24	323	366	343
2013:Q4	496	623	496	54	127	2	16	41	34	390	846	406
2014:Q1	475	421	424	61	12	13	19	38	41	469	796	454
2014:Q2	503	418	434	55	2	23	18	31	25	465	552	613
2014:Q3	497	329	369	64	3	22	14	28	30	376	594	317
2014:Q4	466	378	378	69	6	6	15	33	14	339	468	341

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-16
New York: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are adults

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	792	787	839	154	151	158	53	54	54	291	226	299
2009:Q4	689	690	761	107	143	144	45	52	68	225	212	281
2010:Q1	707	705	740	123	128	117	47	50	56	209	182	265
2010:Q2	830	730	946	187	122	189	54	59	66	259	221	352
2010:Q3	836	822	892	160	171	157	59	66	67	296	253	305
2010:Q4	924	809	1,046	215	170	242	54	61	77	375	321	351
2011:Q1	893	915	1,039	167	185	191	57	64	89	357	352	350
2011:Q2	986	1,023	1,067	218	228	181	63	58	86	395	430	377
2011:Q3	916	920	1,052	194	179	227	60	71	87	350	310	385
2011:Q4	890	882	1,046	167	196	216	55	62	76	343	324	350
2012:Q1	887	994	935	157	162	169	58	80	75	317	343	289
2012:Q2	897	912	893	174	195	121	59	70	59	362	339	348
2012:Q3	822	902	1,001	151	177	186	58	80	70	304	350	371
2012:Q4	836	917	945	140	209	140	47	76	73	283	345	409
2013:Q1	846	843	862	128	130	104	54	74	69	274	340	309
2013:Q2	706	797	773	45	73	58	59	92	70	236	317	292
2013:Q3	1,053	1,086	1,002	203	267	167	69	74	76	362	387	293
2013:Q4	994	1,169	1,050	216	290	207	48	100	82	343	517	330
2014:Q1	950	1,161	1,013	185	258	130	44	101	67	377	414	407
2014:Q2	992	1,002	898	172	193	106	48	61	66	362	311	328
2014:Q3	993	1,129	984	189	231	135	48	88	75	359	393	357
2014:Q4	912	971	924	163	205	219	36	58	83	324	352	315

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-17
New York: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1.6	0.0	0.4	15.8	18.4	17.6	0.0	0.0	0.0	1.1	0.7	0.8	16.7	24.2	19.1
2009:Q4	1.8	0.4	0.1	18.1	23.5	16.6	0.2	0.4	0.0	2.0	4.8	2.5	17.8	24.0	17.7
2010:Q1	1.8	1.1	0.1	16.1	20.6	11.7	0.7	0.7	0.0	2.7	3.9	4.1	21.2	23.5	22.1
2010:Q2	1.8	1.6	1.1	18.1	21.0	18.1	0.7	0.6	0.1	2.8	2.9	2.2	24.5	25.3	27.1
2010:Q3	1.4	4.2	1.7	16.9	17.8	17.5	0.5	1.6	0.4	4.6	2.7	6.0	22.6	28.3	22.7
2010:Q4	2.1	2.2	0.8	22.2	16.2	17.9	0.9	2.0	0.5	6.6	9.0	5.1	30.7	42.3	37.6
2011:Q1	2.2	0.4	2.1	20.9	17.3	18.9	1.5	0.4	0.9	6.1	6.2	6.1	40.4	45.6	41.3
2011:Q2	3.8	0.3	2.0	20.4	14.3	18.2	2.5	0.2	0.8	7.5	4.6	7.1	44.2	37.8	49.7
2011:Q3	1.6	0.4	1.9	20.3	13.6	13.6	1.3	0.3	1.6	4.6	0.8	3.5	31.7	29.1	38.5
2011:Q4	1.6	0.4	1.6	15.6	23.8	14.8	0.7	0.0	1.5	4.2	9.5	4.7	34.5	39.3	40.8
2012:Q1	1.6	0.1	1.5	15.1	12.9	15.8	1.0	0.1	0.3	4.7	1.5	6.2	37.2	37.0	38.4
2012:Q2	2.9	2.3	0.2	16.3	19.2	19.7	1.9	0.9	0.2	4.8	6.8	7.4	35.6	36.1	36.9
2012:Q3	1.1	0.1	0.1	15.8	14.6	15.4	0.4	0.0	0.0	3.4	4.3	3.2	28.1	28.6	27.8
2012:Q4	2.5	0.7	2.1	18.0	18.8	17.7	1.1	0.0	1.4	2.9	5.1	4.3	27.8	27.5	33.7
2013:Q1	1.4	0.1	0.6	16.5	17.5	14.4	0.9	0.0	0.5	3.5	8.9	3.7	30.4	30.2	38.0
2013:Q2	2.1	0.0	0.7	17.1	19.8	13.3	1.6	0.0	0.0	3.4	6.9	1.1	33.4	31.9	33.4
2013:Q3	1.8	0.2	0.5	16.2	11.0	12.5	0.7	0.0	0.5	3.4	3.9	4.0	30.7	29.9	31.3
2013:Q4	2.5	4.0	0.2	15.6	12.6	15.2	1.2	3.8	0.1	4.2	4.4	3.6	34.3	29.3	32.3
2014:Q1	2.6	1.2	2.0	17.8	16.0	20.4	2.2	0.0	1.5	5.5	5.9	5.3	41.6	34.6	41.4
2014:Q2	3.2	0.1	1.7	17.0	19.5	15.3	2.4	0.0	0.2	3.3	8.8	4.0	32.7	31.8	38.6
2014:Q3	2.6	0.1	0.5	13.7	15.6	20.8	1.8	0.0	0.2	2.2	6.1	2.2	29.1	20.5	25.0
2014:Q4	3.0	0.3	0.6	13.7	20.7	8.9	1.6	0.0	0.2	1.8	6.2	0.8	30.5	20.9	34.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-18
New York: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	9.5	8.3	7.7	33.3	28.8	25.6	3.1	2.0	2.6	5.5	3.9	6.7	10.3	10.9	19.9
2009:Q4	7.6	7.6	8.9	30.4	27.6	32.8	1.9	2.2	3.9	4.7	5.4	7.6	11.3	13.5	19.4
2010:Q1	7.5	8.3	8.2	30.8	27.4	26.1	2.5	1.9	2.0	4.9	4.8	3.9	10.9	15.3	20.5
2010:Q2	12.2	6.7	10.0	33.6	34.4	31.9	4.2	2.1	4.9	4.7	6.4	10.3	13.5	15.6	24.8
2010:Q3	10.9	11.8	10.7	36.2	31.4	27.8	5.4	5.1	4.6	8.2	10.0	9.0	18.1	17.1	24.8
2010:Q4	12.3	9.6	11.2	35.1	31.9	29.5	6.2	4.7	5.6	8.5	7.6	10.8	17.7	17.9	25.0
2011:Q1	10.2	11.4	12.0	34.6	31.4	31.1	5.1	6.8	7.1	9.0	10.6	10.9	21.5	23.6	32.7
2011:Q2	13.3	13.4	10.1	37.5	30.6	35.0	8.0	8.3	5.9	11.1	9.4	11.6	25.6	22.5	38.1
2011:Q3	10.4	9.6	10.0	36.1	33.0	35.5	5.1	4.1	7.1	9.3	9.7	11.3	21.3	19.3	30.6
2011:Q4	10.1	11.1	11.8	35.6	32.7	32.3	5.4	5.2	4.0	8.9	9.0	6.5	20.0	20.5	32.4
2012:Q1	10.5	9.5	9.0	33.8	31.4	28.7	5.9	3.2	4.6	7.3	11.1	7.4	20.4	17.5	33.1
2012:Q2	9.6	10.0	7.6	32.8	26.2	29.6	5.5	5.4	3.4	7.9	6.9	7.4	18.5	18.7	27.5
2012:Q3	10.2	8.2	11.4	31.1	31.2	25.4	5.6	4.9	4.7	6.2	8.5	7.9	18.4	18.0	28.9
2012:Q4	8.4	9.4	8.6	26.3	31.9	26.7	3.2	4.4	3.3	4.8	6.9	7.5	18.3	19.7	31.1
2013:Q1	7.8	7.7	6.3	30.0	31.6	28.1	3.3	4.2	3.1	7.3	9.3	8.2	22.8	20.6	30.7
2013:Q2	3.9	5.8	5.1	30.7	31.1	26.4	2.4	3.7	3.4	6.9	9.3	6.7	27.8	20.6	31.5
2013:Q3	9.5	10.5	8.6	33.4	28.4	25.6	4.2	5.6	5.2	8.8	9.3	8.1	25.6	23.8	32.5
2013:Q4	10.7	11.8	10.5	28.8	32.7	26.3	6.9	7.8	6.8	6.7	7.8	6.0	30.0	25.6	32.8
2014:Q1	10.8	13.5	7.6	25.2	30.7	22.8	6.7	7.9	3.8	7.0	9.8	7.6	28.6	29.5	30.9
2014:Q2	7.8	9.1	5.2	28.7	23.6	28.9	4.3	3.9	2.4	6.0	5.8	4.9	25.0	27.1	30.9
2014:Q3	9.2	9.6	6.7	29.7	28.6	28.5	5.0	3.8	2.5	6.0	5.0	9.1	25.6	21.2	28.1
2014:Q4	7.5	7.6	8.4	21.8	23.4	25.7	3.5	2.1	3.9	4.4	5.5	6.3	24.5	23.9	30.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F1-19
New York: Quarterly weighted average expenditures and utilization among disabled beneficiaries who are children

Period	Total Medicaid expenditures			Acute-care expenditures			ER visits not leading to hospitalization expenditures			Specialty physician expenditures			Primary care physician expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	569	479	523	54	15	50	12	17	19	7	12	13	13	20	16
2009:Q4	561	513	522	41	33	39	13	17	14	5	12	11	14	21	19
2010:Q1	576	477	540	40	29	38	10	9	13	7	16	13	17	18	18
2010:Q2	581	495	525	27	23	37	13	11	17	8	11	11	16	17	18
2010:Q3	575	478	500	27	32	38	9	13	12	6	12	12	14	17	15
2010:Q4	656	546	576	40	16	33	11	11	14	8	9	13	17	17	16
2011:Q1	654	524	670	37	26	42	12	10	19	7	9	16	19	21	22
2011:Q2	651	534	615	38	50	53	12	15	17	9	13	16	17	17	18
2011:Q3	598	422	547	41	8	50	12	15	13	7	9	16	14	15	18
2011:Q4	644	505	628	41	33	41	12	18	13	8	14	16	17	20	18
2012:Q1	685	459	612	30	22	27	14	11	15	8	13	16	17	17	17
2012:Q2	653	456	613	28	24	35	13	14	16	11	14	14	18	19	14
2012:Q3	549	379	560	25	10	39	11	6	14	8	12	16	16	17	17
2012:Q4	577	429	622	30	11	28	12	11	16	6	8	10	20	22	21
2013:Q1	593	452	577	37	27	25	9	14	15	7	11	12	20	19	22
2013:Q2	522	372	520	8	11	3	11	19	17	8	12	16	24	22	24
2013:Q3	551	330	590	22	2	17	11	9	12	5	8	13	22	21	24
2013:Q4	658	499	664	29	17	20	10	11	16	6	10	15	23	23	26
2014:Q1	647	462	670	37	18	17	8	12	17	5	8	9	20	18	23
2014:Q2	640	444	766	21	2	45	11	17	16	7	7	13	24	19	33
2014:Q3	599	425	623	31	25	16	10	16	18	6	8	12	24	24	25
2014:Q4	613	488	674	20	22	14	11	14	14	5	5	10	22	26	27

(continued)

Table F1-19 (continued)
New York: Quarterly weighted average expenditures and utilization among disabled beneficiaries who are children

Period	All-cause admissions			ER visits not leading to hospitalization		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	3.4	1.4	2.9	13.6	16.9	15.5
2009:Q4	2.7	1.7	2.5	14.7	17.6	13.1
2010:Q1	2.7	1.8	2.3	12.5	12.4	11.7
2010:Q2	1.8	1.8	2.9	15.5	14.0	16.0
2010:Q3	1.6	2.0	2.3	11.2	13.3	12.0
2010:Q4	2.5	0.8	2.7	12.4	12.0	12.8
2011:Q1	2.2	1.4	2.4	13.1	10.6	15.1
2011:Q2	2.0	2.7	2.7	14.0	13.5	15.4
2011:Q3	2.4	1.1	3.1	14.0	12.5	13.6
2011:Q4	2.3	1.6	2.2	12.6	17.2	11.7
2012:Q1	1.7	1.2	1.5	14.4	9.6	12.9
2012:Q2	1.9	1.2	1.9	14.2	11.3	14.2
2012:Q3	1.5	0.7	2.2	12.1	8.4	11.1
2012:Q4	1.9	0.8	1.7	11.3	13.6	12.8
2013:Q1	2.1	1.8	1.5	9.9	11.3	11.5
2013:Q2	0.9	1.1	0.3	12.6	13.0	12.3
2013:Q3	1.3	0.1	1.1	9.9	9.9	9.2
2013:Q4	1.7	1.1	1.1	9.3	11.8	10.8
2014:Q1	2.2	1.1	1.0	8.3	11.1	11.4
2014:Q2	1.2	0.1	2.7	11.1	10.7	11.2
2014:Q3	1.8	1.7	0.9	9.9	9.4	12.9
2014:Q4	1.4	1.3	0.9	11.7	12.4	9.3

NOTE:

- Numbers represent average expenditures and the percentage of beneficiaries who had any utilizations. Means and percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.2 Vermont

Table F2-1
Vermont: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

Period	Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH
Pre-4	88.1	64.7	76.0
Pre-3	86.4	77.5	75.4
Pre-2	85.1	82.0	81.8
Pre-1	84.3	83.5	79.3
Post-1	82.2	86.5	83.0
Post-2	81.9	88.8	83.1
Post-3	79.8	93.9	81.7

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years pre-assignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-2
Vermont: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	87.3	75.7	74.7	42.8	16.6	36.2	76.5	65.2	69.4	65.1	85.6	84.6
Pre-3	86.7	77.1	72.3	41.8	30.6	36.5	73.4	68.9	66.2	63.9	87.8	82.9
Pre-2	87.3	80.7	70.2	39.4	32.9	33.8	72.0	69.8	64.1	62.3	88.9	86.7
Pre-1	86.8	77.4	76.1	38.5	38.2	33.9	69.9	71.2	64.9	64.6	86.2	82.7
Post-1	91.3	85.7	81.4	43.5	40.9	42.6	74.0	77.2	75.5	70.4	86.8	89.0
Post-2	91.1	88.0	87.0	45.6	40.8	36.4	73.3	79.8	77.9	73.3	90.0	85.7
Post-3	90.2	85.7	88.4	46.7	43.3	42.2	73.2	78.0	75.2	72.5	86.5	90.9

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	25.9	3.8	26.9	4.2	6.6	6.6	37.6	33.3	32.3	35.7	33.9	34.2
Pre-3	25.2	22.9	25.1	5.6	4.4	6.8	36.2	35.4	35.2	36.1	34.9	35.9
Pre-2	22.8	22.2	20.0	5.9	4.4	2.8	35.3	33.3	35.1	32.1	35.9	34.6
Pre-1	23.5	28.4	23.8	6.5	5.9	5.9	35.2	34.9	33.8	30.7	35.2	32.2
Post-1	27.0	28.5	31.2	3.3	2.9	2.4	40.6	33.6	35.1	31.0	32.9	32.8
Post-2	30.7	28.7	25.0	3.1	1.4	3.7	37.2	39.2	38.6	25.7	28.3	29.3
Post-3	31.6	30.8	28.4	4.4	4.0	2.1	38.1	38.2	36.4	24.0	28.0	28.3

(continued)

Table F2-2 (continued)
Vermont: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	43.3	39.7	37.5	30.6	32.5	27.3	77.8	62.8	55.7
Pre-3	44.9	37.7	34.0	32.5	27.9	23.4	77.0	67.9	57.7
Pre-2	42.9	35.8	26.1	30.6	28.8	11.4	75.7	71.7	72.3
Pre-1	40.6	13.0	33.8	28.6	12.8	18.5	75.1	72.7	67.7
Post-1	46.6	40.4	37.4	35.1	26.1	28.1	75.7	73.3	69.8
Post-2	49.0	44.1	45.0	38.5	32.9	35.7	72.5	68.5	76.4
Post-3	48.7	30.7	32.5	36.0	21.0	19.7	72.9	68.3	81.1

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-3
Vermont: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH
2009:Q3	6.3	11.2	15.7
2009:Q4	6.5	10.4	16.6
2010:Q1	7.1	12.2	16.1
2010:Q2	6.9	11.8	13.3
2010:Q3	6.6	11.0	8.7
2010:Q4	6.4	11.5	14.9
2011:Q1	7.4	10.9	11.0
2011:Q2	5.4	9.9	14.6
2011:Q3	6.7	15.5	14.0
2011:Q4	7.8	11.3	10.8
2012:Q1	6.5	9.0	13.5
2012:Q2	6.5	9.8	13.9
2012:Q3	6.8	14.8	15.2
2012:Q4	8.6	14.8	11.3
2013:Q1	6.1	14.5	14.1
2013:Q2	6.8	7.7	4.3
2013:Q3	7.1	13.8	21.0
2013:Q4	7.8	7.6	14.3
2014:Q1	8.3	9.1	11.3
2014:Q2	9.0	9.1	16.3
2014:Q3	9.0	12.2	9.3
2014:Q4	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F2-4
Vermont: Quarterly weighted average Medicaid expenditures for children

Period	Total			Acute-care			ER visits not leading to hospitalizations			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	304	207	220	13.3	18.8	29.7	9.8	10.8	13.3	31.3	36.5	43.7
2009:Q4	331	235	246	12.8	30.4	38.8	8.5	13.8	14.0	36.1	40.6	48.6
2010:Q1	384	230	243	14.1	24.4	30.9	10.8	10.1	12.3	39.0	44.0	51.4
2010:Q2	349	235	246	14.7	22.4	33.0	10.9	9.9	12.7	36.0	43.4	47.9
2010:Q3	324	246	259	12.8	40.5	43.0	9.6	11.1	13.4	35.8	39.6	47.9
2010:Q4	343	274	299	14.2	39.5	55.5	10.5	11.4	13.5	37.2	48.3	55.6
2011:Q1	388	274	326	15.4	35.5	55.4	10.8	13.4	16.2	39.4	50.2	62.2
2011:Q2	343	289	310	14.1	54.5	57.9	10.4	13.8	15.5	36.3	46.8	56.2
2011:Q3	323	241	275	17.3	42.3	49.8	10.6	13.4	13.9	34.1	42.4	49.2
2011:Q4	350	262	293	16.5	34.9	43.3	10.5	13.4	15.3	37.8	46.7	53.0
2012:Q1	397	271	293	19.1	36.5	36.7	13.0	14.4	15.5	40.1	49.5	55.3
2012:Q2	367	252	300	20.1	32.2	40.4	14.3	15.2	15.4	38.4	43.6	49.3
2012:Q3	338	231	264	17.4	27.7	33.8	13.6	13.0	14.7	36.8	38.2	47.4
2012:Q4	362	238	272	14.6	25.8	35.5	12.8	15.8	14.8	39.7	41.5	47.3
2013:Q1	412	245	257	18.0	27.7	30.7	14.7	16.4	14.1	44.3	40.4	48.5
2013:Q2	365	223	241	15.7	15.3	12.7	14.1	17.2	14.0	39.9	35.9	43.6
2013:Q3	343	262	271	14.9	43.3	32.6	14.0	14.8	14.9	36.9	35.7	44.9
2013:Q4	378	290	311	16.4	39.5	44.4	13.4	16.9	15.7	40.0	37.8	47.1
2014:Q1	421	268	282	18.0	35.2	39.2	15.1	14.5	15.0	42.7	39.3	48.3
2014:Q2	370	262	256	11.4	31.3	30.8	14.7	14.4	14.0	41.2	38.0	42.5
2014:Q3	373	251	247	17.8	31.8	31.2	13.7	18.3	14.8	42.4	42.0	43.2
2014:Q4	421	231	233	18.8	20.3	18.7	14.0	15.3	13.4	45.7	44.2	45.6

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-5
Vermont: Quarterly weighted average Medicaid expenditures for adults

Period	Total			Acute-care			ER visits not leading to hospitalizations			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	491	431	440	50.0	62.6	71.5	22.0	23.7	26.5	106	112	106
2009:Q4	487	427	417	42.3	66.0	61.2	19.9	22.1	28.1	109	107	104
2010:Q1	502	417	417	48.5	54.0	52.2	22.5	18.2	24.3	112	111	108
2010:Q2	496	437	444	46.7	60.1	58.3	23.0	20.2	24.8	113	113	112
2010:Q3	489	429	444	45.5	60.2	64.8	23.3	22.5	25.0	120	111	110
2010:Q4	467	439	446	46.4	68.3	70.7	20.9	19.8	26.2	108	116	114
2011:Q1	489	460	476	42.4	74.3	71.9	20.7	20.9	26.5	111	119	119
2011:Q2	486	459	479	48.2	76.4	80.0	21.8	21.3	26.8	112	114	115
2011:Q3	489	444	463	59.3	76.3	80.7	24.3	22.1	27.9	110	109	112
2011:Q4	485	430	433	58.7	63.9	63.3	22.9	22.4	26.8	112	106	106
2012:Q1	496	459	472	60.4	65.0	67.6	24.6	23.1	28.2	111	108	107
2012:Q2	493	455	455	58.8	73.3	63.9	26.6	24.6	26.8	110	98	98
2012:Q3	489	425	445	64.9	70.6	68.7	27.1	25.5	27.3	108	89	90
2012:Q4	475	440	444	50.0	65.9	63.6	24.5	22.7	26.5	110	92	90
2013:Q1	507	463	423	51.6	68.6	54.6	26.1	26.0	24.6	116	92	93
2013:Q2	509	391	391	56.1	17.0	18.2	27.1	26.7	26.1	113	89	94
2013:Q3	505	506	460	53.0	77.1	57.8	28.5	26.2	27.6	108	98	99
2013:Q4	526	495	500	56.5	70.8	69.5	25.7	24.3	28.3	114	98	102
2014:Q1	546	448	467	56.8	66.5	55.1	26.3	23.6	25.3	117	86	98
2014:Q2	542	424	476	39.5	61.9	64.1	28.7	20.3	23.8	121	83	99
2014:Q3	571	481	504	65.8	64.3	61.4	30.0	23.8	28.5	129	98	112
2014:Q4	605	450	476	69.4	51.4	49.4	28.7	19.8	24.1	136	101	115

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-6
Vermont: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1.1	1.8	2.8	10.0	11.2	13.0
2009:Q4	1.0	2.8	3.2	8.8	15.1	14.2
2010:Q1	1.1	2.7	2.7	10.7	11.6	12.6
2010:Q2	1.1	2.3	2.8	11.1	12.0	12.5
2010:Q3	0.9	3.4	3.3	9.7	12.1	12.9
2010:Q4	1.0	3.2	4.0	10.6	10.7	12.2
2011:Q1	1.2	2.6	3.4	10.5	13.2	14.3
2011:Q2	1.0	3.7	3.7	10.4	12.9	13.9
2011:Q3	1.0	3.1	3.5	10.1	12.4	12.2
2011:Q4	1.0	2.6	3.2	10.0	12.2	13.3
2012:Q1	1.1	2.7	2.7	10.8	12.7	13.2
2012:Q2	1.1	2.4	2.9	11.8	12.5	13.2
2012:Q3	0.9	2.4	2.6	10.9	11.6	12.1
2012:Q4	0.9	2.2	2.8	10.1	13.0	13.3
2013:Q1	1.0	2.4	2.6	11.6	12.0	12.1
2013:Q2	0.9	1.7	1.5	11.1	12.1	11.4
2013:Q3	0.8	3.2	2.5	11.0	10.7	11.8
2013:Q4	0.9	2.8	3.1	10.5	12.2	11.3
2014:Q1	1.0	2.6	2.8	11.5	9.9	11.2
2014:Q2	0.9	2.3	2.5	11.3	12.0	12.0
2014:Q3	0.9	2.3	2.4	10.7	13.4	12.1
2014:Q4	0.9	1.4	1.6	10.2	13.2	11.5

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-7
Vermont: Average percent of births with low birth weights: Four quarter intervals preceding and following assignment for children

Period	Low birth weight		
	MAPCP	PCMH	Non-PCMH
Pre-4	13.0	14.5	13.4
Pre-3	14.7	7.2	10.6
Pre-2	12.4	7.6	6.2
Pre-1	12.2	5.8	5.4
Post-1	12.1	8.4	6.3

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-8
Vermont: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	3.2	4.4	4.9	15.8	17.1	17.4
2009:Q4	2.8	4.6	4.3	14.5	16.6	19.0
2010:Q1	3.1	4.3	4.0	14.9	14.6	16.9
2010:Q2	2.9	4.5	4.6	15.6	15.7	18.2
2010:Q3	2.9	4.3	4.3	15.8	16.5	17.8
2010:Q4	2.9	4.2	4.6	14.6	14.3	17.0
2011:Q1	2.8	4.5	4.4	14.1	15.1	17.1
2011:Q2	3.1	4.5	4.8	14.9	15.3	18.0
2011:Q3	3.0	4.7	4.8	15.6	15.4	18.7
2011:Q4	2.9	4.1	4.1	14.1	15.0	17.4
2012:Q1	2.8	4.1	4.1	14.0	14.6	17.2
2012:Q2	2.8	4.4	4.1	15.0	14.9	16.7
2012:Q3	3.0	4.3	4.2	14.9	16.5	16.7
2012:Q4	2.6	4.0	4.0	13.3	14.5	16.2
2013:Q1	2.7	4.1	3.4	13.8	15.3	14.5
2013:Q2	2.8	1.6	1.7	14.4	15.1	15.1
2013:Q3	2.7	4.1	3.4	14.9	15.0	16.0
2013:Q4	2.9	3.9	4.0	13.7	13.6	14.5
2014:Q1	2.9	3.8	3.3	14.0	13.1	13.6
2014:Q2	3.1	3.6	3.5	14.5	13.5	14.2
2014:Q3	3.1	3.7	3.6	15.3	14.0	16.4
2014:Q4	3.1	3.4	3.3	13.8	12.5	13.8

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-9
Vermont: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	BH conditions only			Disabled beneficiaries only			Asthma diagnosis only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	805	270	302	2,021	1,742	2,611	358	455	448
2009:Q4	811	302	381	2,224	2,061	3,168	411	503	496
2010:Q1	924	337	289	2,537	1,952	2,728	468	442	531
2010:Q2	915	397	334	2,277	2,301	3,325	419	638	493
2010:Q3	872	357	336	2,144	2,287	3,144	412	434	500
2010:Q4	900	427	609	2,471	2,668	3,305	430	463	543
2011:Q1	1,074	508	679	2,743	2,052	2,504	475	420	774
2011:Q2	984	520	529	2,468	2,234	3,176	432	471	549
2011:Q3	1,007	345	574	2,234	2,153	2,822	404	412	524
2011:Q4	1,146	602	541	2,417	2,299	3,028	401	900	536
2012:Q1	1,327	416	477	2,830	2,238	3,445	446	523	481
2012:Q2	1,292	464	463	2,593	2,636	4,089	403	666	474
2012:Q3	1,235	420	462	2,263	2,218	4,023	383	855	427
2012:Q4	1,430	329	498	2,530	2,212	4,136	401	437	448
2013:Q1	1,561	540	473	2,781	2,082	2,287	453	396	390
2013:Q2	1,458	450	513	2,344	1,185	3,246	419	352	395
2013:Q3	1,427	459	466	2,277	1,432	3,295	393	325	466
2013:Q4	1,573	519	748	2,716	1,847	2,970	420	360	406
2014:Q1	1,615	423	518	2,761	1,554	3,497	484	383	353
2014:Q2	1,515	394	445	2,477	1,948	3,168	471	372	337
2014:Q3	1,487	439	448	2,328	1,541	2,492	446	445	319
2014:Q4	1,702	362	427	2,665	1,764	2,658	526	363	333

(continued)

Table F2-9 (continued)
Vermont: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Rural beneficiaries only		
	MAPCP	PCMH	Non-PCMH
2009:Q3	350	225	243
2009:Q4	375	284	268
2010:Q1	430	238	243
2010:Q2	395	260	256
2010:Q3	372	231	358
2010:Q4	382	337	352
2011:Q1	435	311	413
2011:Q2	381	285	525
2011:Q3	362	260	500
2011:Q4	396	354	435
2012:Q1	443	361	435
2012:Q2	401	310	689
2012:Q3	381	454	629
2012:Q4	408	248	396
2013:Q1	464	257	363
2013:Q2	395	251	346
2013:Q3	393	382	334
2013:Q4	441	356	491
2014:Q1	486	485	460
2014:Q2	436	381	431
2014:Q3	423	350	313
2014:Q4	471	283	365

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-10
Vermont: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Multiple chronic conditions only			BH conditions only			Disabled beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	826	791	740	823	869	809	1,690	1,113	1,043
2009:Q4	821	786	709	795	812	771	1,716	1,155	918
2010:Q1	848	780	747	853	799	860	1,689	1,034	948
2010:Q2	858	812	784	854	870	912	1,690	1,027	1,006
2010:Q3	842	846	809	845	942	947	1,667	1,064	1,079
2010:Q4	810	874	815	805	932	1,105	1,653	1,051	973
2011:Q1	852	927	912	863	1,056	1,072	1,733	1,055	1,044
2011:Q2	863	969	951	891	1,034	1,173	1,793	1,172	1,056
2011:Q3	911	894	888	976	1,043	1,065	1,733	1,174	1,000
2011:Q4	918	886	835	1,027	958	989	1,733	1,180	1,056
2012:Q1	961	912	899	1,051	1,043	990	1,738	1,178	1,020
2012:Q2	962	882	920	1,025	1,020	931	1,753	1,050	1,109
2012:Q3	942	881	875	977	1,090	987	1,755	982	1,031
2012:Q4	949	907	843	941	1,022	1,045	1,777	1,062	1,085
2013:Q1	969	900	752	981	865	828	1,830	1,155	941
2013:Q2	970	715	702	996	886	789	1,823	881	934
2013:Q3	951	1,009	842	979	1,141	1,114	1,929	1,307	1,251
2013:Q4	988	1,011	968	994	1,278	1,180	1,932	1,320	1,323
2014:Q1	1,015	973	932	1,003	1,289	1,132	1,973	1,278	1,277
2014:Q2	1,000	874	968	984	984	904	2,029	1,362	1,343
2014:Q3	1,039	1,011	944	1,032	1,231	1,038	1,941	1,640	1,406
2014:Q4	1,093	944	918	1,036	1,082	971	2,010	1,350	1,365

(continued)

Table F2-10 (continued)
Vermont: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Asthma diagnosis only			Rural beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	376	1,051	1,052	519	517	393
2009:Q4	361	991	770	517	518	362
2010:Q1	334	934	847	529	524	370
2010:Q2	316	993	903	514	510	394
2010:Q3	308	913	799	505	511	411
2010:Q4	295	1,034	826	490	531	419
2011:Q1	310	988	1,029	516	496	414
2011:Q2	293	1,079	882	516	506	431
2011:Q3	339	914	859	520	502	405
2011:Q4	331	943	835	516	538	412
2012:Q1	329	942	910	521	545	472
2012:Q2	314	882	861	524	494	448
2012:Q3	322	710	889	529	449	433
2012:Q4	321	893	994	525	554	424
2013:Q1	354	789	867	553	539	467
2013:Q2	359	689	769	552	396	369
2013:Q3	385	897	1,036	566	566	421
2013:Q4	391	1,150	927	578	574	439
2014:Q1	393	743	948	606	492	356
2014:Q2	435	715	743	631	485	489
2014:Q3	467	786	1,216	625	494	500
2014:Q4	467	955	1,225	658	476	452

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-11
Vermont: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	89.5	73.3	77.5	45.8	14.8	40.7	79.4	65.1	71.7	67.0	86.7	83.1
Pre-3	87.5	77.6	73.4	44.0	32.7	37.0	74.8	69.4	67.4	65.2	89.7	83.2
Pre-2	88.3	81.5	73.6	40.4	34.0	35.7	73.0	70.6	66.9	63.3	90.0	88.4
Pre-1	88.7	77.6	77.9	42.0	39.5	35.3	72.4	71.5	66.4	67.9	87.6	86.1
Post-1	91.9	84.1	82.7	44.8	45.0	45.5	74.6	73.0	77.4	73.2	89.1	90.0
Post-2	91.1	87.2	88.2	47.6	46.2	38.2	73.6	81.6	78.2	75.5	92.5	90.9
Post-3	90.4	87.0	89.8	47.5	44.8	45.0	73.0	78.2	83.4	73.4	84.2	92.4

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	27.5	3.2	32.0	3.1	7.7	8.0	40.0	34.5	37.3	35.4	33.0	38.6
Pre-3	27.2	24.3	26.5	5.0	3.9	6.2	40.2	40.2	41.3	37.0	35.4	35.8
Pre-2	23.2	23.4	22.3	4.8	4.0	2.5	39.6	40.4	40.2	33.4	36.3	33.6
Pre-1	26.1	28.7	24.9	4.5	4.4	4.0	40.6	43.5	40.9	33.8	37.4	36.9
Post-1	27.5	32.6	34.1	2.5	2.5	1.5	41.7	38.2	37.6	29.2	30.7	31.5
Post-2	32.1	34.7	28.7	2.5	1.0	4.4	38.9	45.1	42.8	24.7	27.2	29.9
Post-3	32.3	30.7	35.0	4.1	3.9	0.8	38.6	43.8	37.5	24.2	28.4	28.7

(continued)

Table F2-11 (continued)
Vermont: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	44.6	42.8	35.6	35.0	35.8	29.0	79.7	60.7	64.1
Pre-3	46.9	39.2	30.1	36.8	30.3	19.9	77.7	71.6	59.9
Pre-2	44.6	37.9	23.8	33.1	30.9	10.2	75.8	76.8	70.5
Pre-1	41.8	13.6	29.5	31.4	8.6	16.1	76.5	80.0	69.7
Post-1	44.1	38.4	34.1	35.1	30.7	27.0	77.6	76.8	73.2
Post-2	49.6	37.9	44.4	41.4	30.3	39.6	74.4	71.8	79.1
Post-3	46.9	28.1	28.5	37.0	20.7	18.3	74.6	79.6	75.0

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-12
Vermont: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH
2009:Q3	9.7	12.8	19.1
2009:Q4	9.6	11.5	16.2
2010:Q1	10.2	18.7	22.3
2010:Q2	9.6	13.8	18.6
2010:Q3	9.4	13.4	11.3
2010:Q4	9.2	14.9	20.9
2011:Q1	11.5	13.2	14.3
2011:Q2	8.2	13.1	17.0
2011:Q3	9.0	20.3	21.5
2011:Q4	10.9	14.2	12.2
2012:Q1	9.5	14.2	17.0
2012:Q2	8.9	11.2	18.9
2012:Q3	9.5	20.8	15.8
2012:Q4	12.0	20.8	22.2
2013:Q1	8.2	17.4	14.5
2013:Q2	9.4	16.2	3.8
2013:Q3	10.1	14.6	26.1
2013:Q4	10.9	10.2	16.4
2014:Q1	11.4	12.3	12.3
2014:Q2	11.0	7.3	14.8
2014:Q3	13.3	19.6	12.6
2014:Q4	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F2-13
Vermont: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute-care			ER visits not leading to hospitalizations			Prescription		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	766	749	689	69	97	104	33	36	37	186	222	196
2009:Q4	762	731	669	59	98	92	30	35	40	193	210	192
2010:Q1	783	728	703	68	80	85	34	28	36	197	222	199
2010:Q2	797	763	745	68	91	92	35	31	37	202	224	208
2010:Q3	785	789	753	63	103	113	36	37	38	215	223	205
2010:Q4	748	821	766	65	122	119	33	33	40	191	236	216
2011:Q1	789	874	857	61	141	130	34	35	44	197	247	229
2011:Q2	794	899	898	69	152	151	35	35	44	200	246	231
2011:Q3	833	824	830	94	135	137	41	34	44	199	236	229
2011:Q4	845	811	785	98	118	111	40	36	42	205	233	216
2012:Q1	880	839	840	104	111	115	43	39	42	208	233	220
2012:Q2	891	817	828	103	124	111	47	40	43	207	213	203
2012:Q3	859	798	784	102	121	116	47	46	42	204	195	187
2012:Q4	854	818	778	86	115	94	42	36	40	211	199	191
2013:Q1	894	828	701	83	120	77	44	42	37	224	200	191
2013:Q2	883	700	676	89	22	22	45	45	44	216	188	189
2013:Q3	861	934	796	79	138	98	47	42	44	205	206	199
2013:Q4	905	937	892	90	122	126	41	43	48	217	208	209
2014:Q1	926	919	870	90	129	96	42	46	41	219	204	212
2014:Q2	899	812	869	60	99	107	46	37	42	223	195	205
2014:Q3	954	921	879	102	104	92	47	41	44	236	227	228
2014:Q4	1,002	861	853	110	89	90	46	34	38	247	225	232

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-14
Vermont: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations			Asthma inpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.3	5.1	6.9	22.1	19.2	21.8	0.0	0.0	0.2
2009:Q4	3.9	5.4	5.9	20.3	19.2	20.3	0.1	0.1	0.1
2010:Q1	4.2	6.1	6.5	20.7	22.5	23.5	0.0	0.5	0.1
2010:Q2	4.2	5.5	7.2	21.7	20.7	22.9	0.0	0.1	0.1
2010:Q3	3.9	6.6	6.9	22.1	22.9	22.6	0.0	0.0	0.1
2010:Q4	3.9	6.7	6.0	21.3	24.4	24.2	0.1	0.1	0.1
2011:Q1	4.0	5.8	6.2	20.9	19.4	21.7	0.0	0.0	0.2
2011:Q2	4.3	6.3	6.8	21.6	22.2	23.7	0.0	0.1	0.0
2011:Q3	4.8	6.6	7.1	23.5	23.8	24.8	0.0	0.2	0.0
2011:Q4	4.7	6.9	7.3	21.8	21.1	23.7	0.0	0.0	0.1
2012:Q1	4.8	7.9	7.3	21.7	21.9	25.1	0.0	0.0	0.1
2012:Q2	4.7	8.3	8.3	23.6	23.2	26.0	0.1	0.2	0.1
2012:Q3	4.7	7.6	7.3	23.0	21.3	25.6	0.1	0.1	0.1
2012:Q4	4.4	6.8	6.8	20.3	22.3	24.8	0.0	0.1	0.1
2013:Q1	4.2	6.4	6.6	20.6	22.6	22.8	0.0	0.1	0.0
2013:Q2	4.4	7.1	6.6	21.3	21.8	23.2	0.0	0.0	0.1
2013:Q3	4.0	6.9	6.4	22.0	25.5	22.9	0.0	0.0	0.1
2013:Q4	4.6	6.7	5.5	20.0	21.6	22.4	0.0	0.2	0.1
2014:Q1	4.5	6.5	4.6	20.2	22.7	20.3	0.0	0.1	0.0
2014:Q2	4.8	2.1	2.2	20.9	23.7	21.4	0.1	0.0	0.0
2014:Q3	4.8	6.9	5.4	21.6	21.5	22.2	0.1	0.1	0.0
2014:Q4	4.9	6.0	6.4	19.8	21.0	22.4	0.0	0.1	0.1

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-15
Vermont: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are children

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	805	270	302	42	4	15	18	18	30	430	85	218
2009:Q4	811	302	381	29	9	51	15	22	31	484	112	198
2010:Q1	924	337	289	18	12	11	19	20	26	600	152	169
2010:Q2	915	397	334	55	12	45	19	18	36	545	207	187
2010:Q3	872	357	336	31	55	26	19	27	44	527	202	236
2010:Q4	900	427	609	40	32	120	21	25	38	517	394	436
2011:Q1	1,074	508	679	61	4	152	21	19	43	673	298	472
2011:Q2	984	520	529	46	66	50	23	31	47	563	394	371
2011:Q3	1,007	345	574	84	28	119	32	24	41	577	227	398
2011:Q4	1,146	602	541	100	52	88	31	24	39	719	346	518
2012:Q1	1,327	416	477	95	5	52	36	22	34	841	195	320
2012:Q2	1,292	464	463	148	42	15	41	33	35	794	231	343
2012:Q3	1,235	420	462	103	11	30	40	27	39	751	171	322
2012:Q4	1,430	329	498	111	7	33	39	26	33	919	220	415
2013:Q1	1,561	540	473	95	3	8	41	41	26	969	492	346
2013:Q2	1,458	450	513	105	1	23	41	36	26	868	361	294
2013:Q3	1,427	459	466	103	60	20	39	33	28	625	289	345
2013:Q4	1,573	519	748	116	22	46	35	38	43	769	608	644
2014:Q1	1,615	423	518	72	3	17	36	56	39	847	531	349
2014:Q2	1,515	394	445	67	7	32	38	29	37	933	423	411
2014:Q3	1,487	439	448	85	2	60	36	41	37	964	324	254
2014:Q4	1,702	362	427	104	8	18	39	33	32	1,160	270	209

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-16
Vermont: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are adults

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	823	869	809	119	179	194	48	64	52	267	250	304
2009:Q4	795	812	771	89	198	179	41	61	57	269	293	302
2010:Q1	853	799	860	111	158	179	50	55	58	283	226	318
2010:Q2	854	870	912	108	159	169	50	64	66	286	255	313
2010:Q3	845	942	947	110	239	214	53	88	73	279	290	355
2010:Q4	805	932	1,105	109	227	293	45	64	87	249	367	398
2011:Q1	863	1,056	1,072	115	271	197	50	82	71	289	389	426
2011:Q2	891	1,034	1,173	110	277	253	55	76	82	289	369	496
2011:Q3	976	1,043	1,065	188	250	293	68	76	79	360	330	429
2011:Q4	1,027	958	989	214	221	218	68	69	75	399	331	385
2012:Q1	1,051	1,043	990	210	228	239	67	92	82	424	322	342
2012:Q2	1,025	1,020	931	201	288	172	71	90	85	420	350	364
2012:Q3	977	1,090	987	185	225	210	72	109	86	349	418	376
2012:Q4	941	1,022	1,045	164	253	224	66	84	66	324	391	398
2013:Q1	981	865	828	152	132	94	66	85	68	337	336	294
2013:Q2	996	886	789	171	87	53	67	97	79	340	332	287
2013:Q3	979	1,141	1,114	160	249	211	72	77	91	359	473	385
2013:Q4	994	1,278	1,180	174	351	264	62	86	95	365	531	375
2014:Q1	1,003	1,289	1,132	139	362	177	58	117	87	372	560	498
2014:Q2	984	984	904	134	181	153	62	67	70	348	391	313
2014:Q3	1,032	1,231	1,038	187	273	165	70	88	76	353	429	355
2014:Q4	1,036	1,082	971	174	275	234	65	67	66	388	381	370

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-17
Vermont: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1.4	0.4	0.7	13.6	17.8	19.4	0.6	0.0	0.3	1.4	0.2	3.3	15.1	10.7	12.1
2009:Q4	1.2	0.3	2.7	12.1	19.3	18.8	0.6	0.2	1.2	1.8	4.6	3.5	16.1	14.4	13.8
2010:Q1	1.1	1.0	1.2	14.1	14.2	16.5	0.3	0.6	0.9	2.3	3.0	4.3	18.1	19.6	18.6
2010:Q2	1.8	0.5	3.0	14.1	21.6	17.9	0.4	0.3	1.2	1.7	2.3	2.3	18.4	24.1	23.0
2010:Q3	1.1	3.9	2.2	13.5	18.5	24.6	0.4	1.5	1.2	2.1	3.0	8.4	18.2	20.6	27.1
2010:Q4	1.7	1.9	7.0	14.9	15.2	19.7	0.6	1.8	3.3	2.3	9.5	7.1	18.5	40.0	32.0
2011:Q1	2.1	0.5	6.3	13.0	17.8	25.6	1.1	0.5	4.5	2.4	6.3	10.3	20.7	43.5	35.9
2011:Q2	1.9	3.7	3.5	14.4	19.2	24.3	1.0	3.5	2.9	3.0	5.6	9.0	23.2	39.0	38.7
2011:Q3	2.6	0.8	6.0	17.0	16.4	19.3	1.7	0.1	4.5	4.1	2.7	6.2	24.4	28.2	29.5
2011:Q4	3.2	1.5	4.2	16.0	19.7	21.6	2.1	0.6	3.0	5.2	4.8	6.7	33.6	38.0	33.8
2012:Q1	3.0	0.3	3.0	17.3	12.3	23.1	2.1	0.3	0.7	5.6	1.1	6.3	38.1	41.1	27.3
2012:Q2	4.1	2.2	1.0	19.1	17.4	19.4	3.0	1.4	0.8	6.6	3.8	7.2	40.5	39.4	29.2
2012:Q3	2.8	0.6	1.4	18.6	18.6	24.5	1.6	0.2	0.3	5.5	1.2	6.0	33.6	31.2	22.3
2012:Q4	3.5	0.6	2.1	17.9	19.0	21.3	1.3	0.0	1.0	4.9	5.6	5.7	32.9	31.1	26.3
2013:Q1	2.9	0.2	0.5	18.1	20.4	19.2	1.5	0.0	0.3	5.2	7.2	2.9	36.0	37.5	32.5
2013:Q2	3.2	0.1	1.2	17.8	18.1	20.5	1.2	0.0	0.4	5.9	6.2	1.9	33.1	36.5	29.3
2013:Q3	3.0	2.1	1.4	17.1	16.0	15.2	0.8	0.6	0.6	4.1	3.4	3.5	27.4	29.1	26.6
2013:Q4	3.3	1.0	2.3	16.8	16.2	19.0	1.2	0.6	0.8	4.5	5.0	6.2	30.2	32.9	31.7
2014:Q1	2.6	0.2	1.7	16.6	17.4	18.8	0.7	0.1	1.4	4.0	4.4	5.8	42.3	35.5	32.1
2014:Q2	2.7	0.3	2.7	18.4	20.4	19.7	0.6	0.1	2.2	4.7	2.8	5.5	39.3	29.3	28.0
2014:Q3	2.5	0.2	1.7	16.9	25.0	19.5	0.3	0.1	1.4	4.1	6.4	3.9	35.6	24.4	24.0
2014:Q4	3.0	0.4	1.9	16.2	21.1	16.8	0.3	0.0	1.1	4.4	2.4	3.1	37.1	26.8	26.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F2-18
Vermont: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.8	9.1	9.2	25.4	33.6	24.7	1.6	3.5	5.1	4.9	6.0	4.5	24.5	10.9	14.4
2009:Q4	4.8	10.2	10.3	22.8	29.7	27.6	1.6	6.0	5.2	4.3	4.6	6.2	24.6	11.7	14.3
2010:Q1	5.5	9.3	9.1	24.3	30.6	29.8	1.6	4.1	4.5	4.8	6.3	4.7	26.3	14.2	17.0
2010:Q2	5.2	8.7	9.4	25.6	32.9	29.2	1.9	3.4	4.5	4.8	7.1	8.1	26.6	15.1	20.2
2010:Q3	5.0	12.7	12.1	26.1	37.5	29.6	2.0	5.0	7.1	5.0	11.8	7.9	28.0	13.3	22.4
2010:Q4	5.4	12.5	12.3	24.7	33.2	34.8	1.7	8.8	6.3	4.1	7.7	11.7	27.6	17.0	25.3
2011:Q1	5.5	15.0	12.6	23.9	35.4	28.0	2.4	9.7	8.5	5.2	11.7	8.8	28.8	19.5	27.6
2011:Q2	5.5	14.0	13.2	26.3	33.6	35.5	2.3	10.0	9.3	6.1	10.3	11.7	31.2	18.8	30.1
2011:Q3	7.3	12.7	12.7	28.1	32.9	34.5	4.1	6.9	9.1	7.6	11.3	10.8	38.3	14.8	25.2
2011:Q4	7.7	11.0	10.5	25.9	32.0	30.2	4.2	6.3	5.4	8.0	8.5	5.5	41.4	16.7	27.9
2012:Q1	7.5	12.8	11.5	25.9	30.0	32.2	4.7	6.1	6.2	8.3	11.6	9.8	44.3	14.7	28.2
2012:Q2	7.4	11.6	7.9	26.6	29.3	32.8	4.9	7.1	4.8	8.0	9.7	8.8	44.8	14.9	24.0
2012:Q3	6.9	10.7	9.4	26.4	38.7	29.7	2.3	6.9	5.2	7.3	12.7	9.1	37.1	13.8	25.3
2012:Q4	6.0	11.8	9.4	23.6	33.7	27.8	1.5	8.0	4.9	5.6	10.3	6.3	33.6	15.5	28.5
2013:Q1	5.7	8.3	4.9	23.5	32.7	26.9	1.2	6.3	2.4	5.5	10.8	7.0	36.4	20.3	29.9
2013:Q2	6.7	7.1	4.7	24.0	36.6	28.9	1.4	5.1	3.6	6.5	9.5	7.8	35.9	19.3	30.3
2013:Q3	5.8	11.5	9.4	25.4	33.0	28.1	1.2	7.8	5.3	6.1	10.4	9.9	35.3	20.4	34.7
2013:Q4	6.3	14.4	11.0	23.2	32.5	29.8	1.2	8.9	6.6	6.0	6.9	9.7	32.8	21.5	33.9
2014:Q1	6.2	18.6	9.8	22.1	36.0	30.0	1.3	11.6	6.1	5.7	13.3	12.1	45.9	26.7	30.4
2014:Q2	6.3	9.5	6.3	24.4	27.9	30.1	1.2	5.3	4.6	5.3	7.4	8.5	45.9	27.4	30.2
2014:Q3	6.9	10.7	9.1	24.7	32.0	31.5	1.1	5.0	4.0	5.9	7.2	11.1	44.0	21.4	29.2
2014:Q4	6.3	10.1	9.0	22.4	28.2	26.9	1.0	4.5	5.5	5.4	7.4	7.4	44.1	23.3	30.1

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.3 Rhode Island

Table F3-1
Rhode Island: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	69.7	66.6	61.5	41.6	32.4	50.0	58.4	69.1	57.2	83.1	62.7	82.0
Pre-3	72.6	63.1	61.3	44.4	31.2	56.7	61.4	55.4	54.6	83.8	71.9	79.2
Pre-2	68.3	79.8	67.0	48.7	64.4	52.4	57.7	49.7	61.3	84.9	91.4	83.2
Pre-1	64.6	51.8	57.5	48.6	49.2	53.8	47.0	46.9	54.6	79.5	82.0	77.4
Post-1	78.8	73.3	65.1	45.5	63.2	51.0	69.3	64.6	66.3	85.3	80.6	86.7
Post-2	78.0	79.1	69.8	44.7	50.4	54.5	70.9	56.2	62.3	82.1	86.0	85.4
Post-3	85.2	82.3	79.2	35.2	48.9	42.8	72.4	81.1	70.7	84.8	82.9	85.5

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	24.2	16.3	30.4	7.9	7.0	8.5	33.6	45.2	38.5	34.4	29.4	33.5
Pre-3	26.1	15.4	24.4	6.2	3.0	9.9	36.9	40.9	38.4	32.8	27.5	32.2
Pre-2	25.3	27.8	29.3	6.7	0.9	5.8	37.3	38.9	39.8	28.6	30.6	30.6
Pre-1	23.1	19.3	25.6	6.6	0.7	9.6	38.3	40.0	39.9	22.5	18.7	18.4
Post-1	30.7	34.1	30.0	3.0	4.1	4.2	34.8	38.2	33.4	30.6	30.9	29.8
Post-2	29.4	28.7	33.0	4.8	4.1	5.8	36.1	41.6	35.5	26.7	29.7	28.0
Post-3	24.8	41.5	30.8	3.3	5.0	5.2	32.5	39.9	34.2	23.7	21.7	22.4

(continued)

Table F3-1 (continued)
Rhode Island: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	32.2	36.3	33.9	20.0	28.3	21.3	70.3	88.2	80.1
Pre-3	33.1	39.8	37.1	22.9	26.6	23.4	70.0	74.1	71.3
Pre-2	27.8	24.3	21.3	15.1	13.4	11.1	69.9	70.7	66.8
Pre-1	30.4	23.1	31.6	16.3	20.8	14.9	68.7	48.4	67.5
Post-1	31.3	42.8	34.5	21.3	30.9	22.9	62.8	54.5	64.0
Post-2	44.0	51.1	42.9	27.9	40.2	31.3	64.9	62.6	62.2
Post-3	27.8	24.3	21.3	15.1	13.4	11.1	64.2	58.9	59.0

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-2a
Rhode Island: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	37.3	36.2	38.1	10.2	12.2	11.9	2.8	2.4	3.0	6.2	8.9	6.7
2009:Q4	37.8	35.6	38.2	10.8	10.8	12.0	2.7	2.9	2.4	6.9	5.6	4.4
2010:Q1	38.7	39.1	39.4	11.0	11.7	12.6	2.8	2.9	3.2	5.7	3.7	7.2
2010:Q2	38.3	37.1	40.8	10.9	11.7	12.9	2.8	3.6	3.2	6.3	7.8	4.5
2010:Q3	37.4	35.1	38.8	11.4	11.1	12.7	2.9	3.7	2.9	5.2	7.6	5.4
2010:Q4	37.8	34.9	37.9	13.2	14.4	14.0	3.0	3.6	3.0	5.1	4.4	5.3
2011:Q1	41.5	38.7	40.6	13.7	14.7	14.8	3.3	3.5	3.4	6.7	5.2	5.0
2011:Q2	41.0	37.0	40.2	14.9	16.2	15.4	3.7	3.9	3.8	5.1	4.2	5.0
2011:Q3	38.6	34.7	39.2	14.2	16.6	14.4	3.7	4.1	3.8	6.7	0.6	2.6
2011:Q4	38.0	36.4	38.5	14.3	14.9	14.5	3.7	4.3	4.1	4.5	4.8	3.5
2012:Q1	39.0	39.1	40.3	15.3	16.6	15.9	4.2	4.7	3.9	4.4	4.6	4.1
2012:Q2	38.0	35.5	39.4	15.1	15.6	15.7	4.3	4.3	4.3	2.4	4.6	2.8
2012:Q3	36.7	34.6	37.9	14.8	17.1	15.1	4.4	3.6	3.8	3.2	1.8	2.2
2012:Q4	37.6	34.9	37.5	13.9	18.1	14.9	4.0	4.5	3.9	2.0	10.8	3.2
2013:Q1	38.0	37.1	38.0	15.7	17.3	16.1	5.1	5.3	4.0	2.2	4.9	3.4
2013:Q2	38.5	37.0	39.1	15.9	17.9	16.8	6.1	5.7	4.1	3.1	0.5	2.5
2013:Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	6.0	3.7
2013:Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	10.6	2.7
2014:Q1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	10.9	3.8
2014:Q2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	8.4	3.0
2014:Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	13.8	5.6
2014:Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—

NOTES:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights
- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F3-2b
Rhode Island: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	76.6	70.6	77.2
Pre-3	77.9	74.1	77.2
Pre-2	77.9	75.1	76.3
Pre-1	73.9	71.1	74.8
Post-1	79.3	74.0	77.5
Post-2	71.5	69.0	72.9
Post-3	68.4	63.8	70.3

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-3a
Rhode Island: Quarterly weighted average Medicaid expenditures for adults

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	222	249	228	75	88	81	20	21	21	17	16	17
2009:Q4	218	227	209	72	69	71	17	16	15	18	15	16
2010:Q1	227	236	223	76	83	77	15	15	15	19	18	18
2010:Q2	232	260	223	78	92	73	17	23	16	18	18	18
2010:Q3	229	230	218	76	77	69	18	15	18	18	16	17
2010:Q4	214	242	209	66	79	64	29	27	26	17	15	16
2011:Q1	210	222	202	63	66	59	27	28	26	17	15	16
2011:Q2	220	229	209	64	57	56	29	27	25	19	17	18
2011:Q3	221	237	219	70	67	72	30	27	27	18	19	16
2011:Q4	204	203	199	54	47	56	28	25	26	21	19	20
2012:Q1	269	298	268	115	135	115	29	27	28	23	21	22
2012:Q2	288	244	284	131	91	138	28	25	26	22	21	22
2012:Q3	291	306	294	135	148	147	30	25	27	21	19	20
2012:Q4	284	297	279	127	118	134	30	30	28	21	20	19
2013:Q1	284	281	275	124	102	127	29	30	27	23	19	21
2013:Q2	287	308	283	127	137	132	31	31	29	23	23	21
2013:Q3	390	389	364	131	122	129	29	30	27	0	0	0
2013:Q4	365	349	350	109	111	119	25	22	24	0	0	0
2014:Q1	322	284	302	96	79	98	23	24	22	0	0	0
2014:Q2	314	326	308	86	116	98	24	23	24	0	0	0
2014:Q3	304	271	307	92	77	104	26	25	25	0	0	0
2014:Q4	253	254	236	63	68	60	12	13	11	0	0	0

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-3b
Rhode Island: Quarterly weighted average Medicaid expenditures for adults

Period	Primary care physician			Prescription			LTC		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	13	11	14	40	41	38	0	0	0
2009:Q4	13	12	13	42	43	40	0	0	0
2010:Q1	14	13	14	42	43	40	0	0	0
2010:Q2	13	12	14	41	42	40	0	0	0
2010:Q3	13	11	13	43	47	42	0	0	0
2010:Q4	13	10	12	42	47	41	0	0	0
2011:Q1	14	11	13	43	45	42	0	0	0
2011:Q2	14	11	13	43	45	41	0	0	0
2011:Q3	13	11	13	41	42	39	0	0	0
2011:Q4	14	11	13	43	43	40	0	0	0
2012:Q1	13	11	13	44	44	42	0	0	0
2012:Q2	12	10	12	43	43	40	0	0	0
2012:Q3	12	10	11	43	42	40	0	0	0
2012:Q4	12	10	11	46	44	41	0	0	0
2013:Q1	13	12	12	45	44	40	0	0	0
2013:Q2	13	12	12	44	43	39	0	0	0
2013:Q3	0	0	0	48	44	42	4	4	3
2013:Q4	0	0	0	48	46	40	4	4	3
2014:Q1	0	0	0	40	35	34	3	4	2
2014:Q2	0	0	0	41	36	33	3	4	3
2014:Q3	0	0	0	43	37	35	3	3	2
2014:Q4	0	0	0	41	35	33	3	3	2

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
    - Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-4
Rhode Island: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.4	4.4	4.8	12.6	12.5	10.9
2009:Q4	4.3	3.9	4.3	10.5	9.4	8.6
2010:Q1	4.1	4.6	4.3	8.5	8.4	8.0
2010:Q2	4.4	5.2	4.1	8.6	10.3	8.0
2010:Q3	4.5	4.1	4.1	8.7	7.4	8.4
2010:Q4	3.9	3.9	3.6	15.0	12.6	12.8
2011:Q1	3.9	4.0	3.6	14.6	13.1	12.7
2011:Q2	4.0	3.7	3.5	14.8	12.5	12.6
2011:Q3	4.2	3.7	4.1	14.8	12.1	12.8
2011:Q4	3.6	2.8	3.6	14.3	11.0	12.2
2012:Q1	3.9	4.4	3.7	14.2	11.6	13.1
2012:Q2	3.7	2.7	3.8	15.0	10.5	13.1
2012:Q3	3.8	4.3	3.9	15.3	12.8	13.4
2012:Q4	3.6	3.5	3.7	14.3	13.1	12.8
2013:Q1	3.6	3.2	3.6	13.1	11.9	12.1
2013:Q2	3.7	3.9	3.6	13.8	12.0	12.5
2013:Q3	3.9	3.8	3.5	14.1	13.7	12.4
2013:Q4	3.3	3.4	3.3	12.0	9.9	11.2
2014:Q1	3.0	2.4	2.9	11.0	9.6	9.8
2014:Q2	2.7	3.3	2.9	11.3	9.9	10.6
2014:Q3	2.9	2.3	3.2	11.2	9.7	10.6
2014:Q4	2.7	3.0	2.5	10.0	8.9	8.9

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-5
Rhode Island: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Multiple chronic conditions only			BH conditions only			Disabled beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	389	400	376	398	511	431	335	491	367
2009:Q4	402	568	323	395	546	363	361	489	378
2010:Q1	381	441	381	429	551	410	363	453	362
2010:Q2	391	493	368	415	488	414	346	510	396
2010:Q3	448	516	416	566	1,043	523	366	575	346
2010:Q4	442	448	424	503	655	444	336	495	344
2011:Q1	476	474	436	498	604	526	333	479	363
2011:Q2	492	513	443	526	619	494	331	474	347
2011:Q3	393	425	378	436	506	395	344	446	345
2011:Q4	381	372	375	442	452	384	314	351	352
2012:Q1	432	549	448	505	650	472	406	586	427
2012:Q2	396	463	403	495	571	403	393	500	433
2012:Q3	432	575	419	551	757	433	450	720	496
2012:Q4	410	594	423	547	782	421	400	502	448
2013:Q1	429	604	419	494	555	446	410	516	433
2013:Q2	443	451	403	519	490	359	425	561	459
2013:Q3	624	876	520	674	816	490	680	594	528
2013:Q4	535	608	517	597	779	542	647	681	549
2014:Q1	535	482	490	612	651	525	623	763	556
2014:Q2	475	429	492	516	655	536	654	751	630
2014:Q3	486	502	460	580	760	524	655	710	555
2014:Q4	404	471	393	505	516	396	586	561	418

(continued)

Table F3-5 (continued)
Rhode Island: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Asthma diagnosis only		
	MAPCP	PCMH	Non-PCMH
2009:Q3	394	506	459
2009:Q4	437	289	450
2010:Q1	397	408	449
2010:Q2	453	428	472
2010:Q3	440	1,046	435
2010:Q4	457	788	444
2011:Q1	443	702	442
2011:Q2	457	447	478
2011:Q3	414	547	350
2011:Q4	446	472	443
2012:Q1	484	608	473
2012:Q2	445	675	488
2012:Q3	447	801	452
2012:Q4	499	553	509
2013:Q1	449	381	464
2013:Q2	418	559	490
2013:Q3	617	634	581
2013:Q4	581	675	590
2014:Q1	612	602	542
2014:Q2	552	506	602
2014:Q3	556	701	523
2014:Q4	503	779	484

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-6
Rhode Island: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	75.0	78.1	59.0	52.9	35.8	59.4	66.2	87.7	56.6	88.2	75.8	88.0
Pre-3	75.0	80.0	62.9	52.9	24.5	56.8	60.6	77.8	56.5	88.5	83.8	80.5
Pre-2	71.8	71.1	71.1	56.4	61.7	60.1	59.7	42.3	65.2	89.3	92.7	86.9
Pre-1	63.1	38.0	60.9	47.7	43.2	64.7	46.2	44.6	57.1	84.1	82.0	79.0
Post-1	78.8	70.5	65.5	48.9	67.3	58.6	71.5	52.2	68.7	88.3	89.7	90.3
Post-2	80.8	90.6	70.3	53.4	63.1	63.7	75.3	69.2	65.4	86.3	97.7	90.7
Post-3	84.1	92.7	79.5	38.1	59.7	44.4	74.6	79.1	70.6	87.3	97.9	86.4

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	27.9	32.0	33.5	4.4	0.0	5.3	48.3	69.6	51.7	39.1	28.4	36.3
Pre-3	27.9	16.2	23.9	1.9	0.0	10.3	46.9	66.6	52.8	39.5	29.7	37.3
Pre-2	28.2	29.9	33.6	2.0	0.8	3.7	47.0	56.8	53.4	31.9	34.0	37.9
Pre-1	21.5	18.3	29.2	4.1	1.1	6.0	52.8	68.9	53.7	26.9	20.3	25.1
Post-1	30.7	17.7	35.3	1.5	0.0	1.6	47.4	59.2	52.0	36.4	43.6	36.7
Post-2	38.4	56.6	44.6	5.5	0.0	5.3	48.0	69.9	48.3	32.9	42.0	35.0
Post-3	28.6	56.5	33.1	1.6	0.0	5.0	37.6	61.0	42.0	25.5	23.4	28.2

(continued)

Table F3-6 (continued)
Rhode Island: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	33.9	40.7	34.8	21.1	32.7	27.0	76.0	95.0	89.3
Pre-3	36.0	62.4	38.9	25.9	48.5	26.2	73.6	87.1	76.1
Pre-2	28.0	16.9	17.4	17.1	14.9	11.7	71.9	85.6	71.9
Pre-1	31.0	25.8	28.1	14.7	25.6	15.3	77.3	48.9	69.3
Post-1	40.1	36.8	39.2	30.4	33.9	30.8	72.9	52.5	73.5
Post-2	26.5	61.6	32.5	21.1	44.7	20.4	76.4	71.9	69.4
Post-3	40.5	63.1	42.0	29.0	63.1	31.6	70.0	75.0	56.5

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-7a
Rhode Island: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	55.7	57.2	59.6	20.5	25.7	23.5	7.2	8.2	6.5	10.0	1.9	9.4
2009:Q4	56.7	53.9	57.7	21.7	21.3	23.8	6.5	11.2	4.8	17.6	14.6	9.0
2010:Q1	60.2	55.7	64.8	21.8	21.2	25.4	6.8	9.8	7.0	8.4	1.2	10.4
2010:Q2	60.7	53.0	65.6	22.5	22.0	27.1	6.9	10.6	8.4	7.2	24.5	8.6
2010:Q3	63.3	60.8	66.6	25.5	26.4	27.7	7.6	10.6	7.4	8.6	25.9	10.3
2010:Q4	64.2	61.3	67.9	28.8	27.8	30.6	8.9	11.1	9.6	8.8	0.2	12.1
2011:Q1	71.7	63.8	71.6	30.3	37.8	33.1	10.6	10.0	9.9	11.2	15.7	7.0
2011:Q2	70.4	63.2	71.5	32.5	33.3	34.4	11.2	11.8	10.6	10.1	0.0	7.0
2011:Q3	61.6	55.9	65.1	29.4	34.5	30.7	10.2	12.7	8.7	13.4	0.0	4.0
2011:Q4	58.8	57.9	63.6	29.0	33.1	30.7	9.8	13.9	10.9	7.0	4.0	4.2
2012:Q1	60.2	65.6	65.7	31.3	34.5	32.9	11.0	12.2	10.1	7.0	17.2	9.2
2012:Q2	59.9	53.7	64.9	31.0	31.0	32.0	9.8	13.2	10.7	3.0	0.0	2.2
2012:Q3	56.3	53.9	62.7	28.5	32.9	31.0	10.4	8.8	10.2	4.8	0.0	4.2
2012:Q4	58.4	45.3	60.6	28.7	32.0	30.7	10.1	8.9	9.6	3.4	31.0	4.7
2013:Q1	57.7	57.9	61.7	31.4	34.9	33.2	11.5	11.2	9.4	10.1	1.2	7.5
2013:Q2	59.0	58.1	62.2	31.7	38.3	34.2	12.4	15.3	11.4	3.8	0.0	11.3
2013:Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0	4.5
2013:Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	2.5	8.8
2014:Q1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.8	5.8
2014:Q2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	1.9
2014:Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	6.2
2014:Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—

NOTES:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F3-7b
Rhode Island: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	72.2	62.7	73.6
Pre-3	73.8	70.1	73.7
Pre-2	74.3	67.1	74.0
Pre-1	70.3	65.3	71.8
Post-1	74.1	53.8	70.7
Post-2	66.6	63.0	68.7
Post-3	64.0	59.1	67.0

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-8a
Rhode Island: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	374	380	363	99	100	104	37	29	32	30	31	30
2009:Q4	374	496	307	102	196	71	31	25	23	31	32	29
2010:Q1	366	417	360	84	134	99	24	30	24	33	36	32
2010:Q2	385	474	358	91	163	87	31	37	25	31	30	33
2010:Q3	433	480	399	115	128	98	32	38	32	36	36	35
2010:Q4	415	416	398	100	117	97	55	39	46	34	28	34
2011:Q1	448	463	405	126	127	103	56	56	44	35	33	34
2011:Q2	464	491	423	121	92	79	54	60	45	40	34	38
2011:Q3	384	413	370	86	84	72	50	60	44	32	40	34
2011:Q4	364	357	357	73	41	67	51	49	43	36	36	36
2012:Q1	428	541	443	124	173	125	53	63	44	40	44	41
2012:Q2	397	465	406	87	78	105	49	61	40	37	42	38
2012:Q3	425	556	410	130	169	109	55	49	47	35	34	35
2012:Q4	407	585	420	109	137	127	51	73	47	35	32	34
2013:Q1	423	589	413	120	142	107	52	83	46	37	34	38
2013:Q2	438	447	397	130	82	121	55	70	41	40	42	39
2013:Q3	617	858	514	140	216	82	52	71	39	0	0	0
2013:Q4	535	609	518	74	95	83	42	44	39	0	0	0
2014:Q1	528	477	483	98	50	92	39	41	37	0	0	0
2014:Q2	472	423	489	82	79	83	38	37	42	0	0	0
2014:Q3	486	503	461	99	130	76	45	36	42	0	0	0
2014:Q4	404	469	392	45	81	55	22	32	19	0	0	0

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-8b
Rhode Island: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Primary care physician			Prescription			LTC		
	MAPCP	PCMH	MAPCP	MAPCP	MAPCP	Non-PCMH	MAPCP	MAPCP	Non-PCMH
2009:Q3	21	20	23	85	98	81	0	0	0
2009:Q4	22	20	22	89	97	84	0	0	0
2010:Q1	24	22	26	92	104	85	0	0	0
2010:Q2	26	18	26	92	91	89	0	0	0
2010:Q3	25	22	27	97	118	94	0	0	0
2010:Q4	26	23	26	99	105	96	0	0	0
2011:Q1	28	22	28	104	114	103	0	0	0
2011:Q2	29	22	27	107	125	104	0	0	0
2011:Q3	23	19	25	102	114	99	0	0	0
2011:Q4	22	21	24	107	121	103	0	0	0
2012:Q1	22	19	23	111	124	107	0	0	0
2012:Q2	22	16	23	110	113	99	0	0	0
2012:Q3	19	18	21	108	104	100	0	0	0
2012:Q4	20	16	22	113	121	99	0	0	0
2013:Q1	20	21	21	112	108	97	0	0	0
2013:Q2	21	20	21	107	106	93	0	0	0
2013:Q3	0	0	0	115	123	100	7	8	7
2013:Q4	0	0	0	110	118	95	7	8	6
2014:Q1	0	0	0	98	92	86	6	8	6
2014:Q2	0	0	0	96	94	82	6	9	5
2014:Q3	0	0	0	102	100	85	6	6	5
2014:Q4	0	0	0	98	90	80	7	7	6

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.

LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-9
Rhode Island: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations			Asthma inpatient admissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.2	4.9	5.9	18.4	16.3	14.9	0.9	1.0	0.9
2009:Q4	5.4	7.9	3.8	16.1	14.5	11.0	0.7	0.0	0.6
2010:Q1	4.4	5.3	4.6	12.6	15.7	11.9	0.6	0.1	0.4
2010:Q2	5.1	8.1	4.5	13.5	13.7	10.8	0.9	1.1	0.6
2010:Q3	6.6	7.1	5.5	13.9	13.7	13.4	1.0	0.3	0.8
2010:Q4	5.5	5.9	5.0	24.1	16.6	20.7	1.1	0.6	0.8
2011:Q1	7.3	7.2	5.3	24.5	24.6	20.5	1.4	1.1	0.7
2011:Q2	6.4	6.0	4.3	23.6	22.1	19.3	1.4	1.2	0.9
2011:Q3	4.8	3.9	3.8	21.1	22.5	18.3	0.6	0.2	0.6
2011:Q4	4.4	2.0	4.0	21.4	18.2	18.1	0.7	0.0	0.4
2012:Q1	4.7	6.1	4.1	21.6	22.1	18.9	1.0	1.0	1.0
2012:Q2	3.4	3.3	3.8	22.1	23.4	19.0	0.4	0.1	0.2
2012:Q3	4.3	6.9	3.3	23.6	22.8	21.0	0.6	1.4	0.4
2012:Q4	3.4	6.8	4.3	21.5	26.4	18.9	0.6	1.5	0.6
2013:Q1	3.7	5.7	4.3	19.4	26.3	16.8	0.6	0.4	0.6
2013:Q2	4.4	3.3	3.8	22.1	23.6	16.3	0.7	0.2	0.8
2013:Q3	4.6	6.7	2.7	22.0	25.1	17.0	0.1	0.0	0.1
2013:Q4	2.9	3.4	3.0	18.8	18.1	17.1	0.3	0.6	0.2
2014:Q1	3.9	1.9	3.2	16.8	14.2	14.8	0.3	0.0	0.1
2014:Q2	3.4	2.7	3.2	16.7	13.8	16.6	0.4	0.0	0.4
2014:Q3	3.4	3.6	3.3	17.7	14.0	17.0	0.3	0.0	0.2
2014:Q4	2.7	4.3	3.1	16.0	16.4	12.9	0.1	0.0	0.0

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-10
Rhode Island: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are adults

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	398	511	431	131	206	146	47	32	46	167	291	177
2009:Q4	395	546	363	129	247	116	32	40	31	161	264	136
2010:Q1	429	551	410	144	259	140	30	26	36	187	309	162
2010:Q2	415	488	414	121	222	135	39	40	36	183	256	182
2010:Q3	566	1,043	523	233	636	220	46	47	49	303	684	294
2010:Q4	503	655	444	182	262	158	72	69	63	254	406	226
2011:Q1	498	604	526	173	228	213	71	66	65	283	367	293
2011:Q2	526	619	494	190	230	177	71	107	61	319	440	298
2011:Q3	436	506	395	126	102	90	70	120	63	218	264	186
2011:Q4	442	452	384	117	106	88	75	77	60	221	230	195
2012:Q1	505	650	472	168	234	157	70	76	61	250	309	210
2012:Q2	495	571	403	150	150	130	76	102	61	241	327	199
2012:Q3	551	757	433	188	293	127	80	92	64	257	308	209
2012:Q4	547	782	421	193	227	142	77	102	55	242	227	169
2013:Q1	494	555	446	145	104	137	75	101	64	238	298	218
2013:Q2	519	490	359	176	120	100	73	121	51	261	239	162
2013:Q3	674	816	490	169	167	82	64	97	50	164	170	114
2013:Q4	597	779	542	114	200	104	53	64	52	144	161	129
2014:Q1	612	651	525	150	112	120	50	75	52	133	167	137
2014:Q2	516	655	536	85	269	121	46	55	52	129	141	116
2014:Q3	580	760	524	135	280	128	61	108	51	124	184	105
2014:Q4	505	516	396	99	161	65	25	46	25	100	134	83

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-11
Rhode Island: Quarterly weighted average utilization among beneficiaries with behavioral health conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	6.0	9.5	6.9	19.7	17.0	18.9	3.3	8.7	3.6	5.4	4.9	6.5	24.0	17.1	24.2
2009:Q4	6.1	6.5	5.2	16.8	20.1	13.6	3.1	5.0	2.9	4.7	5.8	4.8	23.3	27.4	25.0
2010:Q1	6.4	8.6	6.4	13.5	19.0	16.2	3.7	5.1	3.0	4.1	5.5	5.4	26.5	23.9	26.6
2010:Q2	5.7	6.3	5.9	15.8	15.9	14.9	3.1	5.2	3.6	5.2	3.1	5.2	25.1	21.1	30.8
2010:Q3	10.6	18.8	9.5	16.1	20.4	17.3	8.6	15.2	7.7	5.3	10.0	7.4	30.9	29.4	36.1
2010:Q4	8.0	12.3	7.3	26.0	25.6	23.4	6.1	10.8	5.4	9.2	11.3	8.4	34.6	43.1	38.0
2011:Q1	8.2	11.6	9.0	25.8	29.6	23.5	6.7	10.7	6.6	9.9	12.0	8.2	40.4	46.2	44.9
2011:Q2	8.7	12.7	8.0	24.7	27.4	22.0	7.4	10.8	6.8	9.1	11.9	9.3	43.0	48.2	46.2
2011:Q3	5.9	7.7	4.4	24.6	26.1	20.1	3.8	5.1	2.6	8.5	11.7	6.2	38.0	32.1	35.6
2011:Q4	5.9	4.2	4.8	24.5	19.6	20.4	4.6	3.2	3.1	8.7	11.0	8.2	33.4	34.2	35.3
2012:Q1	6.3	8.6	5.5	24.6	18.9	22.7	4.9	6.8	2.8	10.7	10.6	9.7	34.0	33.4	37.4
2012:Q2	5.8	5.8	5.2	24.9	23.6	22.2	4.1	4.5	3.2	10.1	14.8	7.9	35.5	31.5	36.6
2012:Q3	6.6	12.1	3.8	26.5	25.9	22.8	4.7	9.6	2.5	11.7	12.9	10.4	35.0	32.1	35.3
2012:Q4	6.1	9.3	4.6	25.1	27.9	20.2	4.5	4.9	2.9	9.3	11.1	7.2	31.7	26.8	33.7
2013:Q1	5.1	6.0	4.8	22.4	22.9	20.7	3.7	3.9	2.9	9.9	11.3	8.6	43.4	48.7	41.5
2013:Q2	6.6	6.3	3.5	23.9	24.2	17.9	5.2	5.3	2.0	11.1	12.5	6.9	46.4	35.7	42.4
2013:Q3	6.2	5.4	3.1	23.4	31.3	17.6	3.2	3.0	1.7	6.1	8.1	4.0	40.5	37.5	34.6
2013:Q4	4.3	7.2	3.6	21.1	18.9	19.7	2.1	2.4	2.1	6.1	6.8	4.6	35.3	32.4	31.8
2014:Q1	5.0	4.0	4.4	18.9	21.9	18.3	2.1	2.2	2.2	5.2	9.1	5.4	34.7	30.4	29.0
2014:Q2	3.2	7.6	4.3	18.7	16.9	18.3	2.0	2.3	1.8	5.5	5.5	5.8	33.4	24.0	28.3
2014:Q3	4.5	7.6	4.3	19.8	21.5	16.3	2.0	4.0	1.8	5.7	4.0	4.0	31.3	32.6	29.5
2014:Q4	4.5	7.1	3.1	16.3	16.9	15.0	2.3	2.8	1.3	3.0	2.4	3.0	30.0	24.6	26.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F3-12
Rhode Island: Quarterly weighted average expenditures and utilization among disabled beneficiaries

Period	Total Medicaid expenditures			Acute-care expenditures			ER visits not leading to hospitalization expenditures			Specialty physician expenditures			Primary care physician expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	318	442	345	114	159	128	27	31	32	16	22	16	14	10	14
2009:Q4	331	427	336	122	131	123	25	30	26	18	18	14	15	15	14
2010:Q1	342	412	338	121	169	129	22	14	24	18	19	15	16	12	13
2010:Q2	333	466	366	112	172	145	25	37	26	15	18	14	14	12	15
2010:Q3	342	456	321	128	207	107	27	17	26	16	16	14	13	14	13
2010:Q4	317	435	315	101	157	99	43	32	40	15	12	13	15	11	13
2011:Q1	306	408	326	106	140	107	36	34	41	15	8	15	13	13	14
2011:Q2	309	438	321	84	115	94	43	58	41	18	14	16	14	10	13
2011:Q3	330	421	331	116	135	97	45	35	43	16	17	15	13	10	12
2011:Q4	295	331	321	82	66	97	42	32	41	19	21	18	14	13	12
2012:Q1	393	565	415	170	278	180	43	36	41	23	18	22	13	8	14
2012:Q2	385	480	417	163	174	183	39	43	39	21	23	21	14	12	12
2012:Q3	432	638	466	207	340	239	44	36	42	21	18	20	13	13	11
2012:Q4	393	489	436	168	166	197	40	40	43	21	21	17	12	11	11
2013:Q1	396	492	413	178	190	187	42	60	39	21	18	20	13	12	12
2013:Q2	404	526	434	179	252	198	43	39	47	21	20	23	13	9	12
2013:Q3	655	569	510	211	155	159	50	49	42	0	0	0	0	0	0
2013:Q4	626	639	527	178	224	150	43	41	43	0	0	0	0	0	0
2014:Q1	594	676	533	151	287	145	42	49	42	0	0	0	0	0	0
2014:Q2	615	703	588	154	228	179	39	62	42	0	0	0	0	0	0
2014:Q3	606	642	506	170	222	160	60	78	50	0	0	0	0	0	0
2014:Q4	538	510	394	104	128	58	20	31	17	0	0	0	0	0	0

(continued)

Table F3-12 (continued)
Rhode Island: Quarterly weighted average expenditures and utilization among disabled beneficiaries

Period	All-cause admissions			ER visits not leading to hospitalization		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	6.6	8.5	7.2	17.0	17.9	16.2
2009:Q4	7.2	6.1	6.7	15.1	16.2	12.9
2010:Q1	6.3	8.0	6.9	12.4	10.7	12.2
2010:Q2	6.2	8.2	7.5	12.9	16.2	12.4
2010:Q3	7.5	9.8	6.2	12.6	10.4	11.2
2010:Q4	6.0	8.3	5.6	20.9	17.8	19.0
2011:Q1	6.6	6.5	6.2	18.7	17.4	18.9
2011:Q2	5.0	6.8	5.2	20.8	20.0	19.4
2011:Q3	6.2	6.9	5.5	21.3	14.5	19.4
2011:Q4	5.3	3.2	5.8	20.0	16.6	17.2
2012:Q1	5.4	9.6	5.7	19.7	16.7	18.4
2012:Q2	4.7	5.6	5.1	18.9	16.1	19.2
2012:Q3	5.8	10.4	6.3	20.6	15.7	19.0
2012:Q4	5.0	3.7	5.4	18.6	17.0	17.5
2013:Q1	5.2	6.0	5.1	17.5	19.9	17.0
2013:Q2	5.3	7.1	5.4	18.3	15.2	18.6
2013:Q3	6.6	6.2	4.3	21.9	22.2	18.3
2013:Q4	5.6	6.7	4.4	19.8	15.7	17.8
2014:Q1	5.2	8.8	4.5	19.1	16.3	16.7
2014:Q2	5.2	8.0	5.9	16.9	22.8	17.3
2014:Q3	5.9	6.1	5.1	17.9	19.1	15.1
2014:Q4	4.1	6.0	2.8	15.2	14.5	12.5

NOTES:

- Provider specialty information was not well reported in the Medicaid managed care encounter data beginning in Year Three of the demonstration period; thus, Year Three estimates for primary care visits, medical specialist visits, and surgical specialist visits could not be calculated.
- Numbers represent average expenditures and the percentage of beneficiaries who had any utilizations. Means and percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.4 North Carolina

Table F4-1
North Carolina: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

Period	Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH
Pre-2	82.3	91.4	84.2
Pre-1	70.2	86.3	79.0
Post-1	69.2	80.7	79.0

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-2
North Carolina: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	86.9	89.5	80.6	48.0	34.9	42.5	79.3	72.3	73.0	84.0	78.4	83.6
Pre-1	88.7	89.8	86.6	49.2	50.2	45.0	83.0	76.8	77.6	84.8	80.9	82.0
Post-1	86.6	84.1	88.3	40.9	37.2	29.5	78.1	70.4	76.4	84.8	90.4	84.8

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	33.3	25.2	30.1	1.4	1.5	4.1	32.8	29.5	31.6	29.4	28.8	28.2
Pre-1	36.3	37.2	33.1	1.6	1.3	3.3	31.9	32.1	32.6	30.3	25.5	28.4
Post-1	28.9	25.1	22.9	1.9	1.7	3.0	31.0	35.1	36.8	26.4	27.3	25.9

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	33.1	31.3	35.0	28.6	22.7	23.7	74.4	86.2	67.9
Pre-1	42.8	51.1	36.2	30.2	43.8	30.0	70.8	65.2	66.3
Post-1	36.1	33.1	32.6	27.4	19.6	23.8	64.5	69.7	67.9

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-3
North Carolina: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits			Medical specialist visits			Surgical specialist visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	35.7	53.5	52.8	4.0	4.6	5.2	1.2	0.9	1.0
2010:Q1	34.2	51.2	50.8	5.1	5.5	5.9	1.4	0.8	1.0
2010:Q2	32.7	48.7	46.1	5.1	4.4	5.7	1.3	1.1	1.0
2010:Q3	36.4	49.0	48.7	4.9	4.5	5.4	1.4	0.9	0.9
2010:Q4	34.0	49.8	47.6	4.6	4.3	5.1	1.3	0.8	1.2
2011:Q1	38.6	49.7	52.8	4.9	3.8	5.0	1.5	0.8	1.0
2011:Q2	33.6	41.8	44.6	4.7	3.9	5.0	1.3	0.6	0.9
2011:Q3	36.6	44.0	46.2	4.2	4.3	4.8	1.5	0.7	0.9
2011:Q4	35.3	44.1	46.8	3.8	3.7	4.6	1.5	0.7	0.9
2012:Q1	36.6	47.5	51.0	3.9	4.2	5.0	1.5	0.7	0.9
2012:Q2	32.9	42.6	45.9	4.1	3.4	4.6	1.2	0.6	0.5
2012:Q3	36.4	43.9	47.5	3.5	2.7	4.0	1.3	0.6	0.3
2012:Q4	34.7	47.6	44.3	3.4	2.9	3.8	1.3	0.5	0.2
2013:Q1	34.3	46.5	35.9	3.7	2.9	3.7	1.2	0.4	0.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-4a
North Carolina: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	35.6	33.8	35.9	13.1	15.2	13.8	8.5	8.4	6.9	10.1	3.4	9.7
2010:Q1	36.5	38.3	37.1	14.8	16.7	15.3	9.6	8.6	8.1	9.5	9.2	7.5
2010:Q2	36.4	36.4	36.0	15.7	18.6	15.0	9.6	9.4	8.4	9.5	9.6	12.4
2010:Q3	36.3	36.5	36.3	14.1	16.4	14.9	9.7	8.9	8.9	10.6	8.7	7.9
2010:Q4	36.7	37.5	36.9	13.5	15.1	14.1	9.9	9.5	8.5	7.0	10.6	8.4
2011:Q1	42.7	41.2	39.6	13.6	14.8	14.8	10.3	9.2	8.5	9.3	10.1	8.0
2011:Q2	41.2	39.0	38.2	13.2	13.0	13.8	9.9	9.1	7.6	12.1	8.0	7.8
2011:Q3	42.3	40.1	39.3	13.1	13.3	13.8	10.4	9.1	8.3	7.6	7.1	12.6
2011:Q4	42.7	41.7	39.2	12.4	12.6	13.7	10.5	9.2	7.9	11.1	2.9	11.8
2012:Q1	45.5	45.4	41.7	13.7	14.1	14.5	9.6	9.9	8.8	8.9	9.9	9.3
2012:Q2	44.6	44.4	41.2	12.5	15.2	14.0	9.4	8.8	7.1	9.7	7.1	12.7
2012:Q3	44.4	44.9	42.2	12.3	13.1	14.3	9.4	6.0	5.3	9.9	8.7	9.6
2012:Q4	43.9	49.2	44.2	12.4	12.6	14.1	9.1	4.3	5.0	14.3	15.9	9.1
2013:Q1	44.9	48.7	44.8	11.6	13.0	14.4	9.1	4.4	4.7	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F4-4b
North Carolina: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-2	65.6	62.8	66.7
Pre-1	70.0	69.8	69.6
Post-1	72.8	71.8	70.7

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-5
North Carolina: Quarterly weighted average Medicaid expenditures for children

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	219	259	247	9.3	9.5	8.3	13.7	11.7	11.5	27.3	29.5	27.6
2010:Q1	230	275	247	13.9	13.3	11.2	13.2	11.9	12.8	30.3	31.5	29.9
2010:Q2	206	247	231	7.4	8.6	7.9	13.1	12.4	12.1	28.0	30.3	28.9
2010:Q3	216	240	228	10.5	10.6	8.8	12.0	11.9	11.3	28.5	29.5	27.6
2010:Q4	208	229	230	10.7	9.8	9.7	13.2	13.6	11.3	26.4	30.8	27.5
2011:Q1	225	237	245	12.9	9.5	10.1	15.1	12.8	14.3	28.3	29.5	29.2
2011:Q2	206	227	225	10.6	10.9	8.8	14.0	12.1	12.6	27.6	28.7	28.7
2011:Q3	210	227	224	11.9	9.4	9.5	13.4	11.4	12.8	28.6	31.7	28.3
2011:Q4	216	228	226	8.8	7.4	7.6	16.1	12.6	13.5	27.4	28.4	28.6
2012:Q1	260	296	280	8.1	10.0	8.1	27.1	24.2	23.8	27.7	31.4	29.9
2012:Q2	208	236	233	7.3	8.5	8.4	15.0	13.5	14.4	26.9	27.6	27.2
2012:Q3	208	214	217	8.7	7.5	8.2	14.4	12.7	14.5	26.6	26.6	26.9
2012:Q4	205	207	215	6.0	6.2	6.0	15.6	14.2	16.2	24.9	25.8	28.1
2013:Q1	154	168	162	4.9	3.5	4.0	15.1	15.2	14.2	25.3	26.7	24.9

(continued)

Table F4-5 (continued)
North Carolina: Quarterly weighted average Medicaid expenditures for children

Period	Primary care physician			Prescription			LTC		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	26.3	33.2	31.9	34.3	45.1	41.9	5.2	7.6	7.9
2010:Q1	26.3	33.6	32.2	35.4	47.0	41.2	5.2	7.9	7.9
2010:Q2	23.5	29.9	27.3	33.2	43.7	39.0	5.4	8.2	9.0
2010:Q3	25.8	30.4	28.6	32.8	41.7	37.2	6.2	8.5	9.3
2010:Q4	26.0	32.1	29.6	33.7	45.6	39.5	5.0	8.3	8.4
2011:Q1	31.4	36.7	35.2	37.9	49.5	44.8	5.2	7.1	8.5
2011:Q2	26.1	32.1	28.9	33.2	43.7	39.7	4.7	6.2	8.2
2011:Q3	26.2	30.6	29.4	31.3	44.3	37.9	4.7	6.1	7.3
2011:Q4	28.3	33.0	32.3	34.9	45.6	42.3	4.2	6.0	6.8
2012:Q1	30.9	37.4	36.6	40.4	51.9	47.1	4.6	7.0	7.6
2012:Q2	26.3	32.4	32.8	35.5	47.0	42.4	4.5	6.3	6.2
2012:Q3	28.2	32.7	32.9	34.5	44.8	40.9	3.1	3.6	4.8
2012:Q4	28.2	35.6	35.2	35.9	39.1	41.4	3.6	3.6	5.3
2013:Q1	27.7	33.4	30.2	37.1	39.3	40.9	1.1	2.0	3.0

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-6
North Carolina: Quarterly weighted average Medicaid expenditures for adults

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	694	686	689	40.8	38.5	44.4	32.1	44.2	45.7	69.4	72.8	69.2
2010:Q1	716	718	713	46.1	40.4	56.1	34.5	51.2	55.2	69.9	78.5	72.2
2010:Q2	732	710	726	45.9	39.8	52.9	39.9	50.1	58.5	70.3	75.7	72.3
2010:Q3	742	731	741	52.5	45.5	56.6	39.1	51.4	57.8	72.9	72.5	77.7
2010:Q4	692	692	689	46.5	43.0	52.4	38.8	48.3	51.6	68.8	70.6	71.2
2011:Q1	697	711	704	45.9	49.2	56.6	41.3	50.0	52.7	68.9	69.8	72.6
2011:Q2	703	707	716	47.4	45.5	59.5	42.8	49.9	59.2	70.7	64.8	69.5
2011:Q3	715	706	700	51.9	37.8	56.9	45.7	54.0	59.7	70.3	64.6	71.6
2011:Q4	699	717	710	39.7	45.7	43.9	45.3	56.1	56.4	64.8	64.4	66.9
2012:Q1	886	895	880	43.8	40.6	48.9	77.9	91.1	103.7	66.1	70.6	68.3
2012:Q2	741	749	738	47.3	45.8	51.8	49.8	57.1	65.7	65.8	63.9	63.4
2012:Q3	708	733	708	41.2	33.0	46.7	49.9	58.2	64.2	62.4	59.5	60.8
2012:Q4	673	656	629	34.2	25.2	31.4	46.1	49.9	54.4	60.2	57.8	59.2
2013:Q1	580	585	559	27.4	21.1	30.9	40.9	43.5	52.2	53.8	53.4	51.6

(continued)

Table F4-6 (continued)
North Carolina: Quarterly weighted average Medicaid expenditures for adults

Period	Primary care physician			Prescription			LTC		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	49.9	55.5	53.1	159	161	149	70.9	39.6	45.5
2010:Q1	52.7	59.4	55.7	161	166	153	71.7	40.6	44.6
2010:Q2	53.6	56.2	53.2	169	172	158	68.2	41.4	42.7
2010:Q3	58.1	61.9	59.7	171	174	164	62.5	36.8	38.0
2010:Q4	55.1	60.8	58.4	164	170	157	53.5	34.8	33.6
2011:Q1	59.0	64.8	63.4	171	184	167	49.1	31.1	31.2
2011:Q2	60.3	66.1	65.4	164	182	165	44.6	29.1	29.4
2011:Q3	62.5	67.3	66.6	162	176	161	40.8	28.1	26.9
2011:Q4	63.8	71.1	68.4	165	191	175	42.4	28.2	27.1
2012:Q1	73.6	77.1	79.5	182	195	190	43.7	33.5	27.3
2012:Q2	72.7	76.0	80.4	170	187	173	42.3	31.9	24.1
2012:Q3	73.7	80.2	80.6	165	185	172	34.9	21.9	20.8
2012:Q4	72.6	76.0	75.7	154	168	152	40.3	28.3	23.3
2013:Q1	68.0	68.7	71.3	152	168	147	31.0	24.6	20.3

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-7a
North Carolina: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	2.0	2.0	1.7	14.7	13.1	12.7
2010:Q1	2.5	2.5	2.2	13.6	12.7	12.4
2010:Q2	1.5	1.8	1.6	13.6	13.2	12.2
2010:Q3	2.0	2.2	1.6	13.1	11.3	11.2
2010:Q4	2.1	2.0	1.9	12.9	13.7	11.4
2011:Q1	2.4	2.0	1.8	14.2	12.9	13.5
2011:Q2	2.1	2.0	1.7	13.7	13.4	12.3
2011:Q3	2.1	1.8	1.8	12.8	11.0	11.6
2011:Q4	1.6	1.5	1.4	13.9	12.4	12.1
2012:Q1	1.5	1.7	1.5	14.5	13.5	13.0
2012:Q2	1.3	1.5	1.5	14.1	13.1	12.9
2012:Q3	1.4	1.4	1.4	12.8	12.4	13.3
2012:Q4	1.1	1.2	1.1	14.1	13.3	15.3
2013:Q1	0.8	0.7	0.7	13.3	13.6	13.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-7b
North Carolina: Average percent of births with low birth weights: Four quarter intervals preceding and following assignment for children

Period	Low birth weight		
	MAPCP	PCMH	Non-PCMH
Pre-2	9.2	5.6	7.1
Pre-1	5.3	5.6	7.1
Post-1	13.1	12.4	10.9

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-8
North Carolina: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	5.8	5.7	6.5	20.7	25.8	26.5
2010:Q1	5.9	5.1	7.2	19.9	27.3	28.7
2010:Q2	6.3	5.2	7.1	21.3	25.7	28.5
2010:Q3	6.4	5.7	7.1	21.9	25.6	28.3
2010:Q4	6.1	5.6	7.0	21.5	26.3	26.5
2011:Q1	5.8	5.9	7.3	22.8	25.2	27.3
2011:Q2	6.0	5.8	7.6	22.2	26.4	27.8
2011:Q3	6.6	4.9	7.1	23.6	26.3	28.8
2011:Q4	5.8	6.6	6.2	22.3	24.6	26.3
2012:Q1	6.3	5.6	7.0	22.1	25.4	28.4
2012:Q2	6.5	6.1	7.2	23.4	26.7	29.0
2012:Q3	5.6	4.9	6.6	22.6	28.4	28.9
2012:Q4	5.3	4.2	5.0	22.2	25.4	27.5
2013:Q1	4.8	3.8	5.5	19.6	21.2	26.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-9
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Multiple chronic conditions only			BH conditions only			Disabled beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	639	921	753	614	939	947	856	1,066	1,144
2010:Q1	692	940	791	832	1,087	918	882	1,060	1,163
2010:Q2	659	939	794	810	1,077	942	805	999	1,058
2010:Q3	737	923	815	889	1,045	1,029	878	1,031	1,089
2010:Q4	797	897	826	921	1,206	1,119	817	942	999
2011:Q1	816	958	900	1,109	1,175	1,223	811	1,027	1,069
2011:Q2	742	933	864	1,021	1,303	1,240	795	1,046	1,057
2011:Q3	836	1,055	893	1,076	1,545	1,195	900	1,030	1,069
2011:Q4	801	924	829	1,171	1,215	1,128	882	982	1,045
2012:Q1	940	1,187	936	1,154	1,397	1,260	1,041	1,294	1,130
2012:Q2	697	983	772	904	1,358	1,043	845	986	1,009
2012:Q3	682	810	710	848	936	976	888	898	960
2012:Q4	694	770	686	779	790	917	868	840	872
2013:Q1	485	632	508	381	404	424	476	633	565

(continued)

Table F4-9 (continued)
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Rural beneficiaries only			Non-White beneficiaries only			Asthma diagnosis only		
	MAPCP	PCMH	MAPCP	MAPCP	MAPCP	Non-PCMH	PCMH	PCMH	Non-PCMH
2009:Q4	230	300	312	212	254	256	540	629	477
2010:Q1	241	301	322	218	265	246	534	656	499
2010:Q2	210	276	287	190	227	228	491	567	507
2010:Q3	215	225	247	198	225	233	497	575	480
2010:Q4	206	208	273	181	198	235	452	443	467
2011:Q1	229	229	257	196	217	242	449	497	456
2011:Q2	206	222	263	180	201	219	424	465	436
2011:Q3	208	199	258	194	209	223	482	582	498
2011:Q4	211	227	247	201	211	226	460	484	471
2012:Q1	268	268	287	245	275	287	521	613	530
2012:Q2	220	232	265	195	214	233	425	497	437
2012:Q3	220	176	204	202	201	217	431	479	378
2012:Q4	208	180	182	201	199	212	416	450	379
2013:Q1	149	116	184	136	144	148	309	303	293

(continued)

Table F4-9 (continued)
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Network 1			Network 2			Network 3		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	193	259	247	190	259	247	236	259	247
2010:Q1	197	274	247	196	274	247	249	275	247
2010:Q2	210	246	230	206	246	230	211	247	230
2010:Q3	214	239	228	199	239	228	220	240	228
2010:Q4	201	228	229	211	228	229	217	229	230
2011:Q1	208	237	245	253	237	245	234	237	245
2011:Q2	205	227	225	229	227	225	209	227	225
2011:Q3	203	227	224	207	226	223	213	227	224
2011:Q4	211	228	225	226	227	225	224	228	225
2012:Q1	267	295	280	247	295	279	280	295	280
2012:Q2	188	236	233	158	236	233	229	236	233
2012:Q3	168	214	216	137	213	216	231	214	217
2012:Q4	160	207	215	148	207	214	233	207	215
2013:Q1	156	167	161	141	167	161	159	167	162

(continued)

Table F4-9 (continued)
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Network 4		
	MAPCP	PCMH	Non-PCMH
2009:Q4	173	259	247
2010:Q1	180	274	247
2010:Q2	180	246	230
2010:Q3	201	239	228
2010:Q4	173	228	229
2011:Q1	186	237	245
2011:Q2	183	227	225
2011:Q3	199	226	223
2011:Q4	175	227	225
2012:Q1	169	295	279
2012:Q2	153	236	233
2012:Q3	167	214	216
2012:Q4	148	207	214
2013:Q1	137	167	161

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-10
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Multiple chronic conditions only			BH conditions only			Disabled beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	1,028	1,064	1,011	959	1,223	1,350	1,059	1,109	1,072
2010:Q1	1,068	1,103	1,038	1,142	1,325	1,536	1,109	1,093	1,104
2010:Q2	1,091	1,063	1,104	1,236	1,244	1,583	1,132	1,110	1,150
2010:Q3	1,112	1,084	1,132	1,239	1,335	1,718	1,147	1,184	1,195
2010:Q4	1,064	1,065	1,042	1,145	1,248	1,571	1,062	1,109	1,082
2011:Q1	1,088	1,100	1,097	1,320	1,529	1,690	1,103	1,139	1,142
2011:Q2	1,101	1,131	1,135	1,183	1,695	1,484	1,112	1,162	1,168
2011:Q3	1,157	1,127	1,121	1,236	1,534	1,545	1,151	1,180	1,173
2011:Q4	1,119	1,157	1,125	1,213	1,632	1,486	1,110	1,195	1,203
2012:Q1	1,406	1,409	1,385	1,479	2,141	1,913	1,358	1,371	1,333
2012:Q2	1,121	1,161	1,132	1,188	1,688	1,396	1,142	1,203	1,156
2012:Q3	1,096	1,163	1,104	1,040	1,669	1,402	1,113	1,274	1,153
2012:Q4	1,077	1,012	994	962	1,331	1,194	1,066	1,065	982
2013:Q1	956	866	859	829	960	971	886	874	853

(continued)

Table F4-10 (continued)
North Carolina: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Asthma diagnosis only			Rural beneficiaries only			Non-White beneficiaries only		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	PCMH	PCMH	Non-PCMH
2009:Q4	1,288	1,107	1,468	757	944	1,205	700	609	628
2010:Q1	1,372	1,200	1,369	775	605	995	687	624	642
2010:Q2	1,406	1,067	1,398	796	1,110	1,097	705	637	644
2010:Q3	1,482	1,101	1,493	801	1,000	1,519	705	618	693
2010:Q4	1,254	1,141	1,339	732	998	1,229	647	574	596
2011:Q1	1,154	1,201	1,259	734	992	1,571	668	593	636
2011:Q2	1,311	1,018	1,375	752	1,082	1,244	654	612	620
2011:Q3	1,286	1,326	1,322	796	986	1,267	651	595	626
2011:Q4	1,289	1,063	1,349	742	916	1,180	635	602	619
2012:Q1	1,572	1,401	1,612	961	921	1,361	856	806	783
2012:Q2	1,289	1,097	1,259	816	1,350	940	693	660	650
2012:Q3	1,256	973	1,187	814	812	897	672	676	664
2012:Q4	1,209	882	1,068	747	915	1,050	650	547	575
2013:Q1	1,010	931	1,048	660	418	626	552	476	503

(continued)

Table F4-10 (continued)
North Carolina: Quarterly weighted average total Medicare expenditures among special populations for adults

Period	Network 1			Network 2			Network 3		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	725	686	689	667	686	689	699	686	689
2010:Q1	733	716	712	669	715	711	721	717	713
2010:Q2	787	708	723	687	708	723	727	709	724
2010:Q3	759	729	739	715	728	738	750	730	740
2010:Q4	722	690	687	700	690	686	686	691	688
2011:Q1	746	711	704	686	711	704	691	711	704
2011:Q2	779	707	716	690	706	715	691	707	716
2011:Q3	802	705	699	652	704	698	712	706	700
2011:Q4	806	715	708	672	714	707	688	715	708
2012:Q1	1,035	892	877	748	891	876	887	893	878
2012:Q2	913	749	738	586	748	737	760	749	738
2012:Q3	746	730	705	544	729	705	750	733	708
2012:Q4	692	653	626	594	652	626	706	655	628
2013:Q1	596	580	553	519	579	552	604	582	556

(continued)

Table F4-10 (continued)
North Carolina: Quarterly weighted average total Medicare expenditures among special populations for adults

Period	Network 4		
	MAPCP	PCMH	Non-PCMH
2009:Q4	641	686	689
2010:Q1	685	715	710
2010:Q2	695	708	723
2010:Q3	684	728	738
2010:Q4	660	690	686
2011:Q1	666	710	704
2011:Q2	660	706	715
2011:Q3	634	704	698
2011:Q4	609	714	707
2012:Q1	761	891	876
2012:Q2	571	748	737
2012:Q3	607	730	705
2012:Q4	570	652	625
2013:Q1	482	579	552

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-11
North Carolina: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions: Four quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	88.4	90.9	81.7	49.5	35.5	44.0	81.5	73.0	73.3	84.2	79.9	84.3
Pre-1	89.6	90.4	87.5	51.0	50.2	47.8	84.4	77.6	78.1	86.3	83.4	82.9
Post-1	88.1	83.6	89.3	41.8	38.6	29.9	80.0	71.0	77.5	84.8	91.5	84.8

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	34.7	25.7	31.6	0.6	0.5	3.0	35.3	33.0	32.4	27.2	27.7	27.5
Pre-1	38.2	38.6	35.6	1.0	0.8	2.4	34.8	37.2	35.2	28.6	26.6	29.6
Post-1	29.9	26.0	23.6	1.3	1.2	3.0	32.2	37.6	39.0	22.7	26.7	25.2

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-2	33.5	27.4	35.9	31.4	17.1	24.7	76.3	86.0	70.2
Pre-1	44.0	49.9	40.0	33.0	44.3	33.8	70.7	64.6	67.7
Post-1	36.0	35.5	33.2	31.7	21.6	26.2	67.4	71.1	70.6

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-12a
North Carolina: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	43.1	42.1	44.6	18.3	22.9	20.5	12.2	11.3	10.8	12.3	5.0	12.9
2010:Q1	44.0	47.9	46.8	20.5	24.8	21.9	13.5	11.9	12.3	12.1	13.8	8.1
2010:Q2	45.1	45.5	45.4	21.9	25.9	21.8	13.1	12.7	12.6	12.4	12.6	16.6
2010:Q3	45.3	48.7	45.7	20.0	23.7	22.2	14.0	11.5	13.2	11.7	9.2	9.8
2010:Q4	47.5	50.4	49.4	19.6	22.5	22.1	13.7	12.9	12.7	8.9	12.4	9.5
2011:Q1	54.4	53.6	53.5	20.0	22.2	23.1	15.1	13.2	13.6	11.4	12.3	9.1
2011:Q2	53.7	53.9	53.3	19.5	20.4	21.3	15.2	13.1	11.7	14.6	9.5	9.3
2011:Q3	55.8	56.2	55.6	20.6	20.2	22.1	16.1	14.0	13.2	9.3	9.3	14.2
2011:Q4	55.4	53.9	52.7	19.0	18.3	21.0	15.2	13.2	12.6	14.9	3.6	12.8
2012:Q1	58.9	61.8	54.4	20.9	21.0	21.2	14.4	15.0	13.7	11.5	9.8	11.3
2012:Q2	56.2	58.7	53.3	18.2	21.4	20.9	13.4	13.7	10.9	11.0	8.0	13.7
2012:Q3	56.9	59.9	55.5	18.2	19.2	21.4	13.6	8.5	8.8	8.5	11.4	11.0
2012:Q4	55.2	63.1	56.2	18.0	17.9	20.8	13.1	5.3	7.8	18.6	17.9	13.4
2013:Q1	55.7	63.2	56.2	16.5	16.6	19.6	12.7	6.1	7.1	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F4-12b
North Carolina: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-2	62.9	61.1	63.4
Pre-1	67.7	67.7	67.5
Post-1	70.5	70.2	68.9

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-13
North Carolina: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Total			Acute-care			ER visits not leading to hospitalizations			Specialty physician		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	953	973	939	46	46	54	38	57	56	87	91	89
2010:Q1	982	1,008	963	56	49	65	41	65	68	88	99	94
2010:Q2	999	985	1,000	54	48	68	48	65	72	90	95	96
2010:Q3	1,016	1,006	1,023	63	60	74	47	66	76	93	90	103
2010:Q4	969	978	962	61	62	70	50	63	68	88	92	94
2011:Q1	988	1,017	1,001	63	68	77	52	71	72	91	89	98
2011:Q2	1,025	1,038	1,039	68	66	85	56	69	78	95	87	96
2011:Q3	1,051	1,047	1,021	69	53	77	58	76	79	94	86	96
2011:Q4	1,017	1,041	1,012	53	61	61	56	69	73	79	80	86
2012:Q1	1,278	1,286	1,256	51	52	61	95	122	134	82	88	86
2012:Q2	1,041	1,072	1,037	59	66	70	57	73	82	76	80	73
2012:Q3	1,006	1,043	1,002	51	42	61	57	67	79	69	68	70
2012:Q4	962	921	889	45	35	42	56	63	66	68	63	71
2013:Q1	833	801	764	39	22	43	52	54	61	64	53	58

(continued)

Table F4-13 (continued)
North Carolina: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Primary care physician			Prescription			LTC		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	61	69	65	236	242	225	111	60	67
2010:Q1	65	75	68	238	246	229	113	60	65
2010:Q2	67	70	68	247	247	238	106	61	62
2010:Q3	73	77	76	250	256	242	97	54	56
2010:Q4	73	81	80	242	248	231	83	51	49
2011:Q1	81	89	87	252	268	246	76	45	46
2011:Q2	83	93	92	246	275	249	71	42	44
2011:Q3	84	94	95	253	279	256	68	45	43
2011:Q4	86	91	91	261	300	274	73	46	44
2012:Q1	95	101	103	293	302	297	81	54	45
2012:Q2	89	95	104	273	297	274	80	53	41
2012:Q3	92	104	103	269	308	279	70	39	37
2012:Q4	92	96	96	247	266	237	79	48	41
2013:Q1	88	88	91	233	259	218	59	42	34

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-14
North Carolina: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	6.3	6.6	7.9	22.6	30.2	30.4
2010:Q1	6.9	6.0	8.2	22.2	30.8	32.7
2010:Q2	7.1	6.0	9.0	23.4	29.3	32.9
2010:Q3	7.5	7.3	9.1	24.6	30.8	33.9
2010:Q4	7.9	8.0	9.1	25.6	31.0	32.3
2011:Q1	7.9	8.0	9.7	26.6	31.9	33.3
2011:Q2	8.2	8.5	10.9	26.0	33.6	34.1
2011:Q3	8.4	6.7	9.5	27.9	33.4	35.0
2011:Q4	7.5	8.6	8.6	25.4	27.4	30.8
2012:Q1	7.2	6.9	8.5	24.0	29.8	33.1
2012:Q2	7.9	8.4	9.5	26.4	32.6	33.9
2012:Q3	6.8	6.1	8.3	24.8	31.8	33.2
2012:Q4	6.9	5.4	6.6	25.5	28.5	30.5
2013:Q1	6.8	3.8	7.6	23.0	24.9	28.1

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-15
North Carolina: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are children

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	614	939	947	9	6	7	18	15	14	314	693	703
2010:Q1	832	1,087	918	9	7	9	16	11	13	519	826	645
2010:Q2	810	1,077	942	14	17	23	23	30	18	471	739	640
2010:Q3	889	1,045	1,029	25	6	17	20	18	21	532	785	726
2010:Q4	921	1,206	1,119	18	46	33	31	41	23	578	873	787
2011:Q1	1,109	1,175	1,223	15	22	49	31	37	25	708	819	834
2011:Q2	1,021	1,303	1,240	28	72	18	30	28	25	621	900	875
2011:Q3	1,076	1,545	1,195	16	64	39	35	51	33	727	1,046	814
2011:Q4	1,171	1,215	1,128	32	6	26	38	15	20	769	826	733
2012:Q1	1,154	1,397	1,260	10	16	5	50	29	42	685	937	820
2012:Q2	904	1,358	1,043	8	35	8	35	26	25	500	892	658
2012:Q3	848	936	976	25	2	9	28	21	22	416	467	595
2012:Q4	779	790	917	13	19	7	30	23	23	405	438	573
2013:Q1	381	404	424	8	6	13	26	22	19	16	59	95

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-16
North Carolina: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are adults

Period	Total expenditures			Acute-care			ER visits not leading to hospitalizations			Services with principal diagnosis of BH condition		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	959	1,223	1,350	42	67	64	62	69	88	260	323	521
2010:Q1	1,142	1,325	1,536	96	106	123	69	97	113	299	342	599
2010:Q2	1,236	1,244	1,583	127	73	137	85	75	122	301	289	609
2010:Q3	1,239	1,335	1,718	146	139	244	81	101	121	262	341	609
2010:Q4	1,145	1,248	1,571	115	176	209	84	120	113	224	432	533
2011:Q1	1,320	1,529	1,690	152	280	250	109	189	140	307	563	534
2011:Q2	1,183	1,695	1,484	127	280	200	101	137	150	284	580	409
2011:Q3	1,236	1,534	1,545	136	165	224	111	179	181	262	398	467
2011:Q4	1,213	1,632	1,486	130	227	165	98	141	130	231	305	335
2012:Q1	1,479	2,141	1,913	103	245	202	169	196	225	257	732	471
2012:Q2	1,188	1,688	1,396	117	128	129	86	88	126	254	395	329
2012:Q3	1,040	1,669	1,402	72	106	168	91	121	129	145	329	293
2012:Q4	962	1,331	1,194	77	146	83	84	115	105	160	253	208
2013:Q1	829	960	971	59	27	75	74	87	84	37	82	83

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-17
North Carolina: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	0.9	0.8	1.0	15.0	17.9	12.5	1.1	3.4	2.2	0.7	1.1	1.0	34.4	20.0	27.4
2010:Q1	0.7	0.6	1.0	11.7	10.4	12.3	2.1	3.2	2.0	1.0	1.1	2.1	37.3	27.4	30.7
2010:Q2	1.4	1.7	1.7	16.3	17.5	13.8	2.1	3.7	3.4	1.7	0.1	2.0	39.2	34.0	29.2
2010:Q3	1.4	0.8	1.6	16.2	13.0	15.2	2.0	4.0	3.8	2.7	2.1	2.2	42.0	26.9	28.2
2010:Q4	1.7	2.5	3.2	16.4	21.1	15.0	3.5	9.8	7.3	3.8	2.6	3.1	50.7	41.8	44.9
2011:Q1	1.3	1.8	4.6	16.1	23.2	16.6	4.9	7.2	7.7	4.3	5.9	3.8	57.3	54.0	49.4
2011:Q2	2.5	5.2	1.9	16.5	16.7	16.4	4.8	8.7	6.3	4.2	4.2	3.3	54.5	48.0	48.0
2011:Q3	1.6	3.3	3.2	20.1	23.0	18.6	4.8	6.5	6.2	3.7	3.6	3.0	50.6	47.4	50.1
2011:Q4	2.8	0.6	2.4	21.1	14.9	13.1	4.8	3.3	3.6	3.7	0.7	0.9	45.4	41.7	40.0
2012:Q1	0.7	1.1	0.5	13.8	16.7	17.1	2.6	6.2	4.5	1.4	1.3	2.4	40.1	45.3	46.7
2012:Q2	1.0	2.7	0.8	20.5	16.9	16.5	2.4	7.3	2.1	2.1	3.5	1.0	38.3	36.5	34.6
2012:Q3	1.5	0.2	0.6	16.9	20.0	13.6	1.8	2.2	2.7	1.4	0.1	2.2	32.2	30.1	33.6
2012:Q4	1.6	1.6	0.6	13.9	13.1	18.3	1.6	2.1	2.5	2.0	0.5	0.7	30.5	24.1	30.9
2013:Q1	1.3	0.6	1.3	13.9	13.6	13.3	0.4	0.8	0.9	0.0	0.0	0.2	26.9	25.5	29.1

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-18
North Carolina: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	5.5	8.8	8.7	30.1	26.2	36.7	1.5	0.7	5.6	4.0	0.9	7.3	22.2	17.2	18.6
2010:Q1	9.3	11.1	12.1	29.2	33.8	37.6	2.6	1.7	6.6	3.5	2.9	8.2	28.3	31.8	20.8
2010:Q2	13.4	5.6	12.0	32.5	27.3	40.4	3.6	1.6	9.0	6.6	4.8	11.4	32.8	23.4	21.3
2010:Q3	10.3	11.7	15.8	31.9	46.4	38.0	3.2	7.0	8.5	6.6	12.6	8.7	32.9	28.5	28.0
2010:Q4	10.5	12.2	19.7	34.7	53.8	37.6	3.7	10.2	13.0	4.9	10.5	9.4	37.7	36.4	26.9
2011:Q1	11.8	20.9	23.2	37.2	51.1	44.8	5.8	17.6	16.2	8.3	13.1	8.8	47.4	44.6	33.5
2011:Q2	11.8	26.9	18.9	38.7	50.6	42.5	6.4	21.2	10.5	10.2	16.1	11.4	47.8	34.2	34.5
2011:Q3	10.4	15.1	21.5	35.3	41.9	49.5	5.4	10.5	15.9	9.8	6.3	16.7	49.6	40.5	36.5
2011:Q4	10.0	18.1	13.3	35.0	33.4	40.1	4.0	3.3	6.9	7.4	6.5	9.3	39.7	28.4	26.2
2012:Q1	7.5	13.2	13.6	31.1	32.4	40.2	4.1	7.7	7.7	6.8	5.3	8.6	35.3	36.9	26.6
2012:Q2	8.8	9.0	11.9	32.7	34.4	41.2	4.2	2.6	6.3	5.3	8.3	9.9	33.7	33.6	22.5
2012:Q3	6.3	7.5	13.1	32.1	38.6	44.4	1.3	3.0	5.0	3.2	2.1	6.3	31.4	24.0	21.9
2012:Q4	7.1	13.2	7.0	30.3	40.2	32.8	1.7	6.4	2.3	2.3	6.9	4.5	29.9	20.9	18.3
2013:Q1	6.7	2.5	7.2	26.9	24.0	33.0	0.0	0.3	0.8	0.0	0.4	0.8	20.6	22.2	18.8

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-19
North Carolina: Quarterly weighted average expenditures and utilization among children in Network 2

Period	Total Medicaid expenditures			Acute-care expenditures			ER visits not leading to hospitalization expenditures			Specialty physician expenditures			Primary care physician expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	190	259	247	5	10	8	16	12	11	24	29	28	19	33	32
2010:Q1	197	275	247	9	13	11	18	12	13	28	31	30	20	34	32
2010:Q2	207	247	231	12	9	8	19	12	12	24	30	29	18	30	27
2010:Q3	200	240	228	10	11	9	18	12	11	26	29	28	20	30	29
2010:Q4	212	229	230	12	10	10	20	14	11	25	31	28	19	32	30
2011:Q1	254	237	245	10	9	10	24	13	14	30	29	29	23	37	35
2011:Q2	229	227	225	12	11	9	20	12	13	31	29	29	20	32	29
2011:Q3	208	227	224	13	9	9	20	11	13	29	32	28	21	31	29
2011:Q4	226	228	226	9	7	8	28	13	14	27	28	29	22	33	32
2012:Q1	248	296	280	8	10	8	41	24	24	26	31	30	24	37	37
2012:Q2	158	236	233	8	8	8	20	13	14	27	28	27	20	32	33
2012:Q3	137	214	217	6	8	8	18	13	14	21	27	27	22	33	33
2012:Q4	148	207	215	2	6	6	24	14	16	24	26	28	22	36	35
2013:Q1	141	168	162	1	3	4	22	15	14	23	27	25	21	33	30

(continued)

Table F4-19 (continued)
North Carolina: Quarterly weighted average expenditures and utilization among children in Network 2

Period	All-cause admissions			ER visits not leading to hospitalization		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	0.9	2.0	1.7	13.9	13.1	12.7
2010:Q1	1.6	2.5	2.2	14.9	12.7	12.4
2010:Q2	1.7	1.8	1.6	14.4	13.2	12.2
2010:Q3	2.0	2.2	1.6	14.0	11.3	11.2
2010:Q4	2.0	2.0	1.9	14.5	13.7	11.4
2011:Q1	1.5	2.0	1.8	15.9	12.9	13.5
2011:Q2	2.5	2.0	1.7	13.7	13.4	12.3
2011:Q3	2.0	1.8	1.8	14.7	11.0	11.6
2011:Q4	1.5	1.5	1.4	17.2	12.4	12.1
2012:Q1	1.4	1.7	1.5	14.6	13.5	13.0
2012:Q2	1.4	1.5	1.5	14.5	13.1	12.9
2012:Q3	0.9	1.4	1.4	12.7	12.4	13.3
2012:Q4	0.3	1.2	1.1	14.5	13.3	15.3
2013:Q1	0.5	0.7	0.7	15.1	13.6	13.7

NOTE:

- Numbers represent average expenditures and the percentage of beneficiaries who had any utilizations. Means and percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F4-20
North Carolina: Quarterly weighted average expenditures and utilization among adults in Network 2

Period	Total Medicaid expenditures			Acute-care expenditures			ER visits not leading to hospitalization expenditures			Specialty physician expenditures			Primary care physician expenditures		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	667	686	689	28	38	44	54	44	46	71	73	69	36	56	53
2010:Q1	672	718	713	46	40	56	56	51	55	65	79	72	42	59	56
2010:Q2	689	710	726	52	40	53	59	50	59	61	76	72	42	56	53
2010:Q3	718	731	741	40	46	57	59	51	58	74	73	78	41	62	60
2010:Q4	703	692	689	40	43	52	70	48	52	75	71	71	43	61	58
2011:Q1	686	711	704	43	49	57	55	50	53	63	70	73	51	65	63
2011:Q2	691	707	716	54	45	60	57	50	59	66	65	70	56	66	65
2011:Q3	654	706	700	52	38	57	61	54	60	72	65	72	45	67	67
2011:Q4	675	717	710	37	46	44	62	56	56	64	64	67	45	71	68
2012:Q1	752	895	880	37	41	49	103	91	104	63	71	68	47	77	79
2012:Q2	587	749	738	37	46	52	65	57	66	57	64	63	49	76	80
2012:Q3	547	733	708	26	33	47	62	58	64	58	59	61	45	80	81
2012:Q4	598	656	629	31	25	31	61	50	54	57	58	59	57	76	76
2013:Q1	526	585	559	23	21	31	54	43	52	59	53	52	49	69	71

(continued)

Table F4-20 (continued)
North Carolina: Quarterly weighted average expenditures and utilization among adults in Network 2

Period	All-cause admissions			ER visits not leading to hospitalization		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	4.1	5.7	6.5	24.3	25.8	26.5
2010:Q1	5.4	5.1	7.2	22.9	27.3	28.7
2010:Q2	7.2	5.2	7.1	24.6	25.7	28.5
2010:Q3	5.0	5.7	7.1	23.9	25.6	28.3
2010:Q4	5.0	5.6	7.0	29.6	26.3	26.5
2011:Q1	5.2	5.9	7.3	25.0	25.2	27.3
2011:Q2	6.7	5.8	7.6	29.7	26.4	27.8
2011:Q3	6.0	4.9	7.1	27.4	26.3	28.8
2011:Q4	5.1	6.6	6.2	26.2	24.6	26.3
2012:Q1	5.1	5.6	7.0	24.2	25.4	28.4
2012:Q2	4.9	6.1	7.2	25.2	26.7	29.0
2012:Q3	3.4	4.9	6.6	25.0	28.4	28.9
2012:Q4	4.8	4.2	5.0	25.3	25.4	27.5
2013:Q1	3.8	3.8	5.5	22.1	21.2	26.2

NOTE:

- Numbers represent average expenditures and the percentage of beneficiaries who had any utilizations. Means and percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.5 Minnesota

Table F5-1
Minnesota: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

	Appropriate use of asthma medications	
Period	**MAPCP**	**Non-PCMH**
Pre-4	84.4	81.3
Pre-3	82.8	82.5
Pre-2	83.0	85.3
Pre-1	82.1	84.7
Post-1	82.0	84.6
Post-2	82.2	86.2
Post-3	81.5	83.2

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years pre-assignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-2
Minnesota: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	87.0	91.1	22.5	23.4	72.8	79.2	61.5	68.6
Pre-3	88.4	91.3	22.0	24.7	73.6	78.7	63.0	68.4
Pre-2	88.2	91.6	21.2	23.8	72.9	80.7	61.5	69.6
Pre-1	90.3	91.8	22.2	28.9	78.2	79.2	67.7	72.4
Post-1	92.3	87.7	21.5	26.3	81.6	72.1	68.5	63.4
Post-2	93.6	84.2	20.5	30.5	83.4	76.5	71.1	62.2
Post-3	93.7	89.5	20.2	24.6	83.1	69.5	71.5	58.4

Period	Received all 4 diabetes tests		Received none of the 4 diabetes tests		Breast cancer screening		Cervical cancer screening	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	13.1	15.4	7.5	4.6	35.7	39.5	42.1	37.8
Pre-3	14.1	18.0	7.5	5.4	35.5	38.1	40.2	34.1
Pre-2	13.1	16.3	7.6	5.0	34.4	41.1	35.7	32.6
Pre-1	15.3	20.3	5.4	5.4	38.0	40.8	37.5	30.9
Post-1	14.5	15.7	4.6	7.0	37.7	35.4	32.0	27.5
Post-2	14.9	17.7	3.9	6.1	39.0	34.0	28.5	26.3
Post-3	14.3	12.8	3.7	6.1	38.6	32.4	26.9	25.8

(continued)

Table F5-2 (continued)
Minnesota: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks		Appropriate use of antidepressant medication management: 6 months		Appropriate use of asthma medications	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	40.0	38.5	31.5	30.7	69.5	73.3
Pre-3	42.1	49.5	33.9	40.4	68.9	72.2
Pre-2	43.8	51.9	35.2	41.1	69.8	74.3
Pre-1	44.0	45.6	34.7	36.8	71.0	70.6
Post-1	46.5	47.3	37.8	37.4	71.7	70.5
Post-2	49.2	46.1	41.1	39.2	71.9	73.0
Post-3	48.0	46.1	39.4	35.0	72.4	70.9

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-3
Minnesota: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits		Medical specialist visits		Surgical specialist visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	46.5	48.6	3.4	3.9	0.9	1.2
2009:Q4	47.4	49.8	3.4	3.6	0.8	1.2
2010:Q1	46.9	49.3	3.8	4.2	0.9	1.2
2010:Q2	44.9	47.0	3.6	4.0	1.0	1.4
2010:Q3	46.2	49.8	3.4	3.9	1.0	1.4
2010:Q4	44.8	48.2	3.4	3.9	0.9	1.2
2011:Q1	49.0	52.7	4.0	4.4	0.9	1.3
2011:Q2	44.2	47.3	3.9	4.4	1.1	1.4
2011:Q3	44.9	47.9	3.4	4.0	1.0	1.3
2011:Q4	45.0	46.5	3.7	4.0	1.0	1.3
2012:Q1	46.3	47.4	4.1	4.6	1.0	1.4
2012:Q2	44.2	45.6	3.9	4.3	1.0	1.5
2012:Q3	45.4	46.3	3.7	4.1	1.0	1.4
2012:Q4	44.8	46.1	3.8	4.1	1.0	1.3
2013:Q1	46.6	47.9	5.0	5.3	1.0	1.4
2013:Q2	43.4	44.9	4.8	5.1	1.1	1.4
2013:Q3	45.9	46.6	4.7	5.1	1.1	1.4
2013:Q4	43.7	44.4	4.8	5.2	1.0	1.3
2014:Q1	44.6	45.9	5.3	5.5	1.0	1.3
2014:Q2	43.6	44.5	5.4	5.6	1.0	1.4
2014:Q3	43.6	45.2	4.8	5.2	1.0	1.4
2014:Q4	41.6	41.6	5.0	4.8	0.9	1.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-4a
Minnesota: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day unplanned readmissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	48.0	47.2	6.2	7.9	3.4	4.0	8.7	10.7
2009:Q4	48.8	49.0	5.9	7.7	3.2	3.8	8.8	7.7
2010:Q1	50.0	49.6	6.6	8.6	3.8	4.1	8.0	7.1
2010:Q2	48.6	47.9	6.4	8.4	3.7	4.4	8.3	9.4
2010:Q3	44.6	44.6	5.7	7.5	3.3	4.0	7.9	8.6
2010:Q4	44.7	45.3	5.7	7.5	3.2	4.1	7.9	10.6
2011:Q1	48.7	49.0	6.7	8.8	4.0	4.2	8.2	10.7
2011:Q2	49.7	50.1	7.2	9.2	4.3	4.6	9.0	10.5
2011:Q3	47.8	47.3	6.8	9.1	4.1	4.5	8.9	8.7
2011:Q4	48.5	45.1	7.2	8.4	4.0	4.2	9.0	9.0
2012:Q1	51.2	47.4	7.9	10.2	4.2	4.4	9.1	8.8
2012:Q2	50.3	46.7	7.9	9.9	4.2	4.6	9.6	10.2
2012:Q3	49.4	46.1	7.7	9.4	4.3	4.6	10.2	9.8
2012:Q4	49.5	47.1	7.9	9.2	4.2	4.4	9.2	12.3
2013:Q1	51.0	47.6	11.0	12.5	4.5	4.4	9.6	11.9
2013:Q2	51.1	47.3	11.1	12.5	4.7	4.6	10.5	13.0
2013:Q3	50.5	46.0	11.5	12.9	4.7	4.6	9.8	11.2
2013:Q4	49.8	46.4	11.3	12.0	4.4	4.6	9.6	12.9
2014:Q1	50.6	48.2	11.7	12.8	4.4	4.7	10.0	10.8
2014:Q2	50.6	48.8	11.9	13.3	4.5	5.0	10.1	11.2
2014:Q3	48.1	46.0	11.4	13.6	4.3	5.1	9.8	14.0
2014:Q4	45.9	43.8	11.3	11.6	4.0	4.5	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F5-4b
Minnesota: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits	
	MAPCP	Non-PCMH
Pre-4	49.6	48.6
Pre-3	49.0	48.4
Pre-2	49.0	47.0
Pre-1	48.1	45.1
Post-1	47.3	46.1
Post-2	46.8	44.9
Post-3	46.8	44.4

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-5a
Minnesota: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	2.2	2.3	10.9	10.5
2009:Q4	1.6	1.6	12.9	12.8
2010:Q1	2.2	2.4	11.0	11.2
2010:Q2	2.0	2.2	10.7	11.2
2010:Q3	2.0	2.3	10.5	10.9
2010:Q4	2.2	2.4	11.2	10.7
2011:Q1	2.5	2.5	13.5	12.1
2011:Q2	2.3	2.4	11.9	11.0
2011:Q3	2.3	2.2	11.8	10.5
2011:Q4	2.3	2.2	12.6	10.9
2012:Q1	2.6	2.2	12.6	11.3
2012:Q2	2.4	2.1	12.4	11.1
2012:Q3	2.5	2.3	12.1	10.4
2012:Q4	2.5	2.1	12.9	11.2
2013:Q1	2.5	2.3	12.8	10.9
2013:Q2	2.3	2.1	11.5	10.4
2013:Q3	2.3	2.0	11.5	11.0
2013:Q4	2.2	2.0	10.9	10.3
2014:Q1	2.3	2.0	11.4	10.5
2014:Q2	2.2	2.0	12.1	11.3
2014:Q3	2.1	1.9	12.2	11.6
2014:Q4	1.1	1.1	13.0	12.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-5b
Minnesota: Average percent of births with low birth weights:
Four quarter intervals preceding and following assignment for children

Period	Low birth weight	
	MAPCP	Non-PCMH
Pre-4	8.2	9.3
Pre-3	8.5	8.3
Pre-2	8.5	7.6
Pre-1	8.2	9.1
Post-1	0.1	0.2

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-6
Minnesota: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	5.1	4.6	16.8	15.2
2009:Q4	4.5	4.9	15.9	15.5
2010:Q1	4.5	5.0	15.1	14.1
2010:Q2	4.3	4.2	15.2	14.7
2010:Q3	4.0	4.2	13.8	13.4
2010:Q4	4.2	4.1	14.0	12.8
2011:Q1	4.4	4.8	15.4	14.1
2011:Q2	4.7	4.9	16.9	15.1
2011:Q3	4.9	5.6	17.7	15.4
2011:Q4	4.7	5.1	16.6	14.2
2012:Q1	4.9	4.7	16.3	13.6
2012:Q2	4.8	4.1	16.7	13.9
2012:Q3	5.1	4.6	17.5	14.8
2012:Q4	5.0	4.8	16.6	14.3
2013:Q1	5.1	5.2	15.6	13.5
2013:Q2	5.0	4.6	16.4	14.9
2013:Q3	5.2	4.6	17.0	15.4
2013:Q4	4.9	4.5	14.8	13.7
2014:Q1	4.7	4.6	14.9	14.3
2014:Q2	4.5	4.6	15.3	14.4
2014:Q3	4.4	4.3	16.1	15.4
2014:Q4	4.1	3.9	14.7	14.6

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-7
Minnesota: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	87.2	91.0	23.1	24.1	73.0	79.9	61.4	68.0
Pre-3	88.5	91.4	23.7	24.1	74.1	80.0	63.5	68.0
Pre-2	88.5	92.7	22.0	24.9	73.8	81.3	62.0	69.3
Pre-1	90.7	92.2	23.8	30.7	79.0	80.7	68.3	72.3
Post-1	91.6	88.2	23.2	25.5	79.7	75.8	67.4	67.1
Post-2	93.4	83.2	22.4	35.1	81.2	77.4	71.2	56.7
Post-3	93.9	96.0	22.6	18.5	82.6	78.3	70.0	39.4

Period	Received all 4 diabetes tests		Received none of the 4 diabetes tests		Breast cancer screening		Cervical cancer screening	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	13.7	15.9	7.2	3.7	37.8	44.4	40.1	37.5
Pre-3	15.1	18.1	6.9	4.7	38.2	42.2	38.8	34.5
Pre-2	13.7	17.2	7.1	3.5	37.5	47.3	34.3	32.0
Pre-1	16.5	21.9	4.9	4.7	41.6	47.0	37.7	33.0
Post-1	15.5	17.8	4.9	5.5	38.8	43.1	28.3	22.2
Post-2	15.9	24.1	4.0	13.5	41.2	40.6	26.2	22.6
Post-3	15.4	0.0	3.5	4.0	42.1	47.6	25.9	18.1

(continued)

Table F5-7 (continued)
Minnesota: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks		Appropriate use of antidepressant medication management: 6 months		Appropriate use of asthma medications	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	41.5	41.1	34.5	33.7	70.4	78.6
Pre-3	44.0	51.6	37.3	43.4	69.3	70.3
Pre-2	46.3	52.9	39.1	45.6	70.3	75.4
Pre-1	45.9	47.7	37.5	40.9	71.5	72.1
Post-1	49.6	51.0	42.3	41.2	72.3	75.6
Post-2	50.2	55.9	43.0	42.8	72.0	80.8
Post-3	48.4	43.0	41.3	36.5	71.0	75.4

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-8a
Minnesota: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day unplanned readmissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	59.2	55.0	10.7	12.9	6.1	5.4	13.2	9.8
2009:Q4	60.4	54.8	10.2	11.0	5.9	5.5	12.0	7.2
2010:Q1	62.6	57.3	11.7	12.5	7.1	6.3	10.8	9.1
2010:Q2	60.1	54.2	10.9	12.3	6.7	6.1	11.8	13.0
2010:Q3	54.1	52.1	10.0	11.3	6.1	6.1	11.9	9.5
2010:Q4	55.2	52.5	9.8	10.8	6.0	5.7	11.4	9.6
2011:Q1	61.5	55.7	11.9	12.6	7.6	5.9	11.2	10.2
2011:Q2	63.2	57.1	13.2	13.5	8.4	6.0	13.0	14.5
2011:Q3	61.1	53.2	13.8	13.1	8.9	7.1	13.2	11.6
2011:Q4	63.2	55.6	13.1	13.9	7.8	7.3	13.4	12.1
2012:Q1	65.7	58.1	14.2	17.9	8.1	6.9	13.5	12.2
2012:Q2	63.7	59.0	13.7	15.2	7.7	7.4	13.5	14.8
2012:Q3	62.2	58.3	13.2	15.6	7.7	7.6	14.1	14.4
2012:Q4	62.7	58.8	13.4	14.7	7.5	7.6	14.0	16.9
2013:Q1	63.4	61.8	18.1	21.5	7.9	7.4	14.7	16.5
2013:Q2	64.2	61.3	18.3	20.7	8.2	7.6	14.9	20.3
2013:Q3	62.8	59.1	18.6	20.4	8.1	7.6	14.7	17.5
2013:Q4	61.4	59.4	18.0	19.3	7.4	7.6	13.2	14.5
2014:Q1	61.4	59.3	18.7	19.8	7.5	8.8	14.1	14.9
2014:Q2	62.1	61.2	19.3	21.1	7.7	8.1	14.9	12.9
2014:Q3	59.3	57.7	18.6	22.5	7.2	8.8	14.5	20.3
2014:Q4	58.4	54.8	18.1	18.9	6.7	6.8	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F5-8b
Minnesota: Percentage of total visits that were primary care visits:
Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits	
	MAPCP	Non-PCMH
Pre-4	45.2	45.4
Pre-3	44.2	45.8
Pre-2	44.0	44.2
Pre-1	41.8	40.0
Post-1	42.5	42.3
Post-2	41.9	41.9
Post-3	40.6	45.2

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-9
Minnesota: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	7.0	4.8	24.2	18.6
2009:Q4	6.6	6.0	23.6	20.6
2010:Q1	6.6	6.4	22.7	17.4
2010:Q2	6.2	5.1	22.8	18.7
2010:Q3	5.7	4.6	20.5	18.0
2010:Q4	5.7	5.0	20.5	16.2
2011:Q1	6.6	6.1	23.2	18.3
2011:Q2	7.3	6.4	25.5	18.8
2011:Q3	7.5	6.1	26.9	19.6
2011:Q4	7.8	6.2	25.6	21.1
2012:Q1	7.8	6.7	24.7	19.0
2012:Q2	7.5	6.2	24.6	19.5
2012:Q3	7.8	7.0	25.5	21.9
2012:Q4	7.4	7.5	24.4	20.0
2013:Q1	7.5	8.6	22.9	19.9
2013:Q2	7.5	7.4	24.0	21.7
2013:Q3	7.6	7.0	24.6	22.1
2013:Q4	7.1	6.8	21.7	19.9
2014:Q1	7.1	6.9	22.5	20.2
2014:Q2	6.9	8.0	23.2	21.1
2014:Q3	6.7	6.1	24.2	21.7
2014:Q4	6.2	5.3	22.2	19.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-10
Minnesota: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions		ER visits not leading to hospitalization		BH inpatient admissions		BH ER visits		BH outpatient visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	3.5	2.6	14.7	10.3	3.2	1.7	3.5	3.2	36.4	35.0
2009:Q4	3.7	2.8	15.7	12.5	3.8	1.9	2.8	2.6	35.2	37.9
2010:Q1	4.0	2.7	14.0	10.8	3.9	3.0	3.8	3.7	39.0	44.9
2010:Q2	3.8	3.4	15.7	12.7	3.9	2.4	5.2	1.6	38.3	41.4
2010:Q3	4.3	2.2	15.5	13.5	3.8	1.6	4.8	2.8	38.8	41.5
2010:Q4	5.9	5.1	15.5	11.6	6.6	6.2	5.4	4.9	43.9	50.8
2011:Q1	8.0	5.4	17.9	14.6	8.6	4.7	6.2	5.0	47.3	57.1
2011:Q2	7.5	7.4	19.2	15.9	8.4	6.5	7.0	5.6	49.2	55.9
2011:Q3	7.3	4.9	18.2	15.6	7.9	4.5	6.9	5.7	45.0	51.5
2011:Q4	6.9	4.3	18.4	14.0	6.9	3.9	5.1	4.8	44.6	47.1
2012:Q1	6.6	4.3	17.2	13.0	6.4	3.6	6.1	3.1	46.8	50.5
2012:Q2	6.5	3.5	18.1	14.8	5.9	2.9	5.6	4.8	41.6	49.8
2012:Q3	5.2	3.9	17.8	14.3	4.7	2.0	4.9	4.1	41.7	43.8
2012:Q4	6.3	6.0	19.2	11.7	5.9	4.1	5.5	4.7	42.6	50.0
2013:Q1	6.2	6.0	18.6	14.0	5.7	3.9	6.0	5.0	61.4	58.4
2013:Q2	5.7	4.1	18.8	13.0	5.0	3.7	7.1	2.4	63.0	58.1
2013:Q3	5.1	5.0	18.2	13.9	4.8	4.4	5.5	2.9	60.6	59.8
2013:Q4	5.9	4.5	16.6	12.4	5.7	3.8	5.9	2.9	57.9	60.5
2014:Q1	6.2	4.3	17.0	13.1	5.8	2.3	5.9	5.3	62.0	61.6
2014:Q2	5.9	6.2	18.3	15.0	5.1	4.3	5.7	3.9	60.3	63.2
2014:Q3	4.6	4.3	18.0	14.8	4.1	3.9	4.8	3.1	57.9	58.9
2014:Q4	3.9	5.2	16.3	14.8	3.3	4.9	4.1	3.3	53.8	49.9

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F5-11
Minnesota: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions		ER visits not leading to hospitalization		BH inpatient admissions		BH ER visits		BH outpatient visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	12.3	11.2	30.1	26.2	11.8	9.0	10.9	9.6	28.2	30.6
2009:Q4	10.6	10.2	28.4	27.9	10.2	7.2	10.3	7.1	26.4	23.4
2010:Q1	10.8	10.6	28.6	23.6	9.8	7.4	11.1	8.7	29.2	38.7
2010:Q2	10.0	11.4	28.5	28.6	9.9	8.3	10.7	10.2	28.9	31.6
2010:Q3	8.9	8.1	26.0	21.4	9.5	5.4	10.0	7.9	26.1	30.3
2010:Q4	11.5	10.3	25.7	24.3	13.4	9.3	10.6	10.0	30.5	37.4
2011:Q1	14.3	13.8	30.1	29.1	16.7	13.6	12.6	14.5	37.0	36.2
2011:Q2	17.5	13.2	34.3	30.0	18.9	16.7	15.7	11.1	38.9	40.2
2011:Q3	17.9	16.1	36.6	30.7	19.6	21.0	17.2	17.6	39.5	40.6
2011:Q4	15.2	13.5	33.8	31.4	16.4	13.0	14.9	12.1	39.3	30.5
2012:Q1	16.4	10.4	34.6	24.9	17.1	11.3	15.8	11.1	40.2	32.8
2012:Q2	15.2	10.5	35.1	27.4	14.9	12.7	14.0	8.9	37.9	32.2
2012:Q3	15.1	9.9	34.4	29.5	14.2	10.5	14.4	9.0	36.5	33.6
2012:Q4	14.1	9.1	32.3	24.0	13.4	9.2	13.0	8.9	38.5	33.1
2013:Q1	14.3	12.9	30.9	26.7	14.7	15.3	13.8	12.4	60.3	66.9
2013:Q2	13.2	10.6	31.3	27.5	12.3	12.1	12.1	11.8	58.4	66.3
2013:Q3	13.4	10.7	32.2	28.7	13.2	12.5	12.4	8.1	59.9	65.0
2013:Q4	12.7	11.7	27.9	23.7	13.2	15.4	11.2	10.1	57.1	62.8
2014:Q1	12.5	10.7	28.9	24.9	12.6	10.4	11.0	7.8	61.3	67.9
2014:Q2	11.2	10.0	29.4	23.0	11.3	9.6	11.5	7.9	59.8	63.1
2014:Q3	11.3	10.5	29.7	27.5	9.6	11.4	10.2	6.7	54.7	59.5
2014:Q4	9.2	8.5	26.8	23.1	6.6	6.6	8.3	7.4	49.6	53.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.6 Maine

Table F6-1
Maine: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

Period	Appropriate use of asthma medications	
	MAPCP	Non-PCMH
Pre-4	82.4	85.2
Pre-3	83.5	84.0
Pre-2	81.9	84.5
Pre-1	81.6	86.1
Post-1	82.9	81.9
Post-2	82.5	74.0
Post-3	84.0	71.2

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years pre-assignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-2
Maine: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	82.9	76.4	18.5	12.4	75.9	75.0	89.3	72.5
Pre-3	83.1	81.4	23.7	13.8	74.1	70.5	88.6	91.2
Pre-2	86.4	91.6	37.9	27.3	73.3	78.3	89.1	85.5
Pre-1	87.3	78.0	44.5	52.8	73.9	71.6	87.2	87.8
Post-1	90.1	94.6	49.2	50.4	76.3	84.7	90.0	93.2
Post-2	90.8	88.8	51.3	48.0	77.9	77.7	89.1	95.4
Post-3	87.5	90.3	49.1	45.5	79.7	86.4	90.0	95.7

Period	Received all 4 diabetes tests		Received none of the 4 diabetes tests		Breast cancer screening		Cervical cancer screening	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	14.1	9.3	2.9	5.1	38.6	44.1	40.8	39.4
Pre-3	17.5	10.7	3.8	2.4	36.6	47.3	38.2	40.4
Pre-2	27.5	18.6	2.9	3.3	37.2	43.8	34.1	36.6
Pre-1	34.0	37.2	2.9	4.8	36.5	39.1	30.6	32.9
Post-1	37.4	43.1	1.6	1.4	38.6	44.6	30.1	32.4
Post-2	38.3	33.6	1.9	0.0	40.3	40.2	25.4	29.4
Post-3	39.1	36.4	2.8	1.1	34.0	59.3	25.2	19.5

(continued)

Table F6-2 (continued)
Maine: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks		Appropriate use of antidepressant medication management: 6 months		Appropriate use of asthma medications	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	35.0	34.9	25.9	22.1	67.4	63.6
Pre-3	30.1	30.9	21.1	22.1	68.3	75.3
Pre-2	35.5	31.0	24.4	18.6	68.7	64.7
Pre-1	40.9	39.0	30.0	27.9	67.4	60.5
Post-1	41.9	40.8	30.7	28.2	69.6	67.1
Post-2	43.6	42.3	34.0	32.6	67.2	60.8
Post-3	44.4	41.5	32.9	30.8	65.3	38.4

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-3
Maine: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits		Medical specialist visits		Surgical specialist visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	28.0	32.0	1.8	1.5	0.7	1.1
2009:Q4	28.8	32.2	1.6	1.6	0.8	1.0
2010:Q1	28.2	33.8	1.8	1.6	0.8	1.1
2010:Q2	26.5	32.0	2.0	1.9	0.6	1.0
2010:Q3	26.3	31.5	2.6	2.2	1.0	1.3
2010:Q4	28.8	32.9	3.8	3.9	1.4	1.5
2011:Q1	30.8	33.9	4.1	4.4	1.1	1.4
2011:Q2	29.4	32.8	4.1	4.8	1.5	1.7
2011:Q3	27.8	31.4	3.4	3.4	1.3	1.4
2011:Q4	29.7	34.7	3.7	3.8	1.4	1.5
2012:Q1	29.8	35.6	4.1	4.3	1.4	1.6
2012:Q2	28.6	33.4	4.7	4.5	1.4	1.4
2012:Q3	28.7	31.9	4.3	4.7	1.3	1.5
2012:Q4	29.7	33.5	4.1	4.4	1.3	1.6
2013:Q1	30.8	34.5	5.0	4.8	1.2	1.4
2013:Q2	29.6	33.3	4.9	4.7	1.3	1.2
2013:Q3	27.9	34.0	4.3	4.4	1.3	1.2
2013:Q4	28.2	31.9	4.3	4.1	1.2	1.4
2014:Q1	28.5	31.3	4.6	4.4	1.2	1.4
2014:Q2	28.7	32.3	4.8	4.5	1.3	1.3
2014:Q3	27.1	30.4	4.8	4.5	1.4	1.5
2014:Q4	27.4	33.0	4.7	4.8	1.3	1.6

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-4a
Maine: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day readmissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	27.2	28.6	3.8	4.4	2.2	2.5	17.9	8.6
2009:Q4	27.0	29.7	4.0	4.5	2.3	3.1	16.4	11.3
2010:Q1	27.9	28.8	4.5	5.4	2.2	2.9	14.3	22.2
2010:Q2	27.6	29.3	5.1	5.1	2.1	2.5	16.2	21.7
2010:Q3	29.9	29.0	6.4	5.8	2.8	2.6	17.8	20.6
2010:Q4	31.9	30.1	8.0	7.1	4.1	4.3	16.1	5.0
2011:Q1	33.5	32.2	8.4	8.7	4.4	5.1	14.2	16.2
2011:Q2	32.8	31.2	8.6	9.0	4.4	5.3	14.4	16.2
2011:Q3	31.9	27.7	7.6	8.3	3.8	3.7	13.2	8.5
2011:Q4	33.0	29.4	8.0	7.9	4.1	4.0	10.9	19.5
2012:Q1	34.3	31.2	8.8	8.8	4.5	5.3	12.5	5.4
2012:Q2	34.2	29.4	9.1	9.5	4.4	4.1	14.4	16.5
2012:Q3	32.6	29.6	8.6	8.4	4.2	4.0	13.7	12.5
2012:Q4	33.0	28.2	8.4	9.5	4.3	4.7	13.6	17.0
2013:Q1	34.4	32.2	9.7	10.7	4.5	5.3	12.3	24.8
2013:Q2	34.6	29.6	10.2	10.1	4.8	5.6	14.4	21.4
2013:Q3	33.3	30.0	9.7	9.9	4.8	4.7	13.7	16.1
2013:Q4	33.3	30.9	9.7	9.7	4.6	5.0	13.0	16.4
2014:Q1	35.0	30.1	10.2	9.7	4.9	5.1	11.8	5.1
2014:Q2	35.3	28.0	10.7	10.7	5.2	5.6	12.6	15.6
2014:Q3	34.5	29.2	10.6	10.1	4.8	4.9	11.5	14.0
2014:Q4	35.0	29.7	11.4	10.6	4.8	5.0	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F6-4b
Maine: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits	
	MAPCP	Non-PCMH
Pre-4	84.3	82.5
Pre-3	83.1	82.2
Pre-2	80.6	80.8
Pre-1	78.8	75.3
Post-1	76.7	72.9
Post-2	73.9	71.7
Post-3	68.6	68.9

NOTES:

- Numbers represent the percentage of total visits that were primary care visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-5
Maine: Quarterly weighted average Medicaid expenditures for children

Period	Total		Acute-care		ER visits not leading to hospitalizations		Specialty physician	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	270	269	17	12	8	10.1	2	2
2009:Q4	295	300	16	15	9	13.0	2	2
2010:Q1	317	338	18	17	8	12.7	2	2
2010:Q2	323	328	18	13	10	13.3	3	2
2010:Q3	257	265	14	11	11	14.2	3	4
2010:Q4	234	247	11	12	15	14.5	6	5
2011:Q1	256	271	17	15	17	18.3	6	5
2011:Q2	241	256	16	15	16	17.9	4	4
2011:Q3	233	242	14	10	16	18.6	6	5
2011:Q4	242	259	14	13	16	18.0	6	5
2012:Q1	252	275	16	18	18	16.7	6	6
2012:Q2	255	271	17	13	18	19.8	6	5
2012:Q3	239	248	17	20	12	11.5	6	5
2012:Q4	250	262	21	19	12	11.6	5	5
2013:Q1	260	269	19	19	12	12.4	6	5
2013:Q2	278	279	20	21	12	12.5	6	5
2013:Q3	257	252	19	16	11	12.0	5	5
2013:Q4	264	271	18	19	10	11.5	5	5
2014:Q1	273	275	23	22	11	12.2	5	5
2014:Q2	284	291	21	23	12	15.4	6	5
2014:Q3	273	265	22	20	11	14.4	6	5
2014:Q4	275	268	25	21	12	14.1	6	5

(continued)

Table F6-5 (continued)
Maine: Quarterly weighted average Medicaid expenditures for children

Period	Primary care physician		Prescription		LTC	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	25	26	23	24	0	0
2009:Q4	27	27	28	30	0	0
2010:Q1	29	29	22	24	0	0
2010:Q2	29	29	28	32	0	0
2010:Q3	20	21	26	30	0	0
2010:Q4	10	11	28	32	0	0
2011:Q1	10	11	30	34	0	0
2011:Q2	4	7	30	34	0	0
2011:Q3	10	11	28	33	0	0
2011:Q4	11	13	30	35	0	0
2012:Q1	11	13	31	36	0	0
2012:Q2	10	12	30	33	0	0
2012:Q3	10	12	29	31	0	0
2012:Q4	11	13	29	31	0	0
2013:Q1	12	16	30	32	0	0
2013:Q2	13	17	30	33	0	0
2013:Q3	11	15	30	33	0	0
2013:Q4	12	16	32	35	0	0
2014:Q1	12	15	33	38	0	0
2014:Q2	12	15	34	38	0	0
2014:Q3	11	14	34	38	0	0
2014:Q4	11	15	36	39	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-6
Maine: Quarterly weighted average Medicaid expenditures for adults

Period	Total		Acute-care		ER visits not leading to hospitalizations		Specialty physician	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	444	427	33	39	21	21.3	5	6
2009:Q4	432	366	28	25	20	18.3	5	4
2010:Q1	443	412	31	29	20	21.9	6	7
2010:Q2	491	444	36	34	23	21.4	7	7
2010:Q3	447	394	33	27	28	26.9	9	8
2010:Q4	395	378	25	23	36	36.3	13	12
2011:Q1	431	384	35	25	38	38.7	13	13
2011:Q2	410	366	34	32	38	34.3	8	7
2011:Q3	411	357	32	29	41	39.4	13	11
2011:Q4	411	399	33	31	39	39.8	13	13
2012:Q1	445	415	38	46	40	38.6	15	15
2012:Q2	446	393	42	43	41	36.5	14	14
2012:Q3	394	351	44	42	27	27.3	12	10
2012:Q4	384	340	46	41	23	20.8	12	10
2013:Q1	403	394	45	44	23	23.3	13	13
2013:Q2	434	424	48	44	26	25.7	13	13
2013:Q3	420	435	47	39	25	25.8	13	13
2013:Q4	424	397	48	53	22	20.0	13	12
2014:Q1	453	433	58	51	25	26.2	14	13
2014:Q2	476	427	55	46	27	26.7	14	14
2014:Q3	482	445	64	54	28	24.3	14	14
2014:Q4	495	511	73	87	27	25.7	14	14

(continued)

Table F6-6 (continued)
Maine: Quarterly weighted average Medicaid expenditures for adults

Period	Primary care physician		Prescription		LTC	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	30	30	68	61	0	0
2009:Q4	30	32	75	63	0	0
2010:Q1	34	35	59	49	0	0
2010:Q2	34	38	79	67	0	0
2010:Q3	26	27	80	70	0	0
2010:Q4	16	14	79	68	0	0
2011:Q1	16	14	83	69	0	0
2011:Q2	8	10	83	68	0	0
2011:Q3	17	14	82	67	0	0
2011:Q4	17	15	83	67	0	0
2012:Q1	18	17	87	66	0	0
2012:Q2	18	16	82	65	0	0
2012:Q3	17	15	76	66	0	0
2012:Q4	18	15	74	65	0	0
2013:Q1	20	19	79	72	0	0
2013:Q2	21	19	83	81	0	0
2013:Q3	19	19	88	88	0	0
2013:Q4	19	18	92	93	0	0
2014:Q1	20	18	96	98	0	0
2014:Q2	21	16	103	89	0	0
2014:Q3	21	19	107	96	0	0
2014:Q4	21	20	110	104	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-7a
Maine: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	1.7	1.2	7.9	10.3
2009:Q4	1.7	1.5	8.6	12.5
2010:Q1	1.7	1.7	7.7	11.3
2010:Q2	1.7	1.3	8.2	11.8
2010:Q3	1.5	1.3	9.2	11.6
2010:Q4	1.4	1.4	12.0	12.4
2011:Q1	1.6	1.5	13.3	14.3
2011:Q2	1.5	1.6	13.0	14.1
2011:Q3	1.7	1.3	11.8	13.5
2011:Q4	1.5	1.6	11.8	13.3
2012:Q1	1.5	1.7	12.2	12.6
2012:Q2	1.6	1.3	12.2	14.1
2012:Q3	1.6	1.7	12.4	12.6
2012:Q4	1.7	1.7	12.2	12.6
2013:Q1	1.7	1.7	11.8	12.8
2013:Q2	1.7	1.8	11.7	12.3
2013:Q3	1.6	1.5	10.9	12.0
2013:Q4	1.5	1.6	10.1	11.2
2014:Q1	1.8	1.8	10.4	11.7
2014:Q2	1.8	1.6	11.0	13.1
2014:Q3	1.8	1.4	10.2	12.2
2014:Q4	1.4	1.1	10.5	12.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-7b
Maine: Average percent of births with low birth weights:
Four quarter intervals preceding and following assignment for children

Period	Low birth weight	
	MAPCP	Non-PCMH
Pre-4	3.9	4.8
Pre-3	4.3	4.2
Pre-2	5.0	2.9
Pre-1	6.0	6.8
Post-1	7.2	9.0

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-8
Maine: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	2.2	2.7	13.4	14.0
2009:Q4	2.1	2.0	13.0	11.5
2010:Q1	2.1	2.0	12.4	14.7
2010:Q2	2.5	2.4	13.6	13.9
2010:Q3	2.4	2.4	15.6	14.6
2010:Q4	2.2	2.1	17.9	17.6
2011:Q1	2.6	1.8	18.3	17.4
2011:Q2	2.5	2.4	18.2	17.6
2011:Q3	2.6	2.4	18.2	17.7
2011:Q4	2.6	2.4	17.8	17.3
2012:Q1	2.6	3.2	17.0	15.6
2012:Q2	2.8	2.6	17.4	16.3
2012:Q3	2.9	2.8	17.9	17.1
2012:Q4	2.8	2.5	16.5	14.7
2013:Q1	2.9	2.7	15.7	14.9
2013:Q2	3.0	2.7	16.4	15.6
2013:Q3	3.1	2.5	16.9	16.0
2013:Q4	3.0	3.1	15.2	13.3
2014:Q1	3.3	3.3	15.5	14.2
2014:Q2	3.2	2.7	16.0	15.7
2014:Q3	3.5	2.8	16.7	14.8
2014:Q4	3.3	4.1	15.7	14.0

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-9
Maine: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	BH conditions only		Disabled beneficiaries only		Asthma diagnosis only	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	962	1,107	1,618	1,419	600	509
2009:Q4	1,042	1,340	1,745	1,543	701	656
2010:Q1	1,045	1,283	1,912	1,638	605	723
2010:Q2	1,119	1,300	1,990	1,632	652	658
2010:Q3	1,059	1,258	1,680	1,349	524	497
2010:Q4	1,028	1,339	1,632	1,417	508	497
2011:Q1	1,104	1,481	1,699	1,503	476	488
2011:Q2	1,148	1,453	1,690	1,643	464	544
2011:Q3	1,165	1,299	1,633	1,492	453	508
2011:Q4	1,219	1,389	1,498	1,529	485	544
2012:Q1	1,343	1,590	1,747	1,780	518	605
2012:Q2	1,402	1,750	1,632	2,022	501	624
2012:Q3	1,329	1,399	1,589	1,631	467	567
2012:Q4	1,394	1,581	1,447	1,644	497	517
2013:Q1	1,357	1,536	1,549	1,678	494	532
2013:Q2	1,398	1,599	1,538	1,616	518	481
2013:Q3	1,377	1,781	1,586	1,813	488	474
2013:Q4	1,359	1,688	1,522	1,718	486	421
2014:Q1	1,418	1,675	1,539	1,674	497	443
2014:Q2	1,459	1,576	1,588	1,605	520	567
2014:Q3	1,472	1,594	1,614	1,596	508	469
2014:Q4	1,297	1,498	1,587	1,631	502	521

(continued)

Table F6-9 (continued)
Maine: Quarterly weighted average total Medicaid expenditures among special populations for children

Period	Rural beneficiaries only		Non-White beneficiaries only	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	245	256	236	265
2009:Q4	265	288	259	287
2010:Q1	290	330	286	324
2010:Q2	304	317	283	324
2010:Q3	243	257	220	250
2010:Q4	216	235	194	245
2011:Q1	233	259	218	242
2011:Q2	215	240	206	229
2011:Q3	214	241	194	204
2011:Q4	215	256	217	236
2012:Q1	237	271	222	260
2012:Q2	240	268	213	248
2012:Q3	223	256	201	209
2012:Q4	230	255	214	217
2013:Q1	242	269	237	240
2013:Q2	258	290	249	214
2013:Q3	233	255	220	194
2013:Q4	248	265	234	206
2014:Q1	254	277	249	210
2014:Q2	263	297	254	234
2014:Q3	256	255	251	228
2014:Q4	257	268	235	222

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-10
Maine: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Multiple chronic conditions only		BH conditions only		Disabled beneficiaries only	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	771	778	876	852	1,163	1,044
2009:Q4	760	615	840	724	1,158	890
2010:Q1	758	731	840	780	1,133	1,161
2010:Q2	843	889	923	1,168	1,219	1,291
2010:Q3	809	753	920	1,060	1,188	1,208
2010:Q4	740	733	850	909	1,042	1,057
2011:Q1	840	827	915	971	1,134	1,203
2011:Q2	830	779	947	891	1,148	947
2011:Q3	831	768	935	884	1,107	948
2011:Q4	845	888	962	874	1,107	1,100
2012:Q1	923	894	1,031	893	1,230	1,158
2012:Q2	957	865	1,078	1,114	1,260	1,185
2012:Q3	826	720	946	754	1,111	910
2012:Q4	805	702	926	778	1,086	930
2013:Q1	831	824	967	888	1,094	986
2013:Q2	880	863	1,000	1,080	1,195	1,024
2013:Q3	856	865	978	1,078	1,188	1,051
2013:Q4	865	842	948	1,031	1,121	1,097
2014:Q1	929	872	1,019	991	1,143	996
2014:Q2	966	872	1,095	1,008	1,188	1,046
2014:Q3	980	838	1,142	1,041	1,231	1,138
2014:Q4	964	995	1,055	1,330	1,208	1,331

(continued)

Table F6-10 (continued)
Maine: Quarterly weighted average total Medicaid expenditures among special populations for adults

Period	Asthma diagnosis only		Rural beneficiaries only		Non-White beneficiaries only	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	920	1,219	427	407	351	404
2009:Q4	858	956	411	348	347	280
2010:Q1	788	948	427	380	371	337
2010:Q2	882	1,126	484	400	424	294
2010:Q3	862	1,365	441	383	350	285
2010:Q4	781	1,229	392	370	316	367
2011:Q1	767	1,096	420	362	328	206
2011:Q2	821	1,138	393	350	316	294
2011:Q3	800	1,070	394	342	331	287
2011:Q4	793	1,086	398	419	325	336
2012:Q1	842	999	431	437	341	260
2012:Q2	856	1,102	439	396	338	244
2012:Q3	755	885	390	349	300	223
2012:Q4	750	988	386	322	287	204
2013:Q1	764	921	400	377	305	252
2013:Q2	809	1,140	433	386	322	313
2013:Q3	768	1,049	417	395	307	309
2013:Q4	774	626	430	395	319	323
2014:Q1	855	974	457	414	343	241
2014:Q2	878	1,029	482	424	358	315
2014:Q3	870	853	490	448	374	290
2014:Q4	869	1,029	498	489	367	272

NOTES:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-11
Maine: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing		Retinal eye examination		LDL-C screening		Medical attention for nephropathy	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	83.4	78.7	19.6	13.1	77.9	77.7	91.5	76.1
Pre-3	84.0	81.7	24.3	13.5	76.4	73.8	90.2	93.8
Pre-2	87.5	90.7	39.8	24.3	75.3	81.3	91.0	86.3
Pre-1	88.6	82.3	46.7	58.5	75.9	76.0	89.3	92.6
Post-1	91.0	98.5	51.4	52.1	76.9	85.9	91.2	97.3
Post-2	92.5	86.9	53.8	46.6	79.6	76.1	91.6	95.5
Post-3	88.8	90.1	50.4	44.0	80.6	85.9	90.1	96.2

Period	Received all 4 diabetes tests		Received none of the 4 diabetes tests		Breast cancer screening		Cervical cancer screening	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	15.3	9.9	1.9	0.8	42.4	47.9	39.4	37.3
Pre-3	18.0	11.0	2.6	1.7	40.2	51.0	37.0	40.6
Pre-2	29.3	19.3	2.0	3.7	43.0	43.9	34.7	33.6
Pre-1	36.3	42.5	2.1	0.9	43.7	39.9	34.1	34.6
Post-1	39.6	45.7	1.1	0.0	43.1	46.0	27.8	29.2
Post-2	41.7	29.7	0.8	0.0	46.6	43.6	23.3	31.0
Post-3	39.2	34.0	2.6	0.9	37.7	62.5	23.7	17.1

(continued)

Table F6-11 (continued)
Maine: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions: Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks		Appropriate use of antidepressant medication management: 6 months		Appropriate use of asthma medications	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
Pre-4	36.6	34.6	29.2	24.3	68.6	68.6
Pre-3	31.1	32.8	23.7	25.4	71.0	74.7
Pre-2	37.0	33.1	27.8	21.0	71.0	72.6
Pre-1	43.2	39.7	33.7	30.7	70.9	55.8
Post-1	43.6	42.6	34.3	34.8	70.5	73.3
Post-2	45.9	44.1	38.6	37.5	69.4	59.8
Post-3	45.9	43.1	36.3	35.3	69.2	47.8

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-12a
Maine: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits		Medical specialist visits		Surgical specialist visits		30-day unplanned readmissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	35.0	38.4	6.7	7.6	3.7	4.4	26.5	16.9
2009:Q4	35.0	40.9	7.5	9.0	3.7	6.3	22.1	8.0
2010:Q1	36.9	37.7	8.4	10.1	3.8	3.7	20.4	25.7
2010:Q2	36.5	42.7	9.1	9.2	3.6	4.6	25.5	25.9
2010:Q3	40.1	43.1	11.7	9.8	4.6	5.1	26.4	35.8
2010:Q4	42.3	41.8	15.2	13.2	7.2	8.0	22.5	9.0
2011:Q1	45.5	45.7	16.9	18.1	8.4	10.7	16.8	26.2
2011:Q2	45.6	44.6	17.3	18.8	8.4	11.6	18.4	18.4
2011:Q3	45.6	41.2	15.9	18.1	7.3	9.0	14.5	13.8
2011:Q4	47.3	42.9	17.0	17.8	8.2	8.6	13.0	28.4
2012:Q1	49.4	46.2	18.5	20.5	9.0	9.9	16.7	5.4
2012:Q2	50.3	43.7	18.8	21.1	8.7	8.0	19.9	22.4
2012:Q3	48.4	41.4	17.9	18.1	8.5	8.0	18.6	14.8
2012:Q4	48.0	40.5	17.7	19.4	8.4	9.3	16.9	12.6
2013:Q1	49.3	46.3	18.8	20.2	8.5	10.6	17.4	46.0
2013:Q2	49.2	41.8	19.4	20.2	9.1	10.6	18.6	30.7
2013:Q3	47.2	44.4	18.4	19.9	9.4	8.6	19.5	29.4
2013:Q4	47.4	42.4	18.8	17.5	8.2	9.5	22.0	22.7
2014:Q1	49.5	42.7	19.3	17.9	8.9	9.6	16.6	7.6
2014:Q2	49.1	39.2	20.0	21.6	9.6	9.5	18.5	27.0
2014:Q3	48.0	39.3	19.5	20.0	8.6	10.1	17.8	21.6
2014:Q4	46.3	38.3	20.1	18.7	8.2	7.0	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F6-12b
Maine: Percentage of total visits that were primary care visits:
Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits	
	MAPCP	Non-PCMH
Pre-4	80.7	77.6
Pre-3	79.0	80.5
Pre-2	75.7	77.2
Pre-1	73.5	69.7
Post-1	71.4	65.0
Post-2	69.4	70.3
Post-3	63.8	64.6

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-13
Maine: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Total		Acute-care		ER visits not leading to hospitalizations		Specialty physician	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	709	713	43	50	32	34	9	11
2009:Q4	698	593	38	33	30	27	8	7
2010:Q1	699	693	36	45	30	32	11	11
2010:Q2	786	808	48	67	35	34	12	13
2010:Q3	748	688	45	46	43	42	15	15
2010:Q4	684	680	38	35	57	65	22	23
2011:Q1	775	752	59	48	62	69	25	26
2011:Q2	760	725	56	61	64	62	15	14
2011:Q3	765	716	52	58	70	76	26	23
2011:Q4	779	794	57	57	67	67	26	29
2012:Q1	843	854	69	108	67	70	30	29
2012:Q2	869	780	78	95	71	64	27	30
2012:Q3	756	672	76	64	46	41	24	20
2012:Q4	744	648	81	70	40	30	23	20
2013:Q1	763	736	72	77	39	35	25	22
2013:Q2	814	808	82	89	42	44	24	25
2013:Q3	783	784	78	50	42	41	24	20
2013:Q4	790	748	76	92	36	33	23	21
2014:Q1	849	836	94	97	41	41	25	26
2014:Q2	888	811	87	87	46	46	25	24
2014:Q3	873	785	97	100	46	35	24	25
2014:Q4	878	901	121	128	43	34	23	20

(continued)

Table F6-13 (continued)
Maine: Quarterly weighted average Medicaid expenditures among beneficiaries with multiple chronic conditions

Period	Primary care physician		Prescription		LTC	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	44	47	44	47	0	0
2009:Q4	44	52	44	52	0	0
2010:Q1	49	57	49	57	0	0
2010:Q2	50	60	50	60	0	0
2010:Q3	40	44	40	44	0	0
2010:Q4	23	21	23	21	0	0
2011:Q1	24	24	24	24	0	0
2011:Q2	13	18	13	18	0	0
2011:Q3	27	23	27	23	0	0
2011:Q4	28	25	28	25	0	0
2012:Q1	30	29	30	29	0	0
2012:Q2	31	26	31	26	0	0
2012:Q3	29	23	29	23	0	0
2012:Q4	30	25	30	25	0	0
2013:Q1	32	33	32	33	0	0
2013:Q2	34	32	34	32	0	0
2013:Q3	30	29	30	29	0	0
2013:Q4	31	29	31	29	0	0
2014:Q1	33	27	33	27	0	0
2014:Q2	33	26	33	26	0	0
2014:Q3	33	30	33	30	0	0
2014:Q4	32	30	32	30	0	0

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-14
Maine: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	2.8	3.6	18.3	19.5
2009:Q4	2.8	2.5	18.1	15.6
2010:Q1	2.4	3.0	17.4	19.0
2010:Q2	3.2	4.4	18.8	18.6
2010:Q3	3.3	3.6	21.5	19.9
2010:Q4	3.3	2.8	24.9	25.3
2011:Q1	4.1	3.1	26.1	26.5
2011:Q2	4.0	4.2	26.4	27.5
2011:Q3	4.2	4.7	26.7	27.6
2011:Q4	4.2	4.2	26.6	25.4
2012:Q1	4.4	6.9	25.5	22.8
2012:Q2	5.0	5.7	26.0	22.6
2012:Q3	4.8	4.1	26.9	24.2
2012:Q4	4.8	4.1	24.8	19.3
2013:Q1	4.3	4.0	22.9	21.1
2013:Q2	4.9	5.3	23.8	23.4
2013:Q3	4.9	3.0	24.2	23.0
2013:Q4	4.4	5.4	21.9	19.4
2014:Q1	4.9	6.1	22.8	20.5
2014:Q2	4.6	4.7	23.7	24.4
2014:Q3	4.8	4.5	23.9	18.9
2014:Q4	4.9	5.7	21.9	15.9

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-15
Maine: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are children

Period	Total expenditures		Acute-care		ER visits not leading to hospitalizations		Services with principal diagnosis of BH condition	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	962	1,107	47	89	14	20	82	127
2009:Q4	1,042	1,340	74	71	16	21	91	148
2010:Q1	1,045	1,283	47	13	16	27	88	137
2010:Q2	1,119	1,300	83	74	18	22	97	108
2010:Q3	1,059	1,258	57	30	26	25	151	144
2010:Q4	1,028	1,339	94	188	39	29	351	444
2011:Q1	1,104	1,481	118	79	41	48	436	560
2011:Q2	1,148	1,453	145	152	42	44	454	520
2011:Q3	1,165	1,299	104	35	40	48	439	371
2011:Q4	1,219	1,389	130	69	51	58	450	442
2012:Q1	1,343	1,590	150	131	52	38	511	521
2012:Q2	1,402	1,750	160	134	53	46	404	395
2012:Q3	1,329	1,399	111	41	40	26	342	227
2012:Q4	1,394	1,581	109	99	35	30	242	203
2013:Q1	1,357	1,536	113	111	35	34	333	299
2013:Q2	1,398	1,599	95	67	44	43	329	258
2013:Q3	1,377	1,781	116	132	33	25	297	295
2013:Q4	1,359	1,688	111	68	29	30	261	253
2014:Q1	1,418	1,675	161	183	30	24	336	316
2014:Q2	1,459	1,576	134	133	35	47	331	285
2014:Q3	1,472	1,594	214	159	34	33	307	349
2014:Q4	1,297	1,498	304	233	43	37	332	329

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-16
Maine: Quarterly weighted average expenditures among beneficiaries with BH conditions and who are adults

Period	Total expenditures		Acute-care		ER visits not leading to hospitalizations		Services with principal diagnosis of BH condition	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	876	852	108	126	51	83	88	81
2009:Q4	840	724	97	67	45	42	80	54
2010:Q1	840	780	73	47	47	50	77	72
2010:Q2	923	1,168	108	181	56	78	92	108
2010:Q3	920	1,060	96	141	69	102	138	112
2010:Q4	850	909	100	102	90	129	263	245
2011:Q1	915	971	125	111	96	105	310	247
2011:Q2	947	891	131	230	102	110	326	286
2011:Q3	935	884	113	121	111	145	278	246
2011:Q4	962	874	117	67	111	135	313	260
2012:Q1	1,031	893	129	129	104	111	323	233
2012:Q2	1,078	1,114	142	169	122	120	312	285
2012:Q3	946	754	129	76	80	63	275	180
2012:Q4	926	778	128	113	66	58	182	147
2013:Q1	967	888	145	98	71	86	267	259
2013:Q2	1,000	1,080	153	159	74	79	280	322
2013:Q3	978	1,078	141	114	74	92	258	237
2013:Q4	948	1,031	143	246	63	70	251	331
2014:Q1	1,019	991	178	175	68	92	271	258
2014:Q2	1,095	1,008	178	234	74	94	273	315
2014:Q3	1,142	1,041	247	216	76	78	277	254
2014:Q4	1,055	1,330	225	373	65	68	254	325

NOTE:

- Numbers represent average expenditures and were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-17
Maine: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions		ER visits not leading to hospitalization		BH inpatient admissions		BH ER visits		BH outpatient visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	1.4	2.1	12.4	15.6	1.6	1.7	2.7	2.5	1.4	10.4
2009:Q4	2.4	2.0	12.4	16.9	2.1	2.3	3.3	3.8	2.9	10.0
2010:Q1	2.0	0.5	11.0	15.0	1.5	1.3	1.8	5.2	2.9	12.2
2010:Q2	2.5	2.2	12.2	15.8	1.9	3.1	2.4	3.9	3.9	17.3
2010:Q3	2.0	1.5	14.8	16.5	1.5	1.0	4.1	4.9	9.4	18.3
2010:Q4	2.5	4.7	19.8	18.6	1.3	0.7	6.5	6.4	20.3	26.9
2011:Q1	3.6	2.2	20.1	23.3	1.2	1.5	7.2	8.0	23.7	36.5
2011:Q2	3.1	3.7	21.5	21.6	3.3	3.3	8.9	9.0	24.1	33.1
2011:Q3	3.5	1.6	21.6	25.1	3.2	3.3	8.3	9.5	26.4	33.7
2011:Q4	4.5	3.1	23.5	21.2	4.0	4.3	10.2	8.0	30.4	37.8
2012:Q1	4.1	4.7	22.9	18.3	2.8	2.6	10.4	7.5	32.0	42.7
2012:Q2	4.1	4.0	23.4	25.9	3.3	2.6	10.1	11.6	38.3	41.1
2012:Q3	3.7	1.4	23.4	18.7	2.5	1.0	9.5	4.9	36.8	41.7
2012:Q4	3.6	2.9	22.8	19.4	2.1	0.7	6.8	5.4	34.0	39.4
2013:Q1	3.2	2.5	19.9	22.4	2.3	2.1	8.0	7.5	42.3	46.5
2013:Q2	2.8	2.1	23.9	19.9	2.5	1.5	11.3	6.4	43.2	50.7
2013:Q3	3.3	3.1	20.1	19.1	2.3	2.3	8.5	6.8	38.7	46.0
2013:Q4	2.8	2.2	18.9	17.2	2.2	2.7	7.5	5.9	38.7	46.7
2014:Q1	3.9	4.3	19.6	13.4	3.1	3.7	9.1	4.2	34.8	46.3
2014:Q2	3.8	4.9	21.0	19.6	2.5	2.2	7.9	6.8	32.0	43.0
2014:Q3	3.6	3.0	19.6	23.6	2.4	3.0	8.0	5.9	29.8	39.5
2014:Q4	4.6	4.0	18.0	17.2	3.4	3.2	8.0	9.3	30.9	35.7

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-18
Maine: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions		ER visits not leading to hospitalization		BH inpatient admissions		BH ER visits		BH outpatient visits	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	3.8	5.1	21.9	24.7	1.5	1.6	9.0	10.7	6.3	8.2
2009:Q4	3.7	4.1	21.4	19.2	1.3	1.7	8.9	6.9	6.6	8.2
2010:Q1	3.3	3.0	20.7	22.3	1.2	2.2	7.9	8.9	7.2	6.2
2010:Q2	4.0	5.9	22.8	24.5	1.2	1.6	8.6	10.3	7.6	6.7
2010:Q3	4.1	5.9	26.2	27.3	1.2	1.1	11.5	14.5	17.1	14.5
2010:Q4	4.2	3.5	30.2	34.4	1.2	1.7	16.0	20.8	30.0	24.9
2011:Q1	4.8	3.9	31.4	34.2	1.7	2.5	16.9	22.7	34.7	36.4
2011:Q2	4.7	6.0	32.2	39.4	1.7	2.8	17.7	21.7	35.8	35.7
2011:Q3	5.5	6.4	32.4	38.9	2.1	2.2	16.6	22.1	39.0	34.2
2011:Q4	5.1	3.1	32.6	36.5	1.6	2.1	17.6	22.6	40.9	31.6
2012:Q1	4.9	6.7	30.2	29.8	1.8	1.3	16.2	16.4	43.7	34.8
2012:Q2	5.7	5.5	32.6	34.5	1.9	2.0	17.0	14.7	43.7	32.0
2012:Q3	5.3	4.1	32.8	34.1	1.8	2.0	16.0	13.4	42.3	27.1
2012:Q4	5.3	4.2	30.0	25.8	1.5	0.7	11.9	9.2	37.6	25.9
2013:Q1	5.6	2.9	28.2	27.8	2.2	0.7	14.0	16.2	46.5	36.3
2013:Q2	5.6	7.8	28.8	34.3	1.6	1.3	15.8	17.9	45.6	37.2
2013:Q3	5.6	5.0	30.2	32.9	1.6	2.0	15.6	20.1	42.3	34.1
2013:Q4	5.0	9.0	26.4	29.8	1.6	2.3	13.2	19.1	41.2	36.6
2014:Q1	5.5	7.7	28.0	28.5	1.5	2.2	13.5	14.3	38.4	36.6
2014:Q2	5.4	8.6	27.9	26.6	1.6	2.4	13.2	16.8	39.3	34.3
2014:Q3	6.5	3.9	28.5	30.3	1.5	2.0	13.3	17.0	40.0	27.9
2014:Q4	5.5	11.5	25.2	22.3	1.1	1.1	12.4	11.5	37.3	30.0

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F6-19
Maine: Quarterly weighted average expenditures and utilization among disabled beneficiaries who are children

Period	Total Medicaid expenditures		Acute-care expenditures		ER visits not leading to hospitalization expenditures		Specialty physician expenditures		Primary care physician expenditures	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	1,310	1,222	48	31	13	19	6	5	35	37
2009:Q4	1,378	1,342	54	23	14	21	6	5	41	42
2010:Q1	1,563	1,491	65	29	14	17	9	5	42	40
2010:Q2	1,611	1,470	51	30	14	15	8	7	47	44
2010:Q3	1,320	1,185	43	18	18	18	12	11	32	32
2010:Q4	1,230	1,176	44	29	25	19	21	16	19	14
2011:Q1	1,352	1,235	56	26	27	20	24	15	18	16
2011:Q2	1,312	1,273	53	34	31	20	14	11	9	9
2011:Q3	1,271	1,198	37	31	26	18	22	16	18	18
2011:Q4	1,252	1,296	36	22	30	22	21	18	19	18
2012:Q1	1,360	1,439	68	35	36	26	24	18	20	19
2012:Q2	1,316	1,540	38	55	28	36	18	18	20	18
2012:Q3	1,261	1,306	51	48	23	16	19	18	17	18
2012:Q4	1,187	1,294	48	23	18	16	17	14	17	17
2013:Q1	1,219	1,293	47	32	18	13	17	11	19	21
2013:Q2	1,278	1,299	48	46	22	12	20	12	21	22
2013:Q3	1,239	1,341	51	47	20	15	18	15	20	22
2013:Q4	1,217	1,302	51	36	17	14	15	12	20	25
2014:Q1	1,192	1,273	66	85	18	15	15	12	22	21
2014:Q2	1,280	1,326	64	49	21	20	19	15	25	24
2014:Q3	1,206	1,163	52	45	18	20	18	15	21	21
2014:Q4	1,212	1,216	113	54	22	18	16	14	20	20

(continued)

Table F6-19 (continued)
Maine: Quarterly weighted average expenditures and utilization among disabled beneficiaries who are children

Period	All-cause admissions		ER visits not leading to hospitalization	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2009:Q3	3.5	1.8	11.0	14.2
2009:Q4	4.3	1.8	12.3	17.1
2010:Q1	4.6	1.9	10.1	12.5
2010:Q2	3.3	2.2	10.5	12.6
2010:Q3	3.2	1.5	12.4	13.9
2010:Q4	3.6	2.3	15.9	12.2
2011:Q1	3.8	1.8	16.1	15.7
2011:Q2	3.7	2.4	18.9	16.3
2011:Q3	2.9	2.3	15.8	15.8
2011:Q4	2.7	1.5	18.1	13.0
2012:Q1	4.2	2.0	18.3	15.6
2012:Q2	2.1	3.3	16.8	21.1
2012:Q3	3.3	3.1	17.9	14.4
2012:Q4	2.6	1.3	17.3	13.0
2013:Q1	2.8	1.8	16.0	14.2
2013:Q2	2.9	2.6	18.0	12.3
2013:Q3	2.9	2.7	15.3	14.5
2013:Q4	2.9	2.0	13.7	13.1
2014:Q1	3.3	4.2	13.6	14.5
2014:Q2	3.2	2.7	15.5	13.7
2014:Q3	2.5	2.0	13.4	13.1
2014:Q4	4.1	2.1	13.5	13.5

NOTE:

- Numbers represent average expenditures and the percentage of beneficiaries who had any utilizations. Means and percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.7 Michigan

Table F7-1
Michigan: Average weighted likelihood of appropriate use of asthma medication: Four quarter intervals preceding and following assignment for children

Period	Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH
Pre-4	82.9	77.3	76.8
Pre-3	83.1	75.5	78.1
Pre-2	84.6	71.8	79.4
Pre-1	82.6	72.6	80.4
Post-1	82.8	75.8	78.9
Post-2	85.1	75.3	84.8
Post-3	79.0	68.9	76.5

NOTES:

- Numbers represent the percentage of beneficiaries with asthma who had appropriate use of their asthma medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years pre-assignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-2
Michigan: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	63.7	50.6	56.2	11.2	7.5	8.6	50.9	42.8	48.8	43.1	35.6	39.9
Pre-3	65.1	54.7	58.7	20.3	16.7	16.5	53.3	39.3	50.7	46.1	34.9	39.4
Pre-2	67.0	56.8	57.2	40.2	39.8	38.5	53.4	41.3	50.9	47.9	34.5	41.1
Pre-1	63.8	52.3	56.6	38.7	39.7	40.1	50.5	41.3	49.1	47.5	38.3	36.9
Post-1	68.0	45.5	56.3	42.8	45.1	43.2	51.6	29.4	45.2	50.0	31.7	34.7
Post-2	66.8	36.1	46.6	41.7	41.5	43.6	49.5	23.2	37.6	49.6	30.8	34.2
Post-3	60.1	33.9	41.6	34.5	34.1	36.2	39.1	21.4	25.7	41.2	27.1	28.0

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	4.2	2.5	3.3	25.2	35.0	32.4	31.3	27.5	31.5	28.8	23.8	29.2
Pre-3	8.4	3.9	5.2	21.7	29.1	28.1	31.6	28.6	31.9	28.9	23.9	29.3
Pre-2	18.2	11.1	15.3	17.3	23.3	22.2	33.0	27.6	32.6	28.3	23.3	30.2
Pre-1	15.8	12.3	13.2	19.3	23.4	22.9	32.0	29.2	31.0	27.6	22.4	28.4
Post-1	17.9	8.0	14.3	15.3	24.7	23.3	37.1	35.5	34.1	27.4	20.1	28.3
Post-2	17.3	6.2	11.9	15.7	31.3	25.4	33.8	31.4	32.0	22.3	15.7	24.0
Post-3	10.1	3.1	6.0	22.2	35.0	33.3	21.0	18.0	21.4	13.0	10.9	16.0

(continued)

Table F7-2 (continued)
Michigan: Average weighted likelihood of receiving specific tests/examinations or appropriate use of medications: Four quarter intervals preceding and following assignment for adults

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	38.0	31.4	39.0	26.4	20.6	25.1	70.3	61.9	70.2
Pre-3	41.4	38.6	38.4	27.6	27.4	25.4	74.1	62.3	70.5
Pre-2	41.5	38.6	37.4	29.5	28.6	23.8	75.7	72.0	71.0
Pre-1	44.1	41.1	43.5	31.7	26.5	31.5	77.7	66.9	75.4
Post-1	48.0	45.5	41.5	35.4	32.5	33.9	79.9	71.3	78.3
Post-2	46.4	40.7	48.0	34.2	31.1	35.4	83.8	75.2	87.9
Post-3	47.0	42.7	49.6	34.1	31.3	40.8	81.1	68.7	86.9

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-3
Michigan: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits			Medical specialist visits			Surgical specialist visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.2	4.6	4.1	0.8	1.0	0.6	0.2	0.1	0.1
2009:Q4	9.5	7.9	8.2	1.6	1.7	1.0	0.3	0.2	0.3
2010:Q1	28.2	25.5	26.5	4.8	5.4	5.0	0.6	0.6	0.5
2010:Q2	39.5	35.6	38.5	7.0	7.5	7.5	1.1	0.7	0.9
2010:Q3	43.0	39.8	42.5	7.6	8.0	8.4	1.1	1.0	1.1
2010:Q4	43.3	40.4	42.1	7.2	7.7	7.6	1.1	0.9	1.1
2011:Q1	44.9	40.5	44.7	8.2	9.5	8.4	1.1	1.0	1.0
2011:Q2	41.5	36.7	40.5	7.8	8.4	8.0	1.2	1.2	1.1
2011:Q3	42.8	39.9	43.3	7.5	8.7	7.8	1.2	0.9	1.2
2011:Q4	42.6	38.7	42.8	8.5	8.7	8.4	1.2	0.9	1.3
2012:Q1	40.8	39.7	42.9	11.6	9.5	9.5	1.1	1.1	1.1
2012:Q2	37.1	34.1	37.6	10.5	8.3	9.0	1.1	0.9	1.0
2012:Q3	39.7	36.2	40.5	9.4	9.0	9.1	1.2	0.9	1.1
2012:Q4	40.0	38.1	42.1	10.2	8.7	8.5	1.2	1.0	1.2
2013:Q1	43.4	40.4	45.8	8.6	7.8	7.8	1.1	1.1	1.1
2013:Q2	40.5	37.1	41.2	8.1	7.7	7.1	1.3	1.1	1.3
2013:Q3	40.3	38.4	42.7	9.0	7.1	7.2	1.2	1.3	1.3
2013:Q4	42.5	40.4	43.6	6.9	6.3	6.0	1.3	1.2	1.3
2014:Q1	40.8	39.3	41.9	6.4	5.9	6.0	1.3	1.2	1.2
2014:Q2	40.5	37.1	41.8	6.4	6.1	5.6	1.5	1.4	1.1
2014:Q3	42.1	38.7	42.9	6.2	5.1	5.4	1.4	1.2	1.2
2014:Q4	43.1	39.9	43.6	6.6	6.0	5.5	1.4	1.7	1.1

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-4a
Michigan: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.8	4.2	5.2	1.1	1.2	0.8	0.3	0.2	0.3	6.7	8.0	6.9
2009:Q4	9.2	7.4	10.1	2.0	1.6	1.3	0.6	0.4	0.7	7.4	6.2	7.3
2010:Q1	27.7	24.8	28.6	6.9	6.4	6.0	1.9	1.4	1.8	7.7	5.6	5.1
2010:Q2	40.4	37.3	43.9	10.4	10.3	9.6	3.1	2.6	3.3	8.6	7.0	6.0
2010:Q3	41.8	40.2	44.1	11.3	11.3	11.3	3.4	2.9	3.9	7.8	6.8	5.9
2010:Q4	41.6	40.1	44.2	10.7	10.7	10.5	3.5	3.0	3.8	7.6	7.4	7.7
2011:Q1	41.7	40.4	45.3	11.3	11.4	10.7	3.8	3.3	4.4	7.2	6.8	7.8
2011:Q2	41.6	40.5	44.9	11.5	11.3	11.7	3.9	3.4	4.5	8.6	8.8	7.4
2011:Q3	42.2	40.2	45.7	11.6	11.4	11.3	4.2	3.4	4.1	8.2	6.6	6.0
2011:Q4	42.1	40.8	46.1	12.4	11.4	11.7	4.0	3.7	4.2	9.7	10.9	10.9
2012:Q1	41.4	42.6	46.0	15.0	13.2	13.4	4.2	3.9	4.4	8.1	9.4	7.2
2012:Q2	40.6	41.6	44.3	14.8	13.2	12.8	4.2	3.9	4.2	8.9	6.7	7.7
2012:Q3	41.3	42.9	46.2	14.4	14.7	14.0	4.5	4.1	4.5	8.4	8.9	9.1
2012:Q4	41.4	42.5	45.5	14.3	14.2	14.7	4.4	4.6	5.3	9.1	8.7	10.1
2013:Q1	45.4	46.8	49.9	12.9	11.9	13.9	5.1	5.3	5.4	8.8	7.4	9.6
2013:Q2	44.2	45.0	49.2	12.4	12.8	13.2	4.9	5.0	5.7	8.7	9.2	9.8
2013:Q3	41.6	43.8	47.0	14.0	13.4	12.5	4.7	4.6	5.4	8.7	11.7	5.7
2013:Q4	43.8	44.7	48.4	10.9	12.0	11.9	5.0	5.2	5.3	9.3	9.5	13.8
2014:Q1	43.5	45.2	48.1	10.7	10.7	11.1	5.3	5.2	5.6	9.7	8.2	7.2
2014:Q2	39.7	41.2	43.0	9.3	9.0	9.7	4.8	5.1	4.8	8.4	9.5	9.7
2014:Q3	33.4	34.9	37.8	7.9	7.7	8.1	4.1	3.9	4.1	10.2	8.1	6.7
2014:Q4	30.7	31.7	33.6	7.3	6.6	7.8	3.7	4.0	3.3	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F7-4b
Michigan: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	79.0	79.0	80.9
Pre-3	79.3	79.3	80.4
Pre-2	80.9	76.8	80.3
Pre-1	81.9	81.2	83.3
Post-1	75.1	78.9	78.3
Post-2	77.5	82.1	80.2
Post-3	78.6	82.0	81.9

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-5a
Michigan: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	1.9	2.1	2.1	12.5	13.1	13.0
2009:Q4	1.8	2.1	2.0	15.2	17.0	16.1
2010:Q1	1.9	2.0	2.1	13.7	15.5	14.1
2010:Q2	1.7	2.2	2.0	13.6	15.4	14.5
2010:Q3	1.8	2.2	2.1	12.9	15.0	14.1
2010:Q4	1.8	2.2	2.1	12.7	15.1	13.6
2011:Q1	1.9	2.5	2.1	15.0	17.4	15.8
2011:Q2	1.9	2.6	2.1	13.8	15.4	14.7
2011:Q3	1.9	2.3	2.0	12.8	14.8	13.9
2011:Q4	1.8	2.1	1.9	13.4	14.7	14.0
2012:Q1	1.9	1.8	2.0	14.9	17.6	15.9
2012:Q2	1.6	1.7	1.4	13.4	14.7	14.3
2012:Q3	1.7	1.7	1.6	13.1	14.6	13.6
2012:Q4	1.7	1.7	1.6	14.2	15.5	14.6
2013:Q1	1.8	2.2	1.6	14.7	16.1	15.1
2013:Q2	1.7	2.0	1.5	13.4	15.1	13.5
2013:Q3	1.6	1.7	1.4	12.4	14.6	12.7
2013:Q4	1.7	1.9	1.4	13.2	14.3	13.1
2014:Q1	1.6	1.9	1.4	11.8	13.2	11.4
2014:Q2	1.6	1.4	1.4	12.9	15.3	13.0
2014:Q3	1.5	1.8	1.2	12.7	14.3	12.8
2014:Q4	0.8	1.1	0.7	13.8	15.5	13.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-5b
Michigan: Average percent of births with low birth weights:
Four quarter intervals preceding and following assignment for children

Period	Low birth weight		
	MAPCP	PCMH	Non-PCMH
Pre-4	7.2	7.3	7.5
Pre-3	7.3	11.7	8.6
Pre-2	7.5	8.0	7.0
Pre-1	7.5	8.6	8.7
Post-1	29.2	19.6	25.1

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP Demonstration group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-6
Michigan: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	4.6	4.5	4.8	20.5	21.2	19.9
2009:Q4	4.4	4.7	4.9	20.4	20.2	20.5
2010:Q1	4.8	4.7	4.5	19.9	20.1	20.1
2010:Q2	4.7	4.4	4.5	21.4	22.1	21.3
2010:Q3	5.0	4.8	4.6	22.3	22.3	22.1
2010:Q4	4.6	4.3	4.2	20.9	19.7	21.0
2011:Q1	4.5	5.1	4.1	20.2	19.4	20.6
2011:Q2	4.6	4.7	4.5	21.0	19.9	21.3
2011:Q3	4.9	4.9	4.7	21.6	21.1	21.3
2011:Q4	4.5	4.2	4.4	20.5	19.9	20.7
2012:Q1	4.8	4.7	4.6	21.4	21.3	20.8
2012:Q2	4.7	5.0	4.5	21.6	21.5	21.5
2012:Q3	5.1	4.6	4.8	22.4	22.4	21.9
2012:Q4	5.1	4.9	4.5	21.3	21.6	21.6
2013:Q1	5.1	5.5	4.8	21.1	20.2	20.1
2013:Q2	4.9	5.1	4.7	21.1	21.0	20.3
2013:Q3	5.2	4.9	4.9	20.7	20.2	18.8
2013:Q4	5.2	5.2	4.7	19.7	19.9	19.0
2014:Q1	5.0	4.9	4.6	18.4	18.3	16.2
2014:Q2	4.2	4.2	4.0	17.7	17.6	17.7
2014:Q3	3.7	3.2	3.4	15.4	15.7	14.7
2014:Q4	3.1	3.2	2.9	12.7	12.4	11.8

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-7
Michigan: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions:
Four quarter intervals preceding and following assignment

Period	HbA1c testing			Retinal eye examination			LDL-C screening			Medical attention for nephropathy		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	65.2	51.4	56.8	11.0	7.7	8.9	52.3	43.8	49.6	44.8	37.6	41.4
Pre-3	66.9	56.1	58.9	21.2	17.7	16.3	55.4	40.8	52.0	47.8	36.3	41.8
Pre-2	68.1	59.6	57.4	41.5	42.7	38.9	54.8	43.0	51.8	49.2	36.1	42.7
Pre-1	66.4	54.7	58.8	41.5	41.8	41.5	52.9	43.3	51.4	50.2	40.4	38.4
Post-1	69.1	45.9	58.1	44.0	46.3	44.2	52.4	29.5	47.1	51.3	35.3	36.3
Post-2	67.4	36.8	47.1	42.8	42.9	45.6	50.1	23.3	37.4	51.4	33.5	36.6
Post-3	60.3	35.2	42.3	35.4	35.6	37.4	39.6	22.3	26.1	42.7	27.6	29.4

Period	Received all 4 diabetes tests			Received none of the 4 diabetes tests			Breast cancer screening			Cervical cancer screening		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	4.1	2.9	3.6	23.4	34.2	31.1	36.2	31.7	36.1	29.4	24.6	28.4
Pre-3	8.7	4.2	5.8	19.4	27.2	27.4	37.3	34.7	36.8	29.8	25.0	29.9
Pre-2	18.9	12.1	16.4	15.5	19.7	21.8	38.7	32.6	37.8	30.3	26.6	31.5
Pre-1	17.1	13.5	14.3	15.6	20.5	20.4	40.5	36.9	37.1	31.4	27.7	31.3
Post-1	18.4	8.8	15.3	14.1	23.0	21.9	40.5	37.8	37.5	26.5	20.9	27.0
Post-2	17.7	6.5	12.6	14.4	30.5	23.4	36.7	33.9	32.9	21.6	15.5	22.9
Post-3	10.1	3.2	6.0	20.7	33.5	31.3	23.3	18.8	23.7	13.1	11.0	17.8

(continued)

Table F7-7 (continued)
Michigan: Average weighted likelihood of receiving specific tests/examination or appropriate use of medications among beneficiaries with multiple chronic conditions: Four quarter intervals preceding and following assignment

Period	Appropriate use of antidepressant medication management: 12 weeks			Appropriate use of antidepressant medication management: 6 months			Appropriate use of asthma medications		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
Pre-4	38.6	38.6	38.2	29.2	30.5	24.1	76.2	69.5	74.6
Pre-3	41.5	39.1	40.1	30.2	28.7	24.6	79.4	71.8	74.7
Pre-2	42.8	38.3	40.3	32.2	31.2	25.7	80.9	75.7	75.0
Pre-1	44.9	42.6	40.2	33.8	29.7	31.2	80.2	72.0	77.2
Post-1	48.0	46.8	42.8	37.9	35.5	35.0	84.5	75.2	86.3
Post-2	47.2	38.6	45.7	37.7	29.7	32.2	86.9	77.6	89.1
Post-3	47.0	45.6	50.3	37.0	35.2	43.8	84.7	74.4	93.2

NOTES:

- Numbers represent the percentage of beneficiaries receiving specific tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

HbA1c = hemoglobin A1c; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-8a
Michigan: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	7.4	5.1	6.7	1.7	1.8	1.1	0.6	0.2	0.4	10.1	13.7	11.3
2009:Q4	11.7	9.2	13.0	3.2	2.4	2.4	1.0	0.6	1.2	11.6	8.8	11.0
2010:Q1	38.8	34.9	40.5	11.2	9.6	9.7	3.5	2.5	3.2	12.1	8.6	7.5
2010:Q2	55.7	52.3	61.5	16.4	15.8	15.0	5.8	4.7	6.1	13.6	11.6	8.9
2010:Q3	58.3	58.2	62.2	18.3	17.6	18.0	6.5	5.5	6.9	12.8	9.0	10.4
2010:Q4	59.4	59.0	63.2	17.5	16.7	17.2	6.7	5.7	6.9	13.0	9.9	11.8
2011:Q1	59.7	59.8	64.9	18.7	18.1	16.7	7.5	5.9	7.8	12.0	11.8	13.1
2011:Q2	61.4	62.7	66.6	19.7	18.9	19.5	7.6	6.5	8.5	12.7	13.3	12.0
2011:Q3	63.0	63.9	67.9	20.0	19.7	18.4	8.4	6.5	7.7	12.6	9.1	9.7
2011:Q4	63.4	63.8	68.7	21.1	18.8	20.2	8.3	6.9	8.1	14.0	15.4	16.5
2012:Q1	62.7	66.7	67.9	25.0	22.0	22.5	8.6	7.7	7.9	11.8	13.3	11.1
2012:Q2	59.9	63.4	64.1	24.0	21.3	20.9	8.3	7.8	7.6	13.7	9.6	10.6
2012:Q3	60.8	65.1	66.7	23.8	23.6	22.6	9.0	8.3	8.0	13.3	14.3	11.6
2012:Q4	61.4	64.4	65.0	23.5	22.1	24.5	8.9	8.8	9.7	14.0	14.9	15.4
2013:Q1	66.7	69.1	71.2	21.8	20.4	23.4	10.4	11.1	9.6	13.2	11.5	15.9
2013:Q2	66.9	69.0	70.3	21.5	22.0	22.2	9.9	10.0	10.0	13.4	13.3	16.1
2013:Q3	64.5	68.4	68.7	23.5	23.4	21.4	9.6	9.7	9.8	13.3	16.5	9.7
2013:Q4	66.8	68.4	69.3	19.5	21.5	20.0	10.0	10.3	8.9	14.5	16.5	17.1
2014:Q1	66.8	70.3	70.7	19.5	19.5	20.0	10.9	10.0	10.0	14.9	11.1	10.7
2014:Q2	68.2	70.4	71.5	19.8	18.3	19.2	11.1	11.5	10.0	13.1	15.3	15.7
2014:Q3	60.3	64.1	66.1	17.6	16.3	17.0	9.9	9.8	9.5	15.2	13.0	10.8
2014:Q4	55.4	58.7	59.6	16.1	15.5	16.4	9.2	10.0	7.4	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F7-8b
Michigan: Percentage of total visits that were primary care visits:
Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	77.7	78.5	80.5
Pre-3	77.4	78.1	79.3
Pre-2	79.0	75.3	77.6
Pre-1	80.4	81.0	77.0
Post-1	73.1	78.4	76.4
Post-2	76.9	81.8	79.0
Post-3	77.7	81.0	80.8

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-9
Michigan: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.6	5.2	6.2	27.3	27.1	26.6
2009:Q4	5.7	6.3	6.5	26.9	25.5	26.0
2010:Q1	6.3	5.0	5.6	26.7	25.9	26.0
2010:Q2	6.1	5.4	5.4	28.9	28.9	27.3
2010:Q3	6.4	6.1	5.9	29.8	28.8	28.6
2010:Q4	6.1	5.6	6.0	28.3	26.7	27.3
2011:Q1	6.1	6.7	5.4	27.5	25.4	28.0
2011:Q2	6.9	7.2	6.4	30.1	28.8	29.6
2011:Q3	7.3	8.2	5.8	31.3	30.8	29.5
2011:Q4	6.9	6.5	5.8	29.7	27.7	28.8
2012:Q1	7.8	7.5	6.5	30.9	29.8	28.1
2012:Q2	6.9	7.7	5.7	30.5	30.3	29.3
2012:Q3	7.3	6.9	6.6	32.0	30.2	29.2
2012:Q4	7.3	7.1	6.3	30.3	29.7	28.7
2013:Q1	7.6	8.2	6.6	29.8	28.7	27.8
2013:Q2	7.4	8.0	6.2	30.9	29.4	28.2
2013:Q3	7.5	7.1	6.3	30.5	29.4	25.8
2013:Q4	7.8	7.5	6.2	29.4	27.6	26.5
2014:Q1	7.9	7.4	6.7	27.5	27.4	23.0
2014:Q2	8.0	7.7	6.5	29.5	28.0	27.0
2014:Q3	7.0	6.2	6.2	27.3	26.7	24.1
2014:Q4	5.7	5.5	5.4	23.1	22.3	20.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-10
Michigan: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	0.9	1.1	0.5	14.7	18.6	12.0	0.0	0.0	0.0	0.5	0.9	0.5	14.0	12.6	18.5
2009:Q4	0.9	0.4	0.5	16.6	19.3	18.1	0.0	0.0	0.0	0.5	0.9	0.3	17.0	14.3	19.3
2010:Q1	0.7	0.0	0.5	14.6	18.8	15.1	0.0	0.0	0.0	0.8	2.6	1.2	20.0	18.7	23.6
2010:Q2	0.7	0.8	0.4	15.4	15.5	15.2	0.0	0.0	0.1	0.9	1.1	1.1	19.4	22.3	24.2
2010:Q3	0.8	1.0	0.9	15.1	21.6	17.0	0.0	0.0	0.0	0.6	1.0	0.8	18.7	18.9	22.4
2010:Q4	0.7	0.6	0.3	13.8	16.2	15.8	0.0	0.0	0.0	0.8	0.7	1.0	22.6	27.1	29.0
2011:Q1	0.7	1.5	1.5	16.3	20.5	16.2	0.0	0.0	0.4	1.1	1.1	1.9	26.7	26.9	34.8
2011:Q2	0.8	0.9	0.6	16.5	18.1	16.9	0.1	0.5	0.0	1.4	3.0	1.7	35.4	32.9	40.8
2011:Q3	1.3	1.8	1.0	16.2	21.6	16.4	0.1	0.5	0.1	1.7	2.5	1.3	32.1	34.8	40.8
2011:Q4	0.8	1.8	0.7	16.1	20.9	16.7	0.0	0.0	0.2	2.0	1.8	1.3	40.8	37.8	46.2
2012:Q1	1.0	0.4	0.8	17.9	24.3	16.9	0.2	0.0	0.1	2.3	2.7	2.1	46.0	46.3	54.7
2012:Q2	0.9	0.5	1.0	16.1	16.0	16.4	0.0	0.0	0.0	1.7	2.2	1.1	34.3	32.4	42.4
2012:Q3	0.9	1.2	1.2	16.1	20.3	17.8	0.1	0.1	0.0	1.8	2.8	1.8	30.0	37.9	36.6
2012:Q4	1.0	0.5	0.5	15.9	21.1	17.8	0.0	0.0	0.0	1.4	1.5	1.6	35.1	30.2	38.5
2013:Q1	1.1	1.5	1.0	16.1	18.7	15.6	0.0	0.0	0.0	1.8	2.2	1.8	43.0	45.5	50.6
2013:Q2	1.0	0.7	0.4	17.6	19.0	15.5	0.0	0.0	0.0	2.2	4.3	1.7	41.6	43.5	48.7
2013:Q3	0.8	1.2	0.9	16.2	20.2	15.8	0.0	0.0	0.0	1.6	1.9	1.1	36.4	45.5	40.0
2013:Q4	0.9	1.7	0.4	15.0	20.4	12.6	0.1	0.6	0.0	2.2	1.8	0.4	39.0	36.0	45.7
2014:Q1	0.9	1.2	0.5	13.2	19.3	11.6	0.0	0.0	0.0	1.6	1.3	1.5	39.7	45.2	45.5
2014:Q2	0.9	0.8	1.1	15.4	13.9	15.4	0.0	0.0	0.1	1.7	2.8	1.1	37.1	36.3	41.0
2014:Q3	1.1	2.0	1.0	15.1	15.2	15.0	0.0	0.0	0.0	1.3	2.2	1.3	30.3	33.9	35.5
2014:Q4	0.9	1.3	1.3	16.0	17.1	14.8	0.0	0.0	0.0	1.6	2.8	1.0	30.9	33.7	36.0

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F7-11
Michigan: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	5.8	5.7	10.7	30.5	31.6	32.3	0.1	0.0	0.5	3.7	5.4	4.9	12.6	12.2	13.9
2009:Q4	4.9	6.3	4.5	28.8	29.2	30.0	0.1	0.4	0.1	3.6	5.7	4.4	12.6	12.4	14.2
2010:Q1	6.1	5.6	5.6	28.8	26.5	29.5	0.1	0.0	0.0	3.7	3.9	4.4	14.1	14.6	15.5
2010:Q2	5.6	3.3	6.2	31.7	29.1	32.1	0.2	0.2	0.2	4.4	4.5	4.6	14.7	13.9	17.9
2010:Q3	5.7	5.6	8.0	33.7	30.3	36.9	0.3	0.2	0.1	4.7	5.4	5.6	15.3	13.4	17.3
2010:Q4	6.1	3.4	6.4	33.2	32.0	36.7	0.1	0.2	0.2	4.3	4.9	6.3	16.9	15.5	19.0
2011:Q1	5.8	5.6	9.7	31.0	26.6	33.1	0.2	0.3	0.2	4.5	5.7	4.1	18.0	15.6	21.8
2011:Q2	6.4	6.9	6.7	34.6	32.9	38.8	0.5	0.2	0.6	5.8	7.7	7.0	25.2	25.4	29.6
2011:Q3	6.9	8.3	8.2	35.5	34.1	36.8	0.8	1.6	0.7	7.2	9.2	8.3	28.3	27.8	29.7
2011:Q4	6.1	6.4	6.2	33.9	30.5	34.1	0.5	0.7	0.8	6.5	6.9	6.1	29.8	26.2	25.2
2012:Q1	6.1	5.4	6.6	33.8	31.7	31.0	0.8	1.3	0.7	7.0	6.1	7.2	33.8	32.5	29.9
2012:Q2	5.7	5.3	5.6	34.4	30.7	37.0	0.5	0.4	0.2	6.2	6.6	8.2	25.4	24.8	25.2
2012:Q3	5.4	5.0	7.4	37.0	32.8	40.8	0.3	1.0	0.9	7.0	5.0	8.0	25.3	21.8	23.4
2012:Q4	5.5	6.5	4.7	34.3	33.3	35.3	0.4	0.5	0.6	6.1	3.3	8.9	25.8	25.9	28.2
2013:Q1	6.2	8.3	6.1	33.3	29.4	31.3	0.6	0.8	0.2	6.0	5.2	6.6	34.4	35.1	32.4
2013:Q2	5.7	5.9	4.9	34.4	37.6	34.4	0.4	0.2	0.2	6.3	7.2	5.8	34.0	34.5	39.0
2013:Q3	6.6	5.1	6.1	34.2	30.0	34.2	0.7	1.1	0.2	6.2	7.2	7.5	32.1	33.5	31.3
2013:Q4	6.4	4.5	4.6	32.9	31.8	34.3	0.7	0.3	0.1	5.8	3.8	5.1	31.5	32.1	30.2
2014:Q1	6.8	5.8	6.2	31.7	26.2	25.1	0.7	0.5	0.2	5.1	4.0	4.2	33.0	32.7	31.8
2014:Q2	6.5	7.0	7.8	33.2	33.1	32.8	1.3	1.9	1.3	7.5	11.4	8.7	34.0	35.6	36.2
2014:Q3	6.4	6.5	6.5	30.2	27.7	27.3	1.2	2.4	0.3	6.3	6.6	7.1	27.2	28.9	24.8
2014:Q4	5.4	5.6	6.0	24.7	20.6	25.2	0.7	1.7	0.4	3.7	4.8	3.5	22.7	21.3	23.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

F.8 Pennsylvania

Table F8-1
Pennsylvania: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for children

Period	Primary care visits			Medical specialist visits			Surgical specialist visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	36.8	45.2	37.6	4.9	5.9	5.0	0.4	0.4	0.4
2009:Q4	37.9	49.1	41.0	4.5	6.3	4.9	0.3	0.4	0.4
2010:Q1	36.3	43.1	37.0	4.7	6.2	4.9	0.3	0.6	0.4
2010:Q2	37.1	42.6	38.0	4.8	6.7	5.3	0.4	0.6	0.4
2010:Q3	35.8	42.6	36.0	5.1	6.1	5.2	0.4	0.6	0.4
2010:Q4	34.8	42.8	36.2	5.1	6.3	5.2	0.3	0.6	0.4
2011:Q1	35.6	43.5	37.4	5.2	7.3	5.5	0.3	0.8	0.4
2011:Q2	33.8	41.5	35.1	5.1	6.9	5.7	0.4	0.8	0.4
2011:Q3	32.7	40.7	33.4	5.1	6.1	5.3	0.4	0.9	0.5
2011:Q4	32.6	42.2	35.2	5.5	6.5	5.6	0.5	0.7	0.5
2012:Q1	37.9	44.2	40.8	6.6	6.8	6.6	0.6	0.9	0.6
2012:Q2	36.7	42.3	38.8	6.4	7.0	6.4	0.7	0.8	0.6
2012:Q3	35.5	42.6	36.9	6.5	6.7	6.1	0.6	0.8	0.6
2012:Q4	36.6	44.1	38.9	6.1	7.2	6.2	0.5	0.9	0.6
2013:Q1	39.0	44.8	40.2	7.1	7.9	6.9	0.7	0.8	0.7
2013:Q2	36.4	43.6	38.9	7.9	8.8	7.5	0.7	1.0	0.7
2013:Q3	36.6	43.2	38.3	7.4	8.6	7.5	0.8	1.1	0.7
2013:Q4	37.4	42.9	39.3	7.6	8.6	7.6	0.6	1.0	0.7
2014:Q1	35.9	39.7	37.4	7.4	8.5	7.3	0.7	0.9	0.7
2014:Q2	37.1	42.5	40.3	8.4	8.8	8.1	0.7	1.1	0.8
2014:Q3	37.4	41.7	40.5	8.0	8.6	8.0	0.6	0.8	0.8
2014:Q4	40.5	45.9	42.5	8.3	8.8	7.8	0.6	0.7	0.8

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-2
Pennsylvania: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care for adults

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	43.1	37.4	41.1	16.6	10.9	13.2	3.9	3.8	4.0	5.2	7.5	3.5
2009:Q4	42.3	38.8	39.4	16.1	12.0	13.5	3.8	2.2	3.7	5.5	1.8	4.7
2010:Q1	43.5	35.1	39.3	17.3	13.1	15.1	3.9	2.8	4.3	5.4	0.0	7.8
2010:Q2	42.1	38.9	40.9	17.3	11.6	15.4	4.3	4.2	4.3	9.5	7.2	9.4
2010:Q3	41.4	35.5	39.3	18.0	13.6	15.9	4.1	3.6	4.8	7.2	33.3	5.7
2010:Q4	40.0	33.2	39.4	18.1	10.0	15.2	4.4	2.4	4.7	5.9	36.6	4.8
2011:Q1	42.8	34.9	38.9	18.6	12.7	15.8	4.8	3.4	4.8	8.5	44.3	5.5
2011:Q2	40.1	38.2	39.6	19.2	13.8	16.4	4.6	4.6	4.6	9.9	41.5	8.2
2011:Q3	38.3	40.5	38.1	18.6	18.1	16.4	4.8	4.9	4.4	8.7	30.1	6.4
2011:Q4	37.0	40.7	38.0	17.9	17.5	15.7	4.5	6.6	4.4	7.0	21.9	6.9
2012:Q1	40.7	49.9	45.7	20.8	22.7	20.0	5.2	5.6	5.7	6.4	12.3	9.5
2012:Q2	41.4	50.0	44.8	20.9	24.3	20.0	5.9	7.8	6.3	7.4	13.7	4.5
2012:Q3	40.8	42.5	43.5	21.3	17.1	20.0	5.9	6.7	6.1	7.3	0.0	9.9
2012:Q4	42.0	42.0	44.0	21.2	18.4	20.3	5.6	6.3	5.9	5.6	4.7	5.8
2013:Q1	43.3	46.8	44.9	22.7	21.7	21.9	5.9	8.0	6.2	6.8	10.0	2.5
2013:Q2	41.2	44.6	43.5	23.9	22.3	22.2	6.5	5.2	6.9	7.2	0.0	4.6
2013:Q3	42.4	39.4	43.4	23.3	20.1	21.2	6.1	3.7	6.6	5.8	21.5	4.0
2013:Q4	42.8	42.6	45.2	23.0	21.6	20.2	6.1	5.6	7.0	4.9	3.3	3.2
2014:Q1	42.0	37.2	44.4	22.3	16.0	20.9	5.5	5.7	6.0	5.0	0.0	2.4
2014:Q2	43.3	35.4	46.2	24.2	21.0	21.6	6.8	8.8	6.7	2.6	0.0	1.4
2014:Q3	45.1	41.8	47.0	24.4	22.2	21.1	6.8	4.9	6.0	1.6	0.0	3.0
2014:Q4	46.7	47.5	48.8	25.7	22.4	19.8	6.3	2.6	4.9	—	—	—

NOTES:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F8-3
Pennsylvania: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among adults

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	69.6	72.5	72.0
Pre-3	72.7	79.7	73.9
Pre-2	75.4	77.7	74.4
Pre-1	76.5	81.8	76.6
Post-1	63.9	64.0	66.9
Post-2	61.6	59.5	62.7
Post-3	61.6	50.7	65.9

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-4
Pennsylvania: Quarterly weighted likelihood of having utilization for children

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	2.1	1.9	1.9	12.2	12.5	11.7
2009:Q4	2.1	2.3	2.0	13.4	14.2	13.3
2010:Q1	1.9	1.9	1.8	11.5	12.3	10.9
2010:Q2	1.8	1.9	1.6	12.8	12.2	11.9
2010:Q3	1.6	1.9	1.6	11.6	11.7	11.0
2010:Q4	1.6	1.5	1.4	11.7	11.2	10.5
2011:Q1	2.0	2.0	1.8	13.4	13.1	12.1
2011:Q2	1.9	1.5	1.6	12.5	11.8	11.1
2011:Q3	1.8	1.9	1.6	11.8	11.5	9.9
2011:Q4	1.9	2.0	1.6	12.3	12.0	10.8
2012:Q1	1.9	2.0	2.0	14.4	13.0	13.2
2012:Q2	2.0	1.8	1.9	14.8	13.2	13.5
2012:Q3	2.0	1.7	1.9	13.1	12.1	12.5
2012:Q4	2.4	1.8	2.2	14.6	11.8	13.7
2013:Q1	2.1	2.2	2.1	15.0	13.5	14.3
2013:Q2	2.0	2.0	2.0	14.3	11.9	13.3
2013:Q3	2.2	1.8	1.9	13.5	11.4	12.7
2013:Q4	2.0	1.8	2.0	13.3	12.4	13.0
2014:Q1	2.0	1.8	1.9	12.3	11.8	12.1
2014:Q2	2.0	1.6	2.0	14.3	13.3	13.6
2014:Q3	2.4	2.1	2.4	12.7	12.0	13.1
2014:Q4	2.5	1.9	2.3	14.2	13.8	14.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-5
Pennsylvania: Average percent of births with low birth weights: Four quarter intervals preceding and following assignment for children

Period	Low birth weight		
	MAPCP	PCMH	Non-PCMH
Pre-4	11.9	15.6	12.7
Pre-3	12.1	8.3	12.2
Pre-2	9.5	16.3	10.8
Pre-1	11.9	11.3	11.7
Post-1	12.2	11.2	12.3

NOTES:

- Numbers represent the percentage of births with low birth weights during four quarter intervals preceding and following assignment. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment. Post-1 is the first year of life and the first year of demonstration experience for infants born into the MAPCP group or the comparison group. There are no Post-2 and Post-3 estimates because during those times the child moves beyond infancy, and the low birth weight measure no longer applies. The "Pre" years reflect the percentage of children who were attributed to the demonstration or comparison group but for whom there was record of them having low birth weight before attribution.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-6
Pennsylvania: Quarterly weighted likelihood of having utilization for adults

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	6.7	8.2	5.6	25.0	20.9	22.1
2009:Q4	6.6	5.0	6.0	24.5	19.1	20.0
2010:Q1	6.8	2.9	5.6	22.6	21.1	19.6
2010:Q2	6.6	7.1	6.1	25.3	21.9	21.9
2010:Q3	6.3	6.7	5.5	24.9	21.6	21.5
2010:Q4	6.0	5.2	4.8	23.7	16.7	20.5
2011:Q1	5.3	4.9	5.6	23.8	21.1	21.1
2011:Q2	6.3	6.2	5.4	23.7	21.7	20.3
2011:Q3	6.2	4.8	5.5	23.7	22.6	21.1
2011:Q4	6.0	5.7	5.5	22.1	21.7	19.9
2012:Q1	6.1	5.9	6.5	25.0	23.1	24.1
2012:Q2	6.8	6.2	6.3	26.3	20.3	24.5
2012:Q3	6.6	6.0	6.4	25.8	18.1	24.3
2012:Q4	6.7	9.6	5.7	24.2	22.4	21.2
2013:Q1	6.1	7.6	6.3	23.7	22.2	21.7
2013:Q2	6.0	2.9	6.2	24.9	18.2	23.7
2013:Q3	6.5	2.9	6.3	25.4	17.8	23.5
2013:Q4	5.4	5.0	5.5	23.6	18.8	21.8
2014:Q1	5.9	2.4	5.7	23.0	15.5	23.8
2014:Q2	6.3	5.2	5.6	25.4	16.9	23.3
2014:Q3	6.7	4.6	6.2	24.6	12.6	22.7
2014:Q4	5.7	3.1	7.1	22.9	15.7	22.4

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-7
Pennsylvania: Quarterly weighted likelihood of having utilization that reflects access to care and coordination of care among beneficiaries with multiple chronic conditions

Period	Primary care visits			Medical specialist visits			Surgical specialist visits			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	52.1	57.4	56.1	28.5	18.7	24.2	6.5	6.2	7.1	5.5	0.0	2.6
2009:Q4	51.4	57.7	54.0	27.9	19.7	24.5	6.4	5.7	7.0	6.1	4.6	4.4
2010:Q1	53.2	52.8	52.4	29.6	24.2	26.7	6.8	3.6	8.0	5.5	0.0	9.6
2010:Q2	51.4	45.4	55.1	30.1	22.8	28.2	7.3	8.8	7.3	12.5	7.8	9.5
2010:Q3	50.8	40.5	54.4	30.5	24.9	27.9	7.3	8.0	8.2	7.7	43.1	8.4
2010:Q4	51.3	44.5	57.4	31.7	21.3	28.0	7.8	3.8	8.4	6.6	59.4	6.4
2011:Q1	57.2	51.8	57.4	33.0	27.0	29.6	8.6	8.1	8.8	10.1	49.5	7.4
2011:Q2	55.2	42.6	59.9	34.5	27.6	31.0	8.3	8.6	8.3	11.4	43.1	10.3
2011:Q3	51.5	56.8	57.9	34.2	34.4	31.1	8.7	12.1	8.1	10.4	43.8	8.6
2011:Q4	50.8	57.7	57.4	33.5	35.4	30.3	8.4	14.0	8.2	8.6	27.7	8.6
2012:Q1	52.0	62.2	61.9	37.1	42.9	36.7	9.0	9.2	10.3	7.7	21.7	9.2
2012:Q2	54.4	57.7	59.9	35.7	38.9	35.0	10.0	12.5	10.8	7.8	30.4	6.4
2012:Q3	51.0	53.6	57.6	35.7	34.4	33.6	10.0	6.4	10.7	8.2	0.0	13.7
2012:Q4	53.8	40.5	57.7	35.2	29.8	34.1	9.3	9.3	10.3	6.9	8.9	5.9
2013:Q1	55.0	46.7	58.3	37.5	38.2	36.2	10.0	13.5	9.2	6.4	16.0	2.2
2013:Q2	53.6	47.9	55.9	39.6	35.8	35.4	10.2	6.6	11.3	4.0	0.0	6.4
2013:Q3	54.7	59.2	55.5	37.5	38.4	36.1	10.0	8.3	10.6	6.3	77.9	4.8
2013:Q4	55.4	43.6	56.8	36.7	32.2	33.9	10.0	13.7	12.2	4.4	8.1	4.1
2014:Q1	53.4	30.9	55.7	35.4	24.8	35.1	8.6	6.8	10.8	4.6	0.0	3.5
2014:Q2	55.8	37.8	55.9	38.6	41.7	37.6	9.7	26.3	10.7	1.7	0.0	1.3
2014:Q3	56.0	58.7	62.0	38.4	37.0	36.1	10.3	0.0	9.8	0.7	0.0	3.8
2014:Q4	57.0	49.1	65.1	38.9	30.7	34.8	9.1	1.9	8.0	—	—	—

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

MAPCP = Multi-Payer Advanced Primary Care Practice; — = outcome not available for this period; PCMH = patient-centered medical home.

Table F8-8
Pennsylvania: Percentage of total visits that were primary care visits: Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

Period	Percentage of total visits that were primary care visits		
	MAPCP	PCMH	Non-PCMH
Pre-4	62.9	62.1	66.7
Pre-3	66.2	75.9	68.5
Pre-2	68.4	73.6	68.8
Pre-1	69.5	74.3	70.3
Post-1	56.2	52.7	59.8
Post-2	55.6	45.9	55.6
Post-3	57.1	27.9	61.1

NOTES:

- Numbers represent the percentage of total visits that were primary care visits. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.
- Pre-4: Four years preassignment; Pre-3: Three years preassignment; Pre-2: Two years preassignment; Pre-1: One year preassignment; Post-1: One year postassignment; Post-2: Two years postassignment; Post-3: Three years postassignment.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-9
Pennsylvania: Quarterly weighted likelihood of utilization among beneficiaries with multiple chronic conditions

Period	All-cause inpatient admissions			ER visits not leading to hospitalizations		
	MAPCP	PCMH	MAPCP	MAPCP	MAPCP	Non-PCMH
2009:Q3	8.8	12.2	7.6	30.5	25.3	27.1
2009:Q4	8.7	5.6	8.3	29.3	24.0	23.3
2010:Q1	8.8	6.3	8.0	27.3	30.1	23.3
2010:Q2	8.5	8.4	7.4	30.6	30.1	26.6
2010:Q3	8.7	14.1	7.3	30.8	33.6	26.6
2010:Q4	8.7	8.4	7.5	29.6	26.0	25.5
2011:Q1	8.6	11.5	9.3	30.8	32.1	28.4
2011:Q2	10.4	13.1	9.2	31.1	32.2	27.6
2011:Q3	10.5	8.2	9.2	31.1	34.2	27.7
2011:Q4	10.4	11.8	9.4	29.8	32.3	26.5
2012:Q1	9.3	9.4	9.8	31.0	34.7	30.2
2012:Q2	10.6	8.9	8.9	32.8	23.1	30.4
2012:Q3	9.7	6.6	8.3	31.9	26.7	31.6
2012:Q4	9.6	13.6	7.7	30.5	34.8	26.7
2013:Q1	8.7	13.4	9.2	30.4	39.4	28.7
2013:Q2	8.7	3.5	9.4	32.1	24.7	29.5
2013:Q3	9.1	2.7	8.3	31.2	17.4	30.1
2013:Q4	8.9	7.1	9.3	29.2	14.9	26.8
2014:Q1	9.0	3.0	8.7	29.7	19.2	30.3
2014:Q2	9.2	0.0	7.2	32.1	25.0	29.3
2014:Q3	9.1	0.0	8.1	30.3	2.7	28.2
2014:Q4	7.8	5.4	10.0	28.0	34.4	27.3

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-10
Pennsylvania: Quarterly weighted average utilization among beneficiaries with BH conditions and who are children

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	3.2	0.0	2.7	19.0	18.1	10.9	0.0	0.0	0.9	0.0	0.0	0.3	10.8	20.5	11.6
2009:Q4	0.0	3.7	1.8	16.0	15.0	14.3	0.0	0.0	0.0	0.0	0.0	2.3	9.4	13.6	13.1
2010:Q1	2.9	4.3	1.9	14.4	24.6	14.0	0.0	0.0	0.0	1.4	0.0	1.1	17.4	14.0	15.8
2010:Q2	1.4	4.6	1.3	8.5	19.0	15.7	0.0	0.0	0.8	0.0	0.0	0.5	17.0	14.1	15.9
2010:Q3	0.0	6.0	2.3	9.8	11.6	15.8	0.0	0.0	0.0	1.4	0.0	1.6	15.2	16.1	16.1
2010:Q4	1.9	0.7	2.1	11.7	18.5	12.1	0.0	0.0	0.0	1.4	0.0	1.2	19.6	30.1	17.1
2011:Q1	1.2	3.4	1.4	15.5	17.8	17.2	1.2	0.0	1.2	4.9	2.4	5.4	32.0	43.4	36.6
2011:Q2	4.5	0.9	3.9	25.0	22.4	19.7	1.1	0.0	2.7	4.9	1.7	4.3	38.6	50.8	32.9
2011:Q3	4.9	3.9	3.5	16.9	22.6	17.9	2.8	0.0	1.5	2.1	4.8	6.8	32.8	38.4	34.0
2011:Q4	3.1	5.6	4.3	18.8	22.7	17.5	2.1	2.9	2.4	5.2	4.9	6.7	37.5	45.9	37.8
2012:Q1	2.1	0.0	0.9	20.8	16.8	20.3	1.0	0.0	0.0	3.1	2.0	2.9	24.4	27.0	24.2
2012:Q2	1.1	0.9	2.2	15.4	16.8	13.4	0.0	0.0	0.6	2.4	1.1	1.7	22.8	28.4	27.2
2012:Q3	3.4	5.3	1.1	13.4	15.2	15.6	0.0	0.0	0.0	1.1	0.0	1.9	19.0	11.1	18.3
2012:Q4	0.0	1.4	0.7	16.8	16.6	16.8	0.0	0.0	0.5	1.2	0.9	3.0	26.6	21.5	27.4
2013:Q1	1.2	6.3	2.8	14.7	14.4	16.1	0.0	0.0	0.0	2.4	0.0	2.0	24.4	16.3	17.4
2013:Q2	2.5	4.5	0.2	16.8	32.5	13.9	0.0	2.9	0.0	2.6	0.0	1.6	18.1	14.5	22.5
2013:Q3	0.0	6.5	2.1	5.8	10.0	14.9	0.0	0.0	0.2	0.0	1.6	1.4	23.2	9.3	18.8
2013:Q4	0.0	1.9	1.6	15.9	8.6	14.8	0.0	0.0	0.0	0.0	0.0	1.5	23.9	23.5	20.3
2014:Q1	0.0	7.0	1.3	14.5	18.7	12.6	0.0	0.0	0.0	1.8	0.0	0.6	20.3	20.9	14.8
2014:Q2	3.8	2.0	0.6	12.5	18.6	19.8	0.0	0.0	0.3	0.0	4.8	0.5	17.1	12.3	18.2
2014:Q3	0.0	0.0	0.3	8.5	14.9	18.1	0.0	0.0	0.0	0.0	2.0	1.2	20.6	13.0	12.9
2014:Q4	0.0	2.2	2.8	19.2	13.9	18.7	0.0	0.0	1.2	2.4	0.0	1.8	19.2	11.9	12.9

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table F8-11
Pennsylvania: Quarterly weighted average utilization among beneficiaries with BH conditions and who are adults

Period	All-cause admissions			ER visits not leading to hospitalization			BH inpatient admissions			BH ER visits			BH outpatient visits		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	9.1	21.1	6.7	42.8	23.2	36.2	0.0	0.0	0.6	6.9	0.0	4.0	5.1	0.0	15.1
2009:Q4	7.5	3.7	9.0	37.6	21.5	30.1	1.0	0.0	1.1	7.3	0.0	7.9	4.0	0.0	13.4
2010:Q1	11.6	0.0	9.3	37.3	21.6	29.6	0.5	0.0	0.0	11.0	21.6	6.8	10.8	0.0	13.8
2010:Q2	11.9	0.0	10.5	45.5	0.0	37.6	0.0	0.0	2.4	10.2	0.0	4.9	8.1	3.0	21.2
2010:Q3	11.0	0.0	9.2	44.9	20.8	35.1	1.2	0.0	0.0	10.4	0.0	6.7	9.9	0.0	15.9
2010:Q4	13.6	2.0	7.7	41.6	25.5	37.8	2.4	0.0	0.0	13.2	0.0	9.7	10.4	3.3	19.2
2011:Q1	11.7	7.4	9.6	46.1	29.0	45.2	3.1	0.0	2.1	19.1	4.6	14.7	22.0	57.6	25.0
2011:Q2	12.4	7.1	9.7	45.0	63.8	40.2	3.4	0.0	2.2	20.6	42.5	13.9	25.6	17.7	35.1
2011:Q3	11.8	2.0	11.4	43.4	61.5	52.2	3.1	0.0	1.8	16.6	37.6	16.1	26.7	35.6	29.2
2011:Q4	11.3	4.1	12.3	42.1	78.7	49.0	4.0	0.0	6.3	16.7	40.7	20.0	24.4	3.7	24.0
2012:Q1	12.1	0.0	17.4	44.3	44.8	45.9	1.8	0.0	3.2	17.8	7.6	20.9	17.5	13.2	18.1
2012:Q2	15.9	3.4	12.6	44.3	70.6	46.9	2.1	0.0	1.2	15.6	22.5	10.6	12.4	33.9	18.5
2012:Q3	9.6	0.0	10.6	50.3	60.5	42.6	0.6	0.0	0.9	15.6	24.2	8.3	15.9	40.9	17.4
2012:Q4	13.0	7.6	6.8	43.6	56.2	41.5	3.0	0.0	1.0	13.8	0.0	7.9	15.1	36.0	20.8
2013:Q1	7.9	0.0	6.8	41.6	31.9	42.9	0.6	0.0	0.0	8.9	0.0	10.9	9.7	22.1	20.3
2013:Q2	10.2	0.0	8.1	48.2	31.9	47.3	2.7	0.0	0.0	16.8	0.0	10.2	13.4	24.8	20.6
2013:Q3	12.6	0.0	11.6	38.6	45.4	47.7	1.6	0.0	0.0	13.9	0.0	7.7	10.0	8.8	17.3
2013:Q4	9.1	0.0	6.0	45.1	26.3	38.0	4.7	0.0	0.1	12.4	26.3	17.4	11.4	14.5	21.0
2014:Q1	9.0	0.0	3.0	40.0	26.8	37.1	1.0	0.0	0.0	14.0	0.0	13.2	11.0	26.8	17.8
2014:Q2	17.4	0.0	6.5	36.6	64.4	41.9	1.2	0.0	1.8	13.9	0.0	9.8	14.9	0.0	17.0
2014:Q3	11.9	0.0	5.2	41.9	0.0	35.3	0.0	0.0	2.8	13.2	0.0	6.6	16.7	0.0	13.7
2014:Q4	11.2	0.0	7.5	40.9	0.0	27.9	1.6	0.0	0.0	12.8	0.0	9.6	10.4	0.0	17.2

NOTE:

- All numbers represent the percentage of beneficiaries who had any utilizations. Percentages were calculated using the same weights that were used in the regression estimates found in the state chapters. See Appendix N for more information on weights.

BH = behavioral health; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

APPENDIX G
NUMBER OF WEIGHTED OBSERVATIONS USED IN ALL REPORTED MEDICARE ANALYSES

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In this appendix, we present the number of weighted observations used in all reported Medicare analyses. The numbers of observations are broken down by beneficiaries' assignment status—i.e., Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration, patient-centered medical home (PCMH), or non-PCMH. These annual figures represent the total number of unique beneficiaries who were ever attributed to a practice during a year and are presented here as an indication of model reliability. All expenditure outcomes and most utilization and access to care outcomes were estimated for all beneficiaries. For this reason, weighted observation counts for these outcomes were grouped together to avoid redundancy. Observation counts for outcomes estimated for a subset of beneficiaries (e.g., unplanned readmission after a hospitalization) or for special populations are presented separately.

New York

Table G-1
New York: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	21,462	52,859	52,152	5,336	13,344	12,772
Year Two	22,744	52,241	54,372	5,265	12,138	12,483
Year Three	23,002	52,594	53,155	4,744	10,076	9,788
Overall	29,093	66,857	71,011	6,408	14,710	15,128
30-day unplanned readmissions						
Year One	1,428	3,525	3,545	764	1,956	1,773
Year Two	1,401	3,268	3,603	650	1,541	1,905
Year Three	1,317	3,206	3,233	596	1,286	1,157
Overall	1,779	4,338	4,780	906	2,166	2,242
Follow-up visits within 14 days after discharge						
Year One	1,154	2,878	2,773	594	1,563	1,316
Year Two	1,119	2,764	2,864	497	1,246	1,456
Year Three	1,050	2,360	2,082	485	1,011	824
Overall	1,420	3,289	3,415	714	1,716	1,663
Diabetes process of care measures[2]						
Year One	4,692	10,716	10,486	1,490	3,353	3,177
Year Two	3,723	7,347	5,839	1,112	2,265	1,592
Year Three	2,686	5,357	3,445	790	1,510	954
Total lipid panel						
Year One	7,330	16,000	15,964	3,235	7,253	6,957
Year Two	6,021	11,852	10,840	2,409	4,854	4,203
Year Three	4,556	9,503	7,584	1,683	3,511	2,611
Primary care visits as a percentage of total visits						
Year One	18,271	45,697	46,231	4,861	11,750	11,268
Year Two	14,718	33,583	31,137	3,774	8,693	7,269
Year Three	11,391	25,949	22,498	2,769	6,434	4,848

(continued)

Table G-1 (continued)
New York: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	23,370	60,315	46,892	6,147	16,098	12,244
Year Two	19,677	47,302	33,858	4,904	11,844	8,163
Year Three	15,307	36,816	24,487	3,627	8,793	5,440

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 4-13)***, all utilization outcomes (e.g., ***Table 4-15)***, all health outcomes (e.g., ***Table 4-10***), and primary care visits, medical specialist visits, and surgical specialist visits (e.g., ***Table 4-11***).

[2] The diabetes process of care measures include all measures reported in ***Table 4-8***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-2
New York: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Dually eligible beneficiaries	Total Medicare expenditures			
	Year One	5,167	12,362	10,018
	Year Two	5,367	13,071	13,130
	Year Three	5,507	13,024	12,818
	Overall	7,048	16,204	16,745
Rural beneficiaries	Total Medicare expenditures			
	Year One	4,125	6,945	6,453
	Year Two	4,320	6,766	5,582
	Year Three	4,483	6,677	5,648
	Overall	5,471	8,382	8,595
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year One	6,852	16,799	13,976
	Year Two	7,234	17,446	17,784
	Year Three	7,505	17,594	17,128
	Overall	9,578	22,017	22,661
	30-day unplanned readmissions			
	Year One	479	1,317	1,134
	Year Two	487	1,131	1,222
	Year Three	496	1,191	1,125
	Overall	640	1,625	1,730
Non-White beneficiaries	Total Medicare expenditures			
	Year One	475	1,153	1,149
	Year Two	543	1,476	1,462
	Year Three	638	1,512	1,537
	Overall	796	1,876	2,013

(continued)

Table G-2 (continued)
New York: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Pod 1 and all comparisons	Total Medicare expenditures			
	Year One	2,858	52,859	52,152
	Year Two	2,964	52,241	54,372
	Year Three	3,017	52,594	53,155
	Overall	3,723	66,857	71,011
Pod 2 and all comparisons	Expenditure and utilization measures[1]			
	Year One	8,287	52,859	52,152
	Year Two	8,921	52,241	54,372
	Year Three	9,282	52,594	53,155
	Overall	11,808	66,857	71,011
	30-day unplanned readmissions			
	Year One	530	3,525	3,545
	Year Two	514	3,268	3,603
	Year Three	476	3,206	3,233
	Overall	665	4,338	4,780
Pod 3 and all comparisons	Total Medicare expenditures			
	Year One	10,317	52,859	52,152
	Year Two	10,859	52,241	54,372
	Year Three	10,703	52,594	53,155
	Overall	13,562	66,857	71,011
Beneficiaries with BH conditions	Expenditure and utilization measures[2]			
	Year One	3,253	7,593	7,639
	Year Two	3,352	7,467	9,093
	Year Three	3,294	6,447	7,245
	Overall	4,178	8,808	10,411

NOTES:

[1] The expenditure and utilization measures include total Medicare expenditures, acute-care expenditures, ER expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 4-20***.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island

Table G-3
Rhode Island: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	7,921	15,943	31,816	1,842	3,843	7,311
Year Two	9,670	22,795	35,389	2,030	5,077	7,350
Year Three	10,498	24,569	38,857	1,927	4,477	6,002
Overall	13,636	27,898	45,924	2,597	5,558	8,352
30-day unplanned readmissions						
Year One	483	986	1,723	274	515	926
Year Two	539	1,276	1,949	236	679	872
Year Three	551	1,228	2,046	233	564	716
Overall	791	1,645	2,460	392	749	1,086
Follow-up visits within 14 days after discharge						
Year One	389	769	1,202	218	427	619
Year Two	422	1,024	1,486	182	555	654
Year Three	414	894	1,288	176	442	524
Overall	605	1,181	1,522	319	615	738
Diabetes process of care measures[2]						
Year One	2,048	4,118	6,261	691	1,354	1,974
Year Two	1,435	2,403	4,568	467	822	1,330
Year Three	881	1,588	3,269	289	482	888
Total lipid panel						
Year One	2,635	5,677	8,809	1,175	2,567	3,939
Year Two	2,025	3,243	6,826	826	1,400	2,770
Year Three	1,447	2,524	5,070	528	1,047	1,839
Primary care visits as a percentage of total visits						
Year One	9,935	21,681	32,511	2,234	4,824	6,782
Year Two	7,327	16,394	24,059	1,673	3,999	5,312
Year Three	5,057	9,295	17,621	1,099	2,176	3,756

(continued)

Table G-3 (continued)
Rhode Island: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	10,649	21,456	32,899	2,503	5,347	7,956
Year Two	8,538	18,204	28,230	1,885	4,355	6,304
Year Three	5,917	10,734	20,766	1,259	2,505	4,480

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 5-15)***, all utilization outcomes (e.g., ***Table 5-17)***, all health outcomes (e.g., ***Table 5-12***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 5-10***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-4
Rhode Island: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures			
	Year One	2,800	7,006	11,447
	Year Two	3,603	9,002	13,277
	Year Three	3,991	9,307	15,481
	Overall	5,364	10,956	17,858
Dually eligible beneficiaries	Total Medicare expenditures			
	Year One	2,185	6,045	9,229
	Year Two	2,978	7,412	10,815
	Year Three	3,329	7,573	13,022
	Overall	4,419	9,028	14,677
Non-White beneficiaries	Total Medicare expenditures			
	Year One	773	2,458	3,259
	Year Two	1,240	3,175	4,110
	Year Three	1,448	3,173	6,028
	Overall	1,939	3,945	6,466
Beneficiaries with BH conditions	Expenditure and utilization measures[1]			
	Year One	1,789	3,696	6,506
	Year Two	2,203	4,851	7,324
	Year Three	2,259	4,379	6,533
	Overall	2,888	5,320	8,096

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 5-33*** and ***Table 5-35***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont

Table G-5
Vermont: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	50,276	45,442	75,836	12,401	10,748	18,396
Year Two	62,339	48,065	76,771	14,047	9,967	16,906
Year Three	70,149	49,869	75,702	14,115	8,724	13,851
Overall	84,151	61,178	94,491	17,229	12,544	20,006
30-day unplanned readmissions						
Year One	2,373	2,293	3,616	1,342	1,202	1,932
Year Two	2,773	2,192	3,550	1,378	885	1,672
Year Three	3,093	2,380	3,433	1,336	810	1,202
Overall	3,587	2,965	4,518	1,858	1,374	2,139
Follow-up visits within 14 days after discharge						
Year One	1,821	1,663	2,830	1,011	819	1,465
Year Two	2,095	1,711	2,720	995	650	1,230
Year Three	2,276	1,663	2,370	985	570	923
Overall	2,604	2,024	3,257	1,382	956	1,619
Diabetes process of care measures[2]						
Year One	10,609	7,852	12,796	3,481	2,290	4,226
Year Two	7,858	5,594	9,249	2,539	1,466	2,849
Year Three	5,224	4,244	5,966	1,654	1,132	1,797
Total lipid panel						
Year One	16,445	12,806	18,452	7,577	5,416	8,423
Year Two	12,791	8,938	14,046	5,393	3,250	5,596
Year Three	9,160	7,104	9,994	3,685	2,455	3,704
Primary care visits as a percentage of total visits						
Year One	46,406	36,247	51,590	12,197	8,821	12,670
Year Two	35,723	26,807	38,706	9,488	6,060	9,492
Year Three	25,183	20,969	28,164	6,577	4,764	6,694

(continued)

Table G-5 (continued)
Vermont: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	64,661	48,732	73,159	16,476	12,099	19,208
Year Two	54,328	37,656	59,837	13,280	8,270	14,451
Year Three	39,266	29,119	45,814	9,487	6,305	10,779

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 6-13)***, all utilization outcomes (e.g., ***Table 6-15)***, all health outcomes (e.g., ***Table 6-10***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 6-8***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-6
Vermont: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures			
	Year One	13,082	12,026	18,980
	Year Two	16,329	12,003	19,659
	Year Three	18,242	12,310	19,502
	Overall	21,594	15,751	24,231
Dually eligible beneficiaries	Total Medicare expenditures			
	Year One	14,021	12,405	19,769
	Year Two	17,090	12,533	19,958
	Year Three	18,666	12,385	19,963
	Overall	22,131	16,154	24,840
Rural beneficiaries	Expenditure and utilization measures[1]			
	Year One	14,876	5,945	9,329
	Year Two	17,105	6,716	10,052
	Year Three	19,862	6,352	10,658
	Overall	24,359	8,013	11,914
	30-day unplanned readmissions			
	Year One	654	283	385
	Year Two	732	267	432
	Year Three	849	324	429
	Overall	983	366	478
SASH beneficiaries	Total Medicare expenditures			
	Year One	1,578	45,442	75,836
	Year Two	1,938	48,065	76,771
	Year Three	2,143	49,869	75,702
	Overall	2,258	61,178	94,491

(continued)

Table G-6 (continued)
Vermont: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Beneficiaries with BH conditions	Expenditure and utilization measures[2]			
	Year One	8,153	8,606	13,273
	Year Two	9,744	8,093	12,901
	Year Three	10,522	7,655	11,315
	Overall	12,150	10,449	15,097

NOTES:

[1] The expenditure and utilization measures include total Medicare expenditures, acute-care expenditures, ER expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 6-32*** and ***Table 6-34***.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = Support and Services at Home.

North Carolina

Table G-7
North Carolina: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	26,461	61,769	101,589	6,810	16,056	26,536
Year Two	27,445	66,630	106,849	6,436	15,984	25,190
Year Three	26,454	68,742	112,712	5,562	13,628	21,359
Overall	33,394	83,750	139,336	7,730	18,641	30,948
30-day unplanned readmissions						
Year One	1,691	3,763	6,426	1,008	2,086	3,712
Year Two	1,634	3,870	6,576	808	2,024	3,163
Year Three	1,440	4,007	6,353	646	1,845	2,440
Overall	2,008	4,934	8,531	1,130	2,408	4,262
Follow-up visits within 14 days after discharge						
Year One	1,323	3,044	5,265	768	1,656	2,967
Year Two	1,319	3,278	5,500	631	1,717	2,529
Year Three	1,097	3,008	4,667	493	1,490	1,998
Overall	1,563	3,683	6,353	866	1,952	3,403
Diabetes process of care measures[2]						
Year One	6,291	15,654	24,987	2,061	5,470	8,511
Year Two	4,866	9,948	15,662	1,470	3,319	4,908
Year Three	3,199	4,878	8,686	941	1,799	2,602
Total lipid panel						
Year One	7,944	20,764	32,286	3,711	9,341	14,990
Year Two	6,393	14,823	22,182	2,669	6,008	9,057
Year Three	4,499	6,634	12,776	1,740	2,696	4,752
Primary care visits as a percentage of total visits						
Year One	24,073	59,399	102,155	6,462	14,971	25,752
Year Two	18,608	41,125	70,164	4,799	10,208	17,705
Year Three	12,784	26,740	47,785	3,330	7,009	12,072

(continued)

Table G-7 (continued)
North Carolina: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	27,869	66,402	107,884	7,379	17,882	29,551
Year Two	22,276	49,677	80,202	5,608	12,488	20,207
Year Three	15,779	33,745	55,440	3,964	8,605	13,763

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 7-15)***, all utilization outcomes (e.g., ***Table 7-17)***, all health outcomes (e.g., ***Table 7-12***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 7-10***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-8
North Carolina: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures Year One	8,244	18,255	30,559
	Year Two	8,138	19,494	31,269
	Year Three	7,719	20,072	33,519
	Overall	10,156	25,451	42,346
Dually eligible beneficiaries	Total Medicare expenditures Year One	7,227	15,735	27,282
	Year Two	6,993	16,463	26,229
	Year Three	6,596	16,699	27,576
	Overall	8,766	22,011	36,571
Rural beneficiaries	Total Medicare expenditures Year One	19,377	22,252	26,787
	Year Two	19,384	24,314	26,051
	Year Three	18,750	27,376	27,985
	Overall	23,690	34,120	39,303
Non-White beneficiaries	Total Medicare expenditures Year One	5,128	11,497	19,888
	Year Two	5,148	12,571	19,280
	Year Three	4,960	12,788	20,946
	Overall	6,392	15,994	26,676
Network 1 and all comparisons	Total Medicare expenditures Year One	8,930	61,769	101,589
	Year Two	9,971	66,630	106,849
	Year Three	9,621	68,742	112,712
	Overall	11,844	83,750	139,336

(continued)

Table G-8 (continued)
North Carolina: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Network 2 and all comparisons	Expenditure and utilization measures[1]			
	Year One	3,784	61,769	101,589
	Year Two	4,097	66,630	106,849
	Year Three	4,012	68,742	112,712
	Overall	4,855	83,750	139,336
	30-day unplanned readmissions			
	Year One	194	3,763	6,426
	Year Two	183	3,870	6,576
	Year Three	166	4,007	6,353
	Overall	231	4,934	8,531
Network 3 and all comparisons	Total Medicare expenditures			
	Year One	10,327	61,769	101,589
	Year Two	9,645	66,630	106,849
	Year Three	9,222	68,742	112,712
	Overall	12,373	83,750	139,336
Network 4 and all comparisons	Total Medicare expenditures			
	Year One	3,420	61,769	101,589
	Year Two	3,732	66,630	106,849
	Year Three	3,599	68,742	112,712
	Overall	4,322	83,750	139,336
Beneficiaries with BH conditions	Expenditure and utilization measures[2]			
	Year One	2,389	6,384	10,716
	Year Two	2,303	6,720	10,283
	Year Three	2,075	5,804	8,988
	Overall	2,917	7,946	12,848

NOTES:

[1] The expenditure and utilization measures include total Medicare expenditures, acute-care expenditures, ER expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 7-34*** and ***Table 7-36***.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota

Table G-9
Minnesota: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries		Beneficiaries with multiple chronic conditions	
	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]				
Year One	63,378	29,995	15,241	6,812
Year Two	96,515	25,672	22,864	5,391
Year Three	132,963	24,348	24,972	3,942
Overall	159,437	37,477	31,924	7,416
30-day unplanned readmissions				
Year One	4,154	1,893	2,111	920
Year Two	6,166	1,592	3,169	680
Year Three	5,908	1,052	2,619	343
Overall	8,719	2,207	4,200	997
Follow-up visits within 14 days after discharge				
Year One	3,158	1,362	1,596	641
Year Two	4,610	1,064	2,338	448
Year Three	3,922	633	1,894	217
Overall	6,177	1,504	3,129	703
Diabetes process of care measures[2]				
Year One	19,098	4,038	6,499	1,397
Year Two	8,794	2,445	2,870	737
Year Three	3,046	1,255	945	364
Total lipid panel				
Year One	25,980	6,506	12,253	2,856
Year Two	11,966	4,519	5,028	1,738
Year Three	4,022	2,698	1,613	973
Primary care visits as a percentage of total visits				
Year One	100,068	24,365	26,485	6,045
Year Two	46,995	15,955	13,791	3,798
Year Three	21,276	11,045	5,825	2,559
COC Index				
Year One	108,465	26,163	30,006	6,940
Year Two	57,704	18,370	16,076	4,442
Year Three	26,591	12,677	7,124	2,899

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 8-14)***, all utilization outcomes (e.g., ***Table 8-15)***, all health outcomes (e.g., ***Table 8-11***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 8-9***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-10
Minnesota: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures Year One	20,342	9,333
	Year Two	32,892	7,902
	Year Three	43,371	8,143
	Overall	51,687	12,495
Dually eligible beneficiaries	Total Medicare expenditures Year One	14,970	6,722
	Year Two	23,886	5,582
	Year Three	31,287	5,957
	Overall	37,077	8,998
Rural beneficiaries	Total Medicare expenditures Year One	6,382	3,824
	Year Two	8,899	3,205
	Year Three	13,526	3,863
	Overall	16,232	5,751
Non-White beneficiaries	Total Medicare expenditures Year One	6,804	2,484
	Year Two	10,625	2,179
	Year Three	14,065	2,898
	Overall	16,596	4,005
Beneficiaries with BH conditions	Total Medicare expenditures Year One	13,458	6,377
	Year Two	20,814	4,989
	Year Three	22,453	3,684
	Overall	28,615	6,969

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine

Table G-11
Maine: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	21,561	16,049	38,733	5,746	4,313	9,709
Year Two	49,735	19,928	26,546	12,591	4,726	5,935
Year Three	50,605	20,023	24,647	11,265	3,903	4,434
Overall	59,539	24,680	45,224	14,404	5,430	10,163
30-day unplanned readmissions						
Year One	1,207	901	2,318	667	507	1,304
Year Two	2,850	1,083	1,430	1,534	527	691
Year Three	2,092	727	726	1,053	287	361
Overall	3,066	1,247	2,457	1,661	652	1,364
Follow-up visits within 14 days after discharge						
Year One	939	728	1,881	502	398	1,047
Year Two	2,203	939	1,055	1,150	484	501
Year Three	1,581	611	555	761	242	268
Overall	2,386	1,046	1,987	1,242	530	1,089
Diabetes process of care measures[2]						
Year One	9,379	4,051	7,067	3,526	1,450	2,701
Year Two	6,613	2,827	3,805	2,392	896	1,334
Year Three	2,272	1,518	2,634	788	445	917
Total lipid panel						
Year One	13,082	5,770	9,870	6,542	2,861	4,935
Year Two	9,779	3,970	5,574	4,454	1,866	2,392
Year Three	3,619	2,240	3,961	1,507	840	1,615
Primary care visits as a percentage of total visits						
Year One	34,092	15,049	24,730	10,335	4,122	7,309
Year Two	25,992	10,143	14,978	7,615	2,867	4,020
Year Three	8,762	5,606	9,884	2,439	1,637	2,518

(continued)

Table G-11 (continued)
Maine: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	49,894	18,664	34,886	13,883	5,163	9,720
Year Two	38,350	14,278	20,504	10,386	3,810	5,135
Year Three	13,697	8,146	14,283	3,531	2,170	3,503

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 9-13)***, all utilization outcomes (e.g., ***Table 9-15)***, all health outcomes (e.g., ***Table 9-10***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 9-8***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-12
Maine: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures			
	Year One	8,504	6,357	14,927
	Year Two	19,441	7,513	10,215
	Year Three	19,827	7,237	9,925
	Overall	23,561	9,420	17,813
Dually eligible beneficiaries	Total Medicare expenditures			
	Year One	10,216	7,898	18,375
	Year Two	23,565	8,955	11,993
	Year Three	23,443	8,278	11,137
	Overall	27,966	11,082	21,149
Rural beneficiaries	Total Medicare expenditures			
	Year One	5,819	7,861	15,256
	Year Two	18,641	8,279	8,433
	Year Three	19,213	7,359	7,485
	Overall	21,940	10,314	17,445
Non-White beneficiaries	Total Medicare expenditures			
	Year One	421	369	800
	Year Two	1,055	501	662
	Year Three	1,213	518	716
	Overall	1,405	687	1,074
Beneficiaries with BH conditions	Total Medicare expenditures			
	Year One	5,648	2,827	7,619
	Year Two	11,884	3,443	5,116
	Year Three	11,243	2,936	3,958
	Overall	14,055	3,853	8,210

NOTE:

- The expenditure and utilization measures include all outcomes reported in ***Table 9-31*** and ***Table 9-33***.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan

Table G-13
Michigan: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	226,858	28,654	48,355	54,950	6,891	11,451
Year Two	228,779	25,172	36,079	50,767	5,601	7,732
Year Three	222,462	21,890	25,978	42,771	4,445	4,707
Overall	299,909	33,390	54,731	66,610	7,697	12,388
30-day unplanned readmissions						
Year One	14,781	2,019	3,350	7,889	1,085	1,823
Year Two	14,357	1,721	2,477	6,797	782	1,251
Year Three	10,206	1,150	1,270	4,457	477	538
Overall	18,012	2,300	3,755	9,372	1,199	2,036
Follow-up visits within 14 days after discharge						
Year One	11,905	1,708	2,792	6,230	896	1,442
Year Two	11,576	1,424	2,006	5,350	638	955
Year Three	7,986	892	1,012	3,378	352	422
Overall	14,624	1,965	3,120	7,426	991	1,604
Diabetes process of care measures[2]						
Year One	48,143	6,027	9,407	15,599	2,061	3,141
Year Two	32,774	3,379	4,765	9,886	1,043	1,407
Year Three	19,453	2,215	2,469	5,729	638	637
Total lipid panel						
Year One	74,959	10,059	16,102	34,106	4,462	7,458
Year Two	55,360	6,320	8,533	22,242	2,430	3,530
Year Three	35,955	4,635	4,495	13,392	1,623	1,641
Primary care visits as a percentage of total visits						
Year One	213,617	25,042	40,041	57,501	6,726	10,884
Year Two	152,966	16,284	22,347	38,539	4,100	5,484
Year Three	108,616	11,594	12,354	26,033	2,755	2,799

(continued)

Table G-13 (continued)
Michigan: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
COC Index						
Year One	246,108	27,989	44,155	63,916	7,390	11,779
Year Two	180,458	17,890	24,773	43,689	4,462	6,028
Year Three	127,848	13,017	14,066	29,472	3,057	3,075

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 10-14)***, all utilization outcomes (e.g., ***Table 10-15)***, all health outcomes (e.g., ***Table 10-11***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 10-9***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-14
Michigan: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures			
	Year One	58,148	7,406	12,717
	Year Two	59,874	6,614	9,733
	Year Three	59,149	5,709	6,539
	Overall	80,773	8,996	14,730
Dually eligible beneficiaries	Expenditure and utilization measures[1]			
	Year One	34,894	4,401	7,618
	Year Two	35,982	3,822	5,742
	Year Three	34,998	3,336	3,748
	Overall	48,054	5,347	8,767
Dually eligible beneficiaries	30-day unplanned readmissions			
	Year One	2,698	346	611
	Year Two	2,633	342	524
	Year Three	1,965	228	211
	Overall	3,490	420	740
Rural beneficiaries	Total Medicare expenditures			
	Year One	14,783	1,615	6,009
	Year Two	15,461	1,551	5,262
	Year Three	15,239	1,335	4,929
	Overall	20,406	1,885	7,343
Non-White beneficiaries	Total Medicare expenditures			
	Year One	30,386	3,938	6,360
	Year Two	31,600	3,824	5,445
	Year Three	31,649	3,302	3,898
	Overall	42,767	4,764	7,802

(continued)

Table G-14 (continued)
Michigan: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Beneficiaries with BH conditions	Total Medicare expenditures Year One	30,485	3,428	6,259
	Year Two	29,875	2,885	4,549
	Year Three	26,906	2,337	2,664
	Overall	39,822	4,035	6,989

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania

Table G-15
Pennsylvania: Weighted number of observations for all analyzed outcomes among the full beneficiary population and among beneficiaries with multiple chronic conditions

Outcome	All beneficiaries			Beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, access to care and quality of care measures[1]						
Year One	30,365	34,776	84,192	7,864	8,633	21,131
Year Two	32,783	53,971	85,470	7,694	13,040	19,112
Year Three	33,333	65,430	85,005	6,723	11,303	14,941
Overall	41,639	73,851	111,284	9,681	13,955	23,473
30-day unplanned readmissions						
Year One	1,993	2,154	5,918	1,154	1,207	3,342
Year Two	2,123	3,686	5,893	1,085	1,854	2,876
Year Three	1,936	3,175	4,435	868	1,504	1,947
Overall	2,598	3,614	6,761	1,427	1,930	3,700
Follow-up visits within 14 days after discharge						
Year One	1,633	1,643	4,693	920	884	2,560
Year Two	1,700	3,004	4,623	857	1,478	2,089
Year Three	1,541	2,565	3,447	676	1,183	1,462
Overall	2,153	2,849	5,383	1,156	1,475	2,833
Diabetes process of care measures[2]						
Year One	6,470	10,581	16,798	2,306	3,601	5,843
Year Two	4,665	5,619	11,118	1,581	1,767	3,562
Year Three	3,039	3,755	7,456	1,038	1,159	2,241
Total lipid panel						
Year One	9,912	14,804	28,674	4,607	7,070	13,157
Year Two	7,644	7,677	21,021	3,155	3,358	8,633
Year Three	5,729	5,660	15,534	2,229	2,350	5,850
Primary care visits as a percentage of total visits						
Year One	32,442	52,977	84,256	8,599	12,766	21,146
Year Two	23,783	30,505	59,326	6,019	8,180	14,706
Year Three	16,465	18,286	41,925	4,107	4,650	10,049
COC Index						
Year One	34,508	49,658	83,759	9,240	13,401	22,331
Year Two	25,935	33,548	63,037	6,602	8,982	15,845
Year Three	18,851	20,349	45,229	4,615	5,109	10,869

NOTES:

[1] The expenditure, utilization, access to care, and quality of care measures include all expenditure outcomes (e.g., ***Table 11-13***), all utilization outcomes (e.g., ***Table 11-14***), all health outcomes (e.g., ***Table 11-10***), and primary care visits, medical specialist visits, and surgical specialist visits.

[2] The diabetes process of care measures include all measures reported in ***Table 11-9***, except for total lipid panel.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table G-16
Pennsylvania: Weighted number of observations for the analyzed special population outcomes

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicare expenditures			
	Year One	8,442	10,560	24,506
	Year Two	9,257	15,827	24,452
	Year Three	9,343	18,633	23,643
	Overall	12,097	21,454	32,257
Dually eligible beneficiaries	Total Medicare expenditures			
	Year One	6,431	8,317	19,083
	Year Two	6,961	11,679	18,657
	Year Three	6,989	13,668	17,644
	Overall	9,156	16,104	24,998
Rural beneficiaries	Expenditure and utilization measures[1]			
	Year One	1,159	475	1,806
	Year Two	1,229	649	1,431
	Year Three	1,240	774	1,003
	Overall	1,548	863	2,124
Rural beneficiaries	30-day unplanned readmissions			
	Year One	73	20	116
	Year Two	62	30	89
	Year Three	62	15	44
	Overall	94	27	123
Non-White beneficiaries	Total Medicare expenditures			
	Year One	5,358	6,720	19,845
	Year Two	5,959	8,760	21,569
	Year Three	6,317	10,197	22,008
	Overall	8,060	12,166	29,170
Northeast region only	Total Medicare expenditures			
	Year One	19,270	20,904	37,150
	Year Two	20,612	39,299	34,848
	Year Three	20,634	46,440	34,015
	Overall	25,402	51,066	45,989
Southeast region only	Total Medicare expenditures			
	Year One	11,095	13,872	47,041
	Year Two	12,171	14,671	50,622
	Year Three	12,699	18,989	50,990
	Overall	16,237	22,784	65,296
Beneficiaries with BH conditions	Total Medicare expenditures			
	Year One	4,483	4,510	11,356
	Year Two	4,746	6,371	10,476
	Year Three	4,459	5,465	8,172
	Overall	6,156	6,856	12,999

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 11-19***.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

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APPENDIX H
NUMBER OF WEIGHTED OBSERVATIONS USED IN ALL REPORTED MEDICAID ANALYSES

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In this appendix, we present the number of weighted observations used in all reported Medicaid analyses. The numbers of observations are broken down by beneficiaries' assignment status—i.e., Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration, patient-centered medical home (PCMH), or non-PCMH. These annual figures represent the total number of unique beneficiaries who were ever attributed to a practice during a year and are presented here as an indication of model reliability. All expenditure outcomes and most utilization and access to care outcomes were estimated for all beneficiaries. For this reason, weighted observation counts for these outcomes were grouped together to avoid redundancy. Observation counts for outcomes estimated for a subset of beneficiaries (e.g., unplanned readmission after a hospitalization) or for special populations are presented separately.

NEW YORK

Table H-1
New York: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]			
Year One	11,972	36,345	43,435
Year Two	13,455	44,659	50,430
Year Three	16,427	49,744	58,400
Overall	22,376	74,962	85,496
Low birth weight admissions			
Overall	802	3,294	4,484
Appropriate use of asthma medication			
Year One	413	1,065	1,534
Year Two	352	648	838
Year Three	151	398	462
Overall	599	1,491	2,039
Primary care visits as a percentage of total visits			
Year One	6,619	20,748	26,166
Year Two	4,557	9,377	13,064
Year Three	1,869	3,754	5,707
Overall	8,044	23,898	30,638

NOTE:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 4-12***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 4-14)***, and the utilization outcomes (e.g., ***Table 4-16)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-2
New York: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year One	12,822	57,119	47,555	4,310	16,781	14,981
Year Two	12,598	56,104	43,979	4,095	15,840	12,183
Year Three	14,622	60,780	52,311	4,491	16,912	14,043
Overall	24,895	104,638	82,999	6,980	26,916	21,666

(continued)

Table H-2 (continued)
New York: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
30-day unplanned readmissions						
Year One	10,748	47,032	39,276	3,978	15,156	13,652
Year Two	9,707	44,757	37,528	3,499	14,002	11,235
Year Three	12,447	49,952	42,602	4,252	15,680	12,863
Overall	19,137	80,533	64,730	6,176	23,530	18,978
Diabetes process of care measures[2]						
Year One	896	3,438	2,492	663	2,315	1,477
Year Two	581	2,001	1,676	433	1,459	1,107
Year Three	370	1,178	1,055	295	853	765
Overall	1,022	4,011	3,117	746	2,680	1,878
Breast cancer screening						
Year One	1,921	8,755	7,094	1,117	4,525	3,300
Year Two	1,320	4,848	4,517	797	2,626	2,197
Year Three	866	2,744	3,044	562	1,578	1,670
Overall	2,133	9,691	8,086	1,212	4,978	3,644
Cervical cancer screening						
Year One	4,841	22,463	17,911	2,046	8,055	6,163
Year Two	3,224	11,773	11,079	1,454	4,620	3,977
Year Three	1,854	6,444	6,690	953	2,715	2,696
Overall	5,297	24,533	19,988	2,198	8,730	6,719
Antidepressant medication management (12-weeks and 6-months)						
Year One	1,370	5,562	5,208	626	2,470	2,424
Year Two	843	3,589	3,588	412	1,674	1,928
Year Three	517	2,318	2,043	262	1,003	1,229
Overall	2,140	9,133	8,346	978	4,039	4,044
Appropriate use of asthma medication						
Year One	546	2,188	1,662	333	1,372	899
Year Two	372	1,214	923	235	751	499
Year Three	208	791	632	144	510	354
Overall	734	2,875	2,228	442	1,719	1,129
Primary care visits as a percentage of total visits						
Year One	5,174	25,903	21,542	2,443	10,711	8,840
Year Two	3,183	12,349	12,120	1,619	5,795	5,380
Year Three	1,636	6,456	6,920	973	3,122	3,412
Overall	6,242	30,366	26,013	2,845	12,108	10,128

NOTES:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 4-27***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 4-29***), and all utilization outcomes (e.g., ***Table 4-31***).

[2] The diabetes process of care measures include all the measures reported in ***Table 4-24***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-3
New York: Weighted number of observations for the analyzed special population outcomes among children

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures Year One	8,532	17,994	8,688
	Year Two	9,558	25,645	14,807
	Year Three	11,576	30,851	18,476
	Overall	15,323	42,539	25,059
Disabled beneficiaries	Expenditure and utilization measures[1] Year One	904	2,752	3,625
	Year Two	964	3,224	3,538
	Year Three	1,079	3,420	3,635
	Overall	1,368	4,633	5,158
Asthma beneficiaries	Total Medicaid expenditures Year One	508	1,077	1,597
	Year Two	655	1,696	2,072
	Year Three	760	1,862	2,362
	Overall	875	2,225	2,834
Non-White beneficiaries	Total Medicaid expenditures Year One	1,213	5,027	5,579
	Year Two	1,331	5,245	6,118
	Year Three	1,693	5,658	6,665
	Overall	2,422	9,246	9,699
Pod 1 and all comparisons	Total Medicaid expenditures Year One	874	36,345	43,435
	Year Two	1,062	44,659	50,430
	Year Three	1,508	49,744	58,400
	Overall	2,005	74,962	85,496
Pod 2 and all comparisons	Total Medicaid expenditures Year One	4,173	36,345	43,435
	Year Two	4,750	44,659	50,430
	Year Three	6,032	49,744	58,400
	Overall	8,465	74,962	85,496
Pod 3 and all comparisons	Total Medicaid expenditures Year One	528	36,345	43,435
	Year Two	445	44,659	50,430
	Year Three	385	49,744	58,400
	Overall	771	74,962	85,496
Beneficiaries with BH conditions	Expenditure and utilization measures[2] Year One	451	1,162	1,346
	Year Two	470	1,091	1,400
	Year Three	605	1,191	1,616
	Overall	724	1,730	2,151

NOTE:

[1] The expenditure and utilization measures include total Medicaid expenditures, acute-care expenditures, ER expenditures, specialty physician expenditures, primary care physician expenditures, all-cause admissions, and ER visits. [2] The expenditure and utilization measures include all outcomes reported in ***Table 4-33*** and ***Table 4-35***.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-4
New York: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries		
		MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures			
	Year One	7,810	23,637	16,513
	Year Two	7,973	25,565	14,138
	Year Three	8,672	28,323	16,734
	Overall	14,861	47,177	27,220
Disabled beneficiaries	Total Medicaid expenditures			
	Year One	2,409	10,072	8,313
	Year Two	2,443	10,008	7,235
	Year Three	2,501	10,285	7,885
	Overall	3,744	15,624	12,517
Asthma beneficiaries	Total Medicaid expenditures			
	Year One	508	1,077	1,597
	Year Two	640	1,666	2,044
	Year Three	750	1,861	2,349
	Overall	758	1,975	2,535
Non-White beneficiaries	Total Medicaid expenditures			
	Year One	1,183	5,599	4,590
	Year Two	974	5,830	4,299
	Year Three	1,242	6,102	5,421
	Overall	2,471	10,866	8,908
Pod 1 and all comparisons	Total Medicaid expenditures			
	Year One	1,329	57,119	47,555
	Year Two	1,684	56,104	43,979
	Year Three	2,415	60,780	52,311
	Overall	3,534	104,638	82,999
Pod 2 and all comparisons	Total Medicaid expenditures			
	Year One	6,259	57,119	47,555
	Year Two	6,106	56,104	43,979
	Year Three	7,270	60,780	52,311
	Overall	12,147	104,638	82,999
Pod 3 and all comparisons	Total Medicaid expenditures			
	Year One	5,068	57,119	47,555
	Year Two	4,643	56,104	43,979
	Year Three	4,754	60,780	52,311
	Overall	8,893	104,638	82,999
Beneficiaries with BH conditions	Expenditure and utilization measures[1]			
	Year One	798	3,434	4,201
	Year Two	727	3,366	3,306
	Year Three	888	3,325	3,835
	Overall	1,429	5,963	6,215

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 4-21***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

RHODE ISLAND

Table H-5
Rhode Island: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year One	12,527	3,343	20,746	1,774	378	2,782
Year Two	16,831	3,348	20,549	1,916	348	2,354
Year Three	19,551	3,963	23,943	1,748	329	2,166
Overall	27,402	5,396	32,944	2,518	438	3,030
30-day unplanned readmissions						
Year One	1,218	310	2,177	211	33	304
Year Two	1,447	345	2,126	183	44	271
Year Three	1,608	330	2,114	180	34	197
Overall	4,263	945	6,307	522	101	697
Diabetes process of care measures[2]						
Year One	495	98	710	137	22	253
Year Two	313	70	453	73	18	174
Year Three	210	52	365	63	14	144
Overall	650	129	899	172	25	295
Breast cancer screening						
Year One	2,132	459	2,585	352	66	524
Year Two	1,310	316	1,669	273	59	418
Year Three	815	232	1,551	210	49	443
Overall	2,493	542	3,189	420	81	660
Cervical cancer screening						
Year One	10,042	2,127	12,225	1,304	255	1,713
Year Two	6,297	1,455	8,460	955	192	1,336
Year Three	3,421	1,240	7,166	647	172	1,277
Overall	11,042	2,401	14,102	1,421	267	1,888
Antidepressant medication management (12-weeks and 6-months)						
Year One	761	124	769	203	33	241
Year Two	453	102	572	127	19	182
Year Three	279	102	493	90	23	180
Overall	1,047	211	1,183	263	45	351
Appropriate use of asthma medication						
Year One	1,215	250	1,280	332	57	328
Year Two	750	124	688	185	27	212
Year Three	491	75	439	131	13	124
Overall	1,998	358	1,990	488	79	498

(continued)

Table H-5 (continued)
Rhode Island: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Primary care visits as a percentage of total visits						
Year One	6,251	1,349	8,656	1,326	268	1,967
Year Two	2,958	936	5,598	754	184	1,403
Overall	7,025	1,627	10,069	1,431	299	2,114

NOTES:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 5-14***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 5-16***), and all utilization outcomes (e.g., ***Table 5-18***).

[2] The diabetes process of care measures include all the measures reported in ***Table 5-11***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-6
Rhode Island: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures			
	Year One	71	17	164
	Year Two	80	16	135
	Year Three	77	10	101
	Overall	140	18	217
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year One	2,462	585	3,792
	Year Two	2,983	591	3,528
	Year Three	2,538	482	2,665
	Overall	5,075	1,022	6,171
Asthma beneficiaries	Total Medicaid expenditures			
	Year One	525	90	745
	Year Two	756	122	791
	Year Three	856	150	923
	Overall	1,089	172	1,133

(continued)

Table H-6 (continued)
Rhode Island: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Beneficiaries with BH conditions	Expenditure and utilization measures[2]			
	Year One	1,172	262	1,679
	Year Two	1,341	266	1,398
	Year Three	1,295	240	1,297
	Overall	1,872	323	1,885

NOTES:

[1] The expenditure and utilization measures include total Medicaid expenditures, acute-care expenditures, ER expenditures, specialty physician expenditures, primary care physician expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 5-34*** and ***Table 5-36***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

VERMONT

Table H-7
Vermont: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]			
Year One	11,972	36,345	43,435
Year Two	13,455	44,659	50,430
Year Three	16,427	49,744	58,400
Overall	22,376	74,962	85,496
Low birth weight admissions			
Overall	802	3,294	4,484
Appropriate use of asthma medication			
Year One	413	1,065	1,534
Year Two	352	648	838
Year Three	151	398	462
Overall	599	1,491	2,039
Primary care visits as a percentage of total visits			
Year One	6,619	20,748	26,166
Year Two	4,557	9,377	13,064
Year Three	1,869	3,754	5,707
Overall	8,044	23,898	30,638

NOTE:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 6-12***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 6-14)***, and the utilization outcomes (e.g., ***Table 6-16)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-8
Vermont: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year One	12,822	57,119	47,555	4,310	16,781	14,981
Year Two	12,598	56,104	43,979	4,095	15,840	12,183
Year Three	14,622	60,780	52,311	4,491	16,912	14,043
Overall	24,895	104,638	82,999	6,980	26,916	21,666

(continued)

Table H-8 (continued)
Vermont: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
30-day unplanned readmissions						
Year One	10,748	47,032	39,276	3,978	15,156	13,652
Year Two	9,707	44,757	37,528	3,499	14,002	11,235
Year Three	12,447	49,952	42,602	4,252	15,680	12,863
Overall	19,137	80,533	64,730	6,176	23,530	18,978
Diabetes process of care measures[2]						
Year One	896	3,438	2,492	663	2,315	1,477
Year Two	581	2,001	1,676	433	1,459	1,107
Year Three	370	1,178	1,055	295	853	765
Overall	1,022	4,011	3,117	746	2,680	1,878
Breast cancer screening						
Year One	1,921	8,755	7,094	1,117	4,525	3,300
Year Two	1,320	4,848	4,517	797	2,626	2,197
Year Three	866	2,744	3,044	562	1,578	1,670
Overall	2,133	9,691	8,086	1,212	4,978	3,644
Cervical cancer screening						
Year One	4,841	22,463	17,911	2,046	8,055	6,163
Year Two	3,224	11,773	11,079	1,454	4,620	3,977
Year Three	1,854	6,444	6,690	953	2,715	2,696
Overall	5,297	24,533	19,988	2,198	8,730	6,719
Antidepressant medication management (12-weeks and 6-months)						
Year One	1,370	5,562	5,208	626	2,470	2,424
Year Two	843	3,589	3,588	412	1,674	1,928
Year Three	517	2,318	2,043	262	1,003	1,229
Overall	2,140	9,133	8,346	978	4,039	4,044
Appropriate use of asthma medication						
Year One	546	2,188	1,662	333	1,372	899
Year Two	372	1,214	923	235	751	499
Year Three	208	791	632	144	510	354
Overall	734	2,875	2,228	442	1,719	1,129
Primary care visits as a percentage of total visits						
Year One	5,174	25,903	21,542	2,443	10,711	8,840
Year Two	3,183	12,349	12,120	1,619	5,795	5,380
Year Three	1,636	6,456	6,920	973	3,122	3,412
Overall	6,242	30,366	26,013	2,845	12,108	10,128

NOTES:
[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 6-12***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 6-14***), and all utilization outcomes (e.g., ***Table 6-16***).
[2] The diabetes process of care measures include all the measures reported in ***Table 6-9***.
CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-9
Vermont: Weighted number of observations for the analyzed special population outcomes among children

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures			
	Year One	25,839	8,439	5,699
	Year Two	36,964	13,098	8,488
	Year Three	39,273	15,251	10,089
	Overall	46,658	21,179	13,724
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year One	1043	1,352	1,614
	Year Two	1689	1,308	1,427
	Year Three	1,708	1,255	1,559
	Overall	1,864	1,916	2,237
Asthma beneficiaries	Total Medicaid expenditures			
	Year One	2,418	1,395	2,024
	Year Two	4,386	1,986	2,423
	Year Three	4,990	2,356	2,826
	Overall	5,764	2,880	3,371
Beneficiaries with BH conditions	Expenditure and utilization measures[2]			
	Year One	1,413	1,578	2,045
	Year Two	2,075	1,551	2,044
	Year Three	2,158	1,520	2,249
	Overall	2,472	2,281	3,082

NOTES:

[1] The expenditure and utilization measures include total Medicaid expenditures, acute-care expenditures, ER expenditures, specialty physician expenditures, primary care physician expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 6-33*** and ***Table 6-35***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-10
Vermont: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries		
		MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures			
	Year One	23,020	12,526	8,504
	Year Two	27,759	11,695	8,992
	Year Three	30,601	14,106	10,859
	Overall	41,914	25,106	17,152

(continued)

Table H-10 (continued)
Vermont: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries		
		MAPCP	CG PCMH	CG non-PCMH
Disabled beneficiaries	Total Medicaid expenditures			
	Year One	3,473	4,289	4,170
	Year Two	3,939	3,553	3,261
	Year Three	4,063	3,813	3,497
	Overall	4,670	6,488	5,808
Asthma beneficiaries	Total Medicaid expenditures			
	Year One	5,332	1,966	2,120
	Year Two	7,470	1,916	1,983
	Year Three	9,140	2,062	2,334
	Overall	12,006	3,144	3,280
Beneficiaries with BH conditions	Expenditure and utilization measures[1]			
	Year One	3,388	2,709	3,383
	Year Two	3,942	2,271	2,578
	Year Three	4,425	2,599	3,247
	Overall	5,663	4,822	5,503

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 6-33*** and ***Table 6-35***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

NORTH CAROLINA

Table H-11
North Carolina: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]			
Year One	11,436	38,999	120,479
Overall	11,997	41,008	126,026
Low birth weight admissions			
Overall	507	2,121	5,918
Appropriate use of asthma medication			
Overall	224	1,146	2,953
Primary care visits as a percentage of total visits			
Overall	2,934	13,698	45,730

NOTE:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 7-14***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 7-16)***, and the utilization outcomes (e.g., ***Table 7-18)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-12
North Carolina: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year One	7,762	9,170	21,165	3,300	4,022	8,735
Overall	8,413	9,994	23,271	3,392	4,175	9,175
30-day unplanned readmissions						
Year One	1,000	1,023	2,549	579	662	1,632
Overall	1,222	1,252	3,129	690	774	1,916
Diabetes process of care measures[2]						
Overall	584	591	1,378	519	524	1,142
Breast cancer screening						
Overall	1,050	941	2,371	855	702	1,800
Cervical cancer screening						
Overall	2,159	2,228	4,803	1,359	1,341	2,795
Antidepressant medication management (12-weeks and 6-months)						
Overall	287	312	677	227	251	533

(continued)

Table H-12 (continued)
North Carolina: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Appropriate use of asthma medication Overall	44	25	38	35	24	27
Primary care visits as a percentage of total visits Overall	2,456	2,501	5,229	1,719	1,806	3,671

NOTES:

[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 7-14***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 7-16***), and all utilization outcomes (e.g., ***Table 7-18***).

[2] The diabetes process of care measures include all the measures reported in ***Table 7-11***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-13
North Carolina: Weighted number of observations for the analyzed special population outcomes among children

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures Year One	6,033	5,127	1,090
	Overall	6,231	5,433	1,134
Disabled beneficiaries	Expenditure and utilization measures[1] Year One	709	2,572	7,744
	Overall	760	2,762	8,322
Asthma beneficiaries	Total Medicaid expenditures Year One	5,634	19,325	60,255
	Overall	5,880	20,264	62,546
Non-White beneficiaries	Total Medicaid expenditures Year One	350	1,780	4,577
	Overall	350	1,780	4,577
Network 1 and all comparisons	Total Medicaid expenditures Year One	1,650	38,999	120,479
	Overall	1,720	41,008	126,026
Network 2 and all comparisons	Total Medicaid expenditures Year One	611	38,999	120,479
	Overall	665	41,008	126,026
Network 3 and all comparisons	Total Medicaid expenditures Year One	7,515	38,999	120,479
	Overall	7,844	41,008	126,026

(continued)

Table H-13 (continued)
North Carolina: Weighted number of observations for the analyzed special population outcomes among children

Special population	Outcome	MAPCP	CG PCMH	CG non-PCMH
Network 4 and all comparisons	Total Medicaid expenditures Year One	1,660	38,999	120,479
	Overall	1,768	41,008	126,026
Beneficiaries with BH conditions	Expenditure and utilization measures[2] Year One	322	1,118	2,530
	Overall	329	1,146	2,640

NOTES:

[1] The expenditure and utilization measures include total Medicaid expenditures, acute-care expenditures, ER expenditures, specialty physician expenditures, primary care physician expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 7-35*** and ***Table 7-37***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-14
North Carolina: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries		
		MAPCP	CG PCMH	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures Year One	3,977	49	85
	Overall	4,229	49	93
Disabled beneficiaries	Total Medicaid expenditures Year One	3,397	4,018	9,166
	Overall	3,700	4,390	10,230
Asthma beneficiaries	Total Medicaid expenditures Year One	3,067	3,645	8,516
	Overall	3,305	3,944	9,244
Non-White beneficiaries	Total Medicaid expenditures Year One	406	468	1,025
	Overall	406	468	1,025
Network 1 and all comparisons	Total Medicaid expenditures Year One	1,415	9,170	21,165
	Overall	1,521	9,994	23,271
Network 2 and all comparisons	Total Medicaid expenditures Year One	635	9,170	21,165
	Overall	736	9,994	23,271
Network 3 and all comparisons	Total Medicaid expenditures Year One	4,656	9,170	21,165
	Overall	4,966	9,994	23,271

(continued)

Table H-14 (continued)
North Carolina: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries		
		MAPCP	CG PCMH	CG non-PCMH
Network 4 and all comparisons	Total Medicaid expenditures			
	Year One	1,056	9,170	21,165
	Overall	1,190	9,994	23,271
Beneficiaries with BH conditions	Expenditure and utilization measures[1]			
	Year One	473	518	828
	Overall	492	539	896

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 7-35*** and ***Table 7-37***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

MINNESOTA

Table H-15
Minnesota: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG non-PCMH
Utilization and access to care measures[1]		
Year One	199,049	40,022
Year Two	239,076	38,523
Year Three	283,499	49,294
Overall	356,479	69,356
Low birth weight admissions		
Overall	36,800	4,434
Appropriate use of asthma medication		
Year One	8,634	1,775
Year Two	6,985	1,252
Year Three	5,141	1,144
Overall	13,461	2,651
Primary care visits as a percentage of total visits		
Year One	107,691	22,191
Year Two	61,161	11,618
Year Three	34,061	7,035
Overall	138,701	26,177

NOTE:

[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 8-13***), excluding primary care visits as a percentage of total visits, and the utilization outcomes (e.g., ***Table 8-16)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-16
Minnesota: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries		Adult beneficiaries with multiple chronic conditions	
	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
Utilization and access to care measures[1]				
Year One	156,319	20,018	22,418	952
Year Two	198,952	18,774	35,171	2,039
Year Three	261,198	29,316	45,671	5,427
Overall	328,625	44,004	53,095	6,712
30-day unplanned readmissions				
Year One	16,244	2,079	2,798	116
Year Two	24,630	2,069	5,769	250
Year Three	30,053	2,829	7,141	699
Overall	59,564	5,935	12,415	942

(continued)

Table H-16 (continued)
Minnesota: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries		Adult beneficiaries with multiple chronic conditions	
	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
Diabetes process of care measures[2]				
Year One	15,307	1,851	5,636	666
Year Two	11,513	997	3,828	142
Year Three	7,522	794	1,290	24
Overall	18,880	2,220	6,483	704
Breast cancer screening				
Year One	40,015	5,210	11,205	1,289
Year Two	29,173	2,957	7,623	292
Year Three	19,235	2,416	2,603	67
Overall	46,013	5,878	12,193	1,328
Cervical cancer screening				
Year One	102,686	12,874	20,866	2,383
Year Two	71,597	6,789	13,722	576
Year Three	46,349	5,261	4,641	132
Overall	118,005	14,334	22,715	2,462
Antidepressant medication management (12-weeks and 6-months)				
Year One	10,569	1,264	3,601	381
Year Two	8,034	685	2,559	99
Year Three	4,883	479	813	10
Overall	15,420	1,700	4,844	418
Appropriate use of asthma medication				
Year One	21,754	2,445	6,878	639
Year Two	13,672	1,217	3,880	105
Year Three	7,498	786	1,187	15
Overall	32,115	3,369	9,138	704
Primary care visits as a percentage of total visits				
Year One	93,707	11,713	24,553	2,717
Year Two	62,387	5,519	15,774	591
Year Three	38,310	3,293	4,958	80
Overall	124,879	13,586	28,807	2,873

NOTES:
[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 8-13***), excluding primary care visits as a percentage of total visits, and all utilization outcomes (e.g., ***Table 8-16***).
[2] The diabetes process of care measures include all the measures reported in ***Table 8-10***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

MAINE

Table H-17
Maine: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG non-PCMH
Expenditure, utilization and access to care measures[1]		
Year One	15,971	17,093
Year Two	25,209	18,308
Year Three	27,249	18,069
Overall	35,349	26,032
Low birth weight admissions		
Overall	868	551
Appropriate use of asthma medication		
Year One	748	581
Year Two	520	477
Year Three	257	274
Overall	1,031	860
Primary care visits as a percentage of total visits		
Year One	7,358	6,627
Year Two	3,954	3,693
Year Three	1,409	1,776
Overall	9,081	7,947

NOTE:

[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 9-12***), excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 9-14),*** and the utilization outcomes (e.g., ***Table 9-16)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-18
Maine: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries		Adult beneficiaries with multiple chronic conditions	
	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
Expenditure, utilization, and access to care measures[1]				
Year One	15,712	7,519	4,878	2,176
Year Two	27,309	6,259	8,344	1,944
Year Three	24,077	5,129	7,208	1,622
Overall	37,775	10,807	11,016	2,961

(continued)

Table H-18 (continued)
Maine: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries		Adult beneficiaries with multiple chronic conditions	
	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
30-day unplanned readmissions				
Year One	1,243	537	584	292
Year Two	2,304	446	958	189
Year Three	1,706	268	681	141
Overall	4,842	1,127	1,935	515
Diabetes process of care measures[2]				
Year One	1,247	414	971	342
Year Two	822	278	666	225
Year Three	281	111	232	100
Overall	1,469	482	1,132	394
Breast cancer screening				
Year One	3,642	1,254	2,023	648
Year Two	2,317	830	1,342	436
Year Three	777	461	467	271
Overall	4,023	1,375	2,189	711
Cervical cancer screening				
Year One	12,453	3,223	4,539	1,179
Year Two	7,279	1,674	2,851	669
Year Three	2,301	835	967	371
Overall	13,350	3,341	4,829	1,224
Antidepressant medication management (12-weeks and 6-months)				
Year One	1,042	212	603	89
Year Two	609	123	369	45
Year Three	193	67	130	19
Overall	1,349	265	784	113
Appropriate use of asthma medication				
Year One	3,228	851	1,736	438
Year Two	2,092	668	1,160	342
Year Three	797	367	438	197
Overall	4,656	1,426	2,431	682
Primary care visits as a percentage of total visits				
Year One	9,864	2,144	4,542	1,071
Year Two	5,165	1,138	2,623	583
Year Three	1,325	535	709	301
Overall	11,692	2,594	5,200	1,235

NOTES:
[1] The expenditure, utilization, and access to care measures include the access to care outcomes (e.g., ***Table 9-12***) excluding primary care visits as a percentage of total visits, all expenditure outcomes (e.g., ***Table 9-14***), and all utilization outcomes (e.g., ***Table 9-16***).
[2] The diabetes process of care measures include all the measures reported in ***Table 9-9***.
CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-19
Maine: Weighted number of observations for the analyzed special population outcomes among children

Special population	Outcome	MAPCP	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures Year One	6,058	10,195
	Year Two	11,353	10,361
	Year Three	12,322	9,519
	Overall	16,023	14,491
Disabled beneficiaries	Expenditure and utilization measures[1] Year One	581	601
	Year Two	897	658
	Year Three	949	645
	Overall	1,148	845
Asthma beneficiaries	Total Medicaid expenditures Year One	4,051	4,046
	Year Two	6,759	4,975
	Year Three	7,637	5,554
	Overall	9,940	7,290
Non-White beneficiaries	Total Medicaid expenditures Year One	742	851
	Year Two	1,294	989
	Year Three	1,424	970
	Overall	1,710	1,296
Beneficiaries with BH conditions	Expenditure and utilization measures[2] Year One	555	582
	Year Two	991	640
	Year Three	1,076	635
	Overall	1,340	927

NOTES:

[1] The expenditure and utilization measures include total Medicaid expenditures, acute-care expenditures, ER expenditures, specialty physician expenditures, primary care physician expenditures, all-cause admissions, and ER visits.

[2] The expenditure and utilization measures include all outcomes reported in ***Table 9-32*** and ***Table 9-34***.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-20
Maine: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries	
		MAPCP	CG non-PCMH
Rural beneficiaries	Total Medicaid expenditures Year One	6,509	4,915
	Year Two	14,162	4,145
	Year Three	12,501	3,327
	Overall	19,133	7,046

(continued)

Table H-20 (continued)
Maine: Weighted number of observations for the analyzed special population outcomes among adults

Special population	Outcome	All adult beneficiaries	
		MAPCP	CG non-PCMH
Disabled beneficiaries	Total Medicaid expenditures Year One	2,108	918
	Year Two	3,965	1,018
	Year Three	4,280	1,040
	Overall	5,161	1,504
Asthma beneficiaries	Total Medicaid expenditures Year One	2,385	1,153
	Year Two	4,214	857
	Year Three	3,701	749
	Overall	6,063	1,719
Non-White beneficiaries	Total Medicaid expenditures Year One	890	395
	Year Two	1,689	382
	Year Three	1,594	323
	Overall	2,297	566
Beneficiaries with BH conditions	Expenditure and utilization measures[1] Year One	2,246	663
	Year Two	4,035	671
	Year Three	3,598	580
	Overall	5,485	1,063

NOTE:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 9-32*** and ***Table 9-34***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

MICHIGAN

Table H-21
Michigan: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG PCMH	CG non-PCMH
Utilization and access to care measures[1]			
Year One	195,234	13,113	57,873
Year Two	214,132	14,095	59,569
Year Three	190,762	13,494	53,848
Overall	300,037	21,284	83,535
Low birth weight admissions			
Overall	765	61	204
Appropriate use of asthma medication			
Year One	4,798	288	1,187
Year Two	3,645	208	978
Year Three	2,318	176	725
Overall	7,606	510	2,003
Primary care visits as a percentage of total visits			
Year One	79,312	4,855	24,877
Year Two	34,055	2,130	12,181
Year Three	21,261	1,391	7,270
Overall	95,721	5,886	29,648

NOTE:

[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 10-10***), excluding primary care visits as a percentage of total visits, and the utilization outcomes (e.g., ***Table 10-16)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-22
Michigan: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Utilization and access to care measures[1]						
Year One	63,888	12,310	23,550	23,586	4,682	9,561
Year Two	73,025	12,464	24,477	25,545	4,457	9,330
Year Three	114,438	17,854	34,004	27,518	4,579	9,245
Overall	156,829	25,812	49,673	41,716	7,282	14,738

(continued)

Table H-22 (continued)
Michigan: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
30-day unplanned readmissions						
Year One	6,609	1,365	2,146	2,949	690	1,052
Year Two	8,068	1,425	2,535	3,397	633	1,131
Year Three	4,590	708	1,311	1,976	315	607
Overall	17,292	3,070	5,321	6,933	1,341	2,344
Diabetes process of care measures[2]						
Year One	7,101	1,245	2,887	5,552	987	2,291
Year Two	4,663	934	2,027	3,774	768	1,662
Year Three	3,324	685	1,578	2,746	579	1351
Overall	8,400	1,550	3,471	6,440	1,198	2,705
Breast cancer screening						
Year One	15,363	2,667	5,691	9,250	1,618	3,575
Year Two	10,005	1,871	4,133	6,488	1,196	2,811
Year Three	8,412	1,715	3,533	5,484	1,097	2,455
Overall	17,256	3,045	6,481	10,180	1,807	4,013
Cervical cancer screening						
Year One	48,572	8,329	16,329	18,524	3,177	6,705
Year Two	28,092	5,422	10,269	11,840	2,225	4,579
Year Three	22,419	4,648	8,594	9,599	1,979	3,847
Overall	54,349	9,526	18,539	20,251	3,548	7,398
Antidepressant medication management (12-weeks and 6-months)						
Year One	2,300	354	741	1,509	225	456
Year Two	1,459	242	461	1,015	164	338
Year Three	874	169	325	634	100	246
Overall	3,419	581	1,145	2,259	369	768
Appropriate use of asthma medication						
Year One	4,867	900	1,629	2,947	539	1,022
Year Two	2,332	458	823	1,441	277	552
Year Three	1,146	228	420	760	155	266
Overall	7,093	1,308	2,441	4,255	771	1,520
Primary care visits as a percentage of total visits						
Year One	31,620	5,979	11,854	16,363	3,153	6,545
Year Two	13,506	2,829	5,694	7,628	1,646	3,456
Year Three	10,693	2,154	4,468	6,446	1,355	2,934
Overall	36,730	6,895	13,615	18,262	3,489	7,212

NOTES:
[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 10-13***), excluding primary care visits as a percentage of total visits, and all utilization outcomes (e.g., ***Table 10-16***).
[2] The diabetes process of care measures include all the measures reported in ***Table 10-10***.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

PENNSYLVANIA

Table H-23
Pennsylvania: Weighted number of observations for all analyzed outcomes among children in the full beneficiary population

Outcome	MAPCP	CG PCMH	CG non-PCMH
Utilization and access to care measures[1]			
Year One	21,015	12,588	93,623
Year Two	17,867	8,847	83,533
Year Three	15,560	8,485	76,645
Overall	29,595	16,553	137,101
Low birth weight admissions			
Overall	2268	1,104	9,340
Appropriate use of asthma medication			
Year One	646	259	2,884
Year Two	235	113	1077
Year Three	0	0	0
Overall	765	321	3,400
Primary care visits as a percentage of total visits			
Year One	5,860	3,600	28,077
Year Two	3,565	2,360	17,817
Year Three	1,612	1,269	8,681
Overall	7,516	4,730	36,989

NOTE:

[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 11-12***), excluding primary care visits as a percentage of total visits, and the utilization outcomes (e.g., ***Table 11-15)*** excluding low birth weight admissions.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table H-24
Pennsylvania: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Utilization and access to care measures[1]						
Year One	12,724	725	13,182	4,365	184	4,212
Year Two	8,053	417	8,818	2,884	87	2,910
Year Three	6,833	343	9,007	2,226	62	2,245
Overall	16,330	1,031	19,414	4,949	229	4,963

(continued)

Table H-24 (continued)
Pennsylvania: Weighted number of observations for all analyzed outcomes among adults in the full beneficiary population and among adult beneficiaries with multiple chronic conditions

Outcome	All adult beneficiaries			Adult beneficiaries with multiple chronic conditions		
	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
30-day unplanned readmissions						
Year One	1,797	110	1,719	932	43	778
Year Two	1,139	43	1,231	574	12	569
Year Three	742	26	836	394	2	346
Overall	3,045	170	3,208	1,415	51	1,289
Primary care visits as a percentage of total visits						
Year One	3,986	183	4,058	2,175	66	2,190
Year Two	2,378	63	2,364	1,430	25	1,389
Year Three	1,402	30	1,296	943	11	862
Overall	4,629	201	4,643	2,388	70	2,363

NOTES:
[1] The utilization and access to care measures include the access to care outcomes (e.g., ***Table 11-12***), excluding primary care visits as a percentage of total visits, and all utilization outcomes (e.g., ***Table 11-15***).

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

APPENDIX I
DECOMPOSITION OF THE MEDICARE DIFFERENCE-IN-DIFFERENCES ESTIMATES

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I.1 Description of the Decompositions Presented

The linear difference-in-differences estimates presented in this report for the expenditure outcomes result from two sequentially estimated differences. First, we estimated the differences (or changes) in average expenditures from the baseline to demonstration period separately for beneficiaries assigned to Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration practices and for beneficiaries assigned to comparison practices. Second, we compared these differences (or changes) between the two groups. In the main body of this report we presented the second difference. In this appendix, we present the first set of differences.

Decomposing the linear difference-in-differences estimates provides a deeper insight into the magnitude and sign of the point estimates presented in the main body of the report. For example, a negative linear difference-in-differences could occur because:

- Average expenditures increased among comparison beneficiaries and decreased among MAPCP Demonstration beneficiaries;
- Average expenditures increased among both groups but at a slower rate among MAPCP Demonstration beneficiaries; or
- Average expenditures decreased among both groups but at a faster rate among MAPCP Demonstration beneficiaries.

Conversely, a positive linear difference-in-differences estimate could occur because:

- Average expenditures increased among MAPCP Demonstration beneficiaries and decreased among comparison beneficiaries;
- Average expenditures increased among both groups but at a slower rate among comparison beneficiaries; or
- Average expenditures decreased among both groups but at a faster rate among comparison beneficiaries.

The nonlinear difference-in-differences estimates presented in this report for the utilization and quality outcomes have a slightly different interpretation. Specifically, the nonlinear model results are obtained through a single difference. This difference contrasts the observed outcome among the MAPCP beneficiaries during the demonstration with a predicted outcome that estimates what would have been observed among the MAPCP beneficiaries during the demonstration *if they had not been assigned to a demonstration practice*. In the main body of the report, we presented the difference in observed and predicted outcomes. In this appendix, we separately present the observed and predicted outcomes.

Decomposing the nonlinear difference-in-differences estimates in this manner provides analogous insight into the magnitude and sign of the point estimates presented in the main body of the report. For example, a negative nonlinear difference-in-differences estimate could occur because:

- The observed and predicted outcomes were both positive, but the observed outcome was smaller than the predicted outcome;

- The observed and predicted outcomes were both negative, but the observed outcome was larger (in absolute value) than the predicted outcome; or

- The observed outcome was negative and the predicted outcome was positive.

Conversely, a positive nonlinear difference-in-differences estimate could occur because:

- The observed and predicted outcomes were both positive, but the observed outcome was larger than the predicted outcome;

- The observed and predicted outcomes were both negative, but the observed outcome was smaller (in absolute value) than the predicted outcome; or

- The observed outcome was positive and the predicted outcome was negative.

In the following tables, we present a separate decomposition for each year of the MAPCP Demonstration. As stated above, for the linear models this decomposition represents the difference in outcomes from baseline to demonstration. For the nonlinear models, the decompositions represent either an observed or predicted outcome. For completeness, we also present the differences in each decomposition, which correspond with the estimates reported in the main body of this report. As in the main body of this report, the decompositions associated with our negative binomial specifications are presented as rates per 1,000 person-quarters. Likewise, the decompositions associated with our logit and ordered logit specifications are presented as predicted percentages of the sample likely to receive the service (e.g., receive a diabetes test).

I.2 Decompositions of the New York Estimates

Table I2-1 presents a decomposition of the estimates of the changes associated with the New York MAPCP Demonstration for process of care indicators.

Table I2-1
New York: Differences in the probability of receiving the process of care indicator during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	CG PCMHs		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	91.68*	90.21*	1.47	91.91*	92.36*	−0.44
Year Two	91.08*	89.24*	1.84	91.35*	90.63*	0.72
Year Three	91.62*	91.08*	0.54	91.88*	92.18*	−0.31
Overall	91.46*	90.09*	1.37	91.72*	91.74*	−0.02
Retinal eye examination						
Year One	62.74*	61.95*	0.79	62.34*	61.56*	0.78
Year Two	63.93*	63.92*	0.01	63.61*	54.79*	8.82*
Year Three	62.78*	62.25*	0.53	62.69*	62.40*	0.30
Overall	63.15*	62.68*	0.47	62.85*	59.49*	3.36*
LDL-C screening						
Year One	84.86*	84.21*	0.64	84.99*	83.38*	1.60
Year Two	84.22*	84.71*	−0.49	84.50*	81.23*	3.27*
Year Three	85.74*	85.32*	0.42	85.86*	84.50*	1.35
Overall	84.86*	84.65*	0.21	85.03*	82.93*	2.10
Medical attention for nephropathy						
Year One	62.48*	63.75*	−1.28	62.37*	61.23*	1.14
Year Two	63.61*	68.69*	−5.08	63.83*	58.89*	4.94
Year Three	66.61*	71.84*	−5.22	66.90*	67.95*	−1.05
Overall	63.86*	67.36*	−3.51	63.96*	62.07*	1.89
Received all 4 diabetes tests						
Year One	36.96*	36.14*	0.82	36.51*	36.36*	0.15
Year Two	38.88*	41.89*	−3.02	38.64*	31.86*	6.78*
Year Three	38.63*	41.26*	−2.63	38.56*	40.18*	−1.62
Overall	38.01*	39.31*	−1.30	37.72*	35.77*	1.95
Received none of the 4 diabetes tests						
Year One	2.71*	3.09*	−0.38	2.69*	2.44*	0.25
Year Two	3.11*	3.37*	−0.25	3.06*	3.54*	−0.48
Year Three	2.28*	2.36*	−0.08	2.22*	2.21*	0.02
Overall	2.74*	3.01*	−0.27	2.70*	2.76*	−0.05

(continued)

Table I2-1 (continued)
New York: Differences in the probability of receiving the process of care indicator during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	CG PCMHs		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	74.93*	74.74*	0.20	74.67*	73.61*	1.06
Year Two	72.95*	72.80*	0.14	72.93*	73.95*	−1.02
Year Three	72.53*	72.66*	−0.13	72.49*	72.38*	0.11
Overall	73.65*	73.56*	0.09	73.53*	73.41*	0.12

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-2 presents a decomposition of the estimates of the changes associated with the New York MAPCP Demonstration for selected health outcomes.

Table I2-2
New York: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	6.59*	6.12*	0.47	6.49*	5.77*	0.72
Year Two	7.64*	7.58*	0.07	7.53*	8.39*	−0.85
Year Three	8.43*	8.86*	−0.42	8.35*	8.46*	−0.11
Overall	7.80*	7.70*	0.09	7.70*	7.72*	−0.02
PQI admissions—overall						
Year One	11.01*	11.37*	−0.36	10.91*	12.20*	−1.29
Year Two	12.49*	12.26*	0.23	12.38*	12.31*	0.07
Year Three	11.28*	12.29*	−1.02	11.27*	11.67*	−0.40
Overall	11.42*	12.14*	−0.72	11.36*	12.02*	−0.65
PQI admissions—acute						
Year One	4.50*	4.88*	−0.38	4.37*	5.13*	−0.76
Year Two	5.00*	4.96*	0.04	4.87*	5.88*	−1.01
Year Three	4.28*	4.79*	−0.51	4.23*	4.78*	−0.56
Overall	4.48*	4.90*	−0.42	4.39*	5.12*	−0.73
PQI admissions—chronic						
Year One	6.28*	6.29*	−0.01	6.24*	6.63*	−0.39
Year Two	7.21*	7.03*	0.18	7.14*	6.19*	0.95
Year Three	6.82*	7.26*	−0.44	6.82*	6.57*	0.25
Overall	6.70*	6.99*	−0.29	6.68*	6.53*	0.15

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I2-3 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for access to care and coordination of care.

Table I2-3
New York: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	652.31*	660.39*	−8.07	656.36*	654.82*	1.54
Year Two	645.84*	642.66*	3.18	649.24*	631.61*	17.63
Year Three	615.10*	641.57*	−26.46	617.42*	645.53*	−28.11
Overall	635.96*	650.55*	−14.59	638.96*	643.12*	−4.17
Medical specialist visits (per 1,000 beneficiaries)						
Year One	625.97*	648.96*	−23.00	620.21*	633.42*	−13.21
Year Two	658.78*	673.52*	−14.74	648.98*	663.94*	−14.96
Year Three	707.51*	715.28*	−7.77	699.48*	704.41*	−4.92
Overall	665.25*	685.94*	−20.69	657.62*	676.93*	−19.31
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	151.85*	137.18*	14.68*	151.71*	138.83*	12.88
Year Two	147.98*	137.68*	10.30	148.35*	139.53*	8.82
Year Three	152.67*	144.49*	8.18	153.27*	141.81*	11.46
Overall	150.87*	140.59*	10.29	151.19*	141.79*	9.40
Primary care visits as a percent of total visits						
Year One						
1st quintile	26.99*	25.71*	1.28	26.47*	26.86*	−0.40
5th quintile	11.33*	12.01*	−0.68	12.00*	11.79*	0.21
Year Two						
1st quintile	28.91*	27.16*	1.76	28.41*	27.98*	0.43
5th quintile	10.40*	11.24*	−0.84	11.01*	11.22*	−0.21
Year Three						
1st quintile	31.98*	28.33*	3.65	31.36*	27.96*	3.39
5th quintile	9.13*	10.67*	−1.54	9.70*	11.23*	−1.52
Overall						
1st quintile	28.90*	26.86*	2.04	28.36*	27.51*	0.85
5th quintile	10.46*	11.41*	−0.95	11.09*	11.46*	−0.37

(continued)

Table I2-3 (continued)
New York: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	744.38*	750.17*	−5.79	744.35*	766.61*	−22.26
Year 2	765.50*	773.16*	−7.66	762.57*	749.95*	12.62
Year 3	738.86*	737.67*	1.19	737.45*	753.09*	−15.65
Overall	747.51*	752.22*	−4.71	746.00*	760.42*	−14.41
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	165.73*	178.97*	−13.25	166.72*	182.97*	−16.25
Year Two	166.53*	190.76*	−24.23*	166.49*	171.09*	−4.60
Year Three	169.85*	185.38*	−15.52	169.86*	184.70*	−14.83
Overall	169.67*	183.88*	−14.22	170.01*	181.35*	−11.34
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	23.40*	20.11*	3.28*	23.27*	22.25*	1.02
5th quintile	18.51*	21.60*	−3.09*	18.26*	19.14*	−0.88
Year Two						
1st quintile	25.55*	20.73*	4.82*	25.41*	22.81*	2.60*
5th quintile	16.81*	20.96*	−4.15*	16.59*	18.65*	−2.06*
Year Three						
1st quintile	26.81*	21.99*	4.83*	26.76*	24.65*	2.12
5th quintile	15.92*	19.75*	−3.83*	15.64*	17.16*	−1.52
Overall						
1st quintile	25.02*	20.81*	4.20*	24.91*	23.07*	1.84
5th quintile	17.26*	20.90*	−3.64*	17.01*	18.46*	−1.45

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-4 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for expenditures.

Table I2-4
New York: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	418.36*	416.75*	1.61	416.68*	430.95*	−14.27
Year Two	458.35*	440.83*	17.52	456.72*	476.91*	−20.19
Year Three	486.04*	478.66*	7.38	486.24*	488.60*	−2.36
Overall	464.19*	459.55*	4.64	463.40*	473.07*	−9.67
Acute-care expenditures						
Year One	160.77*	170.33*	−9.56	165.49*	158.39*	7.10
Year Two	167.23*	185.28*	−18.05	171.36*	192.26*	−20.90
Year Three	172.27*	194.36*	−22.08*	176.83*	186.82*	−9.99
Overall	167.94*	186.86*	−18.92*	172.43*	178.77*	−6.34
Post-acute-care expenditures						
Year One	49.02*	45.72*	3.30	51.77*	56.83*	−5.06
Year Two	55.76*	47.74*	8.02	58.82*	69.08*	−10.27
Year Three	62.36*	57.27*	5.09	65.99*	69.76*	−3.77
Overall	57.96*	52.91*	5.05	61.23*	66.17*	−4.94
ER expenditures						
Year One	22.09*	13.87*	8.22*	24.12*	19.07*	5.05*
Year Two	20.98*	17.45*	3.53*	23.05*	19.48*	3.57
Year Three	24.44*	22.84*	1.60	26.56*	21.47*	5.09*
Overall	23.48*	19.52*	3.96*	25.56*	20.86*	4.70*
Outpatient expenditures						
Year One	79.14*	62.11*	17.03*	74.05*	65.34*	8.71
Year Two	92.07*	64.63*	27.44*	87.15*	69.87*	17.28*
Year Three	100.90*	74.16*	26.74*	96.02*	86.29*	9.73
Overall	93.06*	69.70*	23.36*	88.10*	77.33*	10.77
Specialty physician expenditures						
Year One	35.82*	42.85*	−7.03*	32.86*	40.48*	−7.62*
Year Two	37.97*	41.82*	−3.85	34.82*	38.55*	−3.73
Year Three	42.34*	50.99*	−8.64*	39.29*	40.02*	−0.73
Overall	39.33*	47.46*	−8.13*	36.26*	40.72*	−4.46
Primary care physician expenditures						
Year One	21.13*	25.88*	−4.75*	21.07*	22.93*	−1.87
Year Two	20.55*	25.63*	−5.08*	20.44*	23.30*	−2.86
Year Three	21.32*	23.34*	−2.02	21.08*	24.26*	−3.18
Overall	21.41*	25.09*	−3.67*	21.25*	24.26*	−3.01

(continued)

Table I2-4 (continued)
New York: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	12.08*	15.03*	−2.94*	13.13*	18.31*	−5.18*
Year Two	17.63*	15.43*	2.19	18.74*	20.87*	−2.13
Year Three	21.81*	19.12*	2.69	23.11*	22.65*	0.45
Overall	18.25*	17.13*	1.12	19.44*	21.22*	−1.78
Other expenditures						
Year One	13.26*	13.25*	0.01	12.44*	17.26*	−4.83*
Year Two	16.35*	14.89*	1.46	15.62*	17.42*	−1.80
Year Three	18.40*	17.79*	0.61	17.90*	20.45*	−2.55
Overall	17.02*	16.21*	0.81	16.36*	19.87*	−3.52
Laboratory expenditures						
Year One	2.06*	4.20*	−2.14*	1.14*	1.57*	−0.42
Year Two	1.98*	3.64*	−1.66*	1.01*	1.69*	−0.68
Year Three	2.12*	3.16*	−1.05*	1.10*	1.97*	−0.87
Overall	2.12*	3.65*	−1.54*	1.14*	1.85*	−0.71
Imaging expenditures						
Year One	−0.78	1.08	−1.86*	−0.86	0.60	−1.46*
Year Two	−2.41*	0.41	−2.82*	−2.53*	−0.12	−2.40*
Year Three	−2.05*	1.02	−3.07*	−2.18*	0.24	−2.42*
Overall	−1.80*	1.06	−2.86*	−1.91*	0.35	−2.26*
Other facility expenditures						
Year One	−0.07	−0.11	0.05	−0.02*	0.01*	−0.03*
Year Two	−0.07	−0.11	0.04	−0.02*	0.01*	−0.03*
Year Three	−0.06	−0.11	0.05	−0.02*	0.01*	−0.03*
Overall	−0.07	−0.11	0.05	−0.02*	0.01*	−0.03*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-5 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for utilization.

Table I2-5
New York: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	67.05*	71.00*	−3.95*	66.43*	68.03*	−1.60
Year Two	67.44*	73.22*	−5.77*	67.02*	70.86*	−3.84
Year Three	67.31*	75.36*	−8.06*	67.26*	73.72*	−6.46*
Overall	67.35*	73.44*	−6.09*	67.06*	70.78*	−3.71*
ER visits not leading to hospitalization						
Year One	125.70*	122.00*	3.70	124.68*	123.60*	1.08
Year Two	132.74*	132.38*	0.36	131.88*	127.70*	4.18
Year Three	131.12*	139.58*	−8.45	130.62*	126.13*	4.49
Overall	130.53*	134.27*	−3.74	129.77*	127.01*	2.76

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-6 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for total Medicare expenditures for special populations.

Table I2-6
New York: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	885.28*	876.29*	8.99	888.21*	943.10*	−54.89
Year Two	908.35*	901.60*	6.75	911.05*	973.57*	−62.52
Year Three	915.36*	890.95*	24.41	923.11*	892.88*	30.23
Overall	914.61*	900.71*	13.90	919.25*	922.66*	−3.41

(continued)

Table I2-6 (continued)
New York: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
BH conditions only						
Year One	518.55*	504.67*	13.88	478.34*	531.00*	−52.66
Year Two	498.86*	549.10*	−50.25	463.08*	475.49*	−12.41
Year Three	543.03*	549.93*	−6.90	511.18*	419.55*	91.63
Overall	533.45*	537.48*	−4.02	497.83*	467.13*	30.70
Disabled beneficiaries only						
Year One	435.04*	409.16*	25.88	421.62*	507.28*	−85.66
Year Two	488.01*	462.75*	25.26	475.24*	443.10*	32.14
Year Three	510.28*	464.02*	46.26	499.53*	444.49*	55.04
Overall	491.98*	458.60*	33.37	479.88*	464.09*	15.79
Dually eligible beneficiaries only						
Year One	442.21*	412.24*	29.98	439.79*	489.96*	−50.17
Year Two	509.45*	484.94*	24.51	507.33*	421.09*	86.23
Year Three	505.87*	489.64*	16.23	505.04*	473.06*	31.98
Overall	495.68*	477.99*	17.69	494.06*	477.54*	16.52
Rural beneficiaries only						
Year One	399.86*	396.80*	3.06	407.55*	418.55*	−11.00
Year Two	501.72*	423.95*	77.77	508.79*	458.51*	50.28
Year Three	494.97*	484.22*	10.75	504.32*	577.33*	−73.02
Overall	476.35*	456.14*	20.21	484.64*	486.83*	−2.19
Pod 1 and all comparisons						
Year One	442.07*	415.71*	26.35	441.17*	429.27*	11.89
Year Two	445.83*	436.95*	8.88	445.18*	471.86*	−26.68
Year Three	477.67*	475.38*	2.29	477.88*	481.88*	−4.00
Overall	460.33*	456.94*	3.39	459.87*	468.49*	−8.62
Pod 2 and all comparisons						
Year One	402.12*	412.05*	−9.92	397.94*	425.06*	−27.12
Year Two	432.46*	435.17*	−2.70	429.14*	469.69*	−40.56*
Year Three	440.00*	472.05*	−32.05	438.34*	479.09*	−40.75
Overall	433.32*	454.44*	−21.13	430.64*	465.67*	−35.03*
Pod 3 and all comparisons						
Year One	416.75*	417.32*	−0.57	415.63*	431.37*	−15.74
Year Two	474.81*	440.17*	34.64	473.08*	476.11*	−3.03
Year Three	520.19*	478.11*	42.08*	520.11*	486.11*	34.00
Overall	483.25*	459.04*	24.21	482.34*	471.79*	10.54

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-7 and ***Table I2-8*** presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for expenditures and health care utilization for beneficiaries in Pod 2.

Table I2-7
New York: Differences in the change in Medicare PBPM expenditures from baseline among Medicare beneficiaries in Pod 2, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Acute-care expenditures			
Year One	153.66*	154.37*	−0.70
Year Two	150.01*	187.87*	−37.86*
Year Three	149.79*	180.51*	−30.72*
Overall	153.94*	173.70*	−19.76*
Expenditures for ER visits not leading to hospitalization			
Year One	16.52*	19.32*	−2.79
Year Two	19.49*	19.83*	−0.34
Year Three	22.25*	21.42*	0.82
Overall	20.56*	21.04*	−0.47
Specialty physician			
Year One	29.08*	39.78*	−10.71*
Year Two	28.70*	37.77*	−9.07*
Year Three	32.57*	39.27*	−6.70*
Overall	30.74*	40.03*	−9.30*
Primary care physician			
Year One	17.97*	22.57*	−4.60*
Year Two	16.28*	22.97*	−6.69*
Year Three	16.04*	23.73*	−7.69*
Overall	16.93*	23.86*	−6.93*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-8
New York: Differences in the rates of utilization during the demonstration among Medicare beneficiaries in Pod 2, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMHs CG	
All-cause admissions			
Year One	62.66*	60.74*	1.92
Year Two	65.39*	63.16*	2.23
Year Three	60.72*	65.52*	−4.80
Overall	62.78*	63.05*	−0.27
ER visits not leading to hospitalization			
Year One	115.85*	119.04*	−3.19
Year Two	122.93*	122.24*	0.69
Year Three	125.49*	120.38*	5.10
Overall	122.33*	121.63*	0.70
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	165.23*	185.70*	−20.47
Year Two	166.36*	172.24*	−5.88
Year Three	174.52*	185.41*	−10.89
Overall	172.27*	182.83*	−10.56

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All-cause admissions and ER visits not leading to hospitalization are rates per 1,000 beneficiary quarters.
- Unplanned 30-day readmissions are rates per 1,000 beneficiary quarters with admissions.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-9 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I2-9
New York: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	89.41*	88.26*	1.15	89.72*	90.36*	−0.63
Year Two	88.21*	88.36*	−0.15	88.18*	93.22*	−5.03*
Year Three	90.56*	89.09*	1.47	90.60*	88.77*	1.83
Overall	89.28*	88.49*	0.80	89.42*	90.93*	−1.50
Retinal eye examination						
Year One	62.37*	61.30*	1.07	62.69*	64.21*	−1.52
Year Two	64.32*	62.84*	1.48	64.34*	51.77*	12.57*
Year Three	65.69*	59.56*	6.13*	65.29*	55.63*	9.66*
Overall	63.78*	61.40*	2.38	63.84*	58.13*	5.70*
LDL-C screening						
Year One	81.22*	80.12*	1.11	81.94*	81.71*	0.23
Year Two	80.03*	81.04*	−1.02	80.79*	77.35*	3.44
Year Three	83.12*	80.61*	2.51	83.54*	83.96*	−0.42
Overall	81.27*	80.54*	0.74	81.94*	80.81*	1.13
Medical attention for nephropathy						
Year One	68.78*	72.98*	−4.21	68.82*	67.27*	1.55
Year Two	70.24*	74.27*	−4.03	70.41*	66.72*	3.69
Year Three	73.02*	75.53*	−2.51	73.18*	72.30*	0.87
Overall	70.24*	74.00*	−3.76	70.36*	68.26*	2.09
Received all 4 diabetes tests						
Year One	37.79*	36.46*	1.33	37.78*	38.55*	−0.77
Year Two	40.79*	39.31*	1.48	40.53*	32.27*	8.26
Year Three	42.82*	38.66*	4.17	42.45*	42.47*	−0.02
Overall	39.95*	37.91*	2.04	39.77*	37.40*	2.36
Received none of the 4 diabetes tests						
Year One	2.97*	2.98*	−0.02	2.60*	2.02*	0.58
Year Two	3.92*	2.92*	0.99	3.58*	1.84*	1.74*
Year Three	2.54*	2.71*	−0.17	2.28*	3.44*	−1.16
Overall	3.18*	2.90*	0.28	2.85*	2.29*	0.55

(continued)

Table I2-9 (continued)
New York: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	70.47*	69.10*	1.38	70.01*	70.82*	−0.82
Year Two	68.00*	68.40*	−0.40	67.97*	70.73*	−2.77
Year Three	69.06*	64.65*	4.41	69.15*	70.43*	−1.28
Overall	69.34*	67.85*	1.49	69.14*	70.70*	−1.56

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-10 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I2-10
New York: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	18.05*	16.89*	1.16	17.96*	15.62*	2.34
Year Two	19.92*	20.61*	−0.69	19.86*	24.84*	−4.98
Year Three	21.59*	23.00*	−1.41	21.65*	20.41*	1.24
Overall	20.53*	20.14*	0.38	20.50*	20.17*	0.34
PQI admissions—overall						
Year One	37.25*	40.74*	−3.48	37.40*	44.89*	−7.48*
Year Two	39.95*	41.60*	−1.65	40.20*	42.73*	−2.53
Year Three	35.48*	39.34*	−3.85	36.02*	38.45*	−2.43
Overall	37.25*	41.27*	−4.02*	37.59*	41.74*	−4.16
PQI admissions—acute						
Year One	12.89*	15.58*	−2.70	12.86*	15.49*	−2.63
Year Two	13.70*	14.73*	−1.03	13.67*	18.01*	−4.34
Year Three	12.91*	12.41*	0.50	13.01*	13.49*	−0.48
Overall	13.00*	14.56*	−1.56	13.02*	15.37*	−2.35
PQI admissions—chronic						
Year One	23.58*	24.34*	−0.76	23.79*	28.22*	−4.43
Year Two	25.26*	25.96*	−0.70	25.59*	23.65*	1.94
Year Three	21.80*	26.41*	−4.62*	22.23*	24.53*	−2.30
Overall	23.41*	25.95*	−2.54	23.76*	25.48*	−1.72

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I2-11 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I2-11
New York: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	885.00*	876.16*	8.83	876.26*	869.23*	7.03
Year Two	838.34*	856.21*	−17.87	830.39*	826.92*	3.47
Year Three	796.26*	819.55*	−23.29	788.74*	801.66*	−12.92
Overall	835.96*	851.43*	−15.46	827.97*	828.60*	−0.64
Medical specialist visits (per 1,000 beneficiaries)						
Year One	1,032.95*	1,051.66*	−18.72	1,018.32*	1,016.42*	1.90
Year Two	995.28*	1,034.67*	−39.39	977.45*	1,022.25*	−44.80
Year Three	1,027.97*	1,050.33*	−22.36	1,017.01*	999.11*	17.90
Overall	1,012.15*	1,043.48*	−31.33	998.57*	1,013.26*	−14.70
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	225.78*	185.02*	40.76*	224.63*	193.75*	30.88*
Year Two	192.62*	169.78*	22.84	191.35*	177.37*	13.98
Year Three	197.86*	176.19*	21.68*	196.60*	184.14*	12.47
Overall	205.20*	176.89*	28.31*	203.97*	184.74*	19.23*
Primary care visits as a percent of total visits						
Year One						
1st quintile	30.28*	28.45*	1.83	29.62*	29.21*	0.42
5th quintile	9.95*	10.76*	−0.82	10.71*	10.91*	−0.19
Year Two						
1st quintile	30.14*	27.93*	2.21	29.43*	30.30*	−0.87
5th quintile	10.01*	11.02*	−1.01	10.80*	10.41*	0.39
Year Three						
1st quintile	32.89*	28.61*	4.28*	32.12*	29.31*	2.81
5th quintile	8.92*	10.69*	−1.78	9.65*	10.86*	−1.21
Overall						
1st quintile	30.87*	28.31*	2.55	30.17*	29.59*	0.57
5th quintile	9.72*	10.83*	−1.11	10.48*	10.73*	−0.25

(continued)

Table I2-11 (continued)
New York: Decomposition of the access to care and coordination of care estimates for beneficiaries with multiple chronic conditions

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	812.97*	810.29*	2.68	812.93*	820.64*	−7.71
Year Two	820.38*	855.18*	−34.80	819.63*	823.62*	−3.99
Year Three	788.68*	798.73*	−10.05	788.74*	763.10*	25.64
Overall	803.58*	817.40*	−13.83	803.33*	803.22*	0.12
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	211.06*	235.19*	−24.14	211.35*	245.67*	−34.32
Year Two	218.08*	242.81*	−24.73	219.22*	217.20*	2.02
Year Three	210.33*	256.93*	−46.60*	211.72*	239.34*	−27.62
Overall	217.44*	242.66*	−25.22	218.39*	231.82*	−13.42
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	22.32*	17.83*	4.49*	22.32*	19.78*	2.54
5th quintile	17.36*	21.76*	−4.40*	17.25*	19.54*	−2.29
Year Two						
1st quintile	23.64*	18.92*	4.72*	23.52*	19.25*	4.27*
5th quintile	16.31*	20.55*	−4.24*	16.29*	20.07*	−3.78*
Year Three						
1st quintile	25.64*	19.60*	6.04*	25.41*	20.80*	4.62*
5th quintile	14.90*	19.85*	−4.95*	14.94*	18.57*	−3.62*
Overall						
1st quintile	23.58*	18.63*	4.95*	23.49*	19.85*	3.63*
5th quintile	16.40*	20.88*	−4.48*	16.36*	19.48*	−3.12*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-12 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I2-12
New York: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	885.28*	876.29*	8.99	888.21*	943.10*	−54.89
Year Two	908.35*	901.60*	6.75	911.05*	973.57*	−62.52
Year Three	915.36*	890.95*	24.41	923.11*	892.88*	30.23
Overall	914.61*	900.71*	13.90	919.25*	922.66*	−3.41
Acute-care expenditures						
Year One	360.33*	382.36*	−22.03	375.90*	373.67*	2.24
Year Two	357.27*	418.33*	−61.06	372.30*	432.74*	−60.44
Year Three	339.63*	397.32*	−57.69	357.19*	349.34*	7.85
Overall	354.82*	404.58*	−49.76*	371.04*	374.28*	−3.25
Post-acute-care expenditures						
Year One	112.45*	98.65*	13.80	124.43*	131.70*	−7.27
Year Two	113.77*	106.86*	6.92	125.81*	140.53*	−14.72
Year Three	124.85*	113.42*	11.44	137.82*	164.56*	−26.75
Overall	120.89*	109.07*	11.82	133.32*	143.43*	−10.11
ER expenditures						
Year One	39.70*	28.80*	10.90*	41.28*	37.80*	3.48
Year Two	38.11*	34.50*	3.61	39.75*	38.13*	1.61
Year Three	46.96*	44.82*	2.13	48.66*	31.18*	17.48*
Overall	42.83*	38.28*	4.55	44.45*	35.82*	8.63*
Outpatient expenditures						
Year One	158.75*	118.53*	40.22*	153.70*	136.37*	17.33
Year Two	164.91*	113.19*	51.72*	159.57*	141.41*	18.16
Year Three	169.11*	122.80*	46.31*	163.31*	136.97*	26.33
Overall	165.63*	120.28*	45.35*	160.18*	135.43*	24.76
Specialty physician expenditures						
Year One	58.17*	69.67*	−11.50*	54.90*	70.15*	−15.25*
Year Two	56.27*	64.10*	−7.83	53.12*	52.07*	1.05
Year Three	61.15*	66.48*	−5.33	58.70*	47.10*	11.60
Overall	57.98*	66.80*	−8.81	55.05*	55.41*	−0.36

(continued)

Table I2-12 (continued)
New York: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	40.52*	51.57*	−11.05*	39.26*	41.41*	−2.14
Year Two	36.19*	48.07*	−11.88*	34.87*	40.52*	−5.65
Year Three	37.46*	38.10*	−0.64	35.99*	37.98*	−1.98
Overall	38.40*	45.12*	−6.72*	37.02*	40.03*	−3.01
Home health expenditures						
Year One	30.25*	36.45*	−6.21	32.47*	45.42*	−12.95*
Year Two	39.10*	34.20*	4.89	41.47*	41.46*	0.01
Year Three	48.06*	40.80*	7.26	50.96*	41.84*	9.12
Overall	40.85*	37.79*	3.06	43.40*	43.46*	−0.06
Other expenditures						
Year One	25.09*	29.14*	−4.05	19.53*	34.54*	−15.01*
Year Two	34.22*	30.23*	3.99	28.29*	30.71*	−2.42
Year Three	38.08*	35.37*	2.71	32.61*	41.12*	−8.51
Overall	34.20*	31.88*	2.32	28.44*	40.79*	−12.35
Laboratory expenditures						
Year One	2.78*	5.77*	−2.99*	1.64*	1.49	0.14
Year Two	1.67*	4.44*	−2.77*	0.55	0.55	0.01
Year Three	2.30*	2.54*	−0.24	1.23	1.76	−0.52
Overall	2.25*	4.15*	−1.89*	1.14	1.48	−0.33
Imaging expenditures						
Year One	−0.95	1.51	−2.46*	−2.75*	−0.93	−1.81
Year Two	−4.07*	0.02	−4.09*	−5.78*	−1.79	−3.99*
Year Three	−2.87*	−1.29	−1.59	−4.41*	−3.41*	−1.00
Overall	−2.67*	0.46	−3.13*	−4.34*	−2.25	−2.09*
Other facility expenditures						
Year One	0.14	−0.05	0.19	−0.04	0.03	−0.08
Year Two	0.14	−0.04	0.18	−0.04	0.03	−0.07
Year Three	0.14	−0.05	0.19	−0.04	0.03	−0.07
Overall	0.14	−0.05	0.19	−0.04	0.03	−0.07

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-13 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I2-13
New York: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	167.02*	179.71*	−12.69*	167.04*	169.47*	−2.43
Year Two	156.88*	178.93*	−22.06*	157.25*	170.88*	−13.63
Year Three	155.39*	173.22*	−17.83*	156.66*	160.32*	−3.66
Overall	159.82*	177.09*	−17.27*	160.44*	163.67*	−3.23
ER visits not leading to hospitalization						
Year One	221.76*	206.76*	15.01	218.49*	206.05*	12.45
Year Two	232.14*	231.63*	0.52	229.26*	205.05*	24.22*
Year Three	228.88*	248.10*	−19.23	227.44*	184.32*	43.12*
Overall	227.18*	232.25*	−5.07	224.75*	197.68*	27.07*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-14 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I2-14
New York: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	518.55*	504.67*	13.88	478.34*	531.00*	−52.66
Year Two	498.86*	549.10*	−50.25	463.08*	475.49*	−12.41
Year Three	543.03*	549.93*	−6.90	511.18*	419.55*	91.63
Overall	533.45*	537.48*	−4.02	497.83*	467.13*	30.70
Acute-care expenditures						
Year One	196.31*	208.93*	−12.62	204.91*	206.27*	−1.36
Year Two	173.68*	245.20*	−71.52*	183.71*	205.58*	−21.87
Year Three	201.71*	229.06*	−27.35	212.98*	200.17*	12.82
Overall	194.93*	227.65*	−32.72*	204.91*	197.00*	7.91
Expenditures for ER visits not leading to hospitalization						
Year One	32.42*	24.30*	8.12*	37.61*	42.80*	−5.19
Year Two	28.93*	28.79*	0.14	34.54*	39.30*	−4.75
Year Three	33.62*	39.66*	−6.04	39.27*	29.24*	10.04*
Overall	32.60*	32.27*	0.33	38.09*	35.83*	2.27
Total for principal diagnosis of a BH condition						
Year One	29.33*	21.34*	7.99	45.04*	42.57*	2.47
Year Two	36.66*	30.05*	6.61	52.47*	50.47*	2.00
Year Three	49.46*	39.96*	9.50	64.78*	45.11*	19.67
Overall	40.59*	29.92*	10.66*	56.13*	47.84*	8.29
Total for secondary diagnosis of a BH condition						
Year One	207.80*	199.50*	8.31	207.26*	218.44*	−11.18
Year Two	200.61*	242.28*	−41.67	201.44*	240.88*	−39.43
Year Three	223.54*	245.38*	−21.84	225.55*	230.78*	−5.22
Overall	215.06*	227.41*	−12.35	215.93*	225.64*	−9.71

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I2-15 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I2-15
New York: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	79.12*	86.38*	−7.26	76.89*	79.19*	−2.30
Year Two	74.00*	87.18*	−13.18*	72.85*	70.46*	2.39
Year Three	79.09*	88.39*	−9.30	78.08*	77.93*	0.15
Overall	77.68*	86.05*	−8.37*	76.26*	75.83*	0.43
ER visits not leading to hospitalization						
Year One	254.28*	258.78*	−4.50	249.66*	259.67*	−10.02
Year Two	254.37*	256.95*	−2.58	252.92*	253.53*	−0.61
Year Three	247.41*	287.23*	−39.82*	247.12*	208.95*	38.17*
Overall	253.21*	270.48*	−17.27	251.55*	235.34*	16.21
BH inpatient admissions						
Year One	2.98	3.57	−0.58	2.09	1.56	0.53
Year Two	4.75	4.20	0.54	3.68	2.51	1.17
Year Three	6.50	3.64	2.86	5.14	3.95	1.19
Overall	4.84	3.56	1.28	3.71	2.93	0.78
BH ER visits						
Year One	16.66*	21.60*	−4.94*	13.86	18.60	−4.73
Year Two	21.22*	19.98*	1.23	18.48	17.49	0.99
Year Three	20.99*	25.02*	−4.03	18.88	13.82	5.06
Overall	19.94*	22.17*	−2.22	17.44	16.83	0.61
BH outpatient visits						
Year One	269.98*	296.46*	−26.48	234.21*	257.42*	−23.21
Year Two	230.18*	330.32*	−100.14*	198.48*	300.88*	−102.41
Year Three	225.73*	310.01*	−84.29*	196.03*	348.79*	−152.76
Overall	238.67*	313.47*	−74.80*	206.88*	309.13*	−102.25

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.3 Decompositions of the Rhode Island Estimates

Table I3-1 presents a decomposition of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for process of care indicators.

Table I3-1
Rhode Island: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	90.80*	88.17*	2.62	91.26*	86.19*	5.07
Year Two	92.58*	87.67*	4.91	92.74*	86.93*	5.81
Year Three	93.21*	90.35*	2.86	93.01*	85.51*	7.50*
Overall	91.87*	88.45*	3.43	92.10*	86.29*	5.81
Retinal eye examination						
Year One	65.00*	65.08*	−0.08	64.90*	64.57*	0.33
Year Two	67.37*	70.33*	−2.96	66.92*	67.40*	−0.48
Year Three	63.41*	71.35*	−7.95*	63.01*	69.48*	−6.48*
Overall	65.46*	68.07*	−2.61*	65.18*	66.49*	−1.31
LDL-C screening						
Year One	84.05*	85.63*	−1.57	84.30*	83.86*	0.45
Year Two	86.50*	84.63*	1.87	86.42*	83.39*	3.03
Year Three	83.88*	84.08*	−0.20	83.41*	80.39*	3.02
Overall	84.82*	84.99*	−0.16	84.82*	83.00*	1.82
Medical attention for nephropathy						
Year One	65.50*	71.84*	−6.33*	66.04*	64.37*	1.67
Year Two	65.89*	74.38*	−8.50*	66.09*	68.13*	−2.05
Year Three	64.51*	73.10*	−8.58*	64.55*	67.55*	−3.00
Overall	65.43*	72.93*	−7.50*	65.75*	66.25*	−0.49
Received all 4 diabetes tests						
Year One	39.34*	40.52*	−1.18	39.75*	36.69*	3.06
Year Two	40.31*	44.10*	−3.79	40.23*	41.06*	−0.83
Year Three	36.38*	44.72*	−8.35*	36.14*	39.68*	−3.54
Overall	39.06*	42.54*	−3.48*	39.18*	38.73*	0.45
Received none of the 4 diabetes tests						
Year One	2.98*	2.08*	0.90	2.91*	4.37*	−1.46
Year Two	1.94*	2.27*	−0.33	1.98*	3.77*	−1.79*
Year Three	2.39*	2.18*	0.21	2.54*	3.25*	−0.71
Overall	2.52*	2.16*	0.36	2.53*	3.95*	−1.42*

(continued)

Table I3-1 (continued)
Rhode Island: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	75.90*	73.94*	1.96	75.98*	76.42*	−0.44
Year Two	74.07*	72.58*	1.49	74.17*	74.48*	−0.31
Year Three	69.83*	71.98*	−2.15	69.61*	71.71*	−2.10
Overall	73.86*	73.03*	0.83	73.87*	74.66*	−0.79

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-2 presents a decomposition of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for selected health outcomes.

Table I3-2
Rhode Island: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	4.95*	4.22*	0.73	4.73*	4.64*	0.10
Year Two	6.57*	6.02*	0.56	6.28*	5.63*	0.64
Year Three	7.64*	5.81*	1.83*	7.39*	5.83*	1.56
Overall	6.61*	5.67*	0.95	6.37*	5.53*	0.85
PQI admissions—overall						
Year One	9.21*	10.71*	−1.51	9.30	8.74	0.56
Year Two	10.68*	11.25*	−0.57	10.74	8.28	2.46
Year Three	10.40*	11.83*	−1.43	10.45	8.73	1.72
Overall	10.15*	10.95*	−0.80	10.21	8.83	1.38
PQI admissions—acute						
Year One	4.19*	4.17*	0.02	4.04*	3.78*	0.27
Year Two	4.04*	4.39*	−0.35	3.87*	3.52*	0.34
Year Three	3.40*	3.36*	0.04	3.32*	2.95*	0.37
Overall	3.84*	3.81*	0.03	3.72*	3.40*	0.32
PQI admissions—chronic						
Year One	4.84*	6.39*	−1.55	4.91	4.68	0.23
Year Two	6.55*	6.70*	−0.15	6.60	4.51	2.09
Year Three	6.79*	8.23*	−1.44	6.78	5.38	1.41
Overall	6.14*	6.94*	−0.80	6.17	5.10	1.07

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I3-3 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for access to care and coordination of care.

Table I3-3
Rhode Island: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	897.18*	806.85*	90.34*	888.37*	861.41*	26.97
Year Two	861.42*	796.88*	64.54	849.75*	833.41*	16.34
Year Three	869.98*	812.73*	57.25	860.52*	840.20*	20.33
Overall	882.57*	807.99*	74.58*	872.75*	843.00*	29.76
Medical specialist visits (per 1,000 beneficiaries)						
Year One	853.57*	847.34*	6.23	852.60*	871.29*	−18.69
Year Two	899.67*	899.39*	0.29	897.09*	902.13*	−5.04
Year Three	947.55*	906.39*	41.16	945.18*	979.19*	−34.01
Overall	914.75*	894.80*	19.95	912.80*	932.99*	−20.19
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	208.28*	186.09*	22.19	207.13*	191.23*	15.90
Year Two	199.25*	184.71*	14.54	198.13*	184.07*	14.07
Year Three	188.58*	187.51*	1.07	188.13*	187.84*	0.29
Overall	194.03*	185.02*	9.00	193.48*	184.69*	8.79
Primary care visits as a percent of total visits						
Year One						
1st quintile	20.80*	21.18*	−0.38	21.14*	23.12*	−1.98
5th quintile	15.96*	15.66*	0.30	16.42*	14.90*	1.52
Year Two						
1st quintile	22.28*	24.44*	−2.16	22.60*	23.91*	−1.31
5th quintile	14.82*	13.36*	1.46	15.28*	14.35*	0.93
Year Three						
1st quintile	23.40*	25.25*	−1.84	23.85*	24.93*	−1.08
5th quintile	14.04*	12.87*	1.17	14.39*	13.68*	0.71
Overall						
1st quintile	21.88*	23.17*	−1.30	22.23*	23.79*	−1.56
5th quintile	15.15*	14.27*	0.88	15.58*	14.44*	1.14

(continued)

Table I3-3 (continued)
Rhode Island: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	732.62*	727.28*	5.34	728.41*	698.18*	30.23
Year Two	729.84*	745.93*	−16.09	726.39*	743.35*	−16.96
Year Three	726.10*	657.40*	68.70	724.87*	725.33*	−0.46
Overall	725.77*	707.51*	18.26	722.77*	725.88*	−3.12
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	188.40*	219.00*	−30.60	184.78*	165.75*	19.04
Year Two	186.48*	226.83*	−40.35	185.19*	169.51*	15.68
Year Three	208.90*	184.31*	24.58	205.43*	156.17*	49.26*
Overall	195.38*	204.72*	−9.33	192.62*	165.95*	26.67*
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.85*	23.03*	−4.18*	18.26*	19.06*	−0.80
5th quintile	21.84*	17.82*	4.02*	22.10*	21.21*	0.89
Year Two						
1st quintile	19.33*	23.45*	−4.13*	18.76*	20.12*	−1.36
5th quintile	21.31*	17.48*	3.84*	21.53*	20.10*	1.43
Year Three						
1st quintile	21.05*	24.12*	−3.07*	20.70*	21.40*	−0.70
5th quintile	19.57*	16.95*	2.62*	19.54*	18.88*	0.66
Overall						
1st quintile	19.53*	23.43*	−3.90*	19.01*	19.97*	−0.97
5th quintile	21.13*	17.50*	3.63*	21.30*	20.28*	1.02

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-4 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for expenditures.

Table I3-4
Rhode Island: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	439.87*	439.74*	0.13	489.61*	491.02*	−1.42
Year Two	509.02*	483.13*	25.89	562.07*	516.57*	45.50
Year Three	525.68*	471.66*	54.01*	581.51*	558.57*	22.93
Overall	507.47*	471.14*	36.33	561.42*	533.98*	27.44
Acute-care expenditures						
Year One	117.71*	142.09*	−24.38	137.64*	140.61*	−2.97
Year Two	148.32*	160.00*	−11.68	169.53*	153.21*	16.32
Year Three	170.01*	156.26*	13.75	192.14*	168.30*	23.84
Overall	150.98*	153.08*	−2.10	172.38*	159.00*	13.38
Post-acute-care expenditures						
Year One	63.08*	62.66*	0.42	84.64*	85.97*	−1.33
Year Two	81.47*	67.21*	14.26	104.61*	85.26*	19.36*
Year Three	71.34*	61.58*	9.75	96.17*	83.47*	12.70
Overall	73.36*	64.78*	8.58	97.12*	85.57*	11.55*
ER expenditures						
Year One	22.84*	24.74*	−1.91	22.55*	23.46*	−0.91
Year Two	26.81*	31.12*	−4.30	26.39*	24.93*	1.46
Year Three	30.58*	28.49*	2.09	29.95*	30.35*	−0.39
Overall	28.04*	28.59*	−0.55	27.55*	27.17*	0.38
Outpatient expenditures						
Year One	65.68*	54.57*	11.11*	63.39*	60.08*	3.31
Year Two	65.73*	60.11*	5.62	63.81*	65.59*	−1.78
Year Three	68.60*	66.25*	2.35	67.30*	76.60*	−9.31
Overall	68.79*	62.57*	6.22	67.11*	70.10*	−3.00
Specialty physician expenditures						
Year One	48.84*	44.87*	3.98	46.29*	43.64*	2.65
Year Two	52.96*	46.09*	6.87	50.25*	41.03*	9.22*
Year Three	50.32*	46.14*	4.19	47.45*	46.53*	0.91
Overall	51.83*	47.19*	4.64	49.09*	45.09*	4.00
Primary care physician expenditures						
Year One	25.71*	21.88*	3.83*	26.93*	27.47*	−0.54
Year Two	26.91*	23.33*	3.58	28.18*	26.52*	1.66
Year Three	26.66*	23.40*	3.26*	28.02*	26.72*	1.31
Overall	26.96*	23.61*	3.35*	28.28*	27.03*	1.25

(continued)

Table I3-4 (continued)
Rhode Island: Differences in the change in expenditure measures from baseline

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	36.19*	32.83*	3.37	37.59*	31.79*	5.80*
Year Two	40.76*	38.14*	2.62	42.14*	38.13*	4.01
Year Three	43.39*	38.02*	5.37*	44.67*	41.69*	2.98
Overall	40.78*	35.91*	4.87*	42.11*	37.46*	4.65*
Other expenditures						
Year One	24.03*	23.90*	0.12	25.38*	26.71*	−1.33
Year Two	25.38*	25.88*	−0.51	26.73*	27.95*	−1.22
Year Three	28.76*	28.24*	0.52	30.02*	29.62*	0.40
Overall	27.04*	26.94*	0.10	28.36*	28.66*	−0.30
Laboratory expenditures						
Year One	6.05*	8.28*	−2.22	6.69*	6.47*	0.22
Year Two	5.33*	6.77*	−1.44	6.00*	6.18*	−0.18
Year Three	5.83*	5.64*	0.20	6.55*	7.93*	−1.39
Overall	5.96*	6.78*	−0.82	6.65*	6.93*	−0.28
Imaging expenditures						
Year One	3.42*	3.82*	−0.40	2.83*	2.59*	0.24
Year Two	0.60	0.59	0.01	0.01	0.63	−0.62
Year Three	−1.36*	−0.60	−0.76	−1.89*	0.00	−1.89*
Overall	0.65	0.85	−0.20	0.11	0.75	−0.65
Other facility expenditures						
Year One	0.56	0.02	0.54	0.59	0.04	0.54
Year Two	−0.24	0.01	−0.24	−0.20	0.01	−0.21
Year Three	−0.15	−0.01	−0.14	−0.11	0.01	−0.12
Overall	−0.02	0.01	−0.03	0.02	0.02	0.01

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-5 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for utilization.

Table I3-5
Rhode Island: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	61.13*	64.19*	−3.05	61.19*	56.82*	4.37
Year Two	64.34*	66.92*	−2.58	64.46*	59.80*	4.66
Year Three	64.08*	64.42*	−0.34	64.27*	61.30*	2.97
Overall	64.26*	64.91*	−0.66	64.41*	60.11*	4.29
ER visits not leading to hospitalization						
Year One	140.35*	146.30*	−5.96	140.71*	141.20*	−0.49
Year Two	146.46*	151.15*	−4.69	146.54*	149.04*	−2.50
Year Three	145.15*	151.31*	−6.16	144.97*	152.16*	−7.19
Overall	144.18*	149.19*	−5.01	144.29*	148.41*	−4.11

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-6 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for total Medicare expenditures for special populations.

Table I3-6
Rhode Island: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	944.97*	989.96*	−44.99	1,128.28*	1,128.55*	−0.26
Year Two	1,003.92*	997.89*	6.03	1,187.07*	1,135.69*	51.38
Year Three	1,022.09*	902.56*	119.53	1,200.52*	1,079.05*	121.48
Overall	1,009.79*	957.89*	51.90	1,190.99*	1,108.19*	82.80
BH conditions only						
Year One	516.46*	595.44*	−78.98	630.66*	600.21*	30.46
Year Two	563.42*	594.21*	−30.79	683.41*	658.22*	25.19
Year Three	619.72*	460.58*	159.13*	744.17*	654.29*	89.88
Overall	578.08*	524.56*	53.52	699.21*	629.48*	69.73
Disabled beneficiaries only						
Year One	396.05*	404.10*	−8.05	445.27*	407.63*	37.63
Year Two	487.85*	472.85*	15.00	539.39*	452.65*	86.73
Year Three	531.21*	373.37*	157.84*	583.91*	519.78*	64.13
Overall	495.30*	409.04*	86.26*	547.15*	475.43*	71.72
Dually eligible beneficiaries only						
Year One	409.53*	391.05*	18.47	505.92*	471.44*	34.48
Year Two	453.79*	511.03*	−57.23	553.33*	481.26*	72.07
Year Three	468.74*	419.85*	48.90	568.81*	515.47*	53.35
Overall	472.21*	434.98*	37.23	571.35*	499.85*	71.50
Non-White beneficiaries only						
Year One	278.43*	469.54*	−191.11*	324.18*	288.02*	36.16
Year Two	409.68*	468.54*	−58.86	458.97*	306.24*	152.73*
Year Three	373.59*	398.56*	−24.97	422.98*	330.90*	92.09*
Overall	369.25*	418.37*	−49.12	417.98*	329.70*	88.28*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-7 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I3-7
Rhode Island: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	87.70*	79.78*	7.92	87.77*	81.40*	6.37
Year Two	91.28*	80.05*	11.23*	91.10*	80.68*	10.42*
Year Three	91.52*	86.55*	4.97	91.06*	81.90*	9.16
Overall	89.62*	81.22*	8.40	89.50*	81.27*	8.24
Retinal eye examination						
Year One	64.75*	66.93*	−2.18	63.54*	68.89*	−5.34*
Year Two	70.87*	67.09*	3.78	69.53*	67.55*	1.98
Year Three	61.75*	68.87*	−7.11	60.38*	65.76*	−5.38
Overall	66.12*	67.37*	−1.25	64.85*	67.83*	−2.99
LDL-C screening						
Year One	78.40*	79.66*	−1.27	78.65*	81.35*	−2.70
Year Two	83.80*	75.09*	8.71*	83.51*	75.84*	7.67*
Year Three	78.04*	82.42*	−4.39	77.34*	77.69*	−0.35
Overall	80.07*	78.74*	1.33	79.96*	78.84*	1.12
Medical attention for nephropathy						
Year One	68.24*	75.13*	−6.89*	69.47*	74.76*	−5.28
Year Two	70.17*	77.88*	−7.70*	70.75*	75.56*	−4.81
Year Three	70.39*	72.43*	−2.04	70.67*	78.91*	−8.24*
Overall	69.29*	75.48*	−6.18*	70.13*	75.85*	−5.72
Received all 4 diabetes tests						
Year One	37.56*	37.97*	−0.40	37.45*	40.13*	−2.69
Year Two	41.33*	35.38*	5.95	40.74*	38.63*	2.12
Year Three	33.13*	39.68*	−6.55	32.43*	39.85*	−7.42
Overall	37.89*	37.47*	0.42	37.51*	39.59*	−2.08
Received none of the 4 diabetes tests						
Year One	3.06*	2.17*	0.89	3.16*	3.98*	−0.82
Year Two	1.12*	1.49*	−0.37	1.30*	4.95*	−3.65*
Year Three	2.23*	2.32	−0.10	2.60*	4.60*	−2.00
Overall	2.27*	1.98*	0.29	2.44*	4.42*	−1.97*
Total lipid panel						
Year One	71.19*	68.39*	2.80	70.77*	71.44*	−0.67
Year Two	68.99*	66.72*	2.27	68.77*	69.16*	−0.39
Year Three	61.97*	64.63*	−2.66	61.85*	64.58*	−2.73
Overall	68.55*	67.06*	1.49	68.26*	69.27*	−1.01

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-8 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I3-8
Rhode Island: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	15.63*	16.24*	−0.62	15.02*	14.45*	0.57
Year Two	17.11*	22.35*	−5.25	16.57*	16.67*	−0.10
Year Three	21.44*	17.58*	3.86	21.18*	13.37*	7.80*
Overall	18.15*	19.43*	−1.28	17.74*	14.89*	2.85
PQI admissions—overall						
Year One	36.35*	40.81*	−4.46	36.20*	32.36*	3.84
Year Two	40.81*	44.47*	−3.66	40.64*	29.45*	11.20
Year Three	39.09*	44.73*	−5.64	38.88*	35.07*	3.81
Overall	38.67*	42.34*	−3.68	38.41*	32.22*	6.19
PQI admissions—acute						
Year One	13.64*	13.65*	0.00	13.48*	11.06*	2.42
Year Two	12.81*	13.97*	−1.16	12.62*	9.15*	3.47
Year Three	10.80*	10.43*	0.37	10.73*	8.93*	1.80
Overall	12.22*	12.52*	−0.30	12.08*	9.58*	2.50
PQI admissions—chronic						
Year One	21.59*	26.06*	−4.47	21.11	20.10	1.02
Year Two	27.26*	29.70*	−2.43	26.60	19.32	7.29
Year Three	27.11*	33.99*	−6.88	26.58	25.17	1.41
Overall	25.45*	29.04*	−3.59	24.81	21.59	3.22

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I3-9 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I3-9
Rhode Island: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	1,213.89*	1,086.77*	127.12*	1,196.85*	1,100.50*	96.35
Year Two	1,130.79*	1,062.89*	67.90	1,113.95*	1,058.34*	55.61
Year Three	1,096.10*	1,036.08*	60.03	1,083.29*	1,041.06*	42.23
Overall	1,145.28*	1,058.45*	86.84*	1,129.67*	1,066.02*	63.65
Medical specialist visits (per 1,000 beneficiaries)						
Year One	1,391.32*	1,379.99*	11.34	1,381.19*	1,393.82*	−12.63
Year Two	1,417.23*	1,478.15*	−60.92	1,401.07*	1,370.73*	30.35
Year Three	1,475.16*	1,404.43*	70.73	1,453.79*	1,411.04*	42.75
Overall	1,439.44*	1,421.48*	17.96	1,422.16*	1,401.08*	21.08
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	299.42*	226.84*	72.59*	298.46*	254.15*	44.31
Year Two	266.43*	227.02*	39.41	264.56*	238.13*	26.43
Year Three	250.99*	215.65*	35.34*	249.05*	226.05*	23.00*
Overall	267.94*	221.62*	46.33*	266.28*	236.15*	30.13*
Primary care visits as a percent of total visits						
Year One						
1st quintile	17.91*	17.80*	0.11	18.06*	19.89*	−1.83
5th quintile	16.91*	17.02*	−0.10	16.62*	15.03*	1.59
Year Two						
1st quintile	18.66*	20.50*	−1.85	18.89*	20.59*	−1.70
5th quintile	16.22*	14.69*	1.53	15.87*	14.49*	1.38
Year Three						
1st quintile	19.26*	20.28*	−1.02	19.54*	20.24*	−0.70
5th quintile	15.69*	14.86*	0.83	15.32*	14.75*	0.56
Overall						
1st quintile	18.45*	19.25*	−0.79	18.66*	20.20*	−1.54
5th quintile	16.41*	15.77*	0.65	16.08*	14.79*	1.29

(continued)

Table I3-9 (continued)
Rhode Island: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	797.35*	822.73*	−25.38	790.34*	776.73*	13.61
Year Two	778.21*	838.41*	−60.20	774.85*	780.53*	−5.68
Year Three	786.50*	692.56*	93.93	785.31*	782.54*	2.77
Overall	782.75*	785.20*	−2.45	778.89*	775.82*	3.07
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	256.66*	270.88*	−14.23	254.34*	235.47*	18.87
Year Two	229.79*	295.61*	−65.82	229.28*	214.65*	14.64
Year Three	268.36*	231.17*	37.19	260.95*	199.37*	61.58*
Overall	254.14*	259.87*	−5.74	250.39*	218.53*	31.85
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.40*	21.97*	−3.56*	17.98*	17.90*	0.08
5th quintile	20.56*	17.17*	3.39*	21.14*	21.23*	−0.09
Year Two						
1st quintile	18.86*	22.57*	−3.71*	18.34*	19.08*	−0.74
5th quintile	20.08*	16.68*	3.39*	20.74*	19.95*	0.79
Year Three						
1st quintile	21.27*	23.12*	−1.85	20.81*	19.55*	1.26
5th quintile	17.76*	16.25*	1.51	18.28*	19.48*	−1.20
Overall						
1st quintile	19.19*	22.43*	−3.23*	18.73*	18.66*	0.07
5th quintile	19.77*	16.80*	2.97*	20.37*	20.42*	−0.04

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-10 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I3-10
Rhode Island: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

	Change in expenditure measures from baseline			Change in expenditure measures from baseline		
Outcome	MAPCP	PCMHs CG	Difference	MAPCP	Non-PCMHs CG	Difference
Total Medicare expenditures						
Year One	944.97*	989.96*	−44.99	1,128.28*	1,128.55*	−0.26
Year Two	1,003.92*	997.89*	6.03	1,187.07*	1,135.69*	51.38
Year Three	1,022.09*	902.56*	119.53	1,200.52*	1,079.05*	121.48
Overall	1,009.79*	957.89*	51.90	1,190.99*	1,108.19*	82.80
Acute-care expenditures						
Year One	260.99*	347.72*	−86.74	339.16*	349.04*	−9.88
Year Two	279.76*	369.18*	−89.42	358.18*	374.99*	−16.81
Year Three	352.62*	322.16*	30.46	429.09*	334.68*	94.41
Overall	306.29*	337.72*	−31.43	383.62*	348.54*	35.07
Post-acute-care expenditures						
Year One	151.15*	155.94*	−4.79	219.93*	222.06*	−2.13
Year Two	175.61*	157.27*	18.34	248.59*	198.79*	49.80*
Year Three	139.63*	130.65*	8.98	215.82*	175.82*	40.00*
Overall	159.81*	150.40*	9.41	233.28*	201.80*	31.48*
ER expenditures						
Year One	45.03*	52.14*	−7.10	47.60*	48.60*	−1.00
Year Two	58.23*	67.51*	−9.28	60.25*	49.96*	10.28
Year Three	59.47*	57.53*	1.94	60.77*	58.90*	1.87
Overall	55.16*	60.36*	−5.21	57.00*	52.74*	4.26
Outpatient expenditures						
Year One	145.07*	128.48*	16.60	135.62*	129.54*	6.08
Year Two	134.83*	127.11*	7.73	125.49*	128.75*	−3.25
Year Three	120.61*	125.64*	−5.03	111.90*	130.79*	−18.88
Overall	133.71*	127.62*	6.08	124.60*	127.86*	−3.26
Specialty physician expenditures						
Year One	78.78*	71.08*	7.70	71.70*	70.74*	0.96
Year Two	81.58*	65.30*	16.27	73.60*	58.75*	14.85
Year Three	79.62*	67.02*	12.61	70.38*	51.88*	18.50*
Overall	81.04*	68.31*	12.73*	72.74*	59.93*	12.81*

(continued)

Table I3-10 (continued)
Rhode Island: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	44.96*	40.19*	4.77	50.32*	49.44*	0.89
Year Two	42.60*	39.80*	2.80	48.14*	47.61*	0.53
Year Three	39.36*	34.24*	5.13	45.09*	42.76*	2.34
Overall	42.18*	37.71*	4.47	47.77*	45.85*	1.92
Home health expenditures						
Year One	81.32*	76.81*	4.51	100.22*	79.50*	20.72*
Year Two	82.95*	83.33*	−0.38	101.11*	93.58*	7.53
Year Three	87.83*	71.45*	16.37	105.37*	99.83*	5.54
Overall	84.76*	75.15*	9.61	102.86*	91.28*	11.58
Other expenditures						
Year One	47.44*	45.99*	1.45	51.02*	53.28*	−2.26
Year Two	47.95*	44.35*	3.59	51.04*	53.17*	−2.13
Year Three	49.63*	52.51*	−2.88	52.34*	53.93*	−1.60
Overall	48.74*	47.70*	1.04	51.84*	53.34*	−1.49
Laboratory expenditures						
Year One	7.72*	11.40*	−3.68	9.65*	7.85*	1.80
Year Two	5.35*	9.04*	−3.69	7.24*	7.50*	−0.26
Year Three	6.15*	5.42*	0.73	7.85*	9.17*	−1.32
Overall	6.36*	8.87*	−2.52	8.19*	8.36*	−0.17
Imaging expenditures						
Year One	3.41*	6.51*	−3.10	2.88	4.11*	−1.23
Year Two	−1.60	0.40	−2.00	−2.16	0.97	−3.13
Year Three	−3.38	−3.92*	0.55	−3.92*	−4.19*	0.27
Overall	−0.43	0.28	−0.70	−0.97	−0.22	−0.75
Other facility expenditures						
Year One	0.12	−0.08	0.20	0.16	0.09	0.08
Year Two	0.11	−0.09	0.20	0.17	−0.02	0.20
Year Three	0.11	−0.10	0.21	0.19	−0.01	0.19
Overall	0.11	−0.03	0.14	0.18	0.02	0.16

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-11 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I3-11
Rhode Island: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	170.73*	182.70*	−11.96	171.53*	148.64*	22.89
Year Two	163.65*	191.99*	−28.34*	163.98*	154.48*	9.50
Year Three	168.47*	174.92*	−6.45	167.40*	152.00*	15.41
Overall	168.84*	180.70*	−11.87	168.58*	150.79*	17.79
ER visits not leading to hospitalization						
Year One	283.33*	271.42*	11.91	286.11*	268.59	17.52
Year Two	299.17*	289.36*	9.81	301.14*	269.29	31.85
Year Three	284.41*	292.11*	−7.70	288.17*	275.09	13.08
Overall	291.57*	279.45*	12.12	294.18*	271.04	23.14

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-12 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I3-12
Rhode Island: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	516.46*	595.44*	−78.98	630.66*	600.21*	30.46
Year Two	563.42*	594.21*	−30.79	683.41*	658.22*	25.19
Year Three	619.72*	460.58*	159.13*	744.17*	654.29*	89.88
Overall	578.08*	524.56*	53.52	699.21*	629.48*	69.73
Acute-care expenditures						
Year One	154.25*	210.22*	−55.97	172.71*	130.33*	42.38
Year Two	158.21*	214.66*	−56.46	178.05*	176.96*	1.09
Year Three	215.36*	142.17*	73.18*	235.53*	170.76*	64.76*
Overall	177.92*	178.71*	−0.79	197.68*	156.12*	41.56*
Expenditures for ER visits not leading to hospitalization						
Year One	32.91*	33.39*	−0.48	35.50*	32.40*	3.10
Year Two	38.18*	53.75*	−15.56	40.27*	36.34*	3.93
Year Three	42.66*	39.42*	3.24	44.05*	43.58*	0.47
Overall	38.33*	41.06*	−2.73	40.18*	37.89*	2.29
Total for principal diagnosis of a BH condition						
Year One	34.44*	38.75*	−4.31	41.77*	18.91*	22.86*
Year Two	37.73*	46.21*	−8.48	44.66*	30.25*	14.41
Year Three	52.25*	46.73*	5.53	58.09*	50.50*	7.59
Overall	46.12*	44.28*	1.84	52.56*	35.31*	17.25*
Total for secondary diagnosis of a BH condition						
Year One	198.66*	224.96*	−26.30	222.88*	196.69*	26.18
Year Two	195.01*	258.72*	−63.71	219.14*	237.19*	−18.05
Year Three	263.73*	177.91*	85.81*	287.58*	221.48*	66.10*
Overall	223.63*	212.61*	11.02	247.65*	214.37*	33.28

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I3-13 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I3-13
Rhode Island: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	82.68*	93.62*	−10.94	84.10	65.16	18.94
Year Two	80.40*	101.83*	−21.43*	81.49	72.66	8.83
Year Three	81.54*	76.22*	5.33	82.27	70.22	12.05
Overall	81.52*	87.36*	−5.84	82.50	69.04	13.46
ER visits not leading to hospitalization						
Year One	331.46*	340.51*	−9.05	333.81*	319.32*	14.50
Year Two	342.61*	371.02*	−28.41	342.83	346.11*	−3.29
Year Three	337.87*	347.93*	−10.06	336.48*	336.87	−0.39
Overall	332.83*	347.96*	−15.14	332.89*	332.11	0.78
BH inpatient admissions						
Year One	6.68*	8.26*	−1.58	5.76	4.35	1.41
Year Two	6.27*	9.32*	−3.05	5.45	5.13	0.32
Year Three	8.34*	7.61*	0.73	7.06	6.08	0.98
Overall	7.50*	8.14*	−0.64	6.44	5.14	1.30
BH ER visits						
Year One	35.19*	35.95*	−0.75	34.66	30.03	4.63
Year Two	45.40*	40.87*	4.54	44.33	36.22	8.11
Year Three	43.77*	35.22*	8.55	41.19	35.29	5.90
Overall	42.85*	35.85*	7.00	41.20	32.90	8.30
BH outpatient visits						
Year One	144.04*	198.23*	−54.18	151.42*	122.42*	29.00
Year Two	168.89*	216.86*	−47.96	178.95*	132.73*	46.22
Year Three	178.70*	138.39*	40.31	187.61*	139.22*	48.38
Overall	163.11*	173.10*	−9.99	172.65*	128.17*	44.48

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.4 Decompositions of the Vermont Estimates

Table I4-1 presents a decomposition of the estimates of the changes associated with the Vermont MAPCP Demonstration for process of care indicators.

Table I4-1
Vermont: Differences in the probability of process of care indicators during the demonstration

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	CG PCMHs		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	92.86*	94.09*	−1.24*	92.05*	92.65*	−0.60
Year Two	92.19*	92.00*	0.19	91.40*	93.34*	−1.94*
Year Three	92.80*	90.82*	1.98*	92.37*	92.11*	0.26
Overall	92.62*	92.68*	−0.05	91.90*	92.76*	−0.86
Retinal eye examination						
Year One	58.60*	58.18*	0.42	57.75*	59.06*	−1.31
Year Two	59.91*	63.46*	−3.56*	58.92*	60.23*	−1.31
Year Three	60.54*	63.08*	−2.54	60.12*	58.97*	1.15
Overall	59.46*	61.01*	−1.55	58.66*	59.43*	−0.77
LDL-C screening						
Year One	80.20*	85.61*	−5.41*	79.10*	78.87*	0.22
Year Two	79.59*	81.11*	−1.52	78.51*	79.11*	−0.59
Year Three	77.66*	81.47*	−3.81	76.99*	78.17*	−1.18
Overall	79.44*	83.21*	−3.77*	78.44*	78.80*	−0.36
Medical attention for nephropathy						
Year One	63.41*	65.20*	−1.79	61.71*	61.87*	−0.16
Year Two	64.35*	65.22*	−0.87	62.73*	64.30*	−1.58
Year Three	66.71*	67.42*	−0.71	65.87*	61.60*	4.27*
Overall	64.45*	65.70*	−1.25	62.97*	62.62*	0.35
Received all 4 diabetes tests						
Year One	33.35*	35.70*	−2.36*	32.12*	31.34*	0.78
Year Two	34.14*	37.54*	−3.41*	32.86*	34.73*	−1.87
Year Three	36.30*	39.24*	−2.94	35.66*	31.86*	3.80*
Overall	34.26*	37.09*	−2.83*	33.15*	32.58*	0.57
Received none of the 4 diabetes tests						
Year One	2.43*	1.76*	0.67	2.69*	2.60*	0.09
Year Two	2.69*	3.28*	−0.59	2.98*	2.42*	0.56
Year Three	2.27*	2.80*	−0.53	2.40*	2.18*	0.22
Overall	2.48*	2.49*	−0.01	2.72*	2.45*	0.27

(continued)

Table I4-1 (continued)
Vermont: Differences in the probability of process of care indicators during the demonstration

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	CG PCMHs		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	69.78*	71.16*	−1.38	68.75*	71.18*	−2.44
Year Two	65.66*	67.16*	−1.49	64.97*	69.52*	−4.55*
Year Three	63.55*	67.61*	−4.06	63.33*	65.03*	−1.70
Overall	66.92*	68.98*	−2.06	66.20*	69.16*	−2.97*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-2 presents a decomposition of the estimates of the changes associated with the Vermont MAPCP Demonstration for selected health outcomes.

Table I4-2
Vermont: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	4.93*	5.30*	−0.37	4.84*	5.01*	−0.17
Year Two	6.07*	6.53*	−0.46	5.97*	5.67*	0.30
Year Three	6.63*	7.58*	−0.96	6.54*	6.09*	0.46
Overall	6.20*	6.95*	−0.76	6.11*	5.99*	0.12
PQI admissions—overall						
Year One	8.73*	7.04*	1.69	9.06*	7.04*	2.02*
Year Two	9.02*	7.22*	1.80	9.26*	7.84*	1.42*
Year Three	9.02*	8.11*	0.91	9.16*	7.46*	1.70*
Overall	8.83*	7.92*	0.91	9.03*	7.48*	1.55*
PQI admissions—acute						
Year One	4.14*	3.61*	0.53	4.35*	3.47*	0.88*
Year Two	4.27*	3.21*	1.06*	4.44*	3.98*	0.47
Year Three	4.21*	3.51*	0.70	4.33*	3.08*	1.25*
Overall	4.08*	3.49*	0.60	4.24*	3.46*	0.78*
PQI admissions—chronic						
Year One	4.48*	3.32*	1.15	4.55*	3.44*	1.12*
Year Two	4.61*	3.74*	0.86	4.64*	3.70*	0.93*
Year Three	4.67*	4.31*	0.36	4.67*	4.05*	0.62*
Overall	4.61*	4.16*	0.45	4.63*	3.80*	0.82*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I4-3 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for access to care and coordination of care.

Table I4-3
Vermont: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	491.40*	511.66*	−20.26	483.72*	528.23*	−44.51
Year Two	491.25*	484.37*	6.88	482.00*	511.26*	−29.26
Year Three	504.66*	527.97*	−23.31	493.15*	513.30*	−20.15
Overall	500.88*	508.50*	−7.62	490.61*	517.46*	−26.85
Medical specialist visits (per 1,000 beneficiaries)						
Year One	490.06*	495.87*	−5.81	490.17*	540.50*	−50.34*
Year Two	525.80*	516.39*	9.41	523.09*	562.82*	−39.74*
Year Three	542.75*	581.17*	−38.42	538.32*	613.59*	−75.27*
Overall	529.20*	543.72*	−14.52	526.11*	584.34*	−58.23*
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	120.35*	123.76*	−3.41	120.71*	123.88*	−3.17
Year Two	103.87*	116.97*	−13.09*	103.66*	120.49*	−16.82*
Year Three	100.33*	133.49*	−33.16*	99.84*	122.41*	−22.57*
Overall	105.40*	126.95*	−21.55*	105.15*	121.58*	−16.43*
Primary care visits as a percent of total visits						
Year One						
1st quintile	22.58*	24.08*	−1.50	22.32*	23.38*	−1.06
5th quintile	14.22*	13.22*	0.99	14.80*	14.06*	0.74
Year Two						
1st quintile	22.85*	24.23*	−1.38	22.73*	24.70*	−1.98
5th quintile	14.03*	13.13*	0.90	14.51*	13.21*	1.30
Year Three						
1st quintile	22.10*	24.18*	−2.08	22.37*	26.09*	−3.73*
5th quintile	14.56*	13.16*	1.40	14.77*	12.39*	2.38*
Overall						
1st quintile	22.56*	24.15*	−1.59	22.46*	24.46*	−1.99
5th quintile	14.23*	13.18*	1.06	14.70*	13.38*	1.31

(continued)

Table I4-3 (continued)
Vermont: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	759.62*	725.08*	34.55	760.63*	769.64*	−9.01
Year Two	754.41*	726.54*	27.87	756.63*	779.99*	−23.36
Year Three	733.15*	759.60*	−26.44	734.94*	805.58*	−70.64*
Overall	746.02*	747.35*	−1.34	747.77*	781.19*	−33.42
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	151.84*	157.27*	−5.42	151.46*	136.40*	15.06
Year Two	143.10*	163.41*	−20.32*	142.45*	143.97*	−1.52
Year Three	156.29*	180.37*	−24.08	155.44*	161.38*	−5.94
Overall	150.31*	170.42*	−20.10	149.64*	150.43*	−0.80
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.47*	19.60*	−1.13	18.21*	19.70*	−1.49*
5th quintile	18.74*	17.65*	1.09	19.18*	17.72*	1.46*
Year Two						
1st quintile	18.53*	19.80*	−1.28	18.21*	20.71*	−2.50*
5th quintile	18.69*	17.47*	1.22	19.18*	16.83*	2.36*
Year Three						
1st quintile	18.57*	22.24*	−3.67	18.23*	23.00*	−4.77*
5th quintile	18.64*	15.45*	3.19	19.17*	15.04*	4.13*
Overall						
1st quintile	18.52*	20.33*	−1.81	18.22*	20.87*	−2.65*
5th quintile	18.70*	17.04*	1.66	19.18*	16.75*	2.43*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-4 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for expenditures.

Table I4-4
Vermont: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	418.11*	446.32*	−28.21	427.08*	457.31*	−30.23*
Year Two	450.63*	472.72*	−22.08	460.66*	502.34*	−41.68*
Year Three	481.31*	525.85*	−44.54*	492.26*	503.97*	−11.71
Overall	460.92*	497.09*	−36.17*	471.37*	502.37*	−31.00*
Acute-care expenditures						
Year One	140.08*	141.39*	−1.30	138.24*	142.10*	−3.86
Year Two	153.64*	161.54*	−7.90	152.02*	156.10*	−4.08
Year Three	158.82*	169.19*	−10.38	157.21*	156.42*	0.79
Overall	152.68*	161.23*	−8.55	151.07*	156.32*	−5.26
Post-acute-care expenditures						
Year One	65.82*	86.45*	−20.63*	69.71*	88.97*	−19.26*
Year Two	70.18*	84.21*	−14.03*	74.81*	95.57*	−20.77*
Year Three	80.52*	97.69*	−17.17*	85.82*	95.06*	−9.24
Overall	73.69*	88.64*	−14.94*	78.56*	95.47*	−16.91*
ER expenditures						
Year One	18.90*	16.40*	2.50	20.83*	23.49*	−2.66*
Year Two	20.72*	17.48*	3.23	22.80*	27.92*	−5.12*
Year Three	23.61*	23.05*	0.56	25.84*	27.87*	−2.03
Overall	21.90*	20.83*	1.07	24.05*	27.38*	−3.33*
Outpatient expenditures						
Year One	103.42*	90.13*	13.29*	103.30*	98.83*	4.47
Year Two	107.58*	94.01*	13.57*	107.90*	106.56*	1.34
Year Three	115.01*	109.58*	5.44	115.76*	114.55*	1.21
Overall	111.80*	102.67*	9.14*	112.29*	111.03*	1.27
Specialty physician expenditures						
Year One	16.60*	23.01*	−6.41*	16.94*	19.70*	−2.76*
Year Two	17.67*	23.79*	−6.12*	17.89*	21.84*	−3.95*
Year Three	17.51*	28.36*	−10.85*	17.70*	22.25*	−4.54*
Overall	17.79*	26.45*	−8.65*	18.02*	22.17*	−4.15*
Primary care physician expenditures						
Year One	12.00*	15.76*	−3.75*	12.97*	15.54*	−2.56*
Year Two	12.92*	14.90*	−1.98	13.81*	16.04*	−2.23*
Year Three	14.30*	17.59*	−3.30*	15.14*	16.35*	−1.21
Overall	13.96*	16.76*	−2.80	14.84*	16.64*	−1.79

(continued)

Table I4-4 (continued)
Vermont: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	28.75*	33.29*	−4.54	25.83*	23.14*	2.70*
Year Two	30.86*	34.38*	−3.53	27.72*	26.26*	1.46
Year Three	34.16*	39.46*	−5.30*	30.76*	27.42*	3.34*
Overall	32.04*	37.87*	−5.84*	28.78*	26.27*	2.51*
Other expenditures						
Year One	15.26*	16.76*	−1.51*	14.63*	14.94*	−0.31
Year Two	16.65*	16.53*	0.12	16.00*	16.49*	−0.49
Year Three	18.82*	19.60*	−0.78	18.26*	17.86*	0.40
Overall	17.83*	18.58*	−0.76	17.23*	17.35*	−0.12
Laboratory expenditures						
Year One	0.10	1.41*	−1.32*	−0.15	1.02*	−1.17*
Year Two	0.25	0.90*	−0.66*	0.02	1.24*	−1.21*
Year Three	0.34	0.90	−0.56	0.10	1.58*	−1.47*
Overall	0.25	1.07*	−0.82*	0.02	1.42*	−1.40*
Imaging expenditures						
Year One	−2.58*	−0.74	−1.83*	−2.69*	−1.40*	−1.29*
Year Two	−2.79*	−2.04*	−0.74	−2.94*	−1.84*	−1.11*
Year Three	−2.66*	−1.44*	−1.22*	−2.87*	−1.92*	−0.94*
Overall	−2.64*	−1.49*	−1.15*	−2.82*	−1.67*	−1.14*
Other facility expenditures						
Year One	−0.04*	−0.12	0.08	−0.05*	−0.11	0.06
Year Two	−0.05*	0.17	−0.22	−0.05*	0.13	−0.18*
Year Three	−0.05*	−0.06	0.01	−0.06*	−0.05	0.00
Overall	−0.02	0.00	−0.02	−0.03	−0.01	−0.02

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-5 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for utilization.

Table I4-5
Vermont: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	50.73*	50.54*	0.19	50.90*	48.10*	2.80*
Year Two	52.58*	51.15*	1.43	52.60*	50.61*	1.99
Year Three	53.45*	54.10*	−0.65	53.33*	52.19*	1.14
Overall	52.56*	53.14*	−0.58	52.54*	51.39*	1.15
ER visits not leading to hospitalization						
Year One	130.54*	112.39*	18.15*	132.29*	118.18*	14.10*
Year Two	128.71*	110.58*	18.13*	130.47*	123.14*	7.33
Year Three	128.87*	114.85*	14.02*	130.70*	117.80*	12.89*
Overall	129.22*	114.56*	14.65*	131.05*	120.41*	10.64*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-6 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for total Medicare expenditures for special populations.

Table I4-6
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	867.38*	872.98*	−5.60	905.76*	912.52*	−6.76
Year Two	883.54*	975.30*	−91.77	919.65*	1,006.33*	−86.68*
Year Three	923.99*	961.27*	−37.28	957.65*	836.75*	120.90*
Overall	899.62*	937.80*	−38.19	935.34*	915.41*	19.92
BH conditions only						
Year One	429.55*	459.52*	−29.97	485.14*	497.69*	−12.55
Year Two	433.73*	433.91*	−0.18	491.09*	531.98*	−40.89
Year Three	468.03*	477.07*	−9.04	527.57*	434.20*	93.37*
Overall	453.53*	483.24*	−29.71	511.92*	489.27*	22.65
Disabled beneficiaries only						
Year One	382.71*	280.35*	102.36*	423.33*	452.01*	−28.67
Year Two	398.42*	377.19*	21.23	440.79*	444.36*	−3.57
Year Three	428.80*	410.08*	18.72	473.06*	460.31*	12.75
Overall	414.09*	401.93*	12.17	457.47*	455.17*	2.30
Dually eligible beneficiaries only						
Year One	430.57*	370.72*	59.86	478.05*	484.88*	−6.83
Year Two	456.20*	434.24*	21.96	504.53*	489.78*	14.75
Year Three	475.80*	461.61*	14.19	525.32*	515.25*	10.07
Overall	459.83*	456.17*	3.66	508.92*	508.37*	0.55
Rural beneficiaries only						
Year One	408.14*	448.09*	−39.95	387.34*	429.89*	−42.55
Year Two	467.04*	483.77*	−16.73	447.68*	504.78*	−57.10*
Year Three	480.17*	611.33*	−131.16	462.80*	529.99*	−67.19*
Overall	460.06*	522.27*	−62.21	441.66*	495.77*	−54.11*
SASH participants						
Year One	351.26*	441.09*	−89.82*	366.12*	456.32*	−90.20*
Year Two	497.66*	473.05*	24.61	510.25*	501.42*	8.84
Year Three	623.29*	518.78*	104.51*	637.70*	501.00*	136.70*
Overall	539.02*	491.78*	47.24	553.15*	499.48*	53.67

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home; SASH = Support and Services at Home.

* Statistically significant at the 10 percent level.

Table I4-7 and Table I***4-8*** presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for expenditures and health care utilization for rural beneficiaries.

Table I4-7
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among rural Medicare beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Acute-care expenditures			
Year One	124.67*	115.16*	9.52
Year Two	149.99*	146.74*	3.24
Year Three	140.17*	155.57*	−15.41
Overall	138.23*	140.15*	−1.92
Expenditures for ER visits not leading to hospitalization			
Year One	20.60*	21.77*	−1.17
Year Two	26.14*	30.73*	−4.59*
Year Three	29.31*	31.05*	−1.74
Overall	26.12*	29.13*	−3.01
Specialty physician			
Year One	16.99*	19.58*	−2.58
Year Two	16.32*	20.61*	−4.29*
Year Three	15.01*	23.64*	−8.63*
Overall	16.20*	21.86*	−5.66*
Primary care physician			
Year One	7.36*	9.47*	−2.11
Year Two	7.97*	10.98*	−3.01
Year Three	8.51*	12.69*	−4.18
Overall	8.45*	11.36*	−2.92

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-8
Vermont: Differences in the rates of utilization during the demonstration among rural Medicare beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		MAPCP
	MAPCP	Non-PCMHs CG	
All-cause admissions			
Year One	49.16*	45.55*	3.60
Year Two	49.55*	49.31*	0.24
Year Three	49.68*	50.99*	−1.30
Overall	49.40*	48.62*	0.78
ER visits not leading to hospitalization			
Year One	154.21*	128.83*	25.38*
Year Two	154.64*	138.56*	16.07*
Year Three	153.07*	136.10*	16.97*
Overall	153.56*	135.50*	18.06*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	147.04*	155.94*	−8.89
Year Two	123.19*	152.40*	−29.21
Year Three	144.96*	144.38*	0.58
Overall	137.79*	148.33*	−10.54

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All-cause admissions and ER visits not leading to hospitalization are rates per 1,000 beneficiary quarters.
- Unplanned 30-day readmissions are rates per 1,000 beneficiary quarters with admissions.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-9 and Table I***4-10*** presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for expenditures and health care utilization for Support and Services at Home (SASH) beneficiaries.

Table I4-9
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among SASH Medicare beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Acute-care expenditures						
Year One	91.98*	129.24*	−37.26*	94.28*	139.13*	−44.85*
Year Two	165.96*	157.88*	8.08	167.27*	151.33*	15.94
Year Three	189.59*	157.69*	31.90	191.33*	152.49*	38.84
Overall	162.80*	151.87*	10.93	164.64*	150.89*	13.75
Expenditures for ER visits not leading to hospitalization						
Year One	20.65*	16.56*	4.09	24.14*	23.66*	0.48
Year Two	22.66*	17.20*	5.47	26.18*	28.59*	−2.41
Year Three	31.56*	22.26*	9.29*	35.09*	29.39*	5.69
Overall	27.70*	20.28*	7.42*	31.23*	28.37*	2.86
Specialty physician						
Year One	13.25*	24.70*	−11.46*	11.20*	20.14*	−8.94*
Year Two	15.20*	26.91*	−11.72*	13.06*	21.73*	−8.66*
Year Three	12.27*	30.92*	−18.64*	10.22*	22.53*	−12.31*
Overall	13.85*	28.86*	−15.01*	11.77*	22.33*	−10.56*
Primary care physician						
Year One	13.07*	17.39*	−4.32*	13.17*	16.30*	−3.13*
Year Two	15.29*	15.66*	−0.37	15.56*	17.24*	−1.68
Year Three	19.20*	18.26*	0.94	19.68*	17.27*	2.41
Overall	17.83*	17.60*	0.23	18.17*	17.63*	0.55

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home; SASH = Support and Services at Home.

* Statistically significant at the 10 percent level.

Table I4-10
Vermont: Differences in the rates of utilization during the demonstration among SASH Medicare beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Differences	Rate of utilization		Differences
	MAPCP	PCMHs CG		Non-PCMHs CG	MAPCP	
All-cause admissions						
Year One	59.61*	67.12*	−7.51	60.25*	64.00*	−3.75
Year Two	70.47*	68.40*	2.07	70.60*	68.03*	2.56
Year Three	79.12*	71.81*	7.31	79.07*	69.36*	9.71
Overall	73.43*	70.63*	2.79	73.56*	68.48*	5.08
ER visits not leading to hospitalization						
Year One	199.30*	168.98*	30.32*	198.46*	177.57*	20.89*
Year Two	200.15*	165.78*	34.37*	200.88*	186.25*	14.62
Year Three	216.30*	172.42*	43.88*	216.35*	175.96*	40.39*
Overall	209.84*	171.93*	37.91*	209.85*	180.74*	29.11*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	137.15*	157.60*	−20.44	138.42*	135.28*	3.14
Year Two	186.20*	171.82*	14.38	188.59*	147.88*	40.71*
Year Three	169.14*	189.20*	−20.06	168.57*	164.79*	3.78
Overall	171.90*	178.66*	−6.76	172.54*	154.29*	18.25

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All-cause admissions and ER visits not leading to hospitalization are rates per 1,000 beneficiary quarters.
- Unplanned 30-day readmissions are rates per 1,000 beneficiary quarters with admissions.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = Support and Services at Home.

* Statistically significant at the 10 percent level.

Table I4-11 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I4-11
Vermont: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	89.81*	89.56*	0.25	89.48*	89.88*	−0.41
Year Two	88.49*	89.39*	−0.91	87.92*	90.81*	−2.88*
Year Three	89.75*	87.56*	2.19	89.30*	88.97*	0.33
Overall	89.36*	89.08*	0.29	88.92*	89.99*	−1.07
Retinal eye examination						
Year One	56.98*	57.86*	−0.88	56.51*	56.76*	−0.25
Year Two	58.72*	63.37*	−4.65	58.30*	59.56*	−1.26
Year Three	57.71*	62.19*	−4.48*	57.03*	57.11*	−0.07
Overall	57.72*	60.62*	−2.91	57.21*	57.76*	−0.55
LDL-C screening						
Year One	72.62*	80.13*	−7.51*	72.09*	75.14*	−3.05
Year Two	72.31*	78.63*	−6.32*	71.49*	72.13*	−0.64
Year Three	68.85*	73.67*	−4.82*	68.31*	72.33*	−4.02
Overall	71.70*	78.24*	−6.54*	71.08*	73.54*	−2.46
Medical attention for nephropathy						
Year One	67.87*	66.97*	0.90	66.55*	70.06*	−3.50
Year Two	68.56*	71.61*	−3.05	67.20*	70.42*	−3.21
Year Three	71.44*	73.61*	−2.17	70.64*	73.79*	−3.15
Overall	68.87*	69.94*	−1.07	67.65*	70.98*	−3.33
Received all 4 diabetes tests						
Year One	31.13*	33.57*	−2.44	31.21*	30.21*	1.00
Year Two	31.00*	38.58*	−7.58*	30.89*	34.26*	−3.37
Year Three	33.14*	40.05*	−6.92*	32.68*	32.63*	0.05
Overall	31.52*	36.63*	−5.11*	31.42*	32.07*	−0.65
Received none of the 4 diabetes tests						
Year One	2.79*	1.83*	0.95*	2.92*	2.68*	0.25
Year Two	3.23*	3.39	−0.16	3.40*	2.65*	0.75
Year Three	2.86*	2.97*	−0.10	3.00*	2.42*	0.58
Overall	2.95*	2.59*	0.36	3.10*	2.61*	0.49
Total lipid panel						
Year One	62.00*	63.99*	−1.98	61.71*	65.10*	−3.39*
Year Two	57.93*	60.50*	−2.58	58.06*	62.78*	−4.72*
Year Three	55.44*	60.45*	−5.01*	55.76*	59.08*	−3.33
Overall	59.23*	62.08*	−2.84	59.21*	63.02*	−3.81*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-12 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I4-12
Vermont: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	12.66*	11.61*	1.05	12.58*	13.70*	−1.12
Year Two	15.70*	14.23*	1.47	15.60*	14.74*	0.86
Year Three	17.01*	14.90*	2.12	16.95*	14.18*	2.77*
Overall	15.88*	13.92*	1.96	15.80*	14.73*	1.07
PQI admissions—overall						
Year One	33.28*	27.16*	6.12	33.89*	26.57*	7.32*
Year Two	32.50*	26.75*	5.75	32.72*	28.07*	4.65*
Year Three	31.15*	27.81*	3.34	31.06*	24.10*	6.96*
Overall	31.73*	27.18*	4.54	31.89*	26.02*	5.86*
PQI admissions—acute						
Year One	14.56*	11.62*	2.94	15.02*	11.85*	3.18*
Year Two	13.84*	9.23	4.60	14.20*	13.01*	1.19
Year Three	13.17*	10.24*	2.93	13.39*	9.48*	3.91
Overall	13.43*	10.12*	3.31	13.75*	11.23*	2.52*
PQI admissions—chronic						
Year One	18.27*	14.92*	3.35	18.29*	14.06*	4.22
Year Two	18.13*	16.79*	1.33	17.88*	14.45*	3.42
Year Three	17.50*	16.90*	0.60	17.10*	13.78*	3.32
Overall	17.82*	16.38*	1.44	17.56*	14.09*	3.47*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I4-13 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I4-13
Vermont: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	679.71*	693.26*	−13.54	667.39*	721.09*	−53.71
Year Two	656.64*	646.00*	10.65	643.27*	679.21*	−35.94
Year Three	671.07*	693.47*	−22.40	656.89*	659.04*	−2.15
Overall	670.24*	669.36*	0.88	656.89*	681.53*	−24.64
Medical specialist visits (per 1,000 beneficiaries)						
Year One	801.28*	811.17*	−9.89	797.15*	846.20*	−49.05
Year Two	823.31*	818.31*	4.99	815.91*	862.90*	−47.00
Year Three	823.38*	905.72*	−82.34	816.24*	891.70*	−75.47
Overall	816.78*	838.40*	−21.62	810.04*	866.76*	−56.72
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	168.68*	181.57*	−12.89	168.06*	166.72*	1.34
Year Two	146.31*	171.41*	−25.10*	145.14*	153.81*	−8.67
Year Three	137.39*	181.69*	−44.31*	136.48*	154.15*	−17.66
Overall	146.89*	174.69*	−27.80*	145.97*	156.19*	−10.22
Primary care visits as a percent of total visits						
Year One						
1st quintile	25.76*	26.95*	−1.19	25.83*	26.73*	−0.90
5th quintile	12.49*	11.84*	0.65	13.00*	12.49*	0.52
Year Two						
1st quintile	24.76*	28.39*	−3.63	24.94*	26.81*	−1.88
5th quintile	13.09*	11.11*	1.98	13.55*	12.44*	1.11
Year Three						
1st quintile	23.53*	26.93*	−3.40	24.06*	28.32*	−4.26*
5th quintile	13.87*	11.85*	2.02	14.11*	11.64*	2.47*
Overall						
1st quintile	24.91*	27.43*	−2.52	25.12*	27.13*	−2.01
5th quintile	13.01*	11.60*	1.42	13.44*	12.27*	1.17

(continued)

Table I4-13 (continued)
Vermont: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	857.18*	818.39*	38.78	857.76*	855.06*	2.70
Year Two	816.47*	815.45*	1.02	819.83*	873.98*	−54.15
Year Three	779.05*	784.92*	−5.87	782.95*	859.17*	−76.22*
Overall	812.96*	805.14*	7.82	815.74*	848.47*	−32.73
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	199.54*	208.44*	−8.90	198.45*	187.96*	10.48
Year Two	183.94*	209.06*	−25.12	182.30*	194.68*	−12.38
Year Three	199.07*	193.73*	5.34	198.10*	202.07*	−3.98
Overall	193.46*	199.25*	−5.79	192.19*	195.38*	−3.19
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	15.96*	19.62*	−3.66*	15.63*	17.67*	−2.04*
5th quintile	21.45*	17.53*	3.92*	21.61*	19.22*	2.38*
Year Two						
1st quintile	16.20*	20.11*	−3.91*	15.81*	18.59*	−2.78*
5th quintile	21.16*	17.08*	4.07*	21.38*	18.28*	3.10*
Year Three						
1st quintile	15.78*	23.56*	−7.78*	15.40*	19.85*	−4.45*
5th quintile	21.69*	14.41*	7.28*	21.90*	17.09*	4.81*
Overall						
1st quintile	16.00*	20.74*	−4.74*	15.64*	18.51*	−2.87*
5th quintile	21.41*	16.62*	4.79*	21.60*	18.39*	3.21*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-14 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I4-14
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	867.38*	872.98*	−5.60	905.76*	912.52*	−6.76
Year Two	883.54*	975.30*	−91.77	919.65*	1,006.33*	−86.68*
Year Three	923.99*	961.27*	−37.28	957.65*	836.75*	120.90*
Overall	899.62*	937.80*	−38.19	935.34*	915.41*	19.92
Acute-care expenditures						
Year One	305.16*	268.64*	36.52	317.70*	321.70*	−4.00
Year Two	321.01*	344.11*	−23.10	331.99*	363.31*	−31.32
Year Three	323.67*	289.87*	33.80	333.27*	272.60*	60.67*
Overall	319.84*	299.14*	20.70	330.66*	316.06*	14.60
Post-acute-care expenditures						
Year One	142.22*	173.27*	−31.05*	145.88*	175.43*	−29.55*
Year Two	150.33*	181.54*	−31.21	153.88*	195.27*	−41.39*
Year Three	175.64*	212.64*	−36.99	178.87*	157.27*	21.60
Overall	157.44*	189.04*	−31.61	160.91*	176.65*	−15.74
ER expenditures						
Year One	35.73*	33.90*	1.83	40.72*	42.50*	−1.79
Year Two	38.97*	40.45*	−1.48	43.93*	50.80*	−6.87
Year Three	43.86*	39.25*	4.61	48.71*	46.88*	1.84
Overall	40.75*	39.56*	1.18	45.67*	48.58*	−2.91
Outpatient expenditures						
Year One	190.55*	158.97*	31.59*	196.17*	167.28*	28.89*
Year Two	180.86*	161.31*	19.55*	186.91*	179.64*	7.27
Year Three	185.78*	170.32*	15.45	192.00*	178.24*	13.76
Overall	185.74*	163.62*	22.12*	191.86*	176.34*	15.52
Specialty physician expenditures						
Year One	27.47*	36.60*	−9.13	26.27*	28.15*	−1.88
Year Two	25.51*	43.85*	−18.34*	24.21*	24.91*	−0.70
Year Three	22.18*	36.33*	−14.16*	20.95*	20.30*	0.65
Overall	24.60*	38.05*	−13.45*	23.36*	24.12*	−0.75

(continued)

Table I4-14 (continued)
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	20.11*	26.06*	−5.95*	21.80*	26.71*	−4.91*
Year Two	21.13*	25.11*	−3.98	22.61*	28.26*	−5.65*
Year Three	23.01*	24.61*	−1.60	24.35*	24.77*	−0.42
Overall	22.30*	25.12*	−2.82	23.76*	27.00*	−3.24
Home health expenditures						
Year One	69.24*	73.90*	−4.66	64.80*	50.35*	14.45*
Year Two	69.54*	76.86*	−7.32	64.86*	55.04*	9.82
Year Three	75.47*	84.45*	−8.99	70.41*	52.92*	17.49*
Overall	72.19*	82.02*	−9.83	67.37*	52.13*	15.24*
Other expenditures						
Year One	29.35*	26.85*	2.50*	28.17*	26.28*	1.90
Year Two	29.73*	28.11*	1.62	28.47*	28.25*	0.22
Year Three	32.67*	30.21*	2.46*	31.47*	27.15*	4.32*
Overall	31.24*	28.91*	2.34*	30.03*	28.17*	1.86
Laboratory expenditures						
Year One	0.00	1.11	−1.11	−0.55	1.60*	−2.15*
Year Two	−0.16	0.82	−0.97	−0.69*	1.12	−1.81*
Year Three	−0.13	1.43	−1.57	−0.66	1.41	−2.07*
Overall	−0.05	0.82	−0.87	−0.59	1.45*	−2.04*
Imaging expenditures						
Year One	−4.13*	−2.72*	−1.41*	−4.14*	−2.19*	−1.96*
Year Two	−4.73*	−4.84*	0.11	−4.76*	−3.42*	−1.33*
Year Three	−4.82*	−4.18*	−0.64	−4.85*	−4.17*	−0.68
Overall	−4.59*	−4.31*	−0.28	−4.62*	−3.33*	−1.29*
Other facility expenditures						
Year One	−0.14	−0.56	0.41	−0.16	−0.37	0.21
Year Two	−0.15	0.65	−0.80	−0.15*	0.46	−0.61
Year Three	−0.15*	−0.08	−0.07	−0.15*	−0.03	−0.13
Overall	−0.15	0.02	−0.17	−0.15*	0.03	−0.19

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-15 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I4-15
Vermont: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	129.04*	118.31*	10.73	129.14*	115.04*	14.11*
Year Two	129.10*	120.64*	8.46	128.51*	120.86*	7.65
Year Three	128.60*	115.98*	12.62	127.48*	109.91*	17.57*
Overall	128.71*	117.45*	11.25	128.04*	115.08*	12.96*
ER visits not leading to hospitalization						
Year One	257.45*	227.24*	30.21*	260.14*	224.22*	35.92*
Year Two	248.28*	230.83*	17.45	250.83*	236.44*	14.39
Year Three	245.48*	216.53*	28.96*	248.18*	212.11*	36.07*
Overall	249.48*	223.91*	25.56*	252.17*	225.54*	26.64*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-16 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I4-16
Vermont: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	429.55*	459.52*	−29.97	485.14*	497.69*	−12.55
Year Two	433.73*	433.91*	−0.18	491.09*	531.98*	−40.89
Year Three	468.03*	477.07*	−9.04	527.57*	434.20*	93.37*
Overall	453.53*	483.24*	−29.71	511.92*	489.27*	22.65
Acute-care expenditures						
Year One	146.23*	154.58*	−8.35	153.55*	165.44*	−11.89
Year Two	151.21*	137.81*	13.40	158.30*	155.03*	3.27
Year Three	147.56*	136.37*	11.19	155.18*	141.84*	13.34
Overall	149.86*	152.27*	−2.41	157.41*	151.97*	5.45
Expenditures for ER visits not leading to hospitalization						
Year One	22.73*	22.07*	0.66	27.59*	25.79*	1.80
Year Two	24.33*	20.66*	3.67	29.53*	31.13*	−1.59
Year Three	27.72*	29.36*	−1.65	33.24*	31.27*	1.97
Overall	25.89*	26.80*	−0.91	31.21*	30.87*	0.34
Total for principal diagnosis of a BH condition						
Year One	25.57*	28.85*	−3.28	21.87*	21.70*	0.17
Year Two	22.40*	39.34*	−16.94*	19.91*	25.74*	−5.83
Year Three	29.81*	29.82*	0.00	28.02*	27.35*	0.67
Overall	29.16*	34.20*	−5.04	26.77*	26.38*	0.38
Total for secondary diagnosis of a BH condition						
Year One	186.65*	164.82*	21.83*	199.69*	227.97*	−28.28
Year Two	190.02*	163.92*	26.09	203.32*	206.09*	−2.77
Year Three	187.82*	162.70*	25.13	201.98*	199.95*	2.03
Overall	190.34*	173.13*	17.21	204.14*	210.52*	−6.37

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I4-17 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I4-17
Vermont: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	64.82*	67.44*	−2.61	64.66*	58.81*	5.85*
Year Two	63.93*	58.29*	5.64	63.68*	57.78*	5.90
Year Three	62.42*	58.40*	4.02	62.16*	53.29*	8.87*
Overall	63.36*	63.71*	−0.35	63.13*	56.15*	6.98*
ER visits not leading to hospitalization						
Year One	253.72*	238.54*	15.19	256.84*	223.21*	33.63*
Year Two	244.93*	228.32*	16.61	248.97*	229.54*	19.43*
Year Three	243.56*	221.24*	22.32*	248.55*	215.80*	32.76*
Overall	246.12*	230.72*	15.40	250.50*	220.88*	29.62*
BH inpatient admissions						
Year One	3.49*	3.76*	−0.27	3.73	5.16	−1.43
Year Two	2.92*	4.32*	−1.39*	3.15	4.17	−1.01
Year Three	2.17*	2.63*	−0.46	2.39	4.12	−1.73
Overall	2.90*	3.37*	−0.47	3.15	4.26	−1.11
BH ER visits						
Year One	17.35	16.93	0.42	19.00*	14.63*	4.37*
Year Two	15.58	13.27	2.31	16.80*	14.17*	2.63*
Year Three	14.93	10.09	4.84	16.48*	13.31*	3.17*
Overall	15.95	13.18	2.77	17.48*	14.30*	3.18*
BH outpatient visits						
Year One	266.70*	192.23*	74.46	285.53*	219.72*	65.81*
Year Two	249.13*	211.74*	37.38	274.04*	255.48*	18.57
Year Three	272.09*	221.40*	50.69	302.76*	237.32*	65.44
Overall	265.11*	211.97*	53.15	291.33*	238.75*	52.58

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.5 Decompositions of the North Carolina Estimates

Table I5-1 presents a decomposition of the estimates of the changes associated with the North Carolina MAPCP Demonstration for process of care indicators.

Table I5-1
North Carolina: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	92.31*	91.73*	0.58	92.43*	91.21*	1.22*
Year Two	91.16*	91.79*	−0.63	91.44*	91.47*	−0.04
Year Three	89.93*	89.77*	0.16	90.26*	89.57*	0.69
Overall	91.39*	91.32*	0.08	91.61*	90.94*	0.68
Retinal eye examination						
Year One	53.57*	55.89*	−2.32	52.99*	54.11*	−1.12
Year Two	55.92*	56.98*	−1.05	55.54*	55.40*	0.14
Year Three	56.24*	52.81*	3.43	55.78*	53.45*	2.33
Overall	54.97*	55.57*	−0.61	54.48*	54.40*	0.08
LDL-C screening						
Year One	87.40*	87.31*	0.09	87.39*	86.79*	0.60
Year Two	86.59*	86.35*	0.24	86.88*	87.30*	−0.42
Year Three	85.23*	83.74*	1.49	85.51*	84.96*	0.55
Overall	86.64*	86.19*	0.45	86.80*	86.55*	0.24
Medical attention for nephropathy						
Year One	55.44*	56.12*	−0.68	54.30*	53.01*	1.29
Year Two	58.61*	57.31*	1.30	57.29*	54.94*	2.35
Year Three	64.14*	61.03*	3.11	62.92*	55.86*	7.06*
Overall	58.45*	57.62*	0.83	57.23*	54.30*	2.93
Received all 4 diabetes tests						
Year One	26.15*	28.31*	−2.16	25.46*	26.73*	−1.27
Year Two	29.31*	28.85*	0.45	28.68*	27.83*	0.84
Year Three	32.08*	27.23*	4.85*	31.43*	27.84*	3.60
Overall	28.54*	28.25*	0.29	27.88*	27.35*	0.53
Received none of the 4 diabetes tests						
Year One	1.97*	2.07*	−0.09	2.02*	2.35*	−0.33
Year Two	2.28*	2.18*	0.09	2.31*	2.41*	−0.09
Year Three	2.53*	2.82*	−0.30	2.59*	2.92*	−0.33
Overall	2.20*	2.28*	−0.08	2.25*	2.50*	−0.25

(continued)

Table I5-1 (continued)
North Carolina: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	79.74*	78.18*	1.56	79.48*	78.31*	1.17
Year Two	78.67*	78.47*	0.20	78.62*	77.81*	0.81
Year Three	75.94*	73.59*	2.35	75.91*	76.12*	−0.20
Overall	78.47*	77.18*	1.29	78.34*	77.62*	0.72

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-2 presents a decomposition of the estimates of the changes associated with the North Carolina MAPCP Demonstration for selected health outcomes.

Table I5-2
North Carolina: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	6.81*	6.62*	0.19	6.73*	6.68*	0.05
Year Two	7.41*	7.48*	−0.07	7.41*	8.18*	−0.77
Year Three	8.88*	9.27*	−0.39	8.84*	8.79*	0.04
Overall	7.85*	7.88*	−0.04	7.81*	8.00*	−0.20
PQI admissions—overall						
Year One	11.89*	11.63*	0.26	11.91*	11.38*	0.53
Year Two	13.30*	11.51*	1.79	13.40*	11.15*	2.25*
Year Three	13.47*	11.74*	1.72	13.50*	12.02*	1.48
Overall	12.96*	11.82*	1.14	13.00*	11.52*	1.48*
PQI admissions—acute						
Year One	5.90*	5.90*	0.00	6.09*	5.42*	0.68
Year Two	6.43*	5.52*	0.91	6.61*	5.13*	1.48*
Year Three	5.79*	5.33*	0.45	5.86*	5.39*	0.47
Overall	6.01*	5.52*	0.49	6.16*	5.29*	0.87*
PQI admissions—chronic						
Year One	5.72*	5.65*	0.07	5.64*	5.74*	−0.10
Year Two	6.50*	5.74*	0.76	6.50*	5.71*	0.80
Year Three	7.27*	6.03*	1.24	7.29*	6.26*	1.03*
Overall	6.59*	6.01*	0.58	6.57*	5.92*	0.65*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I5-3 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for access to care and coordination of care.

Table I5-3
North Carolina: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	922.04*	950.38*	−28.34	961.41*	919.53*	41.88
Year Two	903.64*	908.56*	−4.92	935.03*	901.90*	33.13
Year Three	898.76*	912.15*	−13.39	930.71*	938.42*	−7.71
Overall	910.79*	922.49*	−11.70	944.78*	921.68*	23.10
Medical specialist visits (per 1,000 beneficiaries)						
Year One	625.83*	655.04*	−29.21	622.67*	637.72*	−15.05
Year Two	633.79*	640.61*	−6.82	632.67*	657.89*	−25.21
Year Three	633.80*	657.70*	−23.90	634.61*	691.28*	−56.67*
Overall	631.33*	648.01*	−16.68	630.38*	663.87*	−33.49*
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	224.06*	200.08*	23.97*	222.34*	199.73*	22.61*
Year Two	216.67*	193.33*	23.34*	217.07*	188.46*	28.62*
Year Three	232.13*	191.93*	40.20*	232.19*	190.28*	41.91*
Overall	223.77*	194.88*	28.89*	223.36*	192.71*	30.65*
Primary care visits as a percent of total visits						
Year One						
1st quintile	18.66*	18.89*	−0.23	18.21*	19.29*	−1.08
5th quintile	16.49*	16.28*	0.20	19.56*	18.47*	1.09
Year Two						
1st quintile	18.56*	20.15*	−1.60	18.13*	19.89*	−1.76
5th quintile	16.58*	15.22*	1.37	19.65*	17.91*	1.75
Year Three						
1st quintile	18.69*	21.26*	−2.56	18.31*	20.75*	−2.43
5th quintile	16.46*	14.37*	2.09	19.45*	17.14*	2.31
Overall						
1st quintile	18.64*	19.86*	−1.22	18.20*	19.83*	−1.62
5th quintile	16.51*	15.48*	1.03	19.57*	17.97*	1.59

(continued)

Table I5-3 (continued)
North Carolina: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	742.17*	727.85*	14.33	739.76*	738.37*	1.39
Year Two	723.56*	712.03*	11.53	724.44*	711.93*	12.51
Year Three	706.32*	713.38*	−7.06	706.93*	725.57*	−18.63
Overall	724.63*	717.78*	6.85	724.32*	724.98*	−0.66
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	177.85*	165.64*	12.22	177.89*	164.29*	13.60
Year Two	171.29*	158.92*	12.36	172.58*	162.98*	9.60
Year Three	182.16*	181.79*	0.36	182.50*	182.16*	0.34
Overall	176.84*	168.25*	8.60	177.42*	169.36*	8.06
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	16.96*	16.53*	0.43	17.76*	17.84*	−0.08
5th quintile	21.92*	22.45*	−0.53	21.55*	21.46*	0.09
Year Two						
1st quintile	17.90*	16.85*	1.05	18.76*	18.52*	0.24
5th quintile	20.82*	22.05*	−1.23	20.43*	20.69*	−0.26
Year Three						
1st quintile	18.14*	19.38*	−1.24	19.00*	20.44*	−1.44
5th quintile	20.56*	19.26*	1.30	20.18*	18.75*	1.43
Overall						
1st quintile	17.56*	17.32*	0.24	18.40*	18.69*	−0.30
5th quintile	21.22*	21.55*	−0.33	20.84*	20.55*	0.29

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-4 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for expenditures.

Table I5-4
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	441.04*	446.51*	−5.47	449.43*	446.23*	3.19
Year Two	472.05*	462.86*	9.19	480.49*	468.18*	12.31
Year Three	519.92*	518.75*	1.17	527.29*	488.34*	38.96
Overall	483.82*	473.33*	10.49	491.81*	471.67*	20.13
Acute-care expenditures						
Year One	128.99*	128.09*	0.91	135.98*	144.91*	−8.94
Year Two	139.68*	144.66*	−4.98	146.70*	147.50*	−0.80
Year Three	152.86*	157.71*	−4.86	159.28*	147.15*	12.13
Overall	142.10*	140.71*	1.38	148.87*	146.74*	2.13
Post-acute-care expenditures						
Year One	68.32*	70.93*	−2.60	70.87*	67.03*	3.84
Year Two	75.41*	70.96*	4.45	78.02*	70.74*	7.28*
Year Three	79.75*	83.09*	−3.34	81.99*	70.44*	11.55*
Overall	75.12*	73.74*	1.38	77.57*	70.24*	7.33*
ER expenditures						
Year One	21.76*	20.22*	1.54	20.91*	19.81*	1.10
Year Two	23.51*	22.09*	1.42	22.74*	20.64*	2.11*
Year Three	27.56*	27.09*	0.48	26.71*	26.31*	0.40
Overall	24.68*	23.42*	1.27	23.86*	22.59*	1.27
Outpatient expenditures						
Year One	70.42*	74.05*	−3.63	65.28*	61.32*	3.95
Year Two	80.90*	73.12*	7.77	75.90*	66.96*	8.94*
Year Three	89.57*	86.79*	2.78	84.39*	77.04*	7.35
Overall	81.66*	78.24*	3.42	76.53*	69.54*	6.99*
Specialty physician expenditures						
Year One	39.77*	38.16*	1.61	40.53*	42.96*	−2.43
Year Two	42.88*	38.99*	3.89	43.64*	48.16*	−4.53
Year Three	45.29*	42.42*	2.88	46.39*	50.12*	−3.73
Overall	43.35*	40.00*	3.34	44.24*	47.46*	−3.22
Primary care physician expenditures						
Year One	21.94*	23.63*	−1.69	22.71*	22.70*	0.01
Year Two	22.53*	23.26*	−0.74	23.17*	23.66*	−0.49
Year Three	25.58*	25.69*	−0.10	26.21*	25.75*	0.46
Overall	24.00*	24.65*	−0.65	24.66*	24.62*	0.05

(continued)

Table I5-4 (continued)
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	27.26*	28.29*	−1.04	25.07*	22.21*	2.87*
Year Two	26.04*	27.91*	−1.87	23.80*	23.22*	0.58
Year Three	29.92*	29.96*	−0.04	27.51*	23.86*	3.65*
Overall	28.07*	28.84*	−0.77	25.78*	23.18*	2.60*
Other expenditures						
Year One	17.72*	16.31*	1.41	19.03*	18.71*	0.32
Year Two	18.50*	19.12*	−0.62	19.71*	18.58*	1.13
Year Three	20.08*	21.67*	−1.59	21.21*	20.24*	0.97
Overall	18.99*	19.14*	−0.15	20.19*	19.30*	0.89
Laboratory expenditures						
Year One	4.96*	7.74*	−2.78	4.68*	6.80*	−2.12
Year Two	3.88*	5.60*	−1.72	3.73*	6.42*	−2.70
Year Three	6.61*	8.66*	−2.05	6.45*	8.12*	−1.67
Overall	5.39*	7.37*	−1.98	5.20*	7.29*	−2.10
Imaging expenditures						
Year One	−1.42	−0.43	−0.99	−0.44	0.14	−0.58
Year Two	−2.82*	−1.75	−1.07	−1.73*	−0.51	−1.22
Year Three	−2.43*	−2.12	−0.30	−1.25	−0.42	−0.83
Overall	−2.18*	−1.49	−0.69	−1.09	−0.23	−0.85
Other facility expenditures						
Year One	0.01	−0.01	0.03	0.03	0.03	0.00
Year Two	0.05	−0.01	0.05	0.06*	0.00	0.05*
Year Three	0.01	−0.01	0.02	0.03	0.00	0.03
Overall	0.03	−0.01	0.03	0.04*	0.01	0.03

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-5 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for utilization.

Table I5-5
North Carolina: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	66.79*	64.91*	1.88	66.69*	66.81*	−0.12
Year Two	68.82*	67.33*	1.49	69.19*	66.45*	2.74
Year Three	72.74*	68.94*	3.80	72.91*	67.17*	5.74*
Overall	69.82*	66.66*	3.16	69.98*	66.84*	3.14*
ER visits not leading to hospitalization						
Year One	138.94*	130.13*	8.81	137.73*	139.37*	−1.64
Year Two	143.12*	136.85*	6.27	141.85*	143.59*	−1.74
Year Three	148.22*	146.04*	2.18	146.52*	147.10*	−0.58
Overall	144.21*	138.65*	5.55	142.79*	143.99*	−1.20

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-6 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for total Medicare expenditures for special populations.

Table I5-6
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	940.59*	921.82*	18.77	979.54*	969.21*	10.33
Year Two	903.70*	944.93*	−41.23	943.71*	941.34*	2.37
Year Three	918.58*	975.70*	−57.12	957.37*	860.20*	97.17*
Overall	925.90*	939.69*	−13.79	965.09*	927.11*	37.98
BH conditions only						
Year One	650.74*	700.62*	−49.88	618.46*	582.75*	35.71
Year Two	632.72*	646.75*	−14.03	598.13*	610.83*	−12.69
Year Three	663.98*	684.84*	−20.87	629.26*	598.82*	30.44
Overall	651.18*	672.23*	−21.05	617.30*	591.63*	25.68
Disabled beneficiaries only						
Year One	490.94*	502.63*	−11.69	497.89*	518.89*	−21.00
Year Two	509.53*	568.95*	−59.42	519.51*	492.09*	27.42
Year Three	539.04*	580.11*	−41.07	547.74*	516.43*	31.32
Overall	520.36*	548.16*	−27.80	528.88*	510.00*	18.88
Dually eligible beneficiaries only						
Year One	574.26*	559.21*	15.05	592.78*	525.46*	67.32
Year Two	579.90*	530.31*	49.59	600.53*	528.66*	71.88*
Year Three	626.49*	585.25*	41.24	646.81*	554.39*	92.42*
Overall	596.82*	557.28*	39.54	616.65*	536.89*	79.76*
Rural beneficiaries only						
Year One	486.25*	518.53*	−32.27	470.45*	437.23*	33.22
Year Two	526.72*	544.32*	−17.60	513.77*	459.67*	54.11
Year Three	580.82*	591.94*	−11.12	566.38*	506.44*	59.94
Overall	536.45*	546.50*	−10.05	521.96*	471.09*	50.86
Non-White beneficiaries only						
Year One	455.05*	365.98*	89.07*	531.98*	575.29*	−43.31
Year Two	485.90*	441.19*	44.71	560.56*	536.76*	23.80
Year Three	546.44*	412.53*	133.90*	619.18*	523.54*	95.64*
Overall	499.94*	408.08*	91.86*	574.56*	550.11*	24.44

(continued)

Table I5-6 (continued)
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Network 1 and all comparisons						
Year One	433.85*	440.88*	−7.02	448.67*	442.39*	6.28
Year Two	444.26*	455.50*	−11.24	457.29*	464.46*	−7.17
Year Three	498.08*	511.05*	−12.98	509.96*	484.23*	25.73
Overall	463.94*	465.82*	−1.88	477.05*	467.28*	9.77
Network 2 and all comparisons						
Year One	315.33*	439.75*	−124.41*	330.32*	449.40*	−119.09*
Year Two	394.78*	448.65*	−53.87*	409.10*	461.43*	−52.33*
Year Three	419.03*	504.77*	−85.75*	432.37*	481.12*	−48.75*
Overall	391.86*	463.28*	−71.42*	405.91*	469.22*	−63.31*
Network 3 and all comparisons						
Year One	474.34*	438.84*	35.50	487.90*	439.03*	48.87
Year Two	511.71*	456.88*	54.82	525.12*	466.07*	59.05*
Year Three	552.16*	512.33*	39.83	564.18*	484.62*	79.56*
Overall	516.11*	465.73*	50.38	529.01*	466.53*	62.49*
Network 4 and all comparisons						
Year One	384.34*	439.07*	−54.74*	392.92*	450.67*	−57.76*
Year Two	470.83*	452.36*	18.47	481.64*	463.91*	17.73
Year Three	538.80*	507.30*	31.50	548.84*	482.78*	66.06*
Overall	477.10*	464.96*	12.14	487.02*	470.64*	16.37

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-7 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I5-7
North Carolina: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	89.58*	87.76*	1.81	90.21*	88.36*	1.85*
Year Two	88.46*	90.50*	−2.04	89.17*	88.96*	0.21
Year Three	87.85*	87.77*	0.08	88.72*	87.45*	1.27
Overall	88.85*	88.66*	0.18	89.55*	88.36*	1.19
Retinal eye examination						
Year One	53.34*	54.87*	−1.53	53.27*	54.87*	−1.61
Year Two	56.13*	54.44*	1.68	55.94*	54.01*	1.93
Year Three	56.27*	54.61*	1.66	56.01*	51.76*	4.25*
Overall	54.87*	54.68*	0.20	54.72*	53.93*	0.79
LDL-C screening						
Year One	82.89*	84.07*	−1.17	83.89*	83.08*	0.82
Year Two	81.73*	84.91*	−3.18	82.82*	83.12*	−0.30
Year Three	79.52*	81.34*	−1.82	80.61*	80.40*	0.22
Overall	81.80*	83.77*	−1.97	82.85*	82.53*	0.32
Medical attention for nephropathy						
Year One	64.94*	61.59*	3.35	64.12*	62.38*	1.73
Year Two	67.87*	62.63*	5.24*	66.76*	64.79*	1.97
Year Three	74.49*	71.91*	2.58	73.28*	65.61*	7.67*
Overall	67.91*	64.10*	3.81	66.91*	63.85*	3.06
Received all 4 diabetes tests						
Year One	26.71*	25.09*	1.62	27.57*	28.20*	−0.63
Year Two	30.71*	25.66*	5.05*	31.52*	28.53*	2.98
Year Three	31.71*	27.70*	4.01	32.35*	28.94*	3.41
Overall	29.08*	25.82*	3.25*	29.87*	28.46*	1.41
Received none of the 4 diabetes tests						
Year One	1.53*	1.48*	0.05	1.63*	2.38*	−0.75*
Year Two	1.82*	2.26*	−0.43	1.99*	2.26*	−0.27
Year Three	1.56*	1.35*	0.20	1.76*	3.16*	−1.40*
Overall	1.63*	1.71*	−0.08	1.77*	2.51*	−0.73*

(continued)

Table I5-7 (continued)
North Carolina: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	74.90*	74.57*	0.33	75.54*	73.83*	1.71
Year Two	73.51*	76.10*	−2.59	74.21*	74.34*	−0.13
Year Three	70.02*	69.67*	0.35	70.78*	72.72*	−1.94
Overall	73.39*	74.02*	−0.63	74.08*	73.76*	0.32

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-8 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I5-8
North Carolina: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	18.18*	19.84*	−1.66	18.20*	18.48*	−0.28
Year Two	16.44*	20.50*	−4.06*	16.65*	21.52*	−4.87*
Year Three	19.55*	22.25*	−2.70	19.71*	20.90*	−1.19
Overall	18.27*	20.56*	−2.29	18.39*	20.44*	−2.05
PQI admissions—overall						
Year One	41.98*	38.58*	3.40	42.27*	40.62*	1.64
Year Two	42.52*	37.87*	4.66	43.21*	36.45*	6.76*
Year Three	39.53*	33.89*	5.64	39.94*	35.78*	4.16
Overall	41.72*	38.24*	3.48	42.16*	37.37*	4.79*
PQI admissions—acute						
Year One	18.01*	16.46*	1.55	17.91*	16.68*	1.23
Year Two	19.07*	14.49*	4.58*	19.01*	14.36*	4.66*
Year Three	15.56*	12.36*	3.19	15.37*	13.00*	2.37
Overall	17.54*	14.43*	3.11	17.42*	14.59*	2.83*
PQI admissions—chronic						
Year One	22.98*	21.40*	1.58	22.92*	22.42*	0.49
Year Two	22.25*	22.10*	0.15	22.53*	20.50*	2.03
Year Three	22.77*	20.25*	2.53	23.00*	21.09*	1.91
Overall	23.06*	22.58*	0.48	23.20*	21.20*	2.00

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I5-9 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I5-9
North Carolina: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	1,278.88*	1,259.52*	19.36	1,312.61*	1,239.33*	73.28
Year Two	1,216.84*	1,212.80*	4.04	1,245.27*	1,198.71*	46.56
Year Three	1,173.05*	1,216.85*	−43.80	1,202.63*	1,197.54*	5.09
Overall	1,227.45*	1,227.52*	−0.08	1,258.20*	1,211.96*	46.25
Medical specialist visits (per 1,000 beneficiaries)						
Year One	933.53*	974.53*	−41.00	932.31*	961.92*	−29.60
Year Two	907.58*	925.12*	−17.55	910.37*	958.13*	−47.76
Year Three	891.33*	908.75*	−17.42	894.36*	976.45*	−82.10*
Overall	908.89*	933.44*	−24.55	910.42*	964.23*	−53.81*
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	335.30*	272.07*	63.23*	333.36*	284.46*	48.90*
Year Two	299.59*	258.00*	41.60*	302.70*	263.36*	39.34*
Year Three	314.45*	241.31*	73.14*	314.93*	252.25*	62.68*
Overall	314.66*	259.11*	55.55*	315.15*	267.09*	48.06*
Primary care visits as a percent of total visits						
Year One						
1st quintile	18.85*	19.20*	−0.35	18.06*	19.19*	−1.13
5th quintile	17.38*	17.06*	0.32	20.70*	19.50*	1.20
Year Two						
1st quintile	18.32*	19.19*	−0.87	17.48*	18.72*	−1.24
5th quintile	17.89*	17.07*	0.82	21.36*	19.99*	1.37
Year Three						
1st quintile	18.01*	19.95*	−1.94	17.28*	19.92*	−2.64*
5th quintile	18.20*	16.39*	1.81	21.59*	18.78*	2.81*
Overall						
1st quintile	18.48*	19.37*	−0.88	17.69*	19.20*	−1.51
5th quintile	17.74*	16.91*	0.83	21.12*	19.49*	1.62

(continued)

Table I5-9 (continued)
North Carolina: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	798.73*	783.74*	14.99	797.20*	798.55*	−1.35
Year Two	781.83*	750.84*	30.99	784.22*	760.14*	24.07
Year Three	715.36*	756.09*	−40.73	716.56*	760.90*	−44.35
Overall	770.26*	764.72*	5.54	770.85*	774.90*	−4.05
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	231.28*	206.47*	24.81	229.96*	222.52*	7.44
Year Two	221.07*	196.00*	25.07	222.65*	216.42*	6.23
Year Three	219.89*	259.10*	−39.21	220.46*	209.60*	10.86
Overall	224.58*	217.18*	7.40	224.80*	216.85*	7.95
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	15.17*	14.93*	0.24	15.18*	15.43*	−0.25
5th quintile	23.38*	23.71*	−0.33	23.46*	23.11*	0.35
Year Two						
1st quintile	16.68*	14.49*	2.19*	16.73*	15.72*	1.01
5th quintile	21.41*	24.35*	−2.94*	21.45*	22.73*	−1.28
Year Three						
1st quintile	16.44*	15.64*	0.79	16.48*	17.58*	−1.11
5th quintile	21.71*	22.73*	−1.02	21.76*	20.45*	1.30
Overall						
1st quintile	15.97*	14.95*	1.01	16.00*	16.03*	−0.03
5th quintile	22.34*	23.69*	−1.35	22.39*	22.36*	0.03

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-10 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I5-10
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	940.59*	921.82*	18.77	979.54*	969.21*	10.33
Year Two	903.70*	944.93*	−41.23	943.71*	941.34*	2.37
Year Three	918.58*	975.70*	−57.12	957.37*	860.20*	97.17*
Overall	925.90*	939.69*	−13.79	965.09*	927.11*	37.98
Acute-care expenditures						
Year One	275.11*	263.19*	11.91	319.81*	348.08*	−28.26
Year Two	257.43*	304.30*	−46.86	302.25*	317.36*	−15.11
Year Three	255.35*	295.47*	−40.12	299.13*	263.79*	35.34
Overall	265.76*	282.97*	−17.20	310.16*	309.80*	0.35
Post-acute-care expenditures						
Year One	154.22*	150.85*	3.37	159.36*	148.12*	11.24
Year Two	156.37*	147.53*	8.84	162.40*	147.32*	15.09
Year Three	151.74*	166.16*	−14.42	157.84*	132.39*	25.45*
Overall	153.48*	151.42*	2.06	159.24*	144.17*	15.08*
ER expenditures						
Year One	41.44*	40.72*	0.72	41.34*	39.26*	2.08
Year Two	41.07*	42.04*	−0.97	41.13*	38.20*	2.93
Year Three	45.75*	46.08*	−0.32	45.58*	45.16*	0.42
Overall	43.21*	43.06*	0.15	43.13*	41.18*	1.95
Outpatient expenditures						
Year One	150.81*	170.56*	−19.75	134.31*	126.22*	8.09
Year Two	153.79*	160.36*	−6.57	138.55*	132.24*	6.31
Year Three	156.47*	177.95*	−21.48	141.46*	133.97*	7.50
Overall	154.42*	168.61*	−14.19	138.82*	131.44*	7.38
Specialty physician expenditures						
Year One	61.96*	59.20*	2.76	68.54*	76.15*	−7.61
Year Two	60.12*	53.14*	6.98	65.48*	76.95*	−11.47
Year Three	57.91*	53.84*	4.07	63.46*	69.02*	−5.56
Overall	60.50*	55.76*	4.73	66.33*	74.22*	−7.89

(continued)

Table I5-10 (continued)
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	39.37*	38.78*	0.60	39.10*	37.83*	1.27
Year Two	37.38*	36.00*	1.39	37.13*	38.19*	−1.06
Year Three	40.23*	38.46*	1.77	39.90*	37.08*	2.82
Overall	39.62*	38.16*	1.46	39.32*	38.08*	1.25
Home health expenditures						
Year One	68.53*	60.15*	8.38	62.80*	49.98*	12.82*
Year Two	56.30*	61.36*	−5.06	51.14*	49.26*	1.88
Year Three	61.09*	63.26*	−2.17	55.75*	45.02*	10.73*
Overall	62.63*	61.94*	0.69	57.22*	47.86*	9.36*
Other expenditures						
Year One	37.31*	27.10*	10.21*	40.55*	39.46*	1.09
Year Two	36.87*	36.09*	0.78	39.42*	35.86*	3.57
Year Three	37.16*	36.76*	0.39	39.51*	34.68*	4.83
Overall	37.18*	32.99*	4.19	39.89*	36.82*	3.06
Laboratory expenditures						
Year One	4.53	9.49*	−4.96	3.23	7.75*	−4.53
Year Two	4.07	6.13*	−2.07	2.90	6.75*	−3.85
Year Three	6.09*	9.79*	−3.69	4.86	8.26*	−3.39
Overall	5.05*	8.56*	−3.51	3.81	7.69*	−3.88
Imaging expenditures						
Year One	−0.77	0.70	−1.47	−0.58	0.37	−0.95
Year Two	−3.67*	−2.03	−1.64	−3.45*	−1.75*	−1.70
Year Three	−3.72*	−2.87*	−0.85	−3.47*	−2.34*	−1.13
Overall	−2.65	−1.54	−1.11	−2.43*	−1.19	−1.24
Other facility expenditures						
Year One	0.06	−0.07	0.13	0.05	0.10	−0.05
Year Two	0.06	−0.05	0.11	0.05	0.01	0.04
Year Three	0.05	−0.06	0.12	0.06	0.00	0.05
Overall	0.06	−0.06	0.12	0.05	0.04	0.02

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-11 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I5-11
North Carolina: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	170.03*	160.10*	9.93	169.81*	169.39*	0.42
Year Two	163.37*	160.09*	3.28	164.56*	157.55*	7.01
Year Three	164.78*	162.34*	2.43	165.51*	146.53*	18.98*
Overall	166.65*	160.67*	5.98	167.22*	157.76*	9.46*
ER visits not leading to hospitalization						
Year One	283.50*	267.93*	15.57	281.83*	275.35*	6.48
Year Two	281.85*	267.29*	14.55	279.25*	271.79*	7.46
Year Three	275.61*	263.32*	12.29	272.22*	273.62*	−1.40
Overall	281.30*	265.81*	15.49	278.71*	273.87*	4.83

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-12 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I5-12
North Carolina: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	650.74*	700.62*	−49.88	618.46*	582.75*	35.71
Year Two	632.72*	646.75*	−14.03	598.13*	610.83*	−12.69
Year Three	663.98*	684.84*	−20.87	629.26*	598.82*	30.44
Overall	651.18*	672.23*	−21.05	617.30*	591.63*	25.68
Acute-care expenditures						
Year One	205.09*	238.59*	−33.50	194.47*	179.99*	14.48
Year Two	195.02*	210.01*	−14.99	183.84*	194.30*	−10.46
Year Three	201.52*	252.88*	−51.36	190.07*	186.71*	3.37
Overall	199.73*	231.31*	−31.58	188.68*	182.16*	6.52
Expenditures for ER visits not leading to hospitalization						
Year One	33.30*	36.87*	−3.56	34.06*	34.85*	−0.79
Year Two	32.94*	37.13*	−4.18	33.69*	33.95*	−0.26
Year Three	40.59*	42.76*	−2.17	41.33*	39.53*	1.80
Overall	35.72*	38.91*	−3.19	36.46*	35.99*	0.47
Total for principal diagnosis of a BH condition						
Year One	10.74*	21.89*	−11.15	8.70*	20.10*	−11.40*
Year Two	10.57*	24.16*	−13.58*	8.52*	16.65*	−8.13*
Year Three	20.39*	34.42*	−14.03*	18.75*	22.84*	−4.09
Overall	14.41*	26.60*	−12.18*	12.52*	20.29*	−7.77*
Total for secondary diagnosis of a BH condition						
Year One	216.32*	239.00*	−22.68	204.65*	210.11*	−5.46
Year Two	210.53*	233.82*	−23.29	198.49*	219.82*	−21.34
Year Three	229.75*	255.91*	−26.16	217.83*	208.94*	8.89
Overall	218.82*	242.45*	−23.62	206.97*	210.59*	−3.62

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I5-13 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I5-13
North Carolina: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	94.13*	92.91*	1.22	94.89*	98.03*	−3.14
Year Two	97.30*	90.57*	6.73	98.75*	91.87*	6.88
Year Three	98.09*	99.83*	−1.74	99.62*	90.29*	9.33
Overall	96.82*	94.11*	2.71	98.07*	92.15*	5.92
ER visits not leading to hospitalization						
Year One	313.24*	294.47*	18.77	315.87*	306.83*	9.04
Year Two	292.96*	295.76*	−2.80	295.47*	307.57*	−12.09
Year Three	292.85*	311.30*	−18.45	295.05*	300.79*	−5.75
Overall	299.26*	300.63*	−1.37	301.58*	303.69*	−2.11
BH inpatient admissions						
Year One	4.75*	7.94*	−3.19	5.31*	8.57*	−3.27*
Year Two	3.01*	7.79*	−4.78*	3.41*	7.45*	−4.04*
Year Three	4.39*	8.14*	−3.75	4.95*	8.11*	−3.16*
Overall	4.18*	7.74*	−3.56*	4.70*	8.00*	−3.30*
BH ER visits						
Year One	16.65*	19.02*	−2.37	19.30*	23.02*	−3.71
Year Two	17.55*	21.62*	−4.07	20.07*	22.00*	−1.93
Year Three	17.94*	22.32*	−4.38	20.62*	20.59*	0.03
Overall	17.24*	20.48*	−3.24	19.81*	21.75*	−1.94
BH outpatient visits						
Year One	129.25*	100.35*	28.89	140.14*	115.95*	24.19
Year Two	121.15*	99.78*	21.37	133.67*	103.00*	30.68
Year Three	131.90*	103.87*	28.03	143.82*	141.89*	1.93
Overall	126.00*	99.36*	26.64	137.95*	117.07*	20.87

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.6 Decompositions of the Minnesota Estimates

Table I6-1 presents a decomposition of the estimates of the changes associated with the Minnesota MAPCP Demonstration for process of care indicators.

Table I6-1
Minnesota: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference
	MAPCP	Non-PCMHs CG	
HbA1c testing			
Year One	94.72*	94.41*	0.31
Year Two	94.46*	93.76*	0.70
Year Three	93.48*	95.24*	−1.77*
Overall	94.52*	94.31*	0.22
Retinal eye examination			
Year One	59.14*	54.70*	4.43*
Year Two	59.09*	56.67*	2.42*
Year Three	59.25*	59.50*	−0.25
Overall	59.13*	55.73*	3.40*
LDL-C screening			
Year One	88.71*	88.83*	−0.12
Year Two	88.78*	87.99*	0.79
Year Three	86.59*	88.77*	−2.18
Overall	88.52*	88.58*	−0.06
Medical attention for nephropathy			
Year One	78.57*	77.06*	1.50
Year Two	80.83*	79.46*	1.37
Year Three	79.24*	81.26*	−2.02
Overall	79.28*	78.16*	1.12
Received all 4 diabetes tests			
Year One	44.02*	39.97*	4.05
Year Two	45.01*	42.89*	2.13
Year Three	43.50*	43.96*	−0.46
Overall	44.25*	41.19*	3.06
Received none of the 4 diabetes tests			
Year One	1.77*	1.32*	0.45*
Year Two	1.70*	2.06*	−0.35
Year Three	1.95*	0.67*	1.28*
Overall	1.77*	1.47*	0.30

(continued)

Table I6-1 (continued)
Minnesota: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference
	MAPCP	Non-PCMHs CG	
Total lipid panel			
Year One	68.93*	70.82*	−1.89
Year Two	66.06*	68.71*	−2.65
Year Three	63.55*	65.46*	−1.90
Overall	67.59*	69.70*	−2.11*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-2 presents a decomposition of the estimates of the changes associated with the Minnesota MAPCP Demonstration for selected health outcomes.

Table I6-2
Minnesota: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference
	MAPCP	Non-PCMHs CG	
Avoidable catastrophic events			
Year One	7.39*	6.84*	0.55
Year Two	8.08*	8.02*	0.06
Year Three	9.46*	9.25*	0.21
Overall	8.62*	8.39*	0.23
PQI admissions—overall			
Year One	9.58*	9.96*	−0.38
Year Two	10.23*	10.27*	−0.04
Year Three	10.02*	9.27*	0.74
Overall	10.00*	9.72*	0.27
PQI admissions—acute			
Year One	4.28*	4.32*	−0.04
Year Two	4.23*	4.30*	−0.07
Year Three	3.96*	3.74*	0.22
Overall	4.11*	4.03*	0.08
PQI admissions—chronic			
Year One	5.11*	5.40*	−0.28
Year Two	5.79*	5.78*	0.02
Year Three	5.74*	5.15*	0.59
Overall	5.63*	5.40*	0.24

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I6-3 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for access to care and coordination of care.

Table I6-3
Minnesota: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference
	MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	1,018.68*	982.01*	36.67
Year Two	1,065.82*	1,052.59*	13.23
Year Three	1,105.69*	1,074.69*	31.01
Overall	1,076.04*	1,049.48*	26.56
Medical specialist visits (per 1,000 beneficiaries)			
Year One	471.32*	484.14*	−12.83
Year Two	534.07*	525.75*	8.32
Year Three	531.29*	530.67*	0.62
Overall	520.32*	519.94*	0.38
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	104.81*	113.60*	−8.79
Year Two	106.10*	112.07*	−5.97
Year Three	104.60*	110.54*	−5.94
Overall	105.11*	111.62*	−6.51
Primary care visits as a percent of total visits			
Year One			
1st quintile	18.28*	19.37*	−1.09
5th quintile	21.35*	20.18*	1.17
Year Two			
1st quintile	19.31*	20.90*	−1.59
5th quintile	20.24*	18.69*	1.55
Year Three			
1st quintile	19.94*	19.14*	0.80
5th quintile	19.61*	20.42*	−0.82
Overall			
1st quintile	18.78*	19.77*	−0.99
5th quintile	20.81*	19.79*	1.02
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)			
Year 1	758.52*	745.45*	13.07
Year 2	769.60*	769.11*	0.49
Year 3	761.36*	791.05*	−29.69
Overall	763.71*	771.73*	−8.03
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	166.63*	198.78*	−32.15*
Year Two	167.97*	182.92*	−14.95
Year Three	173.81*	188.60*	−14.79
Overall	170.01*	188.94*	−18.93

(continued)

Table I6-3 (continued)
Minnesota: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference
	MAPCP	Non-PCMHs CG	
COC Index (higher quintile = better care coordination)			
Year One			
1st quintile	18.73*	18.92*	−0.19
5th quintile	21.11*	20.90*	0.21
Year Two			
1st quintile	18.83*	20.47*	−1.64
5th quintile	21.00*	19.33*	1.67
Year Three			
1st quintile	20.63*	21.63*	−1.00
5th quintile	19.18*	18.27*	0.91
Overall			
1st quintile	19.02*	19.76*	−0.74
5th quintile	20.81*	20.07*	0.74

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-4 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for expenditures.

Table I6-4
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Total Medicare expenditures			
Year One	465.94*	420.89*	45.05*
Year Two	496.50*	469.53*	26.97
Year Three	529.52*	495.38*	34.14*
Overall	506.64*	472.59*	34.05*
Acute-care expenditures			
Year One	158.83*	143.55*	15.28
Year Two	172.24*	163.87*	8.37
Year Three	181.44*	167.47*	13.97
Overall	174.10*	161.62*	12.48
Post-acute-care expenditures			
Year One	70.53*	65.18*	5.35
Year Two	76.98*	76.66*	0.32
Year Three	82.36*	74.10*	8.26*
Overall	78.34*	73.14*	5.20
ER expenditures			
Year One	18.92*	16.04*	2.88*
Year Two	20.35*	17.15*	3.19*
Year Three	25.58*	21.81*	3.77*
Overall	22.63*	19.22*	3.41*
Outpatient expenditures			
Year One	73.46*	52.72*	20.73*
Year Two	81.12*	59.93*	21.19*
Year Three	84.23*	82.54*	1.68
Overall	81.13*	69.58*	11.55
Specialty physician expenditures			
Year One	33.68*	42.94*	−9.26*
Year Two	34.33*	46.03*	−11.70*
Year Three	38.95*	44.83*	−5.88
Overall	36.46*	44.84*	−8.37*
Primary care physician expenditures			
Year One	28.67*	28.55*	0.12
Year Two	28.93*	30.92*	−1.99
Year Three	32.73*	33.68*	−0.95
Overall	30.74*	31.81*	−1.07
Home health expenditures			
Year One	22.91*	19.61*	3.30*
Year Two	24.97*	22.22*	2.75
Year Three	26.89*	21.62*	5.28*
Overall	25.51*	21.41*	4.10*

(continued)

Table I6-4 (continued)
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Other expenditures			
Year One	13.34*	12.38*	0.96
Year Two	14.19*	13.94*	0.25
Year Three	17.04*	16.09*	0.95
Overall	15.41*	14.68*	0.73
Laboratory expenditures			
Year One	3.60*	2.88*	0.72
Year Two	1.73*	2.28*	−0.55
Year Three	1.69*	2.28*	−0.59
Overall	2.08*	2.40*	−0.32
Imaging expenditures			
Year One	0.54	0.92	−0.38
Year Two	−0.47	0.49	−0.97
Year Three	0.03	0.83	−0.80
Overall	−0.03	0.74	−0.77
Other facility expenditures			
Year One	−0.82	−0.64	−0.18
Year Two	−0.92	−0.37	−0.55
Year Three	−0.93	−1.03	0.10
Overall	−0.90	−0.74	−0.16

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-5 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for utilization.

Table I6-5
Minnesota: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMHs CG	
All-cause admissions			
Year One	69.92*	68.64*	1.28
Year Two	69.72*	69.26*	0.46
Year Three	69.86*	68.66*	1.20
Overall	69.83*	68.84*	0.98
ER visits not leading to hospitalization			
Year One	121.11*	116.09*	5.02
Year Two	119.33*	110.86*	8.46*
Year Three	122.59*	116.56*	6.04
Overall	121.28*	114.68*	6.60

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-6 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for total Medicare expenditures for special populations.

Table I6-6
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Multiple chronic conditions only			
Year One	1,024.81*	818.04*	206.77*
Year Two	1,053.59*	1,034.18*	19.41
Year Three	1,108.20*	782.68*	325.51*
Overall	1,072.11*	874.36*	197.75*
BH conditions only			
Year One	602.28*	561.73*	40.55
Year Two	618.17*	621.60*	−3.43
Year Three	694.75*	513.78*	180.97*
Overall	649.07*	560.59*	88.48*
Disabled beneficiaries only			
Year One	467.99*	428.60*	39.39
Year Two	485.66*	477.47*	8.19
Year Three	533.27*	472.02*	61.25
Overall	505.44*	465.52*	39.93
Dually eligible beneficiaries only			
Year One	457.81*	449.81*	8.00
Year Two	473.00*	486.22*	−13.22
Year Three	524.67*	494.74*	29.93
Overall	494.93*	483.32*	11.61
Rural beneficiaries only			
Year One	465.68*	366.69*	99.00*
Year Two	490.50*	475.27*	15.24
Year Three	551.34*	499.86*	51.47
Overall	516.00*	467.15*	48.85
Non-White beneficiaries only			
Year One	461.10*	406.61*	54.49
Year Two	487.83*	457.12*	30.71
Year Three	549.16*	499.06*	50.09
Overall	512.06*	467.55*	44.50

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-7 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I6-7
Minnesota: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference
	MAPCP	Non-PCMHs CG	
HbA1c testing			
Year One	92.43*	91.15*	1.29
Year Two	92.33*	90.17*	2.15
Year Three	90.18*	92.34*	−2.16
Overall	92.20*	90.98*	1.21
Retinal eye examination			
Year One	58.68*	53.69*	4.98
Year Two	59.49*	57.51*	1.98
Year Three	60.24*	61.93*	−1.69
Overall	59.05*	55.51*	3.54
LDL-C screening			
Year One	84.85*	84.08*	0.77
Year Two	85.32*	83.20*	2.13
Year Three	81.07*	79.45*	1.62
Overall	84.63*	83.41*	1.23
Medical attention for nephropathy			
Year One	83.35*	81.92*	1.43
Year Two	85.67*	83.67*	2.00
Year Three	84.14*	87.40*	−3.26
Overall	84.06*	82.91*	1.16
Received all 4 diabetes tests			
Year One	42.63*	37.95*	4.68
Year Two	44.03*	42.92*	1.12
Year Three	44.49*	44.01*	0.48
Overall	43.19*	39.89*	3.31
Received none of the 4 diabetes tests			
Year One	1.44*	1.24*	0.19
Year Two	1.22*	1.91*	−0.69
Year Three	1.95*	0.90*	1.05*
Overall	1.42*	1.39*	0.03

(continued)

Table I6-7 (continued)
Minnesota: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference
	MAPCP	Non-PCMHs CG	
Total lipid panel			
Year One	63.50*	65.35*	−1.84
Year Two	60.78*	62.79*	−2.02
Year Three	56.81*	58.95*	−2.14
Overall	62.21*	64.12*	−1.91

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-8 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I6-8
Minnesota: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference
	MAPCP	Non-PCMHs CG	
Avoidable catastrophic events			
Year One	18.42*	16.29*	2.13
Year Two	19.70*	20.40*	−0.69
Year Three	23.74*	21.09*	2.66
Overall	21.25*	19.83*	1.42
PQI admissions—overall			
Year One	30.95*	28.63*	2.31
Year Two	32.83*	32.29*	0.54
Year Three	31.85*	24.80*	7.04*
Overall	31.98*	28.13*	3.86*
PQI admissions—acute			
Year One	11.79*	10.04*	1.75
Year Two	11.90*	10.86*	1.04
Year Three	10.29*	7.92*	2.37*
Overall	11.15*	9.36*	1.79*
PQI admissions—chronic			
Year One	18.16*	17.81*	0.35
Year Two	19.98*	20.66*	−0.68
Year Three	20.28*	16.05*	4.23*
Overall	19.73*	17.97*	1.76

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I6-9 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I6-9
Minnesota: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference
	MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	1,551.32*	1,321.60*	229.72*
Year Two	1,577.98*	1,506.80*	71.18
Year Three	1,654.37*	1,457.56*	196.82*
Overall	1,606.80*	1,444.98*	161.82*
Medical specialist visits (per 1,000 beneficiaries)			
Year One	822.42*	726.01*	96.42*
Year Two	873.27*	807.86*	65.41*
Year Three	877.03*	783.26*	93.77*
Overall	864.10*	779.26*	84.85*
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	150.89*	140.70*	10.19
Year Two	150.64*	146.93*	3.71
Year Three	142.23*	145.24*	−3.01
Overall	146.89*	144.84*	2.06
Primary care visits as a percent of total visits			
Year One			
1st quintile	20.31*	23.22*	−2.92*
5th quintile	19.41*	16.86*	2.54*
Year Two			
1st quintile	20.44*	21.54*	−1.10
5th quintile	19.28*	18.27*	1.01
Year Three			
1st quintile	20.66*	19.57*	1.10
5th quintile	19.07*	20.14*	−1.08
Overall			
1st quintile	20.39*	22.26*	−1.87
5th quintile	19.33*	17.70*	1.63
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)			
Year One	826.71*	781.91*	44.80
Year Two	828.10*	798.57*	29.53
Year Three	805.42*	786.17*	19.25
Overall	819.20*	789.73*	29.47

(continued)

Table I6-9 (continued)
Minnesota: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference
	MAPCP	Non-PCMHs CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	229.31*	259.10*	−29.79*
Year Two	231.64*	237.38*	−5.73
Year Three	236.22*	233.71*	2.51
Overall	232.82*	241.29*	−8.47
COC Index (higher quintile = better care coordination)			
Year One			
1st quintile	18.50*	18.84*	−0.34
5th quintile	20.96*	20.59*	0.36
Year Two			
1st quintile	18.45*	18.89*	−0.44
5th quintile	21.01*	20.53*	0.48
Year Three			
1st quintile	20.11*	20.27*	−0.17
5th quintile	19.30*	19.14*	0.16
Overall			
1st quintile	18.70*	19.05*	−0.34
5th quintile	20.75*	20.38*	0.37

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-10 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I6-10
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Total Medicare expenditures			
Year One	1,024.81*	818.04*	206.77*
Year Two	1,053.59*	1,034.18*	19.41
Year Three	1,108.20*	782.68*	325.51*
Overall	1,072.11*	874.36*	197.75*
Acute-care expenditures			
Year One	363.77*	279.59*	84.18*
Year Two	397.92*	389.96*	7.95
Year Three	405.35*	290.47*	114.88*
Overall	393.98*	321.43*	72.56*
Post-acute-care expenditures			
Year One	164.19*	129.69*	34.50
Year Two	164.97*	167.75*	−2.78
Year Three	179.70*	124.79*	54.92*
Overall	171.46*	140.21*	31.25
ER expenditures			
Year One	36.43*	24.80*	11.63*
Year Two	37.41*	34.00*	3.41
Year Three	49.43*	31.50*	17.93*
Overall	42.63*	30.90*	11.73*
Outpatient expenditures			
Year One	158.08*	112.47*	45.61*
Year Two	162.18*	132.16*	30.01
Year Three	168.12*	130.73*	37.39*
Overall	163.99*	127.31*	36.68*
Specialty physician expenditures			
Year One	59.25*	73.40*	−14.14
Year Two	54.90*	82.35*	−27.45*
Year Three	59.77*	43.42*	16.35*
Overall	58.03*	62.85*	−4.82
Primary care physician expenditures			
Year One	51.40*	45.64*	5.76
Year Two	51.72*	57.74*	−6.03
Year Three	58.04*	54.05*	3.99
Overall	54.51*	53.49*	1.02

(continued)

Table I6-10 (continued)
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Home health expenditures			
Year One	58.27*	38.62*	19.65*
Year Two	58.46*	48.70*	9.76
Year Three	62.86*	35.00*	27.86*
Overall	60.41*	40.36*	20.05*
Other expenditures			
Year One	22.11*	19.58*	2.53
Year Two	24.30*	24.64*	−0.34
Year Three	27.02*	19.21*	7.81*
Overall	25.06*	21.11*	3.96*
Laboratory expenditures			
Year One	4.96*	1.41*	3.55*
Year Two	1.97*	1.88*	0.09
Year Three	2.14*	0.64	1.50
Overall	2.68*	1.22*	1.47*
Imaging expenditures			
Year One	1.72*	−0.05	1.77
Year Two	−0.71	0.90	−1.60
Year Three	−0.01	1.22	−1.24
Overall	0.13	0.84	−0.72
Other facility expenditures			
Year One	−1.82	−1.42	−0.40
Year Two	−2.24	−0.04	−2.20
Year Three	−2.50	−3.39	0.89
Overall	−2.27	−1.85	−0.42

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-11 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I6-11
Minnesota: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMHs CG	
All-cause admissions			
Year One	167.55*	148.23*	19.32*
Year Two	166.94*	166.48*	0.46
Year Three	166.79*	136.81*	29.98*
Overall	167.00*	149.17*	17.83*
ER visits not leading to hospitalization			
Year One	229.05*	204.06*	24.98*
Year Two	221.85*	213.80*	8.05
Year Three	228.03*	195.90*	32.13*
Overall	226.18*	203.63*	22.55*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-12 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I6-12
Minnesota: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMHs CG	
Total Medicare expenditures			
Year One	602.28*	561.73*	40.55
Year Two	618.17*	621.60*	−3.43
Year Three	694.75*	513.78*	180.97*
Overall	649.07*	560.59*	88.48*
Acute-care expenditures			
Year One	223.87*	213.83*	10.04
Year Two	227.35*	243.37*	−16.02
Year Three	251.49*	205.80*	45.68
Overall	237.41*	220.27*	17.15
Expenditures for ER visits not leading to hospitalization			
Year One	29.16*	27.01*	2.15
Year Two	30.35*	28.86*	1.49
Year Three	42.16*	30.70*	11.46*
Overall	35.38*	29.29*	6.09*
Total for principal diagnosis of a BH condition			
Year One	29.09*	13.72*	15.37*
Year Two	35.72*	18.35*	17.37*
Year Three	40.65*	30.02*	10.63
Overall	36.52*	22.59*	13.93*
Total for secondary diagnosis of a BH condition			
Year One	245.27*	206.39*	38.88*
Year Two	259.64*	241.17*	18.46
Year Three	292.37*	240.58*	51.78
Overall	271.23*	233.51*	37.72*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I6-13 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I6-13
Minnesota: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMHs CG	
All-cause inpatient admissions			
Year One	96.71*	102.90*	−6.19
Year Two	94.93*	102.08*	−7.15
Year Three	98.69*	92.45*	6.25
Overall	96.99*	97.94*	−0.95
ER visits not leading to hospitalization			
Year One	253.90*	260.83*	−6.93
Year Two	250.75*	246.89*	3.86
Year Three	265.69*	241.62*	24.07*
Overall	258.11*	247.50*	10.61
BH inpatient admissions			
Year One	11.21*	8.87*	2.34
Year Two	10.39*	7.90*	2.49*
Year Three	9.49*	9.33*	0.16
Overall	10.16*	8.74*	1.42
BH ER visits			
Year One	21.10*	18.72*	2.38
Year Two	20.79*	17.71*	3.07
Year Three	21.19*	14.28*	6.91*
Overall	21.03*	16.39*	4.64*
BH outpatient visits			
Year One	115.07*	113.15*	1.92
Year Two	155.78*	103.75*	52.03*
Year Three	152.78*	101.81*	50.96
Overall	145.77*	104.88*	40.89

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.7 Decompositions of the Maine Estimates

Table I7-1 presents a decomposition of the estimates of the changes associated with the Maine MAPCP Demonstration for process of care indicators.

Table I7-1
Maine: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	92.32*	92.38*	−0.06	91.25*	89.45*	1.81
Year Two	91.99*	94.03*	−2.04	91.22*	91.69*	−0.46
Year Three	91.47*	96.48*	−5.01*	91.17*	91.39*	−0.22
Overall	92.09*	93.49*	−1.39*	91.23*	90.50*	0.73
Retinal eye examination						
Year One	65.74*	63.01*	2.73	67.05*	66.49*	0.57
Year Two	66.42*	71.21*	−4.79*	67.48*	66.75*	0.74
Year Three	66.13*	68.92*	−2.79	66.98*	66.19*	0.79
Overall	66.03*	66.71*	−0.68	67.20*	66.54*	0.66
LDL-C screening						
Year One	85.01*	84.66*	0.35	83.81*	82.85*	0.96
Year Two	83.12*	84.77*	−1.65	82.15*	82.42*	−0.27
Year Three	80.61*	89.30*	−8.68*	80.04*	82.07*	−2.03
Overall	83.78*	85.28*	−1.50	82.74*	82.60*	0.14
Medical attention for nephropathy						
Year One	75.35*	74.36*	1.00	74.03*	73.59*	0.44
Year Two	74.95*	74.02*	0.93	74.27*	76.87*	−2.60
Year Three	73.43*	82.93*	−9.50*	73.56*	75.37*	−1.81
Overall	74.97*	75.30*	−0.34	74.06*	75.00*	−0.94
Received all 4 diabetes tests						
Year One	45.33*	41.67*	3.65	45.06*	44.96*	0.10
Year Two	44.14*	46.26*	−2.13	44.10*	47.65*	−3.55
Year Three	42.14*	55.19*	−13.06*	42.60*	44.69*	−2.10
Overall	44.50*	45.02*	−0.52	44.40*	45.90*	−1.49
Received none of the 4 diabetes tests						
Year One	1.73*	1.65*	0.08	1.98*	2.82*	−0.84*
Year Two	1.97*	1.66*	0.31	2.12*	1.80*	0.32
Year Three	2.43*	0.66*	1.77*	2.44*	2.55*	−0.10
Overall	1.90*	1.53*	0.38	2.09*	2.42*	−0.33

(continued)

Table I7-1 (continued)
Maine: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	73.68*	71.73*	1.96	72.57*	73.59*	−1.02
Year Two	70.73*	72.47*	−1.75	69.93*	72.31*	−2.38
Year Three	67.81*	73.36*	−5.56	67.24*	71.23*	−3.99*
Overall	71.79*	72.23*	−0.44	70.86*	72.79*	−1.93

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-2 presents a decomposition of the estimates of the changes associated with the Maine MAPCP Demonstration for selected health outcomes.

Table I7-2
Maine: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	5.85*	6.01*	−0.16	5.90*	6.00*	−0.11
Year Two	7.30*	6.53*	0.77	7.35*	6.75*	0.60
Year Three	8.33*	8.65*	−0.32	8.36*	6.90*	1.46*
Overall	7.48*	7.33*	0.15	7.52*	6.68*	0.83*
PQI admissions—overall						
Year One	8.87*	7.52*	1.36	8.95*	8.51*	0.43
Year Two	9.82*	9.79*	0.03	9.86*	8.84*	1.02
Year Three	10.62*	8.85*	1.77*	10.64*	9.19*	1.46
Overall	9.99*	9.00*	0.98	10.03*	8.93*	1.10
PQI admissions—acute						
Year One	3.75*	3.50*	0.25	3.84*	3.94*	−0.10
Year Two	4.07*	4.75*	−0.68	4.15*	3.98*	0.17
Year Three	4.21*	4.69*	−0.48	4.28*	3.53*	0.74
Overall	4.08*	4.51*	−0.43	4.15*	3.78*	0.36
PQI admissions—chronic						
Year One	4.93*	3.90*	1.03	4.96*	4.33*	0.63
Year Two	5.51*	4.80*	0.71	5.51*	4.55*	0.97*
Year Three	6.15*	4.09*	2.06*	6.14*	5.29*	0.86
Overall	5.68*	4.35*	1.33*	5.68*	4.82*	0.86*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I7-3 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for access to care and coordination of care.

Table I7-3
Maine: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	575.32*	600.48*	−25.17	571.55*	548.38*	23.17
Year Two	669.43*	644.00*	25.43	665.24*	589.33*	75.92
Year Three	679.58*	653.85*	25.73	675.51*	617.15*	58.36
Overall	657.21*	640.51*	16.71	653.14*	593.78*	59.36
Medical specialist visits (per 1,000 beneficiaries)						
Year One	466.50*	507.59*	−41.09	465.57*	475.56*	−9.99
Year Two	509.23*	553.09*	−43.85*	507.98*	521.27*	−13.29
Year Three	523.53*	538.42*	−14.89	521.98*	539.04*	−17.06
Overall	507.73*	539.00*	−31.28	506.41*	520.70*	−14.29
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	117.73*	125.57*	−7.84	118.03*	113.77*	4.26
Year Two	119.46*	122.27*	−2.81	120.03*	111.37*	8.66
Year Three	126.16*	122.52*	3.64	126.75*	115.11*	11.64
Overall	121.96*	122.95*	−1.00	122.48*	113.35*	9.13
Primary care visits as a percent of total visits						
Year One						
1st quintile	19.99*	21.04*	−1.05	19.24*	20.90*	−1.66
5th quintile	14.83*	14.04*	0.80	15.70*	14.38*	1.32
Year Two						
1st quintile	19.52*	19.89*	−0.37	18.87*	20.40*	−1.53
5th quintile	15.21*	14.91*	0.30	16.03*	14.76*	1.26
Year Three						
1st quintile	19.01*	23.07*	−4.05*	18.61*	20.59*	−1.97
5th quintile	15.64*	12.67*	2.96*	16.25*	14.62*	1.63
Overall						
1st quintile	19.69*	20.86*	−1.18	19.02*	20.67*	−1.65
5th quintile	15.08*	14.20*	0.88	15.90*	14.56*	1.34

(continued)

Table I7-3 (continued)
Maine: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	798.67*	809.51*	−10.84	795.44*	757.86*	37.58
Year two	771.74*	864.17*	−92.43*	770.59*	745.28*	25.31
Year Three	756.41*	840.40*	−83.99*	755.84*	766.99*	−11.15
Overall	771.82*	845.26*	−73.44*	770.46*	755.17*	15.29
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	161.29*	219.64*	−58.36	160.68*	166.59*	−5.92
Year Two	170.69*	210.26*	−39.57	170.56*	166.75*	3.82
Year Three	177.57*	224.10*	−46.53	177.63*	165.99*	11.64
Overall	171.17*	216.85*	−45.68	171.01*	166.46*	4.55
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.69*	23.20*	−4.51*	18.08*	18.57*	−0.49
5th quintile	18.40*	14.65*	3.76*	18.44*	17.95*	0.49
Year Two						
1st quintile	20.46*	23.30*	−2.84*	19.83*	21.34*	−1.51
5th quintile	16.77*	14.58*	2.20*	16.79*	15.54*	1.25
Year Three						
1st quintile	22.88*	21.34*	1.54	22.38*	21.70*	0.68
5th quintile	14.88*	16.04*	−1.17	14.76*	15.26*	−0.50
Overall						
1st quintile	19.92*	22.99*	−3.07*	19.32*	20.03*	−0.72
5th quintile	17.32*	14.81*	2.51*	17.33*	16.69*	0.64

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-4 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for expenditures.

Table I7-4
Maine: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	435.48*	395.65*	39.83	435.15*	440.31*	−5.16
Year Two	496.11*	460.02*	36.09	495.52*	439.51*	56.00*
Year Three	526.49*	479.65*	46.84	525.54*	443.70*	81.84*
Overall	498.19*	456.96*	41.23	497.50*	441.40*	56.10*
Acute-care expenditures						
Year One	118.88*	96.72*	22.17	121.43*	132.74*	−11.31
Year Two	154.06*	122.25*	31.82*	156.36*	129.30*	27.05*
Year Three	156.10*	136.48*	19.62	157.98*	117.85*	40.13*
Overall	148.76*	123.73*	25.03*	150.93*	125.12*	25.80*
Post-acute-care expenditures						
Year One	69.76*	52.98*	16.78*	70.58*	65.18*	5.39
Year Two	75.54*	69.61*	5.93	76.16*	69.48*	6.69
Year Three	78.93*	65.09*	13.84	79.55*	66.98*	12.57*
Overall	75.94*	64.82*	11.13*	76.60*	67.68*	8.92*
ER expenditures						
Year One	22.08*	22.03*	0.05	21.20*	25.01*	−3.81
Year Two	23.86*	24.07*	−0.21	23.18*	25.29*	−2.12
Year Three	28.79*	26.90*	1.89	28.10*	27.21*	0.89
Overall	25.61*	24.89*	0.71	24.89*	26.04*	−1.16
Outpatient expenditures						
Year One	107.07*	96.80*	10.28	105.42*	99.75*	5.67
Year Two	116.51*	101.49*	15.01	115.06*	104.88*	10.18*
Year Three	125.59*	104.09*	21.51	124.41*	117.17*	7.25
Overall	118.65*	101.75*	16.90	117.28*	109.11*	8.17
Specialty physician expenditures						
Year One	30.00*	48.13*	−18.13	28.87*	29.45*	−0.58
Year Two	31.89*	47.08*	−15.19*	30.73*	26.21*	4.52
Year Three	35.41*	46.05*	−10.64	34.19*	28.18*	6.01*
Overall	33.03*	46.83*	−13.80*	31.85*	27.60*	4.25
Primary care physician expenditures						
Year One	16.33*	16.60*	−0.27	16.53*	18.28*	−1.75
Year Two	19.35*	21.78*	−2.42	19.48*	18.70*	0.77
Year Three	20.63*	25.18*	−4.56	20.76*	19.66*	1.10
Overall	19.36*	22.30*	−2.94	19.50*	19.03*	0.47

(continued)

Table I7-4 (continued)
Maine: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	22.25*	24.45*	−2.19	20.94*	20.81*	0.13
Year Two	25.69*	28.66*	−2.97	24.22*	19.80*	4.42*
Year Three	29.55*	28.68*	0.86	27.97*	19.47*	8.50*
Overall	26.70*	27.93*	−1.23	25.21*	19.84*	5.37*
Other expenditures						
Year One	16.60*	15.48*	1.12	15.31*	16.06*	−0.75
Year Two	18.76*	18.69*	0.07	17.54*	18.01*	−0.46
Year Three	22.86*	20.92*	1.94*	21.65*	20.23*	1.41
Overall	20.10*	19.06*	1.03	18.87*	18.60*	0.27
Laboratory expenditures						
Year One	3.48*	3.45*	0.03	3.63*	2.83*	0.80
Year Two	2.80*	3.64*	−0.85	2.96*	2.56*	0.40
Year Three	3.10*	3.81*	−0.71	3.25*	3.03*	0.21
Overall	3.04*	3.68*	−0.64	3.20*	2.81*	0.39
Imaging expenditures						
Year One	−2.57*	−1.67*	−0.90	−2.15*	−2.25*	0.10
Year Two	−3.12*	−2.55*	−0.57	−2.72*	−2.41*	−0.30
Year Three	−3.16*	−2.30*	−0.86	−2.77*	−2.43*	−0.33
Overall	−3.04*	−2.29*	−0.75	−2.64*	−2.39*	−0.25
Other facility expenditures						
Year One	−0.09	0.05	−0.14	−0.02	−0.08	0.07
Year Two	−0.09*	0.01	−0.10	−0.04	−0.15	0.12
Year Three	−0.10*	0.02	−0.13	−0.06	−0.04	−0.02
Overall	−0.09*	0.02	−0.12	−0.04	−0.09	0.05

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-5 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for utilization.

Table I7-5
Maine: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	58.06*	54.72*	3.34	58.55*	57.89*	0.66
Year Two	63.08*	61.46*	1.62	63.50*	57.93*	5.57*
Year Three	64.98*	63.78*	1.20	65.28*	57.74*	7.55*
Overall	62.99*	61.25*	1.74	63.38*	57.84*	5.54*
ER visits not leading to hospitalization						
Year One	163.32*	167.11*	−3.80	163.44*	177.52*	−14.08*
Year Two	160.75*	171.89*	−11.14	161.51*	177.64*	−16.13*
Year Three	164.50*	174.94*	−10.44	165.39*	167.50*	−2.11
Overall	162.76*	172.33*	−9.56	163.47*	173.38*	−9.92

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-6 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for total Medicare expenditures for special populations.

Table I7-6
Maine: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	874.82*	704.02*	170.80*	907.54*	1,002.69*	−95.16
Year Two	1,012.85*	851.59*	161.26	1,044.19*	919.16*	125.03*
Year Three	1,031.93*	915.22*	116.71*	1,060.91*	813.00*	247.91*
Overall	993.77*	847.91*	145.85*	1,024.46*	894.11*	130.35*
BH conditions only						
Year One	489.30*	388.55*	100.75	469.17*	507.57*	−38.40
Year Two	524.53*	502.72*	21.81	505.80*	476.76*	29.04
Year Three	544.17*	554.21*	−10.04	526.23*	396.93*	129.30*
Overall	525.57*	501.24*	24.33	506.88*	450.90*	55.98
Disabled beneficiaries only						
Year One	395.89*	332.17*	63.72*	401.50*	441.41*	−39.92
Year Two	450.93*	447.05*	3.87	455.83*	424.74*	31.09
Year Three	488.90*	528.66*	−39.76	493.24*	409.63*	83.61*
Overall	457.17*	461.06*	−3.89	461.96*	421.34*	40.62
Dually eligible beneficiaries only						
Year One	445.32*	369.29*	76.03*	461.02*	484.68*	−23.66
Year Two	512.11*	431.99*	80.12	527.61*	462.60*	65.01*
Year Three	538.19*	542.22*	−4.02	553.09*	442.82*	110.27*
Overall	511.09*	466.40*	44.69	526.37*	458.33*	68.04*
Rural beneficiaries only						
Year One	423.33*	324.57*	98.77*	424.78*	477.72*	−52.94
Year Two	493.77*	397.03*	96.74*	495.55*	471.75*	23.80
Year Three	520.17*	397.37*	122.80*	522.25*	414.85*	107.40*
Overall	496.12*	387.61*	108.51*	497.99*	447.42*	50.57
Non-White beneficiaries only						
Year One	217.93	207.93	10.00	457.74*	489.00*	−31.26
Year Two	291.61	294.44	−2.83	527.48*	412.94*	114.54
Year Three	375.01*	238.68	136.33	607.70*	434.86*	172.84*
Overall	318.32	255.83	62.49	553.35*	434.54*	118.80*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-7 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I7-7
Maine: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	90.61*	86.19*	4.42	89.30*	85.86*	3.44*
Year Two	90.42*	84.39*	6.03	89.35*	86.99*	2.36
Year Three	89.56*	92.90*	−3.34*	88.74*	87.19*	1.54
Overall	90.42*	86.33*	4.08	89.25*	86.42*	2.83
Retinal eye examination						
Year One	66.71*	60.28*	6.43*	66.82*	64.41*	2.41
Year Two	67.05*	67.73*	−0.68	67.26*	67.48*	−0.22
Year Three	67.41*	80.47*	−13.06*	67.78*	63.51*	4.28
Overall	66.91*	65.31*	1.60	67.09*	65.40*	1.69
LDL-C screening						
Year One	83.72*	73.91*	9.81*	80.73*	79.09*	1.63
Year Two	80.52*	66.92*	13.59	77.78*	75.34*	2.45
Year Three	77.11*	82.90*	−5.80*	75.07*	77.04*	−1.97
Overall	81.80*	72.48*	9.33*	79.01*	77.51*	1.50
Medical attention for nephropathy						
Year One	78.50*	81.51*	−3.01	78.50*	77.28*	1.22
Year Two	78.44*	77.07*	1.37	78.72*	81.03*	−2.31
Year Three	75.58*	86.43*	−10.84*	76.23*	77.44*	−1.21
Overall	78.13*	80.50*	−2.37	78.31*	78.64*	−0.33
Received all 4 diabetes tests						
Year One	46.36*	41.18*	5.18	45.68*	43.77*	1.91
Year Two	45.20*	39.12*	6.08	44.72*	46.52*	−1.80
Year Three	43.67*	68.51*	−24.84*	43.81*	38.09*	5.72
Overall	45.63*	43.66*	1.97	45.12*	44.08*	1.03
Received none of the 4 diabetes tests						
Year One	1.58*	2.46*	−0.88	1.95*	3.71*	−1.76*
Year Two	2.00*	6.25	−4.25	2.31*	2.61*	−0.30
Year Three	3.13*	1.42	1.71	3.29*	2.79*	0.50
Overall	1.91*	3.69*	−1.78	2.23*	3.21*	−0.98

(continued)

Table I7-7 (continued)
Maine: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	69.08*	64.54*	4.53	67.62*	68.17*	−0.55
Year Two	66.86*	61.93*	4.92	65.79*	68.41*	−2.62
Year Three	64.50*	66.40*	−1.89	63.66*	68.79*	−5.13*
Overall	67.73*	63.84*	3.90	66.49*	68.33*	−1.84

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-8 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I7-8
Maine: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	15.66*	13.36*	2.30	15.77*	16.09*	−0.32
Year Two	19.44*	14.81*	4.63	19.62*	16.95*	2.67*
Year Three	21.03*	18.34*	2.69	21.15*	16.24*	4.91*
Overall	19.33*	15.90*	3.43	19.47*	16.51*	2.96*
PQI admissions—overall						
Year One	31.86*	23.06*	8.80*	32.48*	29.48*	3.00
Year Two	33.69*	29.62*	4.06	34.02*	27.68*	6.34*
Year Three	35.44*	28.81*	6.63	35.52*	27.61*	7.90*
Overall	34.02*	28.05*	5.97	34.30*	28.00*	6.30*
PQI admissions—acute						
Year One	11.70*	9.20*	2.50	12.29*	11.91*	0.38
Year Two	12.53*	14.28*	−1.75	12.91*	10.78*	2.13
Year Three	12.92*	16.76*	−3.84	13.20*	10.19*	3.01
Overall	12.52*	14.27*	−1.75	12.91*	10.77*	2.13
PQI admissions—chronic						
Year One	19.48*	13.24*	6.25*	19.57*	16.63*	2.94
Year Two	20.32*	14.74*	5.58	20.31*	15.95*	4.36*
Year Three	21.68*	12.39*	9.29*	21.52*	16.58*	4.94
Overall	20.68*	13.54*	7.14*	20.64*	16.32*	4.31*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I7-9 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I7-9
Maine: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	840.53*	921.93*	−81.41	835.09*	806.26*	28.83
Year Two	967.29*	984.92*	−17.63	958.51*	838.38*	120.12
Year Three	959.13*	910.93*	48.19	950.75*	826.99*	123.76
Overall	939.83*	944.22*	−4.39	931.84*	827.82*	104.03
Medical specialist visits (per 1,000 beneficiaries)						
Year One	777.06*	790.80*	−13.74	776.82*	760.36*	16.46
Year Two	815.77*	899.39*	−83.62	812.80*	794.85*	17.95
Year Three	802.21*	830.65*	−28.44	797.52*	762.37*	35.15
Overall	803.10*	851.98*	−48.88	799.99*	775.67*	24.32
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	163.51*	172.98*	−9.47	163.49*	159.13*	4.36
Year Two	164.46*	171.74*	−7.28	164.90*	146.99*	17.92
Year Three	160.69*	183.68*	−22.99	161.64*	147.88*	13.76
Overall	162.82*	176.60*	−13.78	163.37*	149.66*	13.71
Primary care visits as a percent of total visits						
Year One						
1st quintile	18.90*	19.47*	−0.57	18.05*	19.16*	−1.12
5th quintile	13.54*	13.12*	0.42	14.49*	13.60*	0.89
Year Two						
1st quintile	17.70*	18.06*	−0.36	16.96*	17.84*	−0.88
5th quintile	14.51*	14.21*	0.30	15.45*	14.66*	0.78
Year Three						
1st quintile	16.52*	18.69*	−2.17	15.99*	17.68*	−1.70
5th quintile	15.57*	13.71*	1.87	16.40*	14.80*	1.60
Overall						
1st quintile	18.17*	18.85*	−0.68	17.40*	18.49*	−1.10
5th quintile	14.15*	13.59*	0.55	15.08*	14.14*	0.93

(continued)

Table I7-9 (continued)
Maine: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	853.97*	901.71*	−47.73	853.17*	827.92*	25.25
Year Two	810.04*	956.91*	−146.87*	807.98*	768.29*	39.69
Year Three	793.22*	826.80*	−33.58	791.23*	769.52*	21.71
Overall	814.18*	904.29*	−90.11	812.41*	781.46*	30.96
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	202.96*	254.34*	−51.38	205.01*	216.12*	−11.12
Year Two	225.69*	228.83*	−3.14	226.89*	201.73*	25.16
Year Three	231.22*	284.83*	−53.61	231.86*	211.48*	20.38
Overall	222.55*	252.03*	−29.49	223.75*	207.91*	15.84
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.78*	22.45*	−3.67*	18.27*	18.81*	−0.53
5th quintile	18.89*	15.68*	3.20*	19.29*	18.74*	0.54
Year Two						
1st quintile	20.23*	22.44*	−2.21	19.78*	21.68*	−1.90
5th quintile	17.51*	15.69*	1.82	17.80*	16.17*	1.63
Year Three						
1st quintile	22.37*	16.83*	5.54	22.12*	21.92*	0.20
5th quintile	15.74*	21.02*	−5.27	15.83*	15.99*	−0.16
Overall						
1st quintile	19.78*	21.73*	−1.95	19.33*	20.28*	−0.95
5th quintile	17.97*	16.36*	1.61	18.29*	17.43*	0.86

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-10 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I7-10
Maine: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

	Change in expenditure measures from baseline			Change in expenditure measures from baseline		
Outcome	MAPCP	PCMHs CG	Difference	MAPCP	Non-PCMHs CG	Difference
Total Medicare expenditures						
Year One	874.82*	704.02*	170.80*	907.54*	1,002.69*	−95.16
Year Two	1,012.85*	851.59*	161.26	1,044.19*	919.16*	125.03*
Year Three	1,031.93*	915.22*	116.71*	1,060.91*	813.00*	247.91*
Overall	993.77*	847.91*	145.85*	1024.46*	894.11*	130.35*
Acute-care expenditures						
Year One	256.46*	185.99*	70.47*	280.88*	341.10*	−60.22
Year Two	337.54*	247.13*	90.40	362.33*	298.89*	63.44
Year Three	328.74*	297.29*	31.45	352.54*	231.90*	120.64*
Overall	318.59*	254.81*	63.77*	342.93*	281.07*	61.86*
Post-acute-care expenditures						
Year One	155.59*	102.92*	52.67*	156.28*	154.36*	1.92
Year Two	178.02*	129.07*	48.95	177.61*	160.41*	17.20
Year Three	186.72*	148.77*	37.95	185.88*	166.76*	19.12
Overall	177.09*	131.68*	45.41*	176.72*	161.70*	15.01
ER expenditures						
Year One	43.04*	42.65*	0.39	43.08*	52.98*	−9.90
Year Two	47.37*	44.05*	3.32	47.68*	50.94*	−3.26
Year Three	55.83*	40.34*	15.49*	56.13*	49.78*	6.35
Overall	49.81*	42.35*	7.47	50.07*	50.88*	−0.82
Outpatient expenditures						
Year One	191.22*	166.70*	24.52*	194.38*	198.50*	−4.12
Year Two	211.34*	180.46*	30.88*	215.68*	185.42*	30.26*
Year Three	211.80*	180.72*	31.08	216.40*	169.84*	46.57*
Overall	207.66*	177.92*	29.74	211.88*	181.90*	29.97*
Specialty physician expenditures						
Year One	46.17*	61.00*	−14.84	46.14*	49.12*	−2.98
Year Two	43.16*	48.84*	−5.68	42.59*	34.80*	7.79
Year Three	45.65*	58.76*	−13.11	44.78*	27.38*	17.41*
Overall	44.70*	55.01*	−10.31	44.12*	34.67*	9.45*

(continued)

Table I7-10 (continued)
Maine: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	28.50*	25.40*	3.10	28.18*	31.86*	−3.68
Year Two	34.99*	36.18*	−1.19	34.42*	31.13*	3.29
Year Three	36.72*	40.06*	−3.34	36.18*	31.09*	5.09
Overall	34.41*	35.61*	−1.20	33.91*	31.25*	2.65
Home health expenditures						
Year One	55.68*	56.81*	−1.13	53.99*	50.42*	3.57
Year Two	60.65*	74.78*	−14.12	58.32*	47.77*	10.55*
Year Three	67.28*	75.47*	−8.18	64.44*	41.25*	23.19*
Overall	62.26*	71.60*	−9.33	59.86*	45.76*	14.10*
Other expenditures						
Year One	30.37*	19.53*	10.84*	28.67*	33.29*	−4.62
Year Two	34.24*	31.49*	2.75	32.43*	36.27*	−3.84
Year Three	39.16*	32.38*	6.78*	37.14*	38.75*	−1.61
Overall	35.40*	29.54*	5.86*	33.53*	36.66*	−3.13
Laboratory expenditures						
Year One	4.85*	4.76*	0.09	4.61*	3.29*	1.32
Year Two	4.35*	5.40*	−1.05	4.13*	3.41*	0.72
Year Three	4.00*	4.60*	−0.60	3.70*	3.23*	0.47
Overall	4.31*	4.97*	−0.66	4.06*	3.32*	0.74
Imaging expenditures						
Year One	−3.32*	−3.24*	−0.08	−2.92*	−3.13*	0.21
Year Two	−3.83*	−3.76*	−0.07	−3.50*	−4.37*	0.87
Year Three	−4.15*	−2.36	−1.79	−3.90*	−4.36*	0.46
Overall	−3.85*	−3.12*	−0.74	−3.54*	−4.13*	0.59
Other facility expenditures						
Year One	−0.31	−0.04	−0.27	−0.04	−0.71	0.68
Year Two	−0.12	−0.05	−0.07	0.06	−0.87	0.93
Year Three	−0.13	0.03	−0.16	−0.02	−0.12	0.10
Overall	−0.16	−0.01	−0.15	0.01	−0.55	0.56

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-11 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I7-11
Maine: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	139.03*	123.46*	15.56*	140.29*	141.65*	−1.35
Year Two	151.45*	141.49*	9.96	152.29*	132.44*	19.85*
Year Three	151.83*	143.43*	8.39	152.04*	127.04*	25.00*
Overall	149.22*	138.79*	10.43	149.89*	132.11*	17.78*
ER visits not leading to hospitalization						
Year One	304.22*	297.80*	6.42	303.96*	316.16*	−12.20
Year Two	294.52*	296.15*	−1.64	295.57*	310.24*	−14.67
Year Three	300.33*	261.28*	39.06*	301.46*	286.64*	14.82
Overall	298.63*	282.98*	15.65	299.45*	302.24*	−2.79

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-12 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I7-12
Maine: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	489.30*	388.55*	100.75	469.17*	507.57*	−38.40
Year Two	524.53*	502.72*	21.81	505.80*	476.76*	29.04
Year Three	544.17*	554.21*	−10.04	526.23*	396.93*	129.30*
Overall	525.57*	501.24*	24.33	506.88*	450.90*	55.98
Acute-care expenditures						
Year One	139.79*	92.34*	47.45	133.80*	169.24*	−35.44
Year Two	166.34*	133.55*	32.79	160.85*	140.36*	20.49
Year Three	160.06*	169.15*	−9.09	154.95*	74.23*	80.71*
Overall	158.72*	139.79*	18.93	153.29*	119.59*	33.70
Expenditures for ER visits not leading to hospitalization						
Year One	31.19*	32.04*	−0.85	30.23*	34.37*	−4.14
Year Two	32.89*	38.43*	−5.54	32.13*	36.13*	−4.00
Year Three	38.51*	34.16*	4.35	37.80*	29.97*	7.83*
Overall	34.80*	35.50*	−0.70	34.02*	33.34*	0.69
Total for principal diagnosis of a BH condition						
Year One	21.21*	12.34	8.87	22.38*	12.21*	10.16*
Year Two	28.45*	20.80*	7.65	29.80*	27.30*	2.50
Year Three	38.24*	42.06*	−3.82	39.73*	32.00*	7.72
Overall	30.95*	27.64*	3.31	32.32*	26.27*	6.06
Total for secondary diagnosis of BH condition						
Year One	179.63*	116.24*	63.39	178.21*	196.37*	−18.17
Year Two	190.99*	160.78*	30.21	190.36*	179.26*	11.10
Year Three	190.46*	179.48*	10.98	189.35*	126.89*	62.45*
Overall	188.59*	159.65*	28.94	187.62*	161.70*	25.92

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I7-13 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I7-13
Maine: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	71.51*	63.26*	8.24	70.47*	70.13*	0.34
Year Two	73.91*	72.28*	1.63	73.16*	70.16*	3.00
Year Three	75.18*	78.49*	−3.31	74.61*	57.85*	16.76*
Overall	73.95*	73.02*	0.94	73.22*	65.25*	7.97*
ER visits not leading to hospitalization						
Year One	315.77*	351.35*	−35.58	314.26*	337.09*	−22.83
Year Two	310.31*	370.56*	−60.25	309.99*	334.83*	−24.83
Year Three	307.64*	336.57*	−28.93	307.88*	299.64*	8.24
Overall	310.30*	353.32*	−43.03	309.97*	321.25*	−11.27
BH inpatient admissions						
Year One	5.35*	6.43*	−1.08	5.34	5.00	0.34
Year Two	6.96*	5.37*	1.59	6.97	6.06	0.91
Year Three	6.37*	8.23*	−1.86	6.40	4.90	1.50
Overall	6.41*	6.71*	−0.30	6.43	5.39	1.04
BH ER visits						
Year One	30.56*	33.11*	−2.55	29.52*	25.56*	3.96
Year Two	30.10*	40.31*	−10.21*	29.70*	29.12*	0.58
Year Three	27.97*	30.26*	−2.28	27.75*	25.10*	2.65
Overall	29.34*	34.92*	−5.58	28.89*	26.83*	2.05
BH outpatient visits						
Year One	618.49*	516.71*	101.78	627.36*	520.68*	106.68
Year Two	562.11*	517.07*	45.05	569.65*	568.20*	1.45
Year Three	556.12*	528.59*	27.53	562.21*	571.09*	−8.88
Overall	570.58*	521.59*	49.00	577.80*	560.20*	17.60

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.8 Decompositions of the Michigan Estimates

Table I8-1 presents a decomposition of the estimates of the changes associated with the Michigan MAPCP Demonstration for process of care indicators.

Table I8-1
Michigan: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	90.71*	90.46*	0.25	90.65*	89.18*	1.47*
Year Two	90.51*	90.62*	−0.12	90.49*	89.60*	0.89
Year Three	90.55*	92.25*	−1.70	90.56*	91.73*	−1.17
Overall	90.62*	90.86*	−0.25	90.58*	89.81*	0.77
Retinal eye examination						
Year One	59.28*	59.03*	0.25	59.06*	60.90*	−1.83
Year Two	60.54*	60.25*	0.29	60.36*	58.37*	1.99
Year Three	60.43*	62.57*	−2.14	60.43*	60.67*	−0.25
Overall	59.91*	60.12*	−0.20	59.75*	60.03*	−0.28
LDL-C screening						
Year One	83.82*	84.05*	−0.23	83.70*	85.73*	−2.03
Year Two	83.26*	82.21*	1.05	83.20*	85.42*	−2.22
Year Three	82.50*	82.43*	0.08	82.48*	86.55*	−4.07*
Overall	83.38*	83.13*	0.25	83.30*	85.79*	−2.49
Medical attention for nephropathy						
Year One	73.54*	74.60*	−1.06	73.53*	73.29*	0.24
Year Two	74.87*	73.11*	1.75	74.95*	76.48*	−1.53
Year Three	75.85*	77.02*	−1.17	75.95*	77.68*	−1.73
Overall	74.42*	74.58*	−0.16	74.46*	75.18*	−0.72
Received all 4 diabetes tests						
Year One	40.31*	41.35*	−1.04	40.24*	41.73*	−1.49
Year Two	41.62*	38.66*	2.96	41.58*	42.61*	−1.03
Year Three	41.51*	43.97*	−2.46	41.52*	45.68*	−4.16
Overall	40.97*	40.98*	−0.01	40.93*	42.78*	−1.86
Received none of the 4 diabetes tests						
Year One	2.61*	2.67*	−0.06	2.69*	2.70*	−0.01
Year Two	2.81*	2.42*	0.39	2.87*	3.27*	−0.40
Year Three	2.85*	2.10*	0.76*	2.89*	1.91*	0.98*
Overall	2.72*	2.48*	0.24	2.79*	2.73*	0.05

(continued)

Table I8-1 (continued)
Michigan: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	72.86*	74.37*	−1.51	72.79*	75.25*	−2.46*
Year Two	71.17*	70.59*	0.59	71.10*	73.02*	−1.92
Year Three	68.67*	72.17*	−3.50	68.67*	74.37*	−5.69*
Overall	71.39*	72.63*	−1.24	71.34*	74.32*	−2.98*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-2 presents a decomposition of the estimates of the changes associated with the Michigan MAPCP Demonstration for selected health outcomes.

Table I8-2
Michigan: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	8.02*	8.73*	−0.71	8.00*	8.35*	−0.35
Year Two	9.34*	9.94*	−0.59	9.33*	9.97*	−0.64
Year Three	10.62*	11.07*	−0.46	10.60*	9.83*	0.77
Overall	9.33*	9.91*	−0.59	9.31*	9.39*	−0.08
PQI admissions—overall						
Year One	9.61*	10.51*	−0.90	9.63*	9.49*	0.14
Year Two	10.41*	11.06*	−0.65	10.42*	10.77*	−0.34
Year Three	10.63*	10.61*	0.02	10.65*	11.12*	−0.47
Overall	10.22*	10.73*	−0.51	10.23*	10.46*	−0.22
PQI admissions—acute						
Year One	3.91*	4.61*	−0.70	3.91*	4.16*	−0.25
Year Two	4.16*	4.80*	−0.65	4.15*	4.32*	−0.17
Year Three	4.18*	4.53*	−0.35	4.18*	4.96*	−0.78*
Overall	4.08*	4.65*	−0.57	4.08*	4.48*	−0.40
PQI admissions—chronic						
Year One	5.48*	5.74*	−0.26	5.51*	5.18*	0.33
Year Two	6.00*	5.98*	0.02	6.03*	6.17*	−0.14
Year Three	6.19*	5.68*	0.50	6.22*	5.85*	0.36
Overall	5.89*	5.80*	0.09	5.92*	5.74*	0.18

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I8-3 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for access to care and coordination of care.

Table I8-3
Michigan: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	933.97*	884.19*	49.77*	933.22*	921.54*	11.68
Year Two	942.74*	924.34*	18.40	942.18*	976.01*	−33.82
Year Three	936.51*	978.38*	−41.87*	936.24*	1,012.64*	−76.40*
Overall	937.77*	928.82*	8.95	937.25*	969.99*	−32.75
Medical specialist visits (per 1,000 beneficiaries)						
Year One	703.84*	701.41*	2.43	703.18*	712.49*	−9.31
Year Two	756.56*	764.39*	−7.83	756.02*	780.75*	−24.73
Year Three	751.79*	783.21*	−31.42	751.42*	816.21*	−64.79
Overall	737.47*	749.68*	−12.20	736.95*	769.77*	−32.82
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	143.90*	137.90*	6.00	144.12*	135.90*	8.22
Year Two	144.73*	135.67*	9.06	144.99*	132.10*	12.89*
Year Three	142.68*	138.40*	4.28	143.06*	134.47*	8.59
Overall	143.78*	137.31*	6.46	144.07*	134.14*	9.92*
Primary care visits as a percent of total visits						
Year One						
1st quintile	18.64*	18.42*	0.22	18.88*	18.67*	0.21
5th quintile	17.84*	18.05*	−0.22	17.93*	18.14*	−0.21
Year Two						
1st quintile	19.66*	20.12*	−0.47	19.89*	19.38*	0.52
5th quintile	16.89*	16.48*	0.41	17.00*	17.47*	−0.47
Year Three						
1st quintile	20.06*	20.05*	0.01	20.29*	19.47*	0.82
5th quintile	16.54*	16.55*	−0.01	16.66*	17.39*	−0.73
Overall						
1st quintile	19.29*	19.34*	−0.05	19.53*	19.08*	0.45
5th quintile	17.23*	17.20*	0.03	17.34*	17.75*	−0.41

(continued)

Table I8-3 (continued)
Michigan: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	752.04*	721.95*	30.09*	752.38*	729.46*	22.92
Year Two	743.86*	704.87*	38.99*	743.88*	717.06*	26.83
Year Three	730.21*	678.47*	51.75*	730.06*	751.98*	−21.92
Overall	743.46*	704.58*	38.89*	743.56*	730.71*	12.85
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	168.39*	209.03*	−40.63*	168.16*	186.92*	−18.76*
Year Two	174.48*	187.88*	−13.40	174.29*	173.66*	0.63
Year Three	186.88*	199.79*	−12.90	186.75*	197.71*	−10.96
Overall	175.43*	198.92*	−23.49*	175.24*	184.90*	−9.67
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	17.44*	17.27*	0.17	17.60*	19.01*	−1.40*
5th quintile	21.86*	22.07*	−0.21	21.96*	20.39*	1.57*
Year Two						
1st quintile	17.16*	18.00*	−0.83	17.31*	18.09*	−0.78
5th quintile	22.19*	21.22*	0.98	22.32*	21.40*	0.92
Year Three						
1st quintile	18.34*	20.86*	−2.52*	18.47*	19.21*	−0.74
5th quintile	20.84*	18.32*	2.52*	20.98*	20.18*	0.79
Overall						
1st quintile	17.56*	18.33*	−0.78	17.71*	18.76*	−1.05
5th quintile	21.73*	20.93*	0.81	21.85*	20.67*	1.18

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-4 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for expenditures.

Table I8-4
Michigan: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	503.49*	537.68*	−34.19	506.99*	509.17*	−2.19
Year Two	541.97*	580.30*	−38.33*	545.56*	558.17*	−12.61
Year Three	568.94*	626.73*	−57.79*	572.62*	620.19*	−47.58*
Overall	538.08*	581.45*	−43.37*	541.67*	562.34*	−20.68
Acute-care expenditures						
Year One	157.69*	179.05*	−21.36*	158.53*	163.94*	−5.41
Year Two	177.32*	198.20*	−20.88*	178.14*	184.90*	−6.77
Year Three	185.22*	211.56*	−26.34*	185.97*	211.35*	−25.38*
Overall	173.40*	196.24*	−22.84*	174.21*	186.66*	−12.45
Post-acute-care expenditures						
Year One	80.95*	92.49*	−11.54*	82.15*	88.96*	−6.81
Year Two	89.21*	103.94*	−14.72*	90.52*	105.04*	−14.52
Year Three	95.93*	108.71*	−12.78*	97.35*	103.15*	−5.80
Overall	88.68*	101.71*	−13.03*	89.99*	99.08*	−9.08
ER expenditures						
Year One	15.55*	16.38*	−0.83	15.42*	15.13*	0.30
Year Two	17.26*	17.66*	−0.39	17.14*	16.57*	0.57
Year Three	20.39*	21.97*	−1.58	20.26*	20.37*	−0.11
Overall	17.72*	18.65*	−0.93	17.60*	17.35*	0.25
Outpatient expenditures						
Year One	72.03*	64.45*	7.59	72.36*	58.81*	13.55*
Year Two	76.68*	71.22*	5.46	76.93*	62.43*	14.50*
Year Three	84.28*	81.56*	2.72	84.45*	80.74*	3.70
Overall	77.64*	72.38*	5.26	77.89*	67.26*	10.63*
Specialty physician expenditures						
Year One	52.20*	60.56*	−8.36*	51.98*	56.22*	−4.25
Year Two	51.65*	60.44*	−8.80*	51.40*	56.65*	−5.25
Year Three	51.32*	64.34*	−13.02*	51.05*	63.24*	−12.19*
Overall	51.72*	61.77*	−10.05*	51.47*	58.68*	−7.21*
Primary care physician expenditures						
Year One	29.47*	29.80*	−0.33	30.01*	30.72*	−0.71
Year Two	29.75*	32.05*	−2.29	30.33*	34.41*	−4.08
Year Three	31.20*	34.95*	−3.75*	31.81*	35.10*	−3.29
Overall	30.13*	32.26*	−2.12	30.71*	33.41*	−2.70

(continued)

Table I8-4 (continued)
Michigan: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	38.57*	37.38*	1.20	38.99*	36.67*	2.32
Year Two	41.67*	41.18*	0.49	42.10*	39.38*	2.73*
Year Three	43.87*	44.50*	−0.63	44.34*	43.58*	0.75
Overall	41.37*	41.01*	0.35	41.80*	39.86*	1.94
Other expenditures						
Year One	18.95*	19.19*	−0.23	18.74*	17.77*	0.97
Year Two	20.33*	20.37*	−0.04	20.12*	19.68*	0.44
Year Three	22.87*	24.26*	−1.39	22.68*	23.88*	−1.20
Overall	20.71*	21.26*	−0.55	20.51*	20.43*	0.08
Laboratory expenditures						
Year One	2.13*	4.10*	−1.96*	2.40*	4.50*	−2.09*
Year Two	1.59*	3.70*	−2.11*	1.86*	4.49*	−2.63*
Year Three	1.53*	5.33*	−3.80*	1.81*	5.13*	−3.32*
Overall	1.75*	4.37*	−2.62*	2.02*	4.71*	−2.68*
Imaging expenditures						
Year One	−2.73*	−2.60*	−0.13	−2.74*	−2.37*	−0.37
Year Two	−3.43*	−3.20*	−0.23	−3.42*	−2.81*	−0.61
Year Three	−3.97*	−4.17*	0.20	−3.96*	−2.87*	−1.08
Overall	−3.38*	−3.32*	−0.05	−3.37*	−2.68*	−0.69
Other facility expenditures						
Year One	−0.12	1.27	−1.38	−0.06	−0.16*	0.09*
Year Two	−0.15*	0.52	−0.68	−0.09	−0.36*	0.27
Year Three	−0.21*	−0.05	−0.17	−0.14	−0.33*	0.19
Overall	−0.16*	0.58	−0.74	−0.10	−0.28*	0.19

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-5 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for utilization.

Table I8-5
Michigan: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	68.77*	74.30*	−5.53*	68.74*	70.44*	−1.70
Year Two	71.90*	75.68*	−3.77*	71.88*	72.25*	−0.37
Year Three	74.68*	79.16*	−4.48*	74.64*	76.73*	−2.09
Overall	71.78*	76.37*	−4.59*	71.75*	73.13*	−1.38
ER visits not leading to hospitalization						
Year One	111.23*	110.41*	0.83	111.13*	105.75*	5.38*
Year Two	114.80*	111.94*	2.85	114.71*	108.18*	6.53*
Year Three	118.30*	116.61*	1.69	118.19*	112.88*	5.31
Overall	114.77*	112.97*	1.80	114.67*	108.92*	5.74*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-6 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for total Medicare expenditures for special populations.

Table I8-6
Michigan: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	1,116.07*	1,154.85*	−38.78	1,126.50*	1,149.17*	−22.66
Year Two	1,101.49*	1,318.05*	−216.55*	1,112.24*	1,350.28*	−238.04*
Year Three	1,115.27*	1,222.08*	−106.81*	1,125.97*	1,277.45*	−151.48*
Overall	1,110.90*	1,229.83*	−118.93*	1,121.52*	1,254.88*	−133.37*
BH conditions only						
Year One	756.15*	736.62*	19.54	768.31*	770.71*	−2.40
Year Two	747.27*	789.57*	−42.30	759.84*	895.74*	−135.90*
Year Three	765.96*	897.19*	−131.22*	778.67*	801.64*	−22.97
Overall	756.23*	805.30*	−49.07	768.70*	822.97*	−54.26
Disabled beneficiaries only						
Year One	534.19*	552.58*	−18.39	540.53*	494.63*	45.89
Year Two	568.26*	592.35*	−24.09	574.88*	567.93*	6.95
Year Three	596.27*	625.03*	−28.76	602.89*	623.42*	−20.52
Overall	566.62*	590.43*	−23.81	573.15*	562.80*	10.35
Dually eligible beneficiaries only						
Year One	533.81*	560.39*	−26.58	533.15*	517.51*	15.64
Year Two	544.93*	601.40*	−56.47	544.81*	602.35*	−57.53
Year Three	580.74*	682.98*	−102.24*	580.55*	629.14*	−48.58
Overall	553.24*	615.21*	−61.97*	552.92*	583.61*	−30.69
Rural beneficiaries only						
Year One	396.56*	423.83*	−27.27	404.85*	436.11*	−31.25
Year Two	451.01*	459.93*	−8.92	458.83*	424.51*	34.32
Year Three	475.39*	481.87*	−6.48	482.94*	463.20*	19.74
Overall	441.69*	455.70*	−14.01	449.57*	441.28*	8.29
Non-White beneficiaries only						
Year One	639.07*	621.61*	17.46	654.69*	636.63*	18.07
Year Two	620.97*	643.78*	−22.81	637.22*	734.94*	−97.72
Year Three	651.42*	706.88*	−55.46	667.55*	834.83*	−167.28*
Overall	637.12*	657.97*	−20.85	653.12*	736.99*	−83.86

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-7 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I8-7
Michigan: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics among beneficiaries with multiple chronic conditions

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	87.53*	88.46*	−0.93	87.53*	87.17*	0.37
Year Two	87.24*	89.22*	−1.98	87.29*	86.74*	0.54
Year Three	87.78*	90.73*	−2.95	87.86*	87.10*	0.76
Overall	87.48*	89.12*	−1.64	87.51*	87.02*	0.49
Retinal eye examination						
Year One	57.79*	58.01*	−0.23	57.65*	58.51*	−0.87
Year Two	58.37*	57.22*	1.15	58.26*	59.23*	−0.96
Year Three	57.69*	61.88*	−4.19*	57.76*	63.45*	−5.69
Overall	57.95*	58.47*	−0.52	57.86*	59.64*	−1.78
LDL-C screening						
Year One	78.70*	80.77*	−2.06	78.60*	81.63*	−3.02*
Year Two	77.26*	78.87*	−1.61	77.20*	78.09*	−0.89
Year Three	77.62*	79.37*	−1.75	77.67*	81.11*	−3.44
Overall	78.05*	79.91*	−1.86	77.99*	80.41*	−2.43
Medical attention for nephropathy						
Year One	77.50*	79.89*	−2.38	77.68*	79.37*	−1.70
Year Two	78.88*	79.04*	−0.16	79.13*	80.45*	−1.31
Year Three	80.45*	81.91*	−1.46	80.76*	85.19*	−4.44*
Overall	78.48*	79.99*	−1.51	78.70*	80.78*	−2.08*
Received all 4 diabetes tests						
Year One	37.93*	38.92*	−0.99	37.93*	40.00*	−2.07
Year Two	38.83*	36.65*	2.17	38.83*	41.65*	−2.82
Year Three	38.40*	40.60*	−2.20	38.46*	48.30*	−9.85*
Overall	38.30*	38.51*	−0.21	38.31*	42.05*	−3.73
Received none of the 4 diabetes tests						
Year One	2.54*	2.15*	0.39	2.59*	2.70*	−0.11
Year Two	3.00*	2.22*	0.78*	3.05*	3.51*	−0.46
Year Three	2.60*	1.53*	1.07*	2.59*	2.10*	0.50
Overall	2.70*	2.06*	0.64*	2.74*	2.85*	−0.11

(continued)

Table I8-7 (continued)
Michigan: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics among beneficiaries with multiple chronic conditions

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	67.27*	68.33*	−1.06	67.18*	69.44*	−2.26*
Year Two	65.27*	65.05*	0.22	65.18*	66.48*	−1.29
Year Three	62.80*	67.14*	−4.34	62.86*	69.19*	−6.33*
Overall	65.77*	67.06*	−1.29	65.71*	68.45*	−2.74*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-8 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I8-8
Michigan: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	21.14*	21.63*	−0.49	21.09*	22.22*	−1.13
Year Two	23.51*	24.70*	−1.19	23.48*	27.83*	−4.36*
Year Three	26.30*	26.47*	−0.18	26.24*	22.95*	3.30
Overall	23.45*	24.09*	−0.64	23.41*	24.34*	−0.92
PQI admissions—overall						
Year One	33.74*	35.22*	−1.47	33.90*	32.98*	0.92
Year Two	34.54*	35.05*	−0.50	34.68*	36.11*	−1.44
Year Three	33.90*	31.62*	2.28	34.01*	35.22*	−1.21
Overall	34.06*	34.11*	−0.04	34.20*	34.70*	−0.50
PQI admissions—acute						
Year One	11.72*	13.68*	−1.96	11.70*	12.48*	−0.78
Year Two	11.82*	12.74*	−0.93	11.79*	12.32*	−0.54
Year Three	11.10*	11.76*	−0.66	11.07*	15.08*	−4.01*
Overall	11.57*	12.80*	−1.23	11.55*	13.19*	−1.64*
PQI admissions—chronic						
Year One	20.89*	20.44*	0.45	21.05*	19.42*	1.62
Year Two	21.56*	21.07*	0.49	21.70*	22.47*	−0.77
Year Three	21.69*	18.84*	2.85*	21.82*	19.46*	2.37
Overall	21.35*	20.19*	1.17	21.50*	20.47*	1.03

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I8-9 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I8-9
Michigan: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	1,340.40*	1,240.34*	100.06*	1,339.85*	1,291.67*	48.18
Year Two	1,310.27*	1,306.48*	3.79	1,309.52*	1,403.25*	−93.73
Year Three	1,274.62*	1,307.10*	−32.47	1,273.62*	1,354.02*	−80.40
Overall	1,310.92*	1,282.31*	28.61	1,310.17*	1,347.74*	−37.57
Medical specialist visits (per 1,000 beneficiaries)						
Year One	1,197.60*	1,161.52*	36.08	1,197.14*	1,169.64*	27.50
Year Two	1,214.39*	1,288.73*	−74.34*	1,214.13*	1,278.28*	−64.15
Year Three	1,175.23*	1,244.23*	−69.00	1,175.17*	1,297.96*	−122.78
Overall	1,196.73*	1,228.85*	−32.12	1,196.46*	1,244.05*	−47.59
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	212.60*	212.70*	−0.10	213.01*	200.26*	12.74
Year Two	203.49*	204.07*	−0.58	203.82*	190.69*	13.13
Year Three	193.91*	195.11*	−1.20	194.30*	185.05*	9.25
Overall	204.03*	204.62*	−0.59	204.41*	192.56*	11.85
Primary care visits as a percent of total visits						
Year One						
1st quintile	18.50*	19.33*	−0.84	18.68*	17.91*	0.76
5th quintile	16.96*	16.21*	0.75	16.99*	17.72*	−0.73
Year Two						
1st quintile	18.95*	19.78*	−0.83	19.12*	18.67*	0.46
5th quintile	16.54*	15.83*	0.72	16.58*	17.00*	−0.42
Year Three						
1st quintile	18.70*	18.55*	0.14	18.86*	18.47*	0.39
5th quintile	16.78*	16.91*	−0.13	16.82*	17.19*	−0.36
Overall						
1st quintile	18.68*	19.31*	−0.62	18.86*	18.27*	0.59
5th quintile	16.79*	16.24*	0.55	16.82*	17.38*	−0.55

(continued)

Table I8-9 (continued)
Michigan: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	831.41*	810.32*	21.09	831.85*	793.10*	38.74*
Year Two	804.31*	791.36*	12.95	804.35*	770.24*	34.11
Year Three	776.00*	716.07*	59.93*	775.75*	802.25*	−26.50
Overall	809.24*	782.19*	27.04*	809.38*	787.10*	22.28
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	230.69*	290.22*	−59.53*	229.97*	253.19*	−23.22*
Year Two	235.79*	252.62*	−16.83	235.09*	216.22*	18.87
Year Three	246.01*	249.10*	−3.09	245.29*	223.30*	21.99
Overall	236.05*	267.37*	−31.32	235.34*	233.17*	2.17
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	18.22*	17.44*	0.78	18.32*	19.10*	−0.79
5th quintile	20.96*	21.85*	−0.89	21.09*	20.24*	0.85
Year Two						
1st quintile	17.53*	17.73*	−0.20	17.61*	18.86*	−1.25
5th quintile	21.75*	21.51*	0.24	21.90*	20.50*	1.40
Year Three						
1st quintile	18.62*	21.53*	−2.91	18.71*	18.98*	−0.28
5th quintile	20.52*	17.72*	2.81	20.66*	20.37*	0.29
Overall						
1st quintile	18.08*	18.41*	−0.33	18.17*	19.00*	−0.83
5th quintile	21.12*	20.86*	0.26	21.26*	20.35*	0.91

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-10 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I8-10
Michigan: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

	Change in expenditure measures from baseline			Change in expenditure measures from baseline		
Outcome	MAPCP	PCMHs CG	Difference	MAPCP	Non-PCMHs CG	Difference
Total Medicare expenditures						
Year One	1,116.07*	1,154.85*	−38.78	1,126.50*	1,149.17*	−22.66
Year Two	1,101.49*	1,318.05*	−216.55*	1,112.24*	1,350.28*	−238.04*
Year Three	1,115.27*	1,222.08*	−106.81*	1,125.97*	1,277.45*	−151.48*
Overall	1,110.90*	1,229.83*	−118.93*	1,121.52*	1,254.88*	−133.37*
Acute-care expenditures						
Year One	366.81*	403.06*	−36.25	369.47*	396.22*	−26.75
Year Two	375.50*	472.32*	−96.82*	378.24*	483.03*	−104.79*
Year Three	380.02*	419.40*	−39.38	382.56*	460.92*	−78.36*
Overall	373.62*	431.31*	−57.68*	376.28*	444.59*	−68.31*
Post-acute-care expenditures						
Year One	188.02*	204.18*	−16.15	192.62*	222.44*	−29.81
Year Two	189.88*	241.79*	−51.91*	194.83*	286.57*	−91.73*
Year Three	204.59*	224.43*	−19.84*	209.81*	215.03*	−5.22
Overall	193.51*	222.85*	−29.34*	198.41*	241.99*	−43.58*
ER expenditures						
Year One	30.22*	29.70*	0.53	30.01*	27.23*	2.78
Year Two	31.72*	34.89*	−3.17	31.49*	33.71*	−2.22
Year Three	37.89*	42.56*	−4.67	37.62*	40.04*	−2.42
Overall	32.98*	35.23*	−2.25	32.74*	33.18*	−0.44
Outpatient expenditures						
Year One	157.77*	146.45*	11.32	158.05*	129.08*	28.97*
Year Two	152.79*	169.83*	−17.04	152.98*	136.34*	16.64*
Year Three	158.81*	164.03*	−5.22	158.92*	143.17*	15.74
Overall	156.39*	159.52*	−3.13	156.59*	135.67*	20.91*
Specialty physician expenditures						
Year One	96.78*	114.86*	−18.09*	96.80*	109.12*	−12.32
Year Two	83.91*	121.12*	−37.21*	83.89*	114.63*	−30.74*
Year Three	76.95*	99.01*	−22.06*	76.88*	110.86*	−33.97*
Overall	86.61*	112.34*	−25.73*	86.59*	111.49*	−24.90*

(continued)

Table I8-10 (continued)
Michigan: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	54.81*	55.82*	−1.01	55.95*	59.04*	−3.09
Year Two	52.65*	62.30*	−9.64*	53.85*	72.47*	−18.61*
Year Three	53.40*	60.65*	−7.25*	54.63*	64.76*	−10.13*
Overall	53.67*	59.43*	−5.76*	54.86*	65.26*	−10.41*
Home health expenditures						
Year One	92.93*	83.05*	9.87*	94.59*	83.52*	11.07*
Year Two	90.90*	96.54*	−5.64	92.58*	94.89*	−2.30
Year Three	93.40*	100.37*	−6.97	95.10*	104.96*	−9.86
Overall	92.38*	92.69*	−0.32	94.06*	93.66*	0.41
Other expenditures						
Year One	32.66*	33.10*	−0.44	32.46*	32.95*	−0.49
Year Two	34.25*	34.52*	−0.26	34.04*	38.74*	−4.69
Year Three	37.09*	35.61*	1.48	36.90*	43.23*	−6.33
Overall	34.50*	34.32*	0.18	34.30*	37.92*	−3.63
Laboratory expenditures						
Year One	2.90*	4.76*	−1.86	3.28*	5.29*	−2.01*
Year Two	1.54*	5.43*	−3.89*	1.91*	6.12*	−4.21*
Year Three	1.34*	7.53*	−6.19*	1.70*	6.68*	−4.98*
Overall	1.98*	5.80*	−3.82*	2.35*	5.98*	−3.62*
Imaging expenditures						
Year One	−3.40*	−2.26*	−1.14	−3.54*	−3.61*	0.08
Year Two	−5.45*	−2.55*	−2.90*	−5.60*	−3.86*	−1.75
Year Three	−6.69*	−7.12*	0.44	−6.85*	−5.73*	−1.12
Overall	−5.06*	−3.78*	−1.27	−5.21*	−4.32*	−0.89
Other facility expenditures						
Year One	−0.27	−0.54*	0.27	−0.23	−0.57*	0.34*
Year Two	−0.26	−0.31	0.04	−0.21	−0.52*	0.31
Year Three	−0.47	−1.02*	0.55*	−0.40	−0.63*	0.23*
Overall	−0.33	−0.60*	0.28	−0.28	−0.57*	0.30*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-11 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I8-11
Michigan: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	174.94*	182.80*	−7.85	174.94*	176.35*	−1.41
Year Two	172.24*	186.09*	−13.86*	172.18*	183.25*	−11.08
Year Three	174.20*	185.25*	−11.05	174.01*	179.38*	−5.37
Overall	173.81*	184.63*	−10.82	173.73*	179.58*	−5.85
ER visits not leading to hospitalization						
Year One	210.25*	196.57*	13.68*	209.95*	196.35*	13.59*
Year Two	209.67*	204.94*	4.73	209.38*	208.40*	0.98
Year Three	216.08*	211.61*	4.47	215.58*	208.17*	7.41
Overall	211.76*	203.81*	7.95	211.41*	203.90*	7.51

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-12 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I8-12
Michigan: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	756.15*	736.62*	19.54	768.31*	770.71*	−2.40
Year Two	747.27*	789.57*	−42.30	759.84*	895.74*	−135.90*
Year Three	765.96*	897.19*	−131.22*	778.67*	801.64*	−22.97
Overall	756.23*	805.30*	−49.07	768.70*	822.97*	−54.26
Acute-care expenditures						
Year One	232.49*	253.96*	−21.47	237.04*	257.06*	−20.03
Year Two	241.14*	266.30*	−25.16	245.66*	294.55*	−48.89*
Year Three	245.09*	308.88*	−63.79*	249.35*	278.54*	−29.19
Overall	239.41*	275.49*	−36.08*	243.85*	276.58*	−32.73
Expenditures for ER visits not leading to hospitalization						
Year One	27.14*	27.09*	0.05	26.80*	26.06*	0.74
Year Two	29.77*	32.36*	−2.58	29.38*	30.55*	−1.17
Year Three	35.86*	43.36*	−7.49*	35.40*	29.36*	6.04*
Overall	30.79*	34.01*	−3.22	30.39*	28.62*	1.77
Total for principal diagnosis of a BH condition						
Year One	18.86*	9.77*	9.09*	18.45*	14.12*	4.32
Year Two	21.93*	22.65*	−0.72	21.51*	26.19*	−4.68
Year Three	27.21*	29.82*	−2.61	26.81*	25.29*	1.51
Overall	22.54*	20.48*	2.06	22.13*	21.75*	0.38
Total for secondary diagnosis of a BH condition						
Year One	247.45*	251.32*	−3.87	249.32*	257.01*	−7.69
Year Two	253.76*	277.60*	−23.83	255.54*	287.99*	−32.45
Year Three	261.54*	295.80*	−34.26	263.23*	282.10*	−18.87
Overall	254.04*	274.29*	−20.25	255.83*	275.46*	−19.63

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I8-13 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I8-13
Michigan: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	96.80*	101.01*	−4.21	97.11*	98.00*	−0.89
Year Two	96.76*	101.37*	−4.61	96.98*	102.72*	−5.74
Year Three	97.94*	110.29*	−12.35*	98.03*	97.22*	0.81
Overall	97.14*	104.06*	−6.92*	97.35*	99.36*	−2.00
ER visits not leading to hospitalization						
Year One	240.85*	228.02*	12.83*	240.81*	223.70*	17.11*
Year Two	238.40*	237.73*	0.66	238.23*	232.13*	6.10
Year Three	246.88*	253.00*	−6.12	246.44*	215.79*	30.65*
Overall	241.92*	239.21*	2.71	241.71*	224.07*	17.64*
BH inpatient admissions						
Year One	2.56*	2.37*	0.19	2.56*	2.63*	−0.08
Year Two	2.65*	3.32*	−0.67	2.64*	3.33*	−0.69
Year Three	2.32*	3.41*	−1.10*	2.31*	1.59*	0.72*
Overall	2.51*	3.02*	−0.51	2.51*	2.54*	−0.03
BH ER visits						
Year One	15.14*	13.42*	1.72	14.91*	14.05*	0.86
Year Two	15.13*	14.57*	0.56	14.89*	16.23*	−1.34
Year Three	15.86*	13.82*	2.03	15.61*	12.12*	3.49*
Overall	15.37*	13.94*	1.43	15.13*	14.18*	0.94
BH outpatient visits						
Year One	164.17*	136.05*	28.12	165.23*	123.03*	42.20
Year Two	170.74*	146.06*	24.69	171.54*	136.50*	35.04
Year Three	164.90*	158.00*	6.90	164.66*	176.79*	−12.13
Overall	166.63*	146.38*	20.25	167.20*	144.58*	22.62

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

I.9 Decompositions of the Pennsylvania Estimates

Table I9-1 presents a decomposition of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for process of care indicators.

Table I9-1
Pennsylvania: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	92.42*	92.05*	0.37	92.30*	91.01*	1.29*
Year Two	91.28*	92.07*	−0.79	91.04*	90.73*	0.31
Year Three	90.28*	90.56*	−0.28	90.00*	91.19*	−1.18
Overall	91.58*	91.74*	−0.15	91.39*	90.95*	0.44
Retinal eye examination						
Year One	63.28*	62.05*	1.23	63.37*	62.19*	1.18
Year Two	62.45*	64.43*	−1.98*	62.69*	62.88*	−0.18
Year Three	61.03*	63.79*	−2.77*	61.31*	62.49*	−1.18
Overall	62.52*	63.21*	−0.68	62.71*	62.48*	0.23
LDL-C screening						
Year One	90.16*	89.21*	0.96	90.01*	88.07*	1.94*
Year Two	87.93*	88.92*	−0.99	87.68*	87.77*	−0.09
Year Three	85.47*	88.18*	−2.71*	85.25*	87.19*	−1.94
Overall	88.42*	88.89*	−0.47	88.22*	87.78*	0.44
Medical attention for nephropathy						
Year One	81.84*	86.52*	−4.68*	81.81*	80.55*	1.26
Year Two	79.47*	87.70*	−8.23*	79.76*	82.01*	−2.25
Year Three	78.51*	87.19*	−8.68*	79.29*	83.52*	−4.23*
Overall	80.34*	87.05*	−6.71*	80.60*	81.67*	−1.07
Received all 4 diabetes tests						
Year One	50.32*	52.73*	−2.41	50.14*	49.15*	0.99
Year Two	48.01*	57.08*	−9.07*	48.13*	50.26*	−2.13
Year Three	45.04*	55.07*	−10.03*	45.51*	51.67*	−6.15*
Overall	48.43*	54.66*	−6.24*	48.49*	50.05*	−1.57
Received none of the 4 diabetes tests						
Year One	2.23*	2.80*	−0.57*	2.27*	2.76*	−0.49*
Year Two	2.65*	2.96*	−0.31	2.71*	2.92*	−0.20
Year Three	3.15*	2.29*	0.87*	3.25*	2.63*	0.62
Overall	2.57*	2.74*	−0.17	2.63*	2.78*	−0.16

(continued)

Table I9-1 (continued)
Pennsylvania: Differences in the probability of process of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care indicators		Difference	Probability of process of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total lipid panel						
Year One	77.86*	77.97*	−0.12	78.18*	77.88*	0.29
Year Two	74.99*	75.20*	−0.20	75.16*	76.60*	−1.44
Year Three	72.62*	71.95*	0.67	72.96*	77.34*	−4.38*
Overall	75.63*	75.58*	0.05	75.90*	77.33*	−1.43

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or ischemic vascular disease (total lipid panel).

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-2 presents a decomposition of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for selected health outcomes.

Table I9-2
Pennsylvania: Differences in the rates of health outcomes during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	6.17*	6.95*	−0.77*	5.97*	6.17*	−0.20
Year Two	7.38*	9.43*	−2.05*	7.19*	7.38*	−0.18
Year Three	9.25*	9.49*	−0.24	9.09*	8.80*	0.29
Overall	7.60*	8.64*	−1.04*	7.41*	7.45*	−0.03
PQI admissions—overall						
Year One	11.67*	11.25*	0.43	11.71*	11.64*	0.07
Year Two	11.80*	13.46*	−1.66*	11.85*	12.51*	−0.66
Year Three	11.07*	14.22*	−3.14*	11.13*	12.02*	−0.89
Overall	11.52*	12.98*	−1.46*	11.57*	12.07*	−0.50
PQI admissions—acute						
Year One	4.83*	4.48*	0.35	4.82*	4.83*	−0.01
Year Two	4.74*	4.76*	−0.03	4.73*	5.06*	−0.32
Year Three	4.23*	5.24*	−1.01*	4.22*	4.46*	−0.24
Overall	4.60*	4.83*	−0.23	4.59*	4.79*	−0.20
PQI admissions—chronic						
Year One	6.56*	6.50*	0.06	6.61*	6.52*	0.08
Year Two	6.75*	8.34*	−1.59*	6.80*	7.16*	−0.36
Year Three	6.53*	8.59*	−2.05*	6.59*	7.25*	−0.66
Overall	6.62*	7.82*	−1.20*	6.67*	6.98*	−0.31

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I9-3 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for access to care and coordination of care.

Table I9-3
Pennsylvania: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	1,029.08*	968.11*	60.97	1,029.06*	981.35*	47.71*
Year Two	1,046.35*	1,003.66*	42.69	1,046.02*	1,000.01*	46.01*
Year Three	1,028.08*	1,049.99*	−21.92	1,026.15*	1,012.67*	13.48
Overall	1,034.71*	1,007.19*	27.53	1,033.96*	998.04*	35.92
Medical specialist visits (per 1,000 beneficiaries)						
Year One	820.43*	838.90*	−18.46	823.98*	853.85*	−29.87*
Year Two	904.06*	908.53*	−4.48	911.54*	939.10*	−27.56
Year Three	905.89*	895.66*	10.24	917.53*	924.79*	−7.26
Overall	877.27*	881.51*	−4.24	884.83*	906.50*	−21.67
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	173.21*	178.34*	−5.13	173.35*	178.45*	−5.09
Year Two	176.26*	176.18*	0.08	175.96*	182.96*	−7.01
Year Three	180.52*	179.62*	0.90	179.50*	184.91*	−5.41
Overall	176.66*	178.01*	−1.36	176.27*	182.12*	−5.86
Primary care visits as a percent of total visits						
Year One						
1st quintile	17.41*	17.69*	−0.27	17.80*	18.97*	−1.17*
5th quintile	16.90*	16.63*	0.26	18.24*	17.11*	1.13*
Year Two						
1st quintile	18.94*	19.82*	−0.88	19.47*	21.23*	−1.76*
5th quintile	15.50*	14.78*	0.73	16.66*	15.21*	1.45*
Year Three						
1st quintile	21.02*	19.27*	1.75	21.69*	21.35*	0.35
5th quintile	13.87*	15.22*	−1.35	14.85*	15.11*	−0.26
Overall						
1st quintile	18.73*	18.75*	−0.01	19.24*	20.25*	−1.02
5th quintile	15.75*	15.70*	0.05	16.95*	16.03*	0.92*

(continued)

Table I9-3 (continued)
Pennsylvania: Differences in the rates of the access to care and coordination of care indicators during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	769.59*	730.88*	38.71*	768.86*	721.99*	46.87*
Year 2	758.83*	683.94*	74.89*	757.58*	716.82*	40.76*
Year 3	722.50*	662.82*	59.69	721.61*	714.50*	7.10
Overall	753.50*	696.12*	57.38*	752.53*	718.17*	34.37*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	177.72*	176.74*	0.98	177.90*	181.78*	−3.88
Year Two	175.00*	179.76*	−4.75	175.00*	180.95*	−5.95
Year Three	189.70*	192.06*	−2.36	189.77*	179.16*	10.62
Overall	179.84*	181.82*	−1.98	179.93*	180.79*	−0.87
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	16.91*	17.31*	−0.39	17.02*	18.26*	−1.23*
5th quintile	20.38*	19.93*	0.45	21.13*	19.76*	1.38*
Year Two						
1st quintile	16.64*	18.34*	−1.71*	16.89*	19.38*	−2.49*
5th quintile	20.70*	18.82*	1.87*	21.29*	18.61*	2.68*
Year Three						
1st quintile	17.51*	18.54*	−1.03	17.83*	19.90*	−2.07
5th quintile	19.70*	18.63*	1.08	20.21*	18.12*	2.09
Overall						
1st quintile	16.97*	17.94*	−0.97	17.17*	19.02*	−1.84*
5th quintile	20.32*	19.26*	1.06	20.97*	18.99*	1.97*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-4 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for expenditures.

Table I9-4
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	506.29*	494.98*	11.31	554.57*	568.22*	−13.64
Year Two	530.67*	580.90*	−50.23*	584.60*	629.75*	−45.15*
Year Three	566.33*	639.78*	−73.46*	624.92*	642.86*	−17.95
Overall	534.36*	572.04*	−37.68*	587.97*	613.89*	−25.92
Acute-care expenditures						
Year One	106.40*	110.51*	−4.11	133.42*	142.82*	−9.40
Year Two	122.68*	151.29*	−28.61*	151.52*	172.50*	−20.98*
Year Three	139.46*	173.59*	−34.13*	169.70*	172.64*	−2.94
Overall	122.84*	145.24*	−22.40*	151.54*	162.82*	−11.28
Post-acute-care expenditures						
Year One	126.58*	113.53*	13.05*	134.87*	129.66*	5.21
Year Two	123.40*	135.35*	−11.95	132.46*	143.44*	−10.98
Year Three	130.89*	145.01*	−14.11*	141.12*	142.90*	−1.79
Overall	126.90*	131.37*	−4.47	136.08*	138.75*	−2.67
ER expenditures						
Year One	13.71*	14.96*	−1.25	13.36*	14.74*	−1.38*
Year Two	14.51*	16.63*	−2.12*	14.14*	15.23*	−1.08
Year Three	17.81*	20.05*	−2.24*	17.40*	18.23*	−0.82
Overall	15.33*	17.20*	−1.87	14.95*	16.05*	−1.10
Outpatient expenditures						
Year One	69.04*	72.06*	−3.03	65.86*	64.34*	1.52
Year Two	76.20*	84.35*	−8.16*	73.05*	73.60*	−0.55
Year Three	90.45*	89.49*	0.96	87.56*	78.55*	9.00
Overall	78.52*	82.01*	−3.49	75.44*	72.19*	3.26
Specialty physician expenditures						
Year One	62.17*	57.74*	4.44	68.43*	75.99*	−7.56*
Year Two	61.54*	56.53*	5.00	68.71*	79.30*	−10.59*
Year Three	63.48*	65.74*	−2.26	71.36*	80.24*	−8.88*
Overall	62.38*	59.94*	2.44	69.49*	78.52*	−9.04*
Primary care physician expenditures						
Year One	29.05*	28.23*	0.82	29.50*	30.29*	−0.80
Year Two	30.79*	33.74*	−2.94	31.38*	33.28*	−1.89
Year Three	31.25*	38.65*	−7.41*	31.86*	36.02*	−4.16*
Overall	30.37*	33.54*	−3.17	30.92*	33.20*	−2.28*

(continued)

Table I9-4 (continued)
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Home health expenditures						
Year One	39.24*	37.05*	2.19	47.07*	46.76*	0.31
Year Two	41.18*	41.68*	−0.50	50.19*	52.46*	−2.27
Year Three	41.69*	44.15*	−2.46	51.50*	56.64*	−5.14*
Overall	40.71*	40.97*	−0.26	49.60*	51.96*	−2.36
Other expenditures						
Year One	20.91*	22.89*	−1.98	22.52*	26.30*	−3.78
Year Two	22.18*	24.14*	−1.96	24.03*	26.24*	−2.21
Year Three	23.63*	24.84*	−1.21	25.48*	26.98*	−1.50
Overall	22.24*	23.96*	−1.72	24.01*	26.50*	−2.49
Laboratory expenditures						
Year One	3.78*	6.14*	−2.36*	3.47*	6.00*	−2.53*
Year Two	3.33*	6.32*	−2.99*	3.07*	4.85*	−1.78*
Year Three	3.84*	7.09*	−3.25*	3.56*	6.12*	−2.56*
Overall	3.64*	6.51*	−2.87*	3.36*	5.64*	−2.28*
Imaging expenditures						
Year One	−4.23*	−3.75*	−0.47	−3.79*	−3.14*	−0.65
Year Two	−5.43*	−4.44*	−0.99	−4.85*	−3.93*	−0.93
Year Three	−6.44*	−4.00*	−2.44*	−5.64*	−4.26*	−1.38
Overall	−5.37*	−4.07*	−1.29	−4.76*	−3.78*	−0.98
Other facility expenditures						
Year One	−0.25	−0.04	−0.20	−0.25	0.09	−0.34
Year Two	−0.33*	−0.27	−0.06	−0.32*	0.23	−0.54*
Year Three	−0.26	−0.17	−0.09	−0.23	−0.11*	−0.12
Overall	−0.28*	−0.16	−0.12	−0.27*	0.07	−0.34*

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-5 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for utilization.

Table I9-5
Pennsylvania: Differences in the rates of utilization during the demonstration, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	72.48*	73.89*	−1.41	71.83*	69.17*	2.66
Year Two	72.73*	81.56*	−8.83*	72.32*	72.73*	−0.40
Year Three	74.09*	82.71*	−8.62*	73.80*	72.69*	1.11
Overall	73.10*	79.43*	−6.33*	72.64*	71.55*	1.10
ER visits not leading to hospitalization						
Year One	101.66*	103.12*	−1.46	101.56*	106.15*	−4.59
Year Two	99.23*	102.75*	−3.52	99.38*	104.00*	−4.63
Year Three	103.80*	105.29*	−1.49	103.60*	107.93*	−4.33
Overall	101.52*	103.70*	−2.18	101.47*	105.99*	−4.52

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-6 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for total Medicare expenditures for special populations.

Table I9-6
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Multiple chronic conditions only						
Year One	1,022.69*	876.14*	146.55	1,187.79*	1,177.37*	10.42
Year Two	973.11*	1,173.10*	−200.00*	1,144.07*	1,249.53*	−105.47*
Year Three	1,021.29*	1,192.15*	−170.85*	1,197.12*	1,173.23*	23.89
Overall	1,005.27*	1,069.23*	−63.96	1,175.48*	1,200.95*	−25.47
BH conditions only						
Year One	479.80*	464.92*	14.87	787.22*	837.13*	−49.92
Year Two	490.77*	627.96*	−137.18*	803.86*	858.33*	−54.47
Year Three	596.83*	716.80*	−119.97*	914.91*	808.87*	106.04
Overall	521.00*	601.40*	−80.40*	833.77*	835.36*	−1.59
Disabled beneficiaries only						
Year One	436.60*	417.18*	19.42	527.92*	506.79*	21.14
Year Two	466.82*	501.03*	−34.21	562.80*	583.93*	−21.14
Year Three	521.59*	539.09*	−17.50	620.49*	584.95*	35.53
Overall	475.17*	486.46*	−11.28	570.61*	559.26*	11.35
Dually eligible beneficiaries only						
Year One	488.17*	456.29*	31.89	586.75*	555.73*	31.02
Year Two	496.09*	556.22*	−60.13	600.54*	601.09*	−0.56
Year Three	542.74*	613.82*	−71.08*	653.56*	639.86*	13.69
Overall	508.83*	542.43*	−33.60	613.44*	598.98*	14.46
Rural beneficiaries only						
Year One	417.52*	378.93*	38.59	479.35*	486.65*	−7.30
Year Two	393.82*	723.36*	−329.53*	461.15*	422.88*	38.27
Year Three	443.13*	525.97*	−82.84*	509.44*	597.01*	−87.57
Overall	418.24*	544.47*	−126.23*	483.43*	502.64*	−19.21
Non-White beneficiaries only						
Year One	621.95*	565.89*	56.06	540.90*	505.07*	35.83
Year Two	653.35*	668.12*	−14.77	573.55*	568.74*	4.81
Year Three	671.01*	818.50*	−147.48	591.89*	607.29*	−15.40
Overall	649.97*	690.06*	−40.09	570.03*	562.86*	7.17
Northeast region only						
Year One	463.17*	443.36*	19.81	512.25*	529.08*	−16.83
Year Two	491.57*	537.54*	−45.97*	545.51*	582.99*	−37.48
Year Three	507.78*	591.01*	−83.23*	566.87*	586.81*	−19.94
Overall	487.15*	522.78*	−35.64*	541.08*	566.08*	−25.00

(continued)

Table I9-6 (continued)
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries belonging to special populations, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Southeast region only						
Year One	623.32*	635.11*	−11.79	622.98*	619.68*	3.30
Year Two	643.65*	710.13*	−66.48	643.70*	687.19*	−43.48
Year Three	711.87*	790.74*	−78.88	711.21*	706.52*	4.69
Overall	660.99*	714.68*	−53.69	660.67*	672.80*	−12.13

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-7 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for process of care indicators for beneficiaries with multiple chronic conditions.

Table I9-7
Pennsylvania: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
HbA1c testing						
Year One	90.49*	90.12*	0.37	90.33*	88.32*	2.01*
Year Two	88.91*	89.70*	−0.79	88.53*	89.36*	−0.83
Year Three	88.06*	88.16*	−0.10	87.48*	92.27*	−4.79*
Overall	89.47*	89.57*	−0.10	89.15*	89.48*	−0.33
Retinal eye examination						
Year One	63.49*	60.49*	3.00*	63.54*	62.45*	1.10
Year Two	60.39*	60.96*	−0.56	60.67*	62.20*	−1.52
Year Three	58.67*	62.70*	−4.03*	58.98*	61.67*	−2.69
Overall	61.48*	61.10*	0.37	61.66*	62.20*	−0.54
LDL-C screening						
Year One	87.26*	85.49*	1.77	87.27*	85.21*	2.06
Year Two	84.93*	84.81*	0.11	84.83*	84.30*	0.53
Year Three	81.14*	81.57*	−0.43	81.09*	84.79*	−3.71
Overall	85.22*	84.45*	0.78	85.19*	84.83*	0.35

(continued)

Table I9-7 (continued)
Pennsylvania: Differences in the probability of process of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of process of care measures		Difference	Probability of process of care measures		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Medical attention for nephropathy						
Year One	84.81*	89.15*	−4.34*	85.28*	83.10*	2.17*
Year Two	82.92*	89.81*	−6.89*	83.67*	85.17*	−1.51
Year Three	83.77*	89.53*	−5.76*	84.70*	87.14*	−2.44
Overall	83.98*	89.44*	−5.46*	84.64*	84.62*	0.02
Received all 4 diabetes tests						
Year One	49.68*	51.41*	−1.73	49.77*	47.04*	2.73
Year Two	46.55*	52.62*	−6.07*	46.89*	49.08*	−2.20
Year Three	43.52*	50.57*	−7.05*	44.06*	48.81*	−4.75
Overall	47.38*	51.62*	−4.24*	47.64*	48.07*	−0.43
Received none of the 4 diabetes tests						
Year One	2.33*	2.91*	−0.58	2.29*	2.09*	0.20
Year Two	2.95*	2.98*	−0.03	2.95*	2.41*	0.54
Year Three	2.97*	2.33*	0.64	3.04*	1.60*	1.44*
Overall	2.66*	2.81*	−0.15	2.66*	2.09*	0.57
Total lipid panel						
Year One	73.68*	73.59*	0.10	73.83*	74.06*	−0.23
Year Two	70.61*	70.53*	0.08	70.79*	71.28*	−0.49
Year Three	68.83*	65.56*	3.27	69.19*	73.38*	−4.19
Overall	71.63*	70.83*	0.80	71.83*	73.03*	−1.20

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All measures are annual dichotomous measures of the probability of receiving certain tests given the beneficiary has been diagnosed with either diabetes or IVD (total lipid panel).

CG = comparison group; IVD = ischemic vascular disease; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-8 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for selected health outcomes for beneficiaries with multiple chronic conditions.

Table I9-8
Pennsylvania: Differences in the rates of health outcomes during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of health outcomes		Difference	Rate of health outcomes		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Avoidable catastrophic events						
Year One	15.53*	16.77*	−1.23	15.11*	14.36*	0.75
Year Two	17.64*	22.34*	−4.69*	17.36*	16.91*	0.45
Year Three	21.90*	23.42*	−1.52	21.83*	18.04*	3.79*
Overall	18.09*	20.60*	−2.50*	17.82*	16.30*	1.53
PQI admissions—overall						
Year One	37.18*	31.73*	5.45*	37.25*	35.28*	1.97
Year Two	36.59*	40.02*	−3.42	36.76*	36.67*	0.09
Year Three	31.66*	40.27*	−8.61*	31.94*	32.35*	−0.41
Overall	35.39*	37.04*	−1.65	35.55*	34.91*	0.64
PQI admissions—acute						
Year One	12.90*	11.62*	1.28	12.70*	12.65*	0.05
Year Two	12.37*	11.46*	0.91	12.21*	12.43*	−0.22
Year Three	10.37*	12.20*	−1.83	10.26*	11.19*	−0.93
Overall	11.99*	11.73*	0.26	11.83*	12.16*	−0.33
PQI admissions—chronic						
Year One	22.87*	19.21*	3.66*	23.07*	21.19*	1.88
Year Two	22.82*	27.30*	−4.47*	23.07*	22.90*	0.17
Year Three	20.02*	26.44*	−6.42*	20.33*	19.97*	0.36
Overall	22.03*	24.07*	−2.04	22.28*	21.42*	0.85

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* Statistically significant at the 10 percent level.

Table I9-9 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table I9-9
Pennsylvania: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	1,370.11*	1,219.74*	150.37*	1,368.80*	1,222.30*	146.50*
Year Two	1,339.63*	1,234.90*	104.72*	1,338.12*	1,239.23*	98.88*
Year Three	1,329.84*	1,253.62*	76.22	1,323.08*	1,223.26*	99.83*
Overall	1,348.03*	1,234.72*	113.31*	1,345.08*	1,228.39*	116.69*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	1,327.11*	1,368.07*	−40.96	1,334.22*	1,339.33*	−5.12
Year Two	1,369.06*	1,371.79*	−2.73	1,378.11*	1,383.49*	−5.38
Year Three	1,351.73*	1,297.62*	54.11	1,363.34*	1,298.38*	64.96
Overall	1,348.61*	1,349.02*	−0.41	1,357.68*	1,342.68*	15.01
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	242.85*	262.78*	−19.93	244.01*	236.27*	7.75
Year Two	231.34*	245.82*	−14.48	231.78*	230.43*	1.35
Year Three	228.34*	227.33*	1.01	227.68*	223.46*	4.21
Overall	234.72*	246.74*	−12.02	235.10*	230.57*	4.53
Primary care visits as a percent of total visits						
Year One						
1st quintile	17.44*	18.36*	−0.92	17.94*	19.23*	−1.29
5th quintile	18.73*	17.79*	0.94	20.17*	18.84*	1.34
Year Two						
1st quintile	18.25*	19.94*	−1.69	18.86*	20.30*	−1.43
5th quintile	17.90*	16.35*	1.55	19.21*	17.83*	1.37
Year Three						
1st quintile	19.57*	18.37*	1.20	20.35*	20.35*	0.00
5th quintile	16.67*	17.79*	−1.11	17.79*	17.79*	0.00
Overall						
1st quintile	18.17*	18.87*	−0.70	18.77*	19.82*	−1.05
5th quintile	18.01*	17.33*	0.68	19.34*	18.28*	1.06

(continued)

Table I9-9 (continued)
Pennsylvania: Differences in the rates of the access to care and coordination of care indicators during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of access to care and coordination of care indicators		Difference	Rate of access to care and coordination of care indicators		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year One	811.93*	773.60*	38.33	811.15*	783.43*	27.72
Year Two	792.19*	700.30*	91.88*	792.08*	752.10*	39.98
Year Three	746.46*	669.97*	76.48	746.55*	755.62*	−9.07
Overall	790.07*	724.23*	65.84*	789.72*	766.08*	23.64
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	222.81*	240.50*	−17.69	223.34*	233.19*	−9.85
Year Two	219.93*	236.53*	−16.61	220.67*	234.98*	−14.31
Year Three	234.43*	241.06*	−6.63	235.73*	221.91*	13.83
Overall	224.47*	239.23*	−14.77	225.25*	231.22*	−5.97
COC Index (higher quintile = better care coordination)						
Year One						
1st quintile	17.68*	17.41*	0.27	18.01*	18.07*	−0.06
5th quintile	19.21*	19.51*	−0.30	20.16*	20.10*	0.06
Year Two						
1st quintile	16.44*	17.24*	−0.80	16.85*	18.41*	−1.56
5th quintile	20.62*	19.70*	0.92	21.50*	19.74*	1.76
Year Three						
1st quintile	16.96*	16.55*	0.42	17.40*	18.49*	−1.09
5th quintile	20.01*	20.49*	−0.48	20.85*	19.65*	1.20
Overall						
1st quintile	17.12*	17.16*	−0.04	17.50*	18.28*	−0.78
5th quintile	19.85*	19.79*	0.05	20.75*	19.88*	0.87

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- Office visits, follow-up visits within 14 days of discharge, and 30-day unplanned readmissions are rates per 1,000 person quarters.
- Primary care visits as a percentage of total visits and COC index are measures ranging from 0 to 1. For these 0-to-1 measures, we report results on the probability of being in the lowest or highest quintiles of the distribution.

CG = comparison group; COC = Continuity of Care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-10 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for expenditures for beneficiaries with multiple chronic conditions.

Table I9-10
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	1,022.69*	876.14*	146.55	1,187.79*	1,177.37*	10.42
Year Two	973.11*	1,173.10*	−200.00*	1,144.07*	1,249.53*	−105.47*
Year Three	1,021.29*	1,192.15*	−170.85*	1,197.12*	1,173.23*	23.89
Overall	1,005.27*	1,069.23*	−63.96	1,175.48*	1,200.95*	−25.47
Acute-care expenditures						
Year One	195.26*	159.76*	35.50	299.29*	299.17*	0.12
Year Two	205.91*	282.90*	−76.99*	311.68*	331.02*	−19.34
Year Three	236.19*	329.04*	−92.84*	343.11*	298.49*	44.62
Overall	210.72*	250.86*	−40.13*	316.18*	309.90*	6.28
Post-acute-care expenditures						
Year One	279.26*	215.57*	63.69*	303.79*	291.61*	12.19
Year Two	246.80*	305.18*	−58.38*	272.63*	322.43*	−49.80*
Year Three	261.65*	306.29*	−44.64*	290.17*	290.96*	−0.78
Overall	263.04*	272.50*	−9.46	289.17*	302.00*	−12.83
ER expenditures						
Year One	25.71*	23.68*	2.03	25.30*	26.00*	−0.70
Year Two	25.18*	33.46*	−8.28*	24.63*	27.99*	−3.36*
Year Three	31.66*	32.27*	−0.61	30.87*	30.97*	−0.10
Overall	27.25*	29.52*	−2.27	26.67*	28.11*	−1.44
Outpatient expenditures						
Year One	146.82*	153.79*	−6.97	141.82*	141.07*	0.76
Year Two	142.06*	186.68*	−44.62*	136.74*	149.24*	−12.50
Year Three	157.07*	173.49*	−16.42	152.49*	158.88*	−6.38
Overall	148.14*	170.76*	−22.62*	143.16*	149.01*	−5.85
Specialty physician expenditures						
Year One	102.23*	88.24*	13.99	120.54*	131.58*	−11.04
Year Two	86.59*	84.50*	2.09	105.65*	124.42*	−18.77*
Year Three	91.04*	88.72*	2.32	110.57*	114.70*	−4.13
Overall	93.63*	87.09*	6.54	112.55*	124.25*	−11.70

(continued)

Table I9-10 (continued)
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Primary care physician expenditures						
Year One	44.78*	40.09*	4.68*	48.25*	48.19*	0.06
Year Two	44.97*	53.59*	−8.62*	48.68*	54.40*	−5.72*
Year Three	46.58*	59.22*	−12.64*	50.29*	54.87*	−4.58
Overall	45.36*	50.24*	−4.88*	48.98*	52.25*	−3.26
Home health expenditures						
Year One	92.22*	82.89*	9.33	107.97*	105.09*	2.88
Year Two	87.67*	96.88*	−9.22	104.67*	114.84*	−10.17
Year Three	88.83*	85.28*	3.55	106.54*	116.93*	−10.38
Overall	89.68*	88.38*	1.30	106.42*	111.85*	−5.43
Other expenditures						
Year One	37.17*	43.85*	−6.68	42.88*	51.01*	−8.13
Year Two	41.88*	50.00*	−8.12	47.81*	52.62*	−4.80
Year Three	39.34*	39.38*	−0.04	44.49*	49.06*	−4.57
Overall	39.42*	44.67*	−5.26	45.04*	51.00*	−5.96
Laboratory expenditures						
Year One	4.66*	4.83*	−0.17	4.56*	6.46*	−1.90
Year Two	2.96*	5.59*	−2.63*	2.90*	4.38*	−1.48
Year Three	3.76*	8.00*	−4.24*	3.63*	4.66*	−1.03
Overall	3.82*	6.00*	−2.19*	3.72*	5.23*	−1.51
Imaging expenditures						
Year One	−6.28*	−6.42*	0.15	−3.98*	−4.41*	0.43
Year Two	−9.21*	−7.53*	−1.68	−6.83*	−6.61*	−0.22
Year Three	−9.83*	−7.91*	−1.92	−7.37*	−7.97*	0.61
Overall	−8.31*	−7.23*	−1.08	−5.94*	−6.19*	0.26
Other facility expenditures						
Year One	−0.75*	0.20	−0.94	−0.67	0.39	−1.06*
Year Two	−0.69	−0.68	−0.02	−0.59	−0.24	−0.35
Year Three	−0.03	−0.13	0.10	0.12	−0.09	0.21
Overall	−0.52	−0.20	−0.32	−0.42	0.03	−0.45

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-11 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for utilization for beneficiaries with multiple chronic conditions.

Table I9-11
Pennsylvania: Differences in the rates of utilization during the demonstration among beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause admissions						
Year One	175.47*	165.67*	9.79*	174.87*	156.56*	18.31*
Year Two	165.67*	186.45*	−20.79*	165.25*	160.67*	4.58
Year Three	165.54*	185.38*	−19.84*	165.04*	150.04*	15.01*
Overall	169.24*	178.49*	−9.25	168.73*	156.09*	12.65*
ER visits not leading to hospitalization						
Year One	181.49*	178.37*	3.12	178.16*	176.24*	1.92
Year Two	172.55*	185.08*	−12.54*	168.98*	176.43*	−7.45
Year Three	182.29*	170.12*	12.17	177.59*	180.21*	−2.62
Overall	178.65*	178.29*	0.36	174.85*	177.45*	−2.60

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-12 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for total Medicare expenditures for behavioral health conditions.

Table I9-12
Pennsylvania: Differences in the change in Medicare PBPM expenditures from baseline among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
Total Medicare expenditures						
Year One	479.80*	464.92*	14.87	787.22*	837.13*	−49.92
Year Two	490.77*	627.96*	−137.18*	803.86*	858.33*	−54.47
Year Three	596.83*	716.80*	−119.97*	914.91*	808.87*	106.04
Overall	521.00*	601.40*	−80.40*	833.77*	835.36*	−1.59
Acute-care expenditures						
Year One	−74.39	−56.91	−17.47	184.13*	221.88*	−37.75
Year Two	−53.90	18.51	−72.41*	206.99*	224.39*	−17.40
Year Three	9.19	67.07	−57.87*	271.90*	214.89*	57.02
Overall	−40.62	8.61	−49.23*	220.05*	220.50*	−0.46
Expenditures for ER visits not leading to hospitalization						
Year One	26.45*	29.68*	−3.23	25.70*	24.12*	1.58
Year Two	25.25*	24.70*	0.55	24.26*	23.78*	0.49
Year Three	32.62*	32.91*	−0.29	31.53*	26.63*	4.90
Overall	28.01*	29.00*	−0.99	27.07*	24.81*	2.27
Total for principal diagnosis of BH condition						
Year One	7.82	0.25	7.56	23.88*	17.00*	6.88
Year Two	9.85	1.87	7.97	26.22*	28.14*	−1.92
Year Three	16.33	15.11	1.22	32.51*	36.34*	−3.83
Overall	11.23	5.56	5.67	27.44*	27.01*	0.44
Total for secondary diagnosis of a BH condition						
Year One	151.50*	175.40*	−23.90	178.30*	211.97*	−33.67
Year Two	169.85*	203.45*	−33.60*	198.66*	206.63*	−7.97
Year Three	228.02*	262.33*	−34.31*	256.65*	223.53*	33.12
Overall	182.27*	212.83*	−30.56*	210.35*	213.84*	−3.49

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All expenditures measures are PBPM.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table I9-13 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for behavioral and non-behavioral health care utilization for beneficiaries with behavioral health conditions.

Table I9-13
Pennsylvania: Differences in the rates of utilization during the demonstration among beneficiaries with BH conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMHs CG		MAPCP	Non-PCMHs CG	
All-cause inpatient admissions						
Year One	99.77*	102.72*	−2.95	99.32*	91.57*	7.76
Year Two	90.41*	111.15*	−20.74*	90.29*	89.32*	0.97
Year Three	98.73*	113.50*	−14.77	98.68*	83.04*	15.64*
Overall	96.23*	109.06*	−12.83	96.02*	88.07*	7.95*
ER visits not leading to hospitalization						
Year One	250.45*	244.27*	6.17	247.41*	231.74*	15.68
Year Two	233.67*	216.89*	16.78	230.49*	222.33*	8.15
Year Three	241.77*	220.97*	20.80	238.03*	221.77*	16.26
Overall	241.92*	227.43*	14.49	238.61*	225.32*	13.28
BH inpatient admissions						
Year One	4.61*	4.63*	−0.02	3.78*	2.90*	0.88
Year Two	4.25*	3.98*	0.28	3.56*	3.63*	−0.07
Year Three	3.54*	3.08*	0.47	2.96*	3.09*	−0.13
Overall	4.15*	3.91*	0.24	3.44*	3.21*	0.23
BH ER visits						
Year One	22.30*	21.00*	1.30	21.08*	18.00*	3.08
Year Two	21.17*	17.15*	4.02	20.24*	17.90*	2.34
Year Three	16.51*	18.53*	−2.02	15.90*	17.96*	−2.06
Overall	20.06*	18.89*	1.17	19.13*	17.95*	1.18
BH outpatient visits						
Year One	99.65	26.15	73.50	79.32*	61.84*	17.48
Year Two	88.05	32.61	55.43	71.09*	65.99*	5.10
Year Three	86.96	72.25	14.70	71.48*	75.90*	−4.43
Overall	91.61	43.11	48.50	73.99*	67.76*	6.23

NOTES:

- Table reports decomposition of the difference-in-differences estimates given in the body of this report.
- All utilization measures are rates per 1,000 beneficiary quarters.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

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APPENDIX J
DECOMPOSITION OF THE MEDICAID DIFFERENCE-IN-DIFFERENCES ESTIMATES

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J.1 Description of the Decompositions Presented

In this appendix, we present a decomposition of all of the difference-in-differences estimates reported in the main body of this report. The rationale for the decompositions we present here can be found in ***Appendix I***.

J.2 Decompositions of the New York Estimates

Table J2-1 and ***Table J2-2*** present a decomposition of the estimates of the changes associated with the New York MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J2-1
New York: Differences in the probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Appropriate use of asthma medications						
Year One	85.32*	90.32*	−5.01	65.02*	75.28*	−10.26
Year Two	83.91*	91.40*	−7.49	62.48*	62.87*	−0.39
Year Three	84.32*	89.91*	−5.59	67.31*	60.61*	6.70
Overall	84.61*	90.67*	−6.06	64.42*	68.09*	−3.67

NOTE Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-2
New York: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	91.33*	92.61*	−1.28	81.27*	77.06*	4.21
Year Two	93.79*	93.36*	0.42	86.09*	86.11*	−0.03
Year Three	94.18*	91.32*	2.85	86.47*	89.92*	−3.45
Overall	92.67*	92.59*	0.08	83.83*	82.48*	1.34
Retinal eye examination						
Year One	32.84	42.84	−9.99*	34.72	35.83	−1.10
Year Two	23.93	35.44	−11.51	25.76	33.82	−8.05
Year Three	19.61	34.08	−14.48	21.58	35.61	−14.03
Overall	27.39	38.76	−11.37	29.27	35.15	−5.88
LDL-C screening						
Year One	79.38*	78.94*	0.45	77.92*	74.40*	3.53
Year Two	85.64*	80.14*	5.49	84.35*	81.00*	3.35
Year Three	83.19*	78.21*	4.98	80.16*	77.33*	2.83
Overall	82.11*	79.17*	2.94	80.39*	77.06*	3.33
Medical attention for nephropathy						
Year One	94.52*	94.12*	0.40	95.68*	94.87*	0.80
Year Two	94.76*	95.28*	−0.53	95.96*	94.22*	1.74
Year Three	95.24*	94.16*	1.08	96.51*	96.72*	−0.20
Overall	94.74*	94.49*	0.24	95.93*	95.04*	0.90
Received all 4 diabetes tests						
Year One	28.44	30.51	−2.07	30.57*	26.17	4.40
Year Two	22.13	26.35	−4.22	24.00	19.92	4.08
Year Three	16.66	26.56	−9.90	18.31	25.64	−7.33
Overall	24.10	28.41	−4.31	26.05	24.10	1.95
Received none of the 4 diabetes tests						
Year One	1.57	0.97	0.59	1.41	1.50	−0.09
Year Two	1.01	0.95	0.05	0.91	1.40	−0.49
Year Three	0.66	1.54	−0.88	0.64	0.30	0.34
Overall	1.21	1.08	0.13	1.10	1.23	−0.13
Breast cancer screening						
Year One	27.45	24.06	3.39	23.87	23.41	0.46
Year Two	29.48	28.52	0.96	25.29	26.90	−1.61
Year Three	29.97	24.57	5.39	25.11	23.83	1.28
Overall	28.63	25.60	3.03	24.59	24.62	−0.03

(continued)

Table J2-2 (continued)
New York: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Cervical cancer screening						
Year One	29.81*	25.32*	4.49*	29.97*	24.23*	5.75*
Year Two	26.50*	21.77*	4.73*	26.45*	22.90*	3.55*
Year Three	23.42*	17.41*	6.01*	23.70*	18.04*	5.66*
Overall	27.54*	22.69*	4.85*	27.66*	22.64*	5.02*
Appropriate use of antidepressant medication management: 12 weeks						
Year One	36.01*	41.12*	−5.11	39.26*	38.19*	1.07
Year Two	33.50*	41.43*	−7.94*	38.82*	47.10*	−8.29*
Year Three	31.23*	29.85*	1.37	36.49*	27.12*	9.37*
Overall	34.33*	39.08*	−4.75	38.60*	38.85*	−0.25
Appropriate use of antidepressant medication management: 6 months						
Year 1	15.47*	13.94*	1.52	17.62*	19.14*	−1.53
Year 2	14.71*	15.80*	−1.09	17.84*	24.39*	−6.55*
Year 3	9.17*	8.61*	0.56	11.40*	10.22*	1.18
Overall	14.04*	13.51*	0.53	16.51*	19.07*	−2.57
Appropriate use of asthma medications						
Year 1	76.63*	74.69*	1.95	66.61*	63.55*	3.05
Year 2	77.20*	75.50*	1.70	68.12*	70.55*	−2.43
Year 3	77.92*	73.72*	4.20	69.46*	74.83*	−5.37
Overall	77.06*	74.78*	2.28	67.63*	67.95*	−0.32

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-3 and ***Table J2-4*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J2-3
New York: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	50.23*	43.78*	6.45*	51.08*	44.56*	6.53*
Year Two	51.11*	42.15*	8.96*	51.54*	43.08*	8.46*
Year Three	45.37*	40.05*	5.32*	45.69*	41.61*	4.08*
Overall	48.25*	41.28*	6.98*	48.71*	42.71*	6.00*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	4.09	3.35	0.74	4.48	2.35	2.13
Year Two	1.88	2.78	−0.90	2.00	2.20	−0.20
Year Three	2.21	2.33	−0.12	2.36	1.97	0.39
Overall	2.47	2.56	−0.10	2.67	2.07	0.59
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	1.20	0.87	0.33	N/A	N/A	N/A
Year Two	0.33	0.98	−0.65	N/A	N/A	N/A
Year Three	0.20	0.70	−0.50	N/A	N/A	N/A
Overall	0.44	0.78	−0.34	N/A	N/A	N/A

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; N/A = not applicable; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-4
New York: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	43.14*	35.67*	7.47*	42.99*	36.76*	6.23*
Year Two	46.44*	36.81*	9.63*	46.40*	37.36*	9.04*
Year Three	41.39*	37.39*	4.00*	41.31*	38.03*	3.28
Overall	42.86*	36.26*	6.60*	42.71*	37.21*	5.50*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	11.92*	14.03*	−2.11*	11.86*	12.56*	−0.69
Year Two	8.97*	12.27*	−3.31*	8.77*	10.55*	−1.78*
Year Three	9.36*	11.49*	−2.13*	9.09*	10.25*	−1.16
Overall	9.80*	12.11*	−2.32*	9.62*	10.83*	−1.21*
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	6.28*	5.39*	0.89*	6.20*	6.34*	−0.15
Year Two	3.05*	4.27*	−1.22	3.04*	4.82*	−1.78*
Year Three	2.61*	3.77*	−1.16*	2.60*	4.13*	−1.54*
Overall	3.59*	4.19*	−0.60	3.55*	4.86*	−1.31*
Primary care visits as a percent of total visits						
Year One						
1st quintile	26.58*	34.37*	−7.78*	23.64*	30.98*	−7.34*
5th quintile	49.49*	40.39*	9.10*	52.18*	42.95*	9.23*
Year Two						
1st quintile	17.16*	28.64*	−11.48*	14.53*	22.67*	−8.14*
5th quintile	63.13*	46.92*	16.21*	66.53*	53.54*	12.99*
Year Three						
1st quintile	19.92*	27.67*	−7.75	16.59*	21.37*	−4.78
5th quintile	58.78*	48.12*	10.66	62.94*	55.42*	7.52
Overall						
1st quintile	22.49*	31.45*	−8.95*	19.58*	26.76*	−7.18*
5th quintile	55.36*	43.73*	11.62*	58.52*	48.37*	10.15*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	0.39	0.31	0.08	0.41	0.28	0.13
Year Two	0.37	0.33	0.04	0.40	0.24	0.16
Year Three	0.39	0.32	0.06	0.40	0.35	0.06
Overall	0.38	0.33	0.05	0.40	0.29	0.11

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-5 and ***Table J2-6*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for medical expenditures among Medicaid children and adults, respectively.

Table J2-5
New York: Differences in the change in Medicaid PBPM expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	−38.89*	−50.67*	11.79	−44.10*	−45.64*	1.54
Year Two	−50.06*	−55.06*	5.00	−52.96*	−47.22*	−5.74
Year Three	−38.96*	−36.41*	−2.55	−42.88*	−34.52*	−8.37
Overall	−40.39*	−45.70*	5.31	−43.92*	−43.11*	−0.81
Acute-care expenditures						
Year One	−13.95*	−16.81*	2.86	−11.76*	−16.18*	4.42
Year Two	−19.07*	−19.08*	0.01	−17.41*	−19.86*	2.45
Year Three	−20.31*	−17.38*	−2.93	−18.80*	−18.76*	−0.04
Overall	−17.96*	−17.84*	−0.12	−16.30*	−18.89*	2.59
ER expenditures						
Year One	1.90*	1.90*	0.00	2.97*	2.71*	0.26
Year Two	1.89*	2.75*	−0.86	2.96*	3.01*	−0.05
Year Three	1.20*	1.74*	−0.54	2.26*	2.72*	−0.45
Overall	1.57*	2.42*	−0.85	2.64*	2.61*	0.02
Specialty physician expenditures						
Year One	9.21*	8.68*	0.53	9.63*	6.28*	3.35*
Year Two	3.03*	6.80*	−3.77*	3.47*	5.39*	−1.92
Year Three	2.58*	5.70*	−3.12*	3.00*	4.54*	−1.54
Overall	4.09*	6.16*	−2.07*	4.51*	4.96*	−0.45
Primary care physician expenditures						
Year One	6.66*	2.65	4.00*	6.86*	0.87	5.98*
Year Two	10.93*	5.18	5.75*	10.89*	4.44	6.44*
Year Three	7.78*	5.25	2.53	7.75*	6.07	1.68
Overall	8.74*	4.31	4.43*	8.77*	4.01	4.76*
Prescription expenditures						
Year One	4.19	4.52	−0.33	0.27	4.53*	−4.26
Year Two	−1.96	0.48	−2.45	−5.02*	0.90	−5.92*
Year Three	−1.37	0.54	−1.91	−4.60*	0.36	−4.96*
Overall	−0.25	1.98	−2.23	−3.46*	1.76	−5.22*

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-6
New York: Differences in the change in Medicaid PBPM expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	87.20*	69.91*	17.29	91.19*	97.54*	−6.35
Year Two	71.55*	61.58*	9.97	74.72*	75.64*	−0.92
Year Three	144.41*	116.14*	28.27*	147.17*	148.25*	−1.08
Overall	110.10*	92.60*	17.51	113.91*	119.26*	−5.34
Acute-care expenditures						
Year One	7.71*	3.27	4.44	16.42*	11.21*	5.22
Year Two	−9.16*	−3.97	−5.19	−0.34	−2.89	2.55
Year Three	4.15	3.80	0.35	12.92*	10.21*	2.71
Overall	1.27	2.36	−1.08	9.98*	7.34*	2.64
ER visits not leading to a hospitalization expenditures						
Year One	10.96*	11.13*	−0.17	10.41*	11.97*	−1.56
Year Two	11.53*	12.60*	−1.07	11.15*	10.16*	0.99
Year Three	11.02*	12.63*	−1.61	10.63*	11.41*	−0.78
Overall	10.82*	12.14*	−1.33	10.36*	11.63*	−1.27*
Specialty physician expenditures						
Year One	23.21*	18.08*	5.13*	22.34*	17.94*	4.40*
Year Two	11.29*	14.16*	−2.87*	10.18*	11.26*	−1.08
Year Three	10.58*	12.99*	−2.40	9.31*	10.21*	−0.90
Overall	13.63*	14.23*	−0.60	12.48*	12.28*	0.20
Primary care physician expenditures						
Year One	17.58*	11.68*	5.90*	15.79*	5.64*	10.15*
Year Two	30.95*	19.05*	11.90*	29.15*	14.10*	15.05*
Year Three	31.37*	23.55*	7.81*	29.55*	19.61*	9.94*
Overall	27.60*	19.39*	8.20*	25.77*	14.59*	11.19*
Prescription expenditures						
Year One	9.47*	9.23*	0.23	4.32	16.06*	−11.74*
Year Two	0.42	−5.65	6.07	−5.20	−4.21	−0.98
Year Three	10.49*	−3.54	14.04*	4.91	3.37	1.54
Overall	8.66*	1.35	7.31*	3.36	7.43	−4.08

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-7 and ***Table J2-8*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J2-7
New York: Differences in the probability of medical service utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	0.68*	0.56*	0.12	0.81*	0.70*	0.11
Year Two	0.48*	0.53*	−0.06	0.57*	0.66*	−0.09
Year Three	0.37*	0.52*	−0.16*	0.44*	0.61*	−0.18*
Overall	0.49*	0.53*	−0.04	0.59*	0.64*	−0.05
ER visits not leading to hospitalization						
Year One	11.57*	9.86*	1.71	11.93*	11.24*	0.68
Year Two	11.14*	9.51*	1.63	11.37*	10.52*	0.85
Year Three	9.96*	8.34*	1.62	10.17*	9.71*	0.46
Overall	10.64*	9.24*	1.40	10.88*	10.23*	0.65
Low birth weight admissions						
Overall	2.36	2.25	0.11	9.18*	12.83*	−3.64

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-8
New York: Differences in the probability of medical service utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	3.94*	3.74*	0.20	3.75*	3.66*	0.10
Year Two	2.92*	3.30*	−0.39	2.81*	3.09*	−0.28
Year Three	3.36*	3.55*	−0.18	3.24*	3.45*	−0.21
Overall	3.40*	3.58*	−0.19	3.27*	3.43*	−0.16
ER visits not leading to hospitalization						
Year One	17.19*	15.91*	1.28*	17.04*	17.75*	−0.71
Year Two	17.05*	15.66*	1.39*	16.97*	15.48*	1.49*
Year Three	15.84*	14.53*	1.31*	15.75*	15.21*	0.54
Overall	16.26*	15.28*	0.98	16.13*	16.24*	−0.11

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-9 and ***Table J2-10*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for total Medicaid per beneficiary per month (PBPM) expenditures for special populations among Medicaid children and adults, respectively.

Table J2-9
New York: Differences in the change in total Medicaid PBPM expenditures from baseline for special population beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Behavioral health condition only						
Year One	150.01*	19.82	130.19*	145.95*	59.25	86.69*
Year Two	57.10	−30.70	87.80*	40.47	78.25	−37.78
Year Three	41.70	122.02	−80.32	26.71	116.59*	−89.88*
Overall	78.61	38.55	40.06	67.45*	82.34*	−14.89

(continued)

Table J2-9 (continued)
New York: Differences in the change in total Medicaid PBPM expenditures from baseline for special population beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Disabled beneficiaries only						
Year One	−327.75*	−275.28*	−52.47	−333.49*	−160.49*	−173.00*
Year Two	−399.42*	−345.56*	−53.85	−404.41*	−249.39*	−155.03*
Year Three	−357.39*	−295.23*	−62.15	−365.49*	−185.14*	−180.35*
Overall	−361.93*	−301.72*	−60.21	−368.94*	−199.02*	−169.92*
Asthma diagnosis only						
Year One	40.89	−32.48	73.37	−22.01	39.14	−61.15
Year Two	−12.71	−52.83	40.12	−31.58	8.65	−40.22
Year Three	−20.69	−70.86	50.17	−37.03	−22.73	−14.30
Overall	−3.56	−48.15	44.59	−29.55	−8.79	−20.77
Rural beneficiaries only						
Year One	−40.65	−45.66	5.01	−18.21	−12.76	−5.44
Year Two	−79.74*	−58.26*	−21.49	−56.32*	−28.24*	−28.08*
Year Three	−68.97*	−31.79	−37.18	−44.68*	−23.26*	−21.42
Overall	−60.66*	−51.02*	−9.64	−37.05*	−22.96*	−14.09
Non-White beneficiaries only						
Year One	−42.62*	−65.75*	23.13*	−41.30*	−47.57*	6.27
Year Two	−55.04*	−70.21*	15.17*	−48.48*	−43.65*	−4.83
Year Three	−49.02*	−49.20*	0.18	−42.91*	−30.99*	−11.92
Overall	−47.83*	−58.99*	11.16*	−42.13*	−39.45*	−2.68
Pod 1 and all comparisons						
Year One	−39.26*	−49.59*	10.32	−56.62*	−47.07*	−9.54
Year Two	−49.06*	−54.80*	5.73	−57.43*	−48.40*	−9.03
Year Three	−57.29*	−37.41*	−19.88	−65.22*	−37.23*	−27.99*
Overall	−47.58*	−45.81*	−1.77	−57.60*	−44.81*	−12.79
Pod 2 and all comparisons						
Year One	−30.27*	−49.91*	19.64*	−36.98*	−46.24*	9.26
Year Two	−48.99*	−54.88*	5.89	−51.10*	−47.93*	−3.17
Year Three	−29.76*	−36.47*	6.70	−32.18*	−35.97*	3.79
Overall	−33.38*	−45.67*	12.29	−36.11*	−44.31*	8.20
Pod 3 and all comparisons						
Year One	−98.25*	−49.37*	−48.88*	−88.68*	−46.40*	−42.28
Year Two	−57.37*	−55.06*	−2.31	−90.42*	−49.15*	−41.27
Year Three	1.63	−37.36*	38.99	−59.16*	−36.47*	−22.69
Overall	−46.76*	−46.93*	0.17	−76.70*	−45.28*	−31.42

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-10
New York: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Multiple chronic conditions only						
Year One	256.26*	198.21*	58.05*	234.76*	223.01*	11.75
Year Two	211.16*	174.46*	36.70	188.57*	161.97*	26.60
Year Three	379.38*	333.58*	45.80	357.21*	335.87*	21.34
Overall	293.33*	250.43*	42.90*	271.51*	259.16*	12.35
Behavioral health conditions only						
Year One	263.39*	239.90*	23.49	302.62*	169.51*	133.12*
Year Two	188.55*	187.92*	0.62	208.08*	129.93*	78.16
Year Three	339.51*	440.61*	−101.11*	359.23*	267.01*	92.22*
Overall	277.74*	314.62*	−36.88	302.50*	206.33*	96.17*
Disabled beneficiaries only						
Year One	201.39*	135.99*	65.39	181.30*	148.82*	32.47
Year Two	156.23*	103.50*	52.73	140.05*	134.54*	5.51
Year Three	357.46*	256.17*	101.30*	344.16*	338.79*	5.37
Overall	255.13*	191.14*	63.99*	239.87*	238.31*	1.56
Asthma diagnosis only						
Year One	−1,357.79	−1,525.18	167.39*	70.73	7.70	63.02
Year Two	−1,358.42	−1,560.43	202.01*	77.07	11.35	65.72
Year Three	−1,274.17	−1,402.10	127.93	153.14	27.20	125.94*
Overall	−1,319.11	−1,463.20	144.09*	112.45	32.86	79.58
Rural beneficiaries only						
Year One	134.71*	78.51*	56.19	85.71*	84.00*	1.71
Year Two	67.49*	−0.34	67.83	11.90	48.54*	−36.64
Year Three	136.52*	62.09*	74.43	79.55*	87.29*	−7.74
Overall	121.95*	51.52*	70.43*	66.30*	86.01*	−19.71
Non-White beneficiaries only						
Year One	96.28*	91.98*	4.29	78.48*	79.65*	−1.17
Year Two	98.11*	73.06*	25.05*	82.73*	46.55*	36.18*
Year Three	175.75*	140.53*	35.22*	156.68*	118.86*	37.83*
Overall	133.96*	106.89*	27.07*	116.88*	94.20*	22.67*
Pod 1 and all comparisons						
Year One	76.89*	70.66*	6.22	82.32*	100.23*	−17.91
Year Two	78.28*	61.49*	16.79*	86.23*	78.24*	7.99
Year Three	121.64*	116.10*	5.54	130.91*	151.34*	−20.43
Overall	103.05*	94.69*	8.36	112.42*	124.18*	−11.76

(continued)

Table J2-10 (continued)
New York: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Pod 2 and all comparisons						
Year One	90.80*	68.19*	22.60*	98.28*	97.48*	0.80
Year Two	72.32*	61.07*	11.25	78.02*	76.65*	1.36
Year Three	135.22*	114.73*	20.49	141.14*	149.57*	−8.44
Overall	106.91*	92.15*	14.76	114.26*	121.02*	−6.77
Pod 3 and all comparisons						
Year One	95.70*	71.16*	24.55*	96.51*	100.56*	−4.05
Year Two	74.17*	64.10*	10.07	74.81*	79.71*	−4.90
Year Three	174.32*	117.26*	57.06*	172.97*	151.94*	21.03
Overall	125.48*	92.56*	32.92*	126.15*	121.01*	5.14

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-11 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J2-11
New York: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	89.43*	88.35*	1.08	89.62*	90.09*	−0.46
Year Two	88.24*	88.13*	0.11	88.17*	93.09*	−4.92*
Year Three	90.56*	89.08*	1.48	90.60*	88.64*	1.96
Overall	89.30*	88.45*	0.85	89.37*	90.73*	−1.36
Retinal eye examination						
Year One	62.40*	60.62*	1.79	62.57*	64.23*	−1.66
Year Two	64.36*	62.66*	1.71	64.11*	54.95*	9.16*
Year Three	65.65*	58.93*	6.72*	65.28*	59.24*	6.04
Overall	63.80*	60.89*	2.91*	63.70*	60.03*	3.68
LDL-C screening						
Year One	89.00*	90.73*	−1.73	81.10*	74.63*	6.46
Year Two	92.64*	93.07*	−0.42	87.25*	89.82*	−2.58
Year Three	93.18*	90.09*	3.09	88.72*	90.03*	−1.30
Overall	91.02*	91.32*	−0.30	84.63*	82.63*	2.00
Medical attention for nephropathy						
Year One	32.00	43.18	−11.18*	33.60	35.70*	−2.10
Year Two	25.58	37.53	−11.95	27.37	36.12	−8.76
Year Three	18.86	35.15	−16.28	20.80	36.82	−16.02
Overall	27.21	39.72	−12.50	28.94	36.07	−7.12
Received all 4 diabetes tests						
Year One	78.59*	79.19*	−0.61	76.20*	78.38*	−2.18
Year Two	86.82*	83.78*	3.04	85.09*	82.36*	2.73
Year Three	83.35*	78.27*	5.08	81.62*	85.04*	−3.42
Overall	82.16*	80.42*	1.74	80.12*	81.03*	−0.91
Received none of the 4 diabetes tests						
Year One	93.47*	92.87*	0.59	96.88*	96.41*	0.47
Year Two	93.76*	94.19*	−0.43	97.08*	97.99*	−0.91
Year Three	94.87*	91.92*	2.95	97.81*	97.70*	0.11
Overall	93.85*	93.08*	0.77	97.14*	97.17*	−0.04

(continued)

Table J2-11 (continued)
New York: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Breast cancer screening						
Year One	25.77	30.91	−5.14	30.29	29.81	0.48
Year Two	21.54	27.54	−6.01	25.68	25.78	−0.09
Year Three	15.34	26.60	−11.26	19.13	33.95	−14.83
Overall	22.24	28.95	−6.71	26.49	29.43	−2.94
Cervical cancer screening						
Year One	1.75	1.17	0.58	1.15	1.44	−0.29
Year Two	0.70	1.07	−0.37	0.45	0.33	0.12
Year Three	0.61	2.14	−1.54	0.36	0.19	0.18
Overall	1.18	1.34	−0.16	0.77	0.83	−0.07
Appropriate use of antidepressant medication management: 12 weeks						
Year One	36.80	33.66	3.14	26.48	24.09	2.38
Year Two	40.08*	39.83*	0.25	28.48	30.00	−1.53
Year Three	41.37*	34.54	6.83	29.46	27.24	2.22
Overall	38.89	35.85	3.05	27.80	26.71	1.09
Appropriate use of antidepressant medication management: 6 months						
Year One	31.13*	27.15*	3.98*	26.30*	21.25	5.05*
Year Two	28.46*	24.65*	3.80	23.45*	23.20	0.25
Year Three	26.10*	18.16*	7.94*	21.61*	18.98	2.63
Overall	29.18*	24.41*	4.77*	24.36*	21.40	2.96*
Appropriate use of asthma medications						
Year One	33.45*	39.61*	−6.17	28.22*	29.82*	−1.61
Year Two	31.71*	35.20*	−3.49	29.34*	39.55*	−10.21*
Year Three	29.19*	27.71*	1.48	26.43*	21.09*	5.34
Overall	32.04*	35.82*	−3.78	28.21*	31.15*	−2.94

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-12 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J2-12
New York: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	56.15*	44.43*	11.72*	56.17*	45.80*	10.37*
Year Two	60.51*	46.74*	13.77*	60.50*	46.51*	13.98*
Year Three	55.04*	49.99*	5.05*	54.97*	48.97*	6.00*
Overall	56.25*	46.60*	9.64*	56.21*	46.71*	9.50*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	21.97*	24.03*	−2.06	21.15*	22.65*	−1.50
Year Two	17.07*	21.19*	−4.12*	16.23*	18.77*	−2.54*
Year Three	17.06*	20.31*	−3.25	16.15*	17.33*	−1.18
Overall	18.18*	21.19*	−3.01*	17.36*	18.89*	−1.53
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	10.47*	9.33*	1.14	10.31*	11.06*	−0.75
Year Two	5.75*	7.70*	−1.94	5.73*	8.01*	−2.28*
Year Three	5.01*	6.75*	−1.74	4.98*	6.34*	−1.36
Overall	6.61*	7.65*	−1.04	6.54*	8.15*	−1.61*
Primary care visits as a percent of total visits						
Year One						
1st quintile	33.36*	40.32*	−6.96*	22.49*	29.41*	−6.92*
5th quintile	27.12*	21.62*	5.51*	38.90*	30.72*	8.19*
Year Two						
1st quintile	22.17*	34.14*	−11.97*	13.75*	20.04*	−6.29*
5th quintile	39.55*	26.45*	13.10*	53.69*	42.44*	11.25*
Year Three						
1st quintile	23.50*	33.26*	−9.76	14.53*	17.02*	−2.49
5th quintile	37.76*	27.22*	10.54	52.08*	47.39*	4.69
Overall						
1st quintile	27.86*	36.97*	−9.11*	18.14*	24.00*	−5.86*
5th quintile	33.18*	24.25*	8.92*	46.20*	37.71*	8.49*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	0.74	0.59	0.15	0.78	0.48	0.30
Year Two	0.64	0.60	0.04	0.69	0.45	0.23
Year Three	0.63	0.71	−0.08	0.66	0.63	0.03
Overall	0.66	0.65	0.01	0.70	0.52	0.18

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-13 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for medical expenditures for adult Medicaid beneficiaries with multiple chronic conditions.

Table J2-13
New York: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	256.26*	198.21*	58.05*	234.76*	223.01*	11.75
Year Two	211.16*	174.46*	36.70	188.57*	161.97*	26.60
Year Three	379.38*	333.58*	45.80	357.21*	335.87*	21.34
Overall	293.33*	250.43*	42.90*	271.51*	259.16*	12.35
Acute-care expenditures						
Year One	51.30*	44.47*	6.83	54.34*	32.29*	22.05
Year Two	16.84	23.21*	−6.37	19.95*	−5.66	25.61*
Year Three	65.57*	71.27*	−5.69	68.54*	45.65*	22.89*
Overall	43.65*	46.85*	−3.20	46.45*	26.53*	19.92*
ER visits not leading to hospitalization expenditures						
Year One	25.87*	22.20*	3.67	21.78*	20.11*	1.66
Year Two	24.63*	27.18*	−2.55	21.31*	18.82*	2.49
Year Three	24.09*	30.08*	−6.00*	20.73*	23.80*	−3.07
Overall	24.13*	26.52*	−2.39	20.53*	21.65*	−1.12
Specialty physician expenditures						
Year One	25.87*	22.20*	3.67	21.78*	20.11*	1.66
Year Two	24.63*	27.18*	−2.55	21.31*	18.82*	2.49
Year Three	24.09*	30.08*	−6.00*	20.73*	23.80*	−3.07
Overall	24.13*	26.52*	−2.39	20.53*	21.65*	−1.12
Primary care physician expenditures						
Year One	43.25*	32.60*	10.65*	41.46*	32.79*	8.67*
Year Two	25.10*	26.44*	−1.34	22.94*	19.88*	3.06
Year Three	23.60*	26.34*	−2.74	21.30*	19.30*	2.01
Overall	28.73*	27.34*	1.39	26.62*	22.86*	3.76
Prescription expenditures						
Year One	31.62*	19.71*	11.90*	26.59*	5.26	21.33*
Year Two	51.39*	34.13*	17.26*	46.38*	21.88*	24.49*
Year Three	56.79*	46.92*	9.87*	51.76*	39.07*	12.69*
Overall	47.48*	35.02*	12.46*	42.45*	23.97*	18.48*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-14 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J2-14
New York: Differences in the probability of medical service utilization measures during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	5.60	5.51*	0.09	5.07*	5.15*	−0.08
Year Two	3.81	4.65*	−0.84	3.52*	4.21*	−0.69
Year Three	4.88	5.47*	−0.58	4.52*	4.83*	−0.31
Overall	4.74	5.16*	−0.42	4.36*	4.79*	−0.43
ER visits not leading to hospitalization						
Year One	24.08*	20.99*	3.10*	23.60*	22.44*	1.16
Year Two	22.68*	20.92*	1.76	22.49*	19.86*	2.63*
Year Three	21.19*	19.98*	1.21	20.97*	20.27*	0.70
Overall	22.22*	20.49*	1.73*	21.91*	21.01*	0.90

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-15 and ***Table J2-16*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for expenditures for behavioral health care among Medicaid children and adults, respectively.

Table J2-15
New York: Differences in the change in BH care expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	150.01*	19.82	130.19*	145.95*	59.25	86.69*
Year Two	57.10	−30.70	87.80*	40.47	78.25	−37.78
Year Three	41.70	122.02	−80.32	26.71	116.59*	−89.88*
Overall	78.61	38.55	40.06	67.45*	82.34*	−14.89
Acute-care expenditures						
Year One	47.78*	17.44*	30.34	49.37*	14.13	35.24*
Year Two	24.21*	10.77*	13.44	25.50*	6.53	18.98
Year Three	15.14*	43.32*	−28.18*	16.72*	16.13*	0.59
Overall	31.46*	21.84*	9.62	33.13*	12.60*	20.54*
Expenditures for ER visits not leading to hospitalization						
Year One	11.39*	14.78*	−3.38	14.50*	9.55	4.95
Year Two	10.25*	12.22*	−1.97	14.02*	7.12*	6.90*
Year Three	8.41*	22.02*	−13.61*	12.47*	17.56*	−5.09
Overall	9.35*	17.15*	−7.80*	13.07*	11.47*	1.60
Total for principal diagnosis of a BH condition						
Year One	22.21	210.08*	−187.87	177.02*	188.19*	−11.17
Year Two	77.55	305.93*	−228.38	203.83*	177.85*	25.98
Year Three	137.85	521.11*	−383.25*	250.98*	350.52*	−99.54
Overall	93.71	369.89*	−276.18*	216.19*	245.54*	−29.35

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-16
New York: Differences in the change in BH care expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	263.39*	239.90*	23.49	302.62*	169.51*	133.12*
Year Two	188.55*	187.92*	0.62	208.08*	129.93*	78.16
Year Three	339.51*	440.61*	−101.11*	359.23*	267.01*	92.22*
Overall	277.74*	314.62*	−36.88	302.50*	206.33*	96.17*
Acute-care expenditures						
Year One	17.11	9.58	7.53	33.92	4.37	29.55
Year Two	−9.42	−20.29	10.87	4.89	−39.47*	44.37*
Year Three	43.92	87.83*	−43.91*	57.02*	7.90	49.12*
Overall	22.08	37.66	−15.58	36.09*	4.13	31.96
Expenditures for ER visits not leading to hospitalization						
Year One	38.29*	46.34*	−8.05	29.50*	30.76*	−1.26
Year Two	40.59*	54.67*	−14.07*	30.56*	30.62*	−0.05
Year Three	37.34*	57.22*	−19.88*	26.94*	35.50*	−8.56*
Overall	37.73*	52.69*	−14.96*	27.68*	34.62*	−6.94*
Total for principal diagnosis of a BH condition						
Year One	54.13	−7.85	61.99*	144.41*	54.41*	90.00*
Year Two	−3.37	8.63	−12.00	74.20*	77.58*	−3.37
Year Three	33.03	94.60*	−61.57*	111.96*	106.21*	5.75
Overall	39.35	49.71*	−10.36	121.05*	91.28*	29.77

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-17 and ***Table J2-18*** present decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J2-17
New York: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	2.32	1.82	0.50	2.43	0.83	1.60
Year Two	1.77	0.69	1.08	1.83	0.70	1.13
Year Three	1.64	2.76	−1.13	1.73	1.30	0.43
Overall	1.98	1.55	0.42	2.07	0.91	1.16
ER visits not leading to hospitalization						
Year One	16.74	13.97	2.77	17.30	13.56	3.74
Year Two	16.97	14.29	2.68	17.39	13.12	4.27
Year Three	15.15	13.48	1.67	15.57	14.90	0.67
Overall	15.72	14.38	1.35	16.18	14.11	2.06
BH inpatient admissions						
Year One	1.36	0.41	0.95	1.24	0.20	1.04
Year Two	0.84	0.11	0.73	0.70	0.16	0.53
Year Three	1.37	1.12	0.25	0.57	0.30	0.27
Overall	1.16	0.49	0.68	0.83	0.21	0.62
BH ER visits						
Year One	3.86	3.45	0.40	2.95	2.33	0.62
Year Two	2.70	4.50	−1.80	2.22	1.40	0.82
Year Three	2.82	4.79	−1.97	2.38	2.40	−0.01
Overall	2.81	4.51	−1.71	2.28	1.86	0.43
Behavioral health outpatient visits						
Year One	37.87	24.13	13.74*	40.48*	32.26	8.22*
Year Two	29.84	20.16	9.68	31.27	28.11	3.16
Year Three	29.22	24.43	4.79	30.31	32.45	−2.14
Overall	31.35	21.49	9.86	32.87*	29.79	3.08

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-18
New York: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	6.42*	6.35*	0.08	6.81	5.96	0.86
Year Two	5.71*	5.12*	0.59	5.94	5.32	0.63
Year Three	6.22*	7.91*	−1.70	6.42	5.99	0.44
Overall	6.31*	6.71*	−0.40	6.58	6.05	0.53
ER visits not leading to hospitalization						
Year One	30.65*	29.37*	1.28	31.87*	29.59*	2.27
Year Two	29.13*	29.97*	−0.83	29.81*	25.70*	4.11*
Year Three	26.77*	27.82*	−1.05	27.28*	27.02*	0.26
Overall	28.30*	28.86*	−0.56	28.98*	27.92*	1.06
BH inpatient admissions						
Year One	2.19	1.93	0.26	2.65	2.17	0.48
Year Two	1.92	1.88	0.04	2.25	1.82	0.43
Year Three	1.80	2.95	−1.15	2.12	2.60	−0.48
Overall	2.17	2.28	−0.11	2.56	2.30	0.27
BH ER visits						
Year One	5.57	5.19	0.38	5.40	4.37	1.04
Year Two	4.77	4.93	−0.16	4.50	4.42	0.09
Year Three	4.73	5.01	−0.28	4.50	4.27	0.23
Overall	4.96	4.92	0.04	4.73	4.70	0.03
BH outpatient visits						
Year One	23.46*	17.07*	6.39*	23.26	21.90	1.35
Year Two	21.53*	18.37*	3.16	21.08	22.01	−0.93
Year Three	21.10*	25.71*	−4.60*	20.74	23.22	−2.49
Overall	22.38*	20.60*	1.78	21.99	21.81	0.18

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-19 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration for selected expenditure outcomes among disabled Medicaid beneficiaries who are children.

Table J2-19
New York: Differences in the change in selected Medicaid PBPM expenditures from baseline for disabled beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	−333.49*	−160.49*	−173.00*
Year Two	−404.41*	−249.39*	−155.03*
Year Three	−365.49*	−185.14*	−180.35*
Overall	−368.94*	−199.02*	−169.92*
Acute-care expenditures			
Year One	27.17*	11.51	15.66
Year Two	10.67	−14.13*	24.81*
Year Three	13.06	−7.67	20.73
Overall	14.93	−8.32	23.25*
ER expenditures			
Year One	13.63*	8.86*	4.77*
Year Two	11.76*	11.10*	0.66
Year Three	10.55*	10.02*	0.53
Overall	11.77*	10.22*	1.55
Specialty physician expenditures			
Year One	18.00*	15.36*	2.64
Year Two	15.21*	13.58*	1.63
Year Three	12.68*	10.80*	1.88
Overall	14.50*	12.33*	2.18
Primary care physician expenditures			
Year One	13.96*	5.85	8.11*
Year Two	16.23*	9.85*	6.37*
Year Three	16.57*	15.77*	0.80
Overall	15.76*	11.16*	4.60*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J2-20 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on selected medical service utilization outcomes among disabled Medicaid beneficiaries who are children.

Table J2-20
New York: Differences in the probability of medical service utilization measures during the demonstration for disabled beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	2.00	1.39	0.61
Year Two	1.45	0.93	0.52
Year Three	1.37	0.99	0.38
Overall	1.55	1.01	0.54
ER visits not leading to hospitalization			
Year One	17.00*	11.10*	5.90*
Year Two	13.55*	10.14*	3.41*
Year Three	11.37*	9.39*	1.98
Overall	13.58*	10.22*	3.36*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.3 Decompositions of the Rhode Island Estimates

Table J3-1 present a decomposition of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for process of care indicators for Medicaid adults.

Table J3-1
Rhode Island: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	80.77*	80.38*	0.39	62.54*	51.33*	11.20*
Year Two	80.45*	85.85*	−5.41	63.58*	59.16*	4.42
Year Three	88.30*	88.46*	−0.16	76.13*	70.67*	5.46
Overall	82.22*	83.73*	−1.51	65.66*	57.73*	7.93*
Retinal eye examination						
Year One	31.54*	55.53*	−24.00*	42.33*	40.49*	1.84
Year Two	30.05*	41.36*	−11.31*	41.43*	43.94*	−2.51
Year Three	20.47*	37.88*	−17.41	30.56*	32.15*	−1.59
Overall	28.80*	47.54*	−18.74*	39.63*	39.83*	−0.21
LDL-C screening						
Year One	78.31*	78.31*	0.00	74.03*	69.73*	4.30
Year Two	80.48*	72.42*	8.06*	77.48*	67.56*	9.92*
Year Three	83.42*	89.80*	−6.39	80.29*	75.35*	4.94
Overall	80.03*	78.87*	1.16	76.38*	70.22*	6.16*
Medical attention for nephropathy						
Year One	82.85*	85.70*	−2.85*	84.88*	88.15*	−3.27
Year Two	78.85*	89.79*	−10.95*	81.85*	87.32*	−5.48
Year Three	83.80*	88.45*	−4.65	85.87*	87.20*	−1.33
Overall	81.81*	87.53*	−5.71*	84.15*	87.70*	−3.55
Received all 4 diabetes tests						
Year One	19.99*	32.06*	−12.07*	31.77*	27.57*	4.20
Year Two	18.97*	26.49*	−7.52	32.12*	31.80*	0.32
Year Three	15.94*	39.26*	−23.32*	27.00*	28.86*	−1.86
Overall	18.84*	31.83*	−12.99*	30.90*	29.14*	1.76
Received none of the 4 diabetes tests						
Year One	1.12	2.16	−1.04	2.52*	2.86*	−0.34
Year Two	1.83	2.13	−0.30	3.84*	3.71*	0.13
Year Three	1.27	2.03	−0.76	2.53*	3.50*	−0.97
Overall	1.37	2.12	−0.76	2.93*	3.26*	−0.33

(continued)

Table J3-1 (continued)
Rhode Island: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Breast cancer screening						
Year One	16.20*	18.73*	−2.54	14.95*	15.26*	−0.31
Year Two	12.83*	16.94*	−4.11	11.77*	13.32*	−1.56
Year Three	10.68*	11.16*	−0.47	9.76*	9.76*	0.00
Overall	14.17*	16.85*	−2.68	13.04*	13.69*	−0.66
Cervical cancer screening						
Year One	47.03*	46.51*	0.52	34.47	30.62	3.85
Year Two	46.56*	47.62*	−1.06	33.44	30.37	3.06
Year Three	43.03	43.27	−0.23	30.40	28.52	1.88
Overall	46.12	46.23*	−0.11	33.37	30.14	3.23
Appropriate use of antidepressant medication management: 12 weeks						
Year One	75.38*	70.83*	4.55	71.00*	70.04*	0.96
Year Two	69.33*	77.76*	−8.43	64.53*	67.30*	−2.76
Year Three	80.19*	82.18*	−1.99	76.53*	74.98*	1.55
Overall	74.50*	75.22*	−0.72	70.13*	70.19*	−0.06
Appropriate use of antidepressant medication management: 6 months						
Year 1	52.94*	41.15*	11.80*	DNC	DNC	DNC
Year 2	45.10*	51.65*	−6.55	DNC	DNC	DNC
Year 3	54.65*	61.06*	−6.42	DNC	DNC	DNC
Overall	50.89*	48.34*	2.55	DNC	DNC	DNC
Appropriate use of asthma medications						
Year 1	54.50*	48.28*	6.22*	56.98*	57.53*	−0.54
Year 2	56.42*	59.17*	−2.75	58.69*	55.72*	2.97
Year 3	55.46*	58.64*	−3.18	55.87*	51.80*	4.07
Overall	55.26*	53.52*	1.74	57.29*	55.91*	1.39

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; DNC = model did not converge; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-2 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for access to care for Medicaid adults.

Table J3-2
Rhode Island: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	39.42*	39.15*	0.27	39.21*	38.86*	0.34
Year Two	38.33*	37.54*	0.78	38.30*	37.33*	0.98
Overall	18.78*	18.39*	0.39	18.73*	18.25*	0.48
Medical specialist visits (per 1,000 beneficiaries)						
Year One	15.00*	13.97*	1.03*	14.87*	13.17*	1.71*
Year Two	14.96*	14.92*	0.04	14.87*	13.89*	0.99*
Overall	7.24*	6.94*	0.30	7.19*	6.54*	0.65*
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	DNC	DNC	DNC	3.68*	3.64*	0.04
Year Two	DNC	DNC	DNC	4.57*	3.79*	0.77*
Overall	DNC	DNC	DNC	2.02*	1.81*	0.21
Primary care visits as a percent of total visits (% PC)						
Year One						
% PC < 70%	36.94*	33.75*	3.19*	25.70*	23.85*	1.84
70% ≤ % PC < 100%	23.43*	23.24*	0.19	22.81*	22.18*	0.62
% PC = 100%	39.62*	43.01*	−3.39*	51.50*	53.96*	−2.46
Year Two						
% PC < 70%	41.09*	41.76*	−0.67	29.16*	26.93*	2.22
70% ≤ % PC < 100%	23.38*	23.34*	0.04	23.69*	23.16*	0.53
% PC = 100%	35.53*	34.90*	0.63	47.15*	49.90*	−2.75
Overall						
% PC < 70%	38.28*	36.32*	1.95	26.81*	24.84*	1.97
70% ≤ % PC < 100%	23.42*	23.27*	0.15	23.09*	22.50*	0.59
% PC = 100%	38.31*	40.41*	−2.10	50.10*	52.66*	−2.56
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	4.23	3.27	0.96	4.12	3.35	0.78
Year Two	2.69	2.02	0.67	2.67	2.95	−0.28
Year Three	4.93	7.79	−2.87	4.96	3.91	1.05
Overall	4.23	5.48	−1.25	4.22	3.72	0.50

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; DNC = model did not converge; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-3 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for medical expenditures among Medicaid adults.

Table J3-3
Rhode Island: Differences in the change in Medicaid PBPM expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	125.61*	109.50*	16.10*	124.81*	125.55*	−0.74
Year Two	167.57*	162.48*	5.09	165.58*	168.66*	−3.09
Year Three	239.01*	214.69*	24.33*	236.25*	224.12*	12.13
Overall	186.29*	169.01*	17.28*	184.03*	180.13*	3.90
Acute-care expenditures						
Year One	72.82*	57.80*	15.03*	72.84*	78.53*	−5.68
Year Two	107.60*	98.36*	9.25	106.99*	115.85*	−8.86
Year Three	88.21*	87.97*	0.24	87.27*	94.12*	−6.85
Overall	86.05*	78.88*	7.17	85.34*	92.10*	−6.76
ER visits not leading to a hospitalization expenditures						
Year One	15.98*	12.53*	3.45*	15.92*	14.78*	1.14
Year Two	18.12*	18.12*	0.01	18.04*	17.14*	0.89
Year Three	14.77*	13.64*	1.13	14.67*	14.22*	0.45
Overall	14.94*	13.90*	1.04	14.86*	14.17*	0.69
Specialty physician expenditures						
Year One	9.10*	8.38*	0.72	8.72*	8.55*	0.17
Year Two	9.80*	8.61*	1.19	9.56*	8.54*	1.03
Overall	1.57*	0.80*	0.77*	1.35*	1.14*	0.21
Primary care physician expenditures						
Year One	3.68*	2.73*	0.95	3.69*	2.79*	0.90
Year Two	2.99*	2.62*	0.37	3.06*	1.93*	1.12*
Overall	−3.40*	−3.04*	−0.36	−3.33*	−3.91*	0.58*
Prescription expenditures						
Year One	12.77*	12.86*	−0.09	10.70*	9.21*	1.49
Year Two	14.75*	13.45*	1.30	12.67*	10.37*	2.29
Year Three	16.30*	9.86*	6.43*	14.19*	8.47*	5.72*
Overall	14.99*	11.49*	3.49	12.89*	8.98*	3.91*
LTC expenditures						
Year One	−0.06	0.14*	−0.21*	−0.04	0.01	−0.05
Year Two	0.00	0.08	−0.08	0.01	0.03*	−0.02
Year Three	3.40*	3.90*	−0.50	3.41*	2.69*	0.72
Overall	1.76*	1.97*	−0.21	1.77*	1.40*	0.37

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-4 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for medical service utilization among Medicaid adults.

Table J3-4
Rhode Island: Differences in the probability of medical service utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	3.19*	2.80*	0.39*	3.13*	3.15*	−0.02
Year Two	2.94*	3.03*	−0.09	2.87*	3.09*	−0.22
Year Three	2.68*	2.78*	−0.10	2.61*	2.66*	−0.04
Overall	2.82*	2.79*	0.03	2.75*	2.84*	−0.09
ER visits not leading to hospitalization						
Year One	13.67*	12.00*	1.67*	13.60*	13.23*	0.37
Year Two	13.38*	13.06*	0.32	13.31*	13.35*	−0.04
Year Three	11.96*	11.36*	0.60	11.90*	11.80*	0.09
Overall	12.49*	11.83*	0.66	12.43*	12.34*	0.09

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-5 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for total Medicaid PBPM expenditures for special populations among Medicaid adults.

Table J3-5
Rhode Island: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Multiple chronic conditions only						
Year One	188.27*	116.39*	71.88	198.05*	193.01*	5.04
Year Two	214.35*	222.38*	−8.04	223.30*	228.38*	−5.08
Year Three	343.35*	308.42*	34.92	352.26*	332.99*	19.27
Overall	251.67*	220.44*	31.24	260.94*	253.50*	7.44
BH conditions only						
Year One	217.93*	143.74*	74.19	220.96*	173.75*	47.21*
Year Two	273.54*	271.27*	2.27	273.43*	210.87*	62.57*
Year Three	381.25*	403.86*	−22.61	379.96*	335.20*	44.76
Overall	303.30*	293.88*	9.41	303.35*	248.64*	54.71*
Disabled beneficiaries only						
Year One	264.99*	289.52*	−24.53	272.51*	257.59*	14.91
Year Two	295.37*	387.91*	−92.54*	302.14*	324.90*	−22.76
Year Three	532.06*	561.39*	−29.34	536.95*	443.95*	93.00
Overall	389.30*	431.16*	−41.86*	395.20*	351.50*	43.70
Asthma diagnosis only						
Year One	107.94	−73.68	181.61*	157.92*	132.97*	24.96
Year Two	128.69*	13.35	115.34	171.88*	197.85*	−25.97
Year Three	291.99*	148.20*	143.79*	331.14*	313.67*	17.48
Overall	202.90*	93.16	109.74*	245.05*	234.99*	10.06
Rural beneficiaries only						
Year One	94.93	184.50*	−89.57	162.61*	139.76*	22.84
Year Two	116.88	239.11*	−122.23	189.93*	138.78*	51.16
Year Three	153.91	−13.27	167.18*	231.37*	249.47*	−18.09
Overall	102.94	82.04	20.90	177.20*	183.71*	−6.51

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-6 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J3-6
Rhode Island: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	83.04*	82.36*	0.68	77.21*	68.12*	9.09
Year Two	84.16*	94.95*	−10.79	80.15*	73.01*	7.14
Year Three	88.31*	96.43*	−8.12	84.57*	82.38*	2.20
Overall	84.56*	88.97*	−4.42	79.70*	72.72*	6.98
Retinal eye examination						
Year One	23.42*	56.15*	−32.73*	48.60*	48.29*	0.31
Year Two	26.09*	47.72*	−21.63	53.32*	53.89*	−0.57
Year Three	14.13*	42.71*	−28.58	36.28*	34.61*	1.67
Overall	21.99*	50.80*	−28.80*	47.02*	46.63*	0.39
LDL-C screening						
Year One	93.91*	84.86*	9.04	94.27*	92.54*	1.73
Year Two	95.18*	91.16*	4.02*	95.65*	91.42*	4.22
Year Three	95.71*	95.46*	0.25	95.94*	93.43*	2.51
Overall	94.66*	88.99*	5.67	95.03*	92.45*	2.58
Medical attention for nephropathy						
Year One	85.80*	93.08*	−7.28	89.98*	94.83*	−4.85
Year Two	84.50*	98.13*	−13.62*	88.77*	95.15*	−6.38
Year Three	87.24*	98.52*	−11.27*	90.45*	92.98*	−2.53
Overall	85.79*	95.68*	−9.90*	89.76*	94.49*	−4.72
Received all 4 diabetes tests						
Year One	41.22*	29.95*	11.28	45.50*	44.64*	0.85
Year Two	50.74*	71.10*	−20.36	57.07*	55.23*	1.84
Year Three	39.99*	70.50*	−30.51	46.59*	43.09*	3.49
Overall	43.48*	50.31*	−6.83	48.84*	47.12*	1.73
Received none of the 4 diabetes tests						
Year One	15.04	0.00	15.04	5.19	2.37	2.82
Year Two	42.01	0.00	42.01	20.09	8.56	11.54
Year Three	16.96*	0.00	16.96*	6.11	7.18	−1.07
Overall	22.70	0.00	22.70	9.39	5.13	4.25

(continued)

Table J3-6 (continued)
Rhode Island: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Breast cancer screening						
Year One	28.66*	42.09*	−13.44*	35.13*	35.83*	−0.70
Year Two	25.12*	40.21*	−15.09*	31.25*	33.88*	−2.63
Year Three	19.04*	21.39*	−2.35	24.44*	26.83*	−2.39
Overall	25.35*	36.86*	−11.51*	31.47*	33.18*	−1.71
Cervical cancer screening						
Year One	41.77*	39.55*	2.22	50.48*	51.94*	−1.46
Year Two	43.56*	53.99*	−10.43	51.58*	48.25*	3.33
Year Three	33.37*	41.04*	−7.67*	40.60*	42.07*	−1.47
Overall	40.24*	44.64*	−4.40	48.36*	48.25*	0.10
Appropriate use of antidepressant medication management: 12 weeks						
Year One	53.96*	41.20*	12.76	52.45*	52.16*	0.29
Year Two	38.50*	66.88*	−28.38*	36.86*	46.35*	−9.49
Year Three	55.39*	69.56*	−14.17	54.08*	57.98*	−3.90
Overall	49.83*	54.26*	−4.43	48.33*	51.68*	−3.35
Appropriate use of antidepressant medication management: 6 months						
Year One	64.91*	50.13*	14.78*	56.98*	53.71*	3.27
Year Two	52.51*	61.65*	−9.14	44.23*	41.72*	2.51
Year Three	64.14*	78.93*	−14.78	55.97*	57.83*	−1.86
Overall	61.22*	59.24*	1.97	53.13*	51.12*	2.02
Appropriate use of asthma medications						
Year One	25.61	13.96	11.65	45.31*	49.22*	−3.91
Year Two	30.43	29.84	0.60	51.47*	44.03*	7.44
Year Three	24.79	32.47	−7.68	43.66*	32.84*	10.82
Overall	26.89	22.73	4.16	46.82*	44.14*	2.68

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-7 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J3-7
Rhode Island: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	DNC	DNC	DNC	60.43*	61.75*	−1.32
Year Two	DNC	DNC	DNC	57.40*	58.72*	−1.32
Overall	DNC	DNC	DNC	33.69*	34.38*	−0.69
Medical specialist visits (per 1,000 beneficiaries)						
Year One	DNC	DNC	DNC	30.76*	28.12*	2.64
Year Two	DNC	DNC	DNC	29.80*	29.02*	0.79
Overall	DNC	DNC	DNC	17.25*	16.32*	0.93
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	DNC	DNC	DNC	9.71	9.90	−0.19
Year Two	DNC	DNC	DNC	11.00	9.99	1.01
Overall	DNC	DNC	DNC	5.92	5.69	0.23
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	DNC	DNC	DNC	DNC	DNC	DNC
70% ≤ % PC < 100%	DNC	DNC	DNC	DNC	DNC	DNC
% PC = 100%	DNC	DNC	DNC	DNC	DNC	DNC
Year Two						
% PC < 70%	DNC	DNC	DNC	DNC	DNC	DNC
70% ≤ % PC < 100%	DNC	DNC	DNC	DNC	DNC	DNC
% PC = 100%	DNC	DNC	DNC	DNC	DNC	DNC
Overall						
% PC < 70%	DNC	DNC	DNC	DNC	DNC	DNC
70% ≤ % PC < 100%	DNC	DNC	DNC	DNC	DNC	DNC
% PC = 100%	DNC	DNC	DNC	DNC	DNC	DNC
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	DNC	DNC	DNC	5.44	5.92	−0.48
Year Two	DNC	DNC	DNC	5.49	7.47	−1.98
Year Three	DNC	DNC	DNC	8.78	6.34	2.44
Overall	DNC	DNC	DNC	7.13	6.65	0.48

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; DNC = model did not converge; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-8 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for medical expenditures for adult Medicaid beneficiaries with multiple chronic conditions.

Table J3-8
Rhode Island: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	188.27*	116.39*	71.88	198.05*	193.01*	5.04
Year Two	214.35*	222.38*	−8.04	223.30*	228.38*	−5.08
Year Three	343.35*	308.42*	34.92	352.26*	332.99*	19.27
Overall	251.67*	220.44*	31.24	260.94*	253.50*	7.44
Acute-care expenditures						
Year One	62.38*	−2.48	64.86*	61.91*	65.33*	−3.42
Year Two	85.60*	57.70*	27.91	84.22*	97.00*	−12.78
Year Three	70.85*	42.34	28.51	69.23*	67.16*	2.07
Overall	69.83*	35.05*	34.78	68.58*	72.64*	−4.06
ER visits not leading to hospitalization expenditures						
Year One	30.04*	24.96*	5.08	29.48*	25.52*	3.97
Year Two	33.22*	52.20*	−18.98*	32.69*	32.03*	0.66
Year Three	25.45*	25.96*	−0.51	24.95*	24.56*	0.39
Overall	27.85*	31.94*	−4.09	27.34*	26.02*	1.32
Specialty physician expenditures						
Year One	19.06*	17.33*	1.74	19.80*	20.37*	−0.57
Year Two	18.94*	18.75*	0.19	19.95*	20.45*	−0.50
Overall	5.79*	4.46*	1.33	6.76*	7.13*	−0.36
Primary care physician expenditures						
Year One	7.52*	6.20*	1.32	8.07*	8.99*	−0.93
Year Two	4.94*	5.65*	−0.70	5.56*	6.35*	−0.79
Overall	−3.04*	−2.38	−0.65	−2.42*	−2.37*	−0.05
Prescription expenditures						
Year One	65.84*	59.37*	6.46	61.22*	48.51*	12.71*
Year Two	65.09*	56.33*	8.76	60.86*	44.85*	16.01*
Year Three	67.87*	49.41*	18.47	63.84*	45.64*	18.20*
Overall	65.56*	54.37*	11.19	61.34*	44.71*	16.63*

(continued)

Table J3-8 (continued)
Rhode Island: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
LTC expenditures						
Year One	0.01	0.07	−0.06	0.03	0.02	0.01
Year Two	0.05	0.02	0.03	0.07*	0.03	0.03
Year Three	7.52*	9.49*	−1.97*	7.53*	6.89*	0.64
Overall	3.35*	3.83*	−0.47*	3.37*	2.95*	0.42

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-9 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J3-9
Rhode Island: Differences in the probability of medical service utilization measures during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	3.84*	2.79*	1.04	3.79*	3.74*	0.05
Year Two	3.37*	3.70*	−0.33	3.30*	3.98*	−0.67
Year Three	3.37*	2.89*	0.48	3.30*	3.19*	0.11
Overall	3.44*	3.18*	0.26	3.38*	3.59*	−0.22
ER visits not leading to hospitalization						
Year One	19.74*	18.55*	1.19	19.54*	19.59*	−0.05
Year Two	19.83*	23.15*	−3.32*	19.67*	19.87*	−0.20
Year Three	17.98*	16.81*	1.18	17.85*	18.06*	−0.21
Overall	18.81*	18.97*	−0.16	18.66*	18.83*	−0.17

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-10 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for expenditures for behavioral health (BH) care among Medicaid adults.

Table J3-10
Rhode Island: Differences in the change in BH care expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH care expenditures from baseline		Difference	Change in BH care expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	217.93*	143.74*	74.19	220.96*	173.75*	47.21*
Year Two	273.54*	271.27*	2.27	273.43*	210.87*	62.57*
Year Three	381.25*	403.86*	−22.61	379.96*	335.20*	44.76
Overall	303.30*	293.88*	9.41	303.35*	248.64*	54.71*
Acute-care expenditures						
Year One	73.87*	5.52	68.34*	73.35*	56.77*	16.58
Year Two	113.56*	63.19*	50.37	111.39*	84.51*	26.88
Year Three	87.64*	92.16*	−4.52	84.66*	73.18*	11.47
Overall	91.29*	67.46*	23.83*	89.04*	70.56*	18.48
Expenditures for ER visits not leading to hospitalization						
Year One	44.73*	41.19*	3.53	42.26*	34.98*	7.28
Year Two	46.79*	64.96*	−18.18	44.09*	37.77*	6.32
Year Three	33.81*	35.56*	−1.74	31.03*	29.23*	1.80
Overall	39.00*	48.15*	−9.16	36.33*	31.54*	4.79
Total for principal diagnosis of a BH condition						
Year One	138.93*	75.96*	62.97	142.76*	137.29*	5.46
Year Two	156.30*	129.45*	26.85	158.90*	152.46*	6.44
Year Three	87.37*	9.60	77.77	89.56*	84.85*	4.71
Overall	116.99*	65.19	51.80	119.62*	114.26*	5.36

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-11 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid adults.

Table J3-11
Rhode Island: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	4.80	3.75	1.06	4.76*	4.17*	0.59
Year Two	4.90	4.90	0.00	4.82*	4.14*	0.68
Year Three	4.40	4.42	−0.03	4.32*	3.94*	0.38
Overall	4.67	4.62	0.05	4.59*	4.04*	0.56
ER visits not leading to hospitalization						
Year One	22.75*	20.41*	2.34	22.65*	21.44*	1.21
Year Two	22.83*	23.01*	−0.18	22.70*	21.06*	1.64
Year Three	20.76*	19.44*	1.32	20.63*	19.09*	1.54
Overall	21.51*	20.83*	0.67	21.39*	19.90*	1.49
BH inpatient admissions						
Year One	3.10	1.95	1.15	3.13	2.45	0.67
Year Two	3.18	2.79	0.39	3.19	2.72	0.47
Year Three	2.08	1.56	0.51	2.08	2.11	−0.04
Overall	2.67	2.14	0.53	2.68	2.32	0.36
BH ER visits						
Year One	8.43	7.41	1.02	8.31*	6.80	1.51
Year Two	9.38	9.18	0.20	9.25*	7.55*	1.69
Year Three	5.74	5.48	0.26	5.66*	4.68	0.98
Overall	7.28	6.65	0.63	7.18*	5.86*	1.32
BH outpatient visits						
Year One	32.61*	30.08*	2.53	32.57*	33.57*	−1.00
Year Two	35.56*	39.19*	−3.63	35.56*	37.99*	−2.43
Year Three	34.94*	33.10*	1.84	35.02*	30.42*	4.59*
Overall	33.92*	33.56*	0.36	33.94*	32.90*	1.05

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-12 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration for selected expenditure outcomes among disabled Medicaid beneficiaries who are adults.

Table J3-12
Rhode Island: Differences in the change in selected Medicaid PBPM expenditures from baseline for disabled beneficiaries who are adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in selected expenditure measures from baseline		Difference
	MAPCP	PCMH CG	
Total Medicaid expenditures			
Year One	264.99*	289.52*	−24.53
Year Two	295.37*	387.91*	−92.54*
Year Three	532.06*	561.39*	−29.34
Overall	389.30*	431.16*	−41.86*
Acute-care expenditures			
Year One	141.46*	123.03*	18.43
Year Two	168.35*	198.32*	−29.96*
Year Three	167.80*	216.78*	−48.97
Overall	157.74*	182.64*	−24.90*
ER expenditures			
Year One	27.20*	17.26*	9.95*
Year Two	27.40*	32.18*	−4.78
Year Three	30.68*	43.68*	−13.00*
Overall	29.21*	36.36*	−7.15*
Specialty physician expenditures			
Year One	11.52*	9.68*	1.84
Year Two	11.69*	11.17*	0.52
Year Three	−0.53	−3.54*	3.01*
Overall	6.00*	3.93*	2.07
Primary care physician expenditures			
Year One	5.33*	3.97*	1.36
Year Two	4.25*	3.80*	0.45
Year Three	−8.56*	−7.35*	−1.21
Overall	−1.21*	−1.09*	−0.12

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J3-13 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on selected medical service utilization outcomes among disabled Medicaid beneficiaries who are adults.

Table J3-13
Rhode Island: Differences in the probability of medical service utilization measures during the demonstration for disabled beneficiaries who are adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	PCMH CG	
All-cause admissions			
Year One	5.27*	4.90*	0.37
Year Two	4.80*	6.05*	−1.24
Year Three	5.23*	7.23*	−2.00*
Overall	5.03*	6.14*	−1.11
ER visits not leading to hospitalization			
Year One	19.81*	15.77*	4.04*
Year Two	18.29*	17.98*	0.31
Year Three	19.28*	21.37*	−2.09
Overall	18.75*	18.70*	0.05

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.4 Decompositions of the Vermont Estimates

Table J4-1 and ***Table J4-2*** present a decomposition of the estimates of the changes associated with the Vermont MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J4-1
Vermont: Differences in the probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Appropriate use of asthma medications						
Year One	79.01*	89.56*	−10.55	77.41*	85.65*	−8.24
Year Two	79.14*	91.00*	−11.86	76.91*	85.55*	−8.64
Year Three	73.49*	94.17*	−20.68	72.09*	83.17*	−11.07
Overall	77.85*	91.12*	−13.28	76.05*	85.06*	−9.01

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home. ‘

* Statistically significant at the 10 percent level.

Table J4-2
Vermont: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	93.03*	93.59*	−0.56	93.60*	93.83*	−0.22
Year Two	93.33*	94.74*	−1.41	93.66*	95.81*	−2.14
Year Three	92.52*	93.42*	−0.90	93.12*	96.03*	−2.91
Overall	93.00*	93.97*	−0.97	93.50*	95.16*	−1.66
Retinal eye examination						
Year One	49.98*	56.42*	−6.44	53.47*	58.03*	−4.56
Year Two	50.93*	53.22*	−2.29	53.57*	49.70*	3.87
Year Three	51.33*	55.80*	−4.47	54.22*	54.23*	−0.01
Overall	50.70*	55.07*	−4.37	53.71*	53.91*	−0.20
LDL-C screening						
Year One	58.97*	65.21*	−6.24*	71.88*	79.95*	−8.07*
Year Two	59.22*	68.20*	−8.98*	72.62*	81.77*	−9.15*
Year Three	59.01*	66.06*	−7.05	72.53*	77.67*	−5.15
Overall	59.07*	66.55*	−7.48*	72.33*	80.01*	−7.68*
Medical attention for nephropathy						
Year One	67.09*	62.36*	4.73	73.97*	76.45*	−2.48
Year Two	70.36*	70.15*	0.20	75.53*	69.59*	5.94
Year Three	68.73*	62.78*	5.95	74.37*	79.46*	−5.09
Overall	68.75*	65.37*	3.38	74.66*	74.72*	−0.06
Received all 4 diabetes tests						
Year One	28.71*	32.84*	−4.12	36.89*	42.69*	−5.81
Year Two	32.18*	31.09*	1.09	39.87*	33.93*	5.94
Year Three	32.64*	33.56*	−0.92	40.96*	37.25*	3.72
Overall	31.06*	32.38*	−1.32	39.09*	37.97*	1.13
Received none of the 4 diabetes tests						
Year One	3.92	3.42	0.50	2.43	1.82	0.61
Year Two	3.40	1.67	1.74	2.36	3.28	−0.92
Year Three	5.30	5.09	0.22	3.71	2.24	1.47
Overall	4.10	3.22	0.88	2.75	2.47	0.28
Breast cancer screening						
Year One	20.02*	20.08*	−0.06	20.11*	20.69*	−0.58
Year Two	14.96*	15.39*	−0.42	15.21*	17.14*	−1.92
Year Three	13.18*	14.20*	−1.02	13.47*	15.78*	−2.31
Overall	16.48*	16.91*	−0.43	16.67*	18.18*	−1.50

(continued)

Table J4-2 (continued)
Vermont: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Cervical cancer screening						
Year One	27.02*	22.22*	4.80*	29.76*	26.15*	3.61*
Year Two	23.76*	25.75*	−1.99	26.46*	28.51*	−2.05
Year Three	24.07*	24.14*	−0.07	26.76*	25.66*	1.10
Overall	25.08*	24.01*	1.07	27.79*	26.91*	0.88
Appropriate use of antidepressant medication management: 12 weeks						
Year One	41.22*	40.47*	0.75	47.67*	46.64*	1.03
Year Two	42.80*	42.88*	−0.08	50.26*	54.45*	−4.19
Year Three	42.43*	29.33*	13.10*	50.27*	41.16*	9.11*
Overall	41.99*	38.91*	3.08	49.06*	48.03*	1.03
Appropriate use of antidepressant medication management: 6 months						
Year 1	24.79*	17.51*	7.28*	24.75*	24.72*	0.03
Year 2	26.50*	21.59*	4.91	26.93*	30.09*	−3.16
Year 3	24.15*	12.70*	11.44*	24.94*	16.37*	8.57*
Overall	25.21*	17.83*	7.38*	25.50*	24.71*	0.79
Appropriate use of asthma medications						
Year 1	87.40*	89.94*	−2.54	76.91*	82.72*	−5.81*
Year 2	84.90*	86.23*	−1.33	75.04*	87.33*	−12.29*
Year 3	84.55*	85.07*	−0.52	75.04*	89.06*	−14.03*
Overall	85.76*	87.35*	−1.59	75.75*	86.01*	−10.26*

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-3 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for access to care for Medicaid adults.

Table J4-3
Vermont: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	7.25*	5.24*	2.01*	7.30*	5.18*	2.11*
Year Two	7.98*	5.95*	2.02	8.04*	4.63*	3.41*
Year Three	7.64*	5.05*	2.59	7.61*	6.88*	0.74
Overall	7.66*	5.53*	2.13*	7.68*	5.50*	2.18*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-4 and ***Table J4-5*** present decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for medical expenditures among Medicaid children and adults, respectively.

Table J4-4
Vermont: Differences in the change in Medicaid PBPM expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	105.22*	62.95*	42.28*	103.69*	82.87*	20.82*
Year Two	110.31*	53.53*	56.78*	109.40*	66.91*	42.49*
Year Three	144.47*	91.38*	53.09*	143.47*	93.75*	49.72*
Overall	114.54*	72.93*	41.61*	113.56*	78.00*	35.56*
Acute-care expenditures						
Year One	−1.06	−14.09*	13.02*	−1.42	−14.71*	13.30*
Year Two	−2.98*	−17.20*	14.22*	−3.14*	−19.84*	16.70*
Year Three	−1.02	−2.22	1.20	−1.16	−9.41*	8.25*
Overall	−2.41	−9.85*	7.44*	−2.57*	−14.83*	12.26*
ER expenditures						
Year One	6.55*	7.95*	−1.40	6.87*	6.06*	0.81
Year Two	6.92*	8.51*	−1.60	7.31*	5.16*	2.16*
Year Three	7.02*	7.57*	−0.55	7.43*	5.76*	1.67*
Overall	6.54*	8.13*	−1.59	6.94*	5.47*	1.47*
Prescription expenditures						
Year One	18.64*	16.73*	1.91	18.89*	20.19*	−1.30
Year Two	18.70*	10.94*	7.75*	18.89*	14.99*	3.89*
Year Three	24.35*	9.53*	14.82*	24.56*	14.12*	10.44*
Overall	21.65*	12.30*	9.35*	21.88*	14.99*	6.89*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-5
Vermont: Differences in the change in Medicaid PBPM expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	115.66*	84.47*	31.19*	113.83*	95.40*	18.43
Year Two	137.63*	74.60*	63.04*	134.48*	86.21*	48.27*
Year Three	205.32*	146.53*	58.79*	201.54*	155.47*	46.07*
Overall	150.75*	118.10*	32.65*	147.21*	128.19*	19.03
Acute-care expenditures						
Year One	37.97*	31.58*	6.39*	37.85*	30.66*	7.19*
Year Two	33.51*	22.51*	11.00*	33.40*	21.23*	12.18*
Year Three	46.60*	43.05*	3.56	46.37*	38.27*	8.09*
Overall	37.48*	34.16*	3.32*	37.27*	31.55*	5.72*
ER visits not leading to a hospitalization expenditures						
Year One	11.45*	8.47*	2.97*	11.39*	9.44*	1.96
Year Two	12.11*	10.32*	1.79	12.04*	9.13*	2.91*
Year Three	14.02*	11.03*	2.99*	13.99*	10.99*	2.99*
Overall	11.76*	10.30*	1.46	11.74*	10.32*	1.42*
Prescription expenditures						
Year One	43.02*	26.64*	16.38*	41.91*	32.32*	9.59
Year Two	41.04*	13.93*	27.11*	39.24*	21.98*	17.26*
Year Three	57.37*	19.54*	37.82*	55.51*	30.38*	25.13*
Overall	48.97*	20.99*	27.98*	47.16*	30.53*	16.63*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-6 and ***Table J4-7*** present decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J4-6
Vermont: Differences in the probability of medical service utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	0.44*	0.33*	0.11	0.47*	0.37*	0.10*
Year Two	0.43*	0.32*	0.10	0.46*	0.35*	0.11*
Year Three	0.39*	0.41*	−0.02	0.43*	0.39*	0.04
Overall	0.40*	0.36*	0.03	0.43*	0.37*	0.06*
ER visits not leading to hospitalization						
Year One	11.17*	10.65*	0.52	11.18*	10.39*	0.78
Year Two	11.09*	10.17*	0.91	11.12*	9.59*	1.53*
Year Three	10.26*	9.22*	1.04*	10.33*	9.03*	1.30*
Overall	10.40*	10.05*	0.35	10.45*	9.46*	0.99*
Low birth weight admissions						
Overall	5.23*	10.22*	−5.00	9.14	18.71*	−9.57

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-7
Vermont: Differences in the probability of medical service utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	2.66*	2.41*	0.25*	2.72*	2.40*	0.32*
Year Two	2.75*	2.08*	0.67*	2.81*	2.05*	0.76*
Year Three	2.82*	2.51*	0.31*	2.86*	2.40*	0.46*
Overall	2.65*	2.38*	0.27*	2.69*	2.32*	0.37*
ER visits not leading to hospitalization						
Year One	14.57*	13.40*	1.17	14.59*	13.94*	0.64
Year Two	14.64*	13.75*	0.89	14.63*	12.93*	1.70*
Year Three	14.43*	13.28*	1.16	14.44*	12.68*	1.76*
Overall	14.04*	13.50*	0.54	14.05*	13.20*	0.85*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-8 and ***Table J4-9*** present decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for total Medicaid PBPM expenditures for special populations among Medicaid children and adults, respectively.

Table J4-8
Vermont: Differences in the change in total Medicaid PBPM expenditures from baseline for special population beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
BH conditions only						
Year One	761.58*	521.08*	240.49*	766.18*	468.23*	297.94*
Year Two	832.66*	528.14*	304.52*	830.00*	455.78*	374.22*
Year Three	906.30*	495.14*	411.15*	904.94*	502.78*	402.16*
Overall	796.97*	509.60*	287.36*	796.83*	465.47*	331.36*
Disabled beneficiaries only						
Year One	613.83*	994.57*	−380.73	584.22*	1,960.00*	−1,375.78*
Year Two	753.37*	655.35*	98.02	741.25*	1,897.00*	−1,155.75
Year Three	796.99*	539.19*	257.80	763.88*	1,602.00*	−838.12
Overall	677.48*	627.66*	49.82	650.08*	1,649.00*	−998.92
Asthma diagnosis only						
Year One	−136.39	−192.00	55.61	−127.36	−98.50	−28.86
Year Two	−123.05	−273.68	150.63	−116.41	−161.65	45.25
Year Three	−82.09	−351.88	269.79*	−76.54	−186.76	110.22*
Overall	−116.47	−298.31	181.84*	−109.99	−183.19	73.20
Rural beneficiaries only						
Year One	125.29*	47.91	77.38*	139.54*	115.89*	23.65
Year Two	145.93*	64.65*	81.28*	161.66*	118.94*	42.72
Year Three	169.59*	174.08*	−4.48	186.68*	173.82*	12.86
Overall	139.51*	111.80*	27.72	156.13*	135.32*	20.81

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-9
Vermont: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Multiple chronic conditions only						
Year One	327.11*	244.29*	82.82*	320.82*	311.90*	8.92
Year Two	345.86*	221.87*	123.99*	337.95*	255.63*	82.33*
Year Three	439.47*	382.17*	57.31*	430.64*	414.44*	16.19
Overall	361.09*	311.67*	49.42*	352.75*	347.96*	4.79
BH conditions only						
Year One	326.02*	260.30*	65.72	329.42*	224.16*	105.26*
Year Two	335.46*	234.90*	100.56	336.01*	163.33*	172.68*
Year Three	400.99*	471.23*	−70.25	397.84*	379.22*	18.63
Overall	336.71*	364.72*	−28.01	335.23*	289.63*	45.60
Disabled beneficiaries only						
Year One	315.65*	276.10*	39.54	311.71*	320.77*	−9.06
Year Two	512.60*	200.38*	312.22*	506.72*	294.10*	212.62*
Year Three	629.61*	506.55*	123.06	627.91*	592.45*	35.46
Overall	469.80*	397.77*	72.03	466.64*	452.12*	14.52
Asthma diagnosis only						
Year One	204.00*	30.42	173.58*	203.64*	106.49	97.15
Year Two	235.67*	−2.72	238.40*	233.40*	117.77	115.63
Year Three	279.59*	101.70	177.89*	279.13*	186.15*	92.98
Overall	243.19*	63.63	179.56*	242.00*	209.45*	32.55
Rural beneficiaries only						
Year One	165.87*	122.94*	42.93	165.36*	154.40*	10.95
Year Two	204.87*	127.23*	77.64*	206.64*	182.37*	24.27
Year Three	267.19*	215.38*	51.81	271.26*	246.57*	24.69
Overall	208.23*	171.33*	36.90	211.83*	216.59*	−4.76

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-10 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J4-10
Vermont: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	92.69*	93.06*	−0.37	93.46*	93.42*	0.04
Year Two	92.36*	94.39*	−2.02	92.87*	95.73*	−2.87
Year Three	91.41*	93.80*	−2.39	92.58*	96.23*	−3.65
Overall	92.20*	93.77*	−1.56	92.99*	95.09*	−2.10
Retinal eye examination						
Year One	51.44*	60.64*	−9.19*	54.19*	61.57*	−7.38*
Year Two	53.60*	58.78*	−5.18	56.14*	53.51*	2.63
Year Three	53.22*	57.56*	−4.34	55.69*	58.96*	−3.27
Overall	52.75*	59.06*	−6.31*	55.34*	57.83*	−2.49
LDL-C screening						
Year One	59.87*	62.44*	−2.57	71.14*	80.17*	−9.03*
Year Two	59.50*	72.16*	−12.67*	71.33*	81.11*	−9.78*
Year Three	58.24*	67.35*	−9.11	70.91*	84.35*	−13.44
Overall	59.26*	67.46*	−8.20*	71.15*	81.73*	−10.58*
Medical attention for nephropathy						
Year One	66.04*	61.19*	4.85	74.15*	73.95*	0.20
Year Two	68.92*	72.08*	−3.16	75.03*	75.27*	−0.24
Year Three	66.20*	52.70*	13.50*	72.80*	79.67*	−6.88
Overall	67.15*	62.77*	4.38	74.09*	76.09*	−2.00
Received all 4 diabetes tests						
Year One	27.62*	35.83*	−8.21	36.44*	45.02*	−8.59*
Year Two	32.41*	35.72*	−3.31	41.20*	38.24*	2.96
Year Three	32.08*	31.67*	0.41	41.42*	44.44*	−3.03
Overall	30.68*	34.59*	−3.91	39.64*	42.35*	−2.71
Received none of the 4 diabetes tests						
Year One	4.39	3.98	0.41	2.57	1.77	0.80
Year Two	4.06	1.52	2.53	2.76	5.43	−2.67
Year Three	7.21	6.20	1.01	4.66	1.09	3.57
Overall	5.08	3.71	1.37	3.24	2.93	0.31

(continued)

Table J4-10 (continued)
Vermont: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Breast cancer screening						
Year One	23.17*	22.93*	0.24	21.25*	22.03*	−0.78
Year Two	18.20*	18.51*	−0.31	16.67*	20.21*	−3.54
Year Three	17.19*	18.15*	−0.97	15.99*	19.29*	−3.30
Overall	19.72*	20.00*	−0.29	18.14*	20.62*	−2.49
Cervical cancer screening						
Year One	26.63*	22.73*	3.90	29.34*	25.26*	4.08*
Year Two	24.12*	26.84*	−2.72	26.77*	29.60*	−2.83
Year Three	23.97*	25.30*	−1.33	26.39*	24.70*	1.69
Overall	24.96*	24.97*	−0.01	27.57*	26.72*	0.84
Appropriate use of antidepressant medication management: 12 weeks						
Year One	39.37*	37.33*	2.04	40.38*	43.67*	−3.30
Year Two	44.02*	35.39*	8.62*	46.46*	54.86*	−8.40*
Year Three	41.64*	25.93*	15.71*	44.36*	38.54*	5.82
Overall	41.48*	34.05*	7.43*	43.38*	46.34*	−2.96
Appropriate use of antidepressant medication management: 6 months						
Year One	24.63*	21.17*	3.46	23.75*	26.75*	−3.00
Year Two	29.13*	20.03*	9.10*	28.99*	37.77*	−8.78*
Year Three	25.65*	13.02	12.63*	25.58*	17.85*	7.73*
Overall	26.41*	18.91*	7.50*	25.97*	28.50*	−2.53
Appropriate use of asthma medications						
Year One	81.07*	83.88*	−2.80	73.86*	80.68*	−6.82
Year Two	77.58*	78.11*	−0.53	71.71*	86.46*	−14.76*
Year Three	77.10*	83.35*	−6.25	71.70*	82.53*	−10.83*
Overall	78.71*	81.55*	−2.84	72.48*	83.36*	−10.87*

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-11 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J4-11
Vermont: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	10.18*	7.67*	2.51	10.22*	7.72*	2.50
Year Two	10.98*	9.36*	1.62	11.00*	6.60	4.40*
Year Three	10.52*	6.51*	4.01	10.41*	8.82*	1.58
Overall	10.69*	8.20*	2.49	10.66*	7.60*	3.06*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-12 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for medical expenditures for adult Medicaid beneficiaries with multiple chronic conditions.

Table J4-12
Vermont: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	327.11*	244.29*	82.82*	320.82*	311.90*	8.92
Year Two	345.86*	221.87*	123.99*	337.95*	255.63*	82.33*
Year Three	439.47*	382.17*	57.31*	430.64*	414.44*	16.19
Overall	361.09*	311.67*	49.42*	352.75*	347.96*	4.79
Acute-care expenditures						
Year One	93.67*	73.32*	20.35*	93.45*	72.64*	20.81*
Year Two	87.40*	49.23*	38.17*	87.09*	34.43*	52.66*
Year Three	114.61*	105.84*	8.77	114.11*	92.25*	21.85
Overall	94.01*	77.79*	16.22*	93.59*	69.03*	24.56*
ER visits not leading to hospitalization expenditures						
Year One	25.66*	15.69*	9.97*	26.01*	20.24*	5.77*
Year Two	23.85*	20.73*	3.12	24.09*	20.14*	3.96*
Year Three	26.29*	23.78*	2.51	26.47*	25.42*	1.06
Overall	23.49*	20.67*	2.82	23.79*	22.32*	1.47
Prescription expenditures						
Year One	93.96*	64.52*	29.44*	89.93*	84.36*	5.57
Year Two	95.63*	39.35*	56.28*	90.70*	65.16*	25.54*
Year Three	125.31*	50.03*	75.28*	120.54*	85.43*	35.11*
Overall	109.19*	55.05*	54.15*	104.39*	83.75*	20.65*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-13 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J4-13
Vermont: Differences in the probability of medical service utilization measures during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	4.01*	3.66*	0.35	4.07*	3.43*	0.64*
Year Two	4.05*	3.08*	0.97*	4.11*	2.60*	1.51*
Year Three	4.17*	3.86*	0.31	4.22*	3.48*	0.74*
Overall	3.93*	3.55*	0.38*	3.99*	3.26*	0.73*
ER visits not leading to hospitalization						
Year One	21.00*	18.46*	2.55*	21.01*	19.79*	1.21
Year Two	20.35*	19.70*	0.65	20.35*	18.43*	1.92*
Year Three	19.74*	19.10*	0.64	19.73*	18.93*	0.80
Overall	19.69*	19.28*	0.42	19.69*	19.06*	0.63

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-14 and ***Table J4-15*** present decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for expenditures for BH care among Medicaid children and adults, respectively.

Table J4-14
Vermont: Differences in the change in BH care expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH expenditures from baseline		Difference	Change in BH expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	761.58*	521.08*	240.49*	766.18*	468.23*	297.94*
Year Two	832.66*	528.14*	304.52*	830.00*	455.78*	374.22*
Year Three	906.30*	495.14*	411.15*	904.94*	502.78*	402.16*
Overall	796.97*	509.60*	287.36*	796.83*	465.47*	331.36*
Acute-care expenditures						
Year One	58.64*	77.35*	−18.71	60.46*	73.20*	−12.74
Year Two	55.88*	60.06*	−4.18	56.66*	46.85*	9.81
Year Three	71.71*	66.63*	5.08	73.13*	46.29*	26.84*
Overall	58.65*	64.23*	−5.58	60.07*	52.74*	7.33
Expenditures for ER visits not leading to hospitalization						
Year One	24.79*	24.27*	0.52	24.84*	13.58*	11.25*
Year Two	25.28*	27.93*	−2.65	25.12*	9.00	16.12*
Year Three	27.79*	33.60*	−5.81	27.62*	17.07*	10.55
Overall	25.43*	30.11*	−4.68	25.30*	14.07*	11.24*
Total for principal diagnosis of a BH condition						
Year One	482.69*	370.66*	112.03	482.47*	209.96*	272.51*
Year Two	384.08*	410.04*	−25.96	385.44*	180.74*	204.70*
Year Three	684.52*	565.73*	118.79	686.17*	325.40*	360.77*
Overall	492.99*	456.49*	36.50	494.24*	232.52*	261.72*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-15
Vermont: Differences in the change in BH care expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH care expenditures from baseline		Difference	Change in BH care expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	326.02*	260.30*	65.72	329.42*	224.16*	105.26*
Year Two	335.46*	234.90*	100.56	336.01*	163.33*	172.68*
Year Three	400.99*	471.23*	−70.25	397.84*	379.22*	18.63
Overall	336.71*	364.72*	−28.01	335.23*	289.63*	45.60
Acute-care expenditures						
Year One	110.36*	69.93*	40.44	110.45*	57.50*	52.95*
Year Two	90.50*	23.34	67.15*	91.24*	1.88	89.36*
Year Three	112.96*	137.08*	−24.12	112.98*	82.02*	30.96
Overall	100.47*	93.68*	6.79	100.61*	62.25*	38.35*
Expenditures for ER visits not leading to hospitalization						
Year One	34.80*	30.47*	4.32	35.78*	34.10*	1.68
Year Two	30.83*	38.11*	−7.27	31.67*	28.71*	2.96
Year Three	35.37*	39.63*	−4.26	36.48*	44.27*	−7.79
Overall	31.53*	36.51*	−4.98	32.65*	36.92*	−4.28
Total for principal diagnosis of a BH condition						
Year One	25.91	−86.57	112.49*	27.18	−60.78*	87.96*
Year Two	43.15*	−36.81	79.96*	44.61*	−65.62*	110.23*
Year Three	107.06*	104.45	2.61	105.59*	26.76	78.83*
Overall	49.25*	22.56	26.68	48.75*	−13.72	62.47*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-16 and ***Table J4-17*** present decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J4-16
Vermont: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	1.95	1.89	0.06	2.03	2.20	−0.17
Year Two	1.94	1.31	0.64	1.97	1.26	0.71
Year Three	1.94	1.62	0.32	2.00	1.70	0.29
Overall	1.85	1.40	0.45	1.90	1.61	0.29
ER visits not leading to hospitalization						
Year One	15.92*	13.36*	2.56	15.84*	12.68*	3.16
Year Two	16.92*	14.56*	2.36	16.76*	13.01*	3.76*
Year Three	16.22*	13.95*	2.26	16.15*	11.96*	4.19*
Overall	16.15*	15.15*	0.99	16.06*	12.55*	3.51*
BH inpatient admissions						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC
BH ER visits						
Year One	0.42*	0.47*	−0.05	0.40	0.34	0.07
Year Two	0.48*	0.54*	−0.06	0.45	0.29	0.16
Year Three	0.53*	0.52*	0.02	0.51	0.37	0.13
Overall	0.48*	0.54*	−0.05	0.46	0.32	0.14
BH outpatient visits						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; DNC = model did not converge; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J4-17
Vermont: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	5.60*	4.43*	1.17*	5.69*	4.01*	1.68*
Year Two	5.37*	3.78*	1.59*	5.46*	2.96*	2.50*
Year Three	5.50*	5.78*	−0.28	5.57*	4.22*	1.35*
Overall	5.26*	4.84*	0.42	5.33*	4.07*	1.27*
ER visits not leading to hospitalization						
Year One	23.90*	21.38*	2.52	23.80*	24.13*	−0.32
Year Two	23.75*	24.37*	−0.63	23.64*	21.42*	2.22
Year Three	23.16*	23.30*	−0.14	23.15*	23.20*	−0.06
Overall	22.77*	23.22*	−0.45	22.71*	23.24*	−0.52
BH inpatient admissions						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC
BH ER visits						
Year One	1.41*	1.28*	0.13	1.43*	1.28*	0.15
Year Two	1.43*	1.39*	0.04	1.44*	1.18*	0.26
Year Three	1.49*	1.29*	0.20	1.49*	1.42*	0.07
Overall	1.40*	1.35*	0.05	1.40*	1.35*	0.05
BH outpatient visits						
Year One	9.61*	10.06*	−0.46	DNC	DNC	DNC
Year Two	12.20*	11.89*	0.32	DNC	DNC	DNC
Year Three	14.99*	13.68*	1.31	DNC	DNC	DNC
Overall	12.89*	12.48*	0.41	DNC	DNC	DNC

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; DNC = model did not converge; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.5 Decompositions of the North Carolina Estimates

Table J5-1 and ***Table J5-2*** present a decomposition of the estimates of the changes associated with the North Carolina MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J5-1
North Carolina: Differences in the probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Appropriate use of asthma medications						
Year One	48.93*	41.17*	7.76	40.84*	45.21*	−4.37

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home. ‘

* Statistically significant at the 10 percent level.

Table J5-2
North Carolina: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing Year One	86.34*	81.47*	4.87	90.26*	93.77*	−3.51*
Retinal eye examination Year One	50.68*	52.28*	−1.60	51.61*	42.69*	8.92*
LDL-C screening Year One	85.45*	85.61*	−0.16	81.29*	84.27*	−2.99
Medical attention for nephropathy Year One	99.86*	99.94*	−0.09	97.85*	98.07*	−0.23
Received all 4 diabetes tests Year One	48.72*	48.04*	0.68	41.09*	35.89*	5.19
Received none of the 4 diabetes tests Year One	0.04	0.04	0.00	0.27	0.18	0.08
Breast cancer screening Year One	20.85*	24.23*	−3.38	28.08*	29.83*	−1.75
Cervical cancer screening Year One	27.06*	32.91*	−5.85*	29.51*	36.35*	−6.84*
Appropriate use of antidepressant medication management: 12 weeks Year One	51.36*	45.48*	5.88	33.28*	32.69*	0.59
Appropriate use of antidepressant medication management: 6 months Year One	7.91	5.00	2.91	25.21*	23.54*	1.68
Appropriate use of asthma medications Year One	61.41*	65.52*	−4.11	70.13*	77.35*	−7.23*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-3 and ***Table J5-4*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J5-3
North Carolina: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	32.24*	29.74*	2.50	32.23*	33.26*	−1.03
Year Two	31.59*	31.04*	0.55	31.16*	25.16*	6.00
Overall	32.01*	30.18*	1.83	31.86*	30.46*	1.40
Medical specialist visits (per 1,000 beneficiaries)						
Year One	3.52	3.22	0.29	3.55*	3.78*	−0.22
Year Two	3.28	2.77*	0.51	3.27*	3.03*	0.25
Overall	3.43	3.06	0.37	3.46*	3.52*	−0.06
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	1.05	0.88	0.17	1.06	0.68	0.38
Year Two	0.97	0.63	0.34	0.96	0.24	0.72
Overall	1.02	0.79	0.23	1.02	0.53	0.50

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-4
North Carolina: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	44.94*	44.12*	0.82	45.01*	43.66*	1.35
Year Two	44.05*	46.81*	−2.76	44.29*	45.28*	−0.99
Overall	44.62*	45.06*	−0.44	44.76*	44.23*	0.53
Medical specialist visits (per 1,000 beneficiaries)						
Year One	11.62*	10.73*	0.89	11.52*	12.13*	−0.61
Year Two	10.28*	9.28*	1.00	10.14*	11.41*	−1.27
Overall	11.15*	10.22*	0.93	11.03*	11.88*	−0.85
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	9.05*	8.44	0.61	8.96*	7.87*	1.09
Year Two	7.89	4.00	3.89	7.83*	4.95*	2.88*
Overall	8.64	6.89	1.76	8.56*	6.85*	1.72*
Primary care visits as a percent of total visits						
Overall						
% PC < 70%	43.55*	41.39*	2.16	33.77*	34.45*	−0.67
70% ≤ % PC < 100%	26.84*	27.12*	−0.28	25.91*	25.96*	−0.05
% PC = 100%	29.61*	31.49*	−1.88	40.31*	39.59*	0.72
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	8.33*	5.86	2.47*	7.97*	8.98*	−1.00
Year Two	12.41*	14.15*	−1.74	12.03*	7.49*	4.54
Overall	9.21*	7.64*	1.57	8.84*	8.66*	0.19

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-5 and ***Table J5-6*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for medical expenditures among Medicaid children and adults, respectively.

Table J5-5
North Carolina: Differences in the change in Medicaid PBPM expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	0.95	−11.13	12.08	4.77	−4.71	9.47
Year Two	−32.26*	−57.54*	25.27	−29.50*	−47.85*	18.35*
Overall	−10.51	−27.15*	16.64	−7.06	−19.60*	12.54*
Acute-care expenditures						
Year One	−4.32*	−5.06*	0.75	−3.74*	−3.73*	−0.01
Year Two	−5.91*	−7.16*	1.25	−5.25*	−5.55*	0.30
Overall	−4.87*	−5.79*	0.92	−4.26*	−4.36*	0.10
ER expenditures						
Year One	5.32*	4.16*	1.16	5.89*	5.24*	0.65
Year Two	2.54*	3.25*	−0.70	3.19*	4.01*	−0.82
Overall	4.36*	3.85*	0.51	4.96*	4.82*	0.14
Specialty physician expenditures						
Year One	1.21	0.91	0.31	1.44	2.24*	−0.79
Year Two	−0.08	−0.73	0.65	−0.01	1.04	−1.05
Overall	0.77	0.34	0.42	0.94	1.82*	−0.88
Primary care physician expenditures						
Year One	−1.82	−2.56*	0.74	−2.33*	−1.07	−1.26
Year Two	−2.37	−2.16	−0.21	−2.87*	−2.32	−0.55
Overall	−2.01	−2.43*	0.41	−2.52*	−1.50	−1.02
Prescription expenditures						
Year One	6.18*	5.80*	0.38	4.27*	4.41*	−0.14
Year Two	8.03*	−0.82	8.85*	5.15*	3.11*	2.04
Overall	6.82*	3.52*	3.30*	4.57*	3.96*	0.61
LTC expenditures						
Year One	−0.04	−1.31	1.27	0.39	−0.25	0.65
Year Two	−1.41*	−3.68*	2.27	−0.85	−2.37*	1.52*
Overall	−0.52	−2.13	1.61	−0.03	−0.98*	0.95*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-6
North Carolina: Differences in the change in Medicaid PBPM expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	96.76*	100.98*	−4.22	99.13*	83.48*	15.64
Year Two	−46.36*	−66.52*	20.16	−47.08*	−92.85*	45.77*
Overall	46.59*	42.26*	4.33	47.87*	21.67*	26.20*
Acute-care expenditures						
Year One	−1.29	−0.90	−0.39	3.06	−2.02	5.08
Year Two	−7.90*	−12.25*	4.35	−3.03	−11.77*	8.74*
Overall	−3.61	−4.88	1.27	0.93	−5.44*	6.37*
ER expenditures						
Year One	22.32*	24.44*	−2.13	25.62*	27.20*	−1.58
Year Two	12.64*	6.44*	6.19*	16.11*	10.10*	6.01*
Overall	18.92*	18.13*	0.79	22.29*	21.21*	1.08
Specialty physician expenditures						
Year One	−4.14*	−5.54*	1.40	−1.32	−3.48*	2.15
Year Two	−12.78*	−15.41*	2.63	−9.92*	−13.76*	3.84
Overall	−7.17*	−9.00*	1.83	−4.34*	−7.08*	2.74
Primary care physician expenditures						
Year One	23.31*	20.85*	2.47	24.03*	24.99*	−0.96
Year Two	22.86*	18.39*	4.47	23.45*	22.07*	1.38
Overall	23.15*	19.98*	3.17	23.83*	23.97*	−0.14
Prescription expenditures						
Year One	26.54*	33.46*	−6.92	26.47*	35.43*	−8.96*
Year Two	−3.42	−2.96	−0.46	−5.13	−7.45*	2.32
Overall	16.04*	20.69*	−4.66	15.39*	20.40*	−5.01
LTC expenditures						
Year One	−19.47*	−15.54*	−3.93	−21.43*	−20.93*	−0.50
Year Two	−28.09*	−19.17*	−8.92*	−29.85*	−25.98*	−3.87
Overall	−22.49*	−16.81*	−5.68	−24.38*	−22.70*	−1.68

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-7 and ***Table J5-8*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J5-7
North Carolina: Differences in the probability of medical service utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	0.63*	0.53*	0.10	0.62*	0.61*	0.01
Year Two	0.53*	0.45*	0.08	0.53*	0.50*	0.03
Overall	0.59*	0.50*	0.09	0.59*	0.57*	0.02
ER visits not leading to hospitalization						
Year One	13.42*	13.36*	0.06	13.45*	13.75*	−0.30
Year Two	13.29*	13.88*	−0.59	13.40*	15.51*	−2.11*
Overall	13.38*	13.54*	−0.16	13.43*	14.36*	−0.92*
Low birth weight admissions						
Overall	0.14	0.31	−0.17	0.45*	0.31*	0.14

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-8
North Carolina: Differences in the probability of medical service utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	4.65*	4.52*	0.13	4.53*	4.07*	0.46
Year Two	4.45*	3.71*	0.74*	4.37*	3.76*	0.61
Overall	4.58*	4.24*	0.34	4.48*	3.96*	0.51
ER visits not leading to hospitalization						
Year One	21.35*	21.84*	−0.49	21.42*	21.39*	0.02
Year Two	20.75*	19.59*	1.15	20.71*	20.93*	−0.22
Overall	21.14*	21.06*	0.08	21.17*	21.23*	−0.06

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-9 and ***Table J5-10*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for total Medicaid PBPM expenditures for special populations among Medicaid children and adults, respectively.

Table J5-9
North Carolina: Differences in the change in total Medicaid PBPM expenditures from baseline for special population beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
BH conditions only						
Year One	400.19*	−41.55	441.74	269.02*	62.53	206.48*
Year Two	6.57	−437.80	444.37	−165.98*	−281.09*	115.11
Overall	272.32*	−170.28	442.59	127.70	−49.10	176.80*
Disabled beneficiaries only						
Year One	−86.44	−105.08	18.64	−79.27	−156.92*	77.65
Year Two	−336.58*	−448.13*	111.56	−325.76*	−496.97*	171.21*
Overall	−172.31*	−222.84*	50.54	−163.89*	−273.65*	109.77*
Asthma diagnosis only						
Year One	−8.79	−48.74*	39.95*	2.57	−32.36	34.93
Year Two	−49.30*	−109.71*	60.41*	−40.87*	−106.39*	65.52*
Overall	−22.13	−68.81*	46.68*	−11.74	−56.74*	45.00*
Rural beneficiaries only						
Year One	−4.35	−24.26*	19.91*	5.09	−12.25*	17.34
Year Two	−41.47*	−69.23*	27.76	−28.97*	−64.36*	35.39*
Overall	−16.92*	−39.49*	22.57*	−6.44	−29.90*	23.46*
Non-White beneficiaries only						
Year One	−46.43	−40.10	−6.33	−13.41	−20.83	7.42
Year Two	−112.23*	−186.17*	73.94	−85.29*	−143.02*	57.73
Overall	−67.56	−87.00	19.44	−36.49	−60.06*	23.57
Network 1 and all comparisons						
Year One	−8.89	−11.72	2.83	−7.72	−4.67	−3.05
Year Two	−48.00*	−57.85*	9.84	−49.34*	−48.02*	−1.31
Overall	−21.56	−26.66*	5.10	−21.19*	−18.71*	−2.49
Network 2 and all comparisons						
Year One	−31.04*	−8.36	−22.68	−26.10*	−1.60	−24.50*
Year Two	−60.37*	−58.82*	−1.55	−60.11*	−48.48*	−11.63
Overall	−42.69*	−28.40*	−14.29	−39.60*	−20.22*	−19.39*

(continued)

Table J5-9 (continued)
North Carolina: Differences in the change in total Medicaid PBPM expenditures from baseline for special population beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Network 3 and all comparisons						
Year One	6.89	−13.89	20.78*	10.66	−6.14	16.81*
Year Two	−28.55*	−58.72*	30.18	−24.05*	−48.33*	24.28*
Overall	−4.91	−28.81*	23.91*	−0.89	−20.19*	19.29*
Network 4 and all comparisons						
Year One	−14.98	−8.73	−6.25	−9.54	−2.11	−7.44
Year Two	−28.43*	−58.83*	30.40	−24.94*	−48.55*	23.61*
Overall	−20.47	−29.17*	8.70	−15.83	−21.05*	5.23

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-10
North Carolina: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Multiple chronic conditions only						
Year One	137.18*	164.88*	−27.70	160.87*	165.97*	−5.10
Year Two	−47.55	−155.28*	107.73*	−28.22	−113.04*	84.82*
Overall	76.20*	59.19	17.01	98.45*	73.86*	24.58
BH conditions only						
Year One	201.21*	620.92*	−419.71*	209.76*	294.76*	−85.01
Year Two	−88.00	−69.11	−18.89	−94.44	−188.88*	94.44
Overall	102.37	385.10*	−282.73*	105.80	129.48*	−23.68
Disabled beneficiaries only						
Year One	142.08*	179.28*	−37.20	160.12*	172.50*	−12.38
Year Two	−72.88*	−134.56*	61.68	−61.88*	−130.71*	68.83*
Overall	65.93*	68.11*	−2.18	81.48*	65.09*	16.39
Asthma diagnosis only						
Year One	111.80*	140.12	−28.32	114.81*	−2.03	116.84
Year Two	−26.75	−246.48	219.73	−23.02	−291.42	268.39
Overall	66.13*	12.68	53.45	69.37*	−97.43	166.80
Rural beneficiaries only						
Year One	39.14*	64.32	−25.18	50.69*	35.78*	14.90
Year Two	−81.31*	−131.15*	49.84	−76.13*	−119.64*	43.51*
Overall	−2.54	−3.32	0.78	6.80	−18.00	24.80
Non-White beneficiaries only						
Year One	34.12	40.18	−6.07	−35.76	−130.90	95.15
Year Two	−216.93*	−177.55*	−39.38	−276.61*	−418.10*	141.49*
Overall	−47.80	−30.87	−16.94	−114.35	−224.62*	110.27*
Network 1 and all comparisons						
Year One	162.14*	92.96*	69.18*	166.37*	78.65*	87.72*
Year Two	−101.93*	−74.33*	−27.60	−97.64*	−98.51*	0.87
Overall	72.82*	36.37	36.45	77.07*	18.73	58.34*
Network 2 and all comparisons						
Year One	14.89	98.35*	−83.45*	24.68	86.16*	−61.48*
Year Two	−74.63*	−77.92*	3.29	−65.63*	−99.35*	33.72
Overall	−22.37	24.98	−47.35*	−12.91	8.94	−21.85

(continued)

Table J5-10 (continued)
North Carolina: Differences in the change in total Medicaid PBPM expenditures from baseline for adult special population beneficiaries, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Network 3 and all comparisons						
Year One	90.65*	93.38*	−2.73	94.52*	78.35*	16.18
Year Two	−27.09	−73.08*	45.99*	−24.27	−96.76*	72.49*
Overall	51.74*	38.36	13.37	55.26*	20.47*	34.79*
Network 4 and all comparisons						
Year One	26.70	99.87*	−73.16	32.97	85.28*	−52.30*
Year Two	−97.48*	−75.42*	−22.06	−92.07*	−99.02*	6.95
Overall	−25.14	26.68	−51.83	−19.23	8.33	−27.57

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-11 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J5-11
North Carolina: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing Year One	97.52*	95.98*	1.54	95.97*	97.51*	−1.54
Retinal eye examination Year One	69.52*	73.25*	−3.73	60.23*	50.61*	9.63*
LDL-C screening Year One	95.37*	95.49*	−0.11	86.58*	89.32*	−2.74
Medical attention for nephropathy Year One	100.00*	100.00*	0.00	98.29*	98.52*	−0.24
Received all 4 diabetes tests Year One	69.20*	70.13*	−0.94	56.46*	50.73*	5.73
Received none of the 4 diabetes tests Year One	DNC	DNC	DNC	0.34	0.25	0.09
Breast cancer screening Year One	10.06	12.61	−2.55	20.76*	23.23*	−2.47
Cervical cancer screening Year One	23.65*	28.75*	−5.10*	31.87*	40.17*	−8.30*
Appropriate use of antidepressant medication management: 12 weeks Year One	50.62*	53.96*	−3.33	28.45*	27.63*	0.82
Appropriate use of antidepressant medication management: 6 months Year One	9.07	6.44	2.64	29.44*	27.36*	2.09
Appropriate use of asthma medications Year One	76.41*	78.24*	−1.84	83.06*	87.59*	−4.53

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; DNC = model did not converge; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-12 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J5-12
North Carolina: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	57.42*	56.52*	0.90	57.38*	55.73*	1.65
Year Two	56.50*	60.80*	−4.31	56.60*	57.29*	−0.69
Overall	57.11*	57.93*	−0.82	57.12*	56.25*	0.88
Medical specialist visits (per 1,000 beneficiaries)						
Year One	18.31*	16.08*	2.23	18.36*	18.48*	−0.11
Year Two	16.07*	13.42*	2.64	16.10*	17.14*	−1.05
Overall	17.57*	15.20*	2.37	17.62*	18.04*	−0.42
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	13.71*	13.83*	−0.12	13.72*	12.73*	1.00
Year Two	12.17*	6.12	6.05*	12.23*	8.06*	4.17*
Overall	13.20*	11.29*	1.92	13.23*	11.19*	2.04
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	60.48*	60.21*	0.27	33.96*	35.06*	−1.10
70% ≤ % PC < 100%	23.64*	23.76*	−0.12	28.62*	28.66*	−0.03
% PC = 100%	15.88*	16.03*	−0.15	37.42*	36.29*	1.13
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	9.38	6.94	2.44	9.18*	10.58*	−1.40
Year Two	16.55*	16.03	0.52	16.34*	12.08	4.26
Overall	10.81	8.76	2.05	10.61*	10.88*	−0.27

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-13 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for medical expenditures for adult Medicaid beneficiaries with multiple chronic conditions.

Table J5-13
North Carolina: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference	Change in expenditure measures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	137.18*	164.88*	−27.70	160.87*	165.97*	−5.10
Year Two	−47.55	−155.28*	107.73*	−28.22	−113.04*	84.82*
Overall	76.20*	59.19	17.01	98.45*	73.86*	24.58
Acute-care expenditures						
Year One	11.63	21.52	−9.90	12.94	10.81	2.13
Year Two	6.73	−16.31	23.05*	8.58	−10.73	19.32*
Overall	10.01	9.03	0.98	11.50	3.70	7.80
ER visits not leading to hospitalization expenditures						
Year One	33.43*	35.56*	−2.13	39.61*	42.01*	−2.40
Year Two	22.21*	3.11	19.10*	28.49*	8.53*	19.96*
Overall	29.72*	24.84*	4.88	35.94*	30.96*	4.98
Specialty physician expenditures						
Year One	−15.24*	−14.02*	−1.23	−10.49*	−13.89*	3.40
Year Two	−27.91*	−36.63*	8.72*	−22.92*	−30.55*	7.63*
Overall	−19.42*	−21.48*	2.06	−14.59*	−19.39*	4.80
Primary care physician expenditures						
Year One	31.14*	26.50*	4.64	31.46*	34.46*	−3.01
Year Two	32.64*	22.60*	10.04	32.80*	30.13*	2.67
Overall	31.63*	25.21*	6.42	31.90*	33.03*	−1.13
Prescription expenditures						
Year One	56.61*	70.35*	−13.74	57.11*	75.14*	−18.02*
Year Two	4.14	6.69	−2.55	2.09	−5.46	7.55
Overall	39.29*	49.33*	−10.04	38.95*	48.53*	−9.58
LTC expenditures						
Year One	−24.79*	−22.36*	−2.43	−25.96*	−31.17*	5.21
Year Two	−43.11*	−54.37*	11.26	−44.14*	−49.72*	5.58
Overall	−30.83*	−32.93*	2.09	−31.96*	−37.29*	5.33

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-14 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J5-14
North Carolina: Differences in the probability of medical service utilization measures during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	5.80*	5.84*	−0.04	5.73*	5.44*	0.29
Year Two	5.67*	3.82*	1.85*	5.67*	4.67*	0.99
Overall	5.76*	5.17*	0.59	5.71*	5.19*	0.52
ER visits not leading to hospitalization						
Year One	23.61*	23.25*	0.36	23.70*	23.35*	0.35
Year Two	23.70*	20.67*	3.03*	23.72*	21.32*	2.39*
Overall	23.64*	22.40*	1.24	23.70*	22.68*	1.02*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-15 and ***Table J5-16*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for expenditures for BH care among Medicaid children and adults, respectively.

Table J5-15
North Carolina: Differences in the change in BH care expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH care expenditures from baseline		Difference	Change in BH care expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	400.19*	−41.55	441.74	269.02*	62.53	206.48*
Year Two	6.57	−437.80	444.37	−165.98*	−281.09*	115.11
Overall	272.32*	−170.28	442.59	127.70	−49.10	176.80*
Acute-care expenditures						
Year One	19.28*	−0.81	20.09*	16.62*	−0.44	17.05*
Year Two	13.30	−0.13	13.43	10.31	1.08	9.24
Overall	17.33*	−0.59	17.92*	14.57*	0.05	14.51*
Expenditures for ER visits not leading to hospitalization						
Year One	20.69*	5.98*	14.71*	19.08*	13.20*	5.88
Year Two	11.44*	4.44	7.00	8.79	7.42*	1.38
Overall	17.68*	5.48	12.21*	15.74*	11.32*	4.41
Total for principal diagnosis of a BH condition						
Year One	243.27*	−200.20	443.48	106.86	−65.85	172.71*
Year Two	−90.97	−503.94*	412.96	−256.53*	−353.65*	97.11
Overall	134.69	−298.88	433.56	−11.19	−159.34*	148.15*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-16
North Carolina: Differences in the change in BH care expenditures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH care expenditures from baseline		Difference	Change in BH care expenditures from baseline		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Total Medicaid expenditures						
Year One	201.21*	620.92*	−419.71*	209.76*	294.76*	−85.01
Year Two	−88.00	−69.11	−18.89	−94.44	−188.88*	94.44
Overall	102.37	385.10*	−282.73*	105.80	129.48*	−23.68
Acute-care expenditures						
Year One	55.55*	92.04*	−36.49	70.02*	84.26*	−14.23
Year Two	37.61	10.40	27.21	50.18*	8.21	41.97*
Overall	49.42	64.14*	−14.72	63.24*	58.27*	4.98
Expenditures for ER visits not leading to hospitalization						
Year One	54.20*	52.39*	1.81	50.82*	53.63*	−2.81
Year Two	30.30*	18.60	11.70	27.13*	6.79	20.34
Overall	46.03*	40.84*	5.19	42.72*	37.62*	5.10
Total for principal diagnosis of a BH condition						
Year One	−32.66	101.46	−134.12*	−75.00*	−147.25*	72.24
Year Two	−116.26*	−207.01*	90.75	−164.02*	−352.21*	188.19*
Overall	−61.23	−3.96	−57.27	−105.42*	−217.29*	111.87*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-17 and ***Table J5-18*** present decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J5-17
North Carolina: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	0.63	0.32	0.31	0.76	0.26	0.51
Year Two	0.71	0.40	0.31	0.93	0.35	0.58
Overall	0.65	0.34	0.31	0.82	0.29	0.53
ER visits not leading to hospitalization						
Year One	15.80*	15.20*	0.59	16.11*	15.01*	1.10
Year Two	12.82*	11.51*	1.31	12.87*	16.19*	−3.32
Overall	14.83*	14.00*	0.83	15.06*	15.39*	−0.34
BH inpatient admissions						
Year One	DNC	DNC	DNC	1.43	1.04	0.39
Year Two	DNC	DNC	DNC	0.58	0.66	−0.08
Overall	DNC	DNC	DNC	1.16	0.92	0.24
BH ER visits						
Year One	0.73	0.58	0.14	1.02	0.83	0.20
Year Two	0.51	0.20	0.31	0.62	0.28	0.35
Overall	0.66	0.46	0.20	0.89	0.65	0.25
BH outpatient visits						
Year One	36.84*	46.75*	−9.91*	37.46*	43.08*	−5.62
Year Two	28.12*	31.06*	−2.94	28.13*	35.30*	−7.18*
Overall	34.01*	41.65*	−7.65*	34.43*	40.55*	−6.12*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; DNC = model did not converge; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-18
North Carolina: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	5.71*	6.86*	−1.15	5.49*	6.31*	−0.83
Year Two	5.85*	4.96*	0.88	5.65*	3.67*	1.98
Overall	5.75*	6.21*	−0.46	5.54*	5.41*	0.13
ER visits not leading to hospitalization						
Year One	30.78*	26.57*	4.21	30.55*	32.86*	−2.31
Year Two	28.29*	24.74*	3.56	28.19*	26.45*	1.75
Overall	29.93*	25.95*	3.99	29.74*	30.67*	−0.92
BH inpatient admissions						
Year One	1.45	1.03	0.42	1.47	1.57	−0.10
Year Two	0.69	1.06	−0.36	0.76	0.45	0.31
Overall	1.19	1.04	0.16	1.22	1.18	0.04
BH ER visits						
Year One	3.54*	3.38*	0.16	3.72*	4.10*	−0.38
Year Two	1.05	2.40*	−1.36	1.17	1.51*	−0.34
Overall	2.69*	3.05*	−0.36	2.85*	3.21*	−0.37
BH outpatient visits						
Year One	33.21*	30.87*	2.34	33.38*	28.78*	4.60
Year Two	25.33*	25.08*	0.25	24.86*	25.20*	−0.34
Overall	30.52*	28.89*	1.62	30.47*	27.55*	2.91

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-19 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for selected expenditure outcomes among Medicaid children in Network 2 and all non-PCMH comparisons.

Table J5-19
North Carolina: Differences in the change in selected Medicaid PBPM expenditures from baseline for children in Network 2 and all non-PCMH comparisons, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	−26.10*	−1.60	−24.50*
Year Two	−60.11*	−48.48*	−11.63
Overall	−39.60*	−20.22*	−19.39*
Acute-care expenditures			
Year One	0.81	−3.52*	4.34*
Year Two	−4.21*	−5.49*	1.28
Overall	−1.18	−4.30*	3.12
ER expenditures			
Year One	6.52*	6.02*	0.51
Year Two	4.02*	4.11*	−0.09
Overall	5.53*	5.26*	0.27
Specialty physician expenditures			
Year One	−1.98	2.25*	−4.22*
Year Two	−2.38*	1.13	−3.51*
Overall	−2.14*	1.80*	−3.94*
Primary care physician expenditures			
Year One	0.10	−1.09	1.19
Year Two	−1.16	−2.51	1.35
Overall	−0.40	−1.66	1.26

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-20 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on selected medical service utilization outcomes among Medicaid children in Network 2 and all non-PCMH comparisons.

Table J5-20
North Carolina: Differences in the probability of medical service utilization measures during the demonstration for children in Network 2 and all non-PCMH comparisons, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	0.41	0.30	0.11
Year Two	0.15	0.24	−0.09
Overall	0.31	0.28	0.03
ER visits not leading to hospitalization			
Year One	12.71*	14.36*	−1.64*
Year Two	13.74*	15.98*	−2.24*
Overall	13.12*	15.00*	−1.88*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-21 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration for selected expenditure outcomes among Medicaid adults in Network 2 and all PCMH comparisons.

Table J5-21
North Carolina: Differences in the change in selected Medicaid PBPM expenditures from baseline for adults in Network 2 and all PCMH comparisons, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditures from baseline		Difference
	MAPCP	PCMH CG	
Total Medicaid expenditures			
Year One	14.89	98.35*	−83.45*
Year Two	−74.63*	−77.92*	3.29
Overall	−22.37	24.98	−47.35*
Acute-care expenditures			
Year One	−0.54	−4.22	3.68
Year Two	−3.81	−13.56*	9.75*
Overall	−1.90	−8.11*	6.20
ER expenditures			
Year One	23.45*	24.39*	−0.94
Year Two	8.20*	4.96*	3.24
Overall	17.10*	16.30*	0.80
Specialty physician expenditures			
Year One	−8.27*	−7.65	−0.62
Year Two	−11.19*	−16.98*	5.79*
Overall	−9.49*	−11.53*	2.05
Primary care physician expenditures			
Year One	12.91*	21.42*	−8.50*
Year Two	20.24*	17.56*	2.68
Overall	15.96*	19.81*	−3.85

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J5-22 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on selected medical service utilization outcomes among Medicaid adults in Network 2 and all PCMH comparisons.

Table J5-22
North Carolina: Differences in the probability of medical service utilization measures during the demonstration for adults in Network 2 and all PCMH comparisons, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	PCMH CG	
All-cause admissions			
Year One	3.44*	3.17*	0.27
Year Two	3.70*	2.72*	0.97*
Overall	3.54*	2.98*	0.56
ER visits not leading to hospitalization			
Year One	23.30*	26.32*	−3.01*
Year Two	23.76*	23.29*	0.47
Overall	23.49*	25.06*	−1.56

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.6 Decompositions of the Minnesota Estimates

Table J6-1 and ***Table J6-2*** present a decomposition of the estimates of the changes associated with the Minnesota MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J6-1
Minnesota: Differences in probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of asthma medications			
Year One	74.71*	76.62*	−1.92
Year Two	73.63*	77.30*	−3.66
Year Three	71.38*	72.04*	−0.66
Overall	73.52*	75.71*	−2.19

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-2
Minnesota: Differences in probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
HbA1c testing			
Year One	91.08*	81.87*	9.21*
Year Two	92.28*	75.99*	16.30*
Year Three	91.73*	83.32*	8.41*
Overall	91.63*	80.22*	11.41*
Retinal eye examination			
Year One	16.90*	16.45*	0.44
Year Two	15.62*	18.22*	−2.61
Year Three	15.54*	14.08*	1.46
Overall	16.17*	16.53*	−0.36
LDL-C screening			
Year One	78.58*	62.59*	15.98*
Year Two	79.74*	66.51*	13.24*
Year Three	77.08*	56.36*	20.72*
Overall	78.64*	62.54*	16.10*
Medical attention for nephropathy			
Year One	60.02*	47.70*	12.31*
Year Two	61.92*	45.87*	16.05*
Year Three	61.61*	41.58*	20.03*
Overall	61.00*	45.74*	15.26*
Received all 4 diabetes tests			
Year One	10.52*	8.34*	2.18*
Year Two	10.41*	8.90*	1.50
Year Three	9.93*	6.14*	3.79*
Overall	10.35*	8.04*	2.31*
Received none of the 4 diabetes tests			
Year One	4.95*	10.26*	−5.31*
Year Two	4.60*	10.28*	−5.68*
Year Three	4.76*	10.82*	−6.06*
Overall	4.79*	10.39*	−5.60*
Breast cancer screening			
Year One	20.58*	19.35*	1.23
Year Two	16.51*	16.00*	0.50
Year Three	14.11*	14.76*	−0.66
Overall	17.90*	17.30*	0.60
Cervical cancer screening			
Year One	28.40*	23.29*	5.10*
Year Two	29.37*	22.66*	6.71*
Year Three	29.00*	21.59*	7.41*
Overall	28.85*	22.72*	6.14*

(continued)

Table J6-2 (continued)
Minnesota: Differences in probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of antidepressant medication management: 12 weeks			
Year One	49.98*	48.09*	1.89
Year Two	53.15*	48.09*	5.06*
Year Three	52.08*	48.45*	3.64
Overall	51.36*	48.15*	3.21*
Appropriate use of antidepressant medication management: 6 months			
Year 1	39.68*	36.39*	3.29*
Year 2	43.45*	38.92*	4.53*
Year 3	41.39*	34.40*	6.98*
Overall	41.18*	36.85*	4.33*
Appropriate use of asthma medications			
Year 1	69.67*	65.56*	4.11*
Year 2	69.50*	67.59*	1.91
Year 3	70.00*	65.46*	4.55*
Overall	69.68*	66.23*	3.45*

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-3 and ***Table J6-4*** present decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J6-3
Minnesota: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	42.97*	39.82*	3.15*
Year Two	41.59*	40.07*	1.53
Year Three	38.49*	43.19*	−4.69*
Overall	40.33*	40.72*	−0.39
Medical specialist visits (per 1,000 beneficiaries)			
Year One	3.42*	3.50*	−0.08
Year Two	4.29*	3.82*	0.47*
Year Three	4.65*	4.20*	0.46*
Overall	4.25*	3.88*	0.37*
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	0.90*	0.92*	−0.02
Year Two	0.98*	0.92*	0.06
Year Three	0.91*	0.98*	−0.06
Overall	0.92*	0.93*	−0.01

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-4
Minnesota: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	51.98*	44.81*	7.17*
Year Two	51.75*	45.19*	6.56*
Year Three	48.66*	51.35*	−2.69*
Overall	49.86*	47.40*	2.46*
Medical specialist visits (per 1,000 beneficiaries)			
Year One	7.32*	6.80*	0.52
Year Two	10.05*	8.36*	1.69*
Year Three	10.92*	9.14*	1.78*
Overall	9.88*	8.34*	1.55*
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	3.88*	3.73*	0.15
Year Two	4.25*	3.72*	0.53*
Year Three	3.98*	3.80*	0.18
Overall	3.99*	3.73*	0.26*
Primary care visits as a percent of total visits			
Year One			
% PC < 70%	88.79*	88.01*	0.78
70% ≤ % PC < 100%	6.76*	7.20*	−0.45
% PC = 100%	4.45*	4.79*	−0.34
Year Two			
% PC < 70%	89.09*	89.17*	−0.08
70% ≤ % PC < 100%	6.58*	6.54*	0.05
% PC = 100%	4.32*	4.29*	0.03
Year Three			
% PC < 70%	89.51*	89.82*	−0.30
70% ≤ % PC < 100%	6.34*	6.17*	0.18
% PC = 100%	4.14*	4.02*	0.13
Overall			
% PC < 70%	89.03*	88.74*	0.29
70% ≤ % PC < 100%	6.62*	6.79*	−0.17
% PC = 100%	4.35*	4.48*	−0.13
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	8.54*	7.72*	0.82
Year Two	8.64*	8.54*	0.10
Year Three	8.91*	8.57*	0.34
Overall	8.73*	8.37*	0.36

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-5 and ***Table J6-6*** present decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J6-5
Minnesota: Differences in the rate of utilization during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	0.65*	0.48*	0.18*
Year Two	0.66*	0.60*	0.06
Year Three	0.60*	0.96*	−0.36*
Overall	0.63*	0.71*	−0.08
ER visits not leading to hospitalization			
Year One	11.22*	10.67*	0.55
Year Two	11.04*	9.96*	1.08*
Year Three	10.50*	9.68*	0.82*
Overall	10.93*	10.19*	0.74*
Low birth weight admissions			
Overall	0.05*	0.08*	−0.02

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-6
Minnesota: Differences in the rate of utilization during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	4.52*	4.11*	0.41*
Year Two	4.81*	4.33*	0.48*
Year Three	4.44*	4.23*	0.22
Overall	4.51*	4.18*	0.33*
ER visits not leading to hospitalization			
Year One	15.67*	16.12*	−0.45
Year Two	15.97*	15.63*	0.35
Year Three	15.51*	14.94*	0.56
Overall	15.59*	15.55*	0.04

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-7 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J6-7
Minnesota: Differences in the probability of receiving the process of care indicator for beneficiaries with multiple chronic conditions

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
HbA1c testing			
Year One	92.32*	85.19*	7.13*
Year Two	93.76*	79.15*	14.61*
Year Three	92.93*	93.71*	−0.78
Overall	92.91*	84.06*	8.84*
Retinal eye examination			
Year One	18.74*	17.75*	0.99
Year Two	17.10*	22.89*	−5.79
Year Three	16.97*	9.51	7.47
Overall	17.94*	18.59*	−0.65
LDL-C screening			
Year One	81.50*	72.05*	9.45*
Year Two	82.38*	74.20*	8.18
Year Three	79.98*	67.91*	12.07
Overall	81.63*	72.32*	9.31*
Medical attention for nephropathy			
Year One	61.82*	55.26*	6.55*
Year Two	64.80*	43.93*	20.87*
Year Three	61.88*	25.30*	36.58*
Overall	62.89*	47.64*	15.25*
Received all 4 diabetes tests			
Year One	11.63*	10.47*	1.15
Year Two	11.11*	13.40*	−2.29
Year Three	10.02*	0.00*	10.02*
Overall	11.25*	0.00*	0.99
Received none of the 4 diabetes tests			
Year One	3.35*	5.67*	−2.32
Year Two	2.93*	15.52*	−12.59*
Year Three	3.25*	6.49	−3.24
Overall	3.19*	9.27*	−6.08*
Breast cancer screening			
Year One	19.54*	17.04*	2.51*
Year Two	16.65*	14.11*	2.53*
Year Three	15.01*	9.75*	5.26
Overall	17.99*	15.15*	2.84*
Cervical cancer screening			
Year One	29.15*	26.71*	2.44*
Year Two	30.90*	25.53*	5.37*
Year Three	31.17*	28.55*	2.61
Overall	30.02*	26.52*	3.50*

(continued)

Table J6-7 (continued)
Minnesota: Differences in the probability of receiving the process of care indicator for beneficiaries with multiple chronic conditions

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of antidepressant medication management: 12 weeks			
Year One	54.03*	51.72*	2.31
Year Two	55.08*	58.79*	−3.71
Year Three	52.10*	42.76*	9.33
Overall	54.18*	53.13*	1.05
Appropriate use of antidepressant medication management: 6 months			
Year One	44.74*	39.33*	5.41*
Year Two	45.81*	42.66*	3.15
Year Three	42.99*	34.32*	8.66
Overall	44.91*	39.91*	5.00*
Appropriate use of asthma medications			
Year One	71.65*	71.82*	−0.18
Year Two	70.98*	77.10*	−6.12
Year Three	69.23*	72.44*	−3.21
Overall	71.12*	73.83*	−2.71

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-8 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J6-8
Minnesota: Differences in the probability of having the access to care measure for beneficiaries with multiple chronic conditions

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	68.03*	60.87*	7.16*
Year Two	65.63*	60.66*	4.97*
Year Three	61.47*	62.33*	−0.85
Overall	46.10*	41.23*	4.87
Medical specialist visits (per 1,000 beneficiaries)			
Year One	17.15*	17.29*	−0.14
Year Two	17.95*	16.92*	1.03
Year Three	18.09*	17.30*	0.79
Overall	17.82*	17.14*	0.68
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	8.05*	6.90*	1.15
Year Two	7.90*	7.40*	0.50
Year Three	7.12*	7.89*	−0.77*
Overall	7.44*	7.51*	−0.07
Primary care visits as a percent of total visits			
Year One			
% PC < 70%	90.94*	90.18*	0.76
70% ≤ % PC < 100%	5.75*	6.21*	−0.46
% PC = 100%	3.31*	3.60*	−0.30
Year Two			
% PC < 70%	90.84*	91.11*	−0.27
70% ≤ % PC < 100%	5.81*	5.65*	0.17
% PC = 100%	3.35*	3.24*	0.11
Year Three			
% PC < 70%	91.20*	84.33*	6.87
70% ≤ % PC < 100%	5.59*	9.67*	−4.08
% PC = 100%	3.21*	6.00*	−2.79
Overall			
% PC < 70%	90.93*	89.87*	1.07
70% ≤ % PC < 100%	5.76*	6.40*	−0.64
% PC = 100%	3.31*	3.74*	−0.43

(continued)

Table J6-8 (continued)
Minnesota: Differences in the probability of having the access to care measure for beneficiaries with multiple chronic conditions

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	13.60*	13.05*	0.55
Year Two	13.75*	14.65*	−0.90
Year Three	13.62*	13.69*	−0.07
Overall	13.67*	13.94*	−0.28

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-9 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J6-9
Minnesota: Differences in the rate of utilization for beneficiaries with multiple chronic conditions

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	7.24*	5.46*	1.79*
Year Two	6.81*	5.96*	0.85*
Year Three	6.30*	6.92*	−0.62*
Overall	6.54*	6.31*	0.23
ER visits not leading to hospitalization			
Year One	24.28*	23.77*	0.51
Year Two	23.19*	23.62*	−0.43
Year Three	22.39*	24.40*	−2.01*
Overall	22.83*	24.06*	−1.23*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-10 and ***Table J6-11*** present decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J6-10
Minnesota: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	Non-PCMH CG	
All-cause inpatient admissions			
Year One	4.10*	3.50*	0.60
Year Two	4.13*	3.88*	0.25
Year Three	4.22*	5.35*	−1.14*
Overall	4.07*	4.63*	−0.56
ER visits not leading to hospitalization			
Year One	16.45*	14.67*	1.77
Year Two	17.76*	15.08*	2.67*
Year Three	16.76*	16.45*	0.31
Overall	16.91*	15.84*	1.07
BH inpatient admissions			
Year One	2.69*	2.80*	−0.11
Year Two	3.23*	2.86*	0.38
Year Three	3.45*	4.04*	−0.59
Overall	3.17*	3.78*	−0.61
BH ER visits			
Year One	3.77*	3.14*	0.63
Year Two	4.30*	3.79*	0.51
Year Three	4.34*	4.53*	−0.19
Overall	4.16*	4.00*	0.17
BH outpatient visits			
Year One	43.90*	31.35*	12.55*
Year Two	53.94*	48.81*	5.13*
Year Three	55.79*	58.81*	−3.02
Overall	52.47*	48.47*	4.00*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J6-11
Minnesota: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health utilization measures		Difference
	MAPCP	Non-PCMH CG	
All-cause inpatient admissions			
Year One	12.37*	8.02*	4.34*
Year Two	10.80*	8.88*	1.93*
Year Three	9.91*	10.46*	−0.56
Overall	10.46*	9.55*	0.91
ER visits not leading to hospitalization			
Year One	32.90*	29.63*	3.27*
Year Two	30.44*	28.62*	1.82
Year Three	28.53*	28.28*	0.25
Overall	29.64*	28.50*	1.14
BH inpatient admissions			
Year One	9.97*	7.00*	2.98*
Year Two	7.97*	7.27*	0.70
Year Three	7.56*	8.25*	−0.69
Overall	8.06*	7.65*	0.41
BH ER visits			
Year One	11.43*	10.48*	0.95
Year Two	9.44*	10.23*	−0.78
Year Three	8.67*	10.17*	−1.50
Overall	9.41*	10.18*	−0.77
Behavioral health outpatient visits			
Year One	34.72*	30.28*	4.44*
Year Two	51.50*	49.55*	1.95
Year Three	54.12*	59.28*	−5.16*
Overall	48.72*	49.47*	−0.75

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.7 Decompositions of the Maine Estimates

Table J7-1 and ***Table J7-2*** present a decomposition of the estimates of the changes associated with the Maine MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J7-1
Maine: Differences in the probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of asthma medications			
Year One	82.72*	76.90*	5.82*
Year Two	80.41*	65.46*	14.95*
Year Three	78.10*	58.69*	19.41*
Overall	81.15*	69.93*	11.22*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-2
Maine: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
HbA1c testing			
Year One	85.33*	92.85*	−7.52*
Year Two	85.72*	84.95*	0.77
Year Three	81.44*	85.81*	−4.37
Overall	85.00*	89.25*	−4.24
Retinal eye examination			
Year One	49.29*	51.89*	−2.60
Year Two	52.08*	48.42*	3.66
Year Three	50.86*	46.67*	4.19
Overall	50.45*	50.05*	0.40
LDL-C screening			
Year One	76.48*	82.12*	−5.64
Year Two	75.74*	72.92*	2.82
Year Three	74.36*	82.20*	−7.83
Overall	75.96*	78.91*	−2.94
Medical attention for nephropathy			
Year One	84.25*	90.19*	−5.95*
Year Two	81.08*	92.63*	−11.55*
Year Three	80.70*	92.13*	−11.43
Overall	82.72*	91.28*	−8.56*
Received all 4 diabetes tests			
Year One	30.31*	36.94*	−6.63
Year Two	30.90*	27.38*	3.52
Year Three	31.30*	30.12*	1.17
Overall	30.63*	32.78*	−2.15
Received none of the 4 diabetes tests			
Year One	2.33*	2.05*	0.28
Year Two	3.33*	0.03	3.30*
Year Three	5.35*	2.08	3.27
Overall	3.04*	1.35*	1.69*
Breast cancer screening			
Year One	18.19*	18.83*	−0.64
Year Two	14.14*	16.58*	−2.44
Year Three	13.22*	10.27*	2.95
Overall	16.33*	17.20*	−0.86
Cervical cancer screening			
Year One	29.82*	29.00*	0.82
Year Two	31.59*	24.89*	6.70*
Year Three	26.05*	42.17*	−16.12*
Overall	30.00*	29.11*	0.89

(continued)

Table J7-2 (continued)
Maine: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of antidepressant medication management: 12 weeks			
Year One	40.31*	41.05*	−0.75
Year Two	41.95*	42.30*	−0.35
Year Three	42.51*	41.84*	0.68
Overall	41.16*	41.58*	−0.42
Appropriate use of antidepressant medication management: 6 months			
Year 1	22.73*	22.98*	−0.24
Year 2	25.15*	26.52*	−1.37
Year 3	24.01*	24.92*	−0.91
Overall	23.73*	24.44*	−0.72
Appropriate use of asthma medications			
Year 1	73.25*	73.29*	−0.04
Year 2	70.68*	66.94*	3.75
Year 3	69.05*	46.60*	22.45*
Overall	71.96*	68.40*	3.57

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-3 and ***Table J7-4*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J7-3
Maine: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	23.28*	24.41*	−1.13
Year Two	24.36*	24.00*	0.36
Year Three	23.38*	22.86*	0.52
Overall	23.73*	23.63*	0.10
Medical specialist visits (per 1,000 beneficiaries)			
Year One	4.43*	4.22*	0.21
Year Two	4.63*	4.21*	0.41
Year Three	4.60*	4.24*	0.35
Overall	4.57*	4.23*	0.34
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	1.48*	1.29*	0.19
Year Two	1.19*	1.10*	0.09
Year Three	1.30*	1.22*	0.08
Overall	1.30*	1.19*	0.10

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-4
Maine: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	31.64*	31.81*	−0.17
Year Two	33.26*	29.32*	3.93
Year Three	33.09*	29.10*	3.98
Overall	32.84*	29.79*	3.05
Medical specialist visits (per 1,000 beneficiaries)			
Year One	8.27*	8.59*	−0.32
Year Two	9.06*	8.38*	0.68
Year Three	9.30*	8.47*	0.83
Overall	8.97*	8.46*	0.51
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	4.37*	3.91*	0.46
Year Two	4.41*	3.76*	0.65
Year Three	4.39*	3.92*	0.47
Overall	4.39*	3.85*	0.54
Primary care visits as a percent of total visits			
Year One			
% PC < 70%	38.51*	42.00*	−3.49
70% ≤ % PC < 100%	24.44*	24.27*	0.17
% PC = 100%	37.05*	33.73*	3.32
Year Two			
% PC < 70%	41.99*	42.33*	−0.34
70% ≤ % PC < 100%	24.27*	24.24*	0.03
% PC = 100%	33.74*	33.43*	0.31
Year Three			
% PC < 70%	45.12*	41.99*	3.14
70% ≤ % PC < 100%	23.92*	24.27*	−0.34
% PC = 100%	30.95*	33.74*	−2.79
Overall			
% PC < 70%	40.15*	42.10*	−1.96
70% ≤ % PC < 100%	24.34*	24.26*	0.09
% PC = 100%	35.51*	33.64*	1.87
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	11.65*	12.79*	−1.14
Year Two	11.63*	16.33*	−4.69
Year Three	11.11*	10.59*	0.52
Overall	11.47*	13.64*	−2.18

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-5 and ***Table J7-6*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for medical expenditures among Medicaid children and adults, respectively.

Table J7-5
Maine: Differences in the change in Medicaid PBPM expenditures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	−42.90*	−38.35*	−4.55
Year Two	−21.68*	−17.81*	−3.87
Year Three	−6.97	−4.47	−2.50
Overall	−20.46*	−16.99*	−3.47
Acute-care expenditures			
Year One	0.85	−2.46	3.31
Year Two	1.20	3.44	−2.24
Year Three	4.37*	9.14*	−4.77
Overall	2.39*	4.43*	−2.03
ER expenditures			
Year One	7.73*	6.43*	1.30
Year Two	4.50*	3.26*	1.24
Year Three	5.03*	5.23*	−0.20
Overall	5.42*	4.75*	0.68
Specialty physician expenditures			
Year One	4.61*	4.53*	0.08
Year Two	4.42*	3.94*	0.47*
Year Three	4.46*	4.32*	0.14
Overall	4.48*	4.22*	0.26
Primary care physician expenditures			
Year One	−19.84*	−17.06*	−2.78
Year Two	−16.83*	−13.79*	−3.05
Year Three	−17.41*	−14.58*	−2.83
Overall	−17.73*	−14.83*	−2.90
Prescription expenditures			
Year One	9.34*	11.91*	−2.57*
Year Two	11.04*	11.99*	−0.95
Year Three	14.90*	17.44*	−2.53
Overall	12.21*	14.16*	−1.94
LTC expenditures			
Year One	−3.52*	−3.52*	0.00
Year Two	−3.50*	−3.52*	0.02
Year Three	−3.49*	−3.50*	0.01
Overall	−3.50*	−3.51*	0.01

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-6
Maine: Differences in the change in expenditure measures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	5.08	8.92	−3.84
Year Two	−6.30	−1.94	−4.37
Year Three	16.38	30.08	−13.70
Overall	4.44	12.07	−7.64
Acute-care expenditures			
Year One	39.31*	37.17*	2.15
Year Two	40.41*	41.53*	−1.12
Year Three	54.63*	55.17*	−0.54
Overall	45.33*	45.51*	−0.19
ER visits not leading to a hospitalization expenditures			
Year One	16.40*	15.66*	0.74
Year Two	7.54*	7.57*	−0.03
Year Three	9.16*	8.57*	0.60
Overall	10.08*	9.71*	0.37
Specialty physician expenditures			
Year One	9.44*	9.18*	0.26
Year Two	8.48*	7.98*	0.50
Year Three	8.60*	8.78*	−0.18
Overall	8.74*	8.54*	0.20
Primary care physician expenditures			
Year One	−11.60*	−10.61*	−0.99
Year Two	−7.68*	−10.64*	2.96
Year Three	−7.63*	−11.06*	3.44
Overall	−8.52*	−10.79*	2.26
Prescription expenditures			
Year One	11.18*	12.75*	−1.57
Year Two	12.71*	12.34*	0.37
Year Three	23.73*	22.37*	1.36
Overall	16.37*	16.07*	0.30
LTC expenditures			
Year One	−3.73*	−3.63*	−0.10
Year Two	−3.73*	−3.66*	−0.08
Year Three	−3.79*	−3.66*	−0.13
Overall	−3.75*	−3.65*	−0.10

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-7 and ***Table J7-8*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J7-7
Maine: Differences in the rate of utilization during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	0.58*	0.44*	0.14*
Year Two	0.56*	0.61*	−0.05
Year Three	0.57*	0.71*	−0.14
Overall	0.57*	0.61*	−0.04
ER visits not leading to hospitalization			
Year One	11.79*	10.58*	1.21*
Year Two	10.80*	9.65*	1.15*
Year Three	10.20*	9.78*	0.42
Overall	10.78*	9.91*	0.87*
Low birth weight admissions			
Overall	13.94*	15.83*	−1.89

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-8
Maine: Differences in the rate of utilization during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	2.60*	2.46*	0.14
Year Two	2.57*	2.65*	−0.08
Year Three	2.72*	2.95*	−0.22
Overall	2.63*	2.71*	−0.08
ER visits not leading to hospitalization			
Year One	16.64*	16.04*	0.60
Year Two	15.44*	14.85*	0.59
Year Three	15.01*	14.11*	0.89
Overall	15.55*	14.85*	0.70

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-9 and ***Table J7-10*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for total Medicaid PBPM expenditures for special populations among Medicaid children and adults, respectively.

Table J7-9
Maine: Differences in the change in total expenditures from baseline among children in special populations

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	Non-PCMH CG	
BH conditions only			
Year One	451.34*	527.01*	−75.67
Year Two	442.40*	628.11*	−185.71
Year Three	537.97*	572.72*	−34.75
Overall	484.30*	584.57*	−100.27
Disabled beneficiaries only			
Year One	−111.37	282.03*	−393.40*
Year Two	−166.50*	239.77*	−406.26*
Year Three	−82.87	144.59	−227.46
Overall	−120.95	211.87*	−332.83*
Asthma diagnosis only			
Year One	−101.27*	−22.49	−78.78
Year Two	−63.45	−75.70	12.25
Year Three	−40.76	−59.37	18.61
Overall	−61.82	−57.98	−3.84
Rural beneficiaries only			
Year One	−32.67*	−20.54	−12.12
Year Two	−11.82	−2.81	−9.01
Year Three	3.15	9.50	−6.36
Overall	−9.58	−1.08	−8.50
Non-White beneficiaries only			
Year One	−29.15*	−53.86*	24.70
Year Two	−18.11	−43.63*	25.52
Year Three	−9.36	−18.27	8.91
Overall	−16.73	−35.13*	18.40

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-10
Maine: Differences in the change in total expenditures from baseline among adults in special populations

Outcome	Change in total Medicaid PBPM expenditures from baseline		Difference
	MAPCP	Non-PCMH CG	
Multiple chronic conditions only			
Year One	104.96*	74.27	30.69
Year Two	95.74*	103.90*	−8.16
Year Three	154.04*	152.57*	1.47
Overall	118.55*	114.55*	4.01
BH conditions only			
Year One	141.91*	5.79	136.12*
Year Two	119.97*	72.01	47.97
Year Three	172.52*	202.49*	−29.97
Overall	144.09*	106.13	37.96
Disabled beneficiaries only			
Year One	−109.08*	−30.94	−78.15
Year Two	−61.19	−11.15	−50.04
Year Three	15.11	100.26	−85.15
Overall	−38.36	31.84	−70.19
Asthma diagnosis only			
Year One	54.57	47.38	7.19
Year Two	49.48	−33.05	82.53
Year Three	85.60	6.34	79.26
Overall	64.57	−1.65	66.22
Rural beneficiaries only			
Year One	12.85	16.93	−4.07
Year Two	6.14	3.97	2.17
Year Three	33.93*	47.24	−13.31
Overall	17.96	22.83	−4.87
Non-White beneficiaries only			
Year One	23.07	16.28	6.79
Year Two	−1.63	19.12	−20.75
Year Three	20.74	−1.61	22.35
Overall	11.90	10.95	0.96

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-11 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J7-11
Maine: Differences in the probability of receiving the process of care indicator for beneficiaries with multiple chronic conditions

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
HbA1c testing			
Year One	81.89*	96.89*	−15.00*
Year Two	84.19*	77.12*	7.07
Year Three	78.20*	81.25*	−3.04
Overall	82.25*	87.91*	−5.65
Retinal eye examination			
Year One	55.53*	57.72*	−2.19
Year Two	58.52*	52.03*	6.49
Year Three	55.70*	50.71*	4.98
Overall	56.61*	54.82*	1.79
LDL-C screening			
Year One	72.53*	77.82*	−5.29
Year Two	73.51*	64.41*	9.10
Year Three	71.21*	77.33*	−6.12
Overall	72.71*	72.98*	−0.27
Medical attention for nephropathy			
Year One	83.98*	95.06*	−11.08*
Year Two	83.75*	91.94*	−8.19*
Year Three	79.29*	92.73*	−13.44
Overall	83.32*	93.66*	−10.34*
Received all 4 diabetes tests			
Year One	33.45*	39.29*	−5.84
Year Two	35.33*	24.84*	10.49
Year Three	32.33*	29.90*	2.43
Overall	33.98*	32.98*	1.01
Received none of the 4 diabetes tests			
Year One	2.46	0.12	2.35
Year Two	1.76	0.00	1.76
Year Three	5.95	3.10	2.84
Overall	2.64	0.45	2.20
Breast cancer screening			
Year One	15.35*	16.16*	−0.81
Year Two	12.00*	17.27*	−5.27
Year Three	11.47*	8.58*	2.89
Overall	13.76*	15.66*	−1.90
Cervical cancer screening			
Year One	30.10*	29.59*	0.51
Year Two	33.77*	26.59*	7.18*
Year Three	25.68*	43.47*	−17.79*
Overall	30.85*	30.23*	0.62

(continued)

Table J7-11 (continued)
Maine: Differences in the probability of receiving the process of care indicator for beneficiaries with multiple chronic conditions

Outcome	Probability of receiving the process of care indicator		Difference
	MAPCP	Non-PCMH CG	
Appropriate use of antidepressant medication management: 12 weeks			
Year One	40.40*	41.86*	−1.46
Year Two	42.44*	43.68*	−1.24
Year Three	42.56*	42.85*	−0.29
Overall	41.39*	42.62*	−1.23
Appropriate use of antidepressant medication management: 6 months			
Year One	26.42*	29.81*	−3.40
Year Two	29.75*	32.67*	−2.93
Year Three	27.98*	30.57*	−2.60
Overall	27.78*	30.91*	−3.13
Appropriate use of asthma medications			
Year One	78.34*	81.28*	−2.94
Year Two	77.23*	71.39*	5.84
Year Three	75.54*	60.34*	15.19
Overall	77.64*	75.50*	2.14

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-12 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J7-12
Maine: Differences in the probability of having the access to care measure for beneficiaries with multiple chronic conditions

Outcome	Probability of having the access to care measure		Difference
	MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)			
Year One	43.68*	41.76*	1.92
Year Two	46.81*	41.70*	5.11
Year Three	46.80*	40.34*	6.46
Overall	46.10*	41.23*	4.87
Medical specialist visits (per 1,000 beneficiaries)			
Year One	17.15*	17.29*	−0.14
Year Two	17.95*	16.92*	1.03
Year Three	18.09*	17.30*	0.79
Overall	17.82*	17.14*	0.68
Surgical specialist visits (per 1,000 beneficiaries)			
Year One	8.05*	6.90*	1.15
Year Two	8.36*	7.08*	1.29
Year Three	8.15*	6.94*	1.20*
Overall	8.22*	6.99*	1.23*
Primary care visits as a percent of total visits			
Year One			
% PC < 70%	47.89*	53.69*	−5.80
70% ≤ % PC < 100%	26.78*	25.11*	1.66
% PC = 100%	25.34*	21.19*	4.14
Year Two			
% PC < 70%	49.99*	45.56*	4.43
70% ≤ % PC < 100%	26.23*	27.30*	−1.06
% PC = 100%	23.78*	27.15*	−3.37
Year Three			
% PC < 70%	53.69*	51.68*	2.00
70% ≤ % PC < 100%	25.12*	25.75*	−0.63
% PC = 100%	21.20*	22.57*	−1.37
Overall			
% PC < 70%	49.11*	50.80*	−1.69
70% ≤ % PC < 100%	26.45*	25.90*	0.55
% PC = 100%	24.44*	23.30*	1.14
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year One	15.58*	19.30*	−3.72
Year Two	16.80*	28.61*	−11.81*
Year Three	17.32*	17.43*	−0.10
Overall	16.64*	22.77*	−6.13*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-13 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for medical expenditures for adult Medicaid beneficiaries with multiple chronic conditions.

Table J7-13
Maine: Differences in the change in Medicaid PBPM expenditures from baseline for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	104.96*	74.27	30.69
Year Two	95.74*	103.90*	−8.16
Year Three	154.04*	152.57*	1.47
Overall	118.55*	114.55*	4.01
Acute-care expenditures			
Year One	99.14*	90.81*	8.32
Year Two	94.09*	111.08*	−17.00
Year Three	141.03*	145.64*	−4.61
Overall	111.92*	118.81*	−6.89
ER visits not leading to hospitalization expenditures			
Year One	31.31*	30.40*	0.90
Year Two	19.03*	17.04*	2.00
Year Three	24.05*	21.31*	2.74
Overall	23.58*	21.56*	2.02
Specialty physician expenditures			
Year One	19.44*	17.01*	2.43
Year Two	16.83*	15.28*	1.55
Year Three	16.76*	15.98*	0.78
Overall	17.40*	15.92*	1.48
Primary care physician expenditures			
Year One	−17.06*	−19.66*	2.61
Year Two	−10.34	−16.25	5.91
Year Three	−10.22	−17.40	7.18
Overall	−11.81	−17.43	5.62
Prescription expenditures			
Year One	47.16*	32.17*	14.99
Year Two	46.43*	38.29*	8.14
Year Three	81.66*	78.31*	3.35
Overall	59.13*	51.15*	7.98
LTC expenditures			
Year One	−21.87*	−12.55*	−9.31*
Year Two	−17.90*	−10.39*	−7.51*
Year Three	−16.11*	−8.38	−7.73*
Overall	−18.15*	−10.16*	−8.00*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; LTC = long-term care; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-14 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J7-14
Maine: Differences in the rate of utilization for beneficiaries with multiple chronic conditions

Outcome	Rate of utilization		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	4.01*	3.75*	0.26
Year Two	3.67*	4.13*	−0.46
Year Three	3.92*	4.51*	−0.59
Overall	3.83*	4.18*	−0.34
ER visits not leading to hospitalization			
Year One	22.70*	20.43*	2.27*
Year Two	21.31*	20.46*	0.85
Year Three	21.33*	18.67*	2.66*
Overall	21.63*	19.82*	1.81*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-15 and ***Table J7-16*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for expenditures for BH care among Medicaid children and adults, respectively.

Table J7-15
Maine: Differences in the change in BH care expenditure measures from baseline for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	451.34*	527.01*	−75.67
Year Two	442.40*	628.11*	−185.71
Year Three	537.97*	572.72*	−34.75
Overall	484.30*	584.57*	−100.27
Acute-care expenditures			
Year One	102.36*	87.64*	14.71
Year Two	82.83*	84.83*	−2.00
Year Three	172.63*	192.39*	−19.76
Overall	124.44*	130.53*	−6.10
Expenditures for ER visits not leading to hospitalization			
Year One	24.94*	23.88*	1.05
Year Two	20.71*	19.80*	0.92
Year Three	22.08*	24.85*	−2.77
Overall	22.14*	22.74*	−0.60
Total for principal diagnosis of a BH condition			
Year One	289.77*	236.32*	53.44
Year Two	223.32*	195.03*	28.29
Year Three	247.43*	269.76*	−22.33
Overall	246.78*	234.68*	12.10

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-16
Maine: Differences in the change in BH care expenditure measures from baseline for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in BH care expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	141.91*	5.79	136.12*
Year Two	119.97*	72.01	47.97
Year Three	172.52*	202.49*	−29.97
Overall	144.09*	106.13	37.96
Acute-care expenditures			
Year One	106.45*	58.14*	48.31*
Year Two	116.04*	105.80*	10.24
Year Three	179.96*	194.47*	−14.50
Overall	137.63*	128.42*	9.21
Expenditures for ER visits not leading to hospitalization			
Year One	50.84*	45.64*	5.20
Year Two	31.08*	33.92*	−2.84
Year Three	30.97*	31.96*	−0.99
Overall	35.26*	35.69*	−0.44
Total for principal diagnosis of a BH condition			
Year One	163.83*	143.17*	20.66
Year Two	158.20*	196.90*	−38.71
Year Three	165.56*	205.19*	−39.63
Overall	162.12*	188.50*	−26.37

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-17 and ***Table J7-18*** present decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J7-17
Maine: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	Non-PCMH CG	
All-cause inpatient admissions			
Year One	3.06	3.07	−0.01
Year Two	2.21	2.64	−0.43
Year Three	3.12	4.33	−1.20
Overall	2.76	3.44	−0.67
ER visits not leading to hospitalization			
Year One	20.25*	17.14*	3.10
Year Two	18.62*	16.91*	1.71
Year Three	18.40*	16.96*	1.44
Overall	18.86*	16.98*	1.88
BH inpatient admissions			
Year One	1.83	1.01	0.82
Year Two	1.45	1.38	0.07
Year Three	2.02	2.35	−0.33
Overall	1.77	1.72	0.05
BH ER visits			
Year One	6.01*	5.44	0.57
Year Two	6.79*	5.27	1.52
Year Three	6.42*	6.05	0.37
Overall	6.48*	5.63	0.85
BH outpatient visits			
Year One	33.05	25.15	7.89
Year Two	37.25*	33.11	4.15
Year Three	29.44	29.41	0.03
Overall	33.13	29.96	3.17

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-18
Maine: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health utilization measures		Difference
	MAPCP	Non-PCMH CG	
All-cause inpatient admissions			
Year One	4.20*	3.18*	1.02
Year Two	4.30*	4.17*	0.13
Year Three	4.67*	5.41*	−0.74
Overall	4.41*	4.42*	0.00
ER visits not leading to hospitalization			
Year One	29.30*	27.70*	1.60
Year Two	26.60*	28.15*	−1.55
Year Three	25.66*	25.52*	0.14
Overall	26.83*	27.08*	−0.25
BH inpatient admissions			
Year One	1.00	0.52	0.48
Year Two	1.08	0.67	0.41
Year Three	0.99	0.66	0.32
Overall	1.03	0.63	0.40
BH ER visits			
Year One	12.37*	12.28*	0.09
Year Two	12.99*	14.18*	−1.19
Year Three	11.53*	12.61*	−1.08
Overall	12.32*	13.19*	−0.88
BH outpatient visits			
Year One	38.93*	30.96*	7.97*
Year Two	42.38*	36.82*	5.57
Year Three	37.16*	36.51*	0.64
Overall	39.71*	35.45*	4.26

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-19 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration for selected expenditure outcomes among disabled Medicaid beneficiaries who are children.

Table J7-19
Maine: Differences in the change in selected Medicaid PBPM expenditure measures for disabled beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Change in expenditure measures from baseline		Difference
	MAPCP	Non-PCMH CG	
Total Medicaid expenditures			
Year One	−111.37	282.03*	−393.40*
Year Two	−166.50*	239.77*	−406.26*
Year Three	−82.87	144.59	−227.46
Overall	−120.95	211.87*	−332.83*
Acute-care expenditures			
Year One	60.61*	112.13*	−51.52*
Year Two	65.53*	97.33*	−31.79
Year Three	124.22*	144.00*	−19.78
Overall	87.55*	119.11*	−31.55
ER expenditures			
Year One	11.45*	13.28*	−1.83
Year Two	7.27*	2.58	4.69
Year Three	8.26*	9.84	−1.58
Overall	8.61*	7.88	0.73
Specialty physician expenditures			
Year One	11.09*	13.50*	−2.42
Year Two	11.14*	8.49*	2.65
Year Three	10.54*	9.89*	0.65
Overall	10.89*	10.18*	0.71
Primary care physician expenditures			
Year One	−27.61*	−22.73*	−4.87
Year Two	−23.21*	−19.56*	−3.66
Year Three	−20.64*	−19.97*	−0.67
Overall	−23.20*	−20.44*	−2.76

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J7-20 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on selected medical service utilization outcomes among disabled Medicaid beneficiaries who are children.

Table J7-20
Maine: Differences in the probability of medical service utilization measures for disabled beneficiaries who are children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	Non-PCMH CG	
All-cause admissions			
Year One	2.24	3.96	−1.72
Year Two	2.51	3.24	−0.73
Year Three	2.80	3.76	−0.96
Overall	2.56	3.61	−1.05
ER visits not leading to hospitalization			
Year One	15.36*	14.78*	0.58
Year Two	14.83*	12.46*	2.37
Year Three	13.54*	12.38*	1.16
Overall	14.44*	12.96*	1.48

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.8 Decompositions of the Michigan Estimates

Table J8-1 and ***Table J8-2*** present a decomposition of the estimates of the changes associated with the Michigan MAPCP Demonstration for process of care indicators for Medicaid children and adults, respectively.

Table J8-1
Michigan: Differences in the probability of receiving the process of care indicator during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Appropriate use of asthma medications						
Year One	81.42*	83.32*	−1.90	82.24*	83.46*	−1.22
Year Two	82.48*	81.65*	0.82	83.16*	87.03*	−3.86
Year Three	72.57*	71.47*	1.11	73.56*	77.94*	−4.38
Overall	79.87*	80.20*	−0.33	80.68*	83.48*	−2.80

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home. ‘

* Statistically significant at the 10 percent level.

Table J8-2
Michigan: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	57.87*	46.21*	11.66*	58.70*	55.11*	3.59
Year Two	53.93*	34.50*	19.43*	54.94*	43.38*	11.56*
Year Three	44.68*	30.79*	13.90*	45.36*	37.57*	7.79
Overall	53.75*	39.19*	14.55*	54.60*	47.62*	6.98
Retinal eye examination						
Year One	50.27*	54.68*	−4.41*	49.63*	51.70*	−2.06
Year Two	49.91*	51.37*	−1.46	50.00*	53.13*	−3.13
Year Three	42.25*	42.77*	−0.52	42.40*	46.22*	−3.82
Overall	48.39*	51.03*	−2.64*	48.15*	50.94*	−2.78
LDL-C screening						
Year One	38.49*	27.66*	10.84*	40.12*	36.67*	3.44
Year Two	33.42*	19.85*	13.57*	35.20*	27.54*	7.65*
Year Three	23.64*	17.49*	6.15	24.80*	17.20*	7.59*
Overall	33.65*	23.01*	10.65*	35.22*	29.56*	5.66
Medical attention for nephropathy						
Year One	41.12*	33.30*	7.82*	41.51*	34.24*	7.27*
Year Two	38.61*	30.95*	7.66*	39.10*	32.49*	6.60*
Year Three	30.07*	26.27*	3.80	30.17*	26.30*	3.87
Overall	37.91*	31.02*	6.88*	38.26*	31.95*	6.32*
Received all 4 diabetes tests						
Year One	15.28*	10.62*	4.65	15.60*	15.82*	−0.22
Year Two	14.11*	7.82	6.29	14.69*	12.85*	1.84
Year Three	7.83*	3.72	4.11	8.14*	6.58*	1.56
Overall	13.28*	8.24*	5.04	13.68*	12.87*	0.81
Received none of the 4 diabetes tests						
Year One	18.64*	22.33*	−3.69*	17.91*	20.96*	−3.05
Year Two	20.53*	30.47*	−9.94*	19.42*	23.89*	−4.47
Year Three	29.75*	35.89*	−6.14	28.67*	32.11*	−3.44
Overall	21.67*	27.83*	−6.16*	20.75*	24.32*	−3.58
Breast cancer screening						
Year One	16.65*	14.64*	2.00	16.04*	16.43*	−0.39
Year Two	12.27*	10.48*	1.78	11.86*	12.80*	−0.94
Year Three	6.32*	6.76*	−0.44	6.06*	7.57*	−1.51*
Overall	13.07*	11.68*	1.39	12.60*	13.40*	−0.80

(continued)

Table J8-2 (continued)
Michigan: Differences in the probability of receiving the process of care indicator during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Cervical cancer screening						
Year One	26.69*	28.75*	−2.06	28.75*	27.31*	1.45
Year Two	22.78*	24.00*	−1.22	24.38*	24.32*	0.07
Year Three	12.90*	12.86*	0.05	13.87*	15.18*	−1.31
Overall	22.10*	23.38*	−1.29	23.75*	23.40*	0.35
Appropriate use of antidepressant medication management: 12 weeks						
Year One	45.93*	47.43*	−1.49	47.42*	42.26*	5.16*
Year Two	44.90*	42.23*	2.67	45.95*	48.99*	−3.04
Year Three	44.97*	44.15*	0.83	46.25*	48.19*	−1.94
Overall	45.51*	45.52*	−0.01	46.85*	44.96*	1.90
Appropriate use of antidepressant medication management: 6 months						
Year One	32.29*	33.50*	−1.20	32.00*	32.98*	−0.98
Year Two	31.50*	31.16*	0.35	30.75*	33.86*	−3.11
Year Three	30.37*	30.64*	−0.27	29.69*	36.77*	−7.08*
Overall	31.81*	32.45*	−0.64	31.34*	33.75*	−2.41
Appropriate use of asthma medications						
Year Three	80.85*	82.01*	−1.16	86.07*	86.38*	−0.31
Year Two	84.09*	83.25*	0.84	88.24*	91.05*	−2.81
Year Three	79.06*	78.03*	1.03	84.17*	89.49*	−5.32
Overall	81.53*	81.65*	−0.12	86.40*	88.44*	−2.04

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-3 and ***Table J8-4*** present decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J8-3
Michigan: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	40.12*	41.47*	−1.35*	40.13*	43.13*	−3.00*
Year Two	41.56*	41.46*	0.10	41.57*	43.31*	−1.74
Year Three	42.50*	43.43*	−0.93	42.51*	44.55*	−2.03
Overall	41.32*	42.01*	−0.69	41.33*	43.59*	−2.26*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	10.14*	8.55*	1.59*	10.15*	8.80*	1.36
Year Two	7.47*	6.34*	1.13	7.48*	6.41*	1.07
Year Three	6.07*	5.07*	1.00	6.09*	5.11*	0.98
Overall	8.02*	6.76*	1.25*	8.03*	6.88*	1.14
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	0.94*	1.11*	−0.17	0.94*	1.02*	−0.08
Year Two	1.10*	1.03*	0.06	1.10*	1.02*	0.08
Year Three	1.19*	1.23*	−0.04	1.19*	0.97*	0.22*
Overall	1.07*	1.12*	−0.05	1.07*	1.01*	0.06

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-4
Michigan: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	44.85*	51.96*	−7.11*	44.86*	49.78*	−4.92*
Year Two	48.88*	48.30*	0.58	48.85*	46.87*	1.99
Year Three	37.94*	41.58*	−3.65*	37.73*	38.93*	−1.20
Overall	43.49*	46.76*	−3.28*	43.40*	44.64*	−1.24
Medical specialist visits (per 1,000 beneficiaries)						
Year One	15.19*	14.85*	0.34	15.10*	15.37*	−0.27
Year Two	12.48*	11.63*	0.85	12.40*	11.88*	0.52
Year Three	8.25*	7.50*	0.76	8.14*	8.24*	−0.10
Overall	11.63*	10.96*	0.67	11.53*	11.48*	0.05
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	3.94*	4.72*	−0.78*	3.95*	3.95*	−0.01
Year Two	4.49*	4.51*	−0.02	4.49*	3.94*	0.56
Year Three	3.76*	4.11*	−0.34	3.75*	3.14*	0.60
Overall	4.05*	4.42*	−0.36	4.05*	3.63*	0.41
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	33.52*	30.73*	2.79*	34.32*	31.71*	2.61*
70% ≤ % PC < 100%	27.87*	27.59*	0.29*	28.13*	27.93*	0.20
% PC = 100%	38.60*	41.68*	−3.08*	37.56*	40.36*	−2.81*
Year Two						
% PC < 70%	31.19*	27.09*	4.11*	31.89*	30.08*	1.81
70% ≤ % PC < 100%	27.65*	26.87*	0.79*	27.95*	27.71*	0.24
% PC = 100%	41.15*	46.04*	−4.89*	40.16*	42.21*	−2.05
Year Three						
% PC < 70%	27.41*	24.21*	3.20	27.95*	25.28*	2.67
70% ≤ % PC < 100%	26.95*	25.98*	0.97	27.30*	26.57*	0.73
% PC = 100%	45.65*	49.82*	−4.17	44.75*	48.15*	−3.40
Overall						
% PC < 70%	31.79*	28.60*	3.19*	32.51*	30.08*	2.43
70% ≤ % PC < 100%	27.64*	27.10*	0.54	27.93*	27.62*	0.31
% PC = 100%	40.57*	44.30*	−3.73*	39.56*	42.30*	−2.74

(continued)

Table J8-4 (continued)
Michigan: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	6.39*	5.86*	0.52	6.43*	7.32*	−0.90
Year Two	6.71*	6.57*	0.13	6.77*	7.75*	−0.97
Year Three	7.76*	7.56*	0.20	7.86*	8.27*	−0.41
Overall	6.83*	6.55*	0.29	6.90*	7.72*	−0.82

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-5 and ***Table J8-6*** present decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J8-5
Michigan: Differences in the rate of utilization during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	0.54*	0.49*	0.05	0.54*	0.35*	0.19*
Year Two	0.60*	0.74*	−0.14	0.60*	0.53*	0.07
Year Three	0.63*	1.12*	−0.49*	0.63*	0.70*	−0.08
Overall	0.59*	0.76*	−0.17*	0.59*	0.51*	0.07
ER visits not leading to hospitalization						
Year One	13.42*	13.88*	−0.46	13.40*	13.29*	0.11
Year Two	12.46*	12.82*	−0.36	12.45*	12.03*	0.42*
Year Three	13.14*	13.44*	−0.30	13.13*	12.56*	0.57*
Overall	12.99*	13.36*	−0.38	12.97*	12.62*	0.36
Low birth weight admissions						
Overall	3.14*	2.34	0.81	3.67*	3.89*	−0.22

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-6
Michigan: Differences in the rate of utilization during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	4.51*	4.64*	−0.14	4.50*	4.32*	0.18
Year Two	5.01*	4.56*	0.45*	5.01*	4.36*	0.65*
Year Three	3.94*	3.96*	−0.02	3.95*	3.81*	0.14
Overall	4.45*	4.35*	0.10	4.45*	4.14*	0.32*
ER visits not leading to hospitalization						
Year One	21.71*	22.39*	−0.69	21.69*	21.87*	−0.18
Year Two	21.51*	19.98*	1.53*	21.49*	19.18*	2.31*
Year Three	17.33*	17.41*	−0.08	17.31*	16.72*	0.59
Overall	19.95*	19.68*	0.27	19.93*	19.00*	0.93*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-7 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for process of care indicators for adult Medicaid beneficiaries with multiple chronic conditions.

Table J8-7
Michigan: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
HbA1c testing						
Year One	59.72*	47.08*	12.64*	59.96*	58.40*	1.56
Year Two	55.61*	36.13*	19.48*	55.82*	45.44*	10.38
Year Three	45.97*	32.99*	12.97*	46.06*	39.89*	6.17
Overall	55.31*	40.45*	14.85*	55.50*	50.14*	5.37
Retinal eye examination						
Year One	52.54*	56.52*	−3.99	51.58*	54.50*	−2.92
Year Two	52.25*	53.64*	−1.39	51.75*	56.76*	−5.01*
Year Three	44.19*	45.31*	−1.12	43.94*	49.22*	−5.28
Overall	50.55*	53.07*	−2.52	49.90*	54.01*	−4.11*
LDL-C screening						
Year One	39.53*	27.93*	11.60*	41.11*	39.08*	2.03
Year Two	34.50*	20.39*	14.11*	36.06*	28.06*	8.00*
Year Three	24.46*	18.83*	5.63	25.58*	18.10*	7.48*
Overall	34.53*	23.50*	11.02*	36.00*	30.87*	5.13
Medical attention for nephropathy						
Year One	41.96*	36.41*	5.55	42.16*	35.39*	6.77*
Year Two	40.44*	33.73*	6.71	40.68*	34.74*	5.94*
Year Three	31.45*	26.91*	4.53	31.54*	28.05*	3.49
Overall	39.09*	33.41*	5.68	39.28*	33.52*	5.76*
Received all 4 diabetes tests						
Year One	15.68*	11.04*	4.64	15.95*	16.36*	−0.41
Year Two	14.52*	7.87	6.65	14.97*	13.21*	1.76
Year Three	7.87*	3.82	4.04	8.16*	6.51*	1.65
Overall	13.54*	8.41*	5.13	13.87*	13.14*	0.74
Received none of the 4 diabetes tests						
Year One	16.54*	19.67*	−3.13	15.99*	17.51*	−1.51
Year Two	17.96*	27.78*	−9.83*	17.35*	19.71*	−2.35
Year Three	26.60*	32.22*	−5.61	25.80*	26.94*	−1.14
Overall	19.27*	25.06*	−5.79*	18.65*	20.34*	−1.69

(continued)

Table J8-7 (continued)
Michigan: Differences in the probability of receiving the process of care indicator during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of receiving the process of care indicator		Difference	Probability of receiving the process of care indicator		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Breast cancer screening						
Year One	17.68*	15.92*	1.75	17.21*	17.48*	−0.27
Year Two	13.27*	10.93*	2.34	12.90*	13.99*	−1.09
Year Three	7.21*	7.21*	0.00	6.95*	10.00*	−3.06*
Overall	13.86*	12.35*	1.51	13.47*	14.65*	−1.18
Cervical cancer screening						
Year One	34.99*	36.29*	−1.30	37.55*	36.16*	1.38
Year Two	30.40*	31.57*	−1.17	32.42*	30.74*	1.68
Year Three	17.93*	16.71*	1.22	19.42*	21.27*	−1.85
Overall	29.18*	29.79*	−0.61	31.30*	30.66*	0.64
Appropriate use of antidepressant medication management: 12 weeks						
Year One	46.81*	48.89*	−2.07	50.05*	46.67*	3.38
Year Two	46.14*	39.84*	6.30	49.33*	49.97*	−0.64
Year Three	45.12*	46.91*	−1.79	48.15*	52.70*	−4.55
Overall	46.38*	46.06*	0.31	49.57*	48.48*	1.08
Appropriate use of antidepressant medication management: 6 months						
Year One	32.65*	33.43*	−0.78	33.32*	35.16*	−1.84
Year Two	32.71*	26.79*	5.92	33.18*	31.95*	1.22
Year Three	30.77*	31.76*	−0.99	31.14*	41.82*	−10.68*
Overall	32.39*	31.33*	1.06	32.96*	35.25*	−2.29
Appropriate use of asthma medications						
Year One	81.95*	80.55*	1.40	88.19*	90.99*	−2.79
Year Two	84.09*	80.98*	3.11	89.66*	91.82*	−2.16
Year Three	79.14*	78.31*	0.83	86.28*	94.00*	−7.72*
Overall	82.07*	80.24*	1.83	88.28*	91.86*	−3.58

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report. All measures are annual dichotomous measures of the probability of receiving certain tests/screenings/medications given the beneficiary is eligible to receive the test/screening/medication.

CG = comparison group; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-8 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J8-8
Michigan: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	62.71*	67.78*	−5.07*	62.68*	64.62*	−1.94
Year Two	67.45*	70.29*	−2.84*	67.38*	67.05*	0.33
Year Three	61.03*	67.86*	−6.83*	60.88*	64.05*	−3.17
Overall	63.88*	68.70*	−4.82*	63.80*	65.31*	−1.51
Medical specialist visits (per 1,000 beneficiaries)						
Year One	24.78*	22.43*	2.34*	24.72*	24.68*	0.04
Year Two	20.85*	20.90*	−0.06	20.79*	21.95*	−1.16
Year Three	17.31*	16.98*	0.33	17.23*	18.05*	−0.82
Overall	21.06*	20.20*	0.86	21.00*	21.65*	−0.66
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	8.73*	9.77*	−1.04	8.70*	7.83*	0.87
Year Two	9.53*	10.29*	−0.76	9.50*	8.41*	1.09
Year Three	9.27*	10.98*	−1.70*	9.25*	8.12*	1.14
Overall	9.18*	10.33*	−1.15*	9.16*	8.13*	1.03
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	37.60*	33.73*	3.87*	38.04*	35.68*	2.36
70% ≤ % PC < 100%	32.28*	32.49*	−0.20	32.28*	32.48*	−0.20
% PC = 100%	30.12*	33.79*	−3.67*	29.67*	31.83*	−2.16
Year Two						
% PC < 70%	33.16*	29.63*	3.52	33.41*	33.14*	0.27
70% ≤ % PC < 100%	32.48*	32.22*	0.26	32.54*	32.53*	0.00
% PC = 100%	34.36*	38.15*	−3.78	34.05*	34.32*	−0.27
Year Three						
% PC < 70%	29.77*	28.12*	1.65	29.91*	28.33*	1.59
70% ≤ % PC < 100%	32.24*	31.98*	0.26	32.31*	32.08*	0.24
% PC = 100%	37.99*	39.90*	−1.91	37.77*	39.60*	−1.83
Overall						
% PC < 70%	34.83*	31.51*	3.31*	35.16*	33.49*	1.67
70% ≤ % PC < 100%	32.32*	32.31*	0.01	32.35*	32.41*	−0.06
% PC = 100%	32.85*	36.17*	−3.32	32.48*	34.10*	−1.62

(continued)

Table J8-8 (continued)
Michigan: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	11.50*	11.30*	0.20	11.56*	12.73*	−1.17
Year Two	11.92*	12.29*	−0.37	12.04*	13.27*	−1.23
Year Three	14.02*	13.87*	0.15	14.20*	14.56*	−0.36
Overall	12.23*	12.28*	−0.05	12.34*	13.36*	−1.02

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-9 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J8-9
Michigan: Differences in the Rate of utilization during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	5.63*	5.28*	0.36	5.63*	4.72*	0.91*
Year Two	6.21*	5.94*	0.27	6.22*	5.41*	0.82*
Year Three	5.83*	7.11*	−1.28*	5.86*	6.69*	−0.83*
Overall	5.90*	6.08*	−0.18	5.91*	5.57*	0.34*
ER visits not leading to hospitalization						
Year One	29.43*	28.12*	1.31	29.41*	27.70*	1.71*
Year Two	29.21*	28.39*	0.82	29.18*	27.11*	2.07*
Year Three	27.65*	28.59*	−0.94	27.63*	26.83*	0.79
Overall	28.80*	28.36*	0.44	28.77*	27.22*	1.55*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-10 and ***Table J8-11*** present decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J8-10
Michigan: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	0.65*	0.90*	−0.25	0.65*	0.63*	0.02
Year Two	0.69*	0.81*	−0.12	0.69*	0.48*	0.21
Year Three	0.70*	1.31*	−0.61	0.69*	1.05*	−0.37
Overall	0.68*	0.98*	−0.30	0.67*	0.69*	−0.02
ER visits not leading to hospitalization						
Year One	14.84*	14.53*	0.31	14.83*	13.84*	0.98
Year Two	14.58*	15.26*	−0.68	14.55*	13.21*	1.34*
Year Three	14.82*	15.48*	−0.67	14.77*	14.91*	−0.13
Overall	14.74*	15.06*	−0.33	14.71*	13.90*	0.81
BH inpatient admissions						
Year One	0.02	0.02	0.00	0.01	0.00	0.01
Year Two	0.02	0.05	−0.03	0.01	0.01	0.00
Year Three	0.01	0.00*	0.00	0.01	0.00*	0.00
Overall	0.02	0.00*	−0.01	0.01	0.00*	0.00
BH ER visits						
Year One	0.79*	0.52*	0.26	0.79*	0.59*	0.20
Year Two	0.81*	0.72*	0.09	0.82*	0.70*	0.12
Year Three	0.71*	0.80*	−0.09	0.71*	0.58*	0.13
Overall	0.78*	0.67*	0.10	0.78*	0.63*	0.15
BH outpatient visits						
Year One	33.02*	27.93*	5.10*	32.90*	27.85*	5.05*
Year Two	34.16*	40.71*	−6.55*	33.97*	37.17*	−3.20
Year Three	30.08*	37.65*	−7.56*	29.89*	32.07*	−2.18
Overall	32.64*	35.35*	−2.71*	32.47*	32.48*	0.00

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J8-11
Michigan: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	4.47*	4.37*	0.10	4.44*	3.69*	0.75
Year Two	5.50*	4.57*	0.92	5.47*	3.87*	1.60*
Year Three	5.41*	6.42*	−1.01	5.40*	5.44*	−0.04
Overall	5.15*	5.12*	0.02	5.12*	4.33*	0.79*
ER visits not leading to hospitalization						
Year One	34.60*	29.85*	4.75*	34.64*	30.81*	3.83*
Year Two	32.63*	30.14*	2.49*	32.67*	29.62*	3.05
Year Three	29.77*	30.99*	−1.22	29.81*	29.81*	0.00
Overall	32.29*	30.33*	1.96*	32.34*	30.05*	2.28
BH inpatient admissions						
Year One	0.20	0.06	0.13	0.19	0.03	0.16
Year Two	0.20	0.11	0.09	0.19	0.05	0.14
Year Three	0.33	0.60	−0.27	0.33	0.22	0.11
Overall	0.24	0.26	−0.02	0.24	0.10	0.14
BH ER visits						
Year One	4.27*	2.34*	1.94*	4.45*	2.60*	1.85*
Year Two	3.56*	2.60*	0.96*	3.71*	2.50*	1.21*
Year Three	3.47*	5.30*	−1.83*	3.63*	4.24*	−0.61
Overall	3.75*	3.42*	0.34	3.91*	3.11*	0.80
BH outpatient visits						
Year One	23.77*	24.22*	−0.45	23.74*	18.73*	5.01*
Year Two	26.80*	35.02*	−8.21*	26.78*	27.79*	−1.01
Year Three	24.35*	35.14*	−10.79*	24.32*	28.35*	−4.03
Overall	25.04*	31.69*	−6.65*	25.02*	25.16*	−0.14

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

J.9 Decompositions of the Pennsylvania Estimates

Table J9-1 and ***Table J9-2*** present decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for access to care for Medicaid children and adults, respectively.

Table J9-1
Pennsylvania: Differences in the probability of having the access to care measure during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	34.13*	33.72*	0.42	33.95*	35.39*	−1.44
Year Two	33.48*	32.80*	0.69	33.61*	34.46*	−0.85
Year Three	32.16*	30.92*	1.24	32.56*	34.75*	−2.19
Overall	33.37*	32.64*	0.73	33.45*	34.89*	−1.44
Medical specialist visits (per 1,000 beneficiaries)						
Year One	5.79*	4.71*	1.07*	5.79*	5.43*	0.36
Year Two	6.44*	5.56*	0.88*	6.53*	6.13*	0.40
Year Three	6.48*	5.47*	1.01*	6.67*	6.33*	0.33
Overall	6.20*	5.21*	0.99*	6.29*	5.92*	0.37
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	0.56*	0.47*	0.09	0.55*	0.52*	0.03
Year Two	0.63*	0.56*	0.07	0.61*	0.62*	−0.01
Year Three	0.66*	0.51*	0.14*	0.64*	0.66*	−0.02
Overall	0.61*	0.51*	0.10*	0.60*	0.59*	0.00

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-2
Pennsylvania: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	41.12*	50.40*	−9.28*	41.36*	47.65*	−6.30*
Year Two	42.13*	50.46*	−8.33	42.48*	46.97*	−4.48
Year Three	43.73*	50.08*	−6.35	44.13*	49.72*	−5.59*
Overall	42.05*	50.34*	−8.29*	42.36*	47.92*	0.00*
Medical specialist visits (per 1,000 beneficiaries)						
Year One	19.43*	22.69*	−3.26	19.78*	21.64*	−1.87
Year Two	20.94*	23.42*	−2.49	21.29*	22.29*	−1.00
Year Three	20.55*	23.84*	−3.29	20.95*	21.35*	−0.40
Overall	20.17*	23.19*	−3.02	20.53*	21.78*	−1.25
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	4.89*	5.47*	−0.58	4.99*	4.89*	0.11
Year Two	5.24*	5.59*	−0.35	5.32*	5.30*	0.02
Year Three	5.23*	5.54*	−0.31	5.30*	4.86*	0.44
Overall	5.08*	5.53*	−0.44	5.17*	5.01*	0.16
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	50.91*	55.40*	−4.49	50.61*	49.03*	1.58
70% <= % PC < 100%	21.48*	20.45*	1.03	20.81*	21.08*	−0.27
% PC = 100%	27.61*	24.16*	3.46	28.59*	29.89*	−1.31
Year Two						
% PC < 70%	52.52*	63.22*	−10.71*	51.97*	51.39*	0.59
70% <= % PC < 100%	21.14*	18.07*	3.07*	20.54*	20.66*	−0.12
% PC = 100%	26.34*	18.71*	7.64*	27.48*	27.96*	−0.47
Year Three						
% PC < 70%	49.80*	69.63*	−19.83*	49.27*	46.80*	2.47
70% <= %PC < 100%	21.69*	15.66*	6.04*	21.04*	21.40*	−0.36
% PC = 100%	28.51*	14.72*	13.79*	29.69*	31.80*	−2.11
Overall						
% PC < 70%	51.20*	60.36*	−9.16*	50.79*	49.35*	1.44
70% <= %PC < 100%	21.41*	18.85*	2.56*	20.77*	21.01*	−0.24
% PC = 100%	27.39*	20.78*	6.60*	28.45*	29.64*	−1.20

(continued)

Table J9-2 (continued)
Pennsylvania: Differences in the probability of having the access to care measure during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	5.73*	4.61*	1.13	5.81*	6.32*	−0.52
Year Two	6.06*	4.49*	1.57	6.13*	3.42*	2.70*
Year Three	3.09*	0.00*	2.16*	3.17*	2.67*	0.49
Overall	5.34*	0.00*	1.46	5.41*	4.71*	0.70

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-3 and ***Table J9-4*** present decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for medical service utilization among Medicaid children and adults, respectively.

Table J9-3
Pennsylvania: Differences in the probability of medical service utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	1.32*	1.06*	0.27*	1.23*	1.20*	0.03
Year Two	1.25*	1.14*	0.11	1.15*	1.19*	−0.04
Year Three	1.26*	1.03*	0.23	1.16*	1.23*	−0.07
Overall	1.28*	1.08*	0.20*	1.18*	1.20*	−0.02
ER visits not leading to hospitalization						
Year One	13.20*	11.98*	1.22*	13.02*	12.54*	0.47
Year Two	13.18*	11.95*	1.23*	12.88*	12.99*	−0.12
Year Three	12.64*	12.41*	0.23	12.25*	13.10*	−0.85
Overall	13.04*	12.08*	0.95*	12.76*	12.85*	−0.09
Low birth weight admissions						
Overall	24.61*	21.22*	3.39	25.89*	25.18*	0.71

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-4
Pennsylvania: Differences in the probability of medical service utilization measures during the demonstration for adults

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	6.17*	6.76*	−0.59	6.37*	6.64*	−0.27
Year Two	5.66*	6.22*	−0.56	5.83*	6.59*	−0.76*
Year Three	5.85*	5.64*	0.21	6.03*	7.19*	−1.16*
Overall	5.94*	6.33*	−0.39	6.12*	6.75*	−0.63*
ER visits not leading to hospitalization						
Year One	24.68*	24.56*	0.12	24.73*	26.22*	−1.49*
Year Two	23.97*	24.70*	−0.73	23.99*	25.92*	−1.93*
Year Three	24.64*	22.15*	2.48	24.61*	27.81*	−3.21*
Overall	24.45*	24.04*	0.40	24.47*	26.50*	−2.03*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-5 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for access to care and coordination of care for adult Medicaid beneficiaries with multiple chronic conditions.

Table J9-5
Pennsylvania: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
Primary care visits (per 1,000 beneficiaries)						
Year One	51.58*	52.72*	−1.13	51.83*	56.44*	−4.61
Year Two	52.85*	55.14*	−2.29	53.33*	54.12*	−0.80
Year Three	53.32*	52.93*	0.39	54.00*	56.38*	−2.38
Overall	52.39*	53.53*	−1.14	52.81*	55.70*	−2.89
Medical specialist visits (per 1,000 beneficiaries)						
Year One	36.21*	37.02*	−0.81	36.47*	38.11*	−1.64
Year Two	37.34*	37.95*	−0.60	37.54*	37.97*	−0.43
Year Three	35.41*	38.06*	−2.65	35.63*	36.95*	−1.31
Overall	36.38*	37.55*	−1.18	36.61*	37.79*	−1.18
Surgical specialist visits (per 1,000 beneficiaries)						
Year One	9.16*	8.56*	0.60	9.31*	9.01*	0.30
Year Two	9.55*	9.85*	−0.30	9.66*	9.22*	0.44
Year Three	8.66*	9.24*	−0.58	8.75*	8.51*	0.24
Overall	9.16*	9.12*	0.04	9.29*	8.96*	0.33
Primary care visits as a percent of total visits						
Year One						
% PC < 70%	60.05*	66.87*	−6.82	63.20*	61.69*	1.51
70% <= % PC < 100%	20.33*	17.75*	2.58	18.86*	19.41*	−0.54
% PC = 100%	19.62*	15.38*	4.24	17.93*	18.90*	−0.97
Year Two						
% PC < 70%	59.59*	74.03*	−14.44	62.50*	66.04*	−3.54
70% <= % PC < 100%	20.49*	14.57*	5.92	19.12*	17.78*	1.34
% PC = 100%	19.92*	11.40*	8.52	18.38*	16.18*	2.20
Year Three						
% PC < 70%	56.34*	74.81*	−18.46*	59.14*	60.62*	−1.47
70% <= % PC < 100%	21.52*	14.20*	7.33*	20.27*	19.78*	0.49
% PC = 100%	22.14*	11.00*	11.14*	20.59*	19.61*	0.98
Overall						
% PC < 70%	59.14*	70.76*	−11.63*	62.14*	62.84*	−0.70
70% <= % PC < 100%	20.63*	16.01*	4.61*	19.24*	18.97*	0.26
% PC = 100%	20.24*	13.22*	7.01*	18.63*	18.19*	0.44

(continued)

Table J9-5 (continued)
Pennsylvania: Differences in the probability of having the access to care measure during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of having the access to care measure		Difference	Probability of having the access to care measure		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year One	5.87*	7.60	−1.73	6.07*	5.88*	0.19
Year Two	4.39*	7.16	−2.76	4.59*	3.39*	1.20
Year Three	2.19*	DNC	DNC	2.31*	2.63*	−0.32
Overall	4.72*	DNC	DNC	4.91*	4.50*	0.41

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; DNC = model did not converge; MAPCP = Multi-Payer Advanced Primary Care Practice; PC = primary care; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-6 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for medical service utilization for adult Medicaid beneficiaries with multiple chronic conditions.

Table J9-6
Pennsylvania: Differences in the probability of medical service utilization measures during the demonstration for beneficiaries with multiple chronic conditions, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Rate of utilization		Difference	Rate of utilization		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause admissions						
Year One	8.93*	7.61*	1.32	9.32*	8.52*	0.80
Year Two	7.68*	7.51*	0.16	8.01*	8.83*	−0.82
Year Three	7.64*	6.60*	1.04	7.98*	8.87*	−0.89
Overall	8.23*	7.34*	0.89	8.59*	8.70*	−0.10
ER visits not leading to hospitalization						
Year One	30.00*	29.42*	0.58	30.14*	32.05*	−1.92*
Year Two	29.10*	29.27*	−0.16	29.19*	31.51*	−2.31*
Year Three	29.17*	30.53*	−1.35	29.23*	32.86*	−3.63*
Overall	29.52*	29.63*	−0.11	29.63*	32.07*	−2.44*

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-7 and ***Table J9-8*** present decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration for behavioral and nonbehavioral health care utilization among Medicaid children and adults, respectively.

Table J9-7
Pennsylvania: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for children, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	0.70	0.67	0.03	1.25*	0.73*	0.52
Year Two	1.08	1.19	−0.11	1.43	0.99*	0.44
Year Three	1.30	0.79	0.51	1.53*	0.69*	0.84
Overall	0.99	0.88	0.10	1.39*	0.81*	0.57
ER visits not leading to hospitalization						
Year One	15.15*	11.46*	3.69	15.34*	14.73*	0.61
Year Two	11.30*	13.31*	−2.01	11.52*	13.90*	−2.38
Year Three	14.31*	10.91*	3.39	14.52*	15.33*	−0.81
Overall	13.57*	11.98*	1.60	13.78*	14.59*	−0.80
BH inpatient admissions						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC
BH ER visits						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC
BH outpatient visits						
Year One	18.40*	16.85*	1.55	19.36*	22.24*	−2.88
Year Two	18.99*	12.76*	6.24*	19.39*	18.96*	0.43
Year Three	15.90*	11.02*	4.87	16.20*	13.81*	2.39
Overall	17.98*	13.94*	4.04	18.58*	18.97*	−0.39

NOTES: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; DNC = model did not converge; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table J9-8
Pennsylvania: Differences in the probability of behavioral and nonbehavioral health care utilization measures during the demonstration for adults, adjusted for sociodemographic, practice-level, and area-level characteristics

Outcome	Probability of behavioral and nonbehavioral health care utilization measures		Difference	Probability of behavioral and nonbehavioral health care utilization measures		Difference
	MAPCP	PCMH CG		MAPCP	Non-PCMH CG	
All-cause inpatient admissions						
Year One	10.36*	2.95	7.41*	10.68*	11.87*	−1.19
Year Two	7.33*	2.70	4.64	7.65*	8.66*	−1.01
Year Three	8.89*	2.19	6.70	9.29*	7.41*	1.87
Overall	9.12*	0.00*	6.41	9.46*	9.95*	−0.49
ER visits not leading to hospitalization						
Year One	41.20*	41.22*	−0.02	40.88*	47.92*	−7.05*
Year Two	38.96*	43.26*	−4.30	38.85*	49.03*	−10.17*
Year Three	34.48*	58.81*	−24.33*	34.50*	45.97*	−11.47*
Overall	39.11*	0.00*	−6.42	38.92*	47.86*	−8.93*
BH inpatient admissions						
Year One	DNC	DNC	DNC	DNC	DNC	DNC
Year Two	DNC	DNC	DNC	DNC	DNC	DNC
Year Three	DNC	DNC	DNC	DNC	DNC	DNC
Overall	DNC	DNC	DNC	DNC	DNC	DNC
BH ER visits						
Year One	11.63	4.72	6.90	11.90*	14.41*	−2.51
Year Two	9.55	3.88	5.67*	9.57*	12.98*	−3.41
Year Three	8.67	7.49	1.18	8.58*	15.42*	−6.84
Overall	10.37	5.04	5.33	10.49*	14.18*	−3.69
BH outpatient visits						
Year One	13.17*	18.50*	−5.34	13.75*	10.07*	3.68
Year Two	9.22*	17.05*	−7.82	9.60*	10.56*	−0.96
Year Three	11.64*	21.93*	−10.29	12.26*	10.44*	1.82
Overall	11.63*	18.77*	−7.14	12.16*	10.30*	1.86

NOTE: Table reports decomposition of the difference-in-differences estimates given in the body of this report.

BH = behavioral health; CG = comparison group; DNC = model did not converge; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

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APPENDIX K
AVERAGE MEDICARE DEMONSTRATION EFFECT ESTIMATES FOR CONTINUOUSLY ENROLLED MEDICARE FEE-FOR-SERVICE BENEFICIARIES

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This appendix focuses solely on Medicare fee-for-service (FFS) beneficiaries who were assigned at the start of their state's demonstration and who were continuously enrolled in a practice from demonstration start through the end of 2014. These were beneficiaries with the largest degree of continuity with respect to their state's Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration assignment criteria, and because of this continuity, these beneficiaries may have experienced more pronounced shifts in care (e.g., reductions in key expenditure categories, reduced utilization of inpatient admission and emergency department visits) in the MAPCP Demonstration relative to the overall study sample. The estimates presented here serve as a sensitivity analysis of the potential impact that rolling assignment may have had on the evaluation. This is especially important because assignment occurred at unequal intervals among treatment and comparison beneficiaries. For MAPCP Demonstration beneficiaries, assignment took place on a quarterly basis; for the comparison group, assignment occurred annually.

This subset of beneficiaries continuously enrolled did not include persons who died, moved out of state, lost Medicare eligibility, or otherwise failed to meet the assignment criteria in any quarter during the demonstration. This subset also excluded beneficiaries who were assigned to a practice after the demonstration started. To provide a relevant comparison, non-MAPCP Demonstration beneficiaries in the comparison groups were similarly restricted to only include beneficiaries with continuous assignment throughout the demonstration. It should be noted, however, that continuously enrolled beneficiaries were also likely to be healthier than beneficiaries overall, because individuals who failed to meet assignment criteria due either to hospitalization or death have been, by definition, excluded from the analysis.

For this continuously attributed subset, we estimated models identical to those presented in the state chapters in the main body of the final report. ***Table K-1*** presents the number of continuously enrolled beneficiaries in each state as of the end of 2014, and what percent of the total evaluation sample of Medicare FFS beneficiaries in each state this continuously enrolled sample represented. ***Tables K-2*** and ***K-3*** present estimates for the following outcomes: total Medicare expenditures, expenditures for acute-care, post-acute care, outpatient, primary care and specialty physicians, all-cause admissions, emergency room (ER) visits not leading to a hospitalization, and 30-day unplanned readmissions.

Table K-1
Number of continuously enrolled beneficiaries as a percentage of overall beneficiaries

	MAPCP	PCMH CG	Non-PCMH CG
New York	11,772 (40.5%)	26,906 (35.9%)	15,995 (25.3%)
Vermont	24,531 (29.2%)	16,325 (26.7%)	31,114 (32.9%)
Rhode Island	3,574 (26.2%)	6,415 (22.9%)	15,791 (34.4%)
North Carolina	5,761 (17.3%)	10,060 (12.0%)	30,038 (21.6%)
Minnesota	11,133 (7%)	—	9,216 (24.6%)
Maine	10,708 (18.0%)	4,721 (19.1%)	11,915 (26.4%)
Michigan	79,519 (26.5%)	10,626 (31.8%)	10,771 (19.7%)
Pennsylvania	12,031 (28.9%)	16,548 (22.4%)	37,234 (33.5%)

NOTE:

- Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible (—).

CG = comparison group; HCH = Health Care Home; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table K-2
Comparison of average demonstration effect for selected expenditures among continuously enrolled Medicare beneficiaries

Outcome	Total expenditures	Acute-care expenditures	Post-acute care expenditures	Outpatient expenditures	Primary care physician expenditures	Specialty physician expenditures
New York						
vs. PCMH CG	−8.32	−27.33*	6.74*	17.11*	−3.32*	−5.76*
vs. non-PCMH CG	−1.25	−8.68	1.55	11.66	−3.85*	−5.73*
Rhode Island						
vs. PCMH CG	58.02*	18.26	5.95	6.90	4.72*	10.66*
vs. non-PCMH CG	36.46	8.43	1.52	6.40	2.21	7.46*
Vermont						
vs. PCMH CG	−47.86*	−18.97	−20.21*	13.65*	−4.83*	−12.31*
vs. non-PCMH CG	−23.30*	−3.73	−13.24*	0.15	−2.59	−4.24*
North Carolina						
vs. PCMH CG	9.59	10.13	1.18	3.13	−1.06	−1.96
vs. non-PCMH CG	36.92*	13.19*	8.54*	6.52	1.21	1.38
Minnesota						
vs. non-PCMH CG	39.04*	16.33	0.98	3.62	−0.17	−7.90*
Maine						
vs. PCMH CG	84.20*	20.75*	16.85*	26.10*	−0.19	−2.62
vs. non-PCMH CG	75.06*	35.46*	4.45	18.73*	−3.08	4.98
Michigan						
vs. PCMH CG	−2.46	−9.92	−4.26	11.83*	−1.05	−7.16
vs. non-PCMH CG	−16.84	−19.35*	−2.56	8.30*	−0.68	−9.09*
Pennsylvania						
vs. PCMH CG	−0.35	−12.30*	14.16*	0.40	−2.14	1.12
vs. non-PCMH CG	−14.45	−0.73	−0.68	1.49	−1.89	−8.51*

NOTES:

- All expenditure measures are PBPM.
- Estimates in this table are interpreted as the difference in the rate of growth in expenditures relative to the CG across the demonstration overall. A *negative* value corresponds to *slower growth* in expenditures relative to the comparison group. A *positive* value corresponds to *faster growth* relative to the comparison group.
- Overall change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the year(s).
- Outpatient expenditures include expenditures related to FQHCs. Other expenditures include expenditures for other Part B services, durable medical equipment, and hospice.
- Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible.

CG = comparison group; FQHC = federally qualified health center; HCH = Health Care Home; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

Table K-3
Comparison of average demonstration effect for selected utilization outcomes among continuously enrolled Medicare beneficiaries

Outcome	All-cause admissions	ER visits not leading to a hospitalization	30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)
New York			
vs. PCMH CG	−6.22*	−9.46	−24.06*
vs. non-PCMH CG	−5.79*	0.66	−18.42
Rhode Island			
vs. PCMH CG	3.90	7.08	17.89
vs. non-PCMH CG	0.94	4.05	16.06
Vermont			
vs. PCMH CG	−6.87*	23.76*	−30.52
vs. non-PCMH CG	1.29	14.69*	−4.08
North Carolina			
vs. PCMH CG	5.65	4.06	−11.80
vs. non-PCMH CG	2.24	−6.35	−6.85
Minnesota			
vs. non-PCMH CG	−1.25	1.99	−25.67*
Maine			
vs. PCMH CG	6.82	−5.84	−45.40
vs. non-PCMH CG	4.20	2.29	−23.42
Michigan			
vs. PCMH CG	−1.56	7.08*	−5.46
vs. non-PCMH CG	−3.19	7.29*	−22.44*
Pennsylvania			
vs. PCMH CG	−2.39	6.61	0.00
vs. non-PCMH CG	0.35	−3.64	−4.15

NOTES:

- All-cause admissions and ER visits not leading to hospitalization are quarterly rates per 1,000 beneficiaries. Unplanned readmissions are quarterly rates per 1,000 beneficiaries with an admission.
- A *negative* value corresponds to a decrease in the rate of events compared to the CG. A *positive* value corresponds to an increase in the rate of events compared to the CG.
- Overall change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the year(s).
- Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible.

CG = comparison group; ER = emergency room; HCH = Health Care Home; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Overall, we found only limited evidence that analysis using only continuously enrolled beneficiaries uncovered additional insight into the impact of the MAPCP Demonstration. When estimates in ***Table K-2*** differed from those in the main final report, those differences were as equally likely to represent detrimental impacts as they were beneficial impacts. There was also little agreement in the estimates with respect to both the patient-centered medical home (PCMH) and non-PCMH comparison groups. Specifically, ***Table K-2*** shows:

- In New York, overall differences in aggregate growth among continuously enrolled beneficiaries were somewhat similar to differences observed in the overall analysis. Similar to the overall analysis, the growth in acute-care expenditures was lower and the growth in post-acute and outpatient expenditures was higher among MAPCP Demonstration Medicare beneficiaries relative to the PCMH comparison group. In both the full sample and the sample of continuously enrolled beneficiaries, the rate of all-cause admissions decreased for MAPCP Demonstration beneficiaries relative to both the PCMH and the non-PCMH comparison groups. The following differences, however, were only observed among continuously enrolled beneficiaries: the growth in expenditures for primary care and specialty care were slower relative the non-PCMH comparison group; the rate of 30-day unplanned readmissions decreased relative to the PCMH comparison group.

- In Rhode Island, overall differences in aggregate growth among continuously enrolled beneficiaries were mostly similar to differences observed in the overall analysis. In both the full sample and the continuously enrolled sample, there was no association between participation in MAPCP Demonstration and changes in acute-care expenditures, post-acute care expenditures, outpatient expenditures, all-cause admissions, ER visits, and 30-day unplanned readmissions. When variation between samples did occur, the differences did not represent a beneficial change in outcomes among continuously enrolled MAPCP Demonstration beneficiaries. For example, the growth in total Medicare, primary care, and specialty care expenditures was statistically significantly higher among MAPCP Demonstration beneficiaries who were continuously enrolled relative to the PCMH comparison group, and in the full sample, there was no statistically significant association between demonstration participation and these expenditures.

- In Vermont, overall differences in aggregate growth among continuously enrolled beneficiaries were somewhat similar to differences observed in the overall analysis. Similar to the overall analysis, the growth in total Medicare, post-acute care, and specialty care expenditures was faster among continuously enrolled MAPCP Demonstration Medicare beneficiaries relative to the PCMH and the non-PCMH comparison groups, and the rate of ER visits increased for continuously enrolled MAPCP Demonstration beneficiaries relative to both comparison groups. The following differences, however, were only observed among continuously enrolled beneficiaries: the growth in expenditures for primary care was slower relative to the PCMH comparison group and the rate of all-cause admissions decreased relative to the PCMH comparison group.

- In North Carolina, overall differences in aggregate growth among continuously enrolled beneficiaries were mostly similar to differences observed in the overall analysis. In both the full sample and the continuously enrolled sample, there was no association between participation in the MAPCP Demonstration and changes in primary care and specialty care expenditures, ER visits, and 30-day unplanned readmissions. When variation between samples did occur, the differences did not always represent a beneficial change in outcomes among continuously enrolled MAPCP Demonstration beneficiaries. For example, the growth in total Medicare and acute-care expenditures was statistically significantly higher among MAPCP Demonstration beneficiaries who were continuously enrolled relative to the non-PCMH comparison group, and in the full sample, there was no statistically significant association between demonstration participation and these expenditures. In contrast, the rate of all-cause admissions was no longer statistically significantly different for the continuously enrolled MAPCP Demonstration beneficiaries compared to the non-PCMH comparison group, and in the full sample the rate was higher for the demonstration beneficiaries relative to the non-PCMH comparison group.

- In Minnesota, overall differences in aggregate growth among continuously enrolled beneficiaries were mostly similar to differences observed in the overall analysis. In both the full sample and the continuously enrolled sample, there was no association between participation in the MAPCP Demonstration and changes in acute-care, post-acute care, outpatient, and primary care expenditures as well as all-cause admissions and ER visits. The following difference, however, was only observed among continuously enrolled beneficiaries: the rate of 30-day unplanned readmissions decreased relative to the non-PCMH comparison group; whereas in the full sample, there was no association between demonstration participation and the 30-day readmission rate.

- In Maine, overall differences in aggregate growth among continuously enrolled beneficiaries were mostly similar to differences observed in the overall analysis. In both the full sample and the continuously enrolled sample, there was no association between participation in the MAPCP Demonstration and changes in primary care expenditures as well ER visits and 30-day readmissions. Where variation did occur, the differences did not always represent a beneficial change in outcomes among continuously enrolled demonstration beneficiaries. For example, the growth in total Medicare expenditures was statistically significantly higher among MAPCP Demonstration beneficiaries who were continuously enrolled relative to the PCMH comparison group, and in the full sample, this association was not statistically significant. In the full sample, growth in specialty expenditures was significantly slower for demonstration beneficiaries relative to the PCMH comparison group, and in the continuously enrolled sample, this association was no longer statistically significant. In the continuously enrolled sample, the growth in outpatient expenditures was also faster among MAPCP Demonstration beneficiaries relative to both comparison groups, and in the full sample, there was no statistically significant association.

- In Michigan, there were differences among continuously enrolled beneficiaries compared to the overall analysis. Among the continuously enrolled sample, there is no longer a statistically significant association between MAPCP Demonstration participation and total Medicare and post-care expenditures; whereas in the full sample, the growth in these expenditures was slower among demonstration beneficiaries relative to the PCMH comparison group. Among the continuously enrolled sample, there was no association between MAPCP Demonstration participation and changes in the all-cause admission rate; whereas in the full sample, there was a statistically significant decline in the all cause admission rate for demonstration beneficiaries relative to the PCMH comparison group. The ER visit rate also statistically significantly increased among continuously enrolled demonstration beneficiaries relative to both comparison groups; whereas in the full sample, the ER visit rate was significantly higher only when MAPCP Demonstration beneficiaries were compared to the non-PCMH comparison group beneficiaries. There were also shifts in significant findings. For example, in the full sample, the growth in acute-care expenditures and the rate of 30-day readmissions was lower among demonstration beneficiaries relative to the PCMH comparison group, but in the continuously enrolled sample, these declines in growth were only significant when MAPCP Demonstration beneficiaries were compared to the non-PCMH comparison group.

- In Pennsylvania, overall differences in aggregate growth among continuously enrolled beneficiaries were somewhat similar to differences observed in the overall analysis. In both the full sample and the continuously enrolled sample, there was no association between participation in the MAPCP Demonstration and changes in outpatient expenditures, ER visits, and 30-day readmissions. Where variation did occur, the differences did not represent a beneficial change in outcomes among continuously enrolled Medicare MAPCP Demonstration beneficiaries. For example, statistically significant slower growth in total Medicare and primary care expenditures and all-cause admissions seen in the full sample of beneficiaries was no longer statistically significant in the continuously enrolled sample. Further, post-care expenditure growth was faster among continuously enrolled demonstration beneficiaries relative to the PCMH comparison group.

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APPENDIX L
MEDICARE EXPENDITURES AND PRIMARY CARE VISITS FOR CRITICAL ACCESS HOSPITALS, FEDERALLY QUALIFIED HEALTH CENTERS, AND RURAL HEALTH CLINICS

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The Multi-Payer Advanced Primary Care (MAPCP) Demonstration was expected to lead to higher expenditures for certain types of settings and higher utilization of certain types of primary care services. Specifically, we expected that the demonstration could increase utilization of primary care services received in critical access hospitals (CAHs), federally qualified health centers (FQHCs), and rural health clinics (RHCs); we also expected that Medicare expenditures associated with all services provided in these settings could increase.

In the main body of the report, Medicare expenditures in CAHs, FQHCs, and RHCs were captured as part of the outpatient expenditures outcome. For this appendix, we separated the expenditures for each of these three settings, and we created new utilization measures that capture primary care visits to CAHs, FQHCs, and RHCs. We did not report CAH, FQHC, or RHC expenditures or primary care visits using Medicaid data. Across the MAPCP Demonstration states, the Medicaid data were not uniform in their definition of these three care settings, and, in some states, the Medicaid data did not identify these specific outpatient settings separately.

Tables L-1 and ***L-2*** report covariate-adjusted differences in selected expenditure and utilization outcomes, respectively, between the MAPCP Demonstration and two comparison groups: patient-centered medical homes (PCMHs) and non-PCMHs. ***Table L-1*** contains measures of specific categories of expenditures expected to be affected by the demonstration. Estimates in this table are interpreted as the difference in the rate of growth in per beneficiary per month (PBPM) expenditures relative to the comparison groups in Year One, Year Two, Year Three, and all demonstration years. A *negative* value corresponds to *slower growth* in expenditures relative to the comparison group, while a *positive* value corresponds to *faster growth* relative to the comparison group. We reported separate CAH, FQHC, and RHC expenditures outcomes. Expenditures for the remaining outpatient claims were grouped together as "all other outpatient" expenditures; this measure included outpatient claims for short-stay acute-care hospitals, long-term care hospitals, psychiatric hospitals, and rehabilitation. Hospital claims for emergency room (ER) visits that did not lead to a hospitalization were excluded from the all other outpatient measure because the ER expenditures were a separate expenditure category in the main body of the report. For all settings included in the all other outpatient expenditures, 99 percent of the claims are for outpatient departments in short-stay acute-care hospitals.

We also analyzed changes in CAH, FQHC, and RHC primary care visits measured as rates per 1,000 beneficiary quarters. ***Table L-2*** contains the results of these analyses for the Medicare population. Estimates in this table are interpreted as the difference in the rate of CAH, FQHC, and RHC primary care visits per 1,000 beneficiary quarters associated with the MAPCP Demonstration in Year One, Year Two, Year Three, or all demonstration years. A *negative* value corresponds to a *decrease* in the rate of events relative to the comparison group, and a *positive* value corresponds to an *increase* in the rate of events relative to the comparison group. Note that the baseline data for the utilization outcomes start in June 2008, while the baseline data for the expenditure outcomes start in January 2006. We were not able to identify physician specialty on outpatient claims before June 2008 because the physician National Provider Identifier (NPI) was not included on the claims before that date. Therefore, the outcomes in ***Table L-2*** represent the changes in utilization for beneficiaries attributed to the MAPCP practices relative to a shorter baseline period than what was used for the expenditures.

Table L-1
Comparison of average demonstration effects for outpatient expenditures and subcategories of outpatient expenditures

State	All outpatient	CAH	FQHC	RHC	All other outpatient
New York					
vs. PCMH CG	23.36*	0.75	2.06	−0.03	20.11*
vs. non-PCMH CG	10.77	2.21	3.05	−0.07*	5.33
New York Pod 1					
vs. PCMH CG	16.28*	−1.97	−4.95*	−0.04	22.63*
vs. non-PCMH CG	2.74	−0.60	−4.07*	−0.08	7.10
New York Pod 2					
vs. PCMH CG	25.59*	−0.18	12.97*	0.00	12.51*
vs. non-PCMH CG	13.08	1.22	13.95*	−0.04	−2.12
New York Pod 3					
vs. PCMH CG	22.99*	2.46	−5.09*	−0.05	25.09*
vs. non-PCMH CG	10.08	3.87	−4.11*	−0.09	10.05
Rhode Island					
vs. PCMH CG	6.22	−0.07	−0.10	−0.02	5.85
vs. non-PCMH CG	−3.00	−0.08	0.26	0.00	−3.65
Vermont					
vs. PCMH CG	8.00*	4.63	0.35	0.33	2.29
vs. non-PCMH CG	2.43	−5.17*	1.33	−0.21	6.06
North Carolina					
vs. PCMH CG	3.42	−2.48	0.06	−0.84	6.57
vs. non-PCMH CG	6.99*	0.88	0.16	−1.08	6.91
Minnesota					
vs. non-PCMH CG	11.55	7.73*	−0.10	0.78	2.88
Maine					
vs. PCMH CG	16.90	−1.70	2.71	−0.33	15.48*
vs. non-PCMH CG	8.17	−3.25	2.94	−1.09	9.48*

(continued)

Table L-1 (continued)
Comparison of average demonstration effects for outpatient expenditures and subcategories of outpatient expenditures

State	All outpatient	CAH	FQHC	RHC	All other outpatient
Michigan					
vs. PCMH CG	5.26	0.03	0.05	0.09	4.63
vs. non-PCMH CG	10.63*	0.42	0.08	0.06	9.56*
Pennsylvania					
vs. PCMH CG	−3.49	0.42*	0.07	0.00	−4.41
vs. non-PCMH CG	3.26	0.08	0.05	0.00	2.69

NOTES:

- All expenditures measures are PBPM.
- Estimates for the expenditures outcomes are interpreted as the difference in the rate of growth in expenditures relative to the CG across the demonstration overall. A *negative* value corresponds to *slower growth* in expenditures relative to the CG. A *positive* value corresponds to *faster growth* relative to the CG.
- Overall change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the year(s).
- Pods are unique to the New York MAPCP Demonstration; there are no CG beneficiaries in a Pod. Beneficiaries in each Pod were compared with all PCMH CG beneficiaries and all non-PCMH CG beneficiaries in New York.

CAH = critical access hospital; CG = comparison group; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home; RHC = rural health center.

* Statistically significant at the 10 percent level.

Table L-2
Comparison of average demonstration effects for primary care visits in CAHs, FQHCs, and RHCs

State	CAHs	FQHCs	RHCs
New York			
vs. PCMH CG	0.16*	0.35	—
vs. non-PCMH CG	0.46	−16.17	—
New York Pod 1			
vs. PCMH CG	0.72*	−7.63*	—
vs. non-PCMH CG	0.33	−8.20	—
New York Pod 2			
vs. PCMH CG	−2.42	21.58	—
vs. non-PCMH CG	−3.49	−52.39	—
New York Pod 3			
vs. PCMH CG	0.42*	−10.65	—
vs. non-PCMH CG	0.63	−12.98	—
Rhode Island			
vs. PCMH CG	0.01	−1.93	—
vs. non-PCMH CG	−0.03	−8.16	—
Vermont			
vs. PCMH CG	0.78	13.02	−5.98
vs. non-PCMH CG	0.57	3.23	−1.23
North Carolina			
vs. PCMH CG	−0.12	1.93	−5.64
vs. non-PCMH CG	−7.64	1.55	−10.97
Minnesota			
vs. non-PCMH CG	4.93	0.00	0.27
Maine			
vs. PCMH CG	7.63	24.22	—
vs. non-PCMH CG	−3.79	38.34	—
Michigan			
vs. PCMH CG	0.04	−3.49	−0.98
vs. non-PCMH CG	0.07	−3.03	−0.80

(continued)

Table L-2 (continued)
Comparison of average demonstration effects for primary care visits in CAHs, FQHCs, and RHCs

State	CAHs	FQHCs	RHCs
Pennsylvania			
vs. PCMH CG	−0.11	−2.89	—
vs. non-PCMH CG	−0.39	0.00	—

NOTES:

- All utilization outcomes are rates per 1,000 beneficiary quarters.
- Estimates for the utilization outcomes in this table are interpreted as the difference in the rate of events among MAPCP Demonstration beneficiaries across the demonstration overall. A *negative* value corresponds to a *decrease* in the rate of events. A *positive* value corresponds to an *increase* in the rate of events.
- Overall change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the year(s).
- Pods are unique to the New York MAPCP Demonstration; there are no CG beneficiaries in a Pod. Beneficiaries in each Pod were compared with all PCMH CG beneficiaries and all non-PCMH CG beneficiaries in New York.

CAH = critical access hospital; CG = comparison group; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home; — = rate of visits was too small to examine; RHC = rural health clinic.

* Statistically significant at the 10 percent level.

In addition to reporting the results for each of the eight states, we also examined the effect of the MAPCP Demonstration on outpatient expenditures and utilization in the three Pods in New York. Pod 2 was predominantly comprised of a network of FQHC sites participating in the MAPCP Demonstration, while Pods 1 and 3 were predominantly composed of office-based, primary care practices participating in the demonstration. By examining the Pods separately, we could investigate if beneficiaries assigned to the FQHC sites in Pod 2 experienced different impacts on CAH, FQHC, and RHC expenditures and visits than beneficiaries assigned to the office-based practices in Pods 1 and 3.

Findings from these analyses suggested that in the states where there was significantly faster growth in outpatient expenditures for the MAPCP Demonstration intervention group, that growth was not driven by faster growth in expenditures for CAHs, FQHCs, or RHCs. Faster growth in outpatient expenditures was due to faster growth in the "all other outpatient expenditures" category, which was almost entirely outpatient department claims for short-stay acute-care hospitals. In terms of utilization, there was little evidence that the MAPCP Demonstration had an impact on primary care visits in CAHs, FQHCs, or RHCs. State-specific findings are detailed below.

- In New York, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. When the outpatient expenditures were split into expenditures for CAHs, FQHCs, and RHCs, there were no significant increases in any of these subcategories of expenditures. There was a significant increase in primary care visits in CAHs for demonstration beneficiaries relative to the non-PCMH comparison group, but that increase was very small in magnitude, and we do not see a

corresponding increase in the growth rate of CAH expenditures. Therefore, the increase in outpatient expenditures in New York is not due to increases in CAH, FQHC, or RHC expenditures, or increases in CAH or FQHC primary care utilization. RHC visits were too small to examine. The results suggest that the MAPCP Demonstration in New York increased the rate of expenditure growth for short-stay hospital outpatient departments.

- In New York Pod 1, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. This is driven by faster growth in all other outpatient expenditures, which is almost entirely short-stay acute-care hospital outpatient expenditures. Growth in FQHC expenditures was slower among demonstration beneficiaries relative to beneficiaries assigned to both the PCMH and the non-PCMH comparison groups. There was a significant increase in primary care visits to CAHs relative to the PCMH comparison group, and a significant decrease in primary care visits to FQHCs relative to the PCMH comparison group. RHC visits were too small to examine.

- In New York Pod 2, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. This is driven by faster growth in FQHC expenditures and in all other outpatient expenditures. Growth in FQHC expenditures was also faster among demonstration beneficiaries relative to beneficiaries assigned to the non-PCMH comparison group. However, there was no impact on primary care visits in CAHs or FQHCs; RHC visits were too small to examine.

- In New York Pod 3, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. This is driven by faster growth in "all other outpatient expenditures." Growth in FQHC expenditures was slower among demonstration beneficiaries relative to beneficiaries assigned to both the PCMH and the non-PCMH comparison groups. There was a significant increase in primary care visits to CAHs relative to the PCMH comparison group. RHC visits were too small to examine.

- In Rhode Island, there were no significant effects of the MAPCP Demonstration on overall outpatient expenditures or any of the subcategories of outpatient expenditures. Also, there was no impact on primary care visits in CAHs or FQHCs; RHC visits were too small to examine.

- In Vermont, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. There were no significant increases in any of the four subcategories of outpatient expenditures relative to the PCMH comparison group. Growth in CAH expenditures was slower among demonstration beneficiaries relative to beneficiaries assigned to the non-PCMH comparison group, but there were no significant effects on any other category of outpatient expenditures relative to the

non-PCMH comparison group. Also, there was no impact on primary care visits in CAHs, FQHCs, or RHCs, relative to either comparison group.

- In North Carolina, there were no significant effects of the MAPCP Demonstration on overall outpatient expenditures or any of the subcategories of outpatient expenditures relative to the PCMH comparison group. Growth in overall outpatient expenditures was faster among demonstration beneficiaries relative to beneficiaries assigned to the non-PCMH comparison group, but there were no significant increases in any of the four subcategories of outpatient expenditures relative to the non-PCMH comparison group. Also, there was no impact on primary care visits in CAHs, FQHCs, or RHCs, relative to either comparison group.

- In Minnesota, growth in CAH expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the non-PCMH comparison group, but there was no significant increase in CAH primary care visits. There were no other significant effects of the demonstration on outpatient expenditures or utilization in Minnesota.

- In Maine, growth in all other outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to both the PCMH and the non-PCMH comparison groups. There were no other significant effects of the demonstration on outpatient expenditures or utilization in Maine. RHC visits were too small to examine.

- In Michigan, growth in overall outpatient expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the non-PCMH comparison group. When the outpatient expenditures were split into expenditures for CAHs, FQHCs, and RHCs, there were no significant increases in any of these subcategories of expenditures. The results suggest that the MAPCP Demonstration in Michigan increased the rate of expenditure growth for short-stay hospital outpatient departments. There were no other significant effects of the demonstration on outpatient expenditures or utilization in Michigan.

- In Pennsylvania, growth in CAH expenditures was faster among MAPCP Demonstration beneficiaries relative to beneficiaries assigned to the PCMH comparison group. There were no other significant effects of the demonstration on outpatient expenditures or utilization in Pennsylvania. RHC visits were too small to examine.

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APPENDIX M
MEDICARE COMPARISON GROUP COMPARABILITY TO MAPCP DEMONSTRATION BENEFICIARIES BY STATE

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M.1 Weighting

As described in ***Section 1.2.6***, comparison group (CG) beneficiaries were weighted to resemble demonstration beneficiaries on their observed characteristics just before their practice assignment. The objective of weighting is to reduce bias from group differences (e.g., gender, age, disability) that could independently influence health outcomes. Similarity after weighting increases the likelihood that changes in postdemonstration outcomes are correlated with the demonstration and not with preassignment differences. The regression models described in ***Section 1.2.5*** were estimated using weights designed to balance the sample on these types of observable characteristics.[1]

Traditionally, propensity scores have been used to improve comparability between intervention and CGs in quasi-experimental studies. The propensity score is defined as the probability of being assigned to the treatment group conditional on a set of observed characteristics (Rosenbaum & Rubin, 1983). Comparison beneficiaries with a higher probability of treatment (i.e., whose observable characteristics are more similar to the treatment group) were assigned greater weights via the propensity score. A byproduct of propensity score weighting is that it tends to equate the means of these observed characteristics in the weighted sample (Hirano & Imbens, 2001; Imbens & Wooldridge, 2009; Freedman & Berk, 2008).

A similar effect can be achieved, without the intermediate step of propensity score estimation, by using entropy balance weights (Hainmueller & Xu, 2013). Entropy balance weights were derived from an iterative weighting algorithm that explicitly minimizes differences in the means of observable characteristics between demonstration and comparison group beneficiaries. The benefit of the entropy balance approach is that covariate balance is more efficiently achieved and with less trial and error in terms of model specification. This is true even in the face of large differences in covariate means or when observed covariates are correlated with each other.

In this appendix, we calculated weighted means of the beneficiary- and practice-level characteristics using entropy balance weights and examined the extent to which observed characteristics between groups were similar (or "balanced") after weighting. "Balanced" indicates support for the underlying assumption that the two groups were comparable or exchangeable based on their observable characteristics. This assumption is fundamental to drawing inferences about the effect of the intervention, because it supports the assumption that behavior observed in the comparison group also would have been observed in the treatment group in the absence of the intervention.

Covariate balance can be assessed by examining group means and their standardized differences. If a standardized difference between two means was less than 0.10, it was assumed that the difference between the two groups is negligible (Austin, 2011). To avoid extreme weights from the entropy model, entropy weights also were capped (trimmed) below 0.05 and above 20, to prevent the weighting method from assigning extremely large weights to a relatively

[1] The final analytic weights are the product of (1) the eligibility fraction (EF) and (2) the beneficiary's entropy balance weight (for the CG only; described in ***Section 1.2.6***). Use of the EF as part of the regression weight prevents beneficiaries with limited eligibility but extreme outcomes from exerting an undue influence on the model estimates.

small number of comparison beneficiaries. Covariate balance was evaluated after capping, because modification of the weights always will decrease balance to some extent.

Last, we examined the common support present between our treatment and comparison samples. In general, common support is a visual indication that, for most combinations of observed characteristics in the treatment group, there are at least some individuals in the CG who possess similar characteristics (Caliendo & Kopeining, 2008). If a large number of treated persons lack comparisons, then the CG is not truly comparable to the treatment group even after the balancing weights are applied.

Common support can be seen when examining the distribution of the propensity scores for both groups. Support is found in areas of the treatment group's propensity score distribution where the density of propensity scores in the CG is greater than zero. Overall similarity in the two distributions after entropy balance weighting also indicates that balance was increased through the process of reweighting.

In this analysis, separate entropy balanced weights were generated for each of the two subsamples: (1) beneficiaries assigned to comparison patient-centered medical homes (PCMHs), and (2) beneficiaries assigned to comparison non-PCMH practices. MAPCP Demonstration beneficiaries always were assigned a weight of one (1). Entropy weights were recalculated quarterly as new beneficiaries were assigned to the MAPCP Demonstration group or as comparison beneficiaries were added or removed via true-up. In this appendix, the results of weighting were presented in separate tables for each state. In addition to presenting standardized differences after weighting, for each state we displayed the distribution of the capped entropy weights (***Figure M-#a***) for both CGs, as well as visual examinations of the propensity scores before and after weighting (***Figure M-#b***).

M.1.1 Interpreting State Tables

In ***Table M1-a***, demonstration, unweighted PCMH CG and unweighted non-PCMH CG means are shown in the second, third, and fifth columns, respectively, and standardized differences (for the unweighted means) are shown in the fourth and sixth columns. Columns 7 through 10 show the effect of entropy balancing on the CG means and their standardized differences after weighting. The effects of weighting can be discerned by examining the changes in unweighted and weighted means for the CGs and the decreases of standardized differences before and after weighting. A general threshold for acceptable comparability between groups is a standardized difference less than 0.10 (absolute value). For very small and very large proportions (e.g., 99%), the formula for standardized differences typically overstates the distance between two groups, even though the difference in practical terms is negligible.

When evaluating the distribution of weights from the entropy balance equation, it is typically beneficial if the majority of the distribution contains moderately sized values (e.g., less than 5) and there are relatively few extreme values; this indicates that there was reasonable overlap between the propensity scores of the treatment group and CGs. In this appendix, figures displaying the distribution of weights contain footnotes indicating the percentage of comparison weights that were trimmed because they were greater than 20. Finally, the distributions of propensity scores should be evaluated for their overlap before weighting and for their symmetry after weighting.

When a propensity score model could not be estimated using the full set of covariates (due to a convergence failure in the estimation algorithm), a restricted model using a subset of variables was estimated instead. In these cases, the comparison of propensity score distributions before and after entropy balance weighting was less useful, but the figures are still presented here, along with a note about which variables had to be omitted from the propensity score model.

M.2 New York Demonstration and Comparison Groups

New York's MAPCP Demonstration sites are located in seven counties in the Adirondacks region. Because nearly all the recognized PCMHs in these counties were part of the MAPCP Demonstration, a comparison area in another region of the state was chosen. With input from state initiative staff, 16 New York comparison counties were identified to the south and east of the Adirondacks. The comparisons had a similar mix of rural, micropolitan, and metropolitan areas. Several additional counties were considered but rejected because they had median income or Medicare expenditure levels outside the range observed in the demonstration counties. To achieve balance on practice characteristics, all federally qualified health centers (FQHCs) and critical access hospitals (CAHs) in New York were utilized in the CG. In the non-PCMH CG, additional FQHCs were utilized from the Michigan CG. The final *weighted* non-PCMH CG consisted of 83 percent New York beneficiaries and 17 percent Michigan beneficiaries.

The New York analyses are based on 40 MAPCP Demonstration practices, 32 comparison PCMHs (tax identification numbers [TINs]), and 155 comparison non-PCMHs (TINs).

M.2.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in New York was slightly younger and more likely to be non-White, disabled, and dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was more comparable to the demonstration group in age, disability, and dually eligible status, but also was more likely to be non-White than the demonstration group. General health before assignment—as measured by the Hierarchical Condition Category (HCC) risk and Charlson score—was comparable among the three groups. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors and were more likely to be assigned to FQHCs relative to either comparison group. Lastly, beneficiaries in the PCMH CG, on average, were located in much more densely populated areas, whereas non-PCMH CG beneficiaries were in areas with somewhat lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with roughly 1 percent of weights capped at 20 and roughly 30 percent of weights capped at 0.05.[2] Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[2] The 30% of CG members that had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals are included in the analysis, they contribute very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resemble the intervention group primarily contribute to the regression estimates.

Table M-1a
New York: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

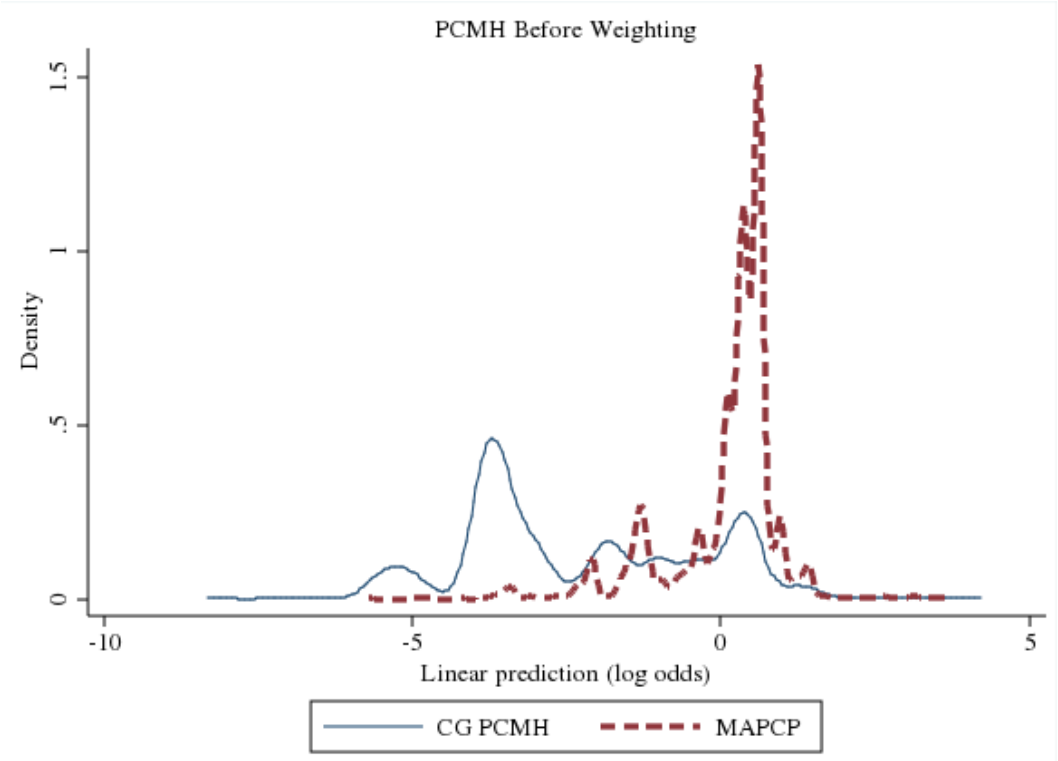
	MAPCP (N = 29,367)	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
		(N = 77,378)	STDF	(N = 63,262)	STDF	(N = 77,378)	STDF	(N = 62,262)	STDF
Age	68.48	66.95	0.10	69.28	−0.06	68.47	0.00	68.78	−0.02
Female	55.6%	55.4%	0.00	56.5%	−0.02	55.6%	0.00	55.9%	−0.01
Non-White	2.7%	10.9%	−0.33	10.4%	−0.31	2.8%	0.00	2.9%	−0.01
Disabled	32.8%	38.7%	−0.12	33.5%	−0.02	32.8%	0.00	31.9%	0.02
Medicaid dual eligible	24.2%	30.7%	−0.15	24.7%	−0.01	24.2%	0.00	23.5%	0.02
ESRD	0.7%	0.9%	−0.01	0.8%	−0.01	0.7%	0.00	0.7%	0.00
Institutionalized	0.1%	0.3%	−0.02	0.3%	−0.02	0.1%	0.00	0.1%	0.00
HCC risk score	1.04	1.03	0.00	1.07	−0.03	1.04	0.00	1.03	0.00
Charlson score	0.81	0.82	−0.01	0.82	0.00	0.81	0.00	0.80	0.01
Population density	230.7	1,569.7	−0.20	317.7	−0.03	289.2	−0.02	231.7	0.00
Percent primary care	90%	67%	1.52	80%	0.54	90%	0.01	90%	0.02
Non-solo primary care	89%	97%	−0.32	70%	0.48	89%	0.00	89%	0.01
FQHC	39%	25%	0.30	13%	0.62	39%	0.00	38%	0.04
RHC	0%	0%	NA	1%	−0.13	0%	NA	0%	−0.03
CAH	5%	3%	0.09	3%	0.11	5%	0.00	5%	−0.01
Median household income	50,800	49,100	0.29	46,900	0.77	50,800	0.00	50,600	0.03

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-1a
Distribution of propensity scores before and after entropy balance weighting in New York vs the PCMH CG



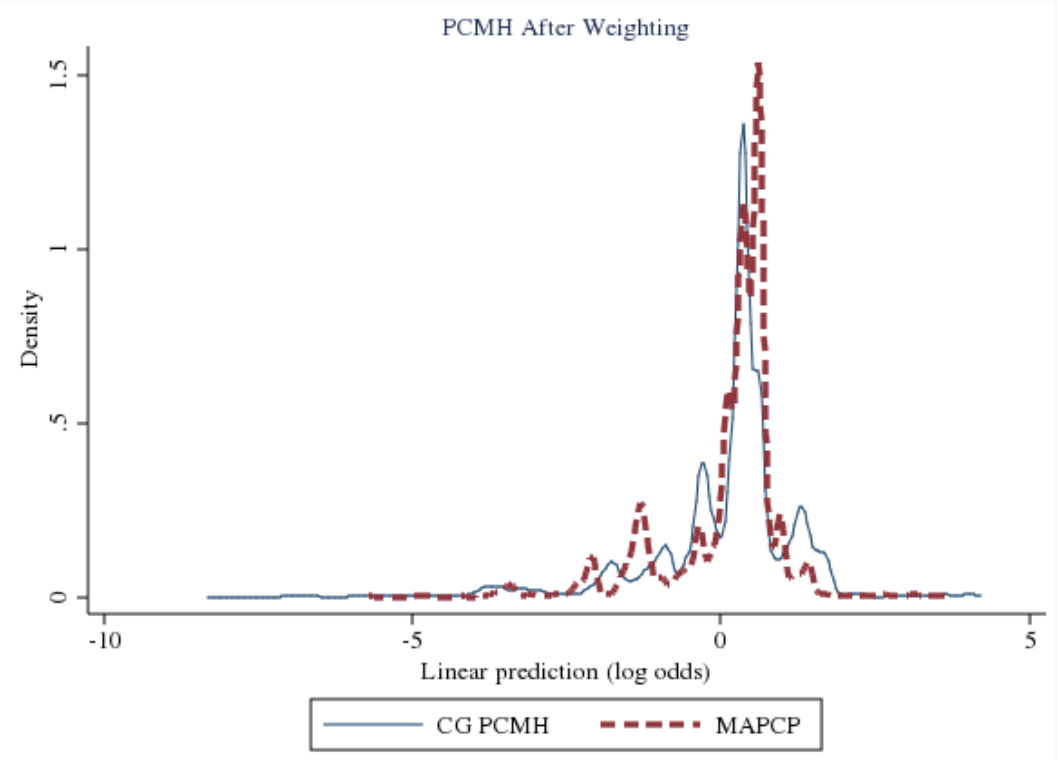
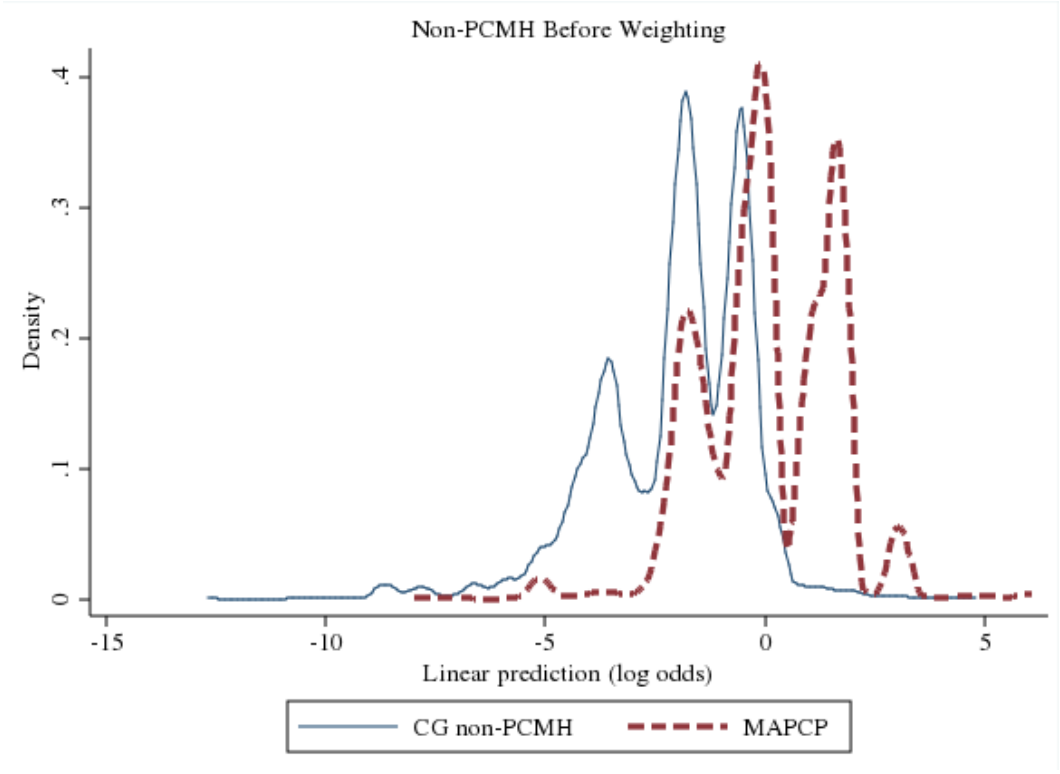


Figure M-1b
Distribution of propensity scores before and after entropy balance weighting in New York vs the non-PCMH CG



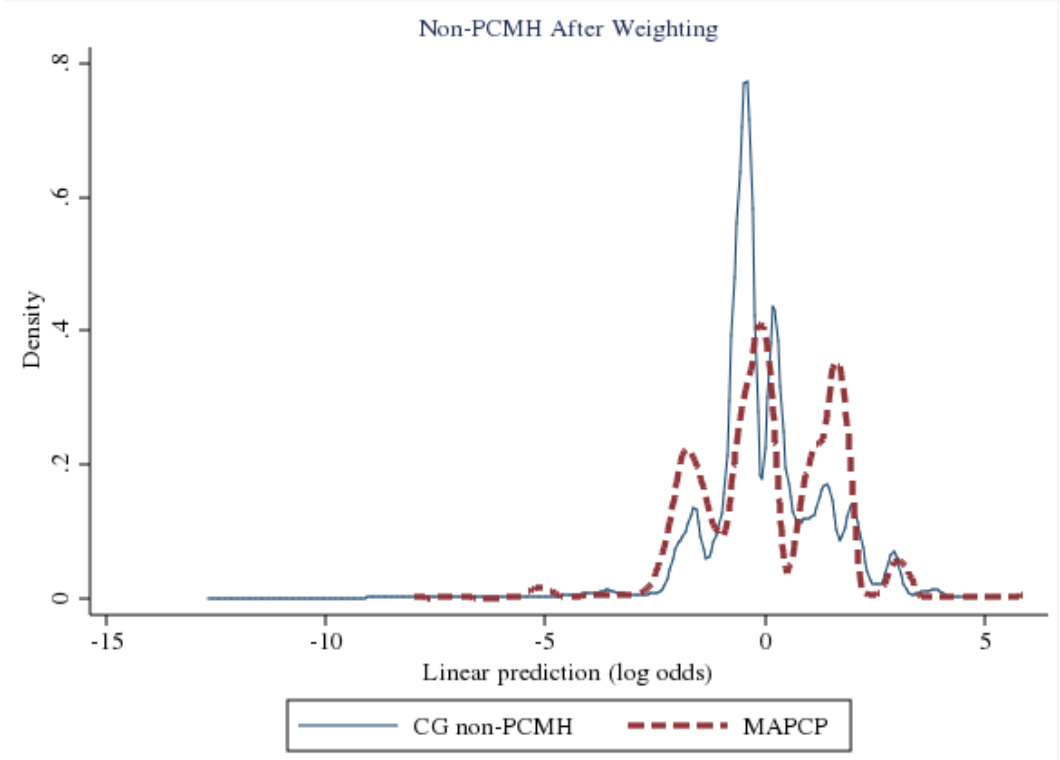
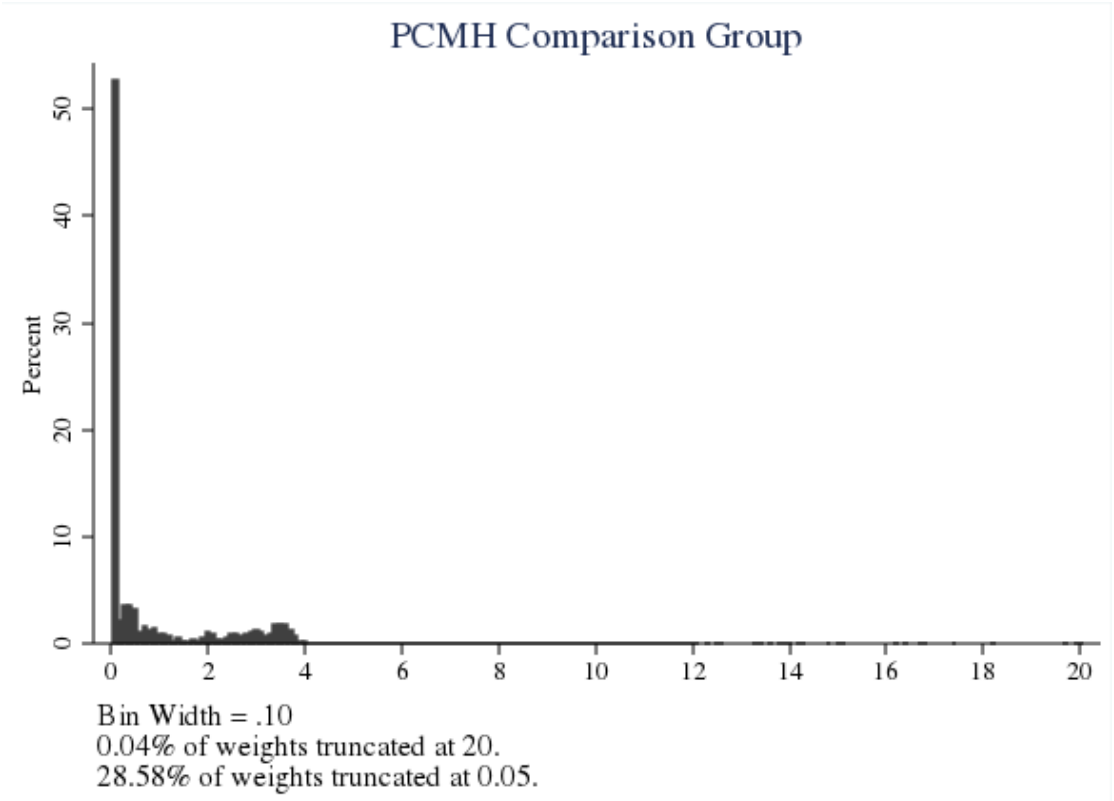
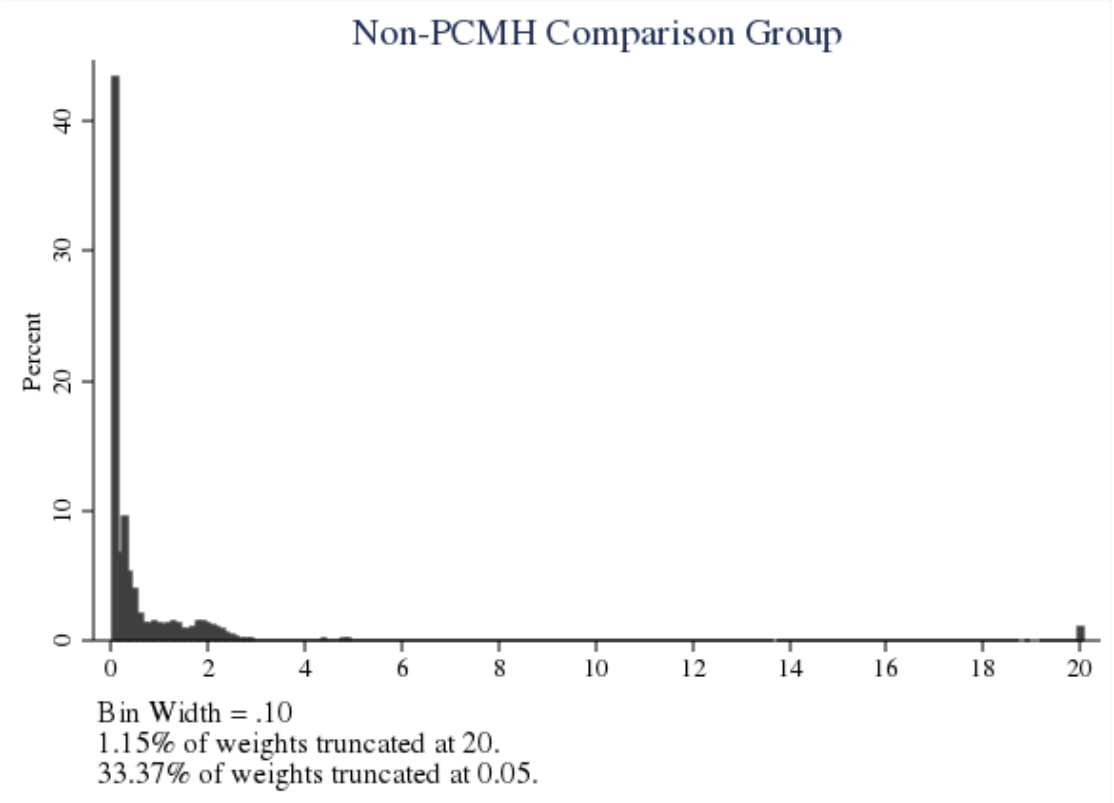


Figure M-1c
Distribution of entropy balance weights in New York





M.3 Rhode Island Demonstration and Comparison Groups

Rhode Island had the smallest number of practices participating in the MAPCP Demonstration, with demonstration practices located in three of the five counties in the state. These three counties were also used for the comparison area. All of the counties were classified as metropolitan areas. To increase their number in the PCMH CG, FQHCs were taken from the existing New York PCMH CG to add to those in Rhode Island. The final *weighted* PCMH CG consisted of 78 percent Rhode Island beneficiaries and 22 percent New York beneficiaries.

The Rhode Island analyses are based on 17 MAPCP Demonstration practices, 32 comparison PCMHs (tax identification numbers [TINs]) and 196 comparison non-PCMHs (TINs).

M.3.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in Rhode Island was slightly younger and more likely to be non-White, disabled, and dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was older and less likely to be non-White, disabled, and dually eligible than the demonstration group. Relative to the demonstration group, general health before assignment—as measured by the HCC risk and Charlson score—was comparable in the PCMH CG, whereas the HCC risk score was greater in the non-PCMH CG. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors relative to either comparison group. PCMH beneficiaries were much more likely to be assigned to FQHCs relative to the other groups. Lastly, beneficiaries in the non-PCMH CG, on average, were located in more densely populated areas, and PCMH CG beneficiaries were in areas with somewhat lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For the PCMH CG, roughly 0.03 percent of weights capped at 20 and roughly 11.06 percent of weights capped at 0.05. For the non-PCMH CG, roughly 0.27 percent of weights capped at 20 and roughly 64.14 percent of weights capped at 0.05.[3] Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[3] The 64% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals are included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the intervention group primarily contributed to the regression estimates.

Table M-2a
Rhode Island: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 13,735)	(N = 28,009)	STDF	(N = 45,896)	STDF	(N = 28,009)	STDF	(N = 45,896)	STDF
Age	65.6	63.9	0.110	70.5	−0.329	65.6	0.000	65.8	−0.012
Female	58.9%	56.2%	0.054	58.1%	0.016	58.9%	0.000	58.8%	0.001
Non-White	14.2%	17.9%	−0.102	10.8%	0.103	14.2%	0.000	14.1%	0.003
Disabled	39.2%	47.3%	−0.163	29.9%	0.197	39.2%	0.000	38.8%	0.009
Medicaid dual eligible	32.3%	37.8%	−0.114	23.2%	0.206	32.3%	0.000	31.9%	0.009
ESRD	0.6%	0.9%	−0.029	0.8%	−0.017	0.6%	0.000	0.6%	0.000
Institutionalized	0.4%	0.4%	−0.001	0.8%	−0.043	0.4%	0.000	0.4%	−0.001
HCC risk score	1.02	1.04	−0.018	1.12	−0.107	1.02	0.000	1.02	−0.003
Charlson score	0.74	0.78	−0.024	0.78	−0.025	0.74	0.000	0.74	−0.001
Population density	1,097.38	856.37	0.237	1,184.30	−0.176	1,096.64	0.001	1,096.36	0.002
Percent primary care	93.2%	75.0%	0.974	88.6%	0.255	93.1%	0.004	93.1%	0.007
Non-solo primary care	95.5%	85.8%	0.340	55.0%	1.064	95.5%	0.001	94.7%	0.038
FQHC	23.3%	60.0%	−0.800	8.4%	0.418	23.4%	−0.002	22.6%	0.017
RHC	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
CAH	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
Median household income	58,800	55,100	0.387	57,500	0.125	58,800	0.002	58,800	−0.003

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-2a
Distribution of propensity scores before and after entropy balance weighting in Rhode Island vs the PCMH CG

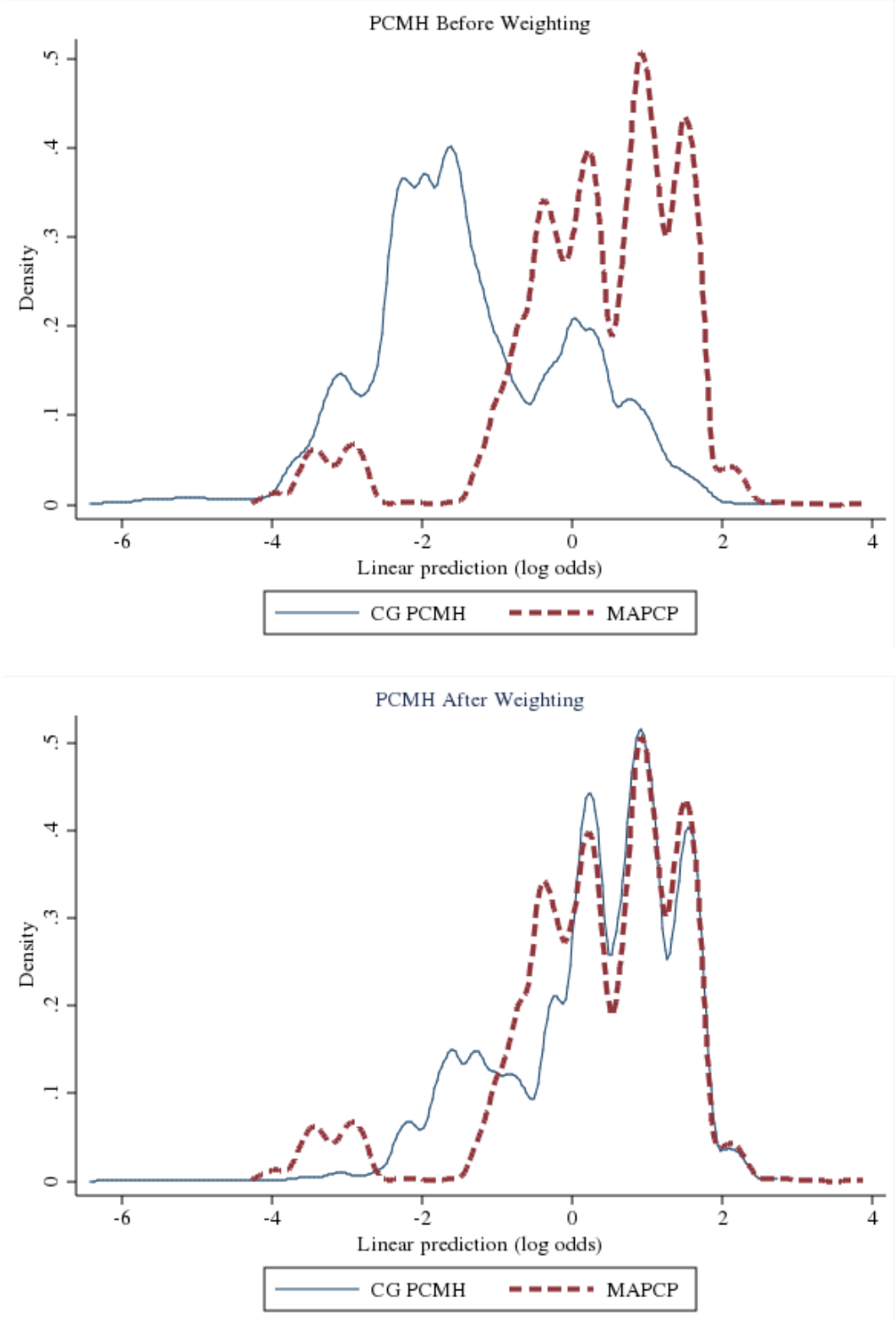


Figure M-2b
Distribution of propensity scores before and after entropy balance weighting in Rhode Island vs the PCMH CG

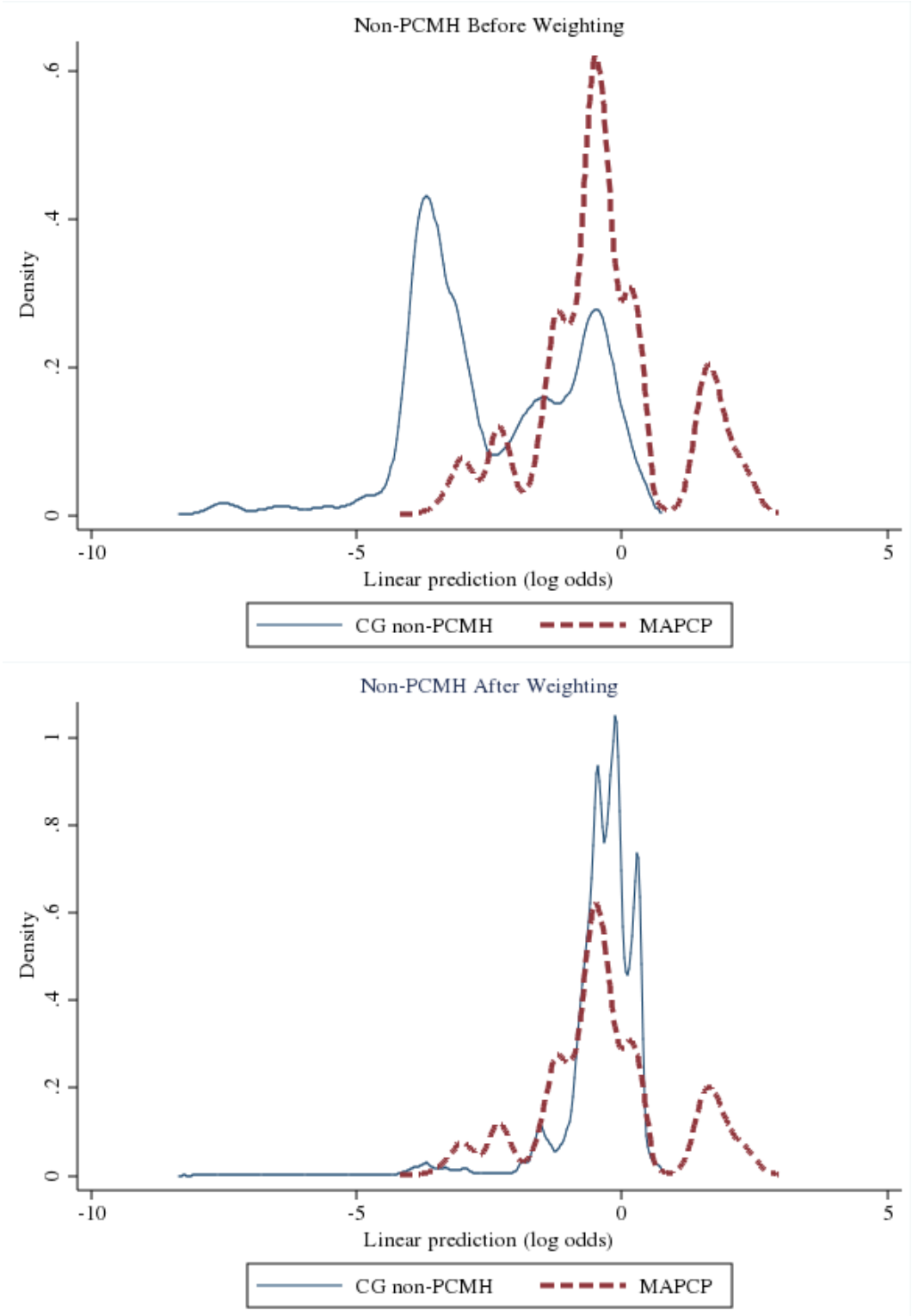
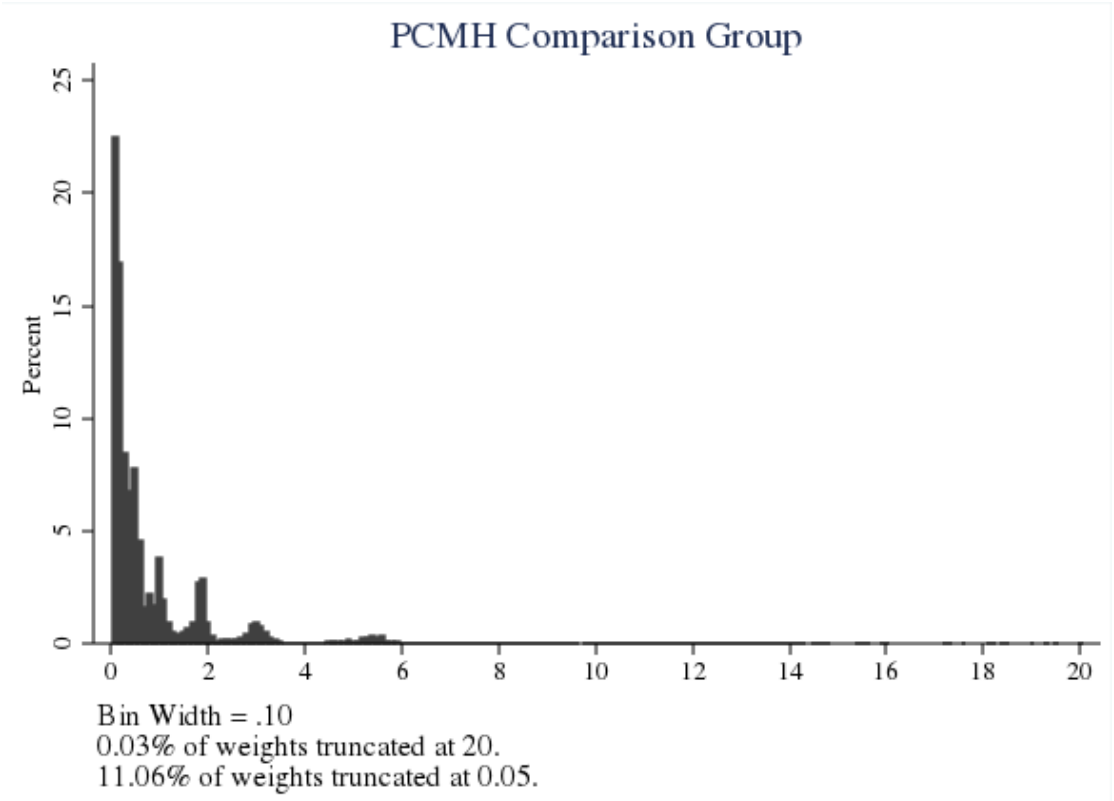
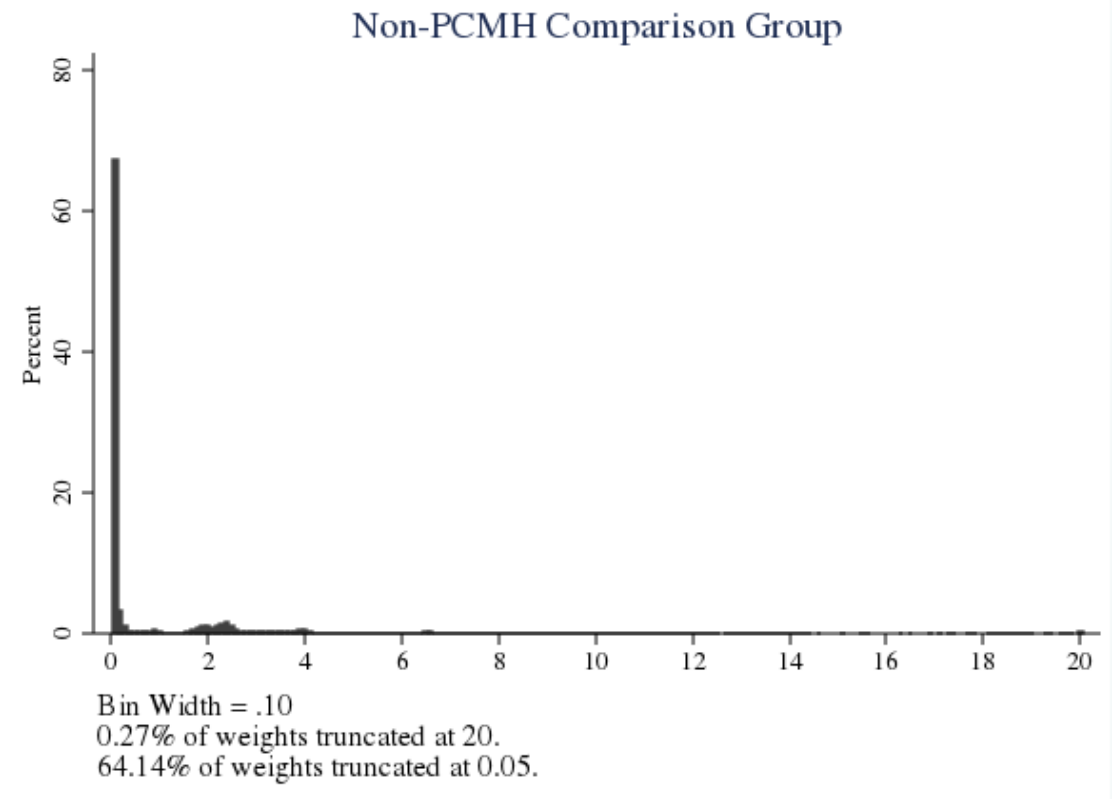


Figure M-2c
Distribution of entropy balance weights in Rhode Island





M.4 Vermont Demonstration and Comparison Groups

Each of Vermont's counties contained at least one demonstration practice. The out-of-state comparison region consisted of 10 counties in the neighboring state of New Hampshire plus all FQHCs in Massachusetts, which was added to increase the number of available FQHCs. Additional comparison practices that were FQHCs, RHCs, or CAHs were utilized from the existing PCMH CGs in Michigan and Maine. The final *weighted* Vermont PCMH CG consisted of 77 percent New Hampshire/Massachusetts beneficiaries, 12 percent Maine beneficiaries, and 11 percent Michigan beneficiaries.

The Vermont analyses are based on 111 MAPCP Demonstration practices, 17 comparison PCMHs (tax identification numbers [TINs]) and 165 comparison non-PCMHs (TINs).

M.4.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in Vermont was slightly younger, more likely to be non-White and disabled, and less likely to be dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was slightly older than the demonstration group, and less likely to be disabled and dually eligible, but also was more likely to be non-White than the demonstration group. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors and were more likely to be assigned to FQHCs relative to either comparison group. Lastly, beneficiaries in the non-PCMH and PCMH CGs, on average, were located in more densely populated areas, and demonstration beneficiaries were in areas with lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For the PCMH CG, roughly 0.97 percent of weights capped at 20 and roughly 50.44 percent of weights capped at 0.05. For the non-PCMH CG, roughly 0.10 percent of weights capped at 20 and roughly 33.88 percent of weights capped at 0.05.[4] Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[4] The 50% of PCMH CG and 34% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals were included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the interention group primarily contributed to the regression estimates.

Table M-3a
Vermont: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 84,939)	(N = 61,481)	STDF	(N = 94,940)	STDF	(N = 61,481)	STDF	(N = 94,940)	STDF
Age	69.6	68.1	0.110	70.7	−0.089	69.5	0.002	69.6	−0.001
Female	56.5%	57.4%	−0.020	57.2%	−0.014	56.4%	0.000	56.5%	0.000
Non-White	2.9%	6.4%	−0.165	3.8%	−0.045	3.0%	−0.002	3.0%	−0.001
Disabled	25.6%	31.3%	−0.126	23.5%	0.049	25.7%	−0.002	25.6%	0.001
Medicaid dual eligible	26.3%	22.4%	0.092	14.4%	0.299	26.4%	−0.001	26.3%	0.001
ESRD	0.4%	0.5%	−0.017	0.5%	−0.008	0.4%	0.000	0.4%	0.000
Institutionalized	0.1%	0.5%	−0.069	0.6%	−0.079	0.1%	−0.001	0.1%	−0.001
HCC risk score	0.95	1.01	−0.071	1.00	−0.062	0.95	0.000	0.95	−0.001
Charlson score	0.69	0.78	−0.061	0.73	−0.027	0.69	−0.001	0.69	0.000
Population density	115.15	300.77	−0.485	365.03	−0.840	116.81	−0.011	117.73	−0.017
Percent primary care	83.4%	69.6%	1.039	73.5%	0.591	83.3%	0.009	83.4%	0.001
Non-solo primary care	96.2%	97.1%	−0.048	83.5%	0.432	77.1%	0.586	96.1%	0.006
FQHC	27.2%	19.5%	0.185	5.4%	0.617	27.3%	−0.002	27.1%	0.003
RHC	10.8%	11.0%	−0.005	4.6%	0.236	10.8%	−0.001	10.8%	0.001
CAH	11.9%	5.4%	0.234	20.5%	−0.237	11.9%	0.000	11.9%	0.000
Median household income	54,600	61,200	−0.647	60,100	−0.598	54,600	−0.002	54,600	0.001

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-3a
Distribution of propensity scores before and after entropy balance weighting in Vermont vs the PCMH CG

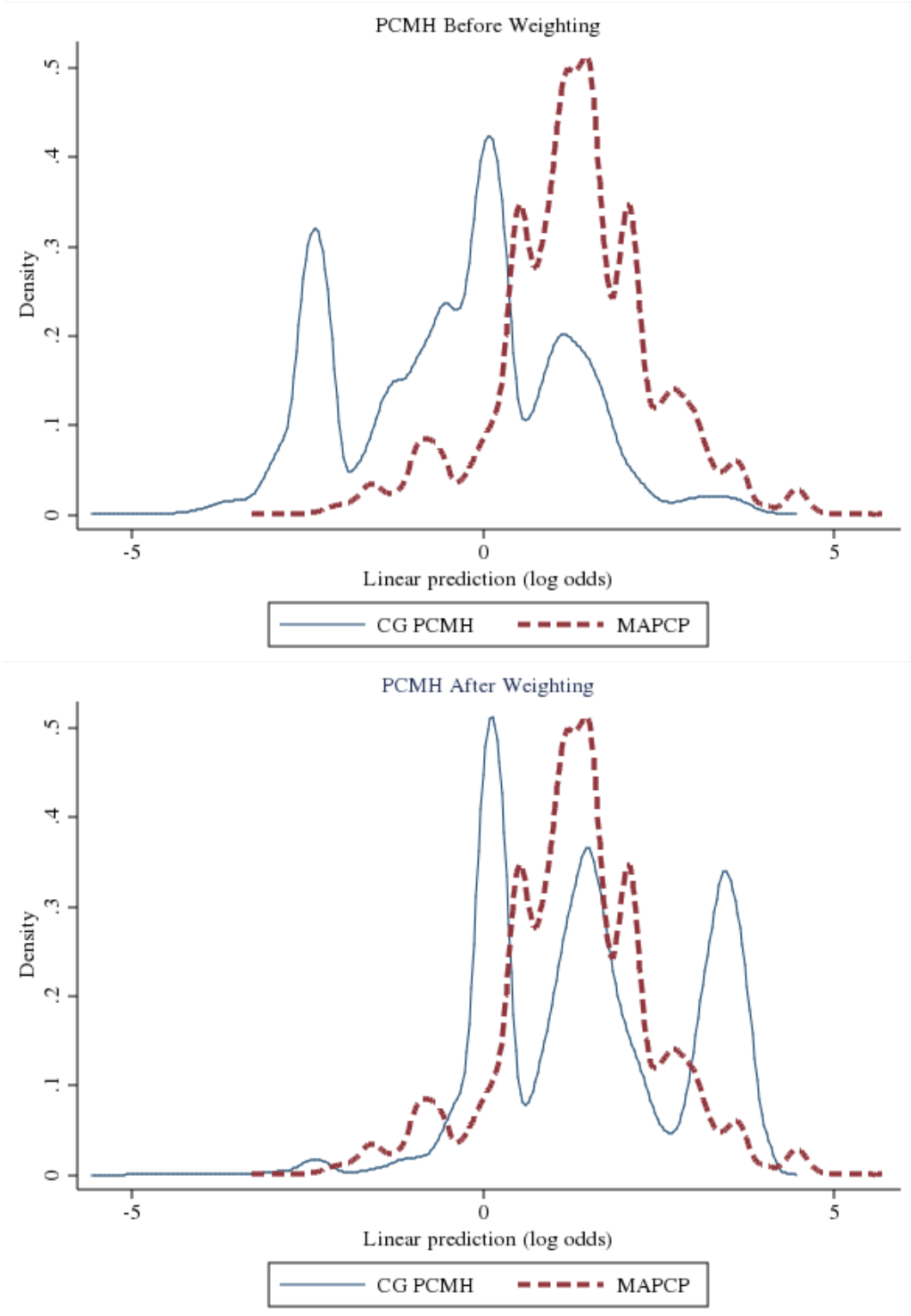


Figure M-3b
Distribution of propensity scores before and after entropy balance weighting in Vermont vs the non-PCMH CG

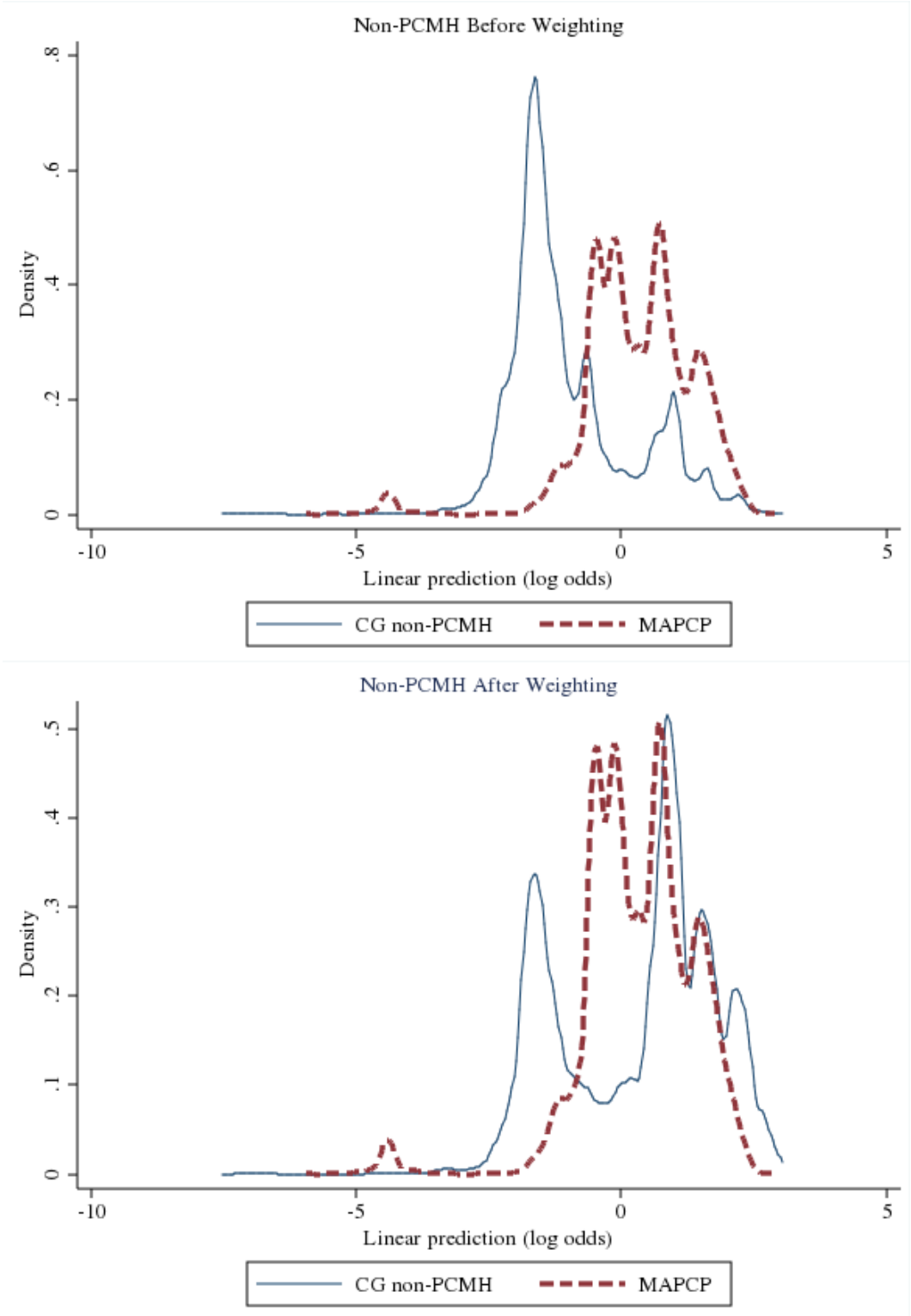
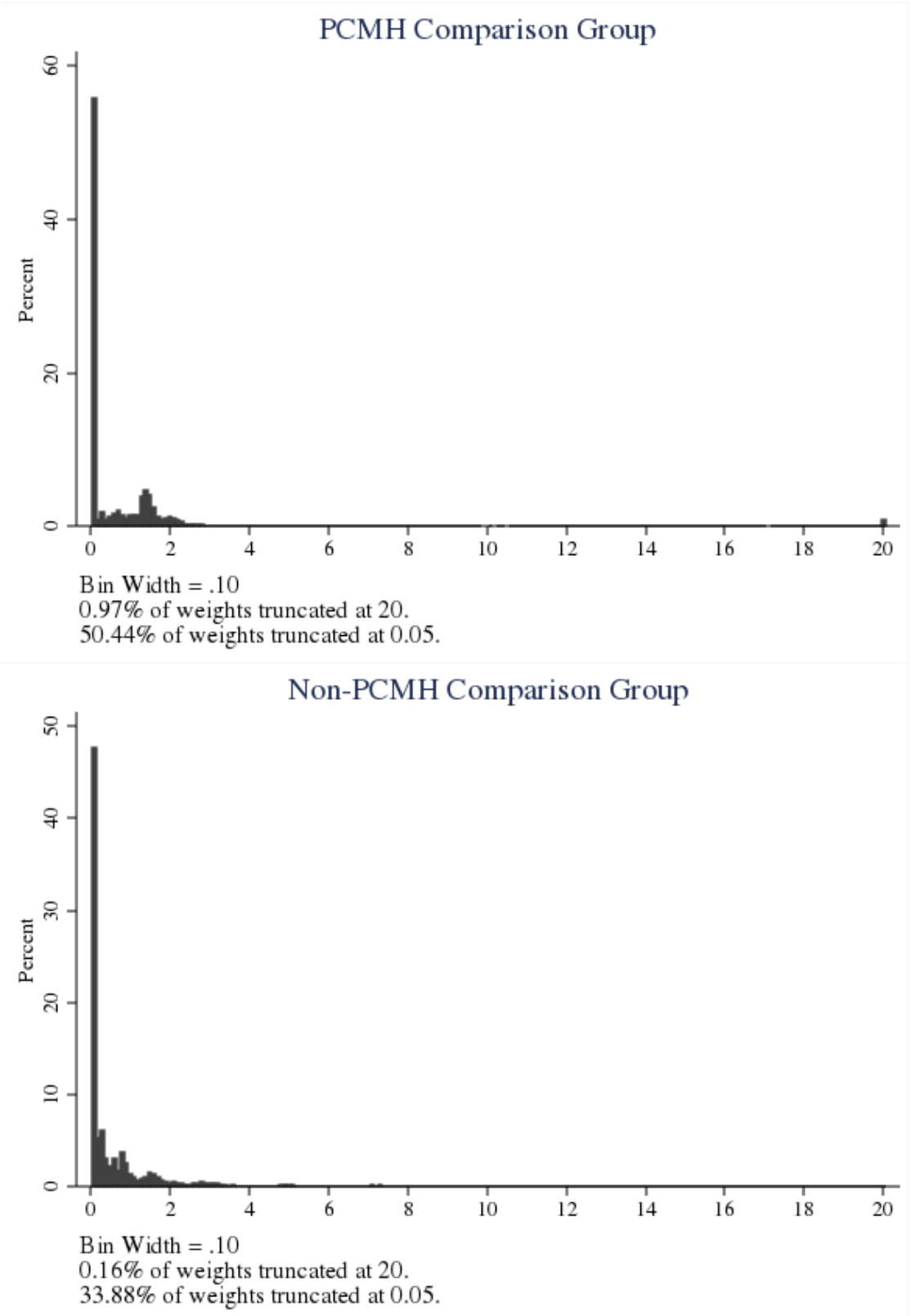


Figure M-3c
Distribution of entropy balance weights in Vermont



M.5 North Carolina Demonstration and Comparison Groups

North Carolina's MAPCP Demonstration practices are located in seven counties, including the only five rural counties in the state that have any PCMHs recognized by the National Committee for Quality Assurance (NCQA). A within-state CG was initially selected, consisting of 13 micropolitan counties and an additional 3 metropolitan counties containing recognized PCMHs. To achieve balance on practice characteristics, all CAHs and RHCs in North Carolina were utilized in the CGs. Additionally, for the PCMH CG, CAHs from Maine were used. The final *weighted* PCMH CG composition was 85 percent North Carolina beneficiaries and 15 percent Maine beneficiaries.

The North Carolina analyses are based on 52 MAPCP Demonstration practices, 45 comparison PCMHs (tax identification numbers [TINs]) and 204 comparison non-PCMHs (TINs).

M.5.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in North Carolina was slightly older and less likely to be non-White, disabled, and dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was more comparable to the demonstration group in age, disability, and dually eligible status, but was less likely to be non-White than the demonstration group. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors and CAHs relative to either comparison group. Lastly, beneficiaries in the PCMH and non-PCMH CGs, on average, were located in much more densely populated areas, and demonstration beneficiaries were in areas with somewhat lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For the PCMH CG, roughly 0.74 percent of weights capped at 20 and roughly 60.53 percent of weights capped at 0.05.[5] For the non-PCMH CG, no weights were capped at 20 and roughly 24.63 percent of weights capped at 0.05. Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[5] The 61% of PCMH CG and 25% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals were included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the interention group primarily contributed to the regression estimates.

Table M-4a
North Carolina: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 33,719)	(N = 84,293)	STDF	(N = 140,172)	STDF	(N = 84,293)	STDF	(N = 140,172)	STDF
Age	69.6	70.4	−0.070	69.1	0.039	69.6	0.000	69.6	0.000
Female	57.5%	59.4%	−0.039	57.1%	0.008	57.5%	0.000	57.5%	0.000
Non-White	19.2%	10.6%	0.243	17.8%	0.034	19.1%	0.002	19.2%	0.000
Disabled	30.4%	25.2%	0.115	31.0%	−0.014	30.4%	0.000	30.4%	0.000
Medicaid dual eligible	26.4%	19.5%	0.166	25.3%	0.024	26.4%	0.000	26.4%	0.000
ESRD	0.9%	0.9%	0.000	1.0%	−0.013	0.9%	0.000	0.9%	0.000
Institutionalized	0.4%	1.0%	−0.073	0.9%	−0.062	0.4%	−0.001	0.4%	0.000
HCC risk score	1.03	1.01	0.022	1.04	−0.008	1.03	0.000	1.03	0.000
Charlson score	0.81	0.78	0.019	0.80	0.007	0.81	0.000	0.81	0.000
Population density	94.27	330.53	−1.332	211.28	−0.628	95.51	−0.013	94.75	−0.005
Percent primary care	86.4%	78.2%	0.433	84.3%	0.114	86.4%	0.003	86.4%	0.000
Non-solo primary care	86.1%	95.8%	−0.343	78.3%	0.205	86.1%	−0.001	86.1%	0.000
FQHC	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
RHC	13.4%	5.4%	0.279	14.3%	−0.025	13.4%	0.000	13.4%	0.000
CAH	14.5%	3.9%	0.374	4.8%	0.334	14.5%	0.000	14.5%	0.000
Median household income	37,900	42,900	−0.917	41,300	−0.546	37,900	−0.003	37,900	−0.001

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-4a
Distribution of propensity scores before and after entropy balance weighting in North Carolina vs the PCMH CG

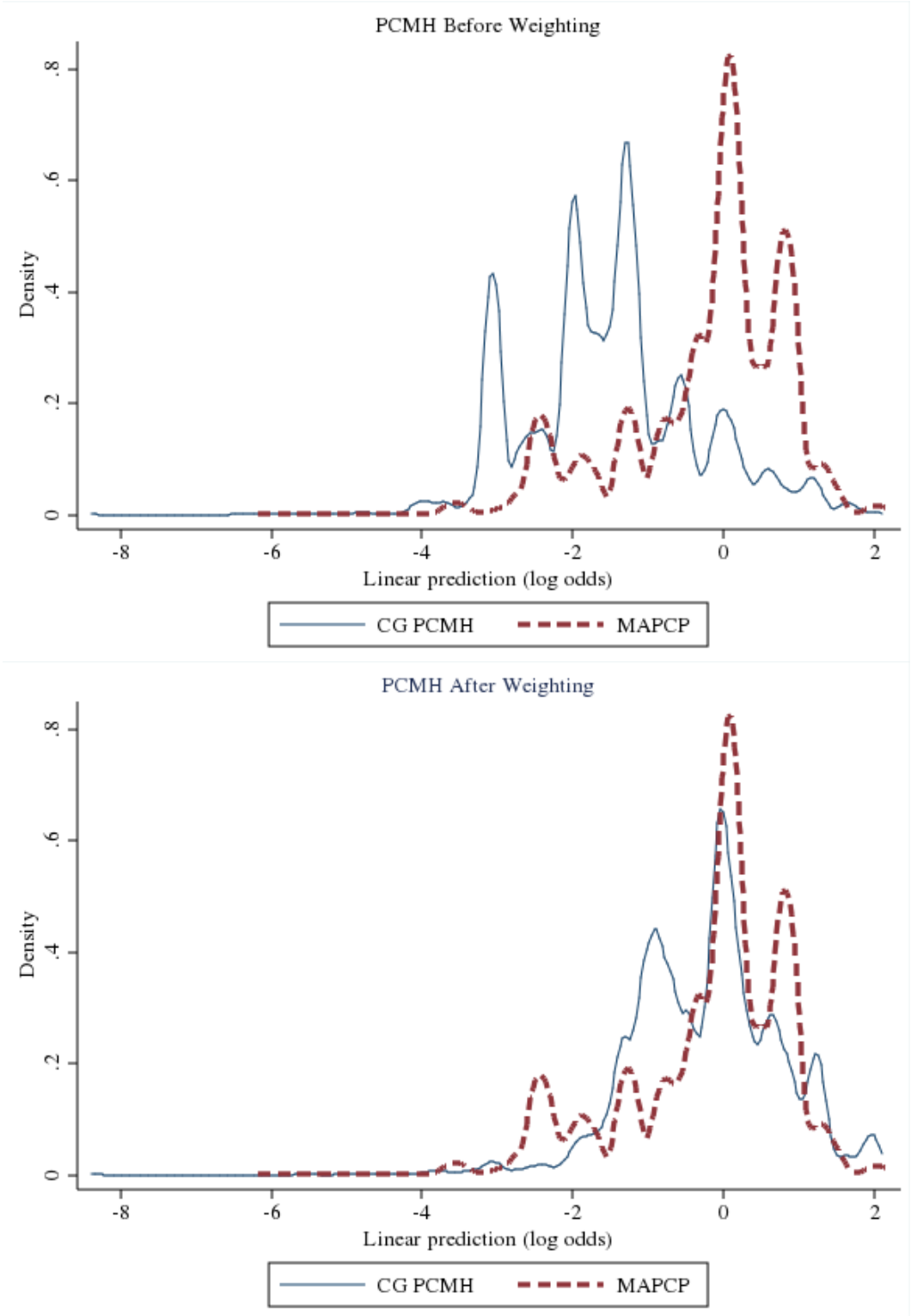


Figure M-4b
Distribution of propensity scores before and after entropy balance weighting in North Carolina vs the non-PCMH CG

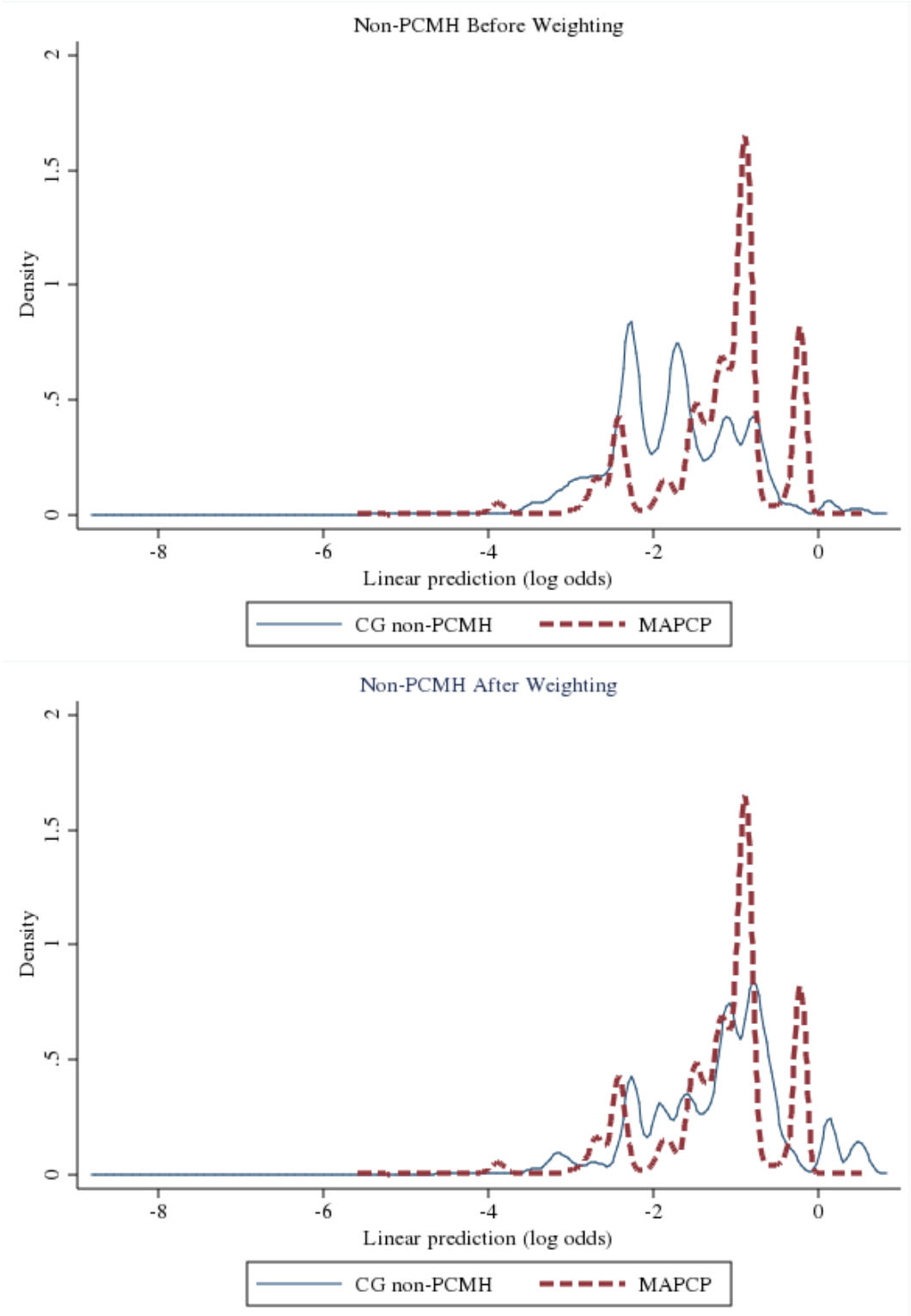
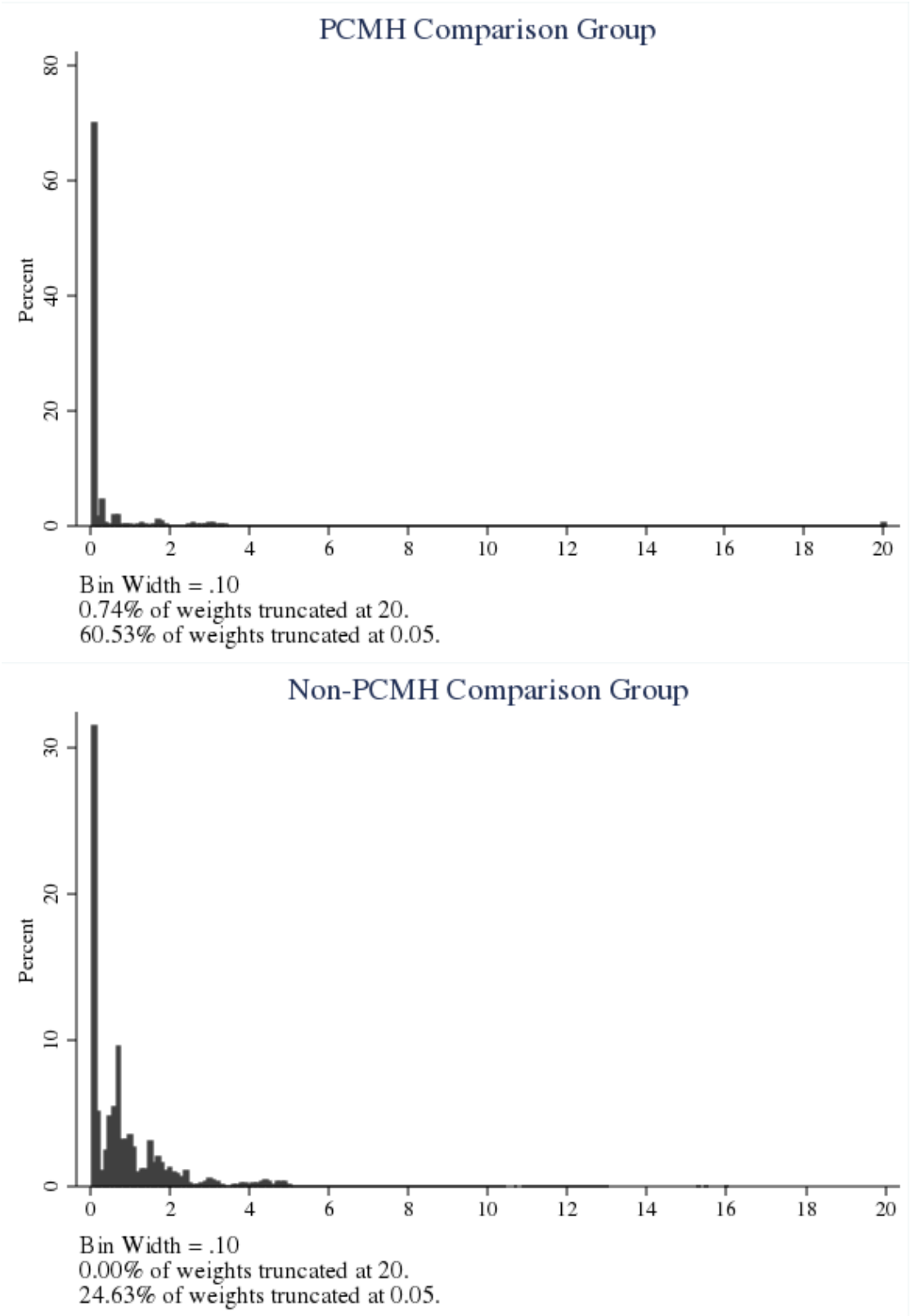


Figure M-4c
Distribution of entropy balance weights in North Carolina



M.6 Minnesota Demonstration and Comparison Groups

The Minnesota Health Care Homes (HCH) initiative is located in 24 Minnesota counties from which intervention group beneficiaries are identified from participating HCHs. CG beneficiaries are drawn from the same counties. MAPCP Demonstration staff requested that four counties in the southeast corner of the state counties (Fillmore, Houston, Olmstead, and Winona) be excluded from the evaluation because they included the Gunderson health system, which was participating in another demonstration.

The Minnesota analyses are based on 245 MAPCP Demonstration practices and 86 comparison non-PCMHs (TINs).

M.6.1 Group Comparability

Relative to the demonstration group, the unweighted non-PCMH CG in Minnesota was slightly older and less likely to be non-White, disabled, and dually eligible for Medicare and Medicaid. General health before assignment—as measured by the HCC risk and Charlson score—was comparable between the groups. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors and were less likely to be assigned to FQHCs relative to the comparison group. Lastly, beneficiaries in the demonstration group, on average, were located in somewhat more densely populated areas and areas with somewhat lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for the non-PCMH CG, we found that the large majority of weights fell in the range of 0.05 through 5, with roughly 0.09 percent of weights capped at 20 and roughly 5.29 percent of weights capped at 0.05. Areas of common support also were observed in the non-PCMH CG in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table M-5a
Minnesota: Comparison of average characteristics between MAPCP Demonstration and non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Means and standardized differences			
		Unweighted		Weighted	
	(N = 161,107)	(N = 40,301)	STDF	(N = 40,301)	STDF
Age	69.1	70.8	−0.115	69.1	0.000
Female	57.3%	55.4%	0.037	57.2%	0.000
Non-White	10.4%	8.4%	0.066	10.4%	0.000
Disabled	32.3%	26.2%	0.134	32.3%	0.000
Medicaid dual eligible	23.2%	17.2%	0.150	23.2%	0.000
ESRD	1.0%	1.0%	0.006	1.0%	0.000
Institutionalized	1.6%	0.3%	0.131	1.6%	0.001
HCC risk score	1.03	1.01	0.020	1.03	0.000
Charlson score	0.72	0.69	0.026	0.72	0.000
Population density	1,056.48	1,002.40	0.048	1,057.56	−0.001
Percent primary care	83.0%	69.2%	0.918	83.0%	−0.002
Non-solo primary care	100.0%	95.9%	0.289	99.8%	0.045
FQHC	1.7%	3.4%	−0.107	1.7%	0.000
RHC	2.1%	9.8%	−0.332	2.1%	0.000
CAH	1.0%	4.8%	−0.226	1.0%	0.000
Median household income	59,900	61,100	−0.111	59,900	−0.001

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-5a
Distribution of propensity scores before and after entropy balance weighting in Minnesota vs the non-PCMH CG

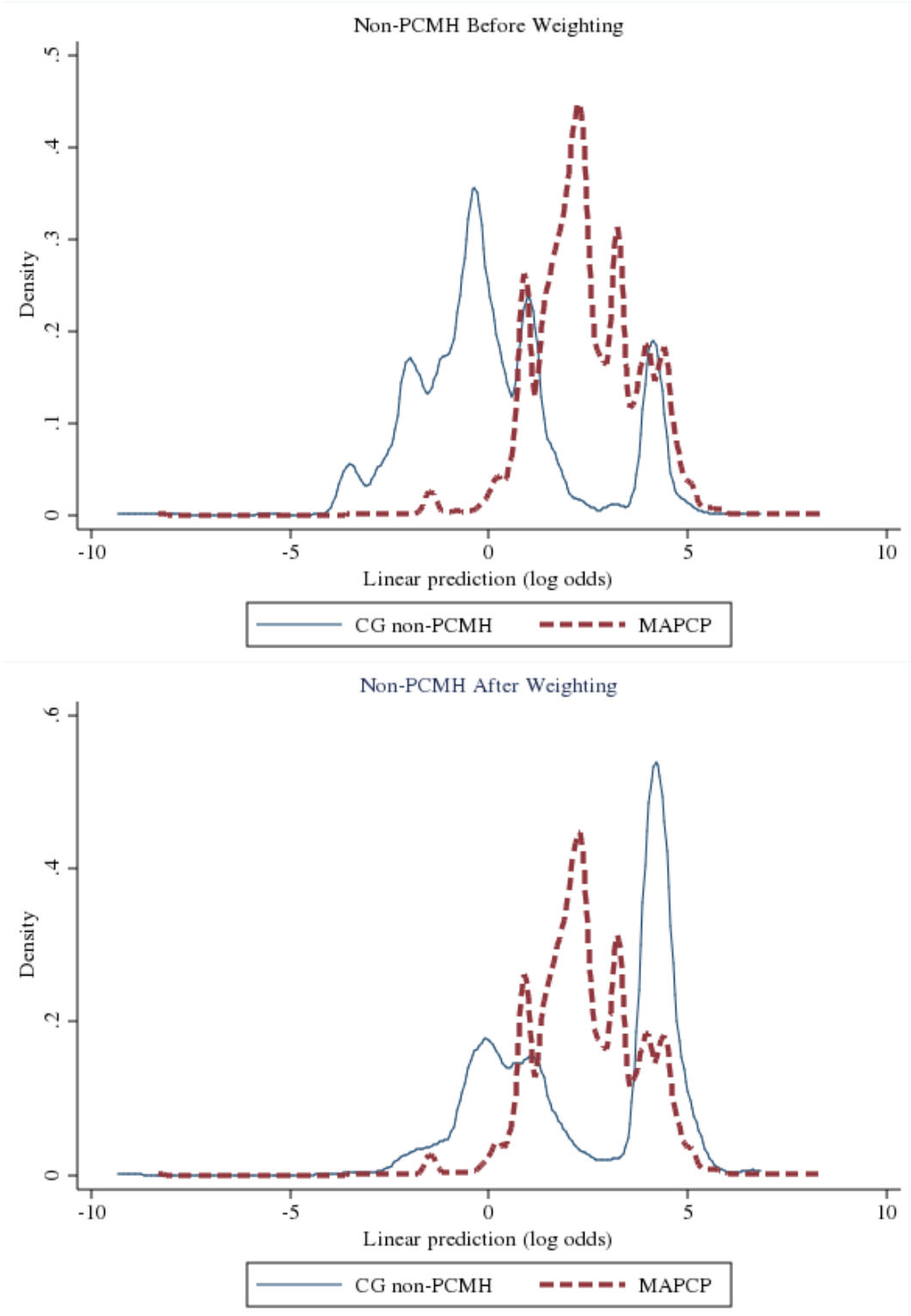
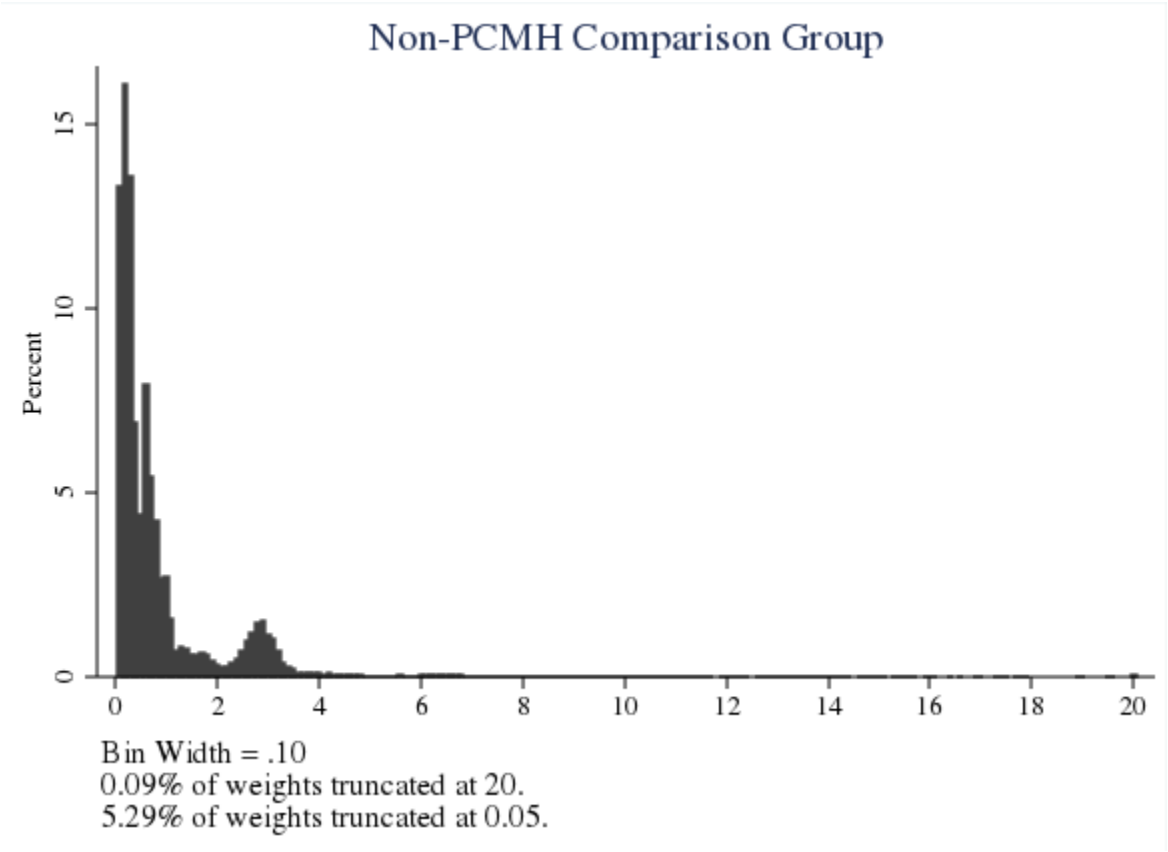


Figure M-5b
Distribution of entropy balance weights in Minnesota



M.7 Maine Demonstration and Comparison Groups

Maine's MAPCP Demonstration practices are located in 11 contiguous counties in the southern and western portions of the state. The same counties were also used to define the comparison area. This region is evenly divided between metropolitan and rural counties. To increase their number in the PCMH CG, FQHCs were also taken from the existing New York PCMH CG to add to those in Maine. The final *weighted* Maine PCMH CG comprised 90 percent Maine beneficiaries and 10 percent New York beneficiaries.

The Maine analyses are based on 73 MAPCP Demonstration practices, 34 comparison PCMHs (tax identification numbers [TINs]), and 115 comparison non-PCMHs (TINs).

M.7.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in Maine was comparable in age and disability status, but was more likely to be non-White and less likely to be dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was comparable to the demonstration group in non-White status, but was older and less likely to be disabled and dually eligible than the demonstration group. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups in terms of HCC risk, but the demonstration group had a slightly higher Charlson score relative to either comparison group. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors, and non-PCMH beneficiaries were much more likely to be assigned to FQHCs relative to either group. Lastly, beneficiaries in the PCMH CG, on average, were located in much more densely populated areas, and demonstration beneficiaries were in areas with lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For the PCMH CG, roughly 2.43 percent of weights capped at 20 and roughly 69.41 percent of weights capped at 0.05. For the non-PCMH CG, roughly 0.02 percent of weights capped at 20 and roughly 26.03 percent of weights capped at 0.05.[6] Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[6] The 69% of PCMH CG and 26% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals were included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the interention group primarily contributed to the regression estimates.

Table M-6a
Maine: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 60,233)	(N = 28,156)	STDF	(N = 45,098)	STDF	(N = 28,156)	STDF	(N = 45,098)	STDF
Age	67.0	66.7	0.020	70.8	−0.270	67.2	−0.015	67.1	−0.005
Female	55.8%	55.5%	0.006	57.3%	−0.032	55.7%	0.000	55.8%	0.000
Non-White	2.4%	10.9%	−0.350	2.2%	0.013	2.8%	−0.026	2.4%	0.000
Disabled	39.4%	38.1%	0.029	27.2%	0.261	38.2%	0.026	39.3%	0.004
Medicaid dual eligible	46.9%	35.4%	0.236	34.8%	0.250	45.0%	0.039	46.8%	0.004
ESRD	0.6%	0.7%	−0.005	0.4%	0.026	0.6%	0.008	0.6%	0.000
Institutionalized	0.4%	0.5%	−0.019	0.6%	−0.030	0.4%	−0.005	0.4%	−0.002
HCC risk score	1.11	1.02	0.089	1.03	0.080	1.09	0.017	1.11	0.001
Charlson score	0.89	0.78	0.071	0.77	0.078	0.87	0.016	0.89	0.001
Population density	110.84	330.06	−0.248	138.64	−0.248	122.93	−0.041	111.77	−0.008
Percent primary care	86.9%	68.0%	1.237	78.0%	0.477	86.1%	0.050	87.1%	−0.010
Non-solo primary care	100.0%	97.8%	0.211	74.0%	0.839	99.9%	0.050	98.7%	0.161
FQHC	21.7%	47.1%	−0.554	14.2%	0.198	20.7%	0.024	21.4%	0.007
RHC	10.5%	7.4%	0.108	8.1%	0.083	11.0%	−0.016	10.4%	0.004
CAH	9.2%	11.7%	−0.083	9.8%	−0.021	10.1%	−0.032	9.0%	0.004
Median household income	46,500	53,300	−0.937	49,500	−0.440	47,200	−0.098	46,600	−0.010

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-6a
Distribution of propensity scores before and after entropy balance weighting in Maine vs the PCMH CG

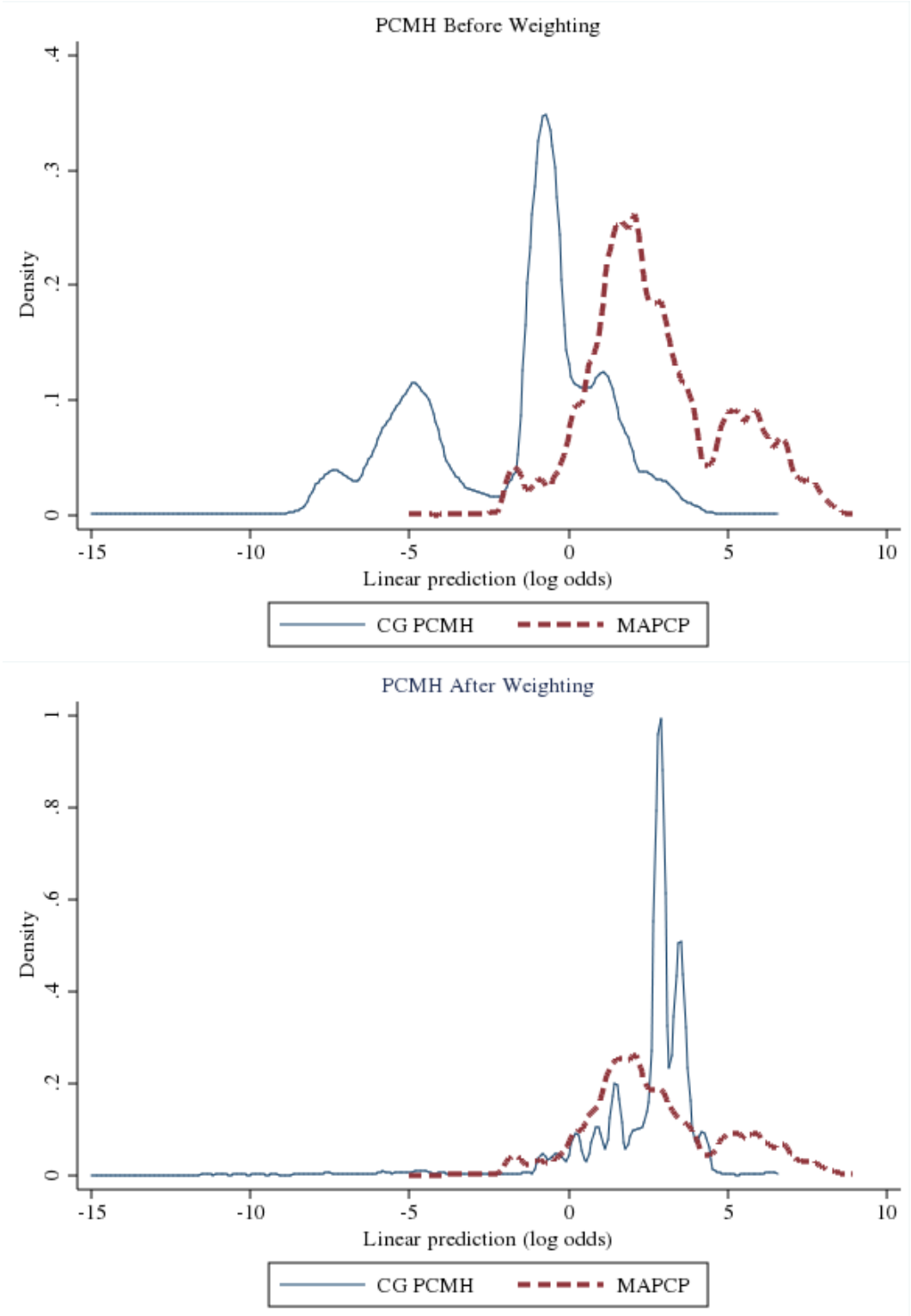


Figure M-6b
Distribution of propensity scores before and after entropy balance weighting in Maine vs the non-PCMH CG

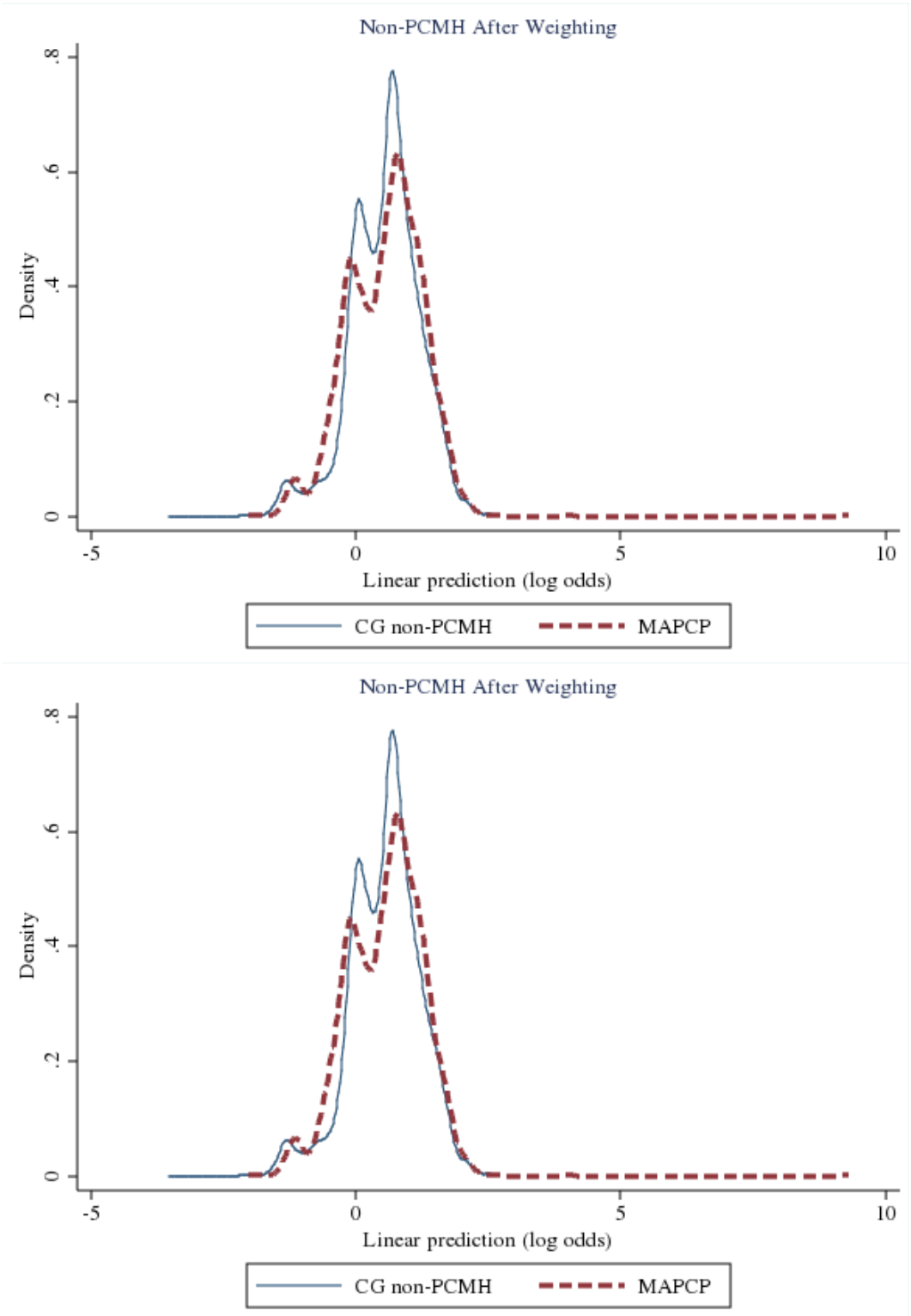
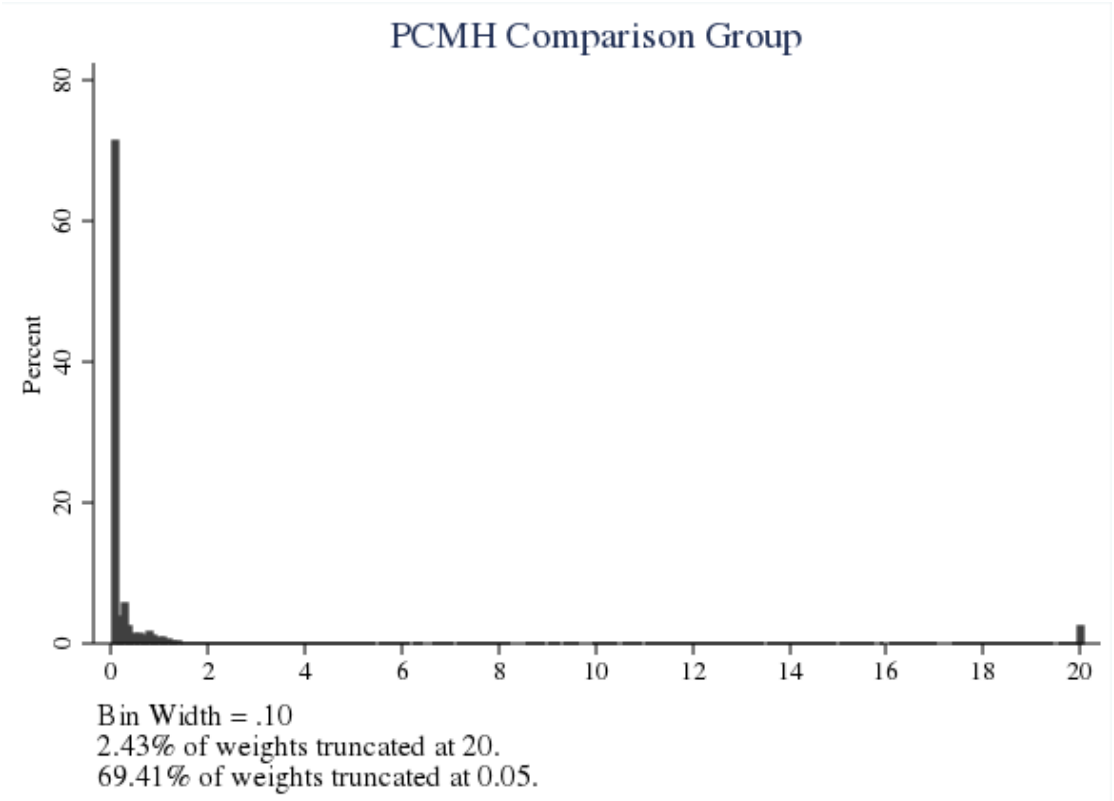
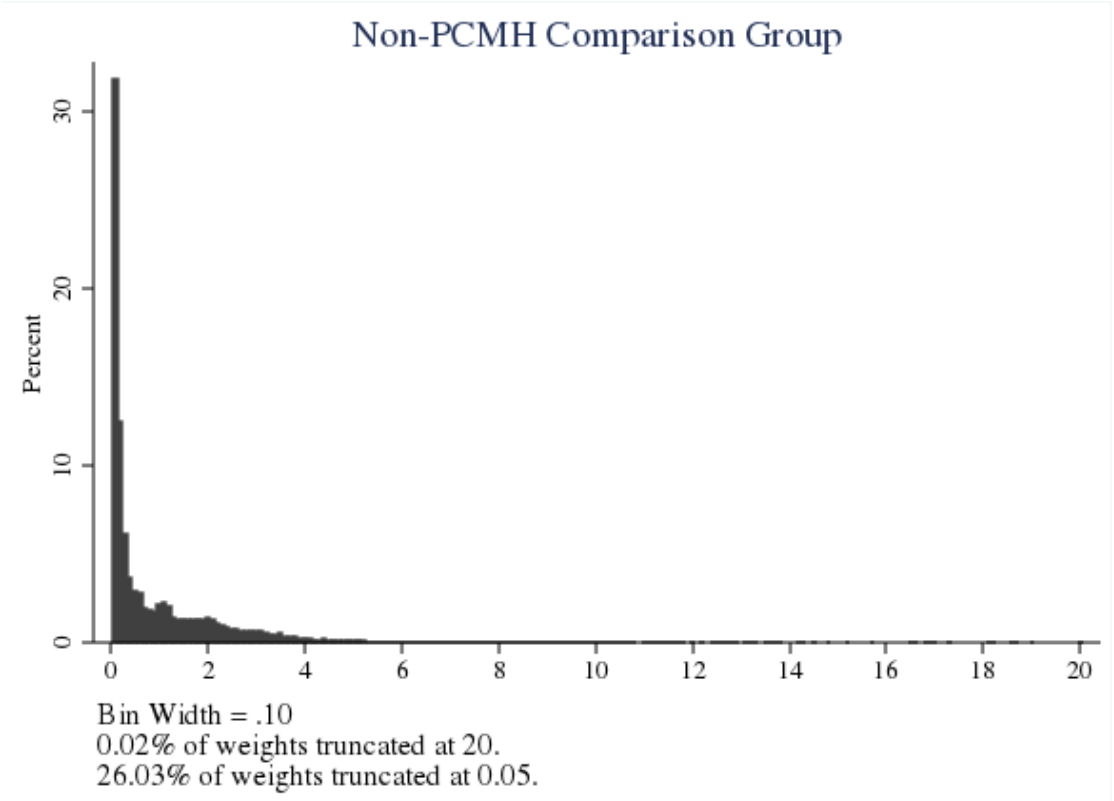


Figure M-6c
Distribution of entropy balance weights in Maine





M.8 Michigan Demonstration and Comparison Groups

Michigan is the largest of the MAPCP Demonstration sites, covering 40 counties including portions of the Upper Peninsula. A 20 percent random sample of non-demonstration primary care practices from the same counties was selected for the CG in the first year of the evaluation and then followed for the true-up. The sample included both FQHCs and RHCs. No CAHs were involved in the demonstration.

Michigan bases PCMH status on Blue Cross Blue Shield of Michigan's (BCBSM) Physician Group Incentive Program (PGIP) designation. Practices must be PGIP-designated or NCQA PPC®-PCMH™ to participate in the MAPCP Demonstration (all have PGIP designation). With the assistance of Michigan initiative staff, we were able to cross-walk BCBSM physician identifiers to determine the PCMH status of the comparison TINs.

The Michigan analyses are based on 367 MAPCP Demonstration practices, 77 comparison PCMHs (tax identification numbers [TINs]) and 158 comparison non-PCMHs (TINs).

M.8.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH and non-PCMH CGs in Michigan were slightly younger and more likely to be non-White, disabled, and dually eligible for Medicare and Medicaid. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups. Beneficiaries from all three groups were assigned to practices with comparable proportions of primary care doctors, but demonstration group beneficiaries were less likely to be assigned to FQHCs relative to either CG. Lastly, beneficiaries from all three groups, on average, were located in areas with comparable population densities, whereas non-PCMH CG beneficiaries were in areas with somewhat lower median household incomes. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For both CGs, no weights were capped at 20, but for the PCMH CG, roughly 0.66 percent of weights capped at 0.05, and for the non-PCMH CG, roughly 7.13 percent of weights capped at 0.05. Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table M-7a
Michigan: Comparison of average characteristics between MAPCP Demonstration and PCMH/non-PCMH comparison beneficiaries before and after weighting

	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 302,999)	(N = 33,656)	STDF	(N = 55,174)	STDF	(N = 33,656)	STDF	(N = 55,174)	STDF
Age	70.0	68.1	0.136	68.2	0.129	70.0	0.000	70.0	0.000
Female	57.9%	57.0%	0.018	54.6%	0.067	57.9%	0.000	57.9%	0.000
Non-White	14.2%	19.0%	−0.129	20.3%	−0.162	14.2%	0.000	14.2%	0.000
Disabled	26.9%	35.4%	−0.184	35.4%	−0.185	26.9%	0.000	26.9%	0.000
Medicaid dual eligible	16.0%	24.2%	−0.204	26.7%	−0.262	16.0%	0.000	16.0%	0.000
ESRD	1.1%	1.1%	−0.005	1.1%	−0.002	1.1%	0.000	1.1%	0.000
Institutionalized	0.7%	1.0%	−0.039	0.9%	−0.029	0.7%	0.000	0.7%	0.000
HCC risk score	1.06	1.15	−0.086	1.15	−0.085	1.06	0.000	1.06	0.000
Charlson score	0.83	0.93	−0.065	0.90	−0.047	0.83	0.000	0.83	0.000
Population density	943.92	953.17	−0.009	949.80	−0.006	943.92	0.000	943.72	0.000
Percent primary care	88.5%	85.4%	0.183	88.7%	−0.011	88.5%	0.000	88.5%	0.000
Non-solo primary care	93.9%	73.1%	0.585	63.9%	0.792	93.9%	0.000	93.9%	0.001
FQHC	3.1%	9.1%	−0.253	10.9%	−0.312	3.1%	0.000	3.1%	0.000
RHC	6.7%	20.0%	−0.399	31.9%	−0.673	6.7%	0.000	6.7%	−0.001
CAH	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
Median household income	49,500	48,200	0.136	45,600	0.443	49,500	0.000	49,500	0.000

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-7a
Distribution of propensity scores before and after entropy balance weighting in Michigan vs the PCMH CG

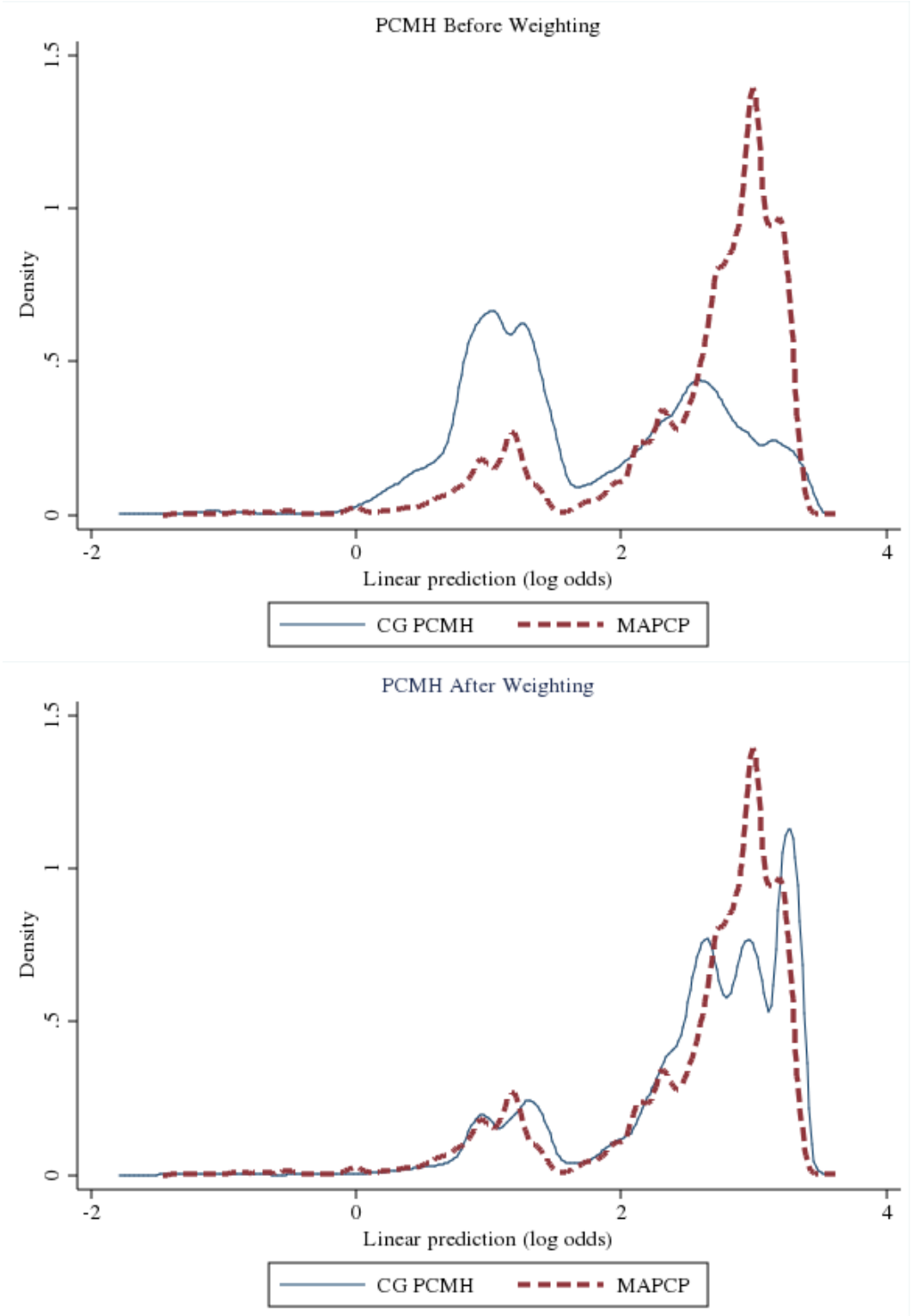


Figure M-7b
Distribution of propensity scores before and after entropy balance weighting in Michigan vs the non-PCMH CG

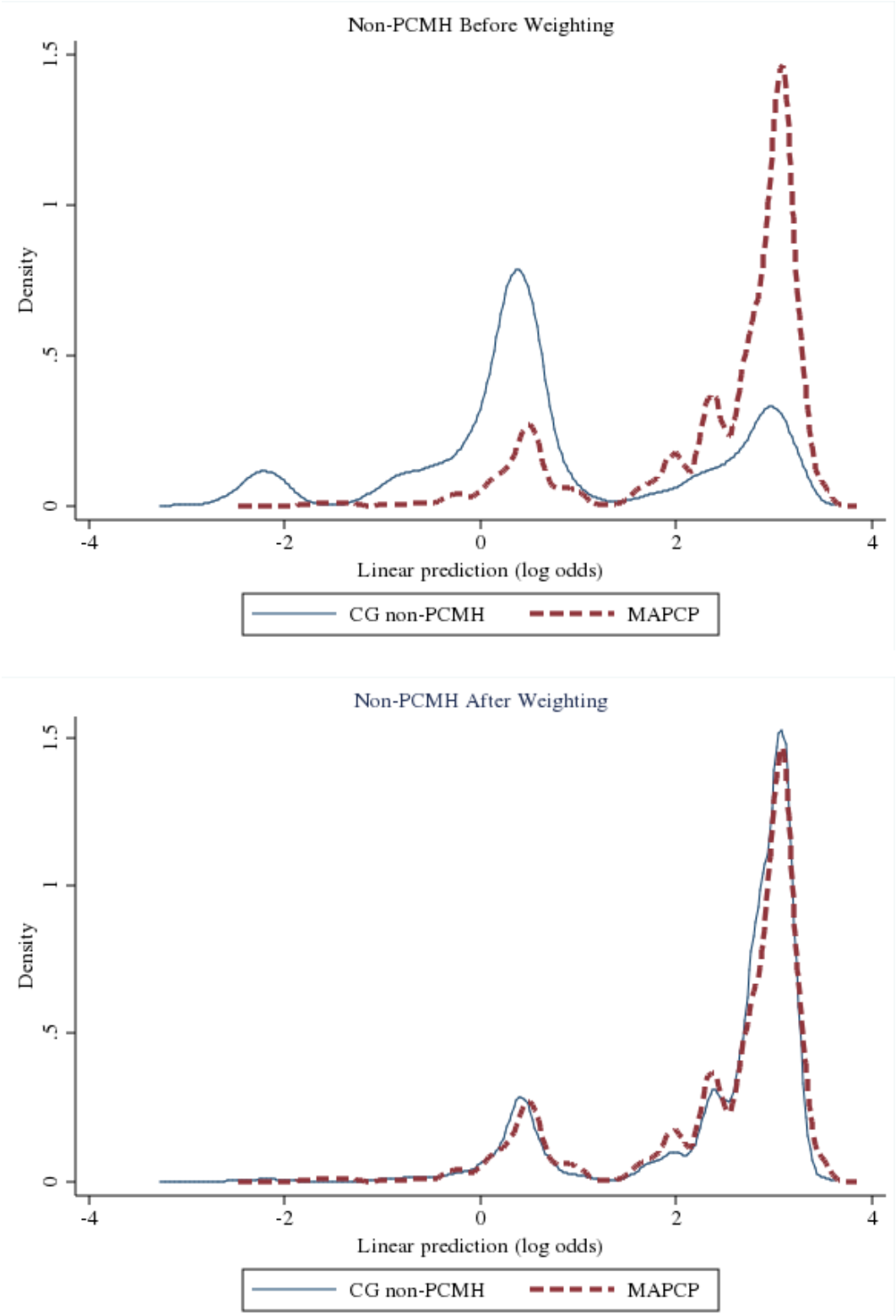
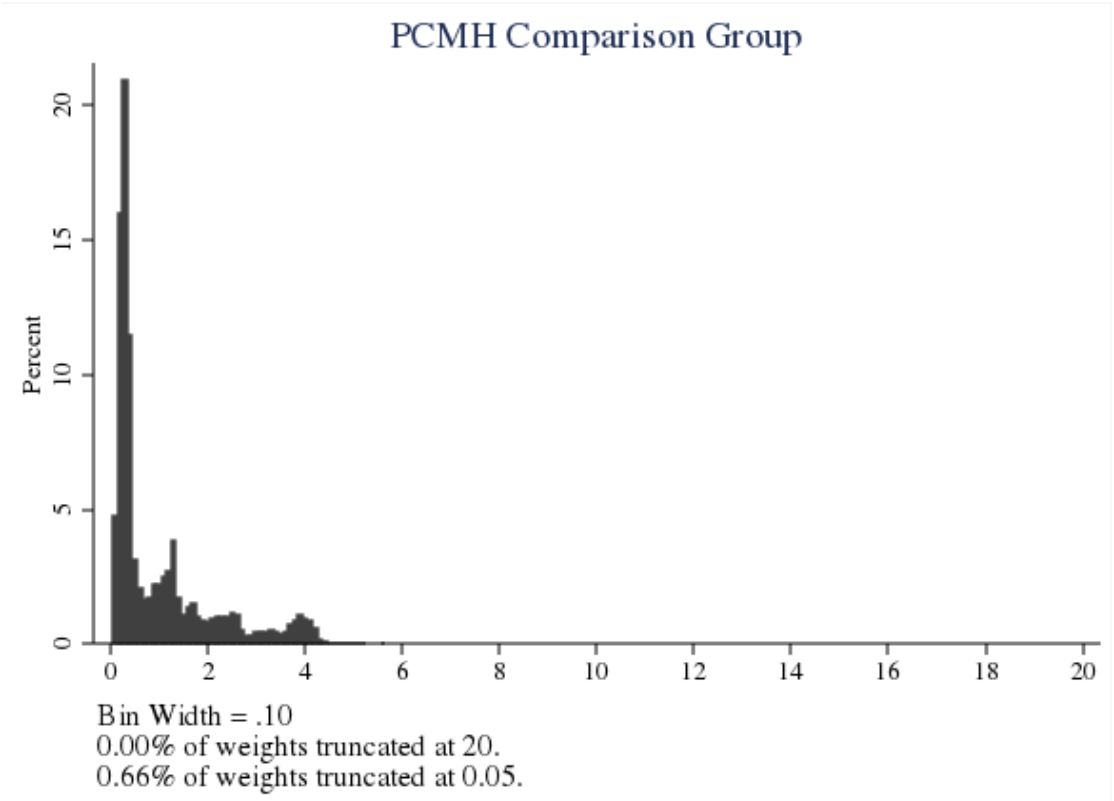
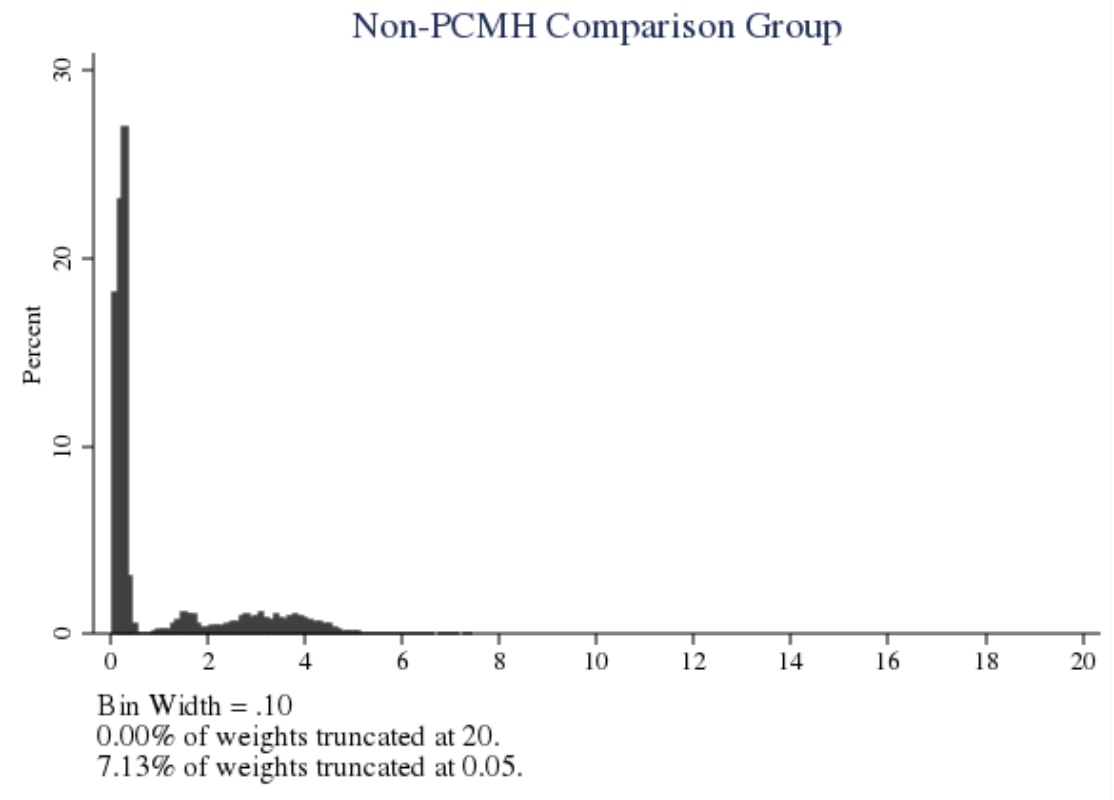


Figure M-7c
Distribution of entropy balance weights in Michigan





M.9 Pennsylvania - Northeast Demonstration and Comparison Groups

The northeast demonstration practices were located in four counties. Comparison beneficiaries were drawn from the same four counties. Because of the limited number of NCQA-recognized PCMHs in the target counties, 10 NCQA-recognized TINs were identified in nine other nonurban counties across the state and added to the three previously identified comparison PCMHs. This change was made beginning with the QSR6 analyses.

The Pennsylvania analyses are based on 27 MAPCP Demonstration practices, 13 comparison PCMHs (tax identification numbers [TINs]), and 110 comparison non-PCMHs (TINs).

M.9.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in Pennsylvania was comparable in age, more likely to be non-White, and less likely to be disabled and dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was slightly older than the demonstration group, and less likely to be non-White, disabled, and dually eligible than the demonstration group. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups. Demonstration beneficiaries largely were assigned to practices with higher proportions of primary care doctors and in all three groups, no one was assigned to a FQHC, CAH, or RHC. Lastly, beneficiaries in the demonstration group, on average, were located in slightly more densely populated areas, and PCMH CG beneficiaries were in areas with somewhat higher median household incomes relative to the other groups. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For the PCMH CG, roughly 0.04 percent of weights capped at 20 and roughly 70.83 percent of weights capped at 0.05.[7] For the non-PCMH CG, no weights were capped at 20 and roughly 54.46 percent of weights capped at 0.05. Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[7] The 71% of PCMH CG and 54% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals were included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the interention group primarily contributed to the regression estimates.

Table M-8a
Pennsylvania-NE: Comparison of average characteristics between MAPCP and PCMH/non-PCMH comparison beneficiaries before and after weighting

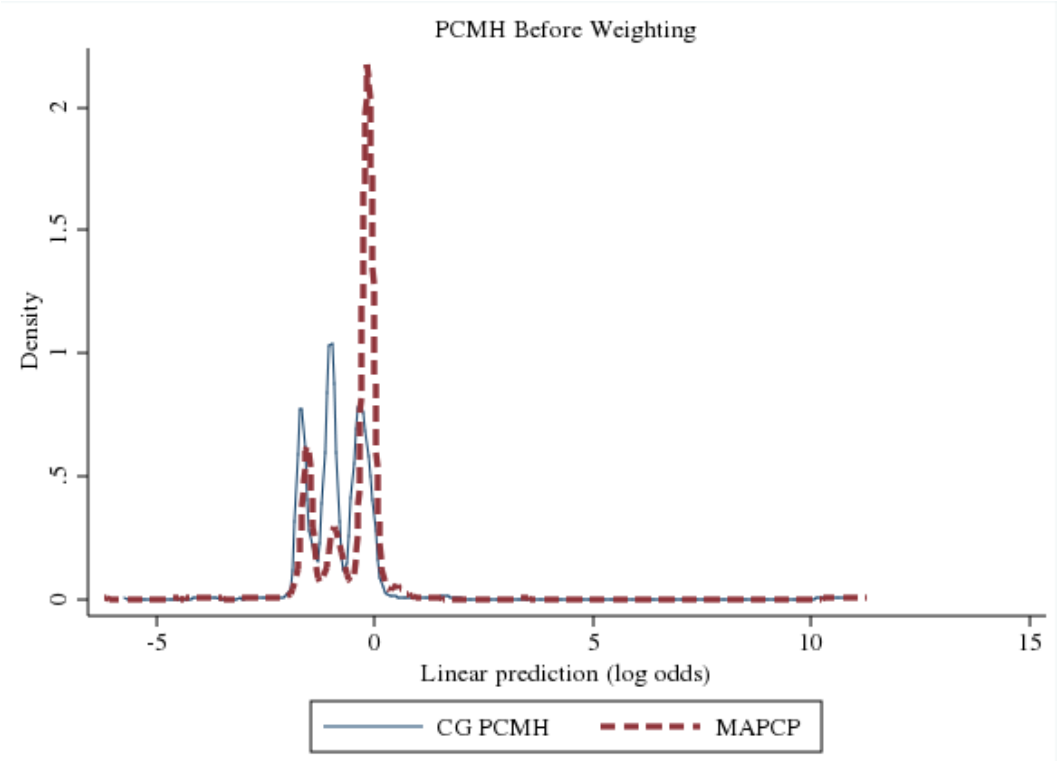
	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 25,685)	(N = 50,865)	STDF	(N = 45,980)	STDF	(N = 50,865)	STDF	(N = 45,980)	STDF
Age	69.5	69.7	−0.021	71.3	−0.141	69.5	0	69.5	−0.002
Female	58.20%	56.90%	0.026	59.00%	−0.017	58.20%	0.001	58.20%	0
Non-White	5.50%	7.00%	−0.060	4.40%	0.05	5.50%	−0.002	5.50%	0.001
Disabled	29.10%	26.20%	0.064	26.20%	0.064	29.10%	0	29.00%	0.001
Medicaid dual eligible	21.10%	17.80%	0.082	18.00%	0.079	21.10%	0	21.10%	0.001
ESRD	0.90%	1.10%	−0.022	0.70%	0.02	0.90%	−0.001	0.90%	0
Institutionalized	0.80%	0.60%	0.028	0.60%	0.024	0.80%	0	0.80%	0
HCC risk score	1.06	1.05	0.012	1.08	−0.021	1.06	−0.001	1.06	0
Charlson score	0.88	0.78	0.064	0.83	0.034	0.88	0	0.88	0
Population density	355.77	340.35	0.044	347.63	0.024	335.39	0.027	355.78	0
Percent primary care	92.80%	61.60%	2.315	90.30%	0.18	92.50%	0.027	92.90%	−0.004
Non-solo primary care	98.40%	99.60%	−0.129	45.50%	1.453	98.40%	−0.001	97.30%	0.071
FQHC	0.00%	0.00%	NA	0.00%	NA	0.00%	NA	0.00%	NA
RHC	0.00%	0.00%	NA	0.00%	NA	0.00%	NA	0.00%	NA
CAH	0.00%	0.00%	NA	0.00%	NA	0.00%	NA	0.00%	NA
Median household income	47,700	51,200	−0.565	47,300	0.07	47,800	−0.009	47,700	0.002

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-8a
Distribution of propensity scores before and after entropy balance weighting in PA-NE vs the PCMH CG



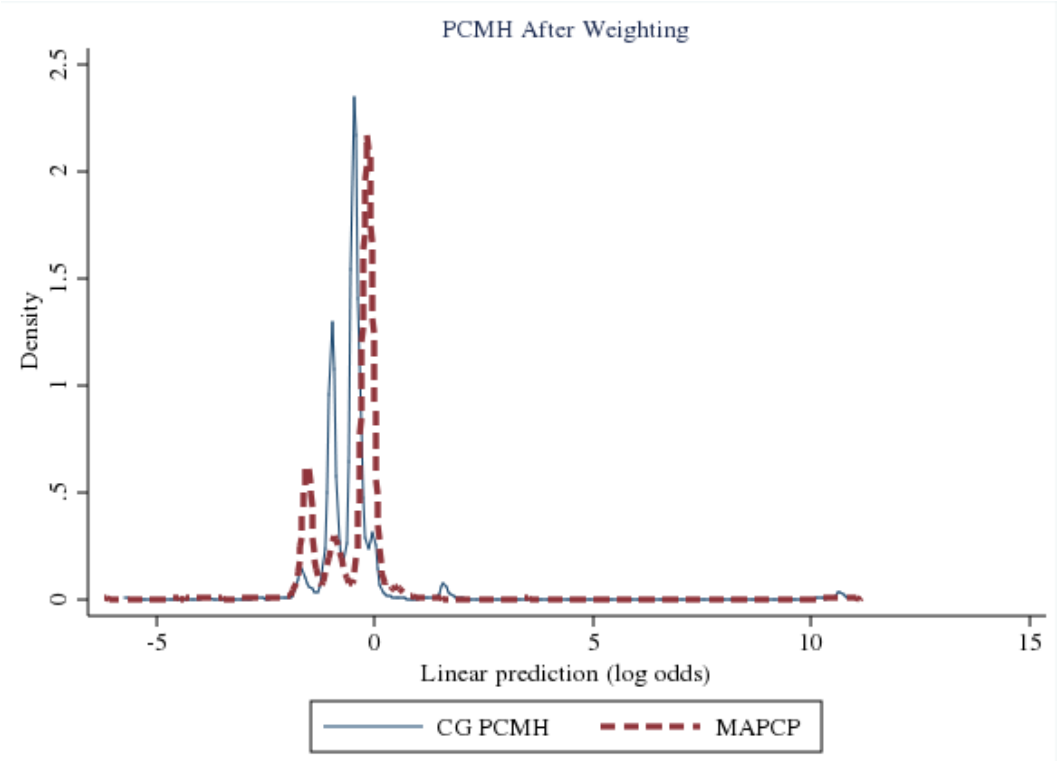


Figure M-8b
Distribution of propensity scores before and after entropy balance weighting in PA-NE vs the non-PCMH CG

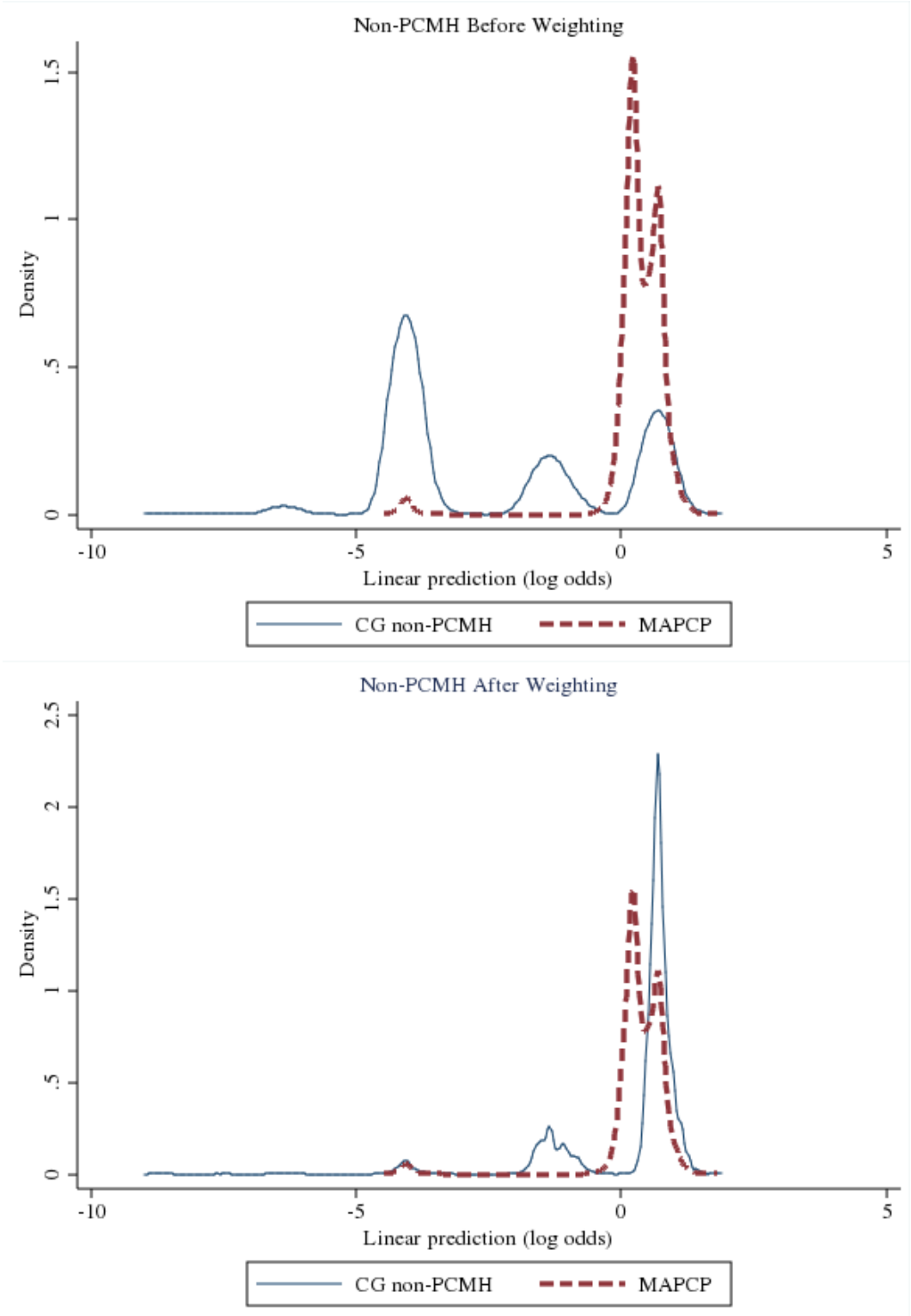
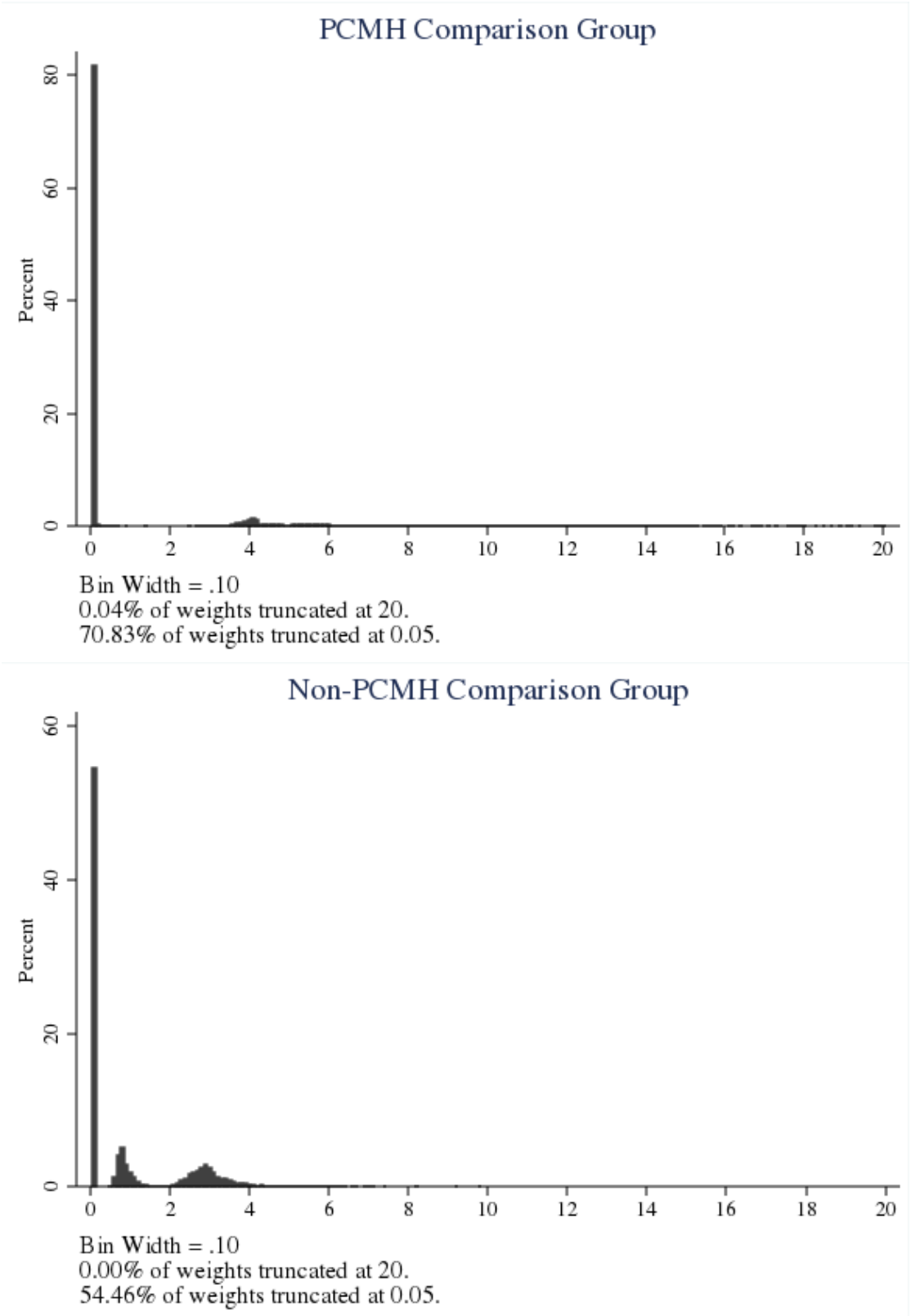


Figure M-8c
Distribution of entropy balance weights in PA-NE



M.10 Pennsylvania - Southeast Demonstration and Comparison Groups

The southeast region included five counties in the greater Philadelphia area. Comparisons were drawn from the same counties. Although the number of MAPCP Demonstration practices is comparatively small, there is a large number of primary care practices in this area. As a result, the CG was based on a random sample of 30 percent of the practices in the target area.

Analyses for the southeast Pennsylvania region were based on beneficiaries from 22 MAPCP Demonstration practices, 13 NCQA-recognized comparison PCMHs (TINs), and 203 non-PCMHs (TINs).

M.10.1 Group Comparability

Relative to the demonstration group, the unweighted PCMH CG in Pennsylvania was comparable in age and disability status, and less likely to be non-White and dually eligible for Medicare and Medicaid. The unweighted non-PCMH CG was older and less likely to be non-White, disabled, and dually eligible than the demonstration group. General health before assignment—as measured by the HCC risk and Charlson score—was comparable among the three groups in terms of HCC risk, but the non-PCMH CG had a slightly lower Charlson score relative to the other groups. Non-PCMH beneficiaries largely were assigned to practices with higher proportions of primary care doctors and were more likely to be assigned to FQHCs relative to either group. Lastly, beneficiaries in the demonstration group, on average, were located in much more densely populated areas and in areas with somewhat lower median household incomes compared to either CG. These average differences were eliminated, however, after reweighting.

Looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5. For both CGs, no weights were capped at 20, but for the PCMH CG, roughly 0.04 percent of weights capped at 0.05, and for the non-PCMH CG, roughly 37.75 percent of weights capped at 0.05.[8] Areas of common support also were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

[8] The 38% of non-PCMH CG members who had weights less than 0.05 did not resemble the intervention group on the observable characteristics included in the propensity score. While these individuals were included in the analysis, they contributed very little to the resulting regression estimates. The large number of CG members with larger weights and who more closely resembled the interention group primarily contributed to the regression estimates.

Table M-9a
Pennsylvania-SE: Comparison of average characteristics between MAPCP and PCMH/non-PCMH comparison beneficiaries before and after weighting

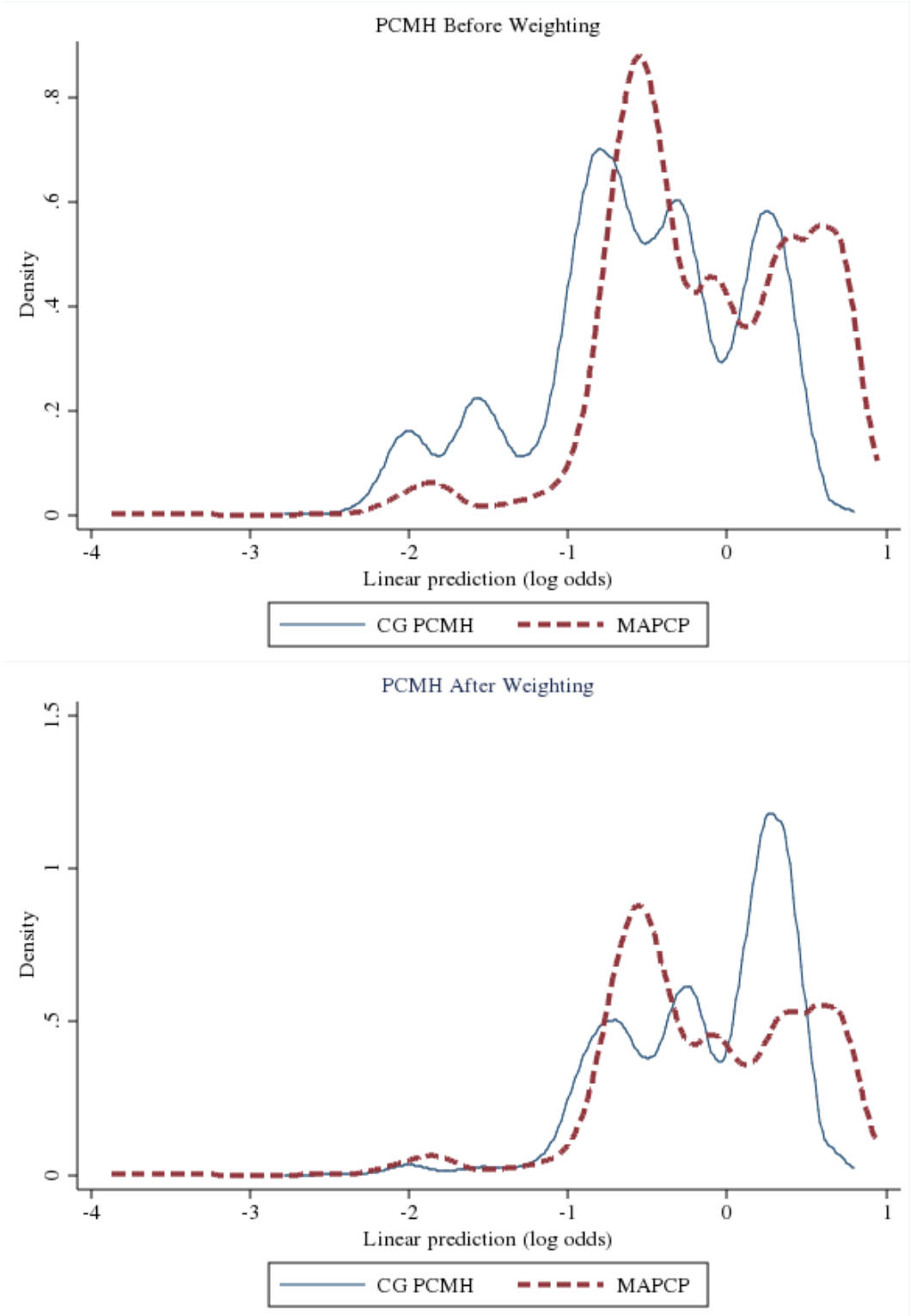
	MAPCP	Unweighted means and standardized differences				Weighted means and standardized differences			
		PCMH		Non-PCMH		PCMH		Non-PCMH	
	(N = 16,385)	(N = 22,950)	STDF	(N = 65,331)	STDF	(N = 22,950)	STDF	(N = 65,331)	STDF
Age	67.9	68.7	−0.059	70.6	−0.203	67.9	0.000	67.9	−0.002
Female	61.8%	58.3%	0.073	57.4%	0.092	61.8%	0.000	61.8%	0.001
Non-White	40.9%	30.5%	0.219	21.6%	0.427	40.9%	0.000	40.8%	0.003
Disabled	28.8%	29.0%	−0.003	23.0%	0.134	28.8%	0.000	28.8%	0.001
Medicaid dual eligible	23.4%	21.8%	0.036	21.1%	0.055	23.4%	0.000	23.4%	0.000
ESRD	1.8%	1.7%	0.008	1.0%	0.073	1.8%	0.000	1.8%	0.001
Institutionalized	0.8%	0.9%	−0.009	1.5%	−0.063	0.8%	0.000	0.8%	0.000
HCC risk score	1.06	1.06	−0.008	1.05	0.006	1.06	0.000	1.06	0.000
Charlson score	0.87	0.83	0.020	0.78	0.052	0.87	0.000	0.87	0.001
Population density	7,256.23	5,374.32	0.400	4,848.28	0.519	7,256.23	0.000	7,237.85	0.004
Percent primary care	88.0%	85.0%	0.186	90.0%	−0.114	88.0%	0.000	88.0%	−0.003
Non-solo primary care	98.9%	94.3%	0.257	62.6%	1.037	98.9%	0.000	98.2%	0.064
FQHC	4.0%	5.6%	−0.074	10.4%	−0.248	4.0%	0.000	4.0%	0.000
RHC	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
CAH	0.0%	0.0%	NA	0.0%	NA	0.0%	NA	0.0%	NA
Median household income	52,500	60,900	−0.437	62,900	−0.549	52,500	0.000	52,600	−0.004

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that standardized differences cannot be estimated.

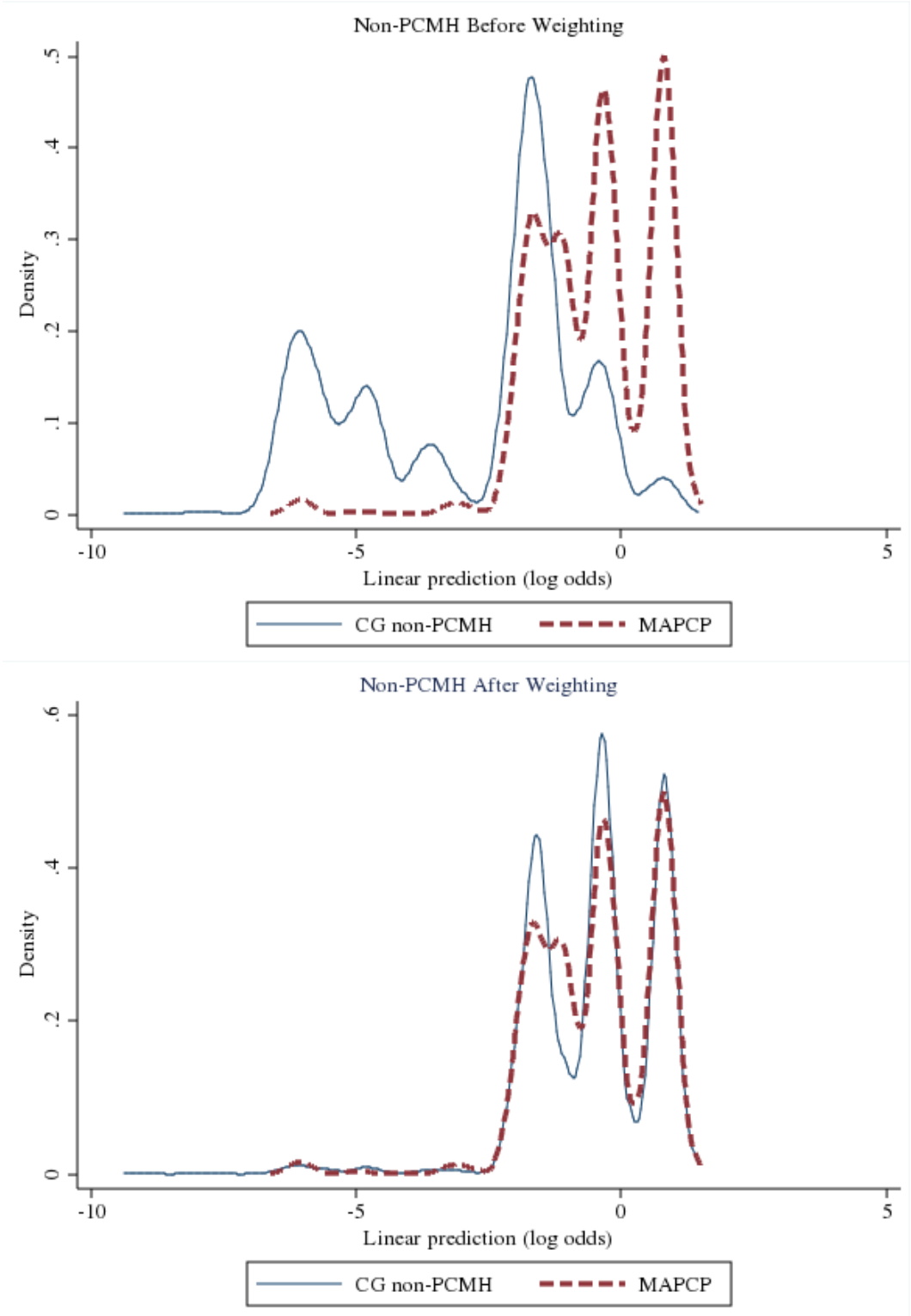
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure M-9a
Distribution of propensity scores before and after entropy balance weighting in PA-SE vs the PCMH CG



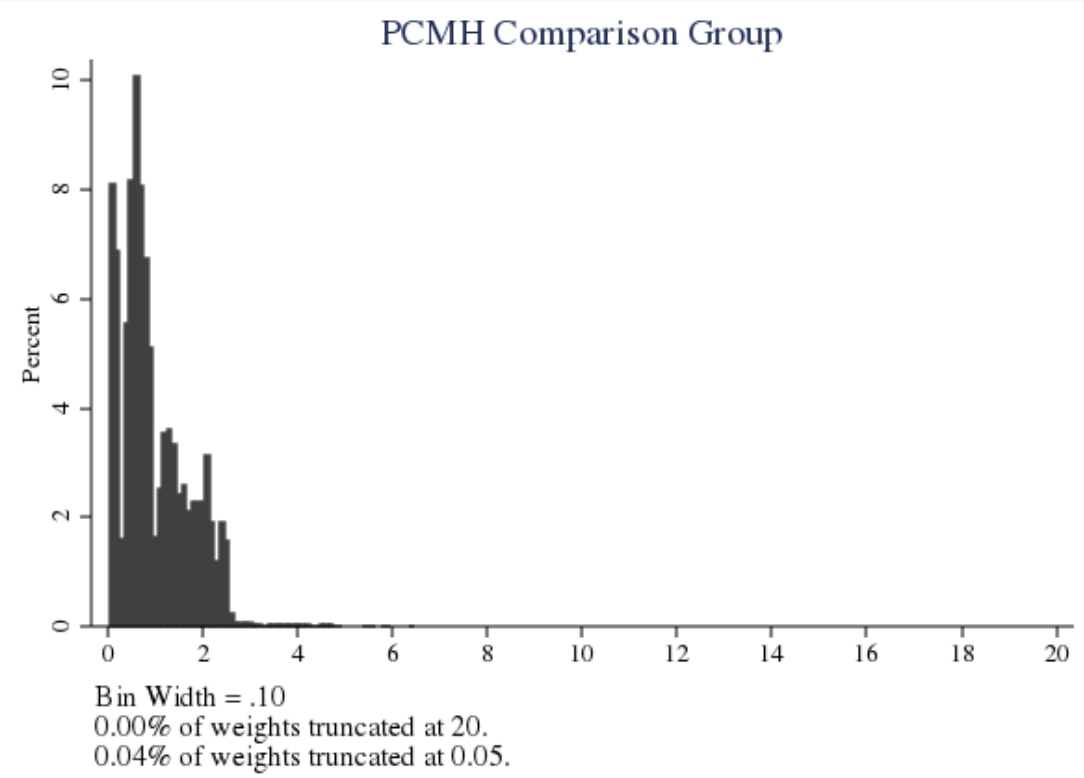
I

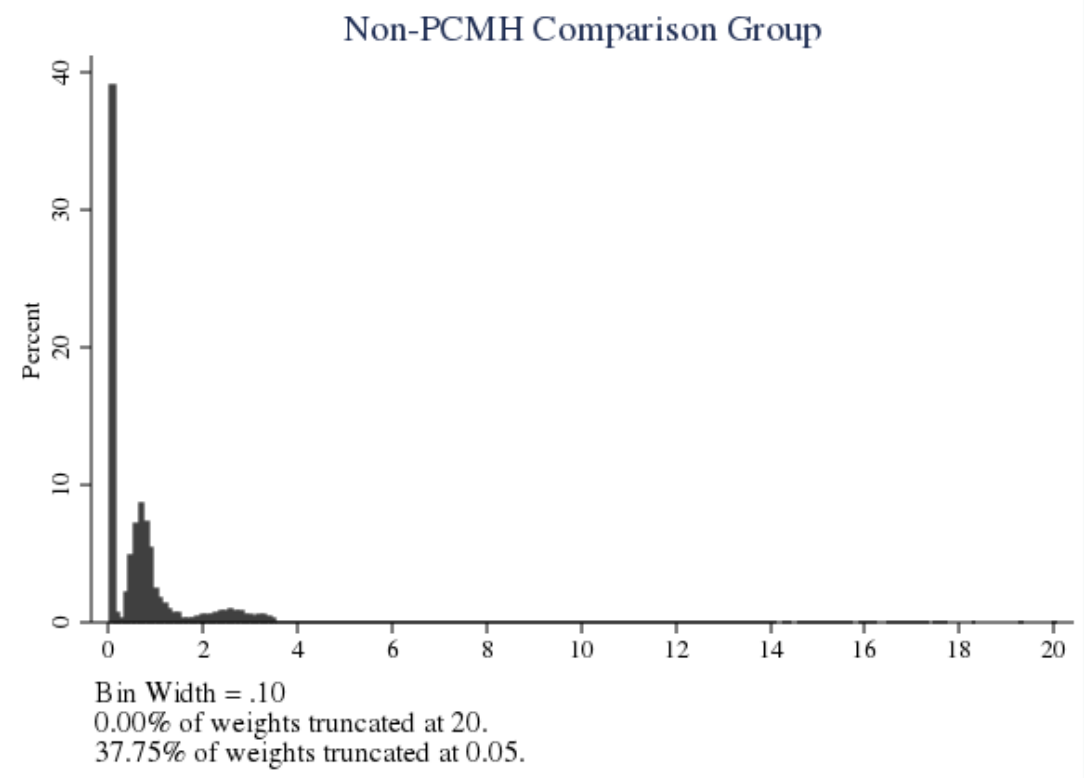
Figure M-9b
Distribution of propensity scores before and after entropy balance weighting in PA-SE vs the non-PCMH CG



I

Figure M-9c
Distribution of entropy balance weights in PA-SE





APPENDIX N
MEDICAID COMPARISON GROUP COMPARABILITY TO MAPCP DEMONSTRATION BENEFICIARIES BY STATE

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N.1 Weighting

Comparison group (CG) beneficiaries in the Medicaid analysis samples were weighted by applying the same methodology used for the Medicare analysis samples. See ***Section 1.2.5*** and ***Appendix M*** for additional details regarding this weighting methodology. In this appendix, we present diagnostic evidence to demonstrate how well our weighting scheme performed in terms of achieving covariate balance and common support. ***Appendix M*** provides additional detail regarding the diagnostic methodology we used to assess the performance of our weighting scheme.

N.1.1 Interpreting State Tables

In the following tables, demonstration and unweighted CG means are shown in the second, third, and fifth columns, and STDFs (for the unweighted means) are shown in the fourth and sixth columns. Columns 6 through 10 show the effect of entropy balancing on the CG means and their STDFs after weighting. The effects of weighting can be discerned by examining the changes in unweighted and weighted means for the CGs and the decreases of STDFs before and after weighting. A general threshold for acceptable comparability between groups is a less than 0.10 (absolute value). For very small and very large proportions (e.g., 99%), the formula for STDFs typically overstates the distance between the two groups even though the difference in practical terms may be negligible.

When evaluating the distribution of weights from the entropy balance equation, it is typically beneficial if the majority of the distribution contains moderately sized values (e.g., less than 5) and there are relatively few extreme values; this indicates that there was reasonable overlap between the propensity scores of the treatment group and CGs. In this appendix, figures displaying the distribution of weights contain footnotes indicating the percentage of comparison weights that were trimmed because they were greater than 20 or less than 0.05. Finally, the distributions of propensity scores should be evaluated for their overlap before weighting and for their symmetry after weighting. When a propensity score model could not be estimated using the full set of covariates (due to a convergence failure in the estimation algorithm), a restricted model using a subset of variables was estimated instead. In these cases, the comparison of propensity score distributions before and after entropy balance weighting were less useful, but the figures still are presented here, along with a note about which variables had to be omitted from the propensity score model.

N.2 New York Demonstration and Comparison Groups

New York's MAPCP Demonstration sites are located in seven counties in the Adirondacks region. Because nearly all the recognized PCMHs in these counties were part of the MAPCP Demonstration, a comparison area in another region of the state was chosen. With input from state initiative staff, 16 New York comparison counties were identified to the south and east of the Adirondacks. The comparisons had a similar mix of rural, micropolitan, and metropolitan areas. Several additional counties were considered but rejected because they had median income or Medicare expenditure levels outside the range observed in the demonstration counties. To achieve balance on practice characteristics, all federally qualified health centers (FQHCs) and critical access hospitals (CAHs) in New York were utilized in the CG.

The New York analyses are based on 40 MAPCP Demonstration practices, 33 comparison PCMHs (tax identification numbers [TIN]) and 106 comparison non-PCMHs (TINs).

N.2.1 Group Comparability

Children. Among children, the unweighted PCMH CG and the unweighted non-PCMH CG in New York had more non-White beneficiaries and were located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, both unweighted CGs had a lower proportion of tax identification number (TIN)-associated providers that were primary care. The unweighted PCMH CG also had more beneficiaries assigned to FQHCs. Lastly, the unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider and that were located in counties with lower median household incomes.

After weighting, adequate covariate balance was achieved among children for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the PCMH CG, the STDF for median household income improved after applying entropy balance weights but was still greater than 0.10 (in absolute value). Likewise, when comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for population density improved after applying entropy balance weights but was still was greater than 0.10 (in absolute value). This is partially because the entropy balance algorithm could not converge if we included population density for this comparison. As a result of this nonconvergence, we also excluded it from the propensity score model comparing MAPCP Demonstration beneficiaries with the non-PCMH CG. Lastly, the STDF for non-solo primary care, when comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, was still greater than 0.10 (in absolute value). The non-solo primary care proportions, however, are not dramatically different; the proportions are 100 percent among the demonstration group and 99 percent among the non-PCMH CG. The STDF can overstate the difference between such large proportions. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among children, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 1. Among children in the PCMH CG, almost 3 percent of weights were capped at 20. Less than 1 percent of weights were capped at 20 among children in the non-PCMH CG. No weights were truncated at 0.05 among children in either PCMH or non-PCMH CGs. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-1
New York: Comparison of average characteristics between MAPCP Demonstration children and PCMH/non-PCMH children comparison beneficiaries before and after weighting

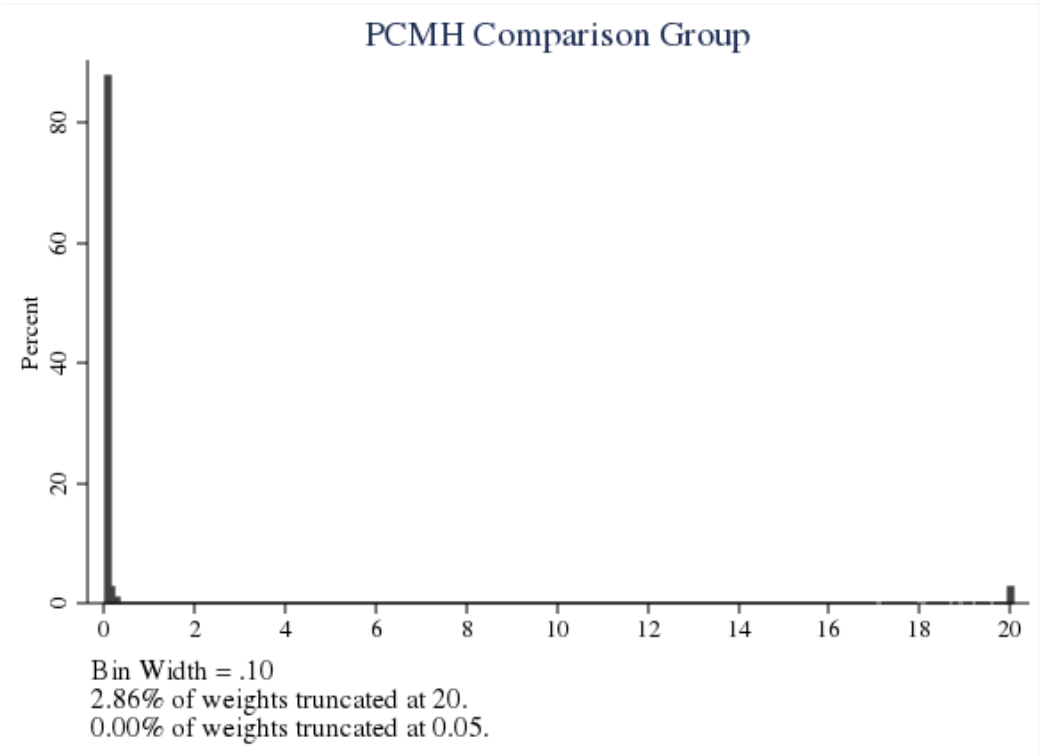
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 22,376)	PCMH (N = 84,969)		Non-PCMH (N = 84,891)		PCMH (N = 84,969)		Non-PCMH (N = 84,891)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	6.20	6.40	−0.04	6.29	−0.02	6.19	0.00	6.17	0.01
Female	0.48	0.50	−0.03	0.49	−0.02	0.48	0.00	0.48	0.00
Non-White	0.11	0.45	−0.82	0.31	−0.50	0.12	−0.05	0.11	−0.01
Disabled	0.06	0.05	0.04	0.05	0.05	0.06	0.00	0.06	0.01
Institutionalized	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Low birthweight and serious perinatal problems	0.03	0.02	0.04	0.02	0.04	0.03	0.00	0.03	0.00
CDPS score	1.03	0.96	0.07	0.96	0.06	1.03	0.00	1.02	0.01
Population density	101.38	449.83	−0.26	293.38	−0.18	115.42	−0.02	303.63	−0.17
Percent primary care	0.94	0.66	2.34	0.75	1.15	0.93	0.08	0.93	0.06
Non-solo primary care	1.00	1.00	0.02	0.79	0.71	1.00	0.00	0.99	0.11
FQHC	0.37	0.57	−0.41	0.32	0.12	0.38	−0.02	0.36	0.02
RHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
CAH	0.01	0.01	−0.03	0.03	−0.16	0.01	0.02	0.01	0.00
Median household income	50,500	51,500	−0.21	47,800	0.57	49,900	0.11	50,000	0.09

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-1a
Distribution of entropy balance weights among New York children in the CGs



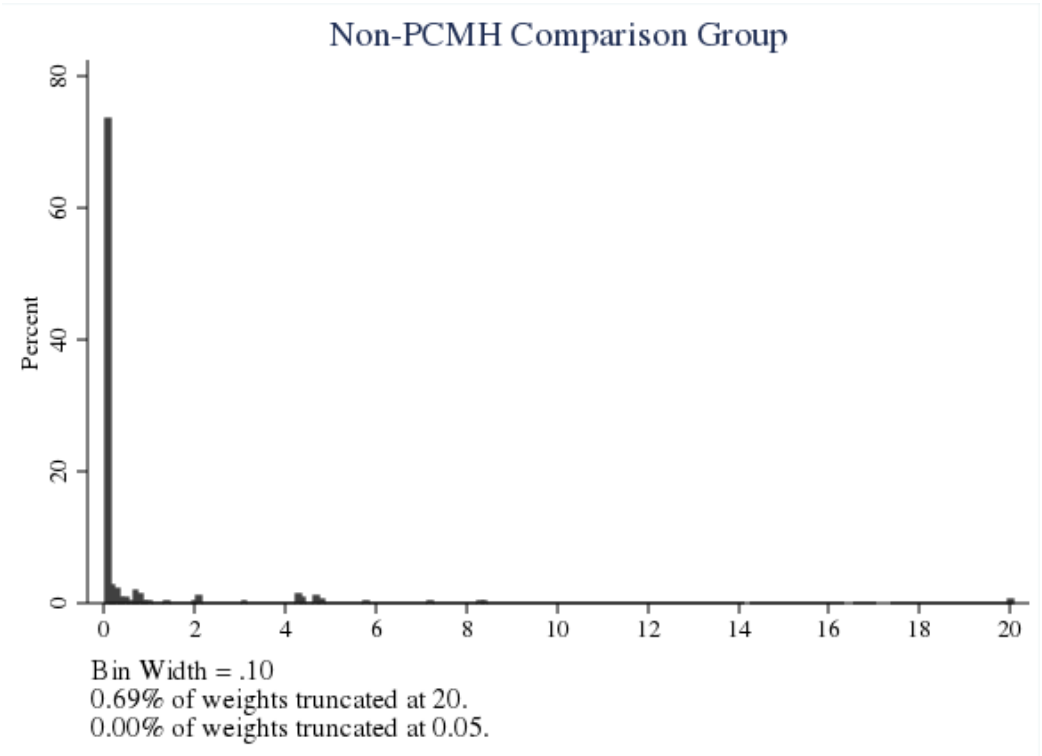


Figure N-1b
Distribution of propensity scores among New York children before and after entropy balance weighting with the PCMH CG

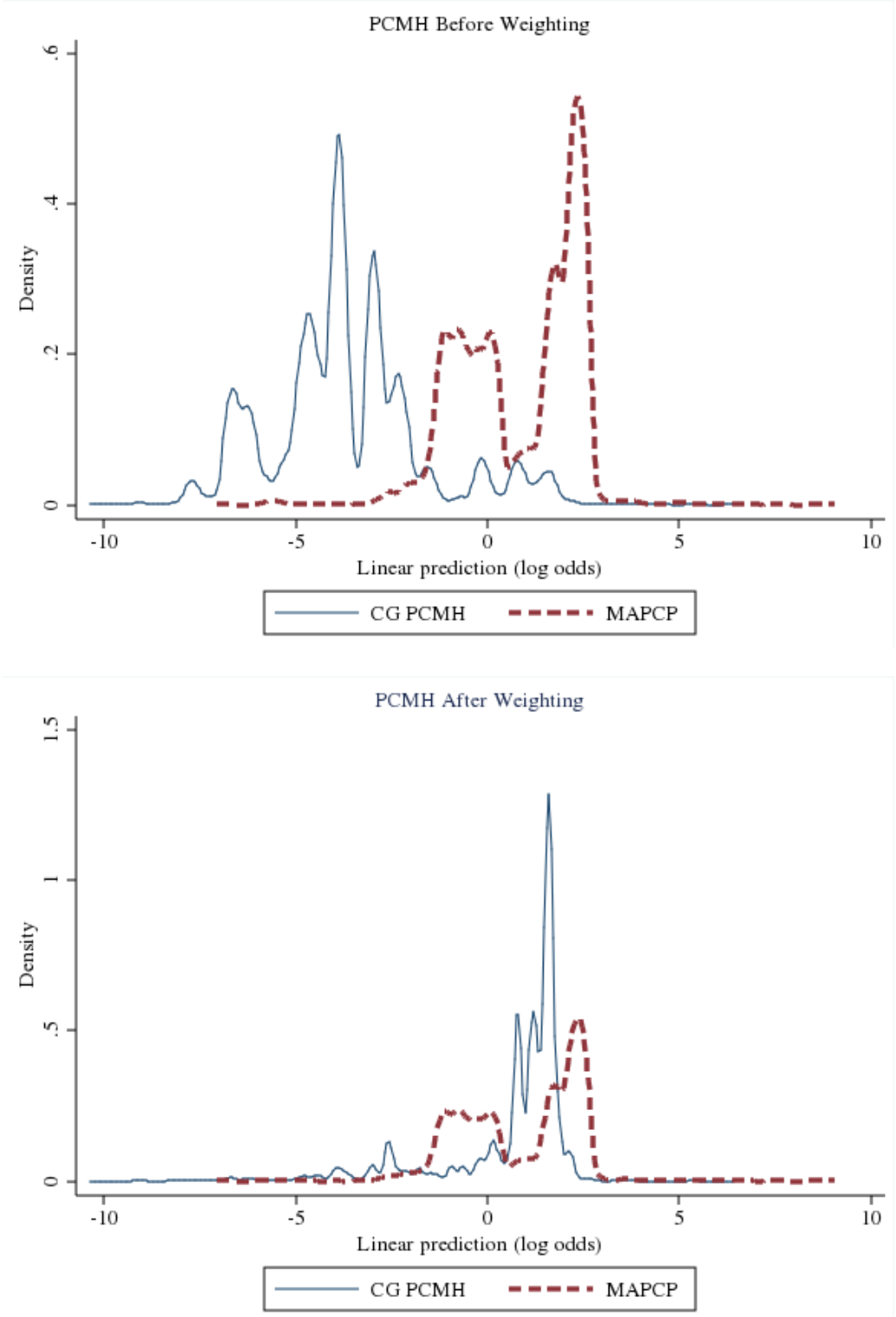
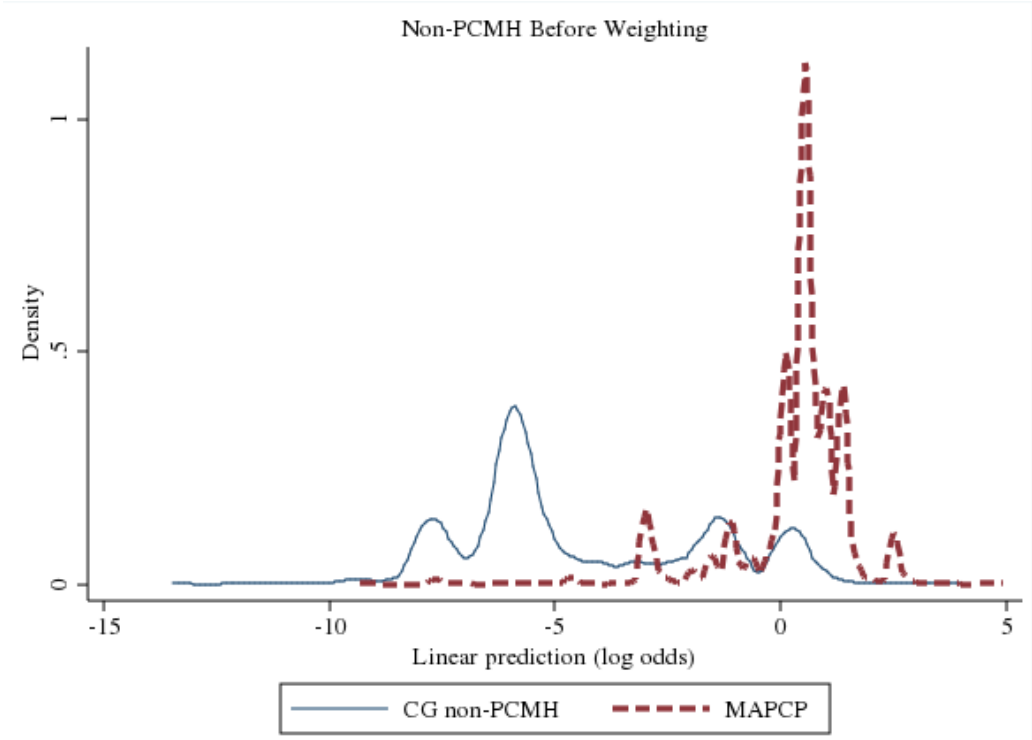
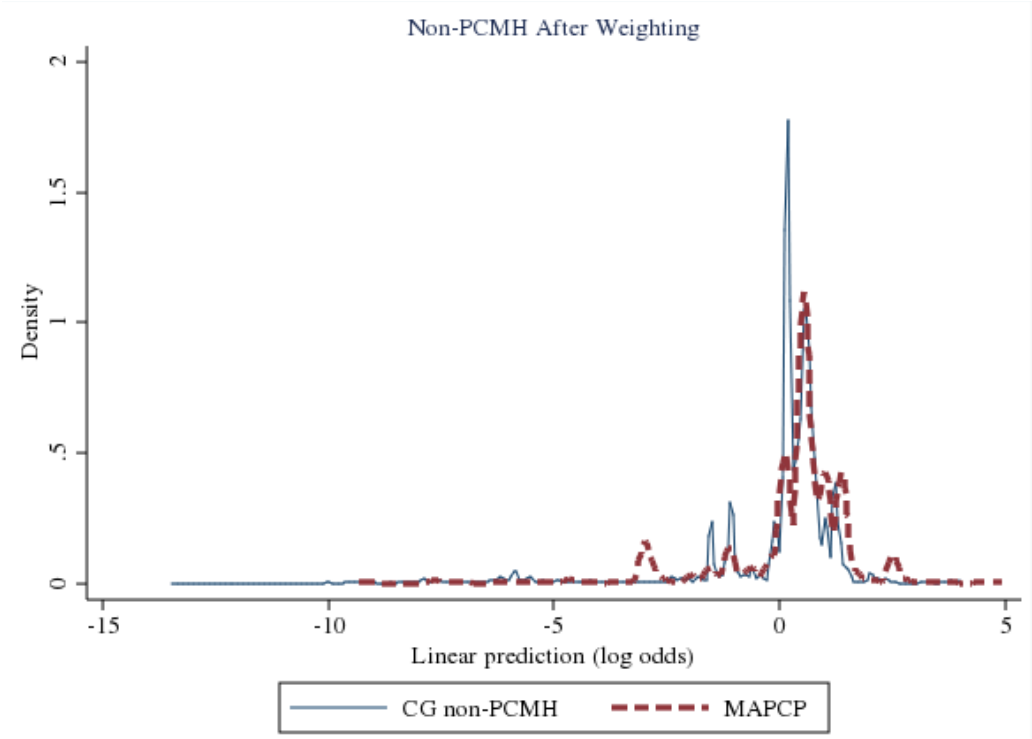


Figure N-1c
Distribution of propensity scores among New York children before and after entropy balance weighting with the non-PCMH CG





Adults. Among adults, the unweighted PCMH CG and the unweighted non-PCMH CG in New York had more non-White beneficiaries and were located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. The unweighted PCMH and non-PCMH CGs also had fewer disabled beneficiaries. Additionally, both unweighted CGs had a lower proportion of TIN-associated providers that were primary care. The unweighted PCMH CG also had more beneficiaries assigned to FQHCs, while the unweighted non-PCMH CG had fewer beneficiaries assigned to FQHCs. Similarly, the unweighted PCMH CG had a higher proportion of TINs with more than one primary care provider, while the unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider. Lastly, the unweighted non-PCMH CG had a lower median household income.

After weighting, adequate covariate balance was achieved among adults for all covariates. That is, STDFs were less than 0.10 (in absolute value) for all covariates and for all comparisons.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 2. Among adults in the PCMH CG, less than 1 percent of weights were capped at 20. Almost 2 percent of weights were capped at 20 among adults in the non-PCMH CG. No weights were truncated at 0.05 among adults in either the PCMH or non-PCMH CGs. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-2
New York: Comparison of average characteristics between MAPCP Demonstration adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

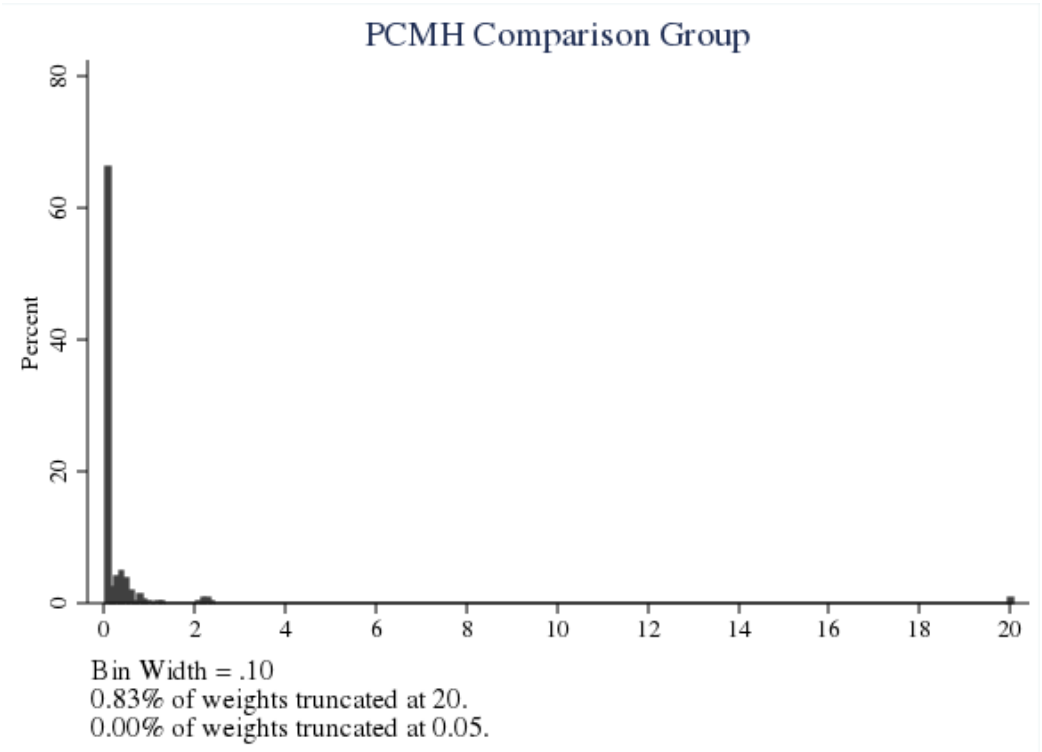
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 24,895)	PCMH (N = 105,879)		Non-PCMH (N = 86,154)		PCMH (N = 105,879)		Non-PCMH (N = 86,154)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	35.24	34.61	0.05	34.49	0.06	35.24	0.00	35.26	0.00
Female	0.58	0.58	0.01	0.57	0.01	0.58	0.00	0.58	0.00
Non-White	0.10	0.40	−0.75	0.28	−0.48	0.10	−0.02	0.11	−0.03
Disabled	0.15	0.11	0.14	0.11	0.14	0.15	0.00	0.15	0.00
Institutionalized	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00
CDPS score	1.83	1.71	0.05	1.70	0.05	1.83	0.00	1.83	0.00
Population density	131.66	526.21	−0.22	345.65	−0.16	142.22	−0.01	140.15	−0.01
Percent primary care	0.90	0.67	1.75	0.72	1.15	0.90	0.00	0.90	0.03
Non-solo primary care	0.96	0.99	−0.18	0.87	0.32	0.96	0.00	0.96	0.01
FQHC	0.48	0.62	−0.30	0.37	0.23	0.48	0.00	0.47	0.03
RHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
CAH	0.04	0.02	0.07	0.06	−0.10	0.03	0.01	0.04	−0.01
Median household income	51,200	51,800	−0.09	48,500	0.54	50,900	0.05	51,100	0.03

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = STDF; TIN = tax identification number.

Figure N-2a
Distribution of entropy balance weights among New York children in the CGs



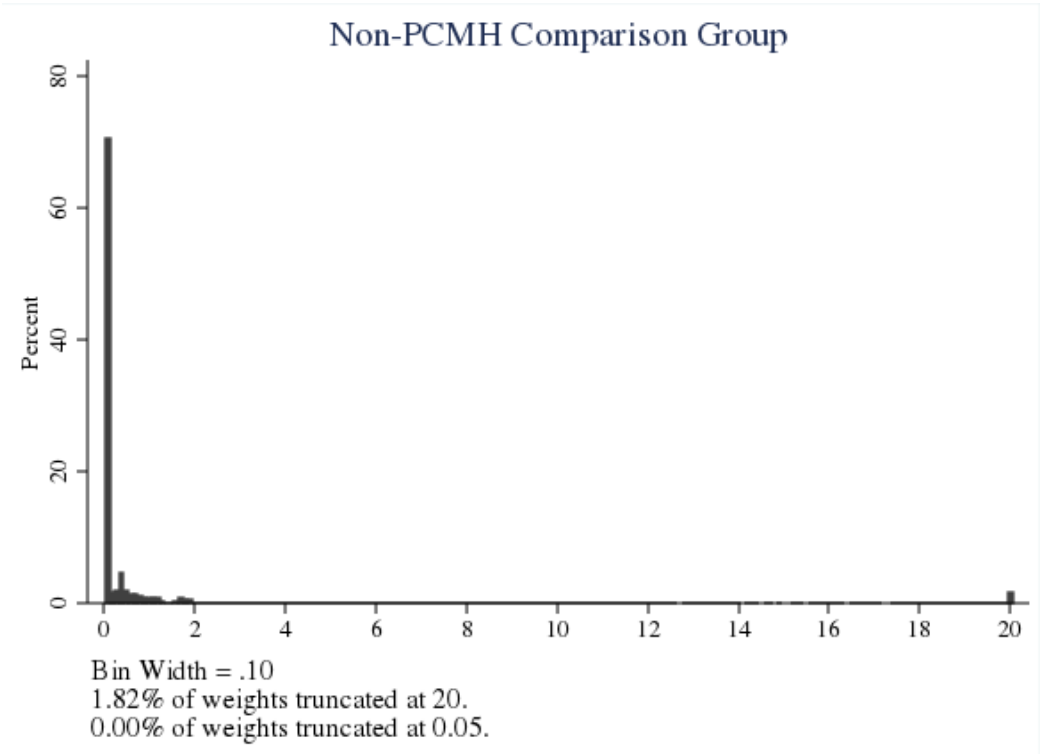


Figure N-2b
Distribution of propensity scores among New York children before and after entropy balance weighting with the PCMH CG

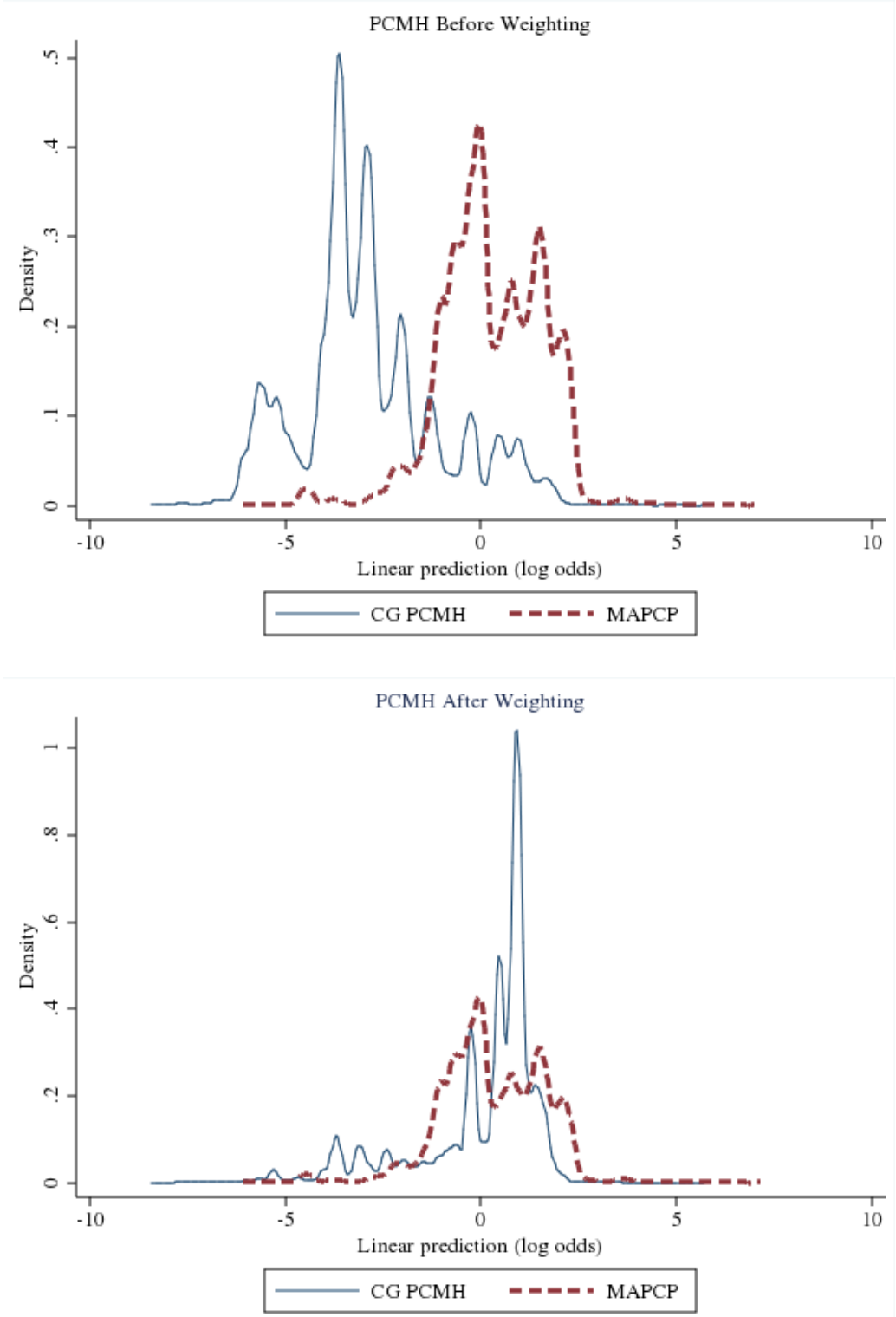
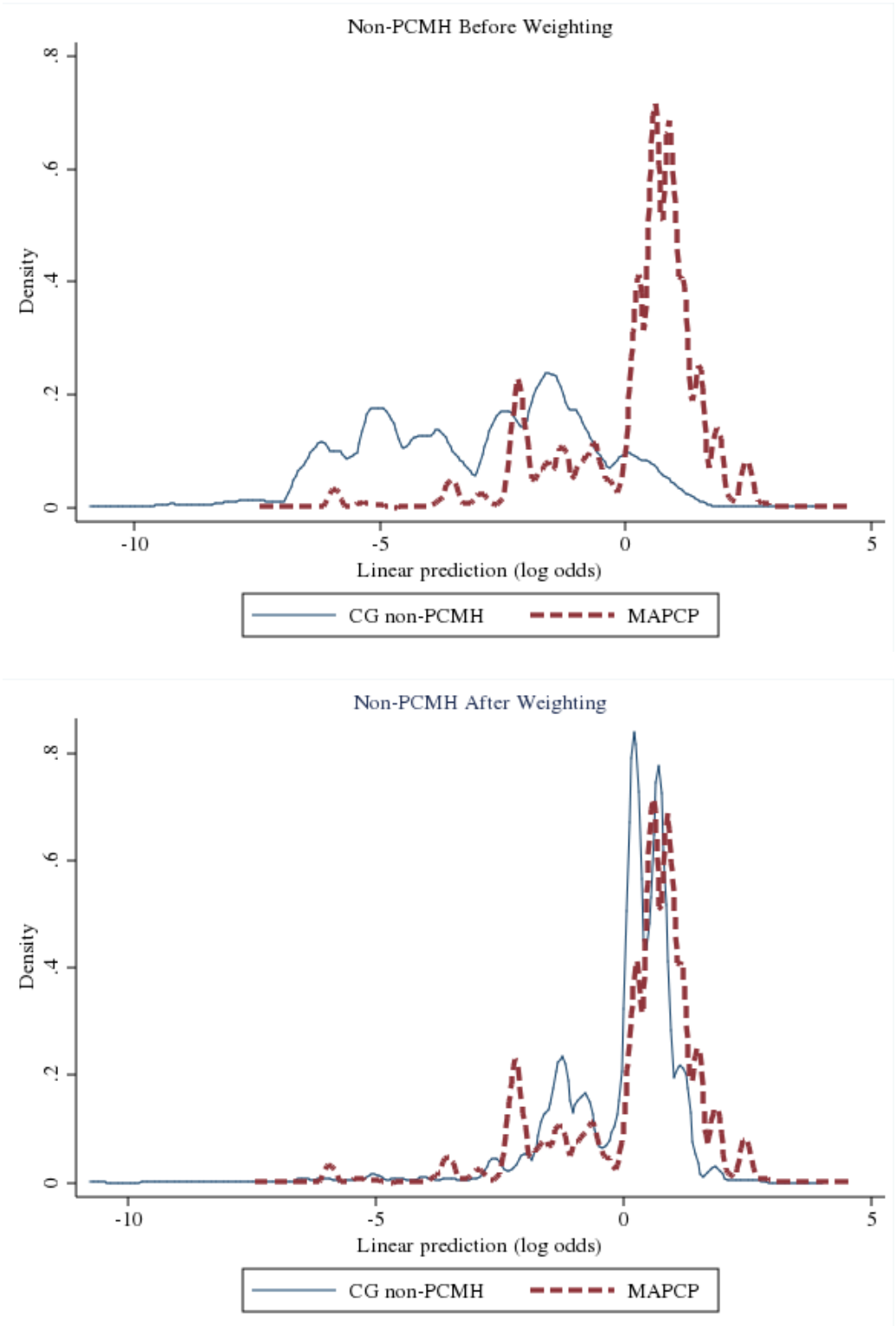


Figure N-2c
Distribution of propensity scores among New York children before and after entropy balance weighting with the non-PCMH CG



N.3 Rhode Island Demonstration and Comparison Groups

Rhode Island had the smallest number of practices participating in the MAPCP Demonstration, with demonstration practices located in three of the five counties in the state. These three counties were also used for the comparison area. All of the counties were classified as metropolitan areas.

The Rhode Island analyses are based on 12 MAPCP Demonstration practices, 21 comparison PCMHs (tax identification numbers [TINs]) and 110 comparison non-PCMHs (TINs).

N.3.1 Group Comparability

Adults. Among adults in Rhode Island, both CGs had similar unweighted means to the MAPCP Demonstration group for female, disability status, and CDPS score. Relative to the MAPCP Demonstration group, the unweighted PCMH CG was older, had a lower proportion of TINs with more than one primary care provider, had a lower proportion of beneficiaries assigned to FQHCs, and had a higher median household income. The unweighted non-PCMH CG also had a lower proportion of TINs with more than one primary care provider, and a lower proportion of beneficiaries assigned to FQHCs. Lastly, relative to the MAPCP Demonstration group, the unweighted non-PCMH CG also had a lower proportion of TIN-associated providers that were primary care.

After weighting, adequate covariate balance was achieved among adults for almost all covariates and comparisons. That is, STDFs were less than 0.10 (in absolute value) for almost all covariates and comparisons. However, after weighting the non-PCMH CG, the STDF for the percent of TIN-associated providers that that were primary care was still well above 0.10 (in absolute value). This is likely because the entropy balance algorithm could not converge if we included this covariate. As a result of this nonconvergence, we also excluded it from the propensity score model comparing demonstration beneficiaries with the non-PCMH CG.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 1. Among adults in both CGs, no weights were capped at 20 or 0.05. There were some areas observed with little overlap in the propensity score distributions across the PCMH CG and the MAPCP Demonstration group. These areas of little overlap persisted even after weighting. Areas of common support were observed across the non-PCMH CG and the demonstration group in most regions of the MAPCP Demonstration group's propensity score distribution. The non-PCMH CG and demonstration propensity score distributions also were fairly symmetric after weighting.

Table N-3
Rhode Island: Comparison of average characteristics between MAPCP Demonstration adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

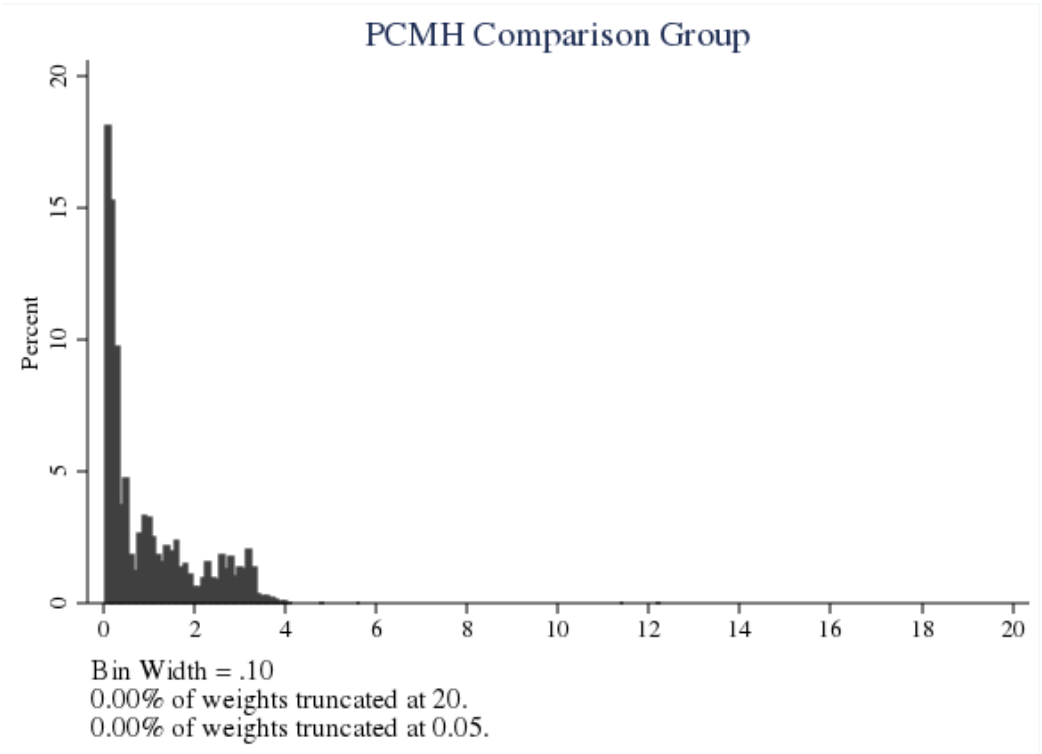
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 27,402)	PCMH (N = 5,369)		Non-PCMH (N = 32,870)		PCMH (N = 5,369)		Non-PCMH (N = 32,870)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	32.22	33.88	−0.17	32.91	−0.07	32.24	0.00	32.23	0.00
Female	0.71	0.67	0.08	0.70	0.02	0.71	0.00	0.71	0.00
Disabled	0.12	0.10	0.06	0.10	0.06	0.12	0.00	0.12	0.00
CDPS score	0.78	0.78	0.00	0.76	0.03	0.78	0.00	0.78	0.00
Population density	1,375.04	1,332.75	0.12	1,351.59	0.07	1,375.16	0.00	1,374.86	0.00
Percent primary care	0.86	0.87	−0.06	0.73	0.62	0.86	0.00	0.73	0.60
Non-solo primary care	1.00	0.84	0.60	0.90	0.46	0.99	0.07	0.99	0.04
FQHC	0.58	0.21	0.81	0.67	−0.19	0.57	0.01	0.58	0.00
RHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
CAH	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
Median household income	53,500	54,500	−0.13	53,500	−0.01	53,500	0.00	53,500	0.00

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-3a
Distribution of entropy balance weights among Rhode Island adults in the CGs



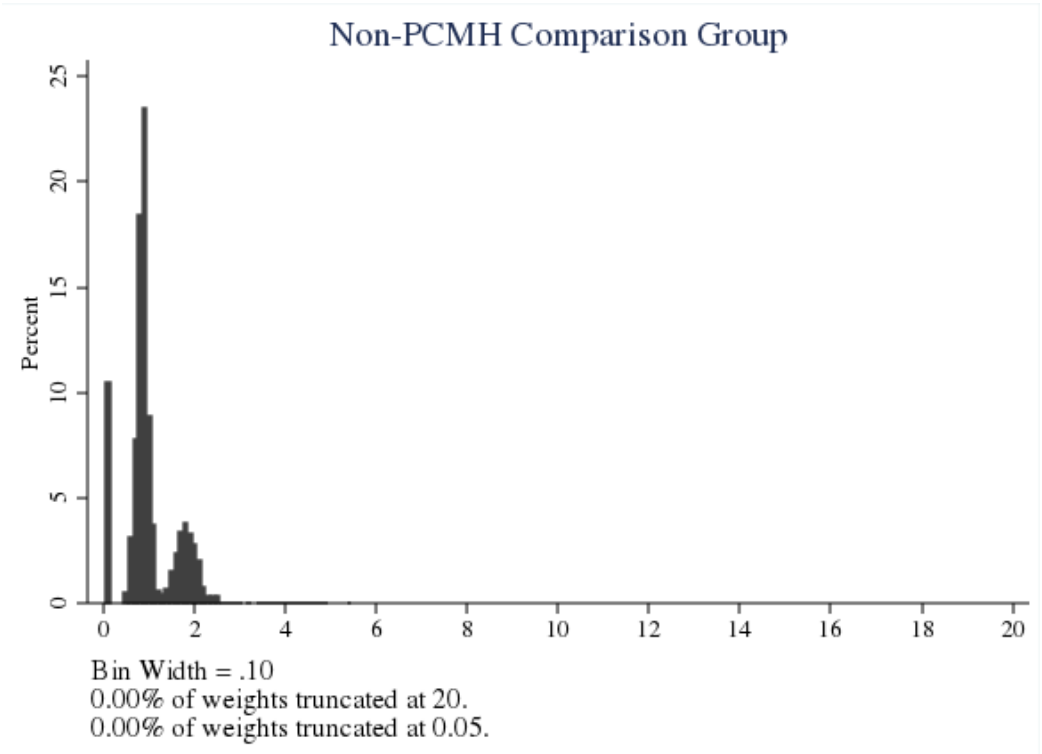


Figure N-3b
Distribution of propensity scores among Rhode Island adults before and after entropy balance weighting with the PCMH CG

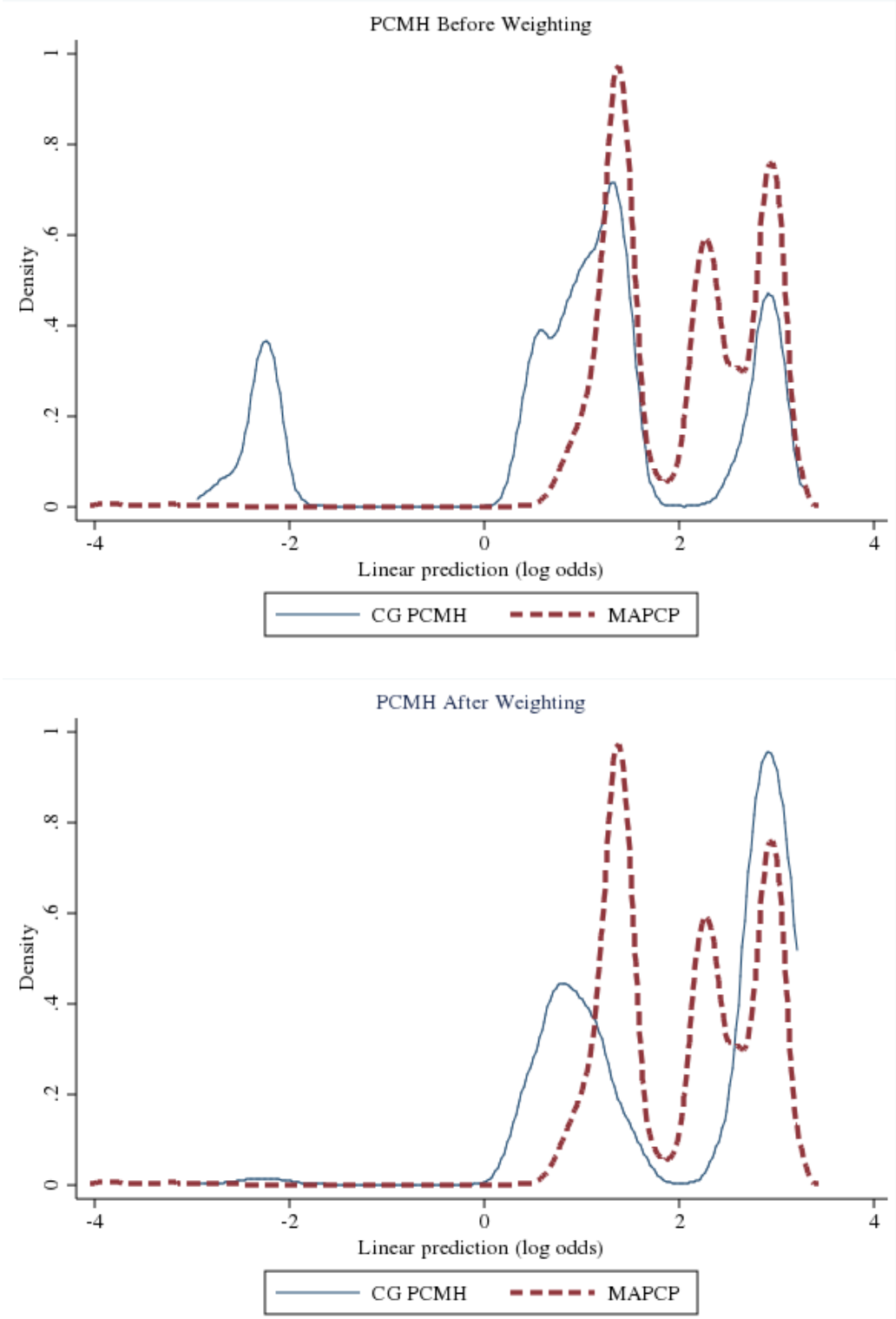
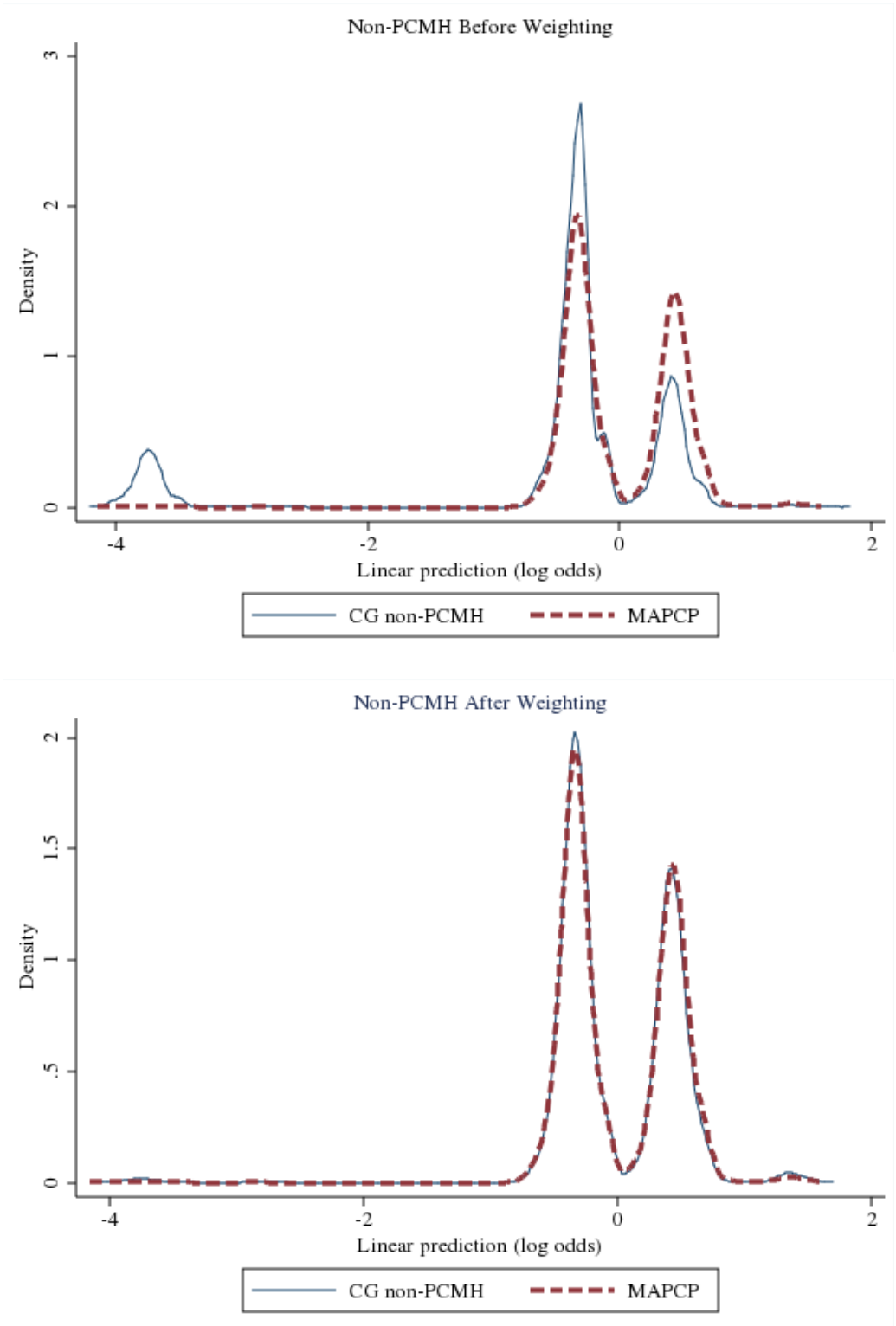


Figure N-3c
Distribution of propensity scores among Rhode Island adults before and after entropy balance weighting with the non-PCMH CG



N.4 Vermont Demonstration and Comparison Groups

Each of Vermont's counties contained at least one demonstration practice. The CG consisted of the same CG described above in ***Section N.2***.

The Vermont analyses are based on 89 MAPCP Demonstration practices, 33 comparison PCMHs (tax identification numbers [TIN]), and 106 comparison non-PCMHs (TINs).

N.4.1 Group Comparability

Children. Among children, the unweighted PCMH CG and the unweighted non-PCMH CG was more densely populated than the MAPCP Demonstration group. Additionally, both unweighted CGs relative to the demonstration group had a lower proportion of TIN-associated providers that were primary care, beneficiaries assigned to CAHs, and beneficiaries located in counties with lower median household incomes. The unweighted PCMH CG had a higher proportion of beneficiaries assigned to FQHCs. Both unweighted CGs had lower CDPS morbidity scores relative to the demonstration group. Lastly, the unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider.

After weighting, adequate covariate balance was achieved among children for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the PCMH CG, the STDF for CDPS score, population density, and CAHs improved after applying entropy balance weights, but was still greater than 0.10 (in absolute value). There were no RHCs in the PCMH CG. Accordingly, the STDF for RHCs did not change after applying entropy balance weights. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for CDPS score improved after applying entropy balance weights but was still was greater than 0.10 (in absolute value), while STDFs for population density and CAHs worsened. A major reason that we did not achieve perfect covariate balance was that population density and CAHs had to be omitted from the balancing model for both CGs. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among children, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 2. Among children in the PCMH CG, roughly 1 percent of weights were capped at 20. Less than 1 percent of weights were capped at 20 among children in the non-PCMH CG. No weights were bottom-coded at 0.05 in either CG. Propensity score models among children did not converge, even after excluding several covariates. Accordingly, overlap was not assessed for Vermont children.

Table N-4
Vermont: Comparison of average characteristics between MAPCP Demonstration children and PCMH/non-PCMH children comparison beneficiaries before and after weighting

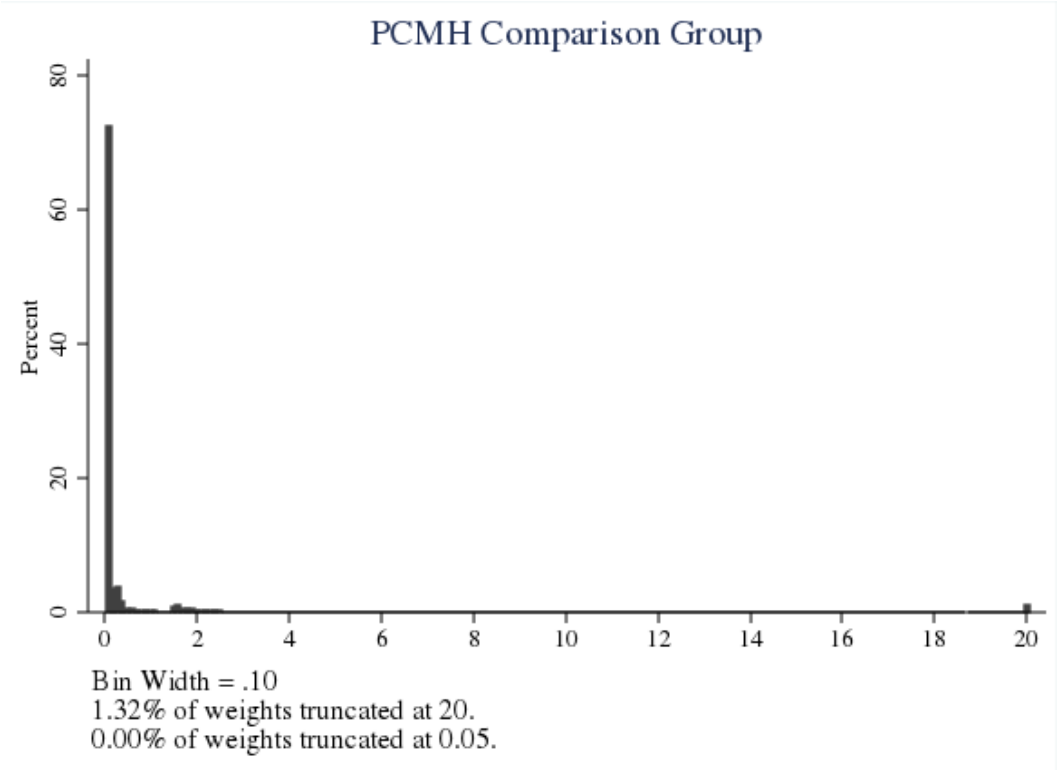
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 65,829)	PCMH (N = 72,127)		Non-PCMH (N = 84,398)		PCMH (N = 72,127)		Non-PCMH (N = 84,398)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	6.97	6.33	0.11	6.29	0.12	6.97	0.00	7.04	−0.01
Female	0.49	0.49	0.00	0.49	0.01	0.50	−0.01	0.49	0.00
Disabled	0.03	0.05	−0.11	0.05	−0.11	0.03	0.00	0.03	0.01
Institutionalized	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00
Low birthweight and serious perinatal problems	0.06	0.02	0.17	0.02	0.18	0.06	0.00	0.05	0.01
CDPS score	2.40	0.96	0.62	0.96	0.62	1.77	0.18	1.88	0.15
Population density	112.21	255.43	−0.41	254.29	−0.38	202.01	−0.27	334.05	−0.60
Percent primary care	0.79	0.64	1.09	0.75	0.21	0.79	−0.01	0.79	−0.02
Non-solo primary care	0.97	1.00	−0.23	0.79	0.55	0.96	0.01	0.97	−0.01
FQHC	0.23	0.51	−0.62	0.32	−0.20	0.23	0.00	0.23	0.00
RHC	0.14	0.00	0.58	0.00	0.58	0.00	0.58	0.00	0.58
CAH	0.45	0.02	1.21	0.03	1.12	0.01	1.21	0.03	1.15
Median household income	53,900	51,300	0.43	47,800	1.11	53,700	0.03	53,700	0.02

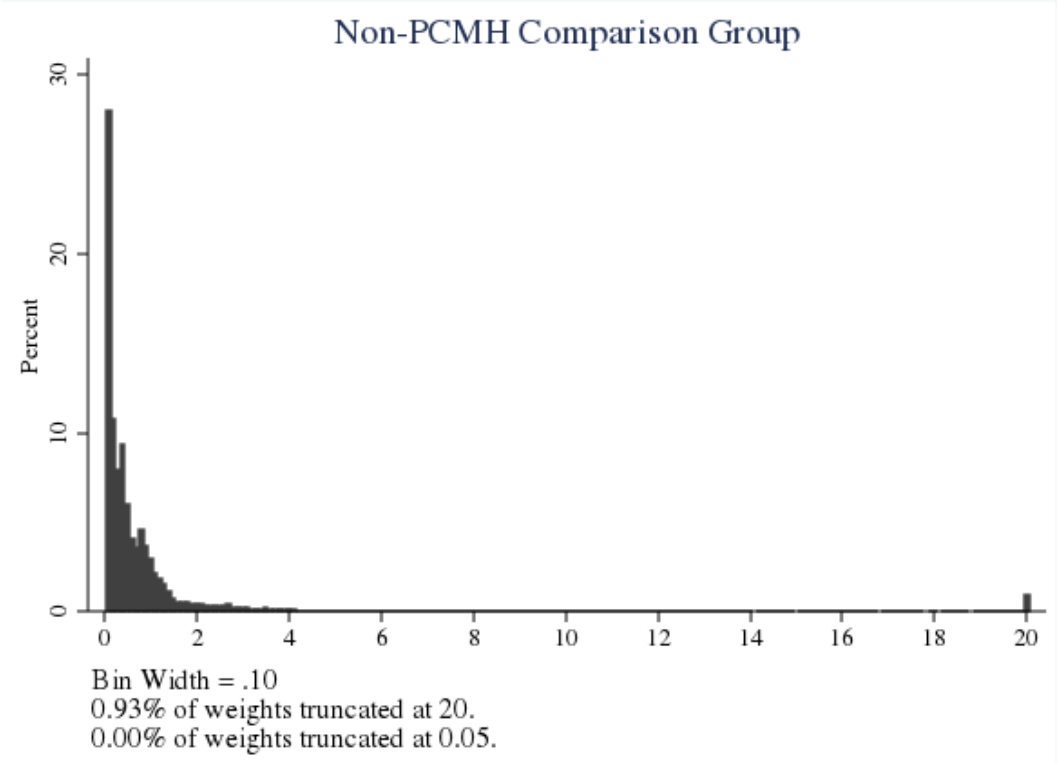
NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-4
Distribution of entropy balance weights among Vermont children in the CGs





Adults. Among adults, the unweighted PCMH CG and the unweighted non-PCMH CG were younger, and was more densely populated than the MAPCP Demonstration group. Additionally, the demonstration group had a higher proportion of TIN-associated providers that were primary care relative to either comparison group. The unweighted PCMH CG also had a higher proportion of beneficiaries assigned to FQHCs, while the unweighted non-PCMH CG had a lower proportion of beneficiaries assigned the FQHCs. Relative to the other groups, the unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider as well as a lower median household income.

After weighting, adequate covariate balance was achieved among adult for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in both CGs, the STDF for population density worsened (in absolute value) after applying entropy balance weights. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for median household income improved after applying entropy balance weights but was still was greater than 0.10 (in absolute value). These imbalances are partially attributable to the fact that we could not include population density in the entropy balancing model. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, used in the balancing procedure were also included directly in the regression models to control for residual confounding.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 2. Among adults in the PCMH CG, about 1 percent of weights were capped at 20. Roughly 1.52 percent of weights were capped at 20 among adults in the non-PCMH CG. No weights were truncated at 0.05 among adults in either the PCMH or non-PCMH CGs. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-5
Vermont: Comparison of average characteristics between MAPCP adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

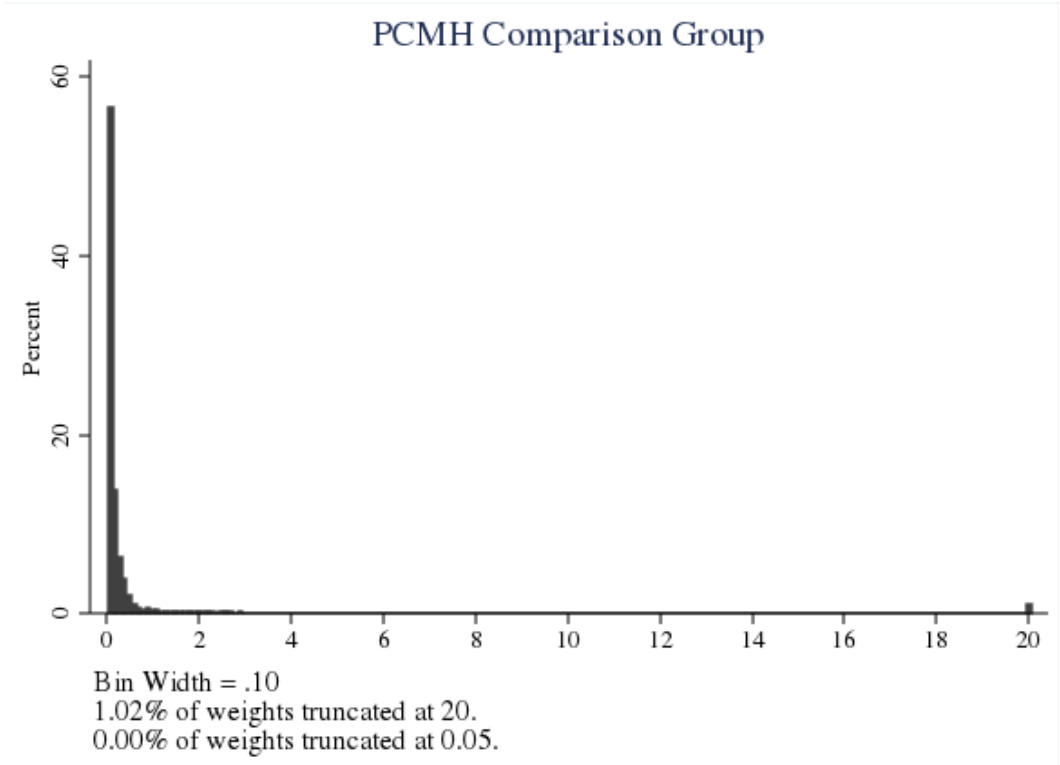
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 61,490)	PCMH (N = 88,372)		Non-PCMH (N = 85,426)		PCMH (N = 88,372)		Non-PCMH (N = 85,426)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	37.36	34.74	0.22	34.51	0.24	37.43	−0.01	37.55	−0.02
Female	0.59	0.58	0.01	0.57	0.02	0.59	0.00	0.58	0.00
Disabled	0.08	0.10	−0.09	0.10	−0.10	0.08	0.00	0.07	0.01
Institutionalized	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00
CDPS score	2.00	1.70	0.14	1.71	0.14	2.00	0.00	2.01	0.00
Population density	132.96	281.20	−0.25	292.33	−0.26	286.12	−0.26	322.90	−0.31
Percent primary care	0.83	0.65	1.33	0.72	0.70	0.83	−0.01	0.82	0.05
Non-solo primary care	1.00	0.99	0.09	0.87	0.51	1.00	0.00	0.99	0.06
FQHC	0.40	0.56	−0.32	0.37	0.07	0.41	−0.01	0.41	−0.01
RHC	0.10	0.00	0.47	0.00	0.47	0.00	0.47	0.00	0.47
CAH	0.19	0.03	0.54	0.06	0.42	0.19	0.02	0.20	−0.01
Median household income	54,400	51,500	0.46	48,400	1.10	53,900	0.07	53,600	0.13

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-5a
Distribution of entropy balance weights among Vermont adults in the comparison groups



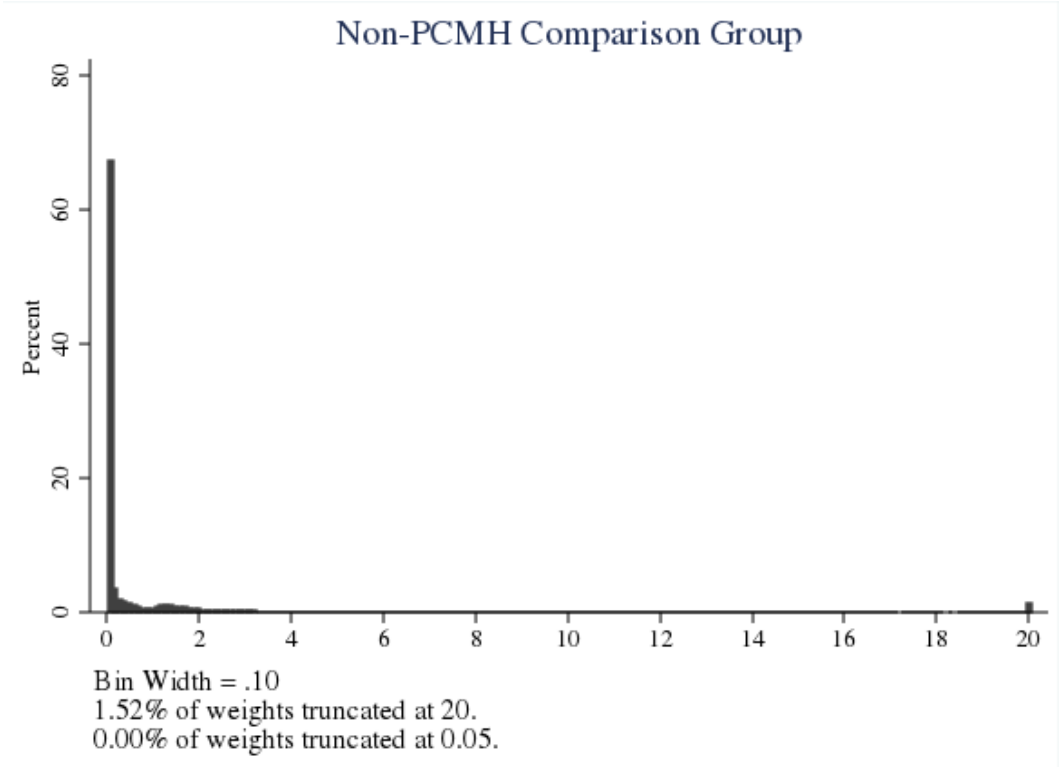


Figure N-5b
Distribution of propensity scores among Vermont adults before and after entropy balance weighting with the PCMH CG

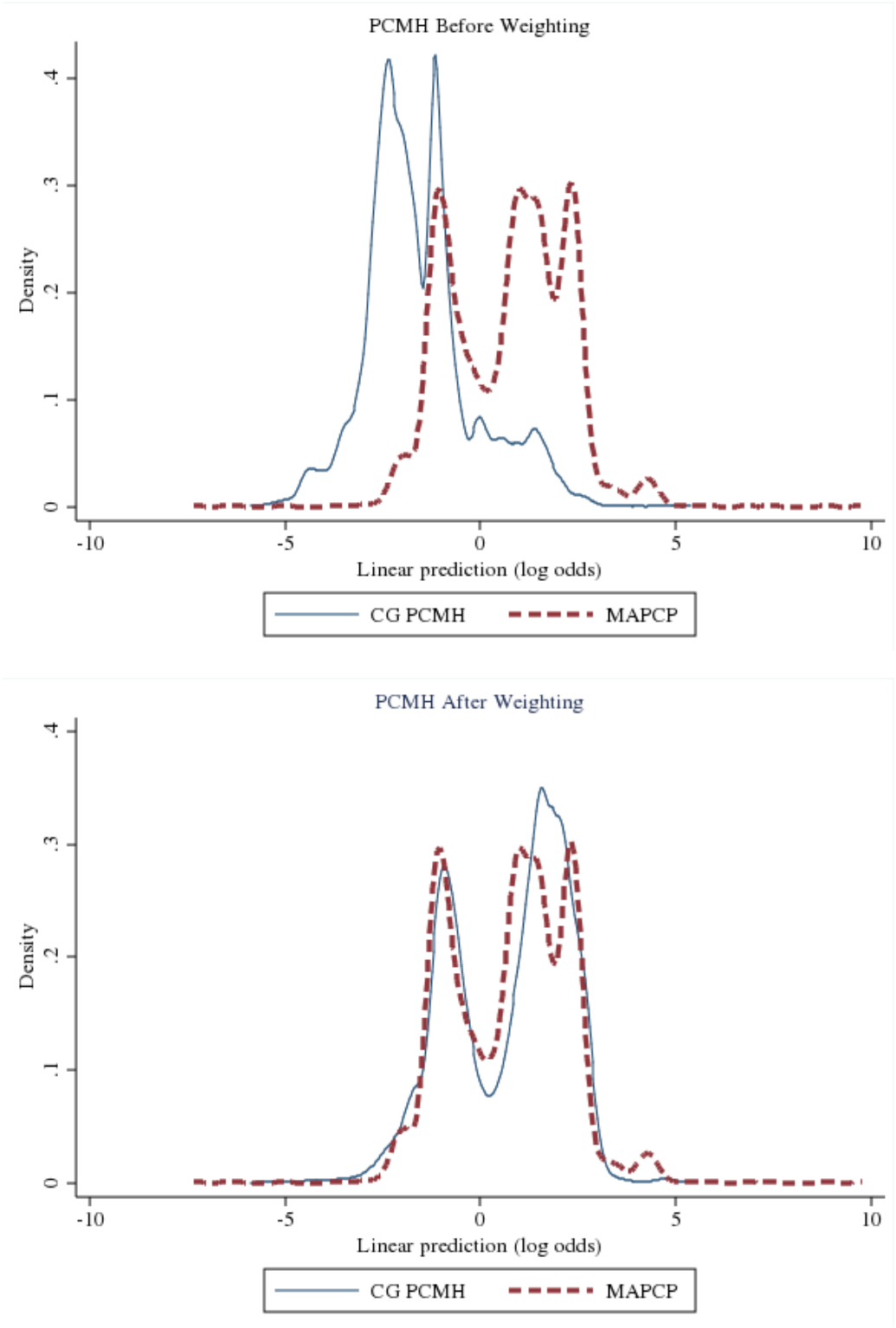
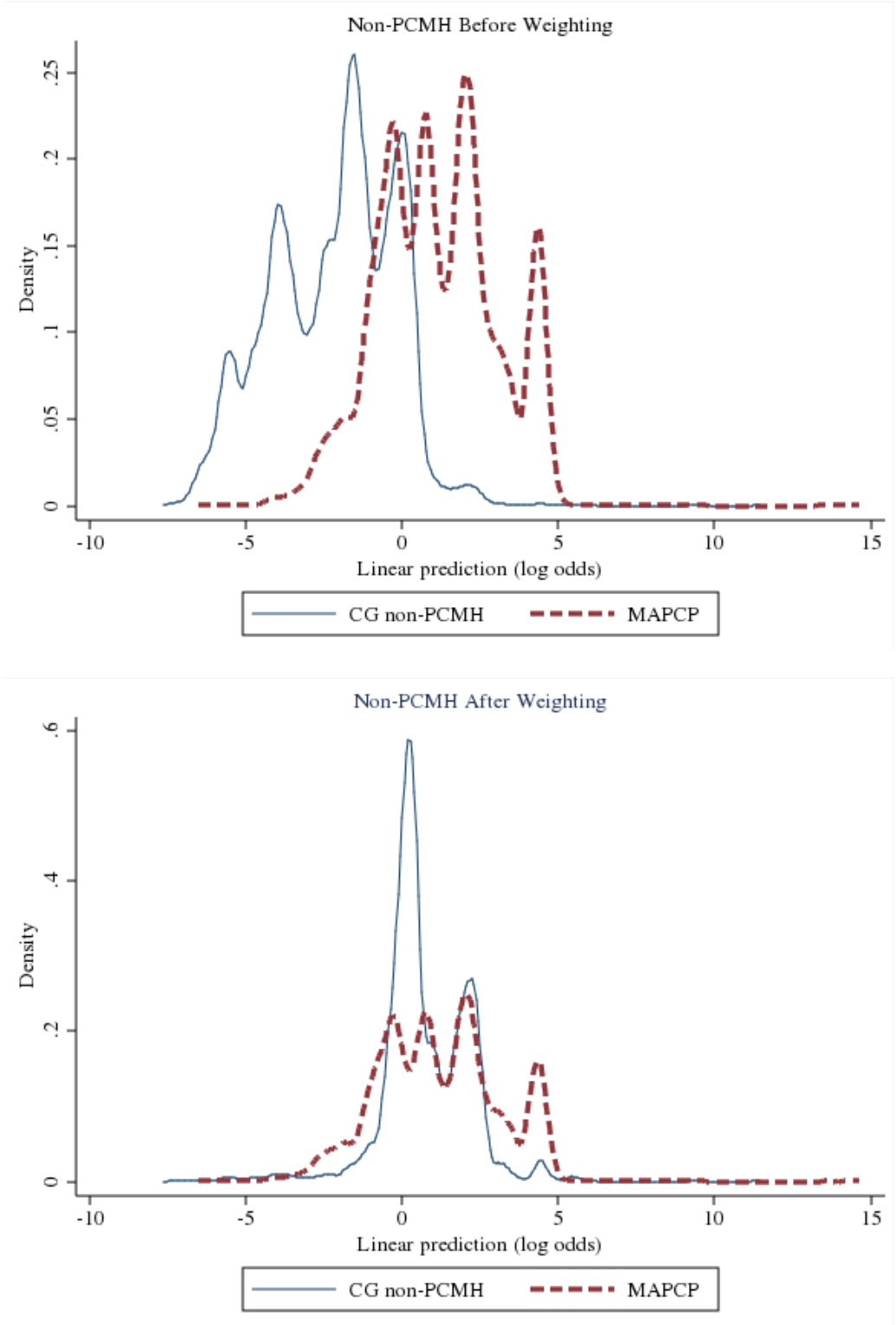


Figure N-5c
Distribution of propensity scores among Vermont adults before and after entropy balance weighting with the non-PCMH CG



N.5 North Carolina Demonstration and Comparison Groups

North Carolina's MAPCP Demonstration practices are located in seven counties, including the only five rural counties in the state that have any PCMHs recognized by the National Committee for Quality Assurance (NCQA). To improve balance on practice characteristics, all CAHs and RHCs in North Carolina were utilized in the CGs.

The North Carolina analyses are based on 59 MAPCP Demonstration practices, 28 comparison PCMHs (tax identification numbers [TINs]), and 103 comparison non-PCMHs (TINs).

N.5.1 Group Comparability

Children. Among children, the unweighted PCMH CG and the unweighted non-PCMH CG beneficiaries in North Carolina were younger, less non-White, and located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, both unweighted CGs had a higher proportion of TIN-associated providers that were primary care. The unweighted PCMH CG also had a higher proportion of beneficiaries assigned to FQHCs. Lastly, the unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider, and demonstration group beneficiaries, on average, were located in counties with lower median household incomes compared to the other groups.

After weighting, adequate covariate balance was achieved among children for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the PCMH CG, the STDF for population density and RHC improved after applying entropy balance weights, but was still greater than 0.10 (in absolute value). When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for population density improved after applying entropy balance weights, but was still was greater than 0.10 (in absolute value), and the STDF for RHC worsened. This is partially because the entropy balance algorithm could not converge if we included population density for this comparison. As a result of this nonconvergence, we excluded it from the propensity score model. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among children, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 2. Among children in the PCMH CG, only 0.11 percent of weights were capped at 20. Only 0.19 percent of weights were capped at 20 among children in the non-PCMH CG. No weights were truncated at 0.05 among children in either PCMH or non-PCMH CGs. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-6
North Carolina: Comparison of average characteristics between MAPCP Demonstration children and PCMH/non-PCMH children comparison beneficiaries before and after weighting

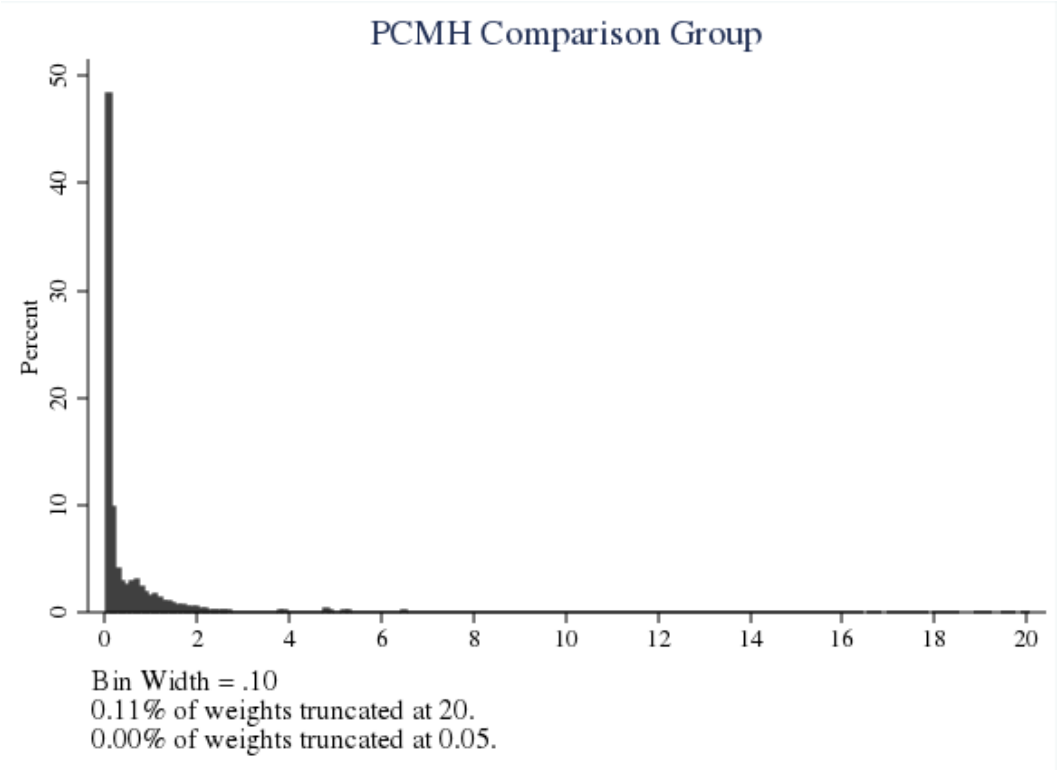
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 12,916)	PCMH (N = 42,570)		Non-PCMH (N = 131,009)		PCMH (N = 42,570)		Non-PCMH (N = 131,009)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	7.55	6.03	0.27	5.80	0.31	7.55	0.00	7.55	0.00
Female	0.50	0.49	0.02	0.49	0.03	0.50	0.00	0.50	0.00
Non-White	0.49	0.43	0.13	0.43	0.13	0.49	0.00	0.49	0.00
Disabled	0.06	0.04	0.07	0.04	0.08	0.06	0.00	0.06	0.00
Institutionalized	0.00	0.00	−0.02	0.00	−0.01	0.00	0.00	0.00	0.00
Low birthweight and serious perinatal problems	0.02	0.03	−0.07	0.03	−0.07	0.02	0.00	0.02	0.00
CDPS score	0.93	0.94	0.00	0.97	−0.03	0.93	0.00	0.93	0.00
Population density	76.15	252.62	−1.35	287.72	−1.38	169.10	−0.91	179.71	−1.03
Percent primary care	0.78	0.82	−0.16	0.95	−0.98	0.78	0.00	0.78	0.00
Non-solo primary care	0.97	0.98	−0.08	0.84	0.45	0.97	0.00	0.97	0.00
FQHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
RHC	0.34	0.02	0.94	0.01	0.99	0.03	0.86	0.00	1.00
CAH	0.00	0.00	0.10	0.01	−0.06	0.00	0.10	0.00	0.00
Median household income	36,700	45,000	−1.46	41,300	−0.74	36,700	0.00	36,700	0.00

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-6a
Distribution of entropy balance weights among North Carolina children in the CGs



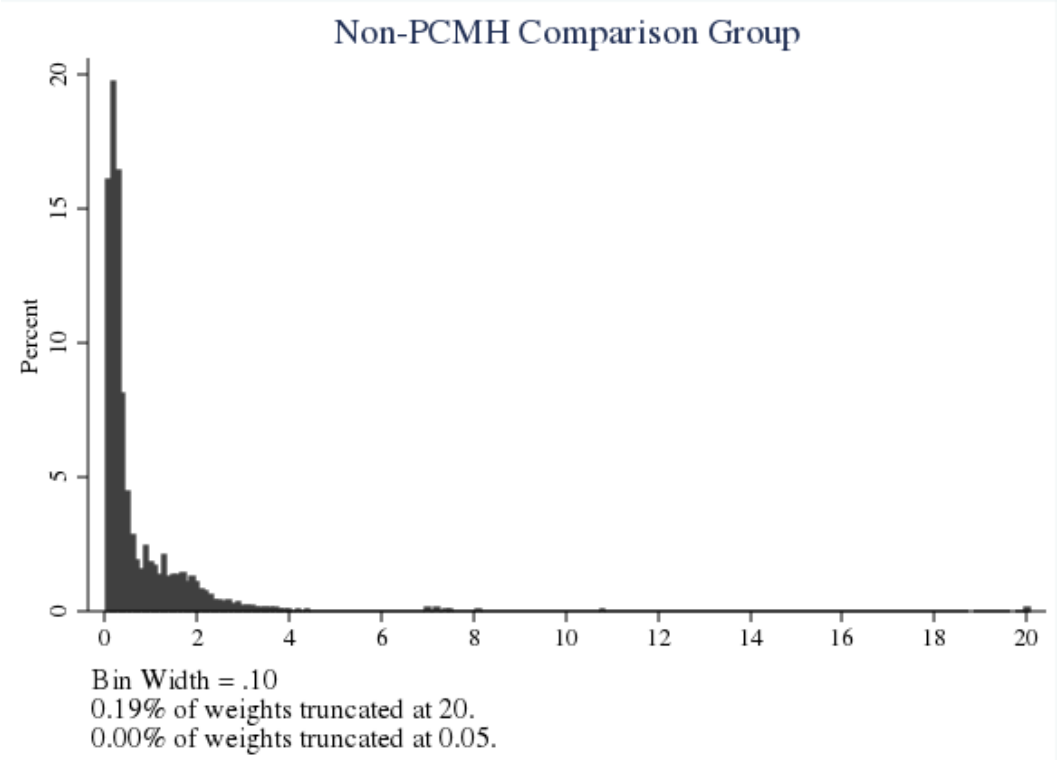


Figure N-6b
Distribution of propensity scores among North Carolina children before and after entropy balance weighting with the PCMH CG

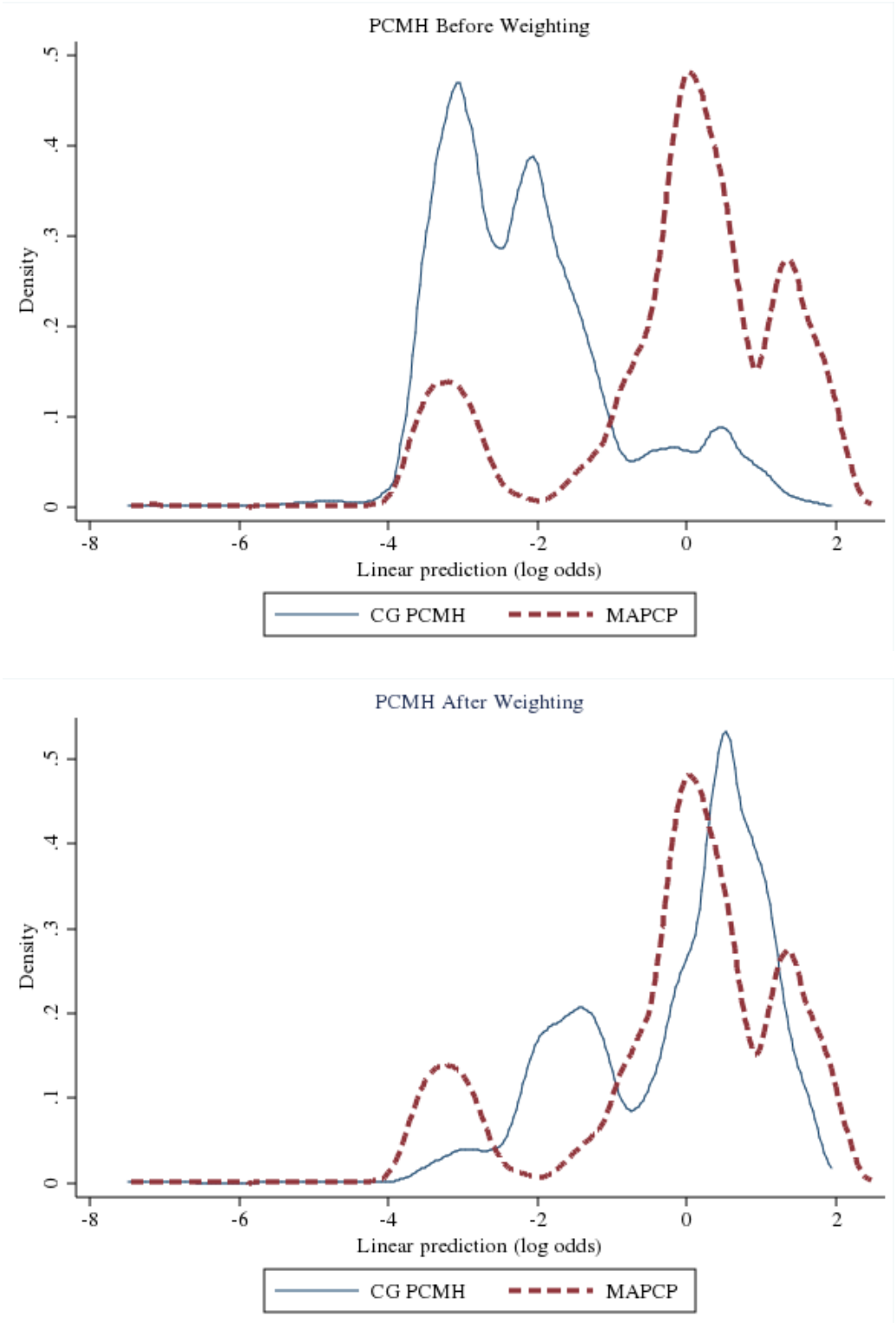
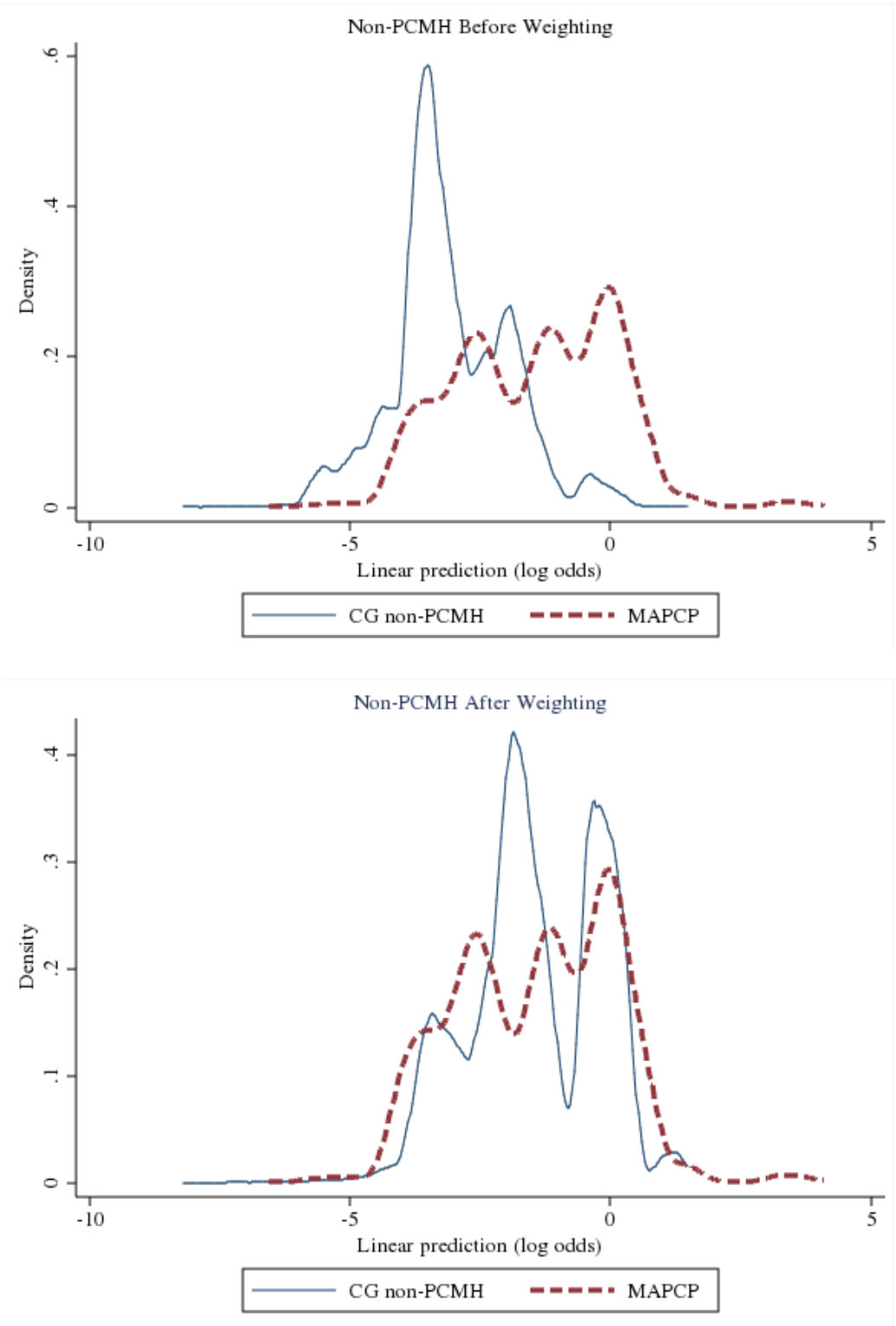


Figure N-6c
Distribution of propensity scores among North Carolina children before and after entropy balance weighting with the non-PCMH CG



Adults. Among adults, the unweighted PCMH CG and the unweighted non-PCMH CG in North Carolina were located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. The unweighted PCMH CG had a lower proportion of tax identification number (TIN)-associated providers that were primary care and a lower proportion of beneficiaries assigned to an RHC relative to the other groups. The unweighted non-PCMH CG had a lower proportion of TINs with more than one primary care provider. Lastly, the unweighted demonstration group had a lower median household income compared to either CG.

After weighting, adequate covariate balance was achieved among adults for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the CGs, the STDF for population density improved after applying entropy balance weights, but was still greater than 0.10 (in absolute value). This is partially because the entropy balance algorithm could not converge if we included population density for this comparison. As a result of this nonconvergence, we excluded it from the propensity score model. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 4. Among adults in the PCMH CG, only 0.16 percent of weights were capped at 20. No weights were capped at 20 among adults in the non-PCMH CG. No weights were truncated at 0.05 among adults in either the PCMH or non-PCMH CGs. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-7
North Carolina: Comparison of average characteristics between MAPCP Demonstration adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

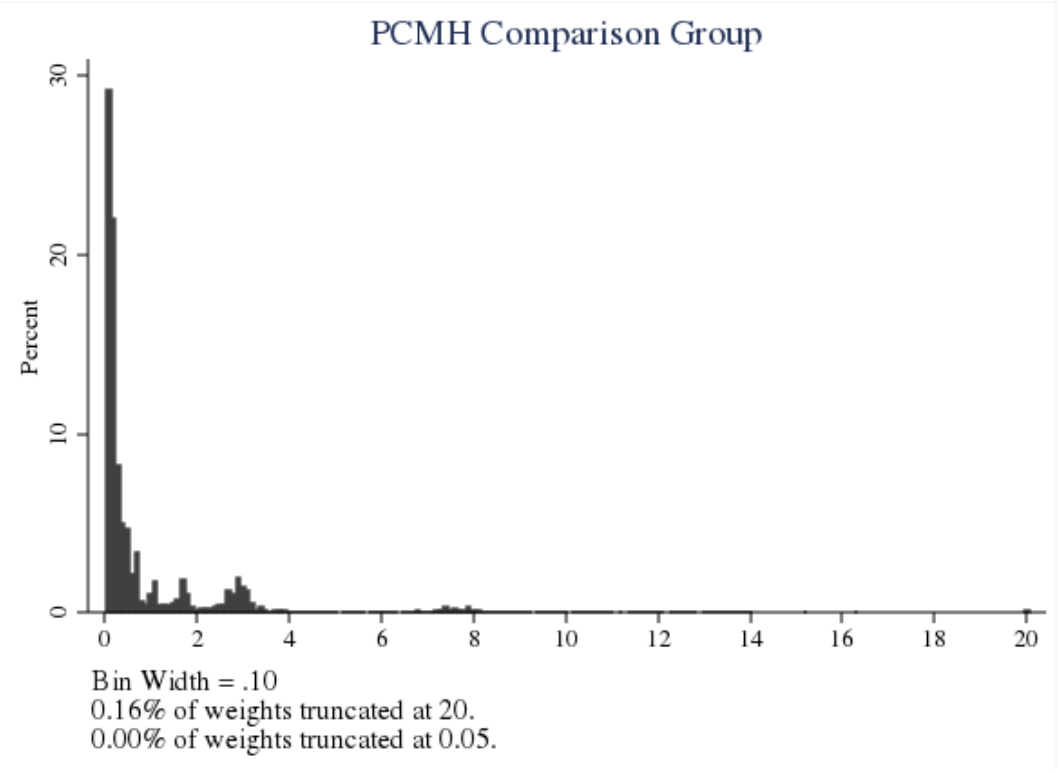
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 9,171)	PCMH (N = 10,590)		Non-PCMH (N = 24,890)		PCMH (N = 10,590)		Non-PCMH (N = 24,890)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	36.83	36.13	0.06	35.92	0.07	36.83	0.00	36.83	0.00
Female	0.67	0.69	−0.03	0.68	−0.02	0.67	0.00	0.67	0.00
Non-White	0.40	0.26	0.30	0.36	0.08	0.39	0.00	0.40	0.00
Disabled	0.42	0.39	0.06	0.40	0.04	0.42	0.00	0.42	0.00
Institutionalized	0.00	0.00	−0.01	0.00	−0.03	0.00	0.00	0.00	0.00
CDPS score	1.23	1.28	−0.04	1.27	−0.03	1.23	0.00	1.23	0.00
Population density	79.64	350.35	−1.87	260.01	−1.28	200.81	−1.23	187.19	−1.13
Percent primary care	0.81	0.72	0.35	0.90	−0.46	0.81	0.00	0.81	0.00
Non-solo primary care	0.92	0.95	−0.14	0.84	0.23	0.92	0.00	0.92	0.00
FQHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
RHC	0.35	0.10	0.61	0.13	0.53	0.35	0.00	0.35	0.00
CAH	0.01	0.00	0.12	0.01	−0.03	0.00	0.12	0.01	0.00
Median household income	37,000	42,900	−1.09	41,000	−0.65	37,000	0.00	37,000	0.00

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-7a
Distribution of entropy balance weights among North Carolina adults in the CGs



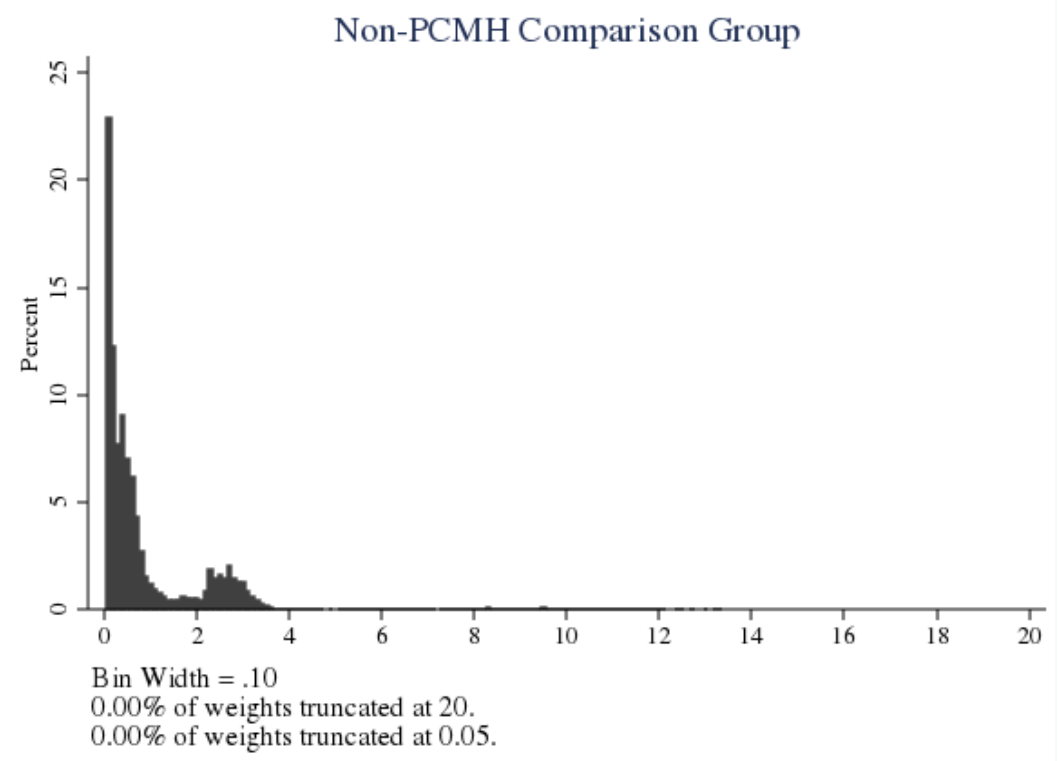


Figure N-7b
Distribution of propensity scores among North Carolina adults before and after entropy balance weighting with the PCMH CG

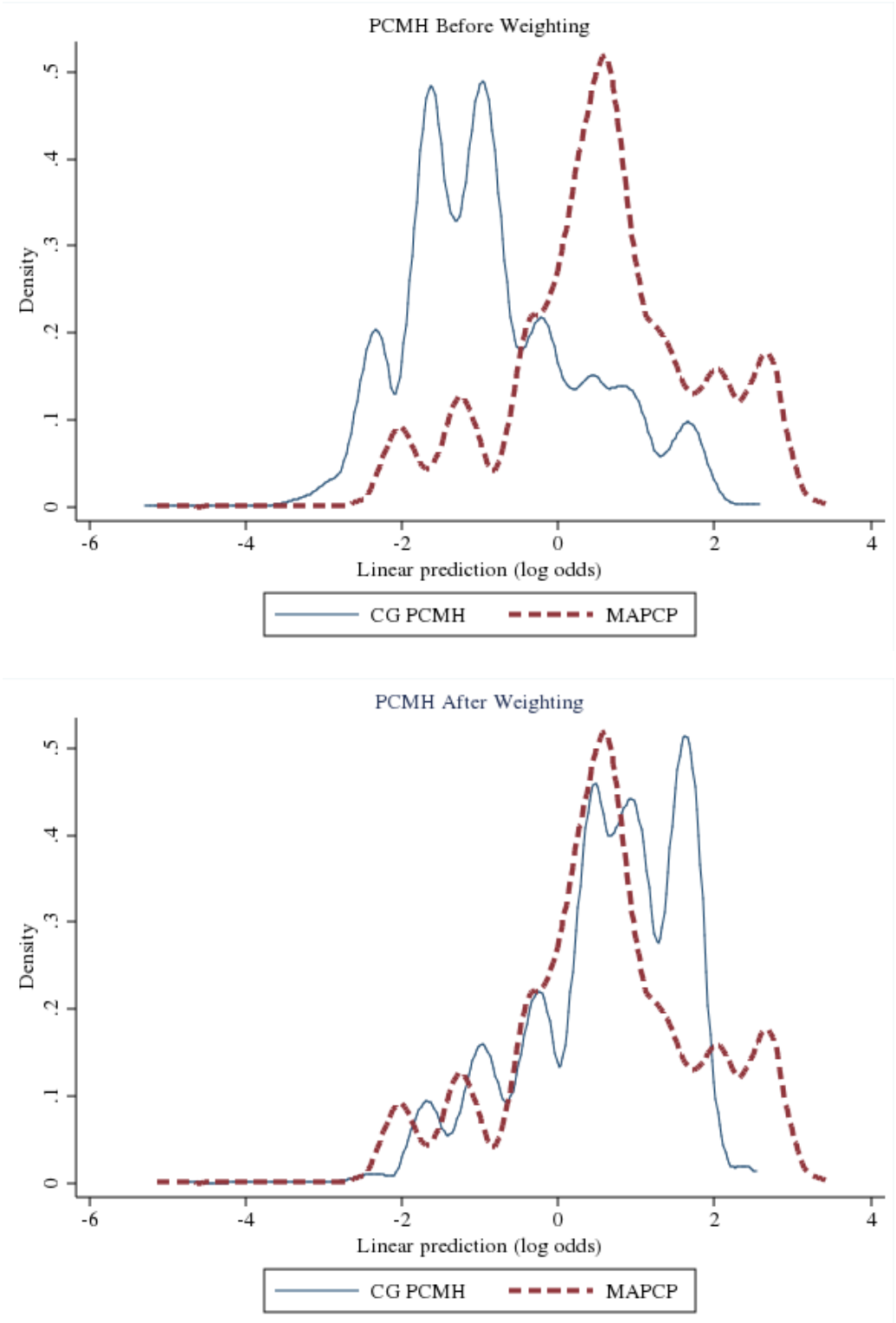
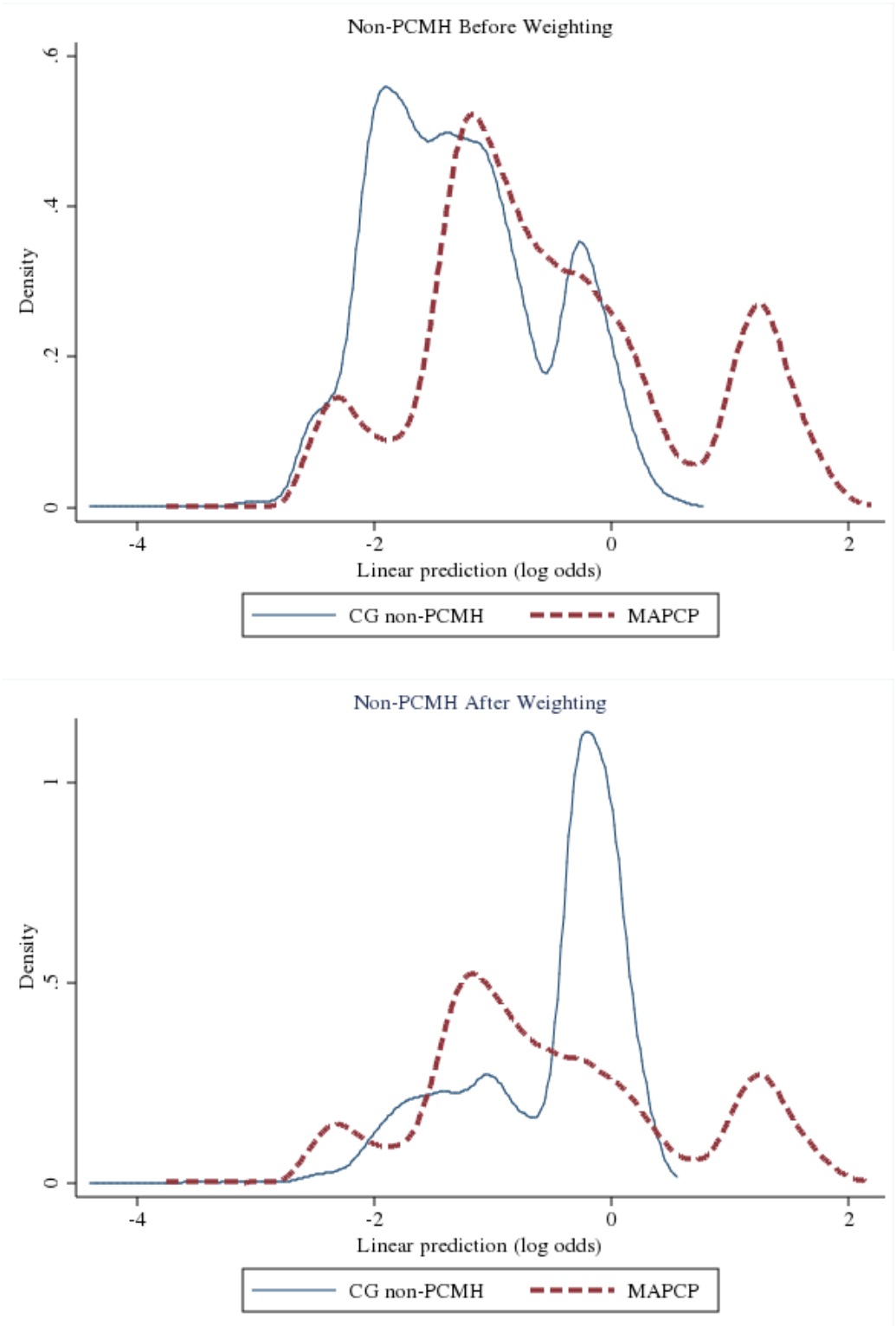


Figure N-7c
Distribution of propensity scores among North Carolina adults before and after entropy balance weighting with the non-PCMH CG



N.6 Minnesota Demonstration and Comparison Groups

The Minnesota Health Care Homes (HCH) initiative is located in 24 Minnesota counties from which intervention group beneficiaries are identified from participating HCHs. CG beneficiaries are drawn from the same counties. MAPCP Demonstration staff requested that four counties in the southeast corner of the state counties (Fillmore, Houston, Olmstead, and Winona) be excluded from the evaluation because they included the Gunderson health system, which was participating in another demonstration.

The Minnesota analyses are based on 197 MAPCP Demonstration practices and 99 comparison non-PCMHs (TINs).

N.6.1 Group Comparability

Children. Among children, the unweighted non-PCMH CG in Minnesota had a lower proportion of non-White beneficiaries and were located in less densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, the unweighted CG had a higher proportion of beneficiaries assigned to a RHC and slightly higher average median household income.

After weighting, adequate covariate balance was achieved among children for all covariates. That is, STDFs were less than 0.10 (in absolute value) for all covariates.

Among children, looking at the distribution of the entropy weights for the CG, we found that the large majority of weights fell in the range of 0.05 through 2. Among children in the CG, no weights were capped at 20 or 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-8
Minnesota: Comparison of average characteristics between MAPCP Demonstration children and non-PCMH children comparison beneficiaries before and after weighting

	Unweighted means and STDFs			Weighted means and STDFs	
	MAPCP (N = 356,479)	Non-PCMH (N = 69,356)		Non-PCMH (N = 69,356)	
	Mean	Mean	STDF	Mean	STDF
Age	6.33	6.65	−0.06	6.33	0.00
Female	0.50	0.49	0.02	0.50	0.00
Non-White	0.50	0.42	0.17	0.50	0.00
Disabled	0.04	0.05	−0.08	0.04	0.00
Institutionalized	0.00	0.00	−0.01	0.00	0.00
Low birthweight and serious perinatal problems	0.01	0.01	0.01	0.01	0.00
CDPS score	0.58	0.58	0.00	0.58	0.00
Population density	1,232.08	1,015.55	0.18	1,232.07	0.00
Percent primary care	0.82	0.81	0.03	0.82	0.00
Non-solo primary care	0.98	0.93	0.26	0.98	0.00
FQHC	0.05	0.05	−0.01	0.05	0.00
RHC	0.03	0.11	−0.31	0.03	0.00
CAH	0.01	0.03	−0.18	0.01	0.00
Median household income	59,700	60,500	−0.08	59,700	0.00

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-8a
Distribution of entropy balance weights among Minnesota children in the CG

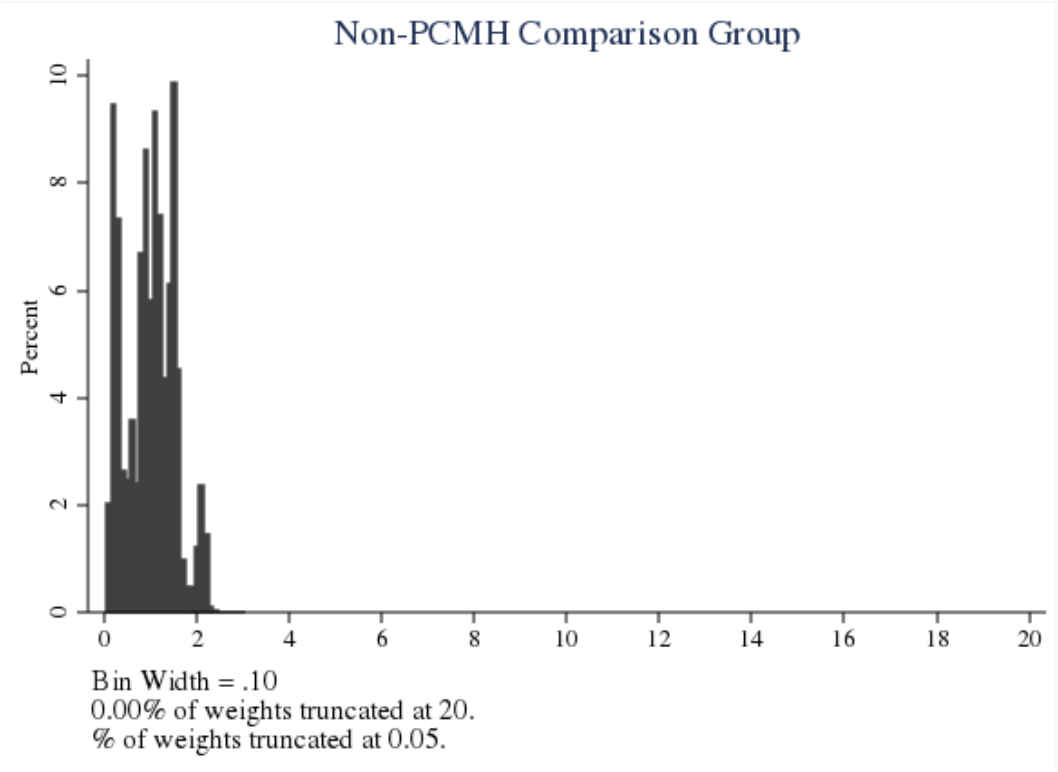
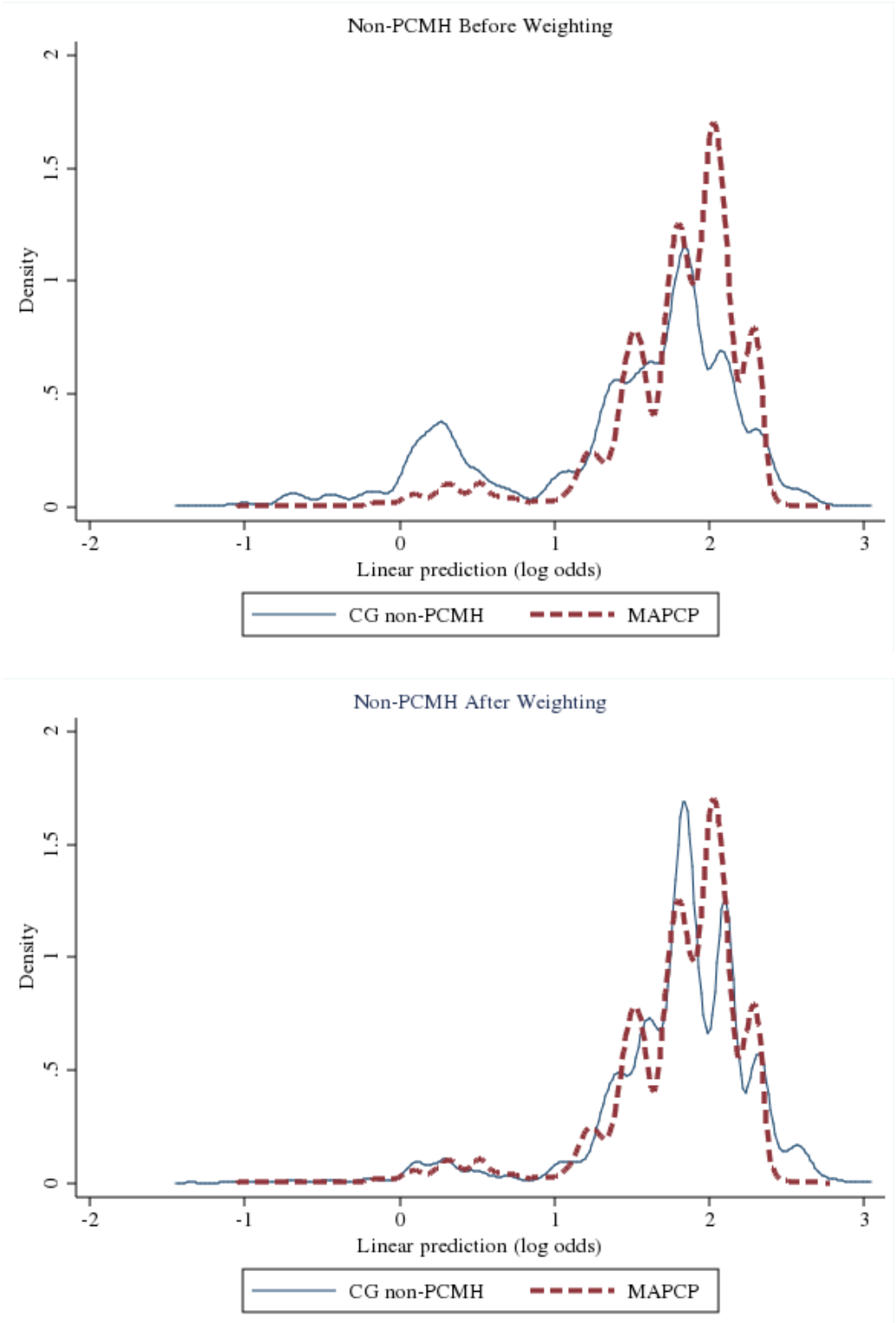


Figure N-8b
Distribution of propensity scores among Minnesota children before and after entropy balance weighting with the non-PCMH CG



Adults. Among adults, the unweighted non-PCMH CG in Minnesota had a lower proportion of non-White beneficiaries and were located in less densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, the unweighted CG had a lower proportion of TIN-associated providers that were primary care and a higher proportion of beneficiaries assigned to RHCs. Lastly, the unweighted non-PCMH CG had a slightly lower median household income.

After weighting, adequate covariate balance was achieved among adults for all covariates. That is, STDFs were less than 0.10 (in absolute value) for all covariates.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 4. Among adults in the CG, no weights were capped at 20 or 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-9
Minnesota: Comparison of average characteristics between MAPCP Demonstration adults and non-PCMH adult comparison beneficiaries before and after weighting

	Unweighted means and STDFs			Weighted means and STDFs	
	MAPCP (N = 328,625)	Non-PCMH (N = 44,004)		Non-PCMH (N = 44,004)	
	Mean	Mean	STDF	Mean	STDF
Age	36.05	36.52	−0.04	36.05	0.00
Female	0.61	0.60	0.01	0.61	0.00
Non-White	0.41	0.31	0.20	0.41	0.00
Disabled	0.08	0.09	−0.05	0.08	0.00
Institutionalized	0.00	0.00	−0.01	0.00	0.00
CDPS score	0.53	0.53	−0.03	0.53	0.00
Population density	1,279.05	740.81	0.46	1,279.04	0.00
Percent primary care	0.81	0.75	0.31	0.81	0.00
Non-solo primary care	0.99	0.94	0.23	0.99	0.00
FQHC	0.05	0.07	−0.08	0.05	0.00
RHC	0.02	0.14	−0.45	0.02	0.00
CAH	0.01	0.04	−0.22	0.01	0.00
Median household income	59,700	58,500	0.12	59,700	0.00

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N-9a
Distribution of entropy balance weights among Minnesota adults in the CGs

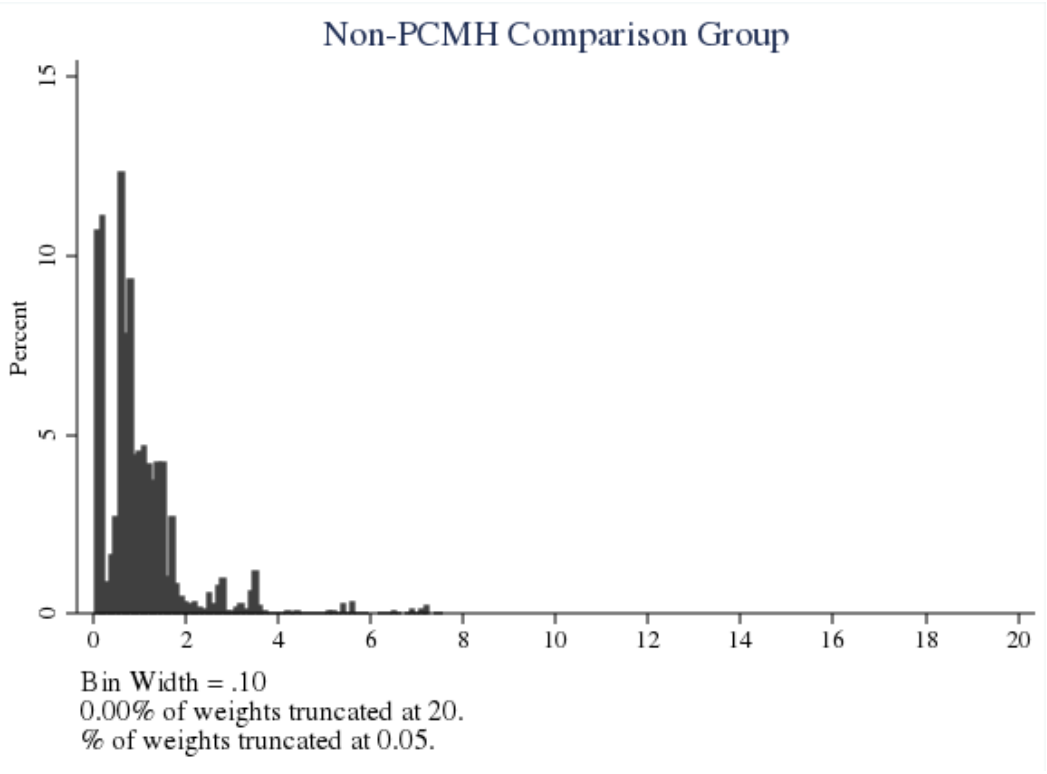
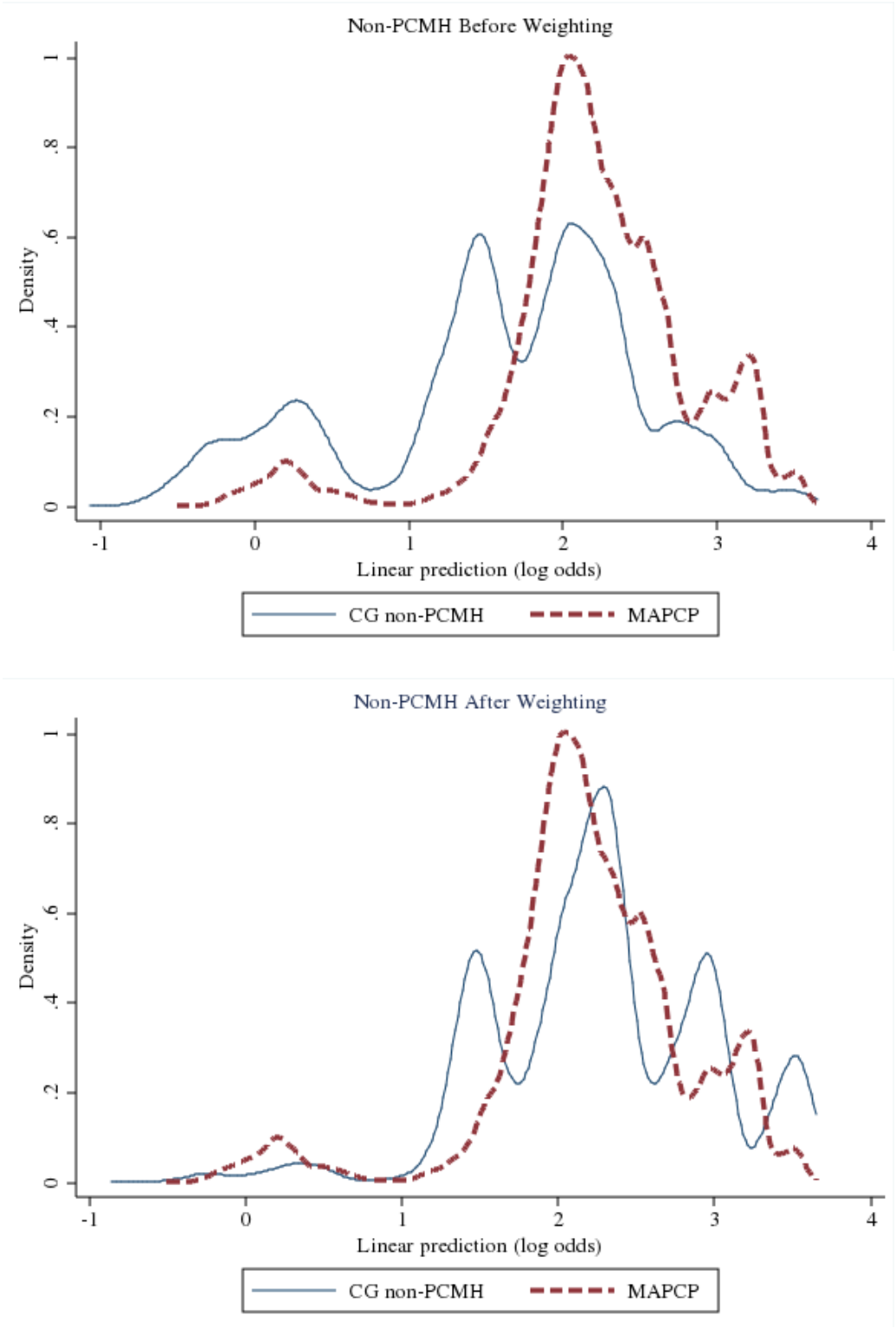


Figure N-9b
Distribution of propensity scores among Minnesota adults before and after entropy balance weighting with the non-PCMH CG



N.7 Maine Demonstration and Comparison Groups

Maine's MAPCP Demonstration practices are located in 11 contiguous counties in the southern and western portions of the state. The same counties were also used to define the comparison area. This region is evenly divided between metropolitan and rural counties. Because there were very few comparison PCMHs in Maine Medicaid claims, we only used a non-PCMH CG.

The Maine analyses are based on 69 MAPCP Demonstration practices and 72 comparison non-PCMHs (TINs).

N.7.2 Group Comparability

Children. Among children, the unweighted non-PCMH CG in Maine was younger and located in less densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, the CG had a lower proportion of TINs with more than one primary care provider and beneficiaries assigned to FQHCs, but a higher proportion of beneficiaries assigned to RHCs and CAHs, relative to the demonstration group. Lastly, the groups had comparable average median household incomes.

After weighting, adequate covariate balance was achieved among children for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the CG, the STDF for non-solo primary care improved after applying entropy balance weights, but was still greater than 0.10 (in absolute value).The non-solo primary care proportions, however, are not dramatically different after weighting even though the STDF is greater than 0.10. This is because the proportions are so close to one in both groups, and the STDF can overstate the difference between such large proportions.

Among children, looking at the distribution of the entropy weights for the CG, we found that the large majority of weights fell in the range of 0.05 through 2. Among children in the non-PCMH CG, about 0.03 percent of weights were capped at 20 and no weights were capped at 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-10
Maine: Comparison of average characteristics between MAPCP Demonstration children and non-PCMH children comparison beneficiaries before and after weighting

	Unweighted means and STDFs			Weighted means and STDFs	
	MAPCP (N = 35,349)	Non-PCMH (N = 25,881)		Non-PCMH (N = 25,881)	
	Mean	Mean	STDF	Mean	STDF
Age	7.36	6.49	0.15	7.36	0.00
Female	0.49	0.49	0.01	0.49	0.00
Non-White	0.28	0.30	−0.04	0.28	0.00
Disabled	0.03	0.03	0.01	0.03	0.00
Institutionalized	0.01	0.01	0.01	0.01	0.00
Low birthweight and serious perinatal problems	0.03	0.03	−0.03	0.03	0.00
CDPS score	0.70	0.67	0.03	0.70	0.00
Population density	150.98	141.94	0.07	150.81	0.00
Percent primary care	0.84	0.83	0.05	0.84	0.00
Non-solo primary care	1.00	0.87	0.54	0.99	0.11
FQHC	0.32	0.10	0.55	0.32	0.01
RHC	0.07	0.12	−0.14	0.07	0.00
CAH	0.07	0.24	−0.50	0.07	−0.01
Median household income	48,000	48,000	0.00	48,000	0.00

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N10-a
Distribution of entropy balance weights among Maine children in the CGs

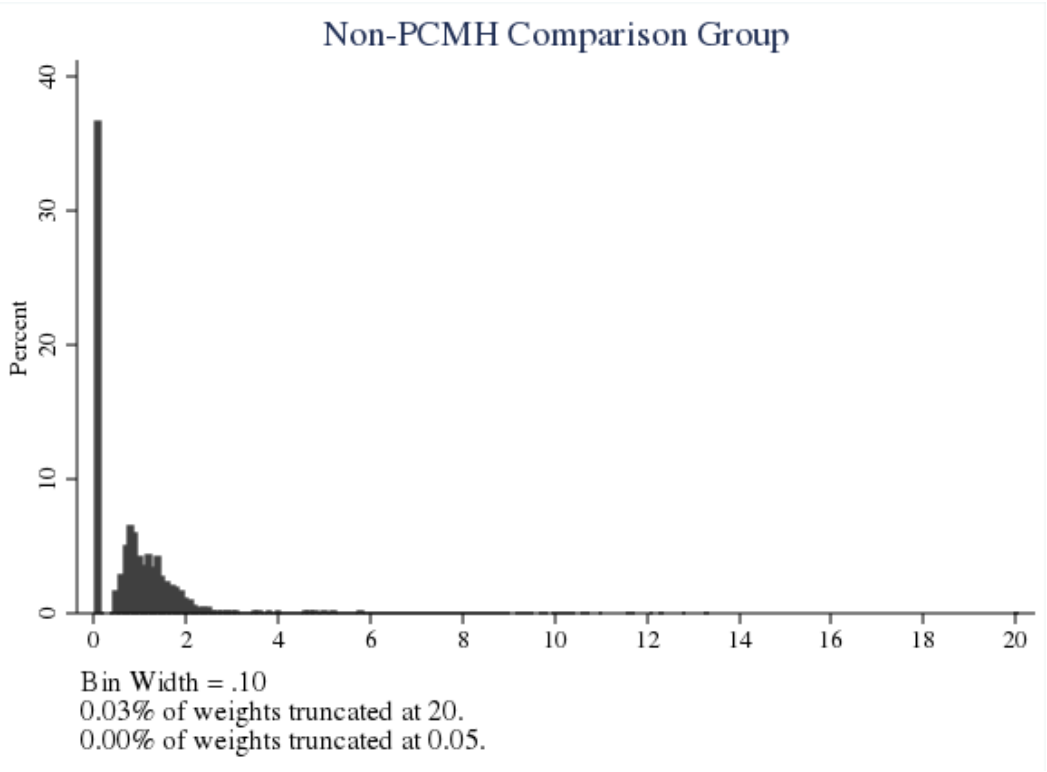
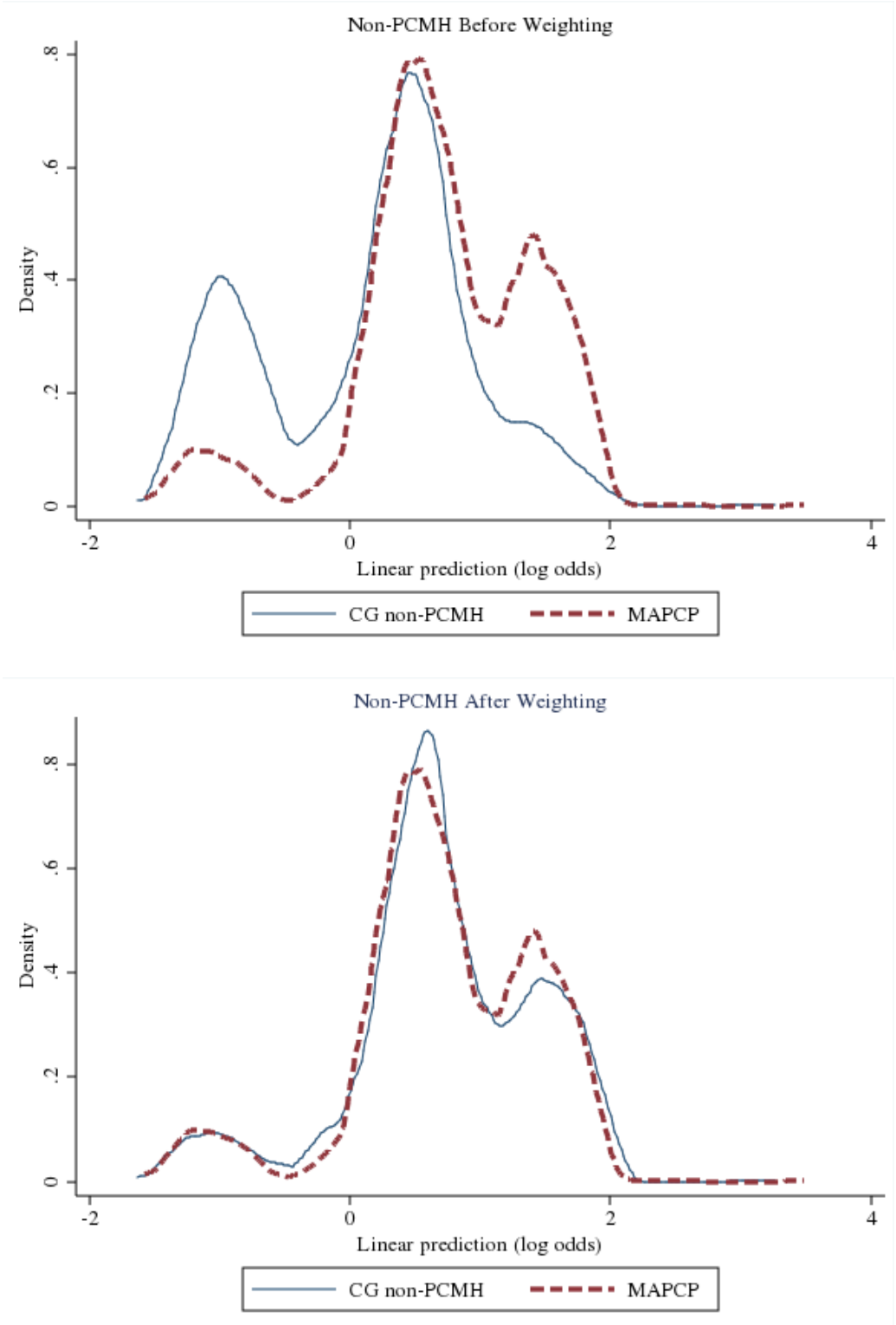


Figure N10-b
Distribution of propensity scores among Maine children before and after entropy balance weighting with the non-PCMH CG



Adults. Among adults, the unweighted non-PCMH CG in Maine was located in less densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, the unweighted CG had a lower proportion of TIN-associated providers that were primary care and TINs with more than one primary care provider. The unweighted CG also had a higher proportion of beneficiaries assigned to RHCs and CAHs. Lastly, the unweighted non-PCMH CG had a lower median household income.

After weighting, adequate covariate balance was achieved among adults for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for percent primary care improved after applying entropy balance weights but was still greater than 0.10 (in absolute value). The STDFs for non-solo primary care and CAH worsened and were greater than 0.10 (in absolute value). Because perfect covariate balance was not achieved, all covariates used in the balancing procedure were also included directly in the regression models to control for residual confounding.

Among adults, looking at the distribution of the entropy weights for the CG, we found that the large majority of weights fell in the range of 0.05 through 2. Among adults in the non-PCMH CG, less than 1 percent of weights were capped at 20 and no weights were truncated at 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-11
Maine: Comparison of average characteristics between MAPCP Demonstration adults and non-PCMH adult comparison beneficiaries before and after weighting

	Unweighted means and STDFs			Weighted means and STDFs	
	MAPCP (N = 37,775)	Non-PCMH (N = 11,185)		Non-PCMH (N = 11,185)	
	Mean	Mean	STDF	Mean	STDF
Age	34.27	34.20	0.01	34.29	0.00
Female	0.62	0.59	0.07	0.62	0.00
Non-White	0.16	0.18	−0.06	0.16	0.00
Disabled	0.14	0.12	0.05	0.14	0.00
Institutionalized	0.00	0.00	0.01	0.00	0.00
CDPS score	0.73	0.69	0.08	0.73	0.00
Population density	148.33	110.05	0.31	142.53	0.04
Percent primary care	0.86	0.69	1.13	0.71	0.91
Non−solo primary care	1.00	0.80	0.71	0.77	0.77
FQHC	0.27	0.24	0.08	0.27	0.00
RHC	0.08	0.21	−0.37	0.08	0.00
CAH	0.07	0.35	−0.75	0.37	−0.79
Median household income	47,800	46,600	0.17	47,800	0.00

NOTE:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N11-a
Distribution of entropy balance weights among Maine adults in the CG

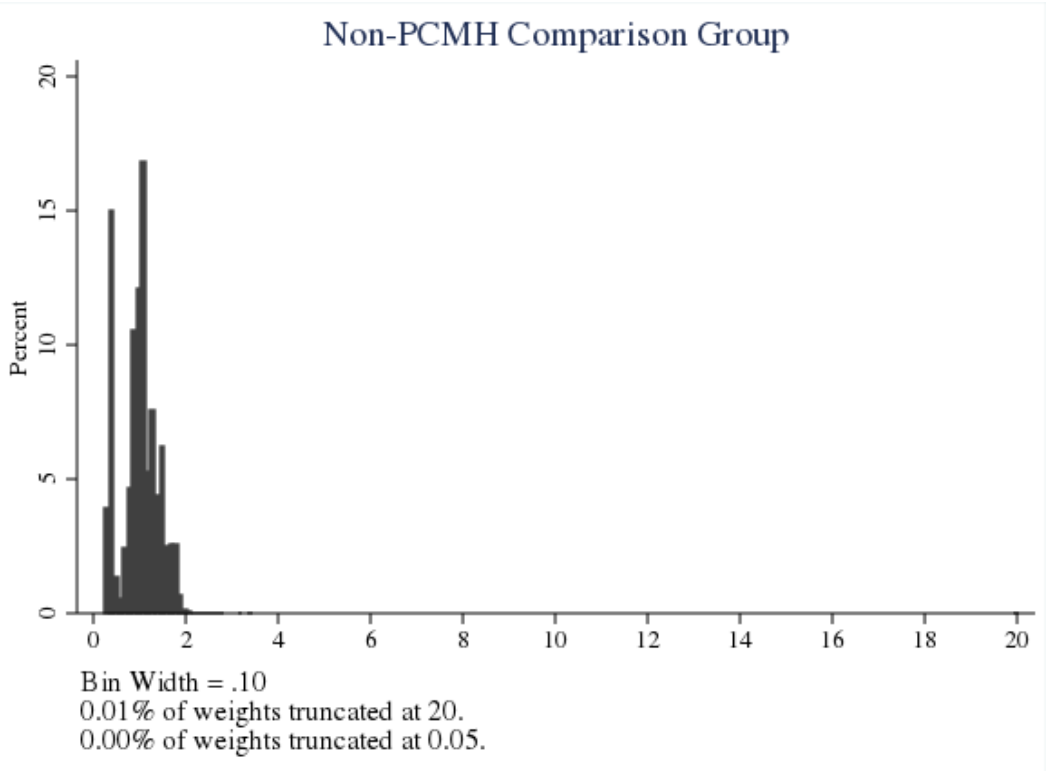
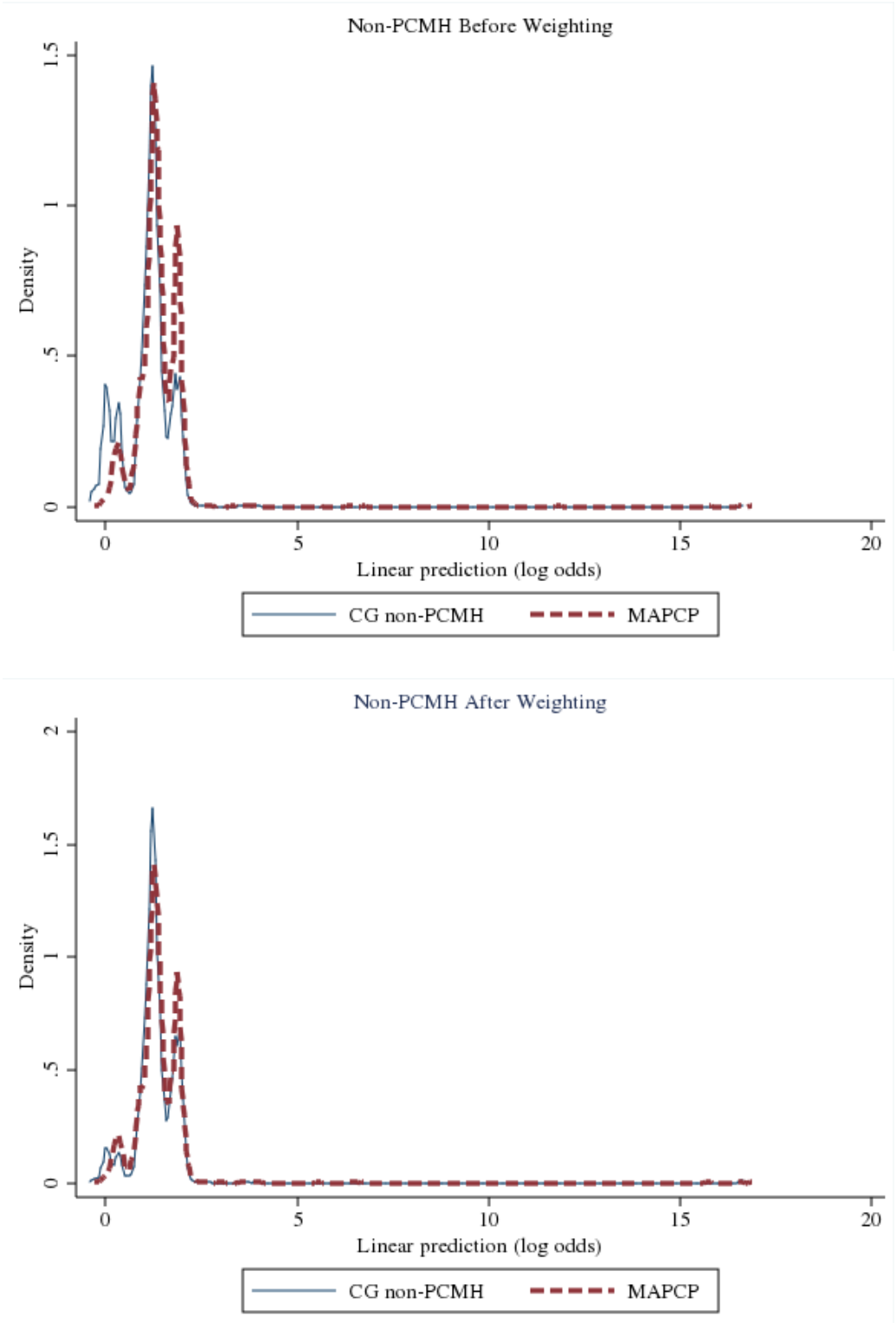


Figure N11-b
Distribution of propensity scores among Maine adults before and after entropy balance weighting with the non-PCMH CG



N.8 Michigan Demonstration and Comparison Groups

Michigan is the largest of the MAPCP Demonstration sites, covering 40 counties including portions of the Upper Peninsula. A 20 percent random sample of non-demonstration primary care practices from the same counties was selected for the CG in the first year of the evaluation and then followed for the true-up. The sample included both FQHCs and RHCs. No CAHs were involved in the demonstration.

Michigan bases PCMH status on Blue Cross Blue Shield of Michigan's (BCBSM) Physician Group Incentive Program (PGIP) designation. Practices must be PGIP-designated or NCQA PPC®-PCMH™ to participate in the MAPCP Demonstration (all have PGIP designation). With the assistance of Michigan initiative staff, we were able to cross-walk BCBSM physician identifiers to determine the PCMH status of the comparison TINs.

The Michigan analyses are based on 427 MAPCP Demonstration practices, 38 comparison PCMHs (tax identification numbers [TINs]) and 144 comparison non-PCMHs (TINs).

N.8.1 Group Comparability

Children. Among children, the unweighted PCMH CG and the unweighted non-PCMH CG in Michigan had a higher proportion of beneficiaries who were non-White and located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. Beneficiaries in the demonstration group were younger than either CG. Additionally, both unweighted CGs had a lower proportion of TINs with more than one primary care provider. The unweighted PCMH CG had a higher proportion of beneficiaries assigned to RHCs, and the unweighted non-PCMH CG had a higher proportion of beneficiaries assigned to FQHCs, relative to the other groups. Lastly, the unweighted non-PCMH CG had a lower median household income.

After weighting, adequate covariate balance was achieved among children for all covariates. That is, STDFs were less than 0.10 (in absolute value) for all covariates and for all comparisons.

Among children, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 4. Among children in the PCMH CG, no weights were capped at 20 or 0.05. Among children in the non-PCMH CG, less than 1 percent of weights were capped at 20 and no weights were truncated at 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-12
Michigan: Comparison of average characteristics between MAPCP Demonstration children and PCMH/non-PCMH children comparison beneficiaries before and after weighting

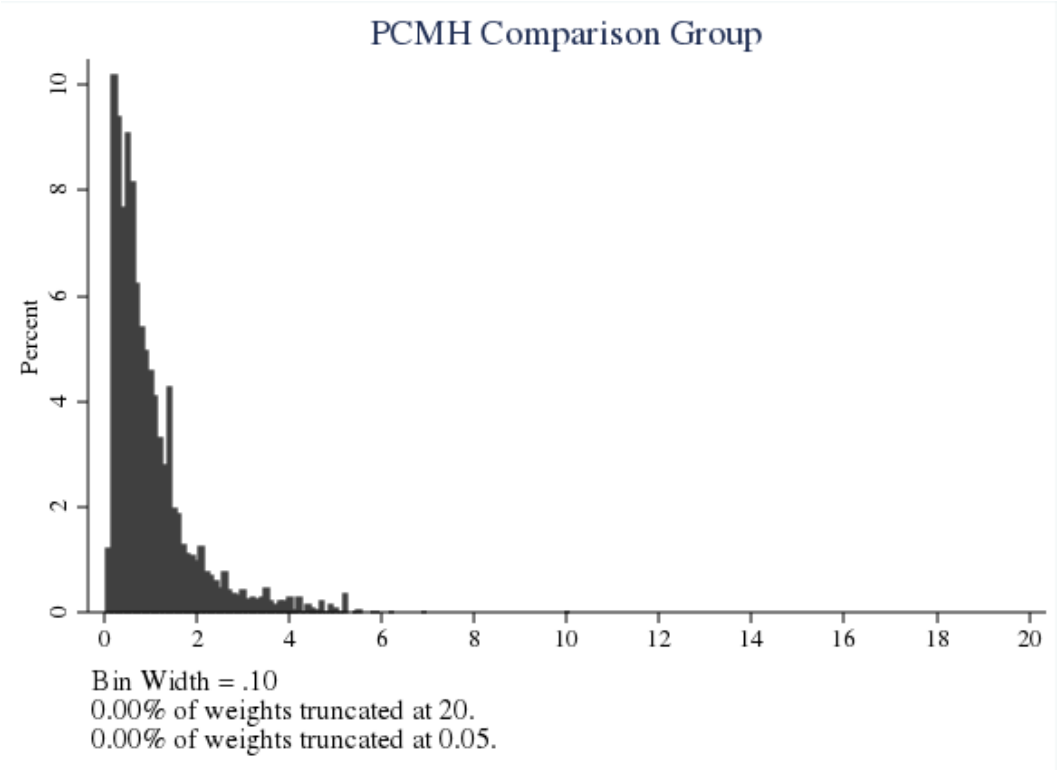
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 300,191)	PCMH (N = 21,287)		Non-PCMH (N = 83,555)		PCMH (N = 21,287)		Non-PCMH (N = 83,555)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	6.96	9.34	−0.39	7.19	−0.04	6.96	0.00	6.95	0.00
Female	0.50	0.51	−0.02	0.50	0.00	0.50	0.00	0.50	0.00
Non-White	0.45	0.58	−0.26	0.57	−0.24	0.45	0.00	0.45	0.00
Disabled	0.05	0.07	−0.09	0.06	−0.04	0.05	0.00	0.05	0.00
Institutionalized	0.00	0.00	−0.02	0.00	0.00	0.00	0.00	0.00	0.00
Low birthweight and serious perinatal problems	0.03	0.02	0.07	0.03	0.02	0.03	0.00	0.03	0.00
CDPS score	0.90	0.90	0.00	0.86	0.03	0.90	0.00	0.90	0.00
Population density	1,029.95	1,073.90	−0.04	1,322.56	−0.26	1,029.95	0.00	1,029.93	0.00
Percent primary care	0.89	0.87	0.13	0.91	−0.13	0.89	0.00	0.89	0.00
Non-solo primary care	0.94	0.87	0.25	0.77	0.52	0.94	0.00	0.94	0.00
FQHC	0.07	0.16	−0.29	0.22	−0.44	0.07	0.00	0.07	0.00
RHC	0.06	0.12	−0.22	0.07	−0.07	0.06	0.00	0.06	0.00
CAH	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
Median household income	49,200	45,700	0.44	45,200	0.56	49,200	0.00	49,200	0.00

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N12-a
Distribution of entropy balance weights among Michigan children in the CGs



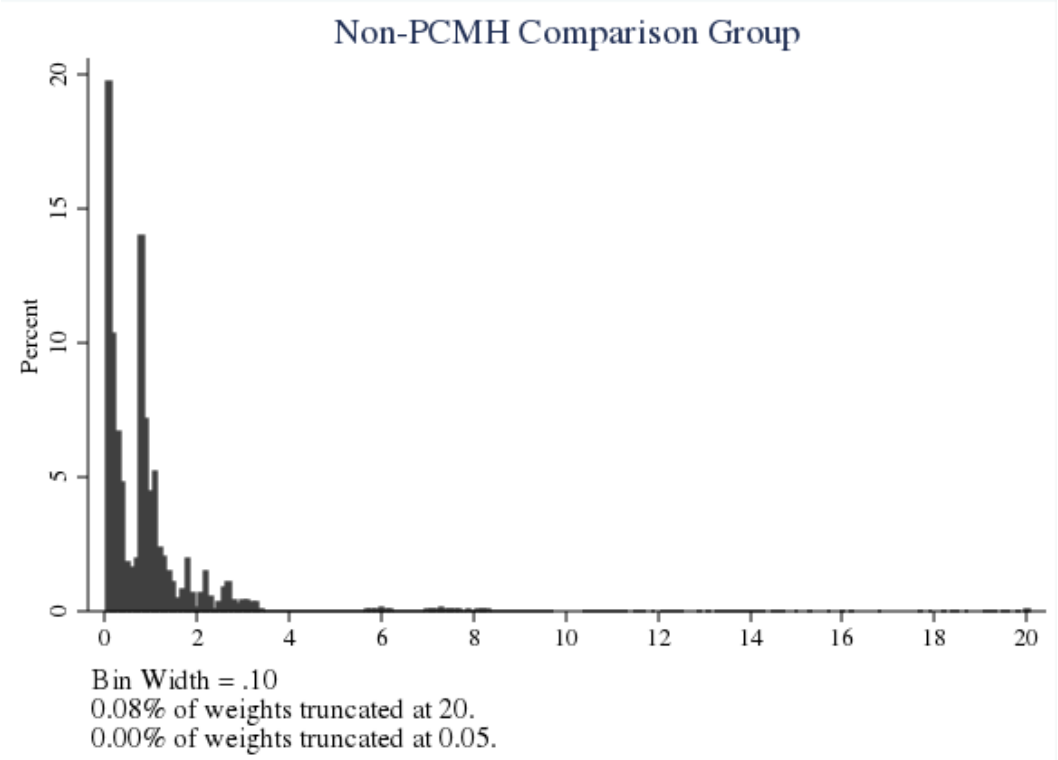


Figure N12-b
Distribution of propensity scores among Michigan children before and after entropy balance weighting with the PCMH CG

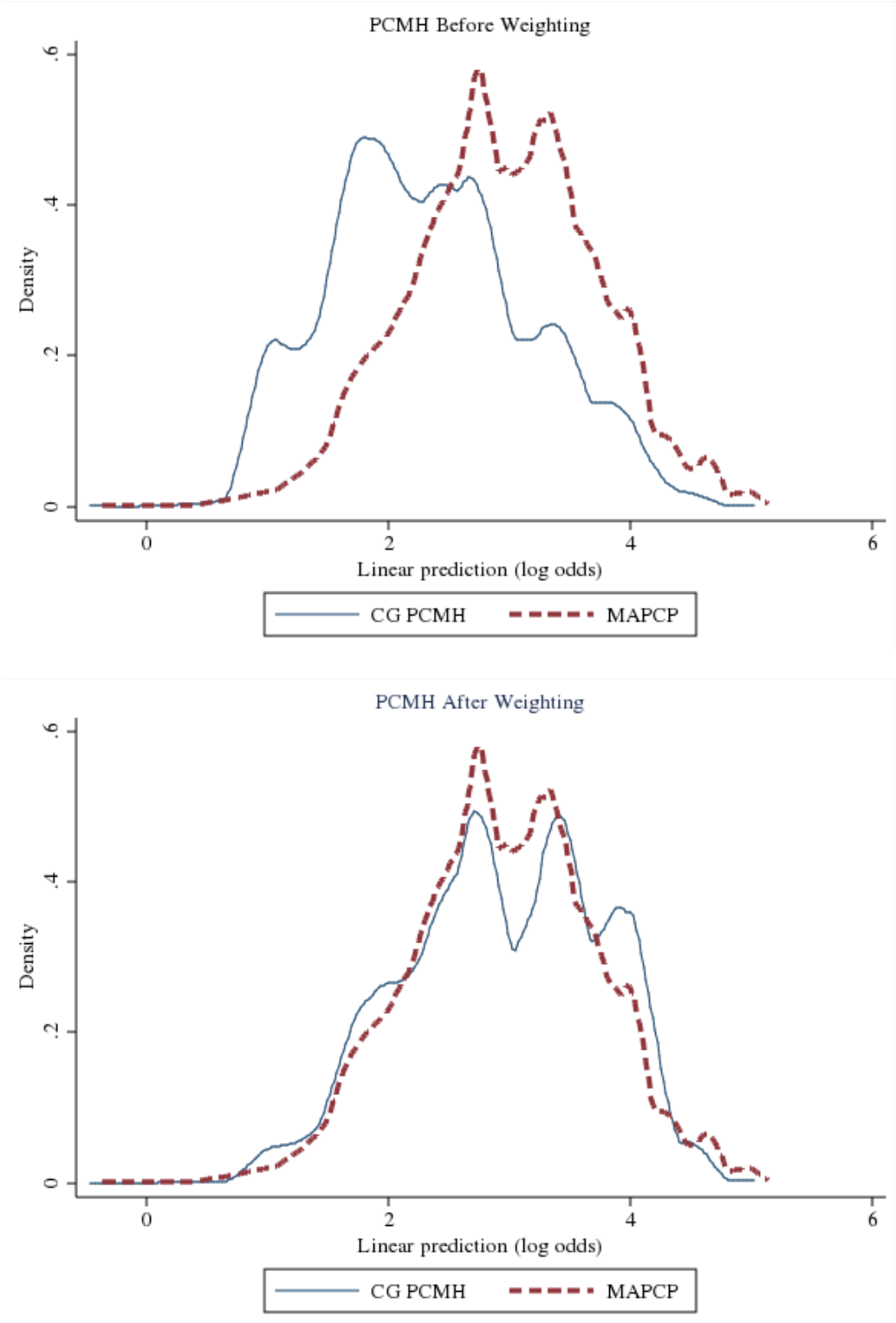
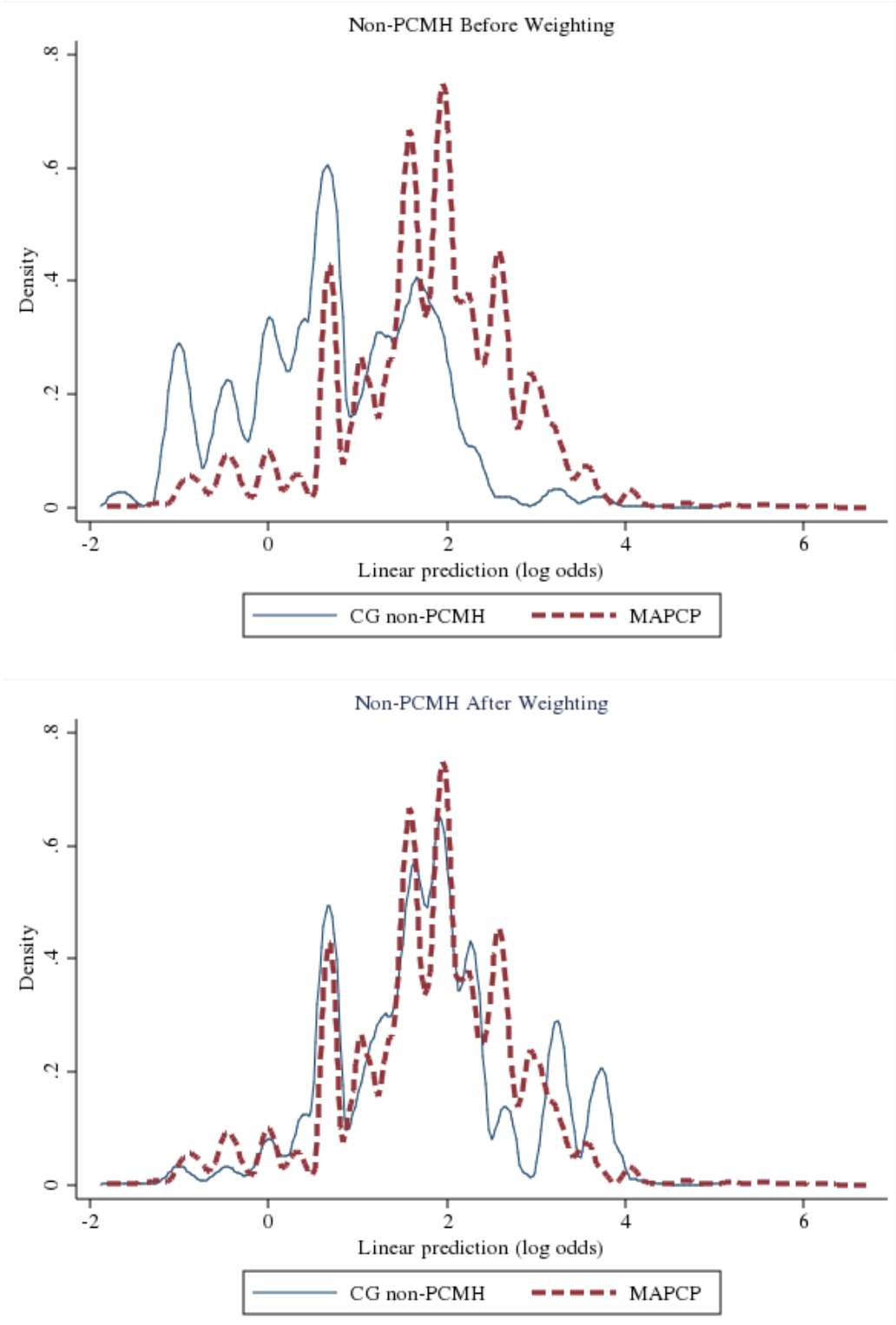


Figure N12-c
Distribution of propensity scores among Michigan children before and after entropy balance weighting with the non-PCMH CG



Adults. Among adults, the unweighted PCMH CG and the unweighted non-PCMH CG in Michigan had a higher proportion of non-White beneficiaries and were located in more densely populated counties than beneficiaries in the MAPCP Demonstration group. Additionally, both unweighted CGs had a lower proportion of TINs with more than one primary care provider. The unweighted non-PCMH CG had a higher proportion of beneficiaries assigned to FQHCs and RHCs and a lower median household income.

After weighting, adequate covariate balance was achieved among adults for all covariates. That is, STDFs were less than 0.10 (in absolute value) for all covariates and for all comparisons.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 4. Among adults in both CGs, no weights were capped at 20 or 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-13
Michigan: Comparison of average characteristics between MAPCP Demonstration adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

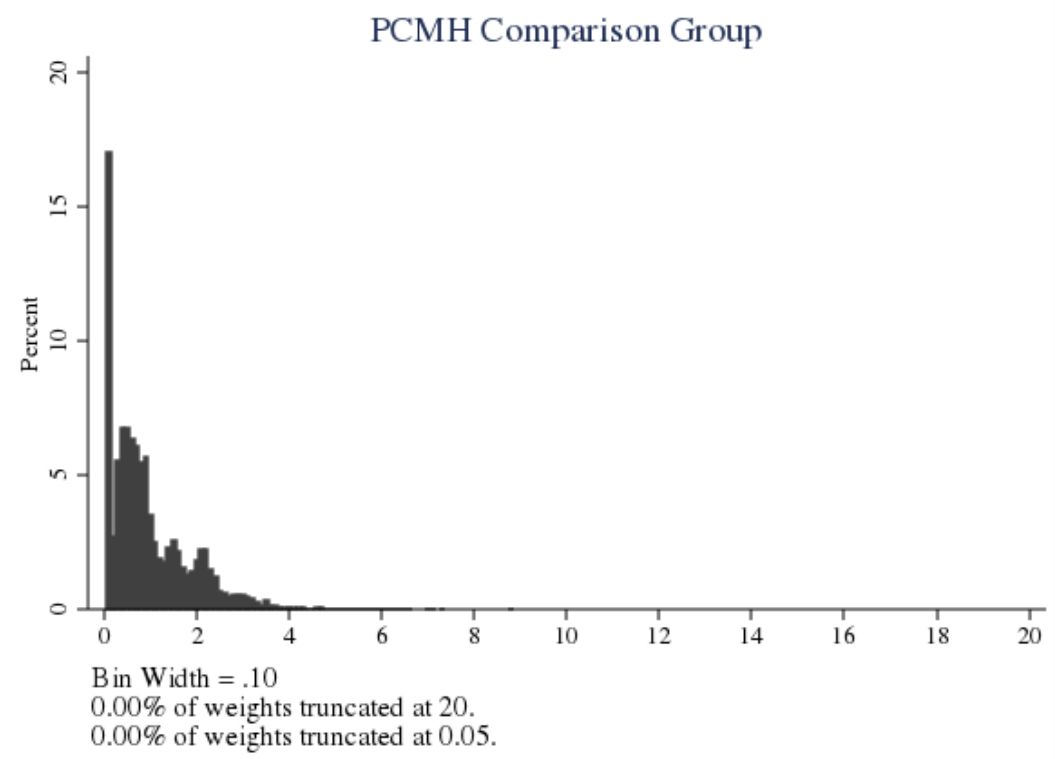
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 157,901)	PCMH (N = 25,947)		Non-PCMH (N = 50,031)		PCMH (N = 25,947)		Non-PCMH (N = 50,031)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	36.41	36.48	−0.01	37.42	−0.08	36.41	0.00	36.41	0.00
Female	0.65	0.63	0.05	0.62	0.07	0.65	0.00	0.65	0.00
Non-White	0.39	0.57	−0.38	0.53	−0.30	0.39	0.00	0.39	0.00
Disabled	0.21	0.26	−0.14	0.27	−0.15	0.21	0.00	0.21	0.00
Institutionalized	0.00	0.00	−0.01	0.00	−0.01	0.00	0.00	0.00	0.00
CDPS score	1.00	1.07	−0.06	1.05	−0.04	1.00	0.00	1.00	0.00
Population density	1,056.26	1,362.70	−0.28	1,613.93	−0.49	1,056.26	0.00	1,056.26	0.00
Percent primary care	0.87	0.86	0.05	0.82	0.31	0.87	0.00	0.87	0.00
Non-solo primary care	0.95	0.75	0.57	0.76	0.56	0.95	0.00	0.95	0.00
FQHC	0.08	0.14	−0.20	0.45	−0.94	0.08	0.00	0.08	0.00
RHC	0.09	0.07	0.07	0.12	−0.09	0.09	0.00	0.09	0.00
CAH	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
Median household income	48,300	46,300	0.24	45,600	0.34	48,300	0.00	48,300	0.00

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N13-a
Distribution of entropy balance weights among Michigan adults in the CGs



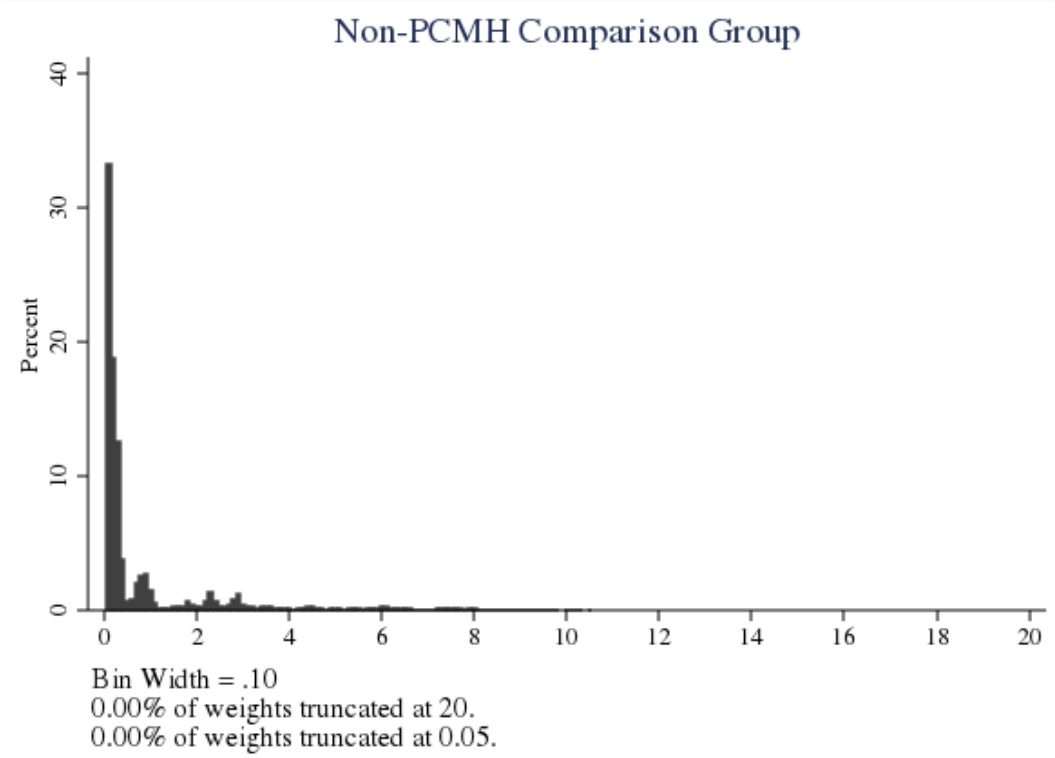


Figure N13-b
Distribution of propensity scores among Michigan adults before and after entropy balance weighting with the PCMH CG

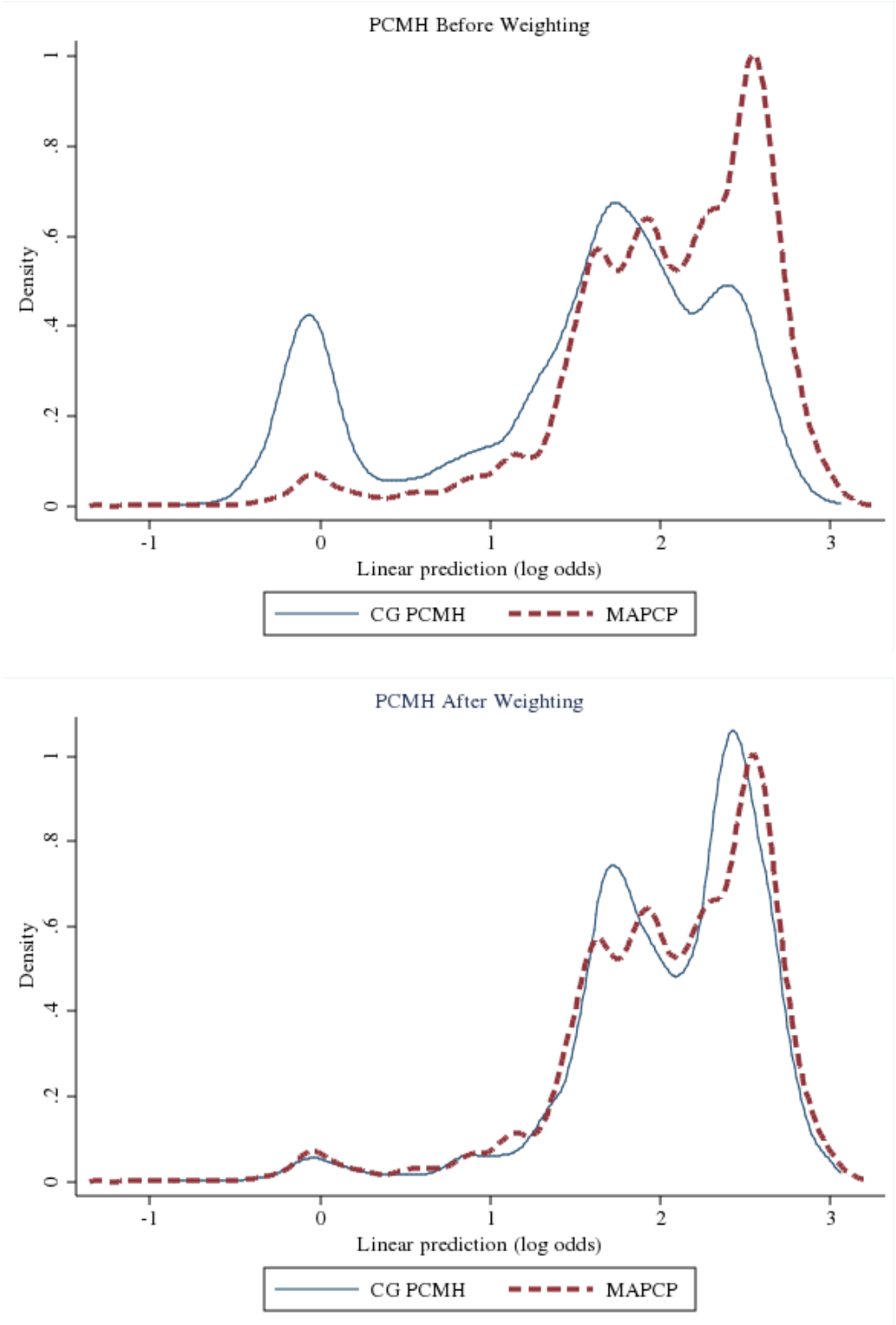
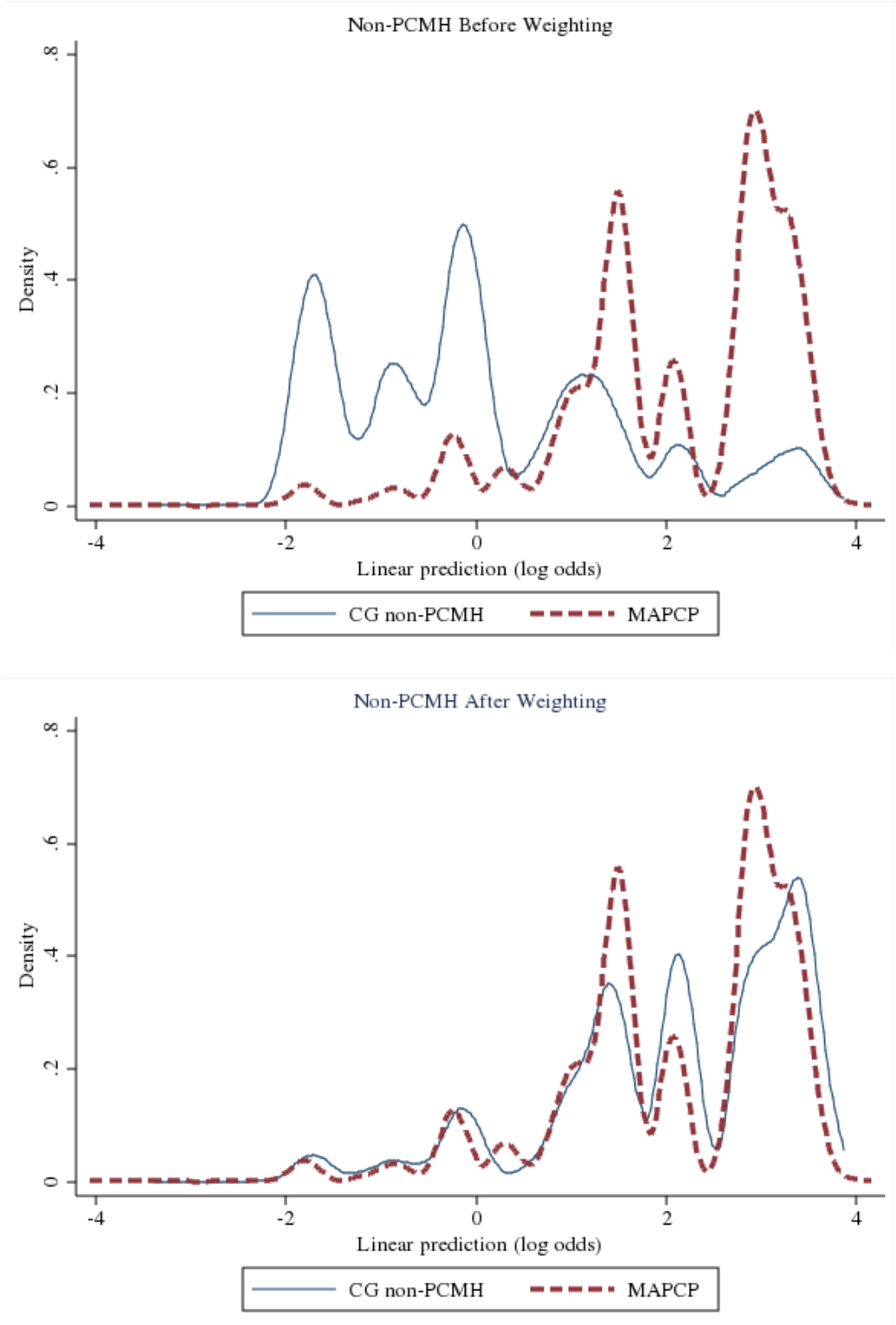


Figure N13-c
Distribution of propensity scores among Michigan adults before and after entropy balance weighting with the non-PCMH CG



N.9 Pennsylvania Demonstration and Comparison Groups

We received Medicaid claims data from one of the Medicaid managed care plans participating in the Chronic Care Initiative (CCI). Enrollees in this managed care plan were primarily located in the greater Philadelphia area. Comparison beneficiaries were drawn from the same area.

N.9.1 Group Comparability

Children. Among children, the unweighted PCMH CG and the unweighted non-PCMH CG in Pennsylvania had a higher proportion of non-White beneficiaries, tax identification number (TIN)-associated providers that were primary care, and TINs with more than one primary care provider than beneficiaries in the MAPCP Demonstration group. Lastly, the unweighted non-PCMH CG had a lower proportion of beneficiaries assigned to FQHCs.

After weighting, adequate covariate balance was achieved among children for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the PCMH CG, the STDF for percent primary care improved after applying entropy balance weights but was still greater than 0.10 (in absolute value). This is partially because the entropy balance algorithm could not converge if we included percent primary care for this comparison. As a result of this nonconvergence, we also excluded it from the propensity score model comparing MAPCP beneficiaries with the PCMH CG. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among children, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 2. Among children in both CGs, no weights were capped at 20 or 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-14
Pennsylvania: Comparison of average characteristics between MAPCP Demonstration children and PCMH/non-PCMH children comparison beneficiaries before and after weighting

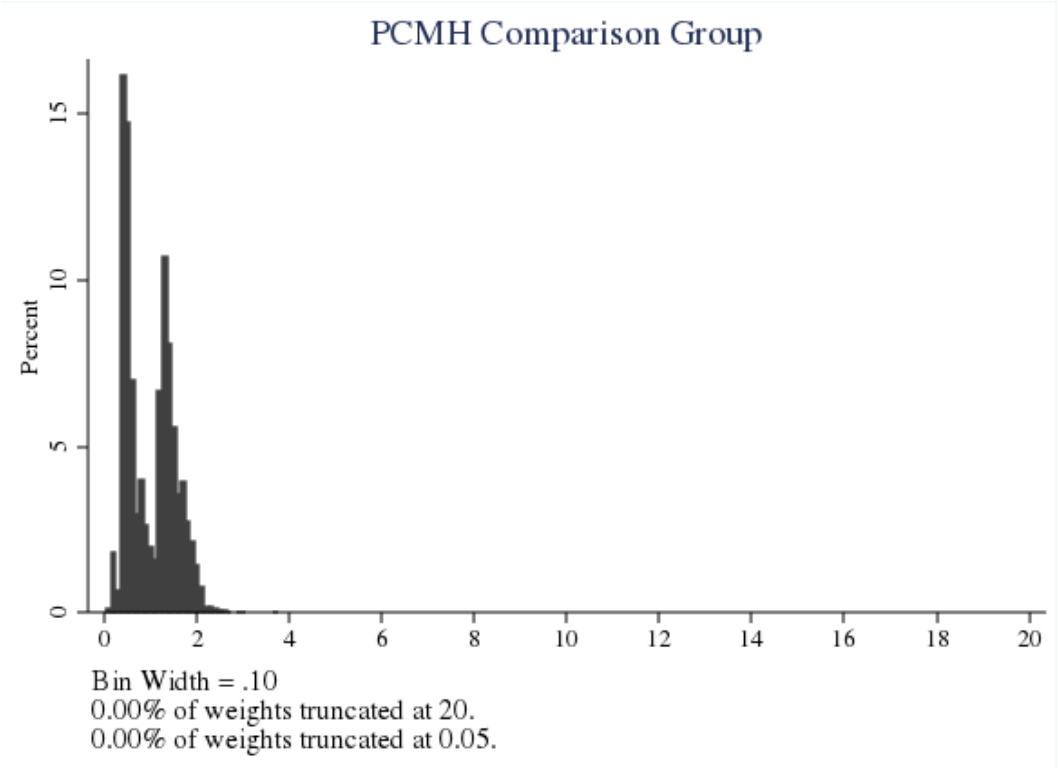
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 29,693)	PCMH (N = 16,629)		Non-PCMH (N = 137,069)		PCMH (N = 16,629)		Non-PCMH (N = 137,069)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	6.46	5.88	0.10	6.22	0.04	6.46	0.00	6.46	0.00
Female	0.49	0.47	0.04	0.48	0.02	0.49	0.00	0.49	0.00
Non-White	0.20	0.41	−0.47	0.30	−0.24	0.20	0.00	0.20	0.00
Disabled	0.07	0.06	0.07	0.06	0.04	0.07	0.00	0.07	0.00
Low birthweight and serious perinatal problems	0.01	0.01	0.03	0.01	0.00	0.01	0.00	0.01	0.00
CDPS score	0.77	0.74	0.02	0.74	0.02	0.77	0.00	0.77	0.00
Percent primary care	0.40	1.00	−2.64	0.71	−0.86	1.00	−2.63	0.40	−0.01
Non-solo primary care	0.00	0.02	−0.14	0.13	−0.53	0.00	0.00	0.01	−0.05
FQHC	0.12	0.14	−0.06	0.07	0.17	0.12	0.00	0.12	0.00
RHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
CAH	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N14-a
Distribution of entropy balance weights among Pennsylvania children in the CGs



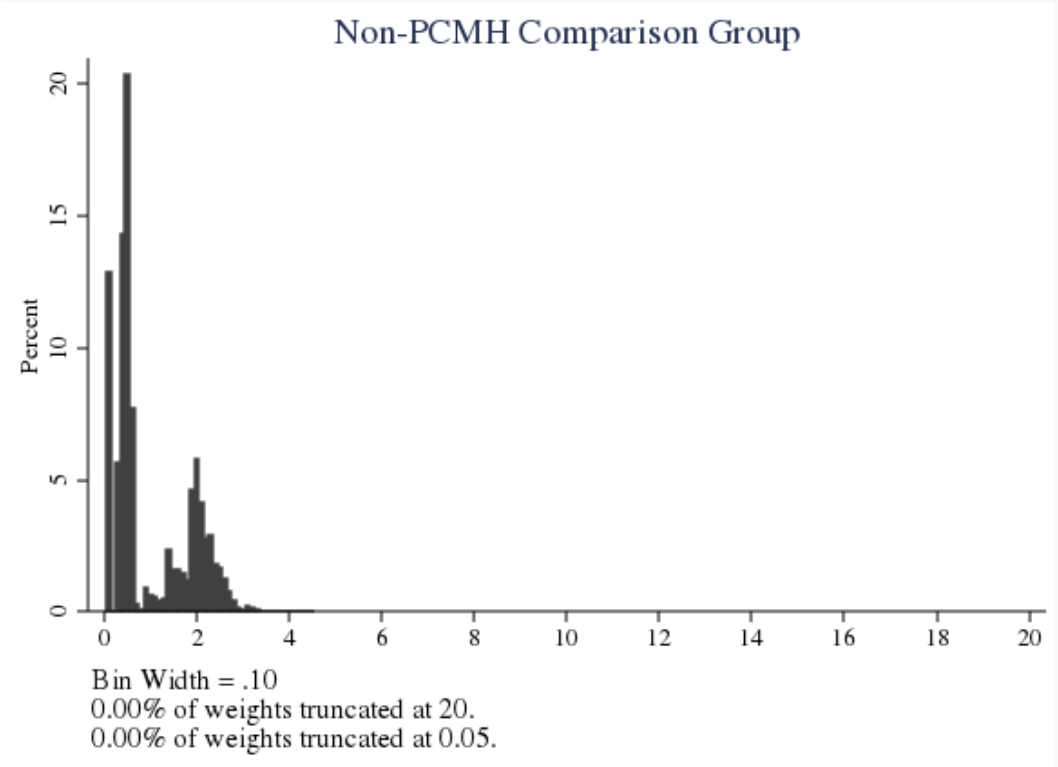


Figure N14-b
Distribution of propensity scores among Pennsylvania children before and after entropy balance weighting with the PCMH CG

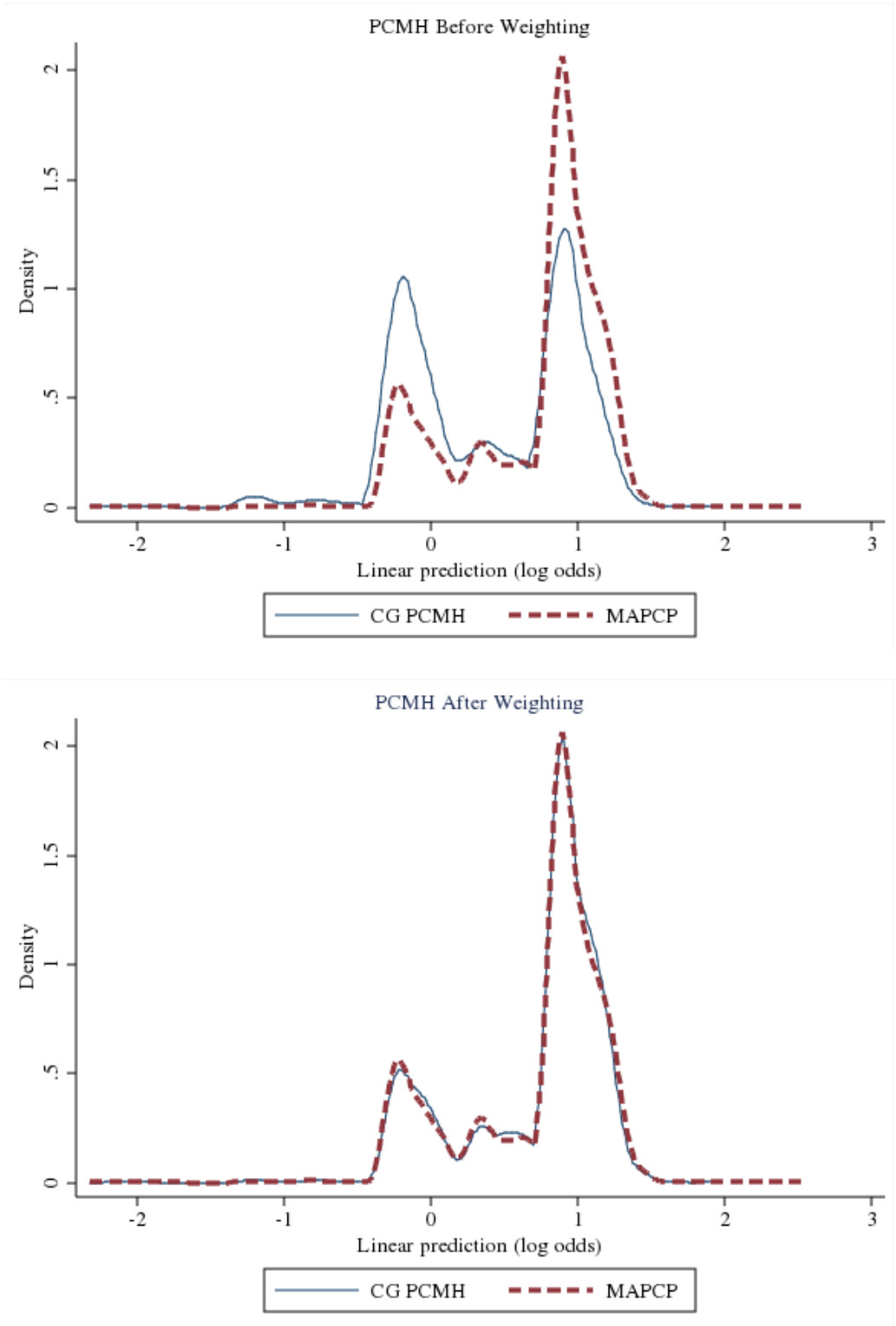
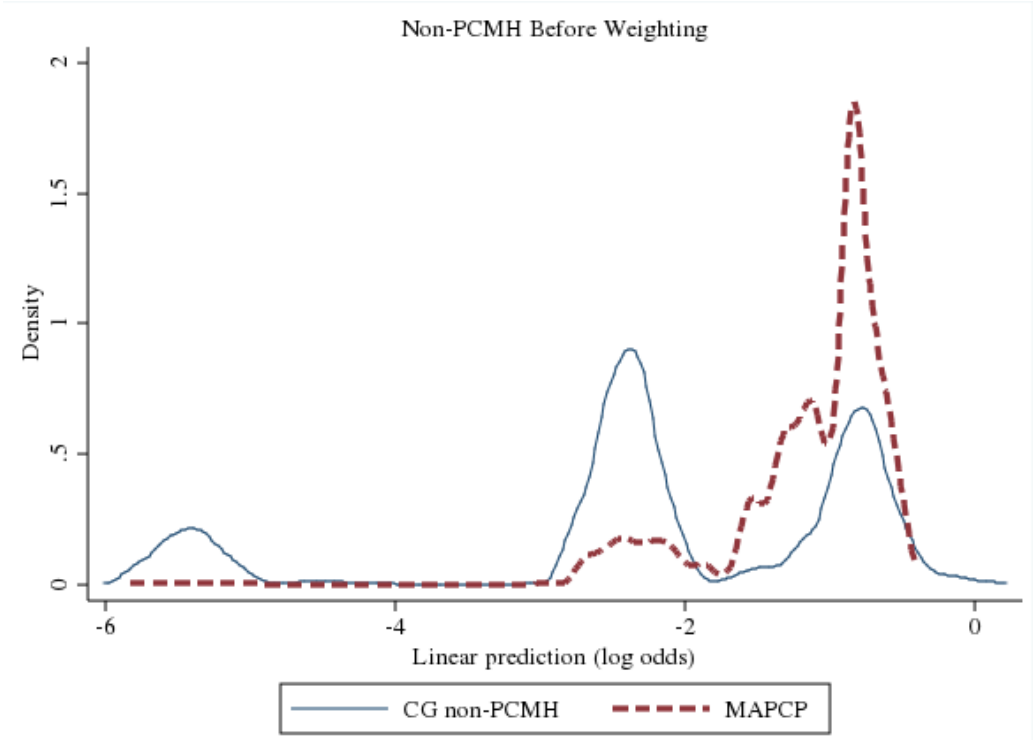
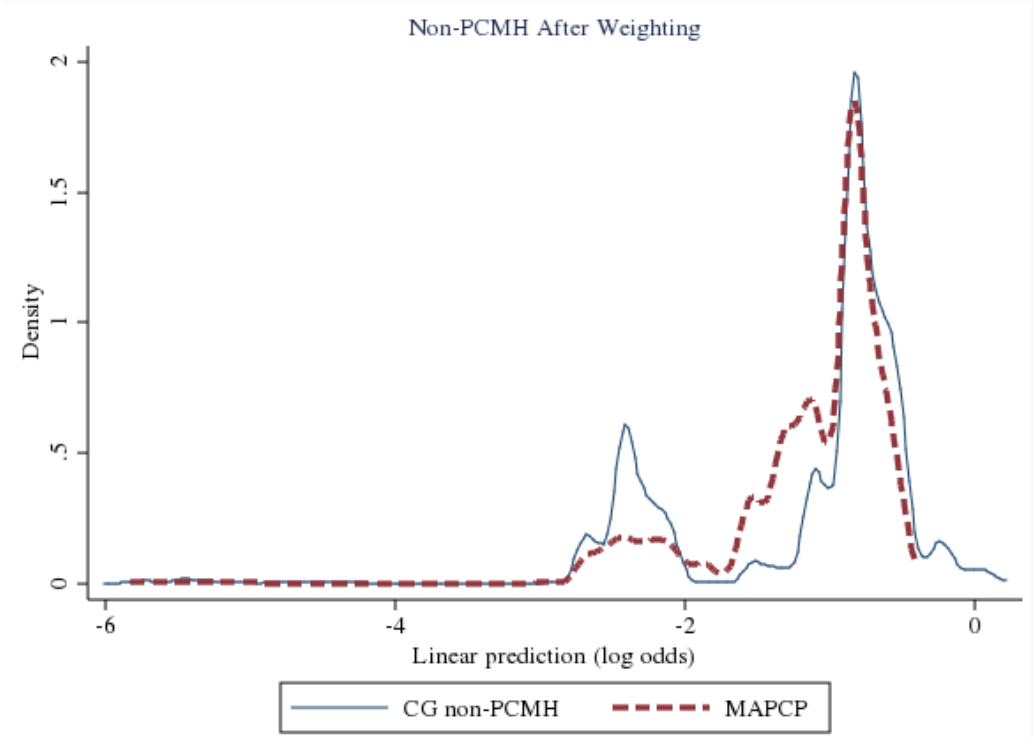


Figure N14-c
Distribution of propensity scores among Pennsylvania children before and after entropy balance weighting with the non-PCMH CG





Adults. Among adults, the unweighted PCMH CG and the unweighted non-PCMH CG in Pennsylvania had a higher proportion of beneficiaries who were non-White than beneficiaries in the MAPCP Demonstration group. The unweighted CGs had a higher proportion of TIN-associated providers that were primary care. The unweighted PCMH CG had a lower proportion of disabled beneficiaries compared to the other groups. The unweighted non-PCMH CG had a higher proportion of TINs with more than one primary care provider and a lower proportion of beneficiaries assigned to FQHCs, relative to the other groups.

After weighting, adequate covariate balance was achieved among adults for most but not all covariates. When comparing beneficiaries in the MAPCP Demonstration group with beneficiaries in the non-PCMH CG, the STDF for non-solo primary care improved after applying entropy balance weights, but was still greater than 0.10 (in absolute value). This is because the proportions are very close to zero, and the STDF overstates the imbalance in these situations. Because perfect covariate balance was not achieved, all covariates, including those omitted from the entropy balance algorithm, were also included directly in the regression models to control for residual confounding.

Among adults, looking at the distribution of the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 4. Among adults in CGs, no weights were capped at 20 or 0.05. Areas of common support were observed across both CGs in most regions of the demonstration group's propensity score distribution. Propensity score distributions also were fairly symmetric after weighting.

Table N-15
Pennsylvania: Comparison of average characteristics between MAPCP Demonstration adults and PCMH/non-PCMH adult comparison beneficiaries before and after weighting

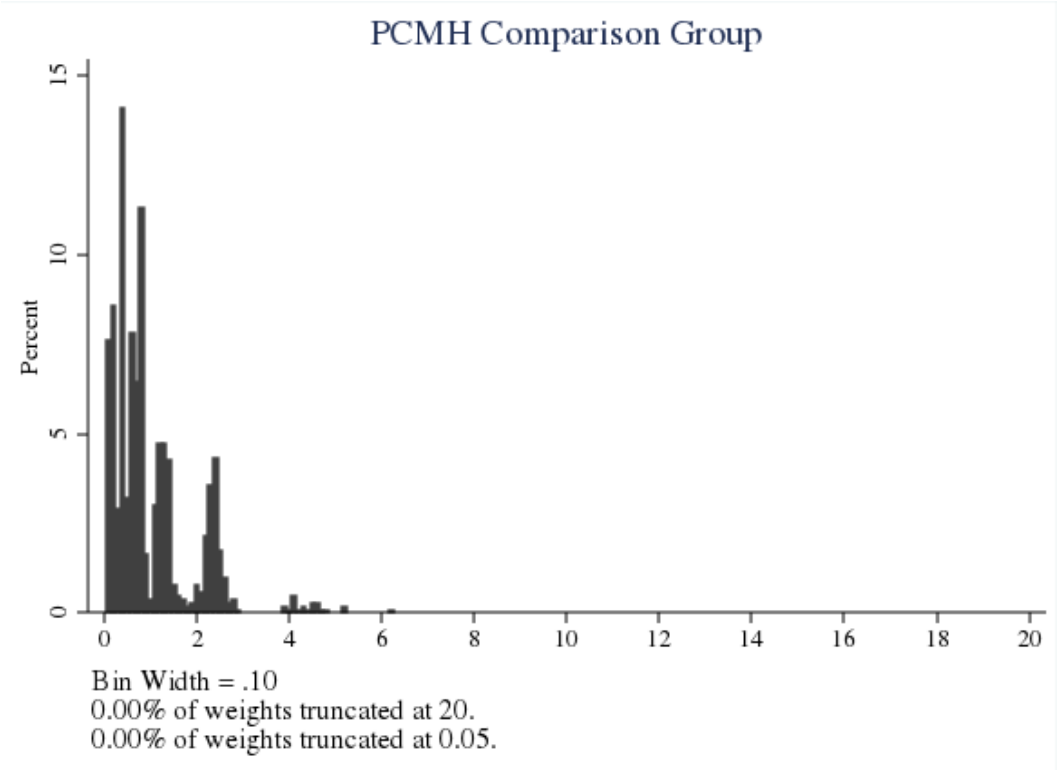
	Unweighted means and STDFs					Weighted means and STDFs			
	MAPCP (N = 16,461)	PCMH (N = 1,035)		Non-PCMH (N = 19,200)		PCMH (N = 1,035)		Non-PCMH (N = 19,200)	
	Mean	Mean	STDF	Mean	STDF	Mean	STDF	Mean	STDF
Age	36.85	35.30	0.13	38.68	−0.15	36.85	0.00	36.91	0.00
Female	0.71	0.70	0.03	0.63	0.19	0.71	0.00	0.71	0.00
Non-White	0.19	0.38	−0.43	0.36	−0.38	0.19	0.00	0.20	−0.01
Disabled	0.27	0.19	0.19	0.26	0.03	0.27	0.00	0.27	0.00
CDPS score	1.26	1.10	0.08	1.10	0.08	1.26	0.00	1.25	0.00
Percent primary care	0.76	0.84	−0.45	0.91	−0.72	0.76	0.00	0.77	−0.02
Non-solo primary care	0.00	0.05	−0.32	0.43	−1.22	0.00	−0.02	0.02	−0.18
FQHC	0.28	0.27	0.01	0.09	0.49	0.28	0.00	0.28	0.01
RHC	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA
CAH	0.00	0.00	NA	0.00	NA	0.00	NA	0.00	NA

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TINs with more than one primary care provider.
- NA (not available) denotes cases when FQHCs, RHCs, or CAHs are not present in one or more groups, meaning that STDFs cannot be estimated.

CAH = critical access hospital; CDPS = Chronic Illness and Disability Payment System; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure N15-a
Distribution of entropy balance weights among Pennsylvania adults in the CGs



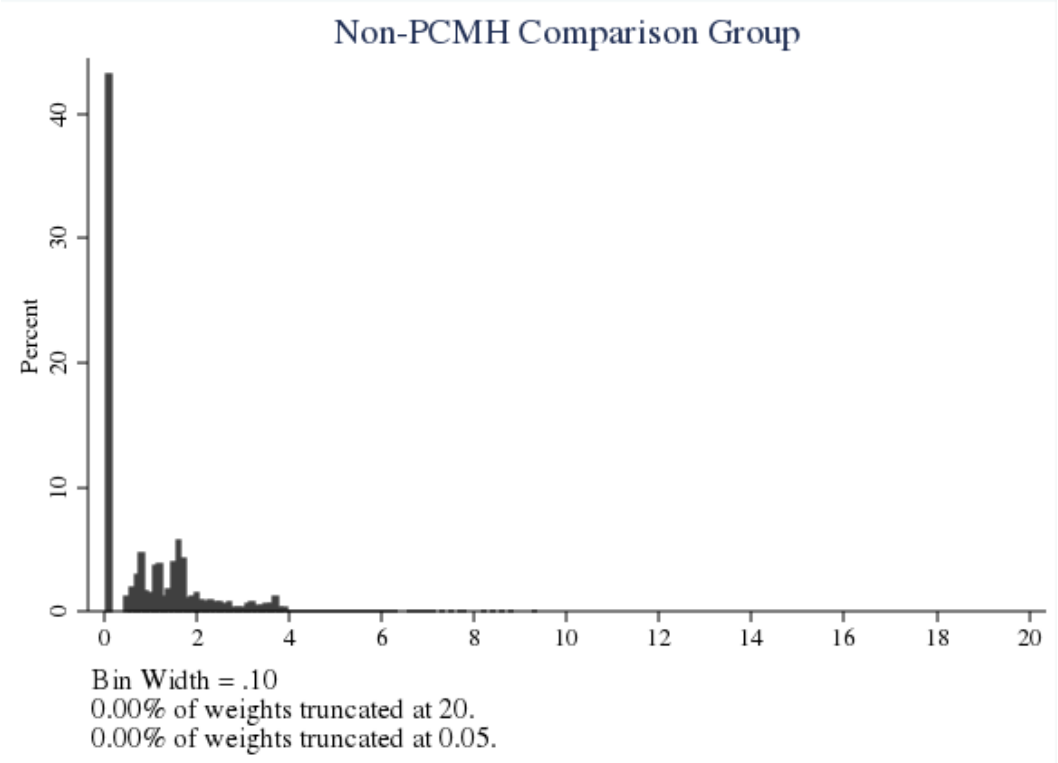


Figure N15-b
Distribution of propensity scores among Pennsylvania adults before and after entropy balance weighting with the PCMH CG

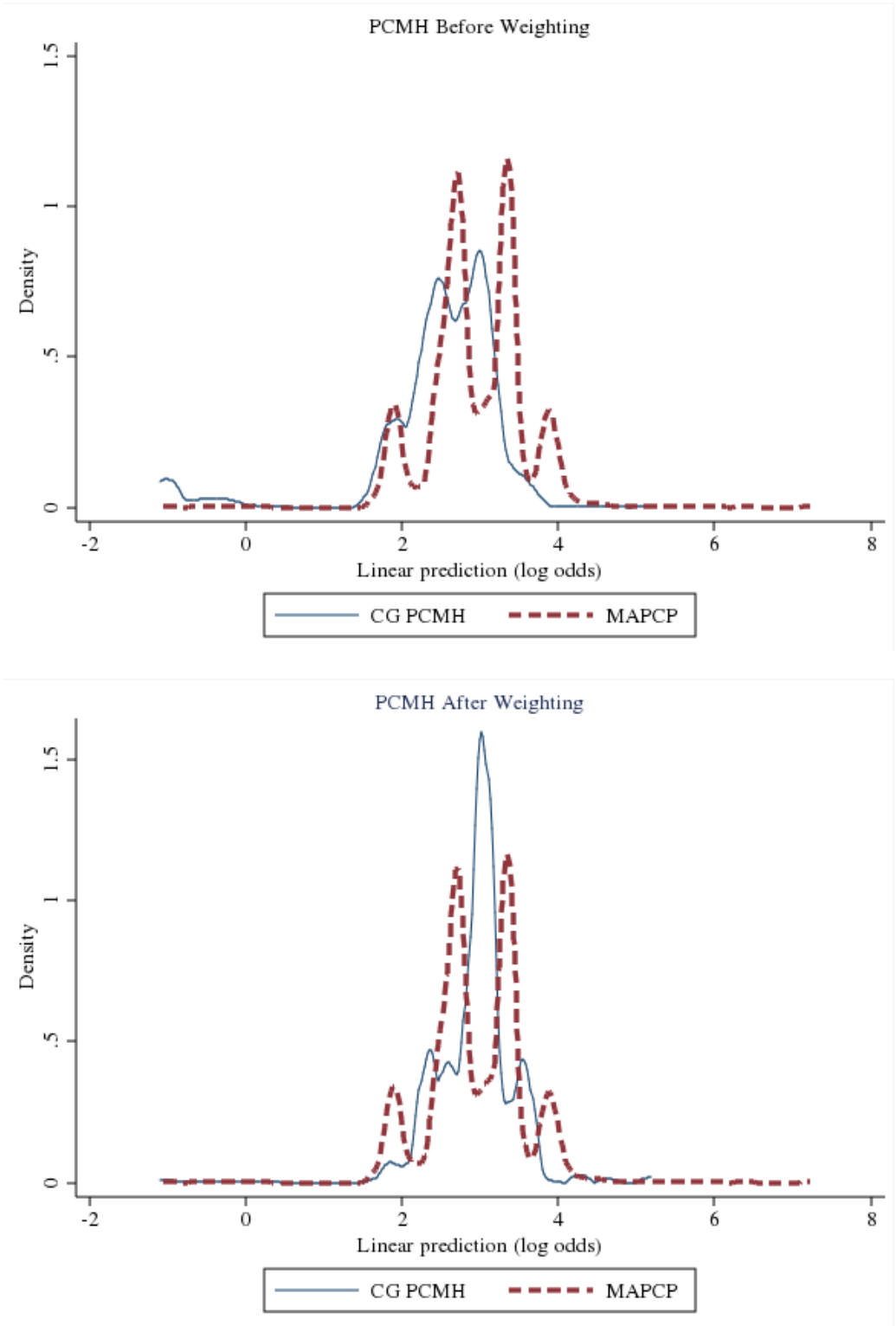
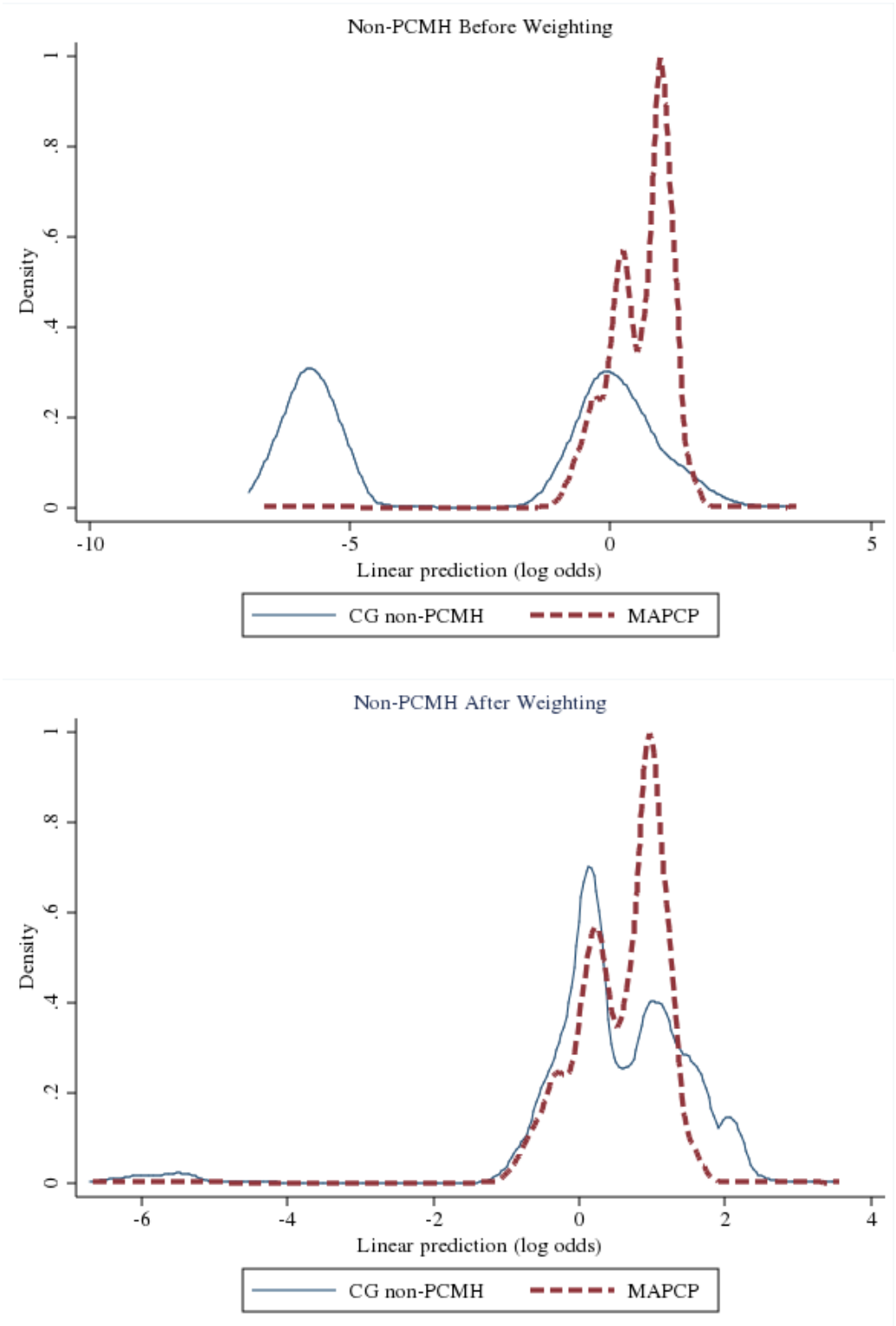


Figure N15-c
Distribution of propensity scores among Pennsylvania adults before and after entropy balance weighting with the non-PCMH CG



APPENDIX O
FOCUS GROUP METHODS

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O.1 Recruitment and Implementation Methods

To learn about beneficiaries' and their caregivers' experiences with the MAPCP Demonstration, we conducted in-person focus groups with Medicare, Medicaid, and dually eligible beneficiaries and their caregivers. Because the demonstration was *patient-centered*, it was critical to understand patients' experiences from their perspective (or from their caregiver's perspective) and how well this model served their needs.

Twelve focus groups—two sets of six—were held in each state. Each set was held in two distinct geographical locations and had different compositions of beneficiaries or caregivers. The categories of focus groups for each state are summarized in ***Table O-1***.

Table O-1
Focus group categories for each state

Focus group composition	Location 1	Location 2
Medicare—low-risk	Focus group 1	Focus group 7
Medicare—high-risk[1]	Focus group 2	Focus group 8
Medicaid	Focus group 3	Focus group 9
Dually eligible	Focus group 4	Focus group 10
Caregivers—Medicaid children (SASH for Vermont)	Focus group 5	Focus group 11
Caregivers—Medicare and dually eligible	Focus group 6	Focus group 12

NOTE:

[1]High-risk is defined as having an HCC score equal to or greater than 1.22.

HCC = Hierarchical Condition Category; SASH = Support and Services at Home.

We recruited participants for the focus groups by mailing letters to Medicare and Medicaid beneficiaries inviting them to participate. To identify Medicare and dually eligible beneficiaries, we selected six MAPCP Demonstration practices in each of the two regions in each state and then used the Medicare Enrollment Data Base (EDB) to select a random sample of beneficiaries attributed to those practices who were age 18 or older, had been assigned to a MAPCP Demonstration practice for at least 4 quarters (1 year), and had visited the practice more than once in the past 12 months. For each focus group, we generated a sample of 400 beneficiaries and mailed invitation letters to them.

We took a different approach to recruit Medicaid beneficiaries because RTI did not have mailing addresses in the Medicaid claims data received from the states. We identified four practices[1] in each state (two practices in each region) to help with recruitment. The practices generated a random sample of between 100 and 400 Medicaid beneficiaries who had received care at their practice over the previous 12 months. In states that included pediatric patients in their initiative, 50 percent of the sample consisted of children insured by Medicaid—if practices had a sufficient number of pediatric patients—to reach parents of the Medicaid beneficiaries group. Practices generated and printed address labels and mailed stamped, preformatted

[1] In three states (Michigan, Minnesota, and Rhode Island), we were able to enlist only three practices to assist with Medicaid recruitment.

invitation letters provided by RTI. To compensate practice staff for their assistance, RTI provided a gift card to each practice.

The focus group guides, the recruitment letter, and the telephone screener and recruitment script were reviewed and approved by the Centers for Medicare & Medicaid Services (CMS), the Office of Management and Budget (OMB), and the RTI International Institutional Review Board. A notice about this proposed information collection was published in the *Federal Register* on April 29, 2013, on pages 25089–25090, allowing 60 days for public comment. CMS received one comment from a coalition of consumer organizations in response to the notice. The comments were considered and minor modifications were made to the focus group guides. Final OMB approval was received on February 26, 2014.

Beneficiaries who received an invitation were asked to call The Henne Group to be screened for eligibility and placed in a group. To be eligible to participate, beneficiaries had to be aged 18 years or older, proficient in English, and not have participated in a focus group in the previous 12 months; they also had to confirm that they had either Medicare or Medicaid insurance and that they received their primary care from a practice participating in the MAPCP Demonstration. To ensure that participants had sufficient experience with the practice to be able to speak knowledgably about it and to ensure that they would be able to address the questions about coordination with specialists, they also had to have received care at the practice for more than 1 year, to have visited the practice at least twice in the past year, to have seen a specialist at least once in the past year, and to have a chronic condition. During screening, we also collected basic sociodemographic information, including their overall health status, sex, race/ethnicity, education level, and age.

Because we did not have contact information specifically for caregivers of Medicare or Medicaid beneficiaries, in the recruitment letters, we invited caregivers to call also and be screened for eligibility. A caregiver was defined as the main person responsible for the beneficiary's health care and usually or always took them to the beneficiary's primary care practice for doctor appointments. To capture a broader range of experiences, we did not recruit a beneficiary and caregiver from the same household.

We aimed to recruit 10 participants per group, to achieve a final group size of eight participants. We had contact information for Medicare and dually eligible beneficiaries, so if we did not receive enough calls from the invitation letters to enlist 10 participants, we called beneficiaries who had been mailed the letters to recruit them or their caregivers proactively for the groups. Because we did not have contact information for the Medicaid beneficiaries and caregivers, we were unable to take additional steps to increase the size of those groups. The groups for caregivers of Medicaid children were the most difficult to recruit, both because we did not have contact information and because many of the practices had few pediatric patients. See ***Table O-2*** for detailed numbers of participants by state and group composition.

Table O-2
Number of focus group participants by state and group composition

State	Medicare beneficiaries—low-risk	Medicare beneficiaries—high-risk	Medicaid beneficiaries	Dually eligible beneficiaries	Caregivers of Medicaid children	Caregivers of Medicare and dually eligible beneficiaries	Special populations[1]	Total focus group participants
Maine	16	11	11	14	—	12	—	64
Michigan	8	11	10	13	3	11	—	56
Minnesota	13	11	8	11	N/A[2]	11	—	54
New York	17	15	12	9	1	6	—	60
North Carolina	16	12	12	5	N/A[2]	12	—	57
Pennsylvania	15	16	11	6	N/A[2]	7	—	55
Rhode Island	16	13	7	15	N/A[2]	7	—	58
Vermont	16	16	16	16	10	—	12[1]	86
Total	117	105	87	89	14	66	12	490

NOTES:

[1] In Vermont, the special populations groups included participants in the SASH program.

[2] Children were not included in the state initiatives in Minnesota, North Carolina, Pennsylvania, and Rhode Island, so focus groups for this group composition did not take place.

— = the focus group was not held because fewer than three participants were recruited; N/A = not applicable; SASH = Support and Services at Home.

An experienced focus group moderator from The Henne Group moderated all of the groups, following a discussion guide (***Appendices P*** and ***Q***). The focus group task leader from RTI observed the first set of focus groups, conducted in one location, to ensure that the moderator had a good understanding of the information that the discussion group guide was intended to elicit. Groups lasted 1.5 hours on average. Focus group participants were given a gift card for their participation. Each group was audiorecorded and transcribed. In addition, the moderator prepared notes on each group immediately after the group, summarizing key findings as well as any relevant insights related to individual participants and the dynamics of the group.

O.2 Data Analysis Methods

To guide our analysis of the data, we developed a coding scheme based on a priori theoretical constructs as well as on themes that emerged from a review of the focus group transcripts. Using NVivo qualitative data analysis software, a team of six coders all coded two transcripts to ensure intercoder reliability and to refine the coding scheme. The team then coded the remaining transcripts and prepared coding reports. For each state, one team member reviewed the coded reports, conducted content analysis to identify patterns and themes within the data, and prepared a report summarizing findings for the state.

O.3 Participant Characteristics

Most participants described themselves as being in very good (25.8%), good (35.8%), or fair (27.4%) health; very few described themselves as being in either excellent (5.7%) or poor (5.3%) health (***Table O-3***). These proportions varied across states, however. In particular, in New York, nearly one in five participants (18.6%) described themselves as being in excellent health.

More than half (59.6%) of participants were female. This proportion was highest in Michigan (67.9%) and Pennsylvania (65.5%). The majority (83.3%) of participants were non-Hispanic White; 13.1 percent were non-Hispanic Black, and less than 4 percent were Hispanic or any other racial/ethnic group. In some states (Maine, New York, Rhode Island, and Vermont), participants were almost exclusively White (89.3% to 98.3%). Black participants were concentrated in four states: Michigan, Minnesota, North Carolina, and Pennsylvania (18.5% to 39.3%).

Approximately one-third (30.6%) of participants had a high school education or less, 52.2 percent had some college or a college degree, and 17.1 percent had more than a college degree. Participants in North Carolina had the lowest educational levels (43.9% of participants had a high school degree or less, and only 7.0% had more than 4 years of college), and participants in Rhode Island had the highest educational levels (only 20.7% had a high school degree or less, and 31.0% had more than 4 years of college).

Almost two-thirds (64.1%) were 60 years of age or older, and only 9.5 percent were under age 40. These proportions were similar across states, except for Michigan. Participants in Michigan were substantially younger, with only 44.6 percent age 60 or older, and 21.5 percent under age 40.

Table O-3
Characteristics of focus group participants, by state

Participant characteristics	ME (n=64)	MI (n=56)	MN (n=54)	NC (n=57)	NY (n=59)	PA (n=55)	RI (n=58)	VT (n=86)	Total (n=490)
Overall health									
Excellent	3.1%	1.8%	1.9%	7.0	18.6%	1.8%	5.2%	4.7%	5.7%
Very good	23.4%	23.2%	11.1%	21.1%	39.0%	27.3%	32.8%	26.7%	25.8%
Good	39.1%	37.5%	51.9%	26.3%	18.6%	36.4%	39.7%	37.2%	35.8%
Fair	26.6%	28.6%	33.3%	35.1%	22.0%	30.9%	22.4%	23.3%	27.4%
Poor	7.8%	8.9%	1.9%	10.5%	1.7%	3.6%	0.0%	7.0%	5.3%
Sex									
Male	43.8%	32.1%	40.7%	42.1%	40.7%	34.5%	37.9%	47.7%	40.4%
Female	56.3%	67.9%	59.3%	57.9%	59.3%	65.5%	62.1%	52.3%	59.6%
Race/ethnicity									
Non-Hispanic White	96.9%	55.4%	77.8%	75.4%	98.3%	65.5%	89.7%	96.5%	83.3%
Non-Hispanic Black	0%	39.3%	18.5%	24.6%	0.0%	27.3%	5.2%	0.0%	13.1%
Hispanic	3.1%	3.6%	1.9%	0.0%	0.0%	1.8%	1.7%	2.3%	1.8%
Asian	0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
American Indian	0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.4%
Other	0%	0.0%	1.9%	0.0%	1.7%	5.5%	1.7%	1.2%	1.4%
Education									
High school degree or less	26.6%	39.3%	29.6%	43.9%	30.5%	36.4%	20.7%	23.3%	30.6%
Some college to 4 years of college	54.7%	48.2%	63.0%	49.1%	42.4%	49.1%	48.3%	59.3%	52.2%
Less than 4 years of college	18.8%	12.5%	7.4%	7.0%	27.1%	14.5%	31.0%	17.4%	17.1%
Age									
18–29	4.7%	5.4%	0.0%	0%	3.4%	1.8%	0.0%	2.3%	2.4%
30–39	6.3%	16.1%	7.4%	3.5%	6.8%	3.6%	6.9%	7.0%	7.1%
40–49	10.9%	7.1%	5.6%	8.8%	3.4%	5.5%	5.2%	10.5%	7.3%
50–59	14.1%	26.8%	18.5%	24.6%	22.0%	21.8%	19.0%	11.6%	19.2%
60–69	28.1%	23.2%	35.2%	21.0%	15.3%	30.9%	17.2%	22.1%	23.9%
70+	35.9%	21.4%	33.3%	42.1%	49.2%	36.4%	51.7%	47.7%	40.2%

NOTE: For the caregiver focus groups, overall health and age were reported by the caregiver for the beneficiary for which they care. Sex, race/ethnicity, and education are reported for the actual caregiver.

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APPENDIX P
FOCUS GROUP GUIDE FOR BENEFICIARIES

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Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration

Focus Group Guide for Beneficiaries

A. Welcome

Hello and thank you for agreeing to meet with us today.

My name is [ ] and I work for The Henne Group, an organization that conducts focus groups on a variety of topics. I would like to introduce [ ], who represents RTI International [or Urban Institute], a nonprofit research organization.

We are working on a project funded by the Centers for Medicare and Medicaid Services (CMS). We want to learn about the experiences you have with the primary care practice listed on the card that you received when you signed in. [Card will list the beneficiary's name and their primary care practice name, based on claims data]

My role is to guide our discussion and to encourage everyone to share their experiences with the primary care practice listed on your card. [Name] will be taking notes while we speak. [Name] will be observing our discussion from the room behind the glass so that we can have our discussion without distractions. These individuals are part of our research team. They will summarize the views that are shared in these discussions. We are conducting 6 such discussions in [name of the state] and 42 additional discussions in 7 other states.

Before we get started, I'd like to go over a few things.

B. Review focus group process and ground rules for participation

First and foremost, during our discussion today, please keep in mind that there are no right or wrong views or answers. Everyone's opinion is important, so don't hesitate to speak up regardless of whether you agree with what others have said. In fact, if you have a different idea or feeling, we especially want to hear from you so we can better understand the different experiences that people have with their primary care practice.

To make sure that we understand everything people say today, we are making an audio and video recording of this discussion, as well as taking notes. So we can hear everyone clearly, we ask that only one person speak at a time. Even if you disagree with what someone is saying, please allow that person to have a chance to speak before you respond. It seems that every group has one or two "quiet" people, and if you are one of those, I might call on you! You are free to say that you'd rather "pass," but I'm hoping to hear from everyone at some point during our discussion.

Your participation in this discussion is voluntary. You can choose not to answer any questions. You can end your participation and leave the room at any time.

We will not share any of your comments with your doctor, your insurance provider, or anyone else in such a way that you can ever be identified. We will not list your name in any of the written notes or transcripts. We will make sure that collected data is kept and handled

in a private and secure way. We will not put any names in our reports. Our job is to ask questions and make sure we understand what you're saying. We also want to make sure that everyone has an opportunity to share their ideas and experiences.

Our discussion will last about 2 hours. I'll balance the amount of time we spend on each question, since we have a lot to get through from this guide. We won't be taking an official break, but if you need a personal break, please feel free to take one. [DESCRIBE LOCATION OF RESTROOMS AND REFRESHMENTS.]

C. Hand out the name badges or name tents and ask to write first name only. [CAN BE FILLED OUT BY PARTICIPANTS AS THEY ARRIVE].

D. **Review informed consent process, obtain the signature of each focus group participant on an informed consent form.** [CAN BE REVIEWED WITH PARTICIPANTS AS THEY ARRIVE OR JUST AS THEY ENTER THE ROOM, DEPENDING ON WHICH OPTION IS MORE PRACTICAL FOR THE PARTICULAR SET UP].

Do you have any questions about the consent form? If you are okay with this, please sign the informed consent form and pass it to us.

COLLECT INFORMED CONSENT FORMS; IF A PARTICIPANT IS NOT COMFORTABLE SIGNING THE FORM, HE/SHE CANNOT PARTICIPATE IN THE DISCUSSION.

E. Introductions

To begin, let's go around and introduce ourselves. Please tell us your first name and something you like to do for fun or a hobby that you have. I'll go first…

The primary purpose of today's discussion is to learn about the care that you receive from the primary care practice listed on the card and the providers that work there.

During the next 2 hours, I will be referring to "**the primary care practice**." When I say that, I am referring to the practice listed on your card. When answering questions, please think about the people who work at the practice listed on the card and the services they provide.

Your **provider** at your primary care practice could be a doctor, but may also be a nurse practitioner or physician assistant. You may also receive services at the practice from case managers, pharmacists, social workers, or patient advocates.

Do you have any questions so far, especially about what we mean by primary care practice or providers?

I want to discuss one more important issue before we get started. Many of us enjoy talking about our own health. However, the focus is on **your experience with primary care practices and providers**, so please limit comments about your health or medical condition to facts that may have **affected** your experience. Please don't be offended if I ask you to clarify

how your health or medical conditions shape your experience with providers or if I move the discussion along to the next topic. Do you have any questions? ANSWER.

Good, let's get started!

Patient Engagement and Management

1. **Knowledge of your health information:** When you go to your primary care practice, how confident are you that the provider knows your medical history and important health information? [PROBES: medications you are taking, your nutrition, activity level, and how well you sleep]. Do they ask this information when you come? Has this always been the case?

2. **Understanding of cultural and personal preferences and circumstances:** How well do providers at your primary care practice understand your own unique views? Do they consider your cultural beliefs and values when they talk to you about your health condition or treatment options?

   How well do staff at the practice understand things about your life circumstances that could get in the way of your health care: [PROBE: Do they understand challenges that you may have to making a weekly appointment or to getting care at a facility across town? Language barriers?]

   a. How could the staff at your primary care practice better understand your values, your preferences for treatment, or just understand your unique needs?

3. **Support for self-care:** What do the providers at your primary care practice do that helps you to take better care of yourself? [PROBES: Gives you advice on nutrition or meal plans? Gives you instructions about how to take care of yourself between visits?]

   a. Change: Have they always done this or is this a new way they are giving care? If new, when did you notice this change?

   b. Feelings: What do you like about this? What are some things you don't like about how they are doing things? Why?

4. **Help managing chronic conditions:** If you have a chronic condition like diabetes or high blood pressure, think about what your provider does to help you manage it.

   a. Information: Does your provider give you information, like lab results, showing how well you've controlled that condition over the past 6 months or year?

   b. Classes: Has anyone at your doctor's office arranged for you to attend a special class about managing your condition? This might be a class taught by nurse educators about diabetes, hypertension, or coronary artery disease.

   c. Care plan: Has your primary care practice worked with you to develop a care plan? What kind of information or instructions are in this care plan? [PROBES: Does it include personal, patient-centered health goals (e.g., "to live long enough to attend my son's wedding" or "to be able to walk to the mailbox without getting out of breath")?]

   d. What is most helpful: What has been most helpful to you in managing your condition? What else could your provider do to help you manage your condition?

5. **Shared decision making:** There are many ways that patients and providers can work together to manage the patient's health or medical condition. For example, some patients rely completely on their doctor to know what is best for them, while others take a more active role in the decisions that affect them. How much of a role do you take in your own care? [PROBE: Do you ask questions, share your views about what you think is best for you?]. How satisfied or dissatisfied are you with the role you play in managing your care?

6. **Effective communication:** How well does your provider communicate with you about your health? [PROBE: Does your provider talk to you about your condition or treatment options in a way that is easy for you to understand? Does your provider use medical words that are easy for you to understand? Does your provider explain the pros and cons of different treatment options? Does your provider listen carefully to your concerns? Is your provider willing to answer your questions?]

    a. Change: Has the way your provider communicates changed over the past couple of years, or has it remained the same? [If changed] What do you think about these new practices? [PROBE: What do you like about them? What are some things that you don't like about them? Why?]

Access to Care

We've been talking about how you and your provider have managed your care. Now we would like to hear about getting to see your provider. Remember, a provider could be a physician, nurse practitioner, or physician assistant. You may also receive services from case managers, pharmacists, social workers, or patient advocates working at your primary care practice.

7. **Getting an appointment:** How easy or hard is it for you to get an appointment with a provider at this practice when you need one? [PROBES: Can you schedule a same day appointment for urgent needs? Can you schedule an appointment for nights, weekends, or holidays?

    a. Change: Did the practice change its hours of operation? If so, how? Are the practice's hours more convenient for you?]

8. **Scheduling:** What ways can you now schedule an appointment? [PROBES: online through a patient portal, leaving a message at the clinic and someone calls you back, scheduling an appointment before you leave the hospital.] What do you think about these different ways of scheduling an appointment? [PROBES: What do you like about it? What are some things you don't like about it?]

    a. Change: Has scheduling an appointment gotten better, worse, or about the same over the couple of years? How has it gotten better or worse?

9. **Wait times:** How are wait times for your appointments? Have they gotten better or worse?

10. **Patient portal:** Some practices have added a patient portal to their website where patients can access lab or test results, contact their providers electronically, or schedule appointments

electronically. Does your practice have a website that allows you to do any of these things? [PROBES: Have you used this website, online tool or patient portal?]

a. If uses: How easy is it to use? What do you like or dislike about it? What features do you use the most? What improvements, if any, would you suggest?

   If doesn't use: Why not?

   If the practice doesn't have one or don't know: Does this sound like something that you would find useful? Why or why not?

11. **Other changes:** In the past year, have you noticed any other changes in the way your primary care practice is working now that makes it easier or harder for you to get the care you need, when you need it?

    a. Has your practice added staff to help you get the care you need? If so, what kind of staff have they added?

       What do the staff do? [PROBES: Do they help you get timely referrals to specialists, provide you with ways you can take better care of yourself at home, resolve other problems like getting necessary medical equipment or transportation to and from appointments? Provide more education about your health conditions? Have they helped you transition from the hospital or a skilled nursing facility to home?]

12. **Use of emergency room:** Sometimes people go to an emergency room (ER) instead of going to their primary care practice, even when they don't feel their injury or illness is life-threatening. For example, they may go to the ER for a sore throat or other routine services.

    Has your primary care practice done anything to help you avoid going to the ER? [PROBES: Has your provider or anyone else in the practice spoken with you about ways that you can better manage your care or have they asked you to contact them before going to an ER? Has your doctor talked to you about when it is appropriate to go to an ER?]

       Have any of these efforts changed your likelihood of going to the ER next time?

       Remember, we're talking about going to the ER for things that your primary care practice provider could take care of, not life-threatening emergencies. What would need to change to encourage you to get treated at your primary care practice instead of going to the ER?

13. **Effect of changes on health:** How do you think any of your primary care office changes that we have talked about have affected your own health?

    a. In what ways?

Care Coordination

Next, we want to get your opinions about how your care is handled when you need to seek care from someone outside of your primary care practice. For example, sometimes patients may need to see a specialist to better handle their condition—a surgeon, heart doctor, allergy doctor, skin doctor, foot doctor, or another provider who specializes in specific types of care.

14. **Coordination with specialists:** How does your primary care practice play a role in getting you to see a specialist? [PROBES: Do they make referrals? Do they make the appointment for you?]

    a. How does this arrangement work out for you? In what ways do you like it? In what ways do you dislike it?

    b. Has your provider always played this role or is this something new? If new, when did you notice the change?

15. **Specialist test results:** You may need to get lab work done, get an x-ray, or other tests during your office visit with a specialist. How do you usually learn about the results of these tests? [PROBES: Who tells you about the results? How do they contact you? How soon do you usually find out?]

    a. Does your provider know the results of your visit with a specialist? [PROBE: Do they refer to test or lab results or notes from the specialist during the next office visit?]

16. **Coordination with hospitals:** When you go to your primary care practice for a medical visit, does your provider know if you've visited the ER, been hospitalized, or had a nursing home or rehabilitation stay since your last office visit?

    a. Do you think your primary care practice knows about new prescriptions or procedures that were done?

       How do you think they know?

       Has this always been the case or have you noticed any changes in the past year or so?

For the following questions about care managers, the language should be tailored to reflect the appropriate terminology used in each state. For NC, MI, PA, NY, ME, VT: care manager [do not ask this question of the VT SASH or VT Medicaid group]; RI: nurse care manager; MN: Health Care Home services.

Some services can be provided by others, such as a care manager, social worker, or someone else, either before or after an office visit, by phone, by email, or during a home visit. This person may teach you how to take better care of your medical condition, may have helped arrange a visit with another provider, or may have helped as you are being admitted or discharged from a hospital, ER, or nursing home.

17. **Care manager:** Do you have a [nurse] care manager, social worker, or someone else who calls you every so often, or that you can call when you have questions?

    a. Is this person part of the practice staff or do they work for another organization?

       Coordination with practice: If they work for another organization, how well does the [nurse] care manager coordinate your care with your primary provider or other staff at your primary care practice? [PROBES: Do they both seem to know what the other is doing for your care? Do they each let the other know when you need to see them?]

       Role and usefulness: How did the [nurse] care manager help you? [PROBES: management of chronic disease(s), transition from the hospital or nursing facility, coordination of care, scheduling appointments with other agencies or providers?]

       If you take medication, does the [nurse] care manager help you understand your medication? If so, how useful is this?

       What did you like or not like about the [nurse] care manager?

Question 18 for North Carolina Only:

We now would like to ask about your experience with the clinical pharmacist. A clinical pharmacist is someone who meets with patients to discuss their medications. You may have met this pharmacist following a referral from your doctor or someone else in your doctor's office. Note this is <u>not</u> the pharmacist who is part of your local pharmacy where you buy your medicines.

18. Have you met with a clinical pharmacist?

    If yes….

    a. How did the clinical pharmacist help you?

       How useful was the clinical pharmacist?

       What did you like or not like about the clinical pharmacist?

Insert Vermont SASH and Medicaid Vermont Chronic Care Initiative (VCCI) modules.

19. **Connections to nonmedical resources:** Care managers or social workers also may help you find resources in the community to better manage your care. These people could help you if you are experiencing some sadness or challenges in your life, need help getting to the grocery store or the pharmacy or need help with other basic needs. Has anyone at your primary care practice told you about nonmedical services in your community that they thought you could benefit from? [PROBES: Meals on Wheels, housing support, social activities at the local seniors' center, support groups?]

Question 20 for Vermont Only:

20. What other experiences have you had with the services in your community that might help you to take care of your health?

    PROBES:

    - Healthier Living Workshops
    - Tobacco cessation activities such as Quit in Person, or other parts of the Quit Network (Your Quit, Your Way, Quit On-line, Quit by Phone)
    - Wellness Recovery Action Plan (WRAP)—a standardized group intervention for adults with mental illness lead by trained cofacilitators who are peers
    - Family wellness coaching

    How useful were these services?

21. **Patient feedback:** Has your primary care doctor's office invited you and/or your family to provide feedback about their office or ways they could improve your experience? For example, were you asked to fill out a patient experience survey and/or participate in an advisory council?

    [NOTE TO FOCUS GROUP FACILITATOR: We are particularly interested in whether practices have gotten input from patients with a chronic condition such as diabetes, high blood pressure, asthma for children, or patients who may have gone to the emergency department or been in and out of the hospital or nursing home].

Awareness of State Medical Home Initiative

[SOME STATES USE ANOTHER TERM FOR MEDICAL HOME. EACH STATE'S PROTOCOL WILL REFLECT THEIR OWN TERMINOLOGY. FOR EXAMPLE, MINNESOTA USES "HEALTH CARE HOME."]

22. **"Medical home":** Have any of you heard of the term "medical home"? What does "medical home" mean to you?

    The term "medical home" doesn't actually refer to any one building or doctor. Medical home refers to a **team or network** of health professionals in different practices, hospitals, and support groups working together to provide better care to patients. The goal of a medical home is to provide better care to their patients by improving access and coordinating the many different kinds of health services provided by that team.

23. **State Initiative:** [Name of the state] has a plan that is designed to improve primary care through medical homes—teams or networks of health professionals in different practices, hospitals, and support groups working together to provide better care to patients. The goal of the plan is to provide better care to patients by improving access and coordinating the

different kinds of health services they receive. In [name of the state], this plan is called [name of initiative]. Have you heard about this initiative? Where did you hear about it or from whom? What have you heard about it? What is your understanding of your doctor's participation in [name of the state initiative or local network]?

24. Do you think that your health could improve under this type of model?

    a. In what ways?

    Are there any downsides to this model, as a patient?

These are all of my questions. Is there anything else you would like to share with me about the care that you receive at your doctor's office that we haven't already discussed?

Vermont Modules

SASH module (for SASH focus group only)

We are also interested in experiences you may have had with a program called SASH. SASH stands for Support and Services at Home. SASH has staff in your housing unit or a housing unit in your neighborhood.

1. Are you aware of the SASH program?

    a. If so, can you tell us about what types of services or programs are available?

    b. How did you learn about SASH services or programs?

2. Have you used any SASH services or educational programs?

    a. How actively do you participate? Did you sign a consent form to allow for coordination of care with their providers? If not, why not?

    b. What services have you used? PROBES:

        - Coordination with providers or others in the provider practices such as social work, mental health provider, etc.

        - Coordination with Program of All-inclusive Care for the Elderly or PACE, home health agencies, Agency on Aging, Medicaid, others

        - Nutritional counseling

        - Medication management

        - Obtaining assistance for performing activities of daily living (ADLs), self-care of medical or mental health conditions, including pain management

- Healthy aging plans
- Assistance transitioning home from the hospital (skilled nursing facility or rehab facility)
- Assistance transitioning to assisted living or long-term care facilities
- Assistance with transportation for health care services
- Assisting with falls prevention
- Others?

c. What educational programs you have participated in? [PROBES: diabetes, nutrition, healthy aging, exercise, others?]

3. How frequently do you interact with the SASH program coordinator or the wellness nurse?

   a. What are the reasons for these interactions?

   b. What benefits do you feel you gained from these interactions?

   c. Does your family or your caregivers interact with SASH staff? If so, for what reasons? Is this beneficial to you?

4. What benefits do you see in this type of program?

   a. What kind of people would benefit the most?

5. What services or programs would you like to receive but that are not available from the SASH program?

Medicaid VCCI module (for Medicaid group only)

Do you have a Medicaid case manager or care coordinator through the Vermont Chronic Care Initiative (VCCI)?

1. How frequently do you interact with your case manager/care coordinator?

2. What are the reasons for these interactions or what services does your case manager/care coordinator provide?

   a. Coordination with providers or others in the provider practices such as social work, mental health provider, etc.

   b. Coordination with Program of All-inclusive Care for the Elderly or PACE, home health agencies, Agency on Aging, Medicaid, others

c. Medication management

d. Obtaining assistance for performing activities of daily living (ADLs), self-care of medical or mental health conditions, including pain management

e. Assistance transitioning home from the hospital (skilled nursing facility or rehab facility)

f. Assistance transitioning to assisted living or long-term care facilities

g. Assistance with transportation for health care services

h. Others?

3. What benefits do you feel you've gained from these interactions?

4. Do you also have interactions with any case managers/care coordinators in your physician's practice?

   a. For what services? Do the two coordinate?

APPENDIX Q
FOCUS GROUP GUIDE FOR CAREGIVERS

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Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration

Focus Group Guide for Caregivers of Beneficiaries

A. Welcome

Hello and thank you for agreeing to meet with us today.

My name is [ ] and I work for The Henne Group, an organization that conducts focus groups on a variety of topics. I would like to introduce [ ], who represents RTI International [or Urban Institute], a nonprofit research organization.

You have been asked to participate in this focus group because you told us that you are a caregiver for someone who is covered by Medicare, Medicaid, or both. You might be a family member or a friend who helps this person with health decisions and goes with them to their doctor appointments. Each of you has a card that lists the name of the person that you represent in this discussion and the name of the primary practice that this person usually visits.

We are working on a project funded by the Centers for Medicare and Medicaid Services (CMS). We want to learn about the experiences you have had as a caregiver for the person listed on your card. We especially want to hear about your experiences with their primary care practice—the one that is also listed on your card.

My role is to guide our discussion and to encourage everyone to share their experiences, as a caregiver, with the practice listed on the card. Some of you may even go to this same practice for your own health needs. But for the purposes of this discussion today, please think about your experiences with this practice in the caregiver role.

[Name] will be taking notes while we speak. [Name] will be observing our discussion from the room behind the glass so that we can have our discussion without distractions. These individuals are part of our research team. They will summarize the views that are shared in these discussions. We are conducting 6 such discussions in [name of the state] and 42 additional discussions in 7 other states.

Before we get started, I'd like to go over a few things.

B. Review focus group process and ground rules for participation

First and foremost, during our discussion today, please keep in mind that there are no right or wrong views or answers. Everyone's opinion is important, so don't hesitate to speak up regardless of whether you agree with what others have said. In fact, if you have a different idea or feeling, we especially want to hear from you so we can better understand the different experiences that people have as a caregiver at the different practices in the area.

To make sure that we understand everything people say today, we are making an audio and video recording of this discussion, as well as taking notes. So that we can hear everyone clearly, we ask that only one person speak at a time. Even if you disagree with what someone

is saying, please allow that person to have a chance to speak about their experience before you respond. It seems that every group has one or two "quiet" people, and if you are one of those, I might call on you! You are free to say that you'd rather "pass," but I'm hoping to hear from everyone at some point during our discussion.

Your participation in this discussion is voluntary. You can choose not to answer any questions. You can end your participation and leave the room at any time.

We will not share any of your comments with the person you care for, people who work at their primary practice, their insurance provider, or anyone else in such a way that you or the person that you care for can ever be identified. We will not list your name or the person you care for in any of the written notes or transcripts. We will make sure that collected data is kept and handled in a private and secure way. We will not put any names in our reports. Our job is to ask questions and make sure we understand what you're saying. We also want to make sure that everyone has an opportunity to share their ideas and experiences.

Our discussion will last about 2 hours. I'll balance the amount of time we spend on each question, since we have a lot to get through from this guide. We won't be taking an official break, but if you need a personal break, please feel free to take one. [DESCRIBE LOCATION OF RESTROOMS AND REFRESHMENTS.]

C. **Hand out the name badges or name tents and ask to write first name only.** [CAN BE FILLED OUT BY PARTICIPANTS AS THEY ARRIVE].

D. **Review informed consent process, obtain the signature of each focus group participant on an informed consent form.** [CAN BE REVIEWED WITH PARTICIPANTS AS THEY ARRIVE OR JUST AS THEY ENTER THE ROOM, DEPENDING ON WHICH OPTION IS MORE PRACTICAL FOR THE PARTICULAR SET UP].

Do you have any questions about the consent form? If you are okay with this, please sign the informed consent form and pass it to us.

COLLECT INFORMED CONSENT FORMS; IF A PARTICIPANT IS NOT COMFORTABLE SIGNING THE FORM, HE/SHE CANNOT PARTICIPATE IN THE DISCUSSION.

E. Introductions

To begin, let's go around and introduce ourselves. Please tell us your first name and something you like to do for fun or a hobby that you have. I'll go first…

The primary purpose of today's discussion is to learn about your experience as a caregiver with the primary care practice listed on the card and the providers that work there.

During the next 2 hours, I will be referring to **"the primary care practice."** When I say that, I am referring to the practice listed on your card. When answering questions, please think about the people who work at the practice listed on the card and the services they provide.

The **provider** at that primary care practice could be a doctor, but may also be a nurse practitioner or physician assistant. The person you care for may also receive services at the practice from case managers, pharmacists, social workers, or patient advocates.

Do you have any questions so far, especially about what we mean by primary care practice or providers?

I also will be referring to "the person you care for." When I say that, I am referring to the person listed on your card. When you answer my questions, please answer about that person.

I want to discuss one more important issue before we get started. Many of us enjoy talking about our own health. However, the focus is on **your experience as a caregiver with that person's primary care practices and providers**, so please limit comments about his/her health or medical condition to facts that may have **affected** your experience. Please don't be offended if I ask you to clarify **how** his/her health or medical conditions shapes your experience with his/her providers or if I move the discussion along to the next topic. Do you have any questions? ANSWER.

Good, let's get started!

Caregiver's Role

1. As a caregiver, how do you assist the person you care for with their health care? [PROBES: Make doctor appointments for them? Go with them to their doctor appointments? Remind them to take their medication? Help them with physical therapy? Monitor their health status by taking blood pressure, checking their blood glucose levels, or other things?]

Patient Engagement and Management

2. **Knowledge of your health information:** When the person you care for goes to his/her primary care practice, how confident are you that the provider knows his/her medical history and important health information? [PROBES: Does his/her provider know all the medications he/she is taking and asks about them at every visit? Does his/her provider ask about his/her nutrition and activity level?] Do you have to remind the staff about the person's medical history or important health information at each visit?

    a. When the person you care for last saw his/her provider, did the provider give you or the person you care for any instructions or things to work on between visits? [IF YES: Were written instructions provided?] Have they always done this or is this something that has changed in the past year or so?

    b. In what ways did the provider involve **you** in the plan for the person you care for? [PROBES: Did they ask **you** how you could help with the plan? Did they ask **you** if you understood the plan?] Have they always done this or is this something that has changed in the past year or so?

3. **Understanding of cultural and personal preferences and circumstances:** How well do providers understand the unique needs of the person you care for? Do they consider his/her cultural beliefs and values when they talk to you or the person you care for about his/her health condition or treatment options?

    How well do staff at the practice understand things about the life **circumstances** of the person you care for that could get in the way of his/her health care? [PROBE: Do they understand challenges that you may have to making a weekly appointment or to getting care at a facility across town? Language barriers? Other things that may get in the way of care?]

    a. How could the staff at your primary care practice better understand your values, your preferences for treatment, or just understand your unique needs?

4. **Support for self-care:** What do the providers at the primary care practice do that helps you to take better care of the person you care for? [PROBES: advice on nutrition or meal plans? Instructions about how to provide care; asks you about household hazards, such as scatter rugs that someone could trip or slip on.]

    a. Change: Have they always done this or is this a new way they are giving care? If new, when did you notice this change?

b. Feelings: What do you like or dislike about this? Why?

5. **Help managing chronic conditions:** If the person you care for has a chronic condition like diabetes or high blood pressure, what does their provider do to help them manage it?

   a. Information: Does his/her primary care provider give him/her information, like lab results, showing how well he/she has managed that condition over the past 6 months or year? Does the provider also share this information with **you**?

   b. Classes: Has anyone at your doctor's office arranged for **you** to attend a special class about managing the condition of the person you care for? This might be a class taught by nurse educators about diabetes, hypertension, or coronary artery disease.

   c. Care plan: Has your primary care practice worked with **you** to develop a care plan for the person you care for? What kind of information or instructions are in this care plan? [PROBES: Does it include personal, patient-centered health goals (e.g., "to live long enough to attend my son's wedding" or "to be able to walk to the mailbox without getting out of breath")?]

   d. What is most helpful: What has been most helpful to **you** to manage the condition of the person you care for? What else could your provider do to help **you** manage their condition?

6. **Shared decision-making:** There are many ways that **caregivers and providers** can work together to manage the patient's health or medical condition. For example, some caregivers rely completely on the provider to know what is best for the person they care for, while others take a more active role in the decisions that affect the person they care for. How much of a role do **you** take in deciding how to best manage the health or condition of the person you care for? [PROBE: Do you ask the provider questions, share your views about what you think is best for them? How satisfied or dissatisfied are you with the role you play?]

7. **Effective communication:** How well does the provider communicate with you about the health of the person you care for? [PROBE: Does the provider talk to you about the condition of the person you care for or his/her treatment options in a way that is easy for you to understand? Use medical words that are easy for you to understand? Explain the pros and cons of different treatment options? Listen carefully to your concerns? Willing to answer your questions?]

   a. Change: Has the way the provider communicates changed over the past couple of years, or has it remained the same? [If changed] What do you think about these new practices? [PROBE: What do you like about them? What are some things that you don't like about them? Why?]

Access to Care

We've been talking about how you, the person you care for, and his/her provider have managed his/her care. Now we would like to hear about getting to see their provider.

Remember, a provider could be a physician, nurse practitioner, or physician assistant. The person you care for may also receive services from case managers, pharmacists, social workers, or patient advocates working at the primary care practice.

8. **Getting an appointment:** How easy or hard is it for you or the person you care for to get an appointment with a provider at this practice when he/she needs one? [PROBES: Can they get a same-day appointment for urgent needs? Can they get an appointment for nights, weekends, or holidays?

    a. Change: Did the practice change its hours of operation? If so, how? Are the practice's hours more convenient for the person you care for?

9. **Scheduling:** What ways can appointments be scheduled with a provider? [PROBES: online through a patient portal, leaving a message at the clinic and someone calls back, scheduling an appointment before leaving the hospital.] What do you think about these different ways of scheduling an appointment? [PROBES: What do you like about it? What are some things you don't like about it?]

    a. Change: Has scheduling an appointment gotten better, worse, or about the same over the couple of years? How has it gotten better or worse?

10. **Wait times:** How are wait times for appointments? Have they gotten better or worse?

11. **Patient portal:** Some practices have added a patient portal to their website where patients and caregivers can access lab or test results, contact providers electronically, or schedule appointments electronically. Does the practice of the person you care for have a website that allows you to do any of these things? [PROBES: Have you used this website, online tool or patient portal?]

    a. If uses: How easy is it to use? What do you like or dislike about it? What features do you use the most? What improvements, if any, would you suggest?

       If doesn't use: Why not?

       If the practice doesn't have one or don't know: Does this sound like something that you would find useful? Why or why not?

12. **Other changes:** In the past year, have you noticed any other changes in the way the primary care practice is working now that makes it easier or harder for you to help the person you care for to get the care he/she needs, when he/she needs it?

    a. Has the practice added staff to help him/her get the care he/she needs? If so, what kind of staff have they added?

       What do the staff do? [PROBES: Do they help you or the person you care for get timely referrals to specialists? Provide **you** with ways to take better care of the person you care for at home? Resolve other problems like getting necessary medical equipment or transportation to and from appointments? Provide more education about their health

conditions? Have they helped **you** to transition the person you care for from the hospital or a skilled nursing facility to home?]

13. **Use of emergency room:** Sometimes people go to an emergency room (ER) instead of going to their primary care practice, even when they don't feel their injury or illness is life-threatening. For example, they may go to the ER for a sore throat or other routine services.

    Has the primary care practice of the person you care for done anything to help him/her avoid going to the ER? [PROBES: Has his/her provider or anyone else in the practice spoken with him/her or with you about ways to better manage his/her care or have they asked them or you to contact them before going to an ER? Has his/her doctor talked to you or the person you care for about when it is appropriate to go to an ER?]

    Have any of these efforts changed the likelihood of the person you care for going to the ER next time?

    Remember, we're talking about going to the ER for things that their primary care practice provider could take care of, not life-threatening emergencies. What would need to change to encourage **you** to take the person you care for to get treated at their primary care practice instead of going to the ER?

14. **Effect of changes on health:** How do you think any of the primary care office changes that we have talked about have affected the health of the person you care for?

    a. In what ways?

Care Coordination

Next, we want to get your opinions about how your care is handled when you need to seek care from someone outside of your primary care practice. For example, sometimes patients may need to see a specialist to better handle their condition—a surgeon, heart doctor, allergy doctor, skin doctor, foot doctor, or another provider who specializes in a specific type of care.

15. **Coordination with specialists:** How does their primary care practice play when he/she needs to see a specialist? [PROBES: Do they make referrals? Do they make the appointment for the person you care for or ask you to do it?]

    a. How does this arrangement work out for you and the person you care for? In what ways do you like it? In what ways do you dislike it?

    b. Has his/her provider always played this role or is this something new? If new, when did you notice the change?

16. **Specialist test results:** The person you care for may need to get lab work done, get an x-ray, or other tests during your office visit with a specialist. How do you or the person you care for

usually learn about the results of these tests? [PROBES: Who tells you or him/her about the results? How do they contact you or him/her? How soon do you or he/she usually find out?]

a. Does their provider know the results of the visit with a specialist? [PROBE: Do they refer to test or lab results or notes from the specialist during the next office visit?]

17. **Coordination with hospitals:** When the person you care for goes to his/her primary care practice for a medical visit, does his/her provider know if he/she has visited the ER, been hospitalized, or had a nursing home or rehabilitation stay since their last office visit?

    a. Do you think the primary care practice knows about new prescriptions or procedures that were done?

    b. How do you think they know?

    c. Has this always been the case or have you noticed any changes in the past year or so?

For the following questions about care managers, the language should be tailored to reflect the appropriate terminology used in each state. For NC, MI, PA, NY, ME, VT: care manager [do not ask this question of the VT SASH or VT Medicaid group]; RI: nurse care manager; MN: Health Care Home services.

Some services can be provided by others, such as a care manager, social worker, or someone else, either before or after an office visit, by phone, by email, or during a home visit. This person may teach you and the person you care for how to take better care of their medical condition, may have helped arrange a visit with another provider, or may have helped as the person you care for was admitted or discharged from a hospital, ER, or nursing home.

18. **Care manager:** Does the person you care for have a [nurse] care manager, social worker, or someone else who calls you or him/her every so often, or that you can call when you have questions?

    a. Is this person part of the practice staff or do they work for another organization?

    Coordination with practice: If they work for another organization, how well does the [nurse] care manager coordinate the care of the person you care for with their primary provider or other staff at their primary care practice? [PROBES: Do they both seem to know what the other is doing for their care? Do they each let the other know when the person you care for needs to see them?]

    Role and usefulness: How did the [nurse] care manager help **you**? [PROBES: Has the [nurse] care manager helped you manage care for the person you care for? Has the [nurse] care manager called you or the person you care for after they were in the hospital or nursing facility? Have they told you about resources that could help the person you care for? Have they coordinated care or scheduled appointments with other agencies or providers?]

    If the person you care for takes medication, does the [nurse] care manager help you understand their medication? If so, how useful is this?

b. How useful was the [nurse] care manager?

c. What did you like or not like about the [nurse] care manager?

Question 19 for North Carolina Only:

We now would like to ask about your experience with the clinical pharmacist. A clinical pharmacist is someone who meets with patients to discuss their medications. You may have met this pharmacist following a referral from the doctor or someone else in the doctor's office. Note this is not the pharmacist who is part of your local pharmacy where you buy your medicines.

19. Have you met with a clinical pharmacist on behalf of the person you care for?

If yes….

a. How did the clinical pharmacist help?

b. How useful was the clinical pharmacist?

c. What did you like or not like about the clinical pharmacist?

20. **Connections to nonmedical resources:** Care managers or social workers also may help you find resources in the community to help you in **your role as caregiver**. Has anyone at the primary care practice told you about any services or support groups for **caregivers**? [PROBES: Support groups that meet through the local hospital, local senior center, or through a place of worship? On-line support groups? Respite?

Question 21 for Vermont Only:

21. What other experiences have you had with the services in your community that might help the person you care for take better care of their health?

PROBES:

- Healthier Living Workshops
- Tobacco cessation activities such as Quit in Person, or other parts of the Quit Network (Your Quit, Your Way, Quit On-line, Quit by Phone)
- Wellness Recovery Action Plan (WRAP)—a standardized group intervention for adults with mental illness lead by trained cofacilitators who are peers
- Family wellness coaching

a. How useful were these services?

22. **Patient feedback:** Has the primary care doctor's office invited the person you care for and/or you to provide feedback about their office or ways they could improve your experience? For example, were you or the person you care for asked to fill out a patient experience survey and/or participate in an advisory council? [NOTE TO FOCUS GROUP FACILITATOR: We are particularly interested in whether practices have gotten input from patients with a chronic condition such as diabetes, high blood pressure, asthma for children, or patients who may have gone to the emergency department or been in and out of the hospital or nursing home].

Awareness of State Medical Home Initiative

[SOME STATES USE ANOTHER TERM FOR MEDICAL HOME. EACH STATE'S PROTOCOL WILL REFLECT THEIR OWN TERMINOLOGY. FOR EXAMPLE, MINNESOTA USES "HEALTH CARE HOME."]

23. **"Medical home":** Have any of you heard of the term "medical home"? What does "medical home" mean to you?

    The term "medical home" doesn't actually refer to any one building or doctor. Medical home refers to a **team or network** of health professionals in different practices, hospitals, and support groups working together to provide better care to patients. The goal of a medical home is to provide better care to their patients by improving access and coordinating the many different kinds of health services provided by that team.

24. **State Initiative:** [Name of the state] has a plan that is designed to improve primary care through medical homes—teams or networks of health professionals in different practices, hospitals, and support groups working together to provide better care to patients. The goal of the plan is to provide better care to patients by improving access and coordinating the different kinds of health services they receive. In [name of the state], this plan is called [name of initiative]. Have you heard about this initiative? Where or from whom did you hear about it? What have you heard about it? What is your understanding of the doctor's participation in [name of the state initiative or local network]?

25. Do you think that the health of the person you care for could improve under this type of model?

    a. In what ways?

    b. Are there any downsides to this model, as a patient?

These are all of my questions. Is there anything else you would like to share with me about your role as caregiver and the care that the person you care for receives at his/her doctor's office that we haven't already discussed?

APPENDIX R
MAPCP DEMONSTRATION CAHPS PCMH SURVEY

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OMB No. ####-####

Medical Home Survey

Sponsored by

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CAHPS®

Consumer Assessment

of Healthcare Providers and Systems

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is **0938-XXXX**. The time required to complete this information collection is estimated to average 20 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.

Survey Instructions

Answer each question by marking the box to the left of your answer.
You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

☒ Yes ➔ **If Yes, go to Q1.**
☐ No

Your Provider

1. Our records show that you got care from the clinic named below in the last 12 months.
[Name of provider].
Is that right?

[1]☐ Yes
[2]☐ No ➔ **If No, go to Q44.**

The questions in this survey will refer to the provider you saw on your most recent visit to this clinic as "this provider." Please think of that person as you answer the survey.

2. Is this the provider you usually see if you need a check-up, want advice about a health problem, or get sick or hurt?

[1]☐ Yes
[2]☐ No

3. How long have you been going to this provider?

[1]☐ Less than 6 months
[2]☐ At least 6 months but less than 1 year
[3]☐ At least 1 year but less than 3 years
[4]☐ At least 3 years but less than 5 years
[5]☐ 5 years or more

Your Care from This Provider in the Last 12 Months

These questions ask about **your own** health care. Do **not** include care you got when you stayed overnight in a hospital. Do **not** include the times you went for dental care visits.

4. In the last 12 months, how many times did you visit this provider to get care for yourself?

☐ None ➔ **If None, go to Q44.**
☐ 1 time
☐ 2
☐ 3
☐ 4
☐ 5 to 9
☐ 10 or more times

5. In the last 12 months, did you phone this provider's office to get an appointment for an illness, injury or condition that **needed care right away**?

[1]☐ Yes
[2]☐ No ➔ **If No, go to Q8.**

6. In the last 12 months, when you phoned this provider's office to get an appointment for **care you needed right away**, how often did you get an appointment as soon as you needed?

[1]☐ Never
[2]☐ Sometimes
[3]☐ Usually
[4]☐ Always

7. In the last 12 months, how many days did you usually have to wait for an appointment when you **needed care right away?**

- ☐ Same day
- ☐ 1 day
- ☐ 2 to 3 days
- ☐ 4 to 7 days
- ☐ More than 7 days

8. In the last 12 months, did you make any appointments for a **check-up or routine care** with this provider?

- [1] ☐ Yes
- [2] ☐ No ➔ **If No, go to Q10.**

9. In the last 12 months, when you made an appointment for a **check-up or routine care** with this provider, how often did you get an appointment as soon as you needed?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

10. Did this provider's office give you information about what to do if you needed care during evenings, weekends, or holidays?

- [1] ☐ Yes
- [2] ☐ No

11. In the last 12 months, did you need care for yourself during evenings, weekends, or holidays?

- [1] ☐ Yes
- [2] ☐ No ➔ **If No, go to Q13.**

12. In the last 12 months, how often were you able to get the care you needed from this provider's office during evenings, weekends, or holidays?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

13. In the last 12 months, did you phone this provider's office with a medical question during regular office hours?

- [1] ☐ Yes
- [2] ☐ No ➔ **If No, go to Q15.**

14. In the last 12 months, when you phoned this provider's office during regular office hours, how often did you get an answer to your medical question that same day?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

15. In the last 12 months, did you phone this provider's office with a medical question **after** regular office hours?

- [1] ☐ Yes
- [2] ☐ No ➔ **If No, go to Q17.**

16. In the last 12 months, when you phoned this provider's office **after** regular office hours, how often did you get an answer to your medical question as soon as you needed?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

17. Some offices remind patients between visits about tests, treatment, or appointments. In the last 12 months, did you get any reminders from this provider's office between visits?

[1] ☐ Yes
[2] ☐ No

18. Wait time includes time spent in the waiting room and exam room. In the last 12 months, how often did you see this provider **within 15 minutes** of your appointment time?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

19. In the last 12 months, how often did this provider explain things in a way that was easy to understand?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

20. In the last 12 months, how often did this provider listen carefully to you?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

21. In the last 12 months, did you talk with this provider about any health questions or concerns?

[1] ☐ Yes
[2] ☐ No ➔ **If No, go to Q23.**

22. In the last 12 months, how often did this provider give you easy to understand information about these health questions or concerns?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

23. In the last 12 months, how often did this provider seem to know the important information about your medical history?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

24. In the last 12 months, how often did this provider show respect for what you had to say?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

25. In the last 12 months, how often did this provider spend enough time with you?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

26. In the last 12 months, did this provider order a blood test, x-ray, or other test for you?

[1] ☐ Yes
[2] ☐ No ➔ **If No, go to Q28.**

27. In the last 12 months, when this provider ordered a blood test, x-ray, or other test for you, how often did someone from this provider's office follow up to give you those results?

[1] ☐ Never
[2] ☐ Sometimes
[3] ☐ Usually
[4] ☐ Always

28. In the last 12 months, did you and this provider talk about starting or stopping a prescription medicine?

[1] ☐ Yes
[2] ☐ No ➔ **If No, go to Q32.**

29. When you talked about starting or stopping a prescription medicine, how much did this provider talk about the reasons you might want to take a medicine?

[1] ☐ Not at all
[2] ☐ A little
[3] ☐ Some
[4] ☐ A lot

30. When you talked about starting or stopping a prescription medicine, how much did this provider talk about the reasons you might **not** want to take a medicine?

[1] ☐ Not at all
[2] ☐ A little
[3] ☐ Some
[4] ☐ A lot

31. When you talked about starting or stopping a prescription medicine, did this provider ask you what you thought was best for you?

[1] ☐ Yes
[2] ☐ No

32. Using any number from 0 to 10, where 0 is the worst provider possible and 10 is the best provider possible, what number would you use to rate this provider?

☐ 0 Worst provider possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best provider possible

33. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care. In the last 12 months, did you see a specialist for a particular health problem?

[1] ☐ Yes
[2] ☐ No ➔ **If No, go to Q35.**

34. In the last 12 months, how often did the provider named in Question 1 seem informed and up-to-date about the care you got from specialists?

1☐ Never
2☐ Sometimes
3☐ Usually
4☐ Always

Please answer these questions about the provider named in Question 1 of this survey.

35. In the last 12 months, did anyone in this provider's office talk with you about specific goals for your health?

1☐ Yes
2☐ No

36. In the last 12 months, did anyone in this provider's office ask you if there are things that make it hard for you to take care of your health?

1☐ Yes
2☐ No

37. In the last 12 months, did you take any prescription medicine?

1☐ Yes
2☐ No ➔ **If No, go to Q39.**

38. In the last 12 months, did you and anyone in this provider's office talk at each visit about all the prescription medicines you were taking?

1☐ Yes
2☐ No

39. In the last 12 months, did anyone in this provider's office ask you if there was a period of time when you felt sad, empty, or depressed?

1☐ Yes
2☐ No

40. In the last 12 months, did you and anyone in this provider's office talk about things in your life that worry you or cause you stress?

1☐ Yes
2☐ No

41. In the last 12 months, did you and anyone in this provider's office talk about a personal problem, family problem, alcohol use, drug use, or a mental or emotional illness?

1☐ Yes
2☐ No

Clerks and Receptionists at This Provider's Office

42. In the last 12 months, how often were clerks and receptionists at this provider's office as helpful as you thought they should be?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

43. In the last 12 months, how often did clerks and receptionists at this provider's office treat you with courtesy and respect?

- [1] ☐ Never
- [2] ☐ Sometimes
- [3] ☐ Usually
- [4] ☐ Always

About You

44. In general, how would you rate your overall health?

- [1] ☐ Excellent
- [2] ☐ Very good
- [3] ☐ Good
- [4] ☐ Fair
- [5] ☐ Poor

45. In general, how would you rate your overall **mental or emotional** health?

- [1] ☐ Excellent
- [2] ☐ Very good
- [3] ☐ Good
- [4] ☐ Fair
- [5] ☐ Poor

46. What is your age?

- ☐ 18 to 24
- ☐ 25 to 34
- ☐ 35 to 44
- ☐ 45 to 54
- ☐ 55 to 64
- ☐ 65 to 74
- ☐ 75 or older

47. Are you male or female?

- [1] ☐ Male
- [2] ☐ Female

48. What is the highest grade or level of school that you have completed?

- [1] ☐ 8th grade or less
- [2] ☐ Some high school, but did not graduate
- [3] ☐ High school graduate or GED
- [4] ☐ Some college or 2-year degree
- [5] ☐ 4-year college graduate
- [6] ☐ More than 4-year college degree

49. Are you of Hispanic or Latino origin or descent?

- [1] ☐ Yes, Hispanic or Latino
- [2] ☐ No, not Hispanic or Latino

50. What is your race? Mark one or more.

- [1] ☐ White
- [2] ☐ Black or African American
- [3] ☐ Asian
- [4] ☐ Native Hawaiian or Other Pacific Islander
- [5] ☐ American Indian or Alaskan Native
- [6] ☐ Other

51. Did someone help you complete this survey?

- [1] ☐ Yes
- [2] ☐ No ➔ **Thank you.**
  Please return the completed survey in the postage-paid envelope.

52. How did that person help you? Mark one or more.

- [1] ☐ Read the questions to me
- [2] ☐ Wrote down the answers I gave
- [3] ☐ Answered the questions for me
- [4] ☐ Translated the questions into my language
- [5] ☐ Helped in some other way

Please print: _____

_____

_____

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APPENDIX S
CAHPS PCMH SURVEY ADMINISTRATION AND ANALYSIS PROCEDURES

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The evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration examines a wide range of health-related outcomes. One key outcome is based on the self-reported health care experiences of Medicare beneficiaries with the demonstration practices that provide their care. Patient experience was measured by responses to the Consumer Assessment of Healthcare Providers and Systems patient-centered medical home (CAHPS PCMH) survey, a questionnaire that is tailored to patients in PCMHs. We focused on six multi-item composite scales that capture key aspects of patient experience. This appendix describes our mail survey protocol, sampling, and analysis procedures.

S.1 Sample Frame

The target population for the survey was Medicare beneficiaries assigned to the MAPCP Demonstration practices in eight states. In each state, the sample frame consisted of Medicare beneficiaries who made at least one visit to a MAPCP Demonstration practice during the previous 3 months. Beneficiaries were randomly sampled from each frame so that the samples were representative of all beneficiaries and practices participating in the MAPCP Demonstration in a state. Two regions in Pennsylvania were combined to form a single sample for that state.

Based on RTI's previous experience administering CAHPS surveys, we projected a 35 percent response rate (512 responses per state). To achieve this response rate, we randomly sampled 1,463 demonstration beneficiaries per state. In the absence of detailed information about the variance of CAHPS PCMH survey composites, we powered the survey to detect an 8 percentage point difference (63% versus 55%) between a MAPCP Demonstration state's score and a benchmark.

S.2 Survey Protocol

CAHPS PCMH questionnaires were printed in English in a format that could be scanned electronically. Respondents were given the option of requesting a Spanish translation. Survey administration consisted of two mailings consisting of questionnaires and cover letters. The cover letter accompanying the first mailing contained all required elements of informed consent and a toll-free number that respondents could call if they had questions about the study design or their rights as research subjects. When necessary, the National Change of Address file was used to update address information. The first survey mailing was sent on April 15, 2014, and the follow-up mailing was sent on May 6, 2014.

Survey materials (questionnaires, cover letters, and supporting documentation) were submitted for Office of Management and Budget (OMB) review in May 2013 and approved on February 26, 2014. The first Federal Register Notice was published on May 31, 2013. The same materials were approved by RTI's Institutional Review Board on April 14, 2014. The assigned OMB Control Code (0938-1223) was printed on all questionnaires.

S.3 Rhode Island Data

Paperwork Reduction Act guidelines emphasize the need to minimize response burden for survey subjects. Since many of the MAPCP Demonstration initiatives periodically conduct their own patient surveys, we monitored the survey efforts in each state. One state, Rhode Island, administered the CAHPS PCMH survey to all patients in demonstration practices during the

month before our survey. To avoid asking the same patients to complete the survey again, we made arrangements to obtain Rhode Island's survey data. Because the data set did not identify the payer status of individual respondents, however, we were unable to distinguish Medicare beneficiaries. To make the data as similar as possible to that of other MAPCP Demonstration states, we restricted our analyses to respondents aged 65 years and older who completed surveys by mail. As a result, our Rhode Island results are not strictly comparable to the other states because they do not include younger disabled or dually eligible beneficiaries or those who chose to respond by telephone rather than mail.

S.4 Response Rates

Response rates for each state exceeded our projected 35 percent rate, perhaps because of the quality of the address and practice visit information; the number of completed surveys also exceeded the target of 512 surveys per state. The response rates among the individual states were similar, ranging from 41.6 percent to 46.2 percent.

A survey disposition was assigned to all sampled beneficiaries. The survey dispositions and response rates for each MAPCP Demonstration state are detailed in ***Table S-1***. We classified beneficiaries as ineligible if they were deceased, institutionalized, physically or mentally incapacitated, or if they had moved without a forwarding address. The first question in the survey listed the name of the medical practice from which a beneficiary had been sampled and asked the respondent to confirm that they had received care there in the past 12 months. Beneficiaries who failed to confirm the practice location, though few, also were classified as ineligible to ensure that survey responses were being reported only for MAPCP Demonstration practices. Outright refusals, with potential respondents communicating their refusal to participate, were rare; only 0.54 percent of the mailings resulted in outright refusals to participate.

Table S-1
MAPCP Demonstration CAHPS PCMH survey dispositions and response rates, by state

Survey disposition	Maine	Michigan	Minnesota	North Carolina	New York	Pennsylvania	Rhode Island	Vermont
Total	1,463	1,463	1,463	1,463	1,463	1,463	1,181	1,463
Ineligible	40	28	26	37	19	35	23	25
Did not confirm MAPCP Demonstration practice	30	28	46	26	30	25	10	24
Eligible	1,393	1,407	1,391	1,400	1,414	1,403	1,181	1,414
Completed survey	643	599	602	634	630	584	544	627
Response rate (% of eligible)	46.2%	42.6%	43.3%	45.3%	44.6%	41.6%	46.1%	44.3%

NOTE:

- Rhode Island data were limited to beneficiaries aged 65 years and older and were collected using a different survey methodology.

CAHPS = Consumer Assessment of Health Providers and Systems; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

S.5 Response Propensity

Response propensity models were estimated for each state to assess factors associated with the likelihood of responding to the survey. Response propensities were estimated in each state by logistic regression, regressing response status (1 = completed survey, 0 = did not respond) on two sets of characteristics. The first set consisted of beneficiary-level characteristics (gender, age group, and Medicaid eligibility status) available from the Medicare Enrollment Data Base. The second set consisted of six ZIP Code Tabulation Area (ZCTA)-level characteristics shown by previous research to be influential for CAHPS survey response rates (Zaslavsky et al., 2002). These variables were the ZCTA-level percentages of college-educated residents, minority residents (Black, Asian, and Hispanic), urban residents, and residents receiving public assistance.

Estimated model coefficients are shown in ***Table S-2***. The results were remarkably similar across states. In nearly every state, respondents younger than 65 years of age, those eligible for Medicaid, and, to a lesser extent, those older than 84 years of age were significantly less likely to complete surveys than other sampled beneficiaries. In some states, the racial and ethnic make-up of a beneficiary's ZIP code area also influenced response rates. The response propensity weights help to adjust for these differential completion rates.

S.6 Demographic Characteristics

Like most Medicare beneficiaries, the majority of survey respondents from all states were women (57.3%) and aged 65 years or older (86.0%). Twenty-seven percent were in fair or poor health. Four-year or advanced college degrees were reported by 25.5 percent of all respondents. Survey completers from the MAPCP Demonstration were overwhelmingly non-Hispanic Whites. Blacks accounted for only 5 percent of respondents, other ethnicities for 2 percent, and Hispanic/Latinos for 1.2 percent.

Table S-2
MAPCP Demonstration CAHPS PCMH survey response propensity logistic models, by state

	ME	MI	MN	NC	NY	PA	RI	VT
Demographic Variables								
Male	−0.118	0.028	−0.025	0.036	0.187*	−0.012	0.109	0.061
	(0.114)	(0.112)	(0.115)	(0.113)	(0.112)	(0.115)	(0.124)	(0.113)
Age under 65	−0.908***	−0.445**	−0.693***	−0.426**	−0.659***	−0.965***	—	−0.670***
	(0.166)	(0.178)	(0.179)	(0.172)	(0.172)	(0.190)	—	(0.186)
Age 75–84	−0.066	−0.176	0.180	0.042	0.043	−0.159	0.430***	0.200
	(0.140)	(0.135)	(0.143)	(0.132)	(0.137)	(0.136)	(0.139)	(0.134)
Age over 85	−0.434**	−0.488***	−0.357**	−0.130	−0.210	−0.836***	0.206	−0.098
	(0.183)	(0.163)	(0.170)	(0.178)	(0.171)	(0.174)	(0.175)	(0.163)
Medicaid	−0.286**	−0.543***	−0.433**	−0.472***	−0.695***	−0.437**	—	−0.433***
	(0.129)	(0.182)	(0.175)	(0.135)	(0.155)	(0.174)	—	(0.147)
ZTCA Variables								
Percent college degree	−0.003	0.017	0.002	−0.003	−0.004	0.015***	0.010	0.003
	(0.007)	(0.011)	(0.007)	(0.008)	(0.006)	(0.005)	(0.038)	(0.006)
Percent Black	0.093*	−0.010**	−0.002	−0.014***	0.006	−0.010***	−0.112	0.198**
	(0.051)	(0.005)	(0.012)	(0.004)	(0.021)	(0.003)	(0.099)	(0.080)
Percent Asian	−0.139**	−0.023	0.006	−0.012	0.081	−0.003	−0.021	−0.135**
	(0.067)	(0.019)	(0.014)	(0.077)	(0.055)	(0.015)	(0.047)	(0.069)
Percent Hispanic	0.042	−0.010	−0.020	−0.017	−0.036	−0.017*	0.144	−0.047
	(0.066)	(0.014)	(0.014)	(0.021)	(0.042)	(0.009)	(0.142)	(0.046)
Percent urban	−0.003	−0.001	−0.002	0.000	−0.003**	0.000	−0.010*	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.005)	(0.002)
Percent receiving public assistance	−0.007	0.003	0.000	0.000	0.012	0.019**	−0.041	0.005
	(0.009)	(0.010)	(0.014)	(0.011)	(0.010)	(0.010)	(0.035)	(0.010)
Constant	0.591***	0.078	0.216	0.343	0.019	−0.114	0.506	−0.111
	(0.208)	(0.224)	(0.213)	(0.210)	(0.191)	(0.200)	(0.865)	(0.184)
Number of observations	1,393	1,407	1,391	1,400	1,414	1,403	1,181	1,414
pseudo R-sq	0.046	0.028	0.041	0.031	0.046	0.048	0.018	0.031

NOTE:

- Rhode Island data were limited to beneficiaries aged 65 years of age and older, and Medicaid eligibility information was not available.

CAHPS = Consumer Assessment of Healthcare Providers and Systems; — = data not available; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; ZTCA = ZIP Code Tabulation Areas.

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

S.7 Survey Weights

A survey weight was generated for each respondent to the survey. The weights consisted of two components. The first component was the survey response propensity probabilities. Weights were computed by taking the inverse of the predicted propensity and then normalizing so that the sum of the weights reflected the number of survey respondents.

The second component of the weights was a case-mix adjustment. We followed the methodology recommended by the CAHPS Consortium by using age group, educational attainment, and perceived health status as the adjustment variables (Agency for Healthcare Research and Quality, 2012). These three items were self-reported in the CAHPS PCMH survey. A review of the literature by Zaslavsky et al. (2001) indicates that these factors most often affect respondent ratings of CAHPS items. We created 12 strata by cross-classifying the case-mix variables; determined the strata distributions for all MAPCP Demonstration survey respondents; and then computed state-specific case-mix stratum weights so that each state had the same weighted distribution. The purpose of case-mix weighting is to ensure that cross-state comparisons are not affected by variations in the compositions of the beneficiary populations served by the MAPCP Demonstration. The CAHPS Database also applies this case-mix adjustment method. The total survey weight used in our composite score analyses was the product of the response propensity and case-mix weights.

S.8 Composite Scores

For each state, we computed the mean score, standard deviation, standard error, and 90 percent confidence interval (CI) for each CAHPS PCMH composite. We gave equal weight to each constituent item when computing composite scores. The items comprising each composite are specified in ***Table S-3***. Unlike most surveys, calculating variances for the CAHPS PCMH composites is complicated by the survey's skip patterns and by the fluctuating numbers of respondents for individual scale items. We performed these calculations using the formulas for the variance of composites detailed by Ley (1972). This method requires that covariances be computed for every pair of items in a scale and then weighted by their respective pairwise sample sizes.

Table S-3
CAHPS PCMH adult survey composite items

Access to Health Care (5 items) ▪ Q6. Getting appointments for urgent care. ▪ Q9. Getting appointments for routine care. ▪ Q14. Getting an answer to a medical question during regular office hours. ▪ Q16. Getting an answer to a medical question after regular office hours. ▪ Q18. Saw provider within 15 minutes of appointment time.
Provider Communication (6 items) ▪ Q19. Provider explained things in a way that is easy to understand. ▪ Q20. Provider listened carefully to you. ▪ Q22. Provider gave easy to understand information. ▪ Q23. Provider knew important information about medical history. ▪ Q24. Provider showed respect for what you have to say. ▪ Q25. Provider spent enough time with you.
Office Staff Interactions (2 items) ▪ Q42. Clerks and receptionists at this provider's office were helpful. ▪ Q43. Clerks and receptionists at this provider's office treated you with courtesy and respect.
Comprehensiveness—Attention to Behavioral Health (3 items) ▪ Q39. Asked about feeling sad, empty, or depressed.[1] ▪ Q40. Talked about things in your life that worry you or cause you stress.[1] ▪ Q41. Talked about personal or family problems, alcohol/drug use, or mental or emotional illness.[1]
Self-Management Support (2 items) ▪ Q35. Talked with you about specific goals for your health.[1] ▪ Q36. Asked you if there are things that make it hard for you to take care of your health.[1]
Shared Decision Making about Medication (3 items) ▪ Q29. Provider talked about the reasons to take a medicine.[1] ▪ Q30. Provider talked about the reasons not to take a medicine.[1] ▪ Q31. Provider asked what you thought was best for you.[1]

NOTE:

[1] Items in CAHPS PCMH survey not included in CG-CAHPS core survey.

CAHPS = Consumer Assessment of Healthcare Providers and Systems; CG = comparison group; PCMH = patient-centered medical home.

APPENDIX T
PRACTICE MANAGER SURVEY

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The Multi-Payer Advanced Primary Care Practice Demonstration

Practice Manager Survey

Sponsored by:

U.S. Department of Health and Human Services,
Centers for Medicare & Medicaid Services

OMB No.: 0938-1256
Expires: 2/2/2017

Your Participation in This Survey

This survey is being fielded among all practices participating in the Centers for Medicare and Medicaid Services' (CMS) Multi-Payer Advanced Primary Care Practice Demonstration, which includes providers participating in Vermont's Blueprint for Health Initiative.

There is no "passing grade" for this voluntary survey, nor will your responses have any consequences for payment.

Your responses will be linked to claims data using an encrypted identifier, and analyzed by researchers (at RTI International, The Urban Institute, and the National Academy for State Health Policy) contracted to evaluate this demonstration. Researchers will report the results of this survey and their analyses in reports to CMS that will be made available to other federal agencies, state governments, and the general public in a nonidentifiable, aggregated form.

We estimate that this survey will take **6 minutes** to complete.

If you are willing to participate in this research, please complete this survey by **March 18, 2015**.

If you have difficulty or questions when completing this survey, please contact Stephen Zuckerman at szuckerman@urban.org or at 202-261-5679.

The Questions in This Survey

This survey asks about practice finances and organizational characteristics, participation in other initiatives, and current practice staff and roles.

Please complete all questions in the survey to the best of your knowledge. If your practice has multiple physical locations, please respond based on the practice site that is participating in Vermont's Blueprint for Health Initiative. For practices with more than one physical location participating in the initiative, we will contact each location to complete the survey.

Input can be requested from other staff in the practice as needed.

1. Please indicate which category (or categories) describes your practice.

CHECK ALL THAT APPLY

- ☐ Solo practice
- ☐ Single-specialty primary care practice
- ☐ Multiple specialty group practice
- ☐ Group or staff model HMO
- ☐ Community health center established to serve low-income or rural patients
- ☐ Hospital or hospital system
- ☐ Faculty practice / residency / medical school / teaching clinic
- ☐ Other: _____
- ☐ Don't Know

2. Please indicate the types of organizations that your practice is part of or affiliated with.

CHECK ALL THAT APPLY

- ☐ Hospital
- ☐ Integrated health care system
- ☐ Multispecialty group practice
- ☐ Independent Practice Association (IPA)
- ☐ Physician-Hospital Organization (PHO)
- ☐ Accountable Care Organization (ACO)
- ☐ Other: _____
- ☐ Don't Know

3. What percentage of the patients at this practice have the following insurance as their primary insurance type? Please provide your best estimate.

	PERCENTAGE
a. Medicare (includes dual Medicaid and Medicare patients) ...	|___|___|___| %
b. Medicare Advantage/managed care plans (includes dual Medicaid and Medicare patients)	|___|___|___| %
c. Medicaid (non-dual)/CHIP	|___|___|___| %
d. Privately insured	|___|___|___| %
e. TRICARE or other veteran's insurance	|___|___|___| %
f. Uninsured	|___|___|___| %
g. Other insurance:_____	|___|___|___| %

TOTAL SHOULD EQUAL 100%

- ☐ Don't Know

4. Is your practice accepting all, most, some, or no new patients who are insured through the traditional Medicare fee-for-service (FFS) program (not Medicare Advantage)?

- ☐ All new Medicare FFS patients
- ☐ Most new Medicare FFS patients
- ☐ Some new Medicare FFS patients
- ☐ No new Medicare FFS patients
- ☐ Don't Know

5. What percentage of your practice's total revenue for clinical services comes from the following sources? Please provide your best estimate.

	PERCENTAGE
a. Fee-for-service payments	|__|__|__| %
b. Capitation (e.g., a fixed monthly payment for physician services for a patient)	|__|__|__| %
c. Episode-based payments (e.g., a fixed payment for all physician services related to a specific condition, such as diabetes)	|__|__|__| %
d. Care management fees for patients with complex conditions	|__|__|__| %
e. Incentive bonuses for reductions in patients' costs and/or utilization below a target	|__|__|__| %
f. Incentive bonuses for quality performance	|__|__|__| %
g. Other payments:_____	|__|__|__| %

TOTAL SHOULD EQUAL 100%

- ☐ Don't Know

6. Within your practice, which of the following disciplines are present?

If your practice has multiple physical locations, please respond based on the practice site that is participating in Vermont's Blueprint for Health Initiative.

If a staff member at your practice fits into more than one job category, divide his or her full-time equivalent (FTE) time across the appropriate categories (for example, an RN who spends 20 hours per week serving as a clinical nurse and 20 hours per week serving as a care manager would be reflected as an 0.5 FTE registered nurse and an 0.5 FTE care manager).

In the third column, please check the box if any staff have joined your practice during the past 12 months for each job category.

	ANY IN PRACTICE?	NUMBER OF FTE STAFF	JOINED PRACTICE WITHIN PAST 12 MONTHS?
a. Physicians	☐ Yes	|__|__|__|	☐ Yes
b. Nurse practitioners and physician assistants (NPs/PAs)	☐ Yes	|__|__|__|	☐ Yes
c. Registered nurses (RNs, excluding RN care managers)	☐ Yes	|__|__|__|	☐ Yes
d. Care managers/care coordinators who coordinate care for patients in the practice with other providers or community services and resources	☐ Yes	|__|__|__|	☐ Yes
e. Social workers	☐ Yes	|__|__|__|	☐ Yes
f. Health educators	☐ Yes	|__|__|__|	☐ Yes
g. Nutritionists	☐ Yes	|__|__|__|	☐ Yes
h. Pharmacists	☐ Yes	|__|__|__|	☐ Yes
i. Licensed practical or vocational nurses (LPNs/LVNs)	☐ Yes	|__|__|__|	☐ Yes
j. Medical assistants	☐ Yes	|__|__|__|	☐ Yes
k. Administrative (reception, medical records, appointment, finance, etc.)	☐ Yes	|__|__|__|	☐ Yes

☐ Don't Know

7. Does your practice charge a "retainer" or "concierge" fee for some or all of your patients?

(This is an additional fee patients pay either monthly or annually beyond what insurance pays or the patient copay, for enhanced care—such as phone or email contact with clinicians after hours, or full access to an online patient portal.)

- ☐ Yes
- ☐ No
- ☐ Don't Know

8. How long has your practice had an electronic health record (EHR) system?

- ☐ No EHR
- ☐ Less than 1 year
- ☐ Between 1 and 3 years
- ☐ More than 3 years
- ☐ Don't Know

9. Please write in the Practice ID# in our email or the full name of your practice (e.g., "Jones Point Family Medicine"):

_____

Thank you for completing the survey!

Please fax it to Nana Haywood at 301-230-4647
or scan it as a PDF and email it to nhaywood@rti.org
or mail it to:
Ms. Nana Haywood
RTI International
6110 Executive Blvd., Suite 902
Rockville, MD 20852-3907

APPENDIX U
PROVIDER SURVEY

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The Multi-Payer Advanced Primary Care Practice Demonstration

Provider Survey

Sponsored by:

U.S. Department of Health and Human Services,
Centers for Medicare & Medicaid Services

OMB No.: 0938-1256
Expires: 2/2/2017

Your Participation in This Survey

This survey is being fielded among all health care providers participating in the Centers for Medicare and Medicaid Services' (CMS) Multi-Payer Advanced Primary Care Practice Demonstration, which includes providers participating in Vermont's Blueprint for Health Initiative.

This survey is designed to measure the extent to which the practice you work for engages in activities associated with the patient-centered medical home (PCMH) model of care.

There is no "passing grade" for this voluntary survey, nor will your responses have any consequences for payment. We are genuinely interested in your candid observations of the way your practice operates today.

Your responses will be linked to claims data using an encrypted identifier, and analyzed by researchers (at RTI International, The Urban Institute, and the National Academy for State Health Policy) contracted to evaluate this demonstration. Researchers will report the results of this survey and their analyses in reports to CMS that will be made available to other federal agencies, state governments, and the general public in a nonidentifiable, aggregated form.

We estimate that this survey will take **12 minutes** to complete.

If you are willing to participate in this research, please complete this survey by **March 18, 2015.**

If you have difficulty or questions when completing this survey, please contact Stephen Zuckerman at szuckerman@urban.org or at 202-261-5679.

The Questions in This Survey

This survey asks about how your practice currently manages your patients' health needs. The questions are organized into two sections:

Section A: Practice Functions asks you to identify your practice's care processes and approach to managing change and improving quality.

Section B: Provider Characteristics asks about your patient panel size, how long you've been with your practice, and basic demographic information.

Please complete all questions in the survey to the best of your knowledge. If your practice has multiple physical locations, please respond based on the physical location where you practice most frequently. For practices with more than one physical location participating in Vermont's Blueprint for Health Initiative, we will contact each location to complete the survey.

All medical doctors, doctors of osteopathy, nurse practitioners, and/or physician's assistants in your practice have been asked to complete this survey. Input can be requested from other staff in the practice as needed, but please complete as much of the survey as you can from your perspective.

Section A: Practice Functions

General Instructions: Please select **the point value** that best describes the level of advanced primary care/medical home that currently exists in your practice. Within each box there is a range of responses indicating the extent of implementation. Assign higher point values to indicate that the actions described in that box are more fully implemented. **Assign lower point values if some, but not all, of the actions described in that box have been implemented.**

1. Appointment systems	...are limited to prescheduled appointments.	...have prescheduled appointments and the ability to schedule urgent visits.	...have prescheduled appointments, the ability to schedule urgent visits, and the capacity for walk-ins or same-day visits.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
2. Respond to urgent problems	Clinician/practice team responds to urgent problems as time permits, and otherwise directs patients to the emergency department or urgent care centers.	Clinician/practice team has a system in place to triage patient problems, through phone or email communications or face-to-face visits, *but with limited availability for same-day appointments.*	Clinician/practice team has a system in place to triage patient problems though phone or email communications or face-to-face visits, *with same-day appointments usually available.*
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
3. After-hours access (24 hours, 7 days a week) to practice team for urgent care	...is not available after-hours during evenings and/or weekends. Practice does not actively coordinate emergency department care nor does it follow-up with patients after visits to the emergency department.	...is available by phone for urgent care.	...is available by phone for urgent care, and in-person during some evenings and/or weekends. The practice actively participates in coordinating emergency department care, and follows-up with patients after visits to the emergency department.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

4. Alternate types of contact (email, web portal, text message) with the practice team	...are not regularly available.	...are available but not encouraged, or selectively available, and responses are not provided within a timely and consistent timeframe.	...are a core component of patient-practice team communication, and responses are provided within a timely and consistent timeframe.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
5. Patient-clinician continuity	For ambulatory/outpatient care, patients are not assigned to a specific clinician and care team.	For ambulatory/outpatient care, patients are assigned to a specific clinician and care team, and are encouraged to seek care from this designated clinician and practice team. There is limited practice involvement with patients' care during hospital and post-acute care facility stays.	For ambulatory/outpatient care, patients are assigned to a specific clinician and care team, and are encouraged to seek care from this designated clinician and practice team. The practice monitors patients' care during hospital and post-acute facility stays, and is involved as needed.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
6. Registries (integrated in the electronic health record [EHR] or free-standing)	...are not used by practice teams for previsit planning, reminders to providers, patient outreach, or population health monitoring.	...are used by practice teams for previsit planning, reminders to providers, patient outreach, or population health monitoring but only for a limited number of conditions and high risk patients.	...are available to practice teams and routinely used for previsit planning, reminders to providers, and patient outreach, and population health monitoring across a comprehensive set of diseases and high risk patients.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
7. Visit focus	...is organized around the specific reason for a patient's visit.	...is organized around the specific reason for a patient's visit, but sometimes with attention to ongoing chronic care and prevention needs if time permits.	...is organized around the specific reason for a patient’s visit, but with consistent attention to ongoing chronic care and prevention needs (e.g., through the use of EHR care alerts).
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

8. Medication review for patients on multiple medications	...is not routinely done.			...is done only during care transitions or when patients receive new medications.			...is done on a regular basis for patients during care transitions, when patients receive new medications and during all regularly scheduled visits.		
	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
9. Care plans* for patients with chronic conditions	...are not routinely developed or recorded in patient medical records.			...are developed collaboratively with patients and families, and include self-management and clinical goals, but they are not routinely recorded in patient medical records nor used to guide subsequent care.			...are developed collaboratively with patients and families, recorded in patient medical records, include self-management and clinical goals, are used to guide ongoing care, and are given to the patient and family to support their care.		
	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9
**** A "care plan" summarizes a patient's treatment goals and treatment plan, and identifies the responsibilities of each of the various health care providers involved in the patient's care. A care plan is developed in collaboration with patients/families, and is based on a patient health risk assessment.***									
10. Clinical care management for complex patients	...is not done.			...involves assisting patients with educational resources and self-management, but does not involve the use of any care management services by the practice.			...is accomplished by identifying patients for whom care management might be beneficial. The practice actively coordinates care management with other providers and caregivers, and provides educational resources and ongoing support to assist with self-management.		
	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9

11. Preventive services (e.g., cancer screenings)	...are delivered at visits specifically scheduled for this purpose.	...are delivered at visits specifically scheduled for this purpose. Practice staff also identify needed preventive services at other visits.	...are delivered at visits specifically scheduled for this purpose. Practice staff also identify needed preventive services at other visits. In addition, registries or other clinical decision support tools are used to identify patients who have not received recommended preventive services, and reminders are given to patients to schedule these.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
12. Assessing patient and family values and preferences (e.g., preferences for last-stage-of-life care, role in clinical decision making)	...is not done systematically.	...is done for only some patients with significant health problems or who articulate values and preferences themselves. The practice team incorporates these patients' preferences and values into planning and organizing care.	...is systematically done for all patients with significant health problems or who articulate values and preferences themselves. The practice team incorporates patient preferences and values into planning and organizing care.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
13. Involving patients and caregivers in health care decision making	...is not a priority.	...is recognized as important, but practice does not use any systematic approach (e.g., decision aids) to support patients.	...is a priority and systematically done. Patients are supported to consider the likely outcomes of treatment options through the use of clinical decision aids, motivational interviewing, and/or teach-back techniques.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

14. Patient self-management support for chronic conditions	...is accomplished by distributing information (e.g., pamphlets, booklets) or referring patients to self-management classes or educators.	...is provided through goal-setting and action planning with members of the practice team, with ad hoc ongoing support from other providers as needed.	...is provided through goal-setting and action planning with members of the practice team trained in patient education, empowerment and problem-solving methodologies. Ongoing support is available through individualized care or group interventions.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
15. Tracking and follow-up with patients for important referrals	...is not generally done.	...is sometimes done.	...is consistently done.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
16. Tracking and follow-up with patients about test results	...is not generally done.	...is done for some test results.	...is consistently done for all tests.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
17. Relationships with commonly referred-to practices (i.e. cardiology, OB/GYN)	...are not formalized with practice agreements and referral protocols.	...are established through verbal understanding with some practices.	...are formalized with practice agreements and referral protocols.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
18. Patient referral information to specialists, hospitals, and other medical care providers	...is transmitted by the patient.	...is usually transmitted by the practice, but referrals do not always contain reason for referral, relevant clinical information or other core patient information.	...is consistently transmitted by the practice. Referrals contain reason for referral, clinical information relevant to the referral (e.g., test results, medical history), and core patient information (e.g., medications, allergies).
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

19. Patients in need of behavioral health support or community-based resources (e.g., social services)	...are only provided names of some organizations for patients to contact on their own.	...are referred to partners with whom the practice has established relationships and relevant patient information is communicated to these organizations.	...are referred to partners with whom the practice has established relationships, relevant patient information is communicated to them, and timely follow-up with patients occurs where necessary.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
20. Follow-up with patients seen in the emergency department (ED) or hospital	...occurs only if ED, hospital, patient, or caregiver alerts the practice.	...generally occurs on an ad hoc basis. Practice has agreements with the hospitals and facilities patients most commonly use to alert them when their patients are seen there.	...is done routinely after receiving notification from the ED or hospital. Practice has agreements in place with the hospitals and facilities patients most commonly use. Practice tracks patients and follows up with them either by visit, phone, or other form of communication within a short and specified timeframe.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
21. EHRs	...are not used.	...are used for basic functions such as documenting services rendered, using computerized provider order entry, printing information for patients, and e-prescribing.	...are used for basic functions plus more advanced functions such as clinical decision support (e.g., medication guides/alerts, preventive services alerts, clinical guidelines) and generating quality measure data for quality improvement purposes.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

22. Quality improvement activities	...are not organized or supported consistently.	...are conducted in reaction to specific problems and do not use systematic quality improvement approaches.	...are based on systematic quality improvement approaches (e.g., Plan-Do-Study-Act cycles, or tracking performance on quality measures) and are used in meeting organizational goals.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9
23. Feedback to the practice from patients and their families	...is not collected.	...is noted and incorporated into practice activities, but not in a systematic way.	...is regularly collected through a formal approach (e.g., patient survey, focus group), and through specific patients' concerns, and is incorporated into practice improvements.
	☐ 1 ☐ 2 ☐ 3	☐ 4 ☐ 5 ☐ 6	☐ 7 ☐ 8 ☐ 9

(Survey continues on next page)

Section B: Provider Characteristics

24. What is the total number of different patients that you, as a clinician, have in your patient panel, regardless of type of insurance coverage? Your best estimate is fine.

TOTAL NUMBER OF PATIENTS IN YOUR PATIENT PANEL: |__|__|__|__|__|

☐ Don't Know

25. How many patient visits do you have in an average week, regardless of type of insurance coverage? Your best estimate is fine.

NUMBER OF PATIENTS PER WEEK = |__|__|__|__|

☐ Don't Know

26. Which response best reflects how you are compensated for work performed at your primary practice location?

☐ Salary only
☐ Productivity incentives only
☐ Salary with productivity incentives
☐ Salary with quality incentives
☐ Salary with both quality and productivity incentives
☐ Capitation
☐ Other: _____
☐ Don't Know

27. If you reported using any productivity incentives in the previous question, which productivity measures does your practice use in calculating incentives?

CHECK ALL THAT APPLY

☐ Cash collections
☐ Relative value units (RVUs)
☐ Number of visits
☐ Other: _____
☐ Don't Know

28. What is your gender?

☐ Male
☐ Female
☐ Prefer Not to Say

29. Are you of Hispanic or Latino origin?

- ☐ Yes
- ☐ No
- ☐ Prefer Not to Say

30. What is your race?

- ☐ White
- ☐ Black/African American
- ☐ Asian
- ☐ Native Hawaiian/Other Pacific Islander
- ☐ American Indian/Alaska Native
- ☐ Prefer Not to Say

31. How long have you been with the practice?

- ☐ Less than 1 year
- ☐ Between 1 and 5 years
- ☐ Between 5 and 10 years
- ☐ More than 10 years
- ☐ Don't Know

32. In a typical week, how many hours are you scheduled to work at the practice?

- ☐ Less than 20 hours
- ☐ 20 to 29 hours
- ☐ 30 to 39 hours
- ☐ 40 to 49 hours
- ☐ 50 hours or more
- ☐ Don't Know

33. Please write in the Practice ID# in our email or the full name of your practice (e.g., "Jones Point Family Medicine"):

_____

Thank you for completing the survey!

Please fax it to Nana Haywood at 301-230-4647
or scan it as a PDF and email it to nhaywood@rti.org
or mail it to:
Ms. Nana Haywood
RTI International
6110 Executive Blvd., Suite 902
Rockville, MD 20852-3907

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APPENDIX V
DETAILED DESCRIPTION OF PRACTICE TRANSFORMATION SURVEY DATA

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V.1 Data Collection Methods

To understand which patient-centered medical home (PCMH) activities had been adopted by the MAPCP Demonstration the end of the demonstration, we fielded two companion surveys between January and May 2015. The surveys had different start and end dates in different states, due to state-specific extenuating circumstances. In all states, our survey fielding period was planned originally to be 6 weeks long, but was extended by a few weeks to increase response rates. By surveying practices in early 2015, we were able to collect information at a point when all states were at least 3 years into their demonstration activities.

To solicit responses from participating practice staff, we emailed practice points-of-contact listed in the provider file to which we had access (typically nonphysician office managers), asking them to: (1) complete a short practice manager survey (which asked about basic practice characteristics, such as number of staff and how long the practice had had an electronic health records [EHR] system); and (2) to forward an e-mail to each provider in their practice asking them to complete a separate, longer provider survey (which asked respondents to rate their degree of adoption of 23 PCMH-related activities, by selecting from one of three progressively more advanced answer options for each, and to answer a few provider characteristics questions). Our practice manager survey and provider survey are adapted from the Comprehensive Primary Care Initiative (CPCI) Practice Survey and Readiness Assessment Tool, developed by Deborah Peikes and colleagues at Mathematica Policy Research, Inc., and are included as ***Appendix T*** and ***Appendix U***. To thank our practice points-of-contact for their assistance, a $50 gift card for Amazon.com was included in our e-mails to them.

Both the surveys' text and the solicitation e-mail to practices, along with weekly reminder e-mails we sent, were reviewed and approved by CMS, OMB, and the Urban Institute and RTI Institutional Review Boards (IRBs). A notice about this proposed information collection was published in the *Federal Register* on July 12, 2013, on pages 41931–41932, allowing 60 days for public comment. No public comments were received, but we did receive feedback from six clinicians participating in the MAPCP Demonstration who pilot-tested our survey (a seventh clinician pilot-tested our survey, but had no suggested revisions). These pilot-testers told us they thought the survey covered appropriate topics. They did not have any major suggested revisions, although they did suggest rewording some questions to increase clarity and reader comprehension.

To encourage participating MAPCP Demonstration providers to complete the proposed survey, we contacted state staff administering the MAPCP Demonstration in advance of fielding the survey and asked them to let demonstration practices know that they would soon receive an e-mail asking them to complete an online survey. State staff were asked to assure providers that this survey was an authorized component of the MAPCP Demonstration evaluation and to encourage providers to complete the survey. We also asked state staff to mention the survey to providers during existing webinars, conference calls, in-person MAPCP Demonstration meetings with providers, in e-mails sent to providers, or in a combination of these contacts.

Response rates to the two companion practice surveys appear in ***Table V-1*** below. Because we did not receive a response from 80 percent of MAPCP Demonstration practices

within 6 weeks of the start of states' survey administration periods, we extended this period by a few weeks and offered nonresponders the option of completing a hard-copy version of our surveys that could be faxed, e-mailed, or mailed back to RTI, which only a handful of respondents chose to do. Evaluation staff then manually entered these practices' responses into the online survey instrument on behalf of these providers.

Table V-1
Practice-level response rates[1] for MAPCP Demonstration practice surveys, by state and type of respondent

State	Total number of demonstration practices in early 2015	Total number of practices that completed surveys	Response rate
Provider Survey (PCMH questions)			
Maine	69	48	70%
Michigan	355	201	57%
Minnesota	284	126	44%
North Carolina	40	14	35%
New York	41	29	71%
Pennsylvania	41	27	66%
Rhode Island	16	11	69%
Vermont	129	66	51%
Total	975	522	54%
Practice Manager Survey (practice characteristics questions)			
Maine	69	52	75%
Michigan	355	257	72%
Minnesota	284	155	55%
North Carolina	40	24	60%
New York	41	37	90%
Pennsylvania	41	28	68%
Rhode Island	16	13	81%
Vermont	129	94	73%
Total	975	660	68%

NOTE:

[1] In this table, the "practice-level response rate" identifies the number of *practices* with at least one respondent who completed the survey. A larger number of *individuals* completed our surveys, because multiple individuals from a single practice sometimes completed our survey.

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

V.2 Data Analysis Methods

Once practice manager and provider surveys were submitted by respondents, we reviewed these data and identified some mostly incomplete and duplicate practice manager surveys (the practice manager survey was designed to yield one observation per practice, but

unexpectedly yielded responses from multiple respondents from some practices). Of the 831 practice manager surveys submitted, we dropped 143 mostly incomplete surveys from 84 practices. Next, we reviewed instances where multiple practice manager surveys had been submitted by a single practice; 97 surveys fell into this category, submitted by 38 practices. For these practices, we averaged answer values across all available responses and combined responses that were not inconsistent with one another. Some questions had inconsistent responses. When surveys from the same practice diverged on questions about EHR adoption ("How long has your practice had an electronic health record [EHR]) system?") or accepting Medicare FFS ("Is your practice accepting all, most, some, or no new patients who are insured through the traditional Medicare fee-for-service [FFS] program [not Medicare Advantage]?"), we opted for the more conservative answer option (i.e., "less than 1 year" instead of "between 1–3 years" for EHR adoption, and "some new Medicare FFS patients" instead of "most new Medicare FFS patients" for accepting FFS). Once added to the 591 surveys already submitted by one practice each and not requiring any modifications, this yielded a total of 657 unique practice-level observations for the practice manager survey.

We then merged this edited practice manager survey data set with the 1,056 provider surveys submitted, linking surveys using practice identification numbers. This resulted in a total of 1,209 merged surveys. In this merged data set, we identified 187 practices for which we had practice manager survey responses, but no provider survey responses, resulting in missing values for all of the provider survey questions for these practices. Given our primary interest in the answers captured in the provider survey, we dropped merged surveys for these 187 practices, resulting in a final data set of 1,022 mostly complete merged surveys. The preceding steps are summarized in ***Figure V-1***.

The next step in our analysis was to calculate descriptive statistics based on the answers to the 23 PCMH questions in our provider survey. First, we needed to calculate descriptive statistics at the individual question level. Looking at the PCMH questions in our provider survey (see sample question below), the third answer box (the one with the "7," "8," or "9" answer options, below) describes activities that we believe a PCMH would engage in, while the second answer box ("4," "5," "6") describes activities that a practice transitioning to a PCMH might engage in, and the first answer box ("1," "2," "3") describes activities that a non-PCMH practice might engage in. We therefore opted to present the percentage of providers in each state who selected this third answer box (by selecting "7," "8," or "9") in the tables in our report that present provider performance on these individual survey questions ***(Table 3-7*** and the second provider survey table in each state chapter). The text we include in these tables is the same text that appears in the third answer box in our survey (highlighted in yellow below). We refer to respondents who selected this third answer box as having adopted a particular PCMH activity at a "high level."

Tables in our state chapters and ***Chapter 3*** present the percentage of providers who reported a high level of adoption of each of the 23 PCMH capabilities in our survey (i.e., chose response categories "7," "8," or "9"). In these tables, we exclude missing values when calculating the percentage of providers with a high level of adoption of each PCMH capability.

Figure V-1
Practice manager surveys and provider surveys used in analyses

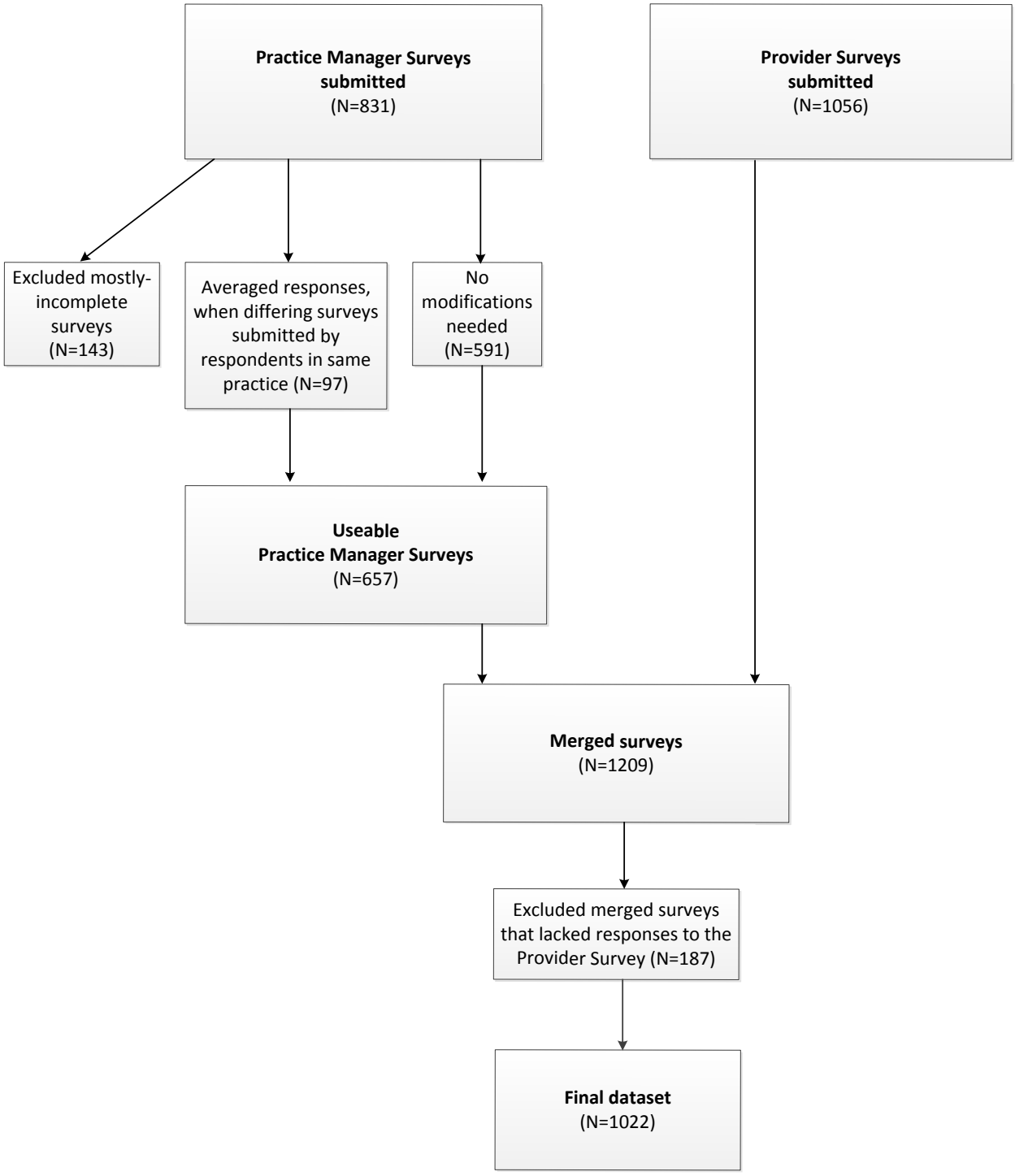

Figure V-2
Example question from MAPCP Demonstration Provider Survey

General Instructions. Please select **the point value** that best describes the level of advanced primary care/medical home that currently exists in your practice. Within each box there is a range of responses indicating the extent of implementation. Assign higher point values to indicate that the actions described in that box are more fully implemented. Assign lower point values if some, but not all, of the actions described in that box have been implemented.

Appointment systems	…are limited to prescheduled appointments. 1 2 3	…have prescheduled appointments and the ability to schedule urgent visits. 4 5 6	… have prescheduled appointments, the ability to schedule urgent visits, and the capacity for walk-ins or same-day visits. 7 8 9

We next created a summary variable to identify providers' overall performance on the 23 PCMH questions included in our provider survey, which we refer to as the Overall Practice Transformation Index. This index identifies the percentage of PCMH activities that providers reported implementing at a high level, i.e., the percentage of PCMH questions, out of the 23 PCMH questions included in our provider survey, for which a provider selected the third and most advanced answer option. For example, if a respondent answered a "7," "8," or "9" on 11 of the 23 PCMH questions, their Overall Practice Transformation Index score would be 11/23 = 48 percent. Average Overall Practice Transformation Index scores for demonstration states appear in ***Table 2-2***, ***Table 3-6***, and the first provider survey table in each state chapter.

We used a similar approach to create variables that identify providers' performance on each of six PCMH domains of care (i.e., access to care, care management (which we defined as not involving other health care providers), care coordination (which we defined as involving other providers), patient engagement and self-management, quality improvement, and health information technology), by grouping together PCMH questions from our provider survey that were on like topics. Domain-level variables were defined as the percentage of questions within a domain for which a respondent selected the third and most advanced answer option (i.e., by selecting a "7," "8," or "9"). Each domain had a different denominator based on the number of questions included in the domain. Average performance on these PCMH domains among demonstration states are reported in ***Table 3-6*** and the first provider survey table in each state chapter. Some respondents did not answer all of the questions within a domain. Rather than not using these incomplete surveys when calculating domain scores, we instead interpreted questions with missing values to mean that a respondent was not performing that particular PCMH activity at a high level.

We also sought to identify practice and provider characteristics associated with a high degree of mastery of the PCMH model of care (as measured by Overall Practice Transformation Index scores). To do this, we first created practice or provider characteristics variables from the practice manager survey and provider survey, choosing questions that had relatively low numbers of missing values (MV). Many questions that required the respondent to write in a number had very high MV and, therefore, were not used in this analysis. For example,

respondents were asked to estimate the number of patients in their patient panel (MV = 386), the percentage of their patients insured by Medicare FFS, a Medicare Advantage plan, Medicaid, etc. (MV = 199), and the percentage of their practice's total revenue that came from various types of payments (e.g., FFS, capitation, episode-based payments, etc.) (MV = 515). In other instances, we opted not to include certain answer options that may have seemed redundant to a reader (e.g., "hospital" was an answer option both for the question about practice type and the question about organizations with which a practice was affiliated). The practice and provider characteristics variables we included in our analysis are shown in ***Table 2-2***.

We then estimated regression-adjusted average Overall Practice Transformation Index scores for different practice and provider characteristics, calculated one characteristic at a time, while holding constant all remaining characteristics.[1] The results of this analysis are compiled in ***Table 2-2***, showing the incremental effect on Overall Practice Transformation Index scores of having a particular characteristic, holding all other characteristics constant, compared to not having a particular characteristic. For example, when looking at the "Hours worked per week by provider" provider characteristic variable, we see that working "≥ 40 hours" was associated with an estimated Overall Practice Transformation Index score of 79.0 percent, which is 2.8 percentage points higher than the 76.2 percent score estimated for providers who worked "<40 hours" (our reference category for this variable). This means that providers who work more than 40 hours per work are estimated to perform slightly more of the PCMH activities in our provider survey than providers who work fewer than 40 hours per week.[2]

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[1] These regression-adjusted averages are derived from a model of the Overall Practice Transformation Index that includes as explanatory variables all of the variables identified in this table: patients seen per week; usual number of hours worked per week; years with current practice; practice type; practice affiliations; whether a provider's compensation includes any kind of financial incentives; whether a practice has a nurse practitioner or physician assistant; whether the practice has a care manager; whether the practice has a social worker, health educator, nutritionist, pharmacist, or counselor; how long a practice has had an EHR. State-specific fixed effects were also included (not shown in table). Standard errors are adjusted to correct for clustering at the practice level because multiple physicians from the same practice provided survey responses in some cases. To estimate these regression-adjusted averages, we first estimated an ordinary least squares (OLS) regression model, where the Overall Practice Transformation Index is the dependent variable, and the variables listed earlier in this note are the independent variables. We then estimated the average of the predicted values from this model, assuming that every observation in the data, in turn, takes on the characteristic of a given answer option for each of the practice characteristics listed above. For example, for the dependent variable "Number of years provider has been with current practice," which may have four distinct values (< 1 year, 1–5 years, 5–10 years, ≥ 10 years), we obtain an average for this variable that is "adjusted" under the assumption that all providers have only been with the practice for less than 1 year.

[2] We note that the results in ***Table 2-2*** do not identify the *actual* average Overall Practice Transformation Index scores observed for providers who work ≥ 40 hours, since we held all other provider characteristics constant when calculating the estimates that appear in this table. We also note that numbers in ***Table 2-2*** should be compared only to other numbers within the same provider characteristic row and should not be compared to the "Unadjusted Average" shown at the top of this table. The Unadjusted Average is provided only for general context.

V.3 Nonresponse Bias Analysis

Since we did not achieve the 80 percent response rate we had hoped to see on the Practice Manager Survey and the Provider Survey, we conducted a nonresponse bias analysis by comparing available characteristics for responding practices versus nonresponding practices, shown in ***Tables V-2*** and ***V-3*** below.

To conduct this analysis, we merged our survey data file (containing merged observations from the Practice Manager Survey and the Provider Survey) with data from two additional sets, containing: (1) practice characteristics data for all practices in the MAPCP Demonstration (including a variable identifying the county that each practice was located in, in the form of Federal Information Processing Standard [FIPS] county codes), drawn from Actuarial Research Corporation's Q12 MAPCP Demonstration Provider File; and (2) selected county-level variables from the Health Resources and Services Administration's (HRSA's) publicly available 2013–2014 Area Health Resources File (AHRF) (which contains data from different years, depending on what the most recent available year of data is for a particular variable). We used practices' FIPS codes to merge AHRF data with our other data sources for purposes of this analysis. The AHRF county-level variables we used are: an indicator if the practice is in a Metropolitan Statistical Area (MSA) as of the 2010 Census; Medicare Advantage penetration as of 2012; percent uninsured by age group estimates using the Census Small Area Health Insurance Estimates for 2006–2012; educational attainment for adults 25 and older using 2008–2012 Census American Community Survey; percent of population that is White as of the 2010 Census; and percent of population that is female as of the 2010 Census. We created one county-level variable (the rate of Medicare FFS emergency department visits per 1,000 Medicare FFS beneficiaries in practices' counties), by combining two AHRF variables: the number of Medicare FFS emergency department visits in a county in 2011 divided by the total number of Medicare FFS beneficiaries in a county that same year, multiplied by 1,000 to produce a rate of emergency department visits per 1,000 Medicare FFS beneficiaries.

Table V-2
Nonresponse bias analysis: Average characteristics of practices that responded to both the MAPCP Demonstration Provider Survey and MAPCP Demonstration Practice Manager Survey versus practices that did not respond to both of these surveys

Characteristics of practices	Practices that responded to surveys (N = 416)[1]	Practices that did not respond to surveys (N = 381)
Number of providers in the average practice	44.5	65.1*
Number of primary care providers in the average practice	36.6	52.2*
Percentage of providers that are primary care providers in the average practice	87.3%	83.2%*
Percentage of practices with ≥ 40 providers	32.2%	31.5%
Percentage of practices that participated in state's PCMH initiative before MAPCP Demonstration	68.8%	64.3%
Percentage of practices that are FQHCs	8.4%	8.9%

(continued)

Table V-2 (continued)
Nonresponse bias analysis: Average characteristics of practices that responded to both the MAPCP Demonstration Provider Survey and MAPCP Demonstration Practice Manager Survey versus practices that did not respond to both of these surveys

Characteristics of practices	Practices that responded to surveys (N = 416)[1]	Practices that did not respond to surveys (N = 381)
Percentage of practices that are RHCs	6.5%	5.0%
Percentage of practices that are part of CAHs	2.4%	2.9%
Percentage of practices that are located in an MSA	71.2%	66.9%

NOTE:

[1] An additional 69 practices responded to our surveys but were unable to be linked to practice characteristics data and, therefore, are not included in this nonresponse bias analysis.

CAH = critical access hospital; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; MSA = Metropolitan Statistical Area; PCMH = patient-centered medical home; RHC = rural health clinic.

SOURCES: Actuarial Research Corporation's Q12 MAPCP Demonstration Provider File; HRSA's 2013–2014 Area Health Resources File (AHRF), available at: http://ahrf.hrsa.gov/.

* The difference between respondents and nonrespondents is statistically significant at the 10 percent level.

Table V-2 indicates that responding practices and nonresponding practices were highly similar to each other on many dimensions, although they did differ on a few characteristics.

Specifically, the average number of providers in practices that responded to both our Practice Manager Survey and our Provider Survey was 44.5, whereas the average number of providers in practices that did not respond to our surveys was 65.1. Similarly, a more specific metric that identified the average number of primary care providers was also statistically significantly different between these two groups: 36.6 in responding practices versus 52.2 in nonresponding practices. However, the percentage of providers in a practice that were primary care providers was quite similar in these two groups (87.3% of providers were primary care providers among responding practices vs. 83.2% in nonresponding practices). Interestingly, a statistically significant difference between the two groups did not exist in terms of the percentage of practices that had 40 or more providers (32.2% versus 31.5%) – which suggests that a small number of very large practices may be skewing the average size of practices up, but that the general makeup of the two groups may actually be quite similar, in terms of practice size.

We found no other statistically significant differences between these two groups in ***Table V-2*****,** in terms of the share of practices that had previously participated in their state's PCMH initiative before the MAPCP Demonstration began, the percentage of practices that were FQHCs, RHCs, CAHs, and the percentage that were located in an MSA.

Table V-3
Nonresponse bias analysis: Average characteristics of the counties where practices that responded to both the MAPCP Demonstration Provider Survey and MAPCP Demonstration Practice Manager Survey were located, versus the counties of practices that did not respond to both of these surveys

Characteristics of the counties where practices were located	Practices that responded to surveys (N = 397)[1,2]	Practices that did *not* respond to surveys (N = 366)[2]
Percentage of Medicare beneficiaries in Medicare Advantage plans	27.3%	27.9%
Percentage of nonelderly people (under age 65) who are uninsured	11.7%	11.6%
Percentage of nonelderly adults (age 18–64) who are uninsured	14.3%	14.1%
Percentage of children (age ≤ 18) who are uninsured	4.7%	4.9%*
Percentage of people living below the Federal Poverty Level	14.5%	14.0%
Percentage of adults (age ≥ 25) with less than a high school diploma	10.9%	10.9%
Percentage of adults (age ≥ 25) with a 4-year college degree	29.4%	28.9%
Percentage of population that is White	84.3%	84.7%
Percentage of population that is female	50.7%	50.6%*
Rate of Medicare FFS ED visits per 1,000 Medicare FFS beneficiaries	709*	694*

[1] An additional 69 practices responded to our surveys but were unable to be linked to practice characteristics data and, therefore, are not included in this nonresponse bias analysis.

[2] An additional 34 practices could not be included in the analysis presented in Appendix ***Table V-3*** because AHRF data do not include data for certain unreported geographic areas and certain geographic areas with small populations. Among these 34 practices, 19 responded to our surveys and 15 did not. Among these 34 practices, responding practices were more likely to be located in an MSA than nonresponding practices (84.2% of respondents were in an MSA while only 46.7% of nonrespondents were in an MSA); other differences between these two groups were much smaller and not statistically significant.

ED = emergency department; FFS = fee-for-service; MAPCP = Multi-Payer Advanced Primary Care Practice; MSA = Metropolitan Statistical Area; PCMH = patient-centered medical home.

SOURCES: Actuarial Research Corporation's Q12 MAPCP Demonstration Provider File; HRSA's 2013-2014 Area Health Resources File (AHRF), available at: http://ahrf.hrsa.gov/.

* The difference between respondents and nonrespondents is statistically significant at the 10 percent level.

Table V-3 indicates that the counties where responding practices and nonresponding practices were located were similar to each other, although we did find a few statistically significant differences. Responding practices' counties had a slightly lower uninsurance rate among children than nonresponding practices' counties (4.7% vs. 4.9%), a slightly higher percentage of females (50.7% vs. 50.6%), and a slightly higher rate of ED visits among Medicare FFS beneficiaries (709 ED visits per 1,000 beneficiaries vs. 694 ED visits per 1,000 beneficiaries). These differences were all very small, suggesting that the differences between responding and nonresponding practices' counties are not likely to introduce much bias into our survey findings.

Meanwhile, we found no statistically significant differences between responding and nonresponding practices' counties with respect to: the percentage of Medicare beneficiaries in

Medicare Advantage plans; the uninsurance rate among all nonelderly individuals as well as nonelderly adults; the percentage of the population living below the Federal Poverty Level; the percentage of adults with less than a high school diploma and the percentage with a 4-year college degree; and the percentage of the population that is White.

APPENDIX W
ADDITIONAL INFORMATION RELATED TO THE TRADITIONAL COMPARATIVE CASE STUDY

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To confirm that the ability of MAPCP Demonstration states to generate net savings for the Medicare program was an appropriate main outcome measure to use for our comparative case study, we compared states' performance on this metric to their performance on the rest of the key outcome measures in this report. In ***Table W-1***, below, we reduce findings to symbols, to facilitate visual identification of patterns. A plus sign ("+") is used to identify states where demonstration practices achieved performance that was statistically significantly better than non-PCMH comparison practices, and conversely a minus sign ("–") is used to identify states where demonstration practices achieved performance that was statistically significantly worse than these comparison practices. A blank table cell indicates that the difference between the performance of demonstration practices and comparison practices was not statistically significant in a state.

In analyzing ***Table W-1***, we found that the four states with net savings (Vermont, Michigan, Pennsylvania, and New York) were also the states where practices tended to perform favorably on more Medicare claims-based measures of quality, health care utilization, and expenditures, compared to other states. The four states with net losses (Minnesota, Maine, Rhode Island, and North Carolina) tended to perform favorably on fewer of these claims-based measures and were more likely to generate unfavorable performance relative to non-PCMH comparison practices (especially in North Carolina and Maine). Based on our assessment that the eight states' performance on these key outcome measures was consistent with their performance on the net savings measure, we proceeded with using net savings as our main outcome of interest for purposes of our traditional comparative case study.

Table W-1
Summary of MAPCP Demonstration states' performance on key evaluation outcome measures relative to non-PCMH comparison practices

	Net savings for Medicare?							
	Yes				No			
	VT	MI	PA	NY	NC	RI	ME	MN
Quality								
Received all 4 recommended diabetes tests								
Avoidable catastrophic events							−	
PQI admissions—overall	−				−			
PQI admissions—acute				+	−			
PQI admissions—chronic	−				−		−	
Access to Care & Care Coordination								
Number of primary care visits								
Number of medical specialist visits	+				+			
Number of surgical specialist visits	+	−		−	−			
Primary care visits as a percentage of total visits			+					
Follow-up visits within 14 days after discharge			+					
Unplanned readmissions within 30 days						−		
COC Index	+		+	−				
Utilization								
All-cause admissions					−		−	
ER visits not leading to a hospitalization	−	−						
Expenditures								
Total expenditures	+						−	−
Acute-care expenditures							−	−
Post-acute care expenditures	+				−	−		
ER expenditures	+			−				−
Outpatient expenditures		−		−	−		−	−
Specialty physician expenditures	+	+	+				−	
Primary care physician expenditures			+	+				
Home health expenditures	−				−	−	−	−
Laboratory expenditures	+	+	+					−
Imaging expenditures	+			+				
Other facility expenditures			+					
Other non-facility expenditures								−

NOTES:

+ = demonstration practices' performance was statistically significantly better than comparison practices.

− = demonstration practices' performance was statistically significantly worse than comparison practices.

Empty cell = no statistically significant difference between demonstration and comparison practices' performance.

COC = Continuity of Care; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

APPENDIX X
METHODS AND DETAILED RESULTS RELATED TO QUALITATIVE COMPARATIVE ANALYSES (QCA)

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X.1 Overview of Qualitative Comparative Analysis Method

Qualitative comparative analysis (QCA) is designed to analyze data in a novel way to identify combinations of conditions under which policies, programs, or interventions are successful or desired outcomes are achieved (Ragin, 1987, 1999, 2000). QCA uses data from cases (in these analyses, each state represents a case) to identify:

- Features or combinations of features that are necessary, or always found among cases that exhibit the specific outcome under evaluation.

- Features or combinations of features that are sufficient, or always present when these features or combinations of features are present.

The results generated by QCA are called solutions. Solutions use logical operators, such as "AND," "OR," and "NOT," to describe the relationship between case features and the outcome under evaluation. The solution generated by QCA is analogous to the expression of a relationship among variables using regression models, although unlike regression models, solutions do not offer an estimate of precision, nor can they be used for statistical hypothesis testing. With a QCA solution, numeric parameters of fit are calculated to describe the strength of the "set" relationship (referred to as consistency) and the relevance of the solution identified for explaining cases with the outcome (referred to as coverage).

We used fsQCA software (version 2.5) (Ragin, Drass, & Davey, 2006) to conduct all analyses. Consistent with QCA best practices, we conducted analyses for the relationship among features and favorable outcomes and for the relationship between features and unfavorable outcomes. We used a consistency threshold of 0.67 for these analyses because of the small number of cases available.[1] We summarized results in graphical, tabular, and narrative formats.

X.2 Definition of Outcome Used in QCA

We evaluated nine different outcomes and used the same approach to defining each of those outcomes as favorable or not favorable for purposes of the QCA.

To define each state's Medicare expenditures or utilization outcomes as favorable or not favorable, we used the average demonstration effect estimates during the first 12, 13, or 14 quarters of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration. Each state was assigned to one of four possible categories based on these reported average demonstration effects (***Table X-1)***. A numeric value, referred to as a set membership value (SMV) that represents the assigned category, is used to conduct the analysis. SMVs are the numerical representation between 0 and 1 of the "favorableness" of each state's outcome. Because demonstration effects were estimated relative to two different comparison groups, we

[1] The consistency threshold refers to the threshold above which a specific combination of features would be used in the analysis of sufficiency for the outcome. A threshold of 0.67 means that 67 percent of the cases with the combination of features would need to exhibit the specific outcome under evaluation in order for that combination to be considered sufficient and used in the logical minimization part of the analysis.

assigned two SMVs to each state; one SMV represents "favorableness" relative to the non-patient-centered medical home (non-PCMH) practice comparison group (CG) and the other represents "favorableness" relative to the PCMH practice CG.

Table X-1
Categories and SMVs used to define outcomes for the QCA

Set membership description[1]	SMV assigned
Fully in: Favorable effect as demonstrated by statistically significant reduction in growth of expenditure or utilization outcome among beneficiaries in demonstration practices relative to CG practices	1.0
Somewhat in: Reduction in growth of expenditure or utilization outcome among beneficiaries in demonstration practices relative to CG practices, but reduction in growth does not reach statistical significance	0.67
Somewhat out: Increase in growth of expenditure or utilization outcome among beneficiaries in demonstration practices relative to CG practices, but increase in growth does not reach statistical significance	0.33
Fully out: Statistically significant increase in growth of expenditure or utilization outcome among beneficiaries in demonstration practices relative to CG practices	0

[1] Based on outcomes reported in Tables 3–11, 3–12, and 3–14 of this report, which define statistically significant results as $p < 0.10$.

CG = comparison group; QCA = quantitative comparative analysis; SMV = set membership value.

The SMVs assigned for each of the nine outcomes are provided in ***Table X-2***.

Table X-2
SMVs assigned for outcomes used in the QCAs[1]

Outcome	Maine		Michigan		Minnesota		North Carolina		New York		Pennsylvania		Rhode Island		Vermont	
	PCMH	Non-PCMH	PCMH	Non-PCMH	PCMH[2]	Non-PCMH	PCMH	Non-PCMH	PCMH	Non-PCMH	PCMH	Non-PCMH	PCMH	Non-PCMH	PCMH	Non-PCMH
Total Medicare expenditures	0.33	0	1	0.67	—	0	0.33	0.33	0.33	0.67	1.0	0.67	0.33	0.33	1	1
Acute-care expenditures	0	0	1	0.67	—	0.33	0.33	0.33	1	0.67	1.0	0.67	0.67	0.33	0.67	0.67
Post-acute care expenditures	0	0	1	0.67	—	0.33	0.33	0	0.33	0.67	0.67	0.67	0.33	0	1	1
Outpatient expenditures	0.33	0.33	0.33	0	—	0.33	0.33	0	0	0.33	0.67	0.33	0.33	0.67	0	0.33
Specialty care expenditures	1	0.33	1	1	—	1	0.33	0.67	1	0.67	0.33	1	0.33	0.33	1	1
All-cause admissions	0.33	0	1	0.67	—	0.33	0.33	0	1	1	1	0.33	0.67	0.33	0.67	0.33
Chronic PQI admissions	0	0	0.33	0.33	—	0.33	0.33	0	0.67	0.33	1	0.67	0.67	0.33	0.33	0
ER visits	0.67	0.67	0.33	0	—	0.33	0.33	0.67	0.67	0.33	0.67	0.67	0.67	0.67	0	0
Unplanned readmissions	0.67	0.33	1	0.67	—	0.67	0.33	0.33	0.67	0.67	0.67	0.67	0.67	0	0.67	0.67

[1] We used the categories described in ***Table X-1*** to assign SMVs for each CG of practices within each state.

[2] There is no PCMH group in Minnesota.

CG = comparison group; — = data not available; ER = emergency room; PCMH = patient-centered medical home; PQI = preventive quality indicators; QCA = comparative quantitative analysis; SMV = set membership value.

X.3 Definition of Initiative Features (Payment Methodology) Used in the Qualitative Comparative Analyses

Table X-3 describes the categories used for initiative features related to the payment methodologies used by states participating in the MAPCP Demonstration. The table identifies the initiative feature, provides a brief definition, and describes the two categories defined for each feature. Each state was assigned to one of the two categories available for each feature, and we assigned a numeric value, the SMV, to represent the category assigned for use in the analysis. ***Table X-4*** provides the SMVs that were assigned to each state using the categories described in ***Table X-3***.

Table X-3
Description of features and categories used for payment methodology initiative features

Initiative feature	Definition	Categories for SMV assignment
Non-practice supporting entities receive PCMH payments (feature "n")	The PCMH payment methodology for the state includes payments for non-practice supporting entities, such as community health teams.	Feature is ***present*** in a state if: a portion of the PCMH payments are routinely paid to non-practice supporting entities (e.g., community health teams, community health networks, supporting physician organizations, or other supporting entities). (SMV = 1) Feature is ***absent*** in a state if: no portion of PCMH payments are paid to non-practice supporting entities. (SMV = 0)
Performance incentives included in the PCMH payment methodology (feature "p")	The PCMH payment methodology for the state includes financial incentives for practices to improve performance on quality and/or cost (e.g., pay-for-performance bonuses, opportunities to earn shared savings).	Feature is ***present*** in a state if: the PCMH payment methodology includes bonus payments or incentives to practices based on their performance on quality and/or cost (e.g., pay-for-performance, shared savings opportunities). (SMV = 1) Feature is ***absent*** in a state if: the PCMH payment methodology does not include bonus payments or incentives (i.e., payments are limited to fixed PMPM or enhanced FFS payments). (SMV = 0)

(continued)

Table X-3 (continued)
Description of features and categories used for payment methodology initiative features

Initiative feature	Definition	Categories for SMV assignment
Certification as a more advanced PCMH earns practices higher PCMH payments (feature "r")	The payers paid higher PCMH payments to practices that achieved higher levels of PCMH certification (e.g., NCQA Level 3 as opposed to Level 1).	Feature is ***present*** in a state if: PCMH payments made to practices are adjusted based on the practice's level of PCMH certification, with higher levels of payments made for higher levels of certification. (SMV = 1) Feature is ***absent*** in a state if: PCMH payments to practices are not adjusted based on level of PCMH certification. Practices receive the same level of payments, regardless of level of PCMH certification. (SMV = 0)
Characteristics of patients determines PCMH payment amounts (feature "c")	The state paid higher PCMH payments based on the characteristics of patients, such as higher payments for older patients or patients with more chronic conditions.	Feature is ***present*** in a state if: PCMH payments made to practices are adjusted based on patient health or socioeconomic characteristics, such as age, number of chronic conditions, or aged, blind, or disabled status. (SMV = 1) Feature is ***absent*** in a state if: PCMH payments made to practices are not adjusted based on patient health or socioeconomic characteristics, such as age, number of chronic conditions, or aged, blind, or disabled status. (SMV = 0)

FFS = fee for service; NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home; PMPM = per member per month; SMV = set membership value.

Table X-4
SMVs assigned for payment methodology initiative features[1]

Feature	Maine	Michigan	Minnesota	North Carolina	New York	Pennsylvania	Rhode Island	Vermont
Non-practice supporting entities receive PCMH payments (feature "n")	1	1	0	1	1	0	1	1
Performance incentives included in PCMH payment methodology (feature "p")	0	1	0	0	1	1	1	0
Certification as higher-level PCMH earns practices higher PCMH payments (feature "r")	0	0	0	1	0	0	0	1

(continued)

Table X-4 (continued)
SMVs assigned for payment methodology initiative features[1]

Feature	Maine	Michigan	Minnesota	North Carolina	New York	Pennsylvania	Rhode Island	Vermont
Characteristics of patients determines PCMH payment amounts (feature "c")	0	0	1	0	0	1	0	0

[1] We used the categories described in ***Table X-3*** to assign SMVs for each feature.

PCMH = patient-centered medical home; SMV = set membership value.

X.4 Definition of Initiative Features (Non-payment-related) Used in the Qualitative Comparative Analyses

Table X-5 describes the categories used for initiative features not related to the payment methodology used by states participating in the MAPCP Demonstration. The table identifies the initiative feature, provides a brief definition, and describes the two categories defined for each feature. Each state was assigned to one of the two categories available for each feature, and we assigned a numeric value, the SMV, to represent the category assigned for use in the analysis. ***Table X-6*** provides the SMVs that were assigned to each state using the categories described in ***Table X-5***.

Table X-5
Description of features and categories used for initiative features not related to payment methodology

Initiative feature	Definition	Categories for SMV assignment
High accountability standards to ensure practices achieve PCMH requirements (feature "a")	Accountability standards to ensure practices achieve PCMH requirements include explicit requirements for practices to demonstrate that they are operating and performing as a PCMH through an independent review or audit. A practice self-assessment can be a component of accountability standards, but the self-assessment must also be accompanied by an additional independent review/audit by a third party to confirm practice PCMH capabilities at some point during the demonstration. Audits/reviews of a subsample of randomly selected practices within a state do not qualify as "high" accountability standards. Practice site visits by external parties for the purpose of practice facilitation and technical assistance for practice transformation do not qualify as independent reviews/audits.	Feature is ***present*** in a state if: the state initiative explicitly requires independent reviews/audits of all participating practices to verify that PCMH requirements are being met. (SMV = 1) Feature is ***absent*** in a state if: the state initiative does not explicitly require independent reviews/audits of all participating practices to verify that PCMH requirements are being met. (SMV = 0)

(continued)

Table X-5 (continued)
Description of features and categories used for initiative features not related to payment methodology

Initiative feature	Definition	Categories for SMV assignment
Advanced PCMH practice requirements (feature "d")	Advanced PCMH practice requirements are defined as recognition as an NCQA PCMH Level 3 practice or equivalent status as determined by the number and type of requirements the state initiative has defined. Practice recognition as a Level 3 or its equivalent must be required at some point during the demonstration period.	Feature is ***present*** in a state if: the state initiative has identified explicit expectations regarding minimum recognition as an NCQA PCMH Level 3 practice (or something equivalent to Level 3) at some point during the demonstration. (SMV = 1) Feature is ***absent*** in a state if: the state initiative has not identified any explicit expectations regarding minimum recognition as an NCQA PCMH Level 3 (or something equivalent to Level 3) at some point during the demonstration. (SMV = 0)
Community-based care management teams (feature "t")	Care management teams include teams of health care professionals that work with the individual practices' nurses, mid-level providers, and physicians to address the needs of patients. Team composition can vary but generally includes nurses, pharmacists, health educators, social workers, behavioral health specialists, and/or dieticians. These teams are provided by external, community-based organizations. Most teams serve multiple practices. Services may include patient outreach, education, provision of self-management tools, community-based resource integration, care coordination of services, referrals, transitions, social services, and medication reconciliation. The frequency and quality of interactions and services provided by care management teams can vary by practice. Some teams may focus on more medically complex patients, specific payer's patients, or recently discharged patients, while others may have a broader reach among patients.	Feature is ***present*** in a state if: a core feature of the state's initiative includes providing all participating practices with access to a team of community-based health care professionals who provide a range of care management and coordination services. (SMV = 1) Feature is ***absent*** in a state if: if the state's initiative does not provide all participating practices with access to a team of community-based health care professionals who provide a range of care management and coordination services. (SMV = 0)

NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home; SMV = set membership value.

Table X-6
SMVs assigned for initiative features not related to payment methodology[1]

Initiative feature	Assigned SMVs							
	Maine	Michigan	Minnesota	North Carolina	New York	Pennsylvania	Rhode Island	Vermont
High accountability standards to ensure practices achieve PCMH requirements (feature "a")	0	1	1	0	0	1	0	1
Presence of advanced PCMH practice requirements (feature "d")	0	1[a]	1	0	0	0	1	0
Community-based care management teams (feature "t")	1	0	0	1	1	0	0	1

[1] We used the categories described in ***Table X-5*** to assign SMVs for each feature.

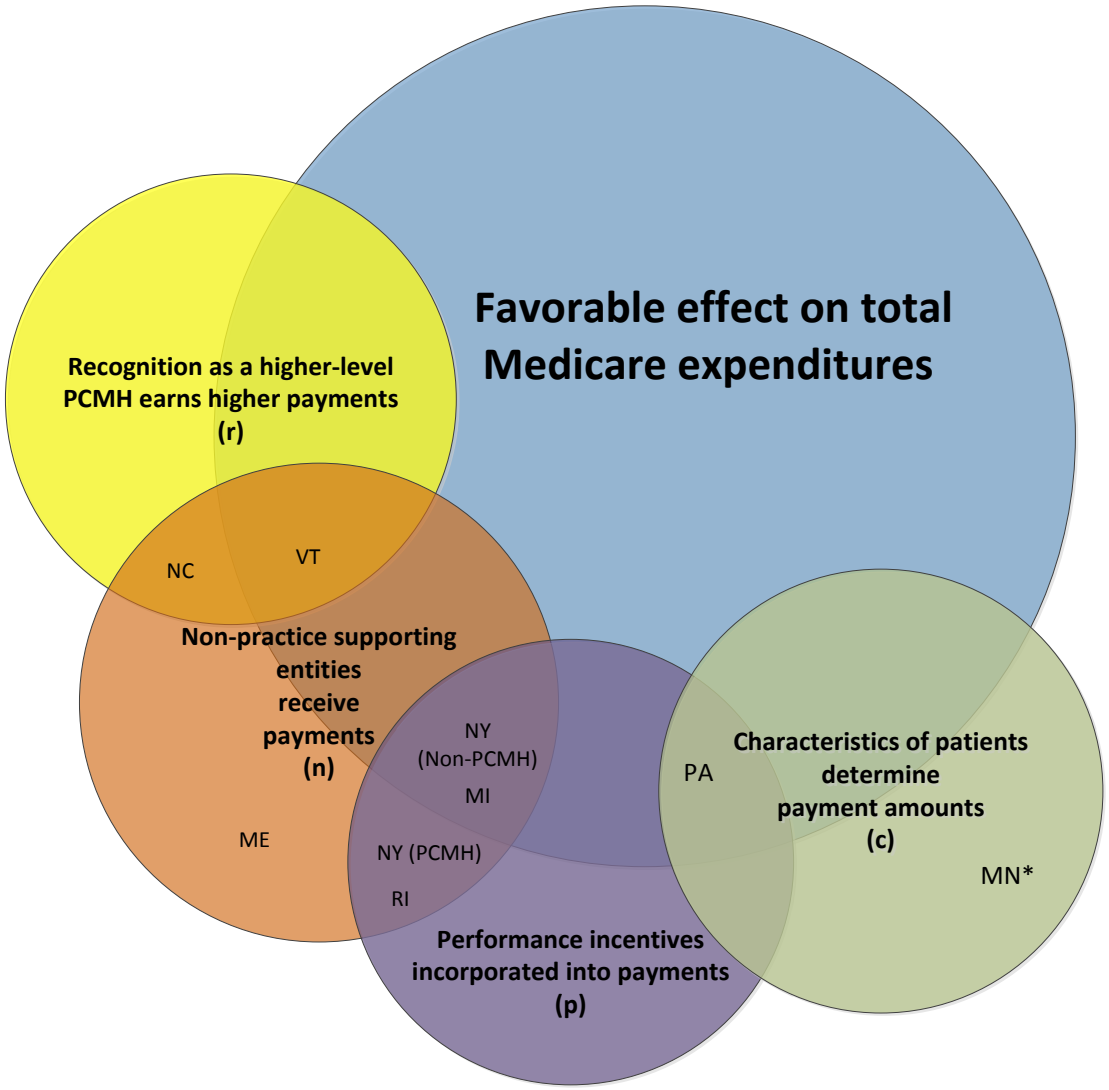
PCMH = patient-centered medical home; SMV = set membership value.

X.5 Detailed Results

PCMH payment methodology features (Analysis 1). In this analysis, we examined which features of the PCMH payment methodologies were present in states with favorable performance on various outcome measures. The features used in this QCA are described in ***Section 1.2.11*** and ***Section X.3*** of this report. We conducted separate analyses for each of the outcomes and for each comparison group (PCMH practices and non-PCMH practices).

In ***Figure X-1***, we illustrate the relationships among PCMH payment methodology features and the growth in total Medicare expenditures among beneficiaries in MAPCP Demonstration practices relative to beneficiaries in comparison practices. In this figure, states are located within or outside the circles that represent the payment methodology features and the total Medicare expenditure outcome ("favorable" or "unfavorable" according to definitions provided in ***Table X-1***). States with a favorable outcome (i.e., slower growth in total Medicare expenditures among MAPCP Demonstration practices relative to comparison practices over the demonstration period) appear in the largest circle labeled "Favorable effect on total Medicare expenditures." The states with favorable outcomes that appear within this circle include Vermont, New York (relative to the non-PCMH CG only), Michigan, and Pennsylvania. Each state's location in this figure also reflects which PCMH payment methodology features were present in that state. For example, the Vermont payment methodology included higher payments for more advanced levels of NCQA PCMH recognition and payments to community health teams, so Vermont appears within these two circles in the diagram. Vermont did not adjust payments based on patient characteristics and does not include financial performance incentives, so Vermont does not appear within those two circles in the diagram.

Figure X-1
Graphical summary of relationships between state initiative payment methodology features and total Medicare expenditures[1]



[1] The demonstration effect on total Medicare expenditures is measured over the first 12, 13, or 14 quarters of the MAPCP Demonstration (depending on when the state's demonstration began) and compares Medicare beneficiaries assigned to MAPCP Demonstration practices to beneficiaries assigned to PCMH or non-PCMH comparison practices. Except for New York, this figure is the same for each of the two CGs evaluated in each state.

* Minnesota findings only reflect the analysis using non-PCMH practices as a CG, since the state does not have a CG of PCMH practices.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Findings are presented in ***Table X-7***. In this table, we list the combination ("solution") of payment methodology features sufficient for favorable and unfavorable results for each outcome,

along with each solution's parameters of fit (i.e., consistency[2] and coverage[3]). The remainder of this subsection describes the findings from this table.

Total Medicare expenditure outcome. We identified the same two combinations of payment methodology features as being reasonably sufficient for a favorable outcome regardless of which CG (PCMH or non-PCMH) was evaluated:

- The first combination is a payment methodology that adjusts payments based on patient characteristics AND includes performance incentives. Pennsylvania is the only state with a favorable outcome covered by this combination of features.

- The second combination is a payment methodology that provides payments to nonpractice entities AND either offers higher payments for advanced PCMH certification OR includes performance incentives. Vermont, Michigan, and New York (relative to its non-PCMH CG) are the states with favorable outcomes covered by this combination of features.

These combinations explain a substantial proportion of states with favorable outcomes (with coverage 0.85 for the PCMH comparison group and 0.91 for the non-PCMH comparison group). Modest consistency values (0.73 for the PCMH CG and 0.67 for the non-PCMH CG) indicate that not all states with these combinations of features exhibit the favorable outcome (i.e., slower growth in total Medicare expenditures). North Carolina and New York (relative to its PCMH CG) are aberrant cases, as they exhibit payment methodology features identified as sufficient for a favorable outcome but do not exhibit a favorable outcome.

Consistent with QCA best practices, we conducted a separate analysis to identify initiative payment methodology features associated with an unfavorable outcome (i.e., faster growth in total Medicare expenditures among beneficiaries in MAPCP Demonstration practices relative to beneficiaries in comparison practices):

- For the PCMH CG, a payment methodology that does not adjust for patient characteristics AND does not provide higher payments for more advanced PCMH certification AND that either does not use performance incentives OR does not make payments to nonpractice entities was sufficient to produce an unfavorable outcome. This solution was somewhat sufficient to produce an unfavorable outcome; a

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[2] Consistency of a solution can range from 0 to 1, with values closer to 1 indicating that the data are closer to demonstrating a perfectly sufficient relationship. In other words, a favorable outcome is *always* found when the combination of listed features is present. Consistency should not be interpreted as a probability. Rather, findings with consistency levels closer to 1 offer the strongest evidence of a sufficient relationship. As the consistency level decreases from 1, the evidence for a sufficient relationship weakens.

[3] Coverage can range from 0 to 1, with higher values indicating that the combinations identified from the empiric data explain most of the states with favorable outcomes (or unfavorable outcomes). Lower values for coverage suggest that the features included in the analysis may not be as empirically relevant, since states with favorable outcomes (or unfavorable outcomes) are not explained by the identified combinations of features. In other words, favorable outcomes (or unfavorable outcomes) might be explained by features not included in the analysis.

reasonable proportion of cases with these features had unfavorable outcomes (consistency 0.67), but these features explained only a modest proportion of states with unfavorable outcomes (coverage 0.57), and thus may not be empirically relevant.

- For the non-PCMH CG, a common feature present in all states with an unfavorable outcome was not providing higher payments for advanced levels of PCMH certification. This feature, in combination with the absence of various pairs of the other three payment methodology features, was sufficient to produce the unfavorable outcome (consistency 0.89). The coverage associated with this solution, however, was 0.62, indicating that only a moderate proportion of states with unfavorable outcomes are explained by these combinations of features.

Regardless of which CG is considered, in three out of the four states with an unfavorable total Medicare expenditure outcome, only one payment methodology feature was used as opposed to the use of multiple features. Specifically, Rhode Island's methodology only used financial performance incentives; Maine's model only made payments to nonpractice supporting entities; and Minnesota's model only made higher payments based on patient characteristics.

The combinations of features we identified as sufficient for the other expenditure outcomes (acute-care, post-acute care, outpatient expenditures, and specialty care expenditures) were similar to the combinations identified for the total Medicare expenditure outcome; however, consistency and coverage varied by outcome and CG.

Table X-7
Sufficient combinations of state initiative payment methodology features associated with favorable and unfavorable outcomes

Outcome[5]	Combinations in states with favorable outcomes (consistency[1], coverage[2])		Combinations in states without favorable outcomes (consistency[1], coverage[2])	
	PCMH[3]	non-PCMH[4]	PCMH[3]	non-PCMH[4]
Total Medicare expenditures	(c AND p) OR (n AND (r OR p)) 0.73, 0.85	(c AND p) OR (n AND (r OR p)) 0.67, 0.91	~c AND ~r AND (~n OR ~p) 0.67, 0.57	~r AND ((~p AND ~n) OR (~c AND ~n) OR (~c AND ~p)) 0.89, 0.62
Acute-care expenditures	p 0.92, 0.79	p AND (c OR n) 0.67, 0.55	~c AND ~r AND ~p 1.0, 0.43	~r AND ((~p AND ~n) OR (~c AND ~n) OR (~c AND ~p) 0.78, 0.54
Post-acute care expenditures	(c AND p) OR (n AND (r OR p)) 0.67, 0.91	p AND (n OR c) 0.67, 0.60	~r AND ((~n AND ~c) OR (~c AND ~p)) 0.83, 0.50	~r AND ((~n AND ~c) OR (~c AND ~p) OR (~n AND ~p)) 0.89, 0.57
Outpatient expenditures	c AND p 0.67, 0.34	~c AND p AND ~n 0.67, 0.34	~c AND ((~p) OR (~r AND ~n)) 0.78, 0.93	(~r AND ((c AND ~n) OR (~c AND n))) OR (n AND ~c AND ~p) 0.81, 0.95
Specialty physician expenditures	~r AND n 1.0, 0.6	c OR (n AND (r OR p)) 0.89, 0.89	~r AND ~n 0.67, 0.67	~c AND ~r AND (~n OR ~p) 0.67, 0.67
All-cause admissions	p 0.92, 0.73	p AND n 0.83, 0.56	~c AND ~p 0.67, 0.86	(~r AND ~n) OR (~c AND ~p) 0.78, 0.88
Chronic PQI admissions	p AND ~n 0.84, 0.50	c AND p 0.67, 0.34	~c AND ~p 0.78, 0.64	(~c AND ~p) OR (~r AND ~p AND ~n) OR (~c AND ~r) 0.81, 0.95
Unplanned readmissions (per 1,000 hospital discharges)	~r AND (p OR n) 0.74, 0.79	c OR (p AND n) 0.67, 0.67	None identified	~c AND ((~p) OR (~r AND ~n)) 0.75, 0.70

(continued)

Table X-7 (continued)
Sufficient combinations of state initiative payment methodology features associated with favorable and unfavorable outcomes

Outcome[5]	Combinations in states with favorable outcomes (consistency[1], coverage[2])		Combinations in states without favorable outcomes (consistency[1], coverage[2])	
	PCMH[3]	non-PCMH[4]	PCMH[3]	non-PCMH[4]
ER visits	(p AND ~n) OR (~r AND ~p AND n) 0.67, 0.60	(p AND ~n) OR (~r AND ~p AND n) 0.67, 0.60	~c AND r AND ~p 0.84, 0.46	~r AND ((~p AND ~n) OR (p AND n AND ~c)) 0.78, 0.50

[1] Consistency is the proportion of states with the identified combination of features that have the identified outcome (i.e., either favorable or unfavorable); consistency ranges from 0 to 1 with higher values representing a stronger set relationship (i.e., consistency = 1 when the identified outcome is *always* present when the combination identified is present).

[2] Coverage is the proportion of states with the identified outcome (i.e., either favorable or unfavorable) that are represented by the identified combination of features; coverage ranges from 0 to 1 with higher values representing larger empirical relevance of the combination identified for explaining the outcome (i.e., coverage = 1 if all states with the identified outcome are explained by the identified combination).

[3] Outcomes relative to the PCMH CG within the state; note that Minnesota is excluded from these analyses because the state did not have a PCMH CG.

[4] Outcomes relative to the non-PCMH CG within the state.

[5] Outcomes from the first 12, 13, or 14 quarters of the MAPCP Demonstration (depending on when the state's demonstration began), comparing Medicare beneficiaries assigned to demonstration practices to beneficiaries assigned to comparison PCMH and non-PCMH practices. Favorable and unfavorable outcomes as calibrated using the rubric defined in ***Table X-1***.

n = demonstration states that made payments to nonpractice supporting entities; p = demonstration states that included performance bonuses or incentives in their PCMH payment methodology; r = demonstration states that paid higher PCMH payments to practices achieving higher levels of PCMH certification (e.g., NCQA Level 3 or equivalent); c = demonstration states that paid higher PCMH payments for older and/or sicker patients; ~ refers to the absence of the initiative feature (e.g., n, p, r, or c). CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home; PQI = Prevention Quality Indicators.

Nonexpenditure outcomes. We identified different combinations of features among the four utilization measures evaluated and for the different CGs (***Table 1***). Across all three admissions measures, solutions identified relative to the non-PCMH CG were only modestly sufficient (consistency 0.67 to 0.83) and had low-to-modest coverage (range 0.34 to 0.67). Solutions identified for the PCMH CG were somewhat more robust (consistency range 0.74 to 0.92, coverage range 0.50 to 0.79).

- For the all-cause admissions measure relative to the PCMH CG, we identified the use of performance incentives in the payment methodology as sufficient for a favorable outcome. A methodology with performance incentives AND payments to nonpractice entities was also sufficient for a favorable outcome relative to the non-PCMH CG.

- For the chronic Prevention Quality Indicator (PQI) admissions measure, states with favorable outcomes relative to PCMH comparison practices included performance incentives in their payment methodology AND did not make payments to nonpractice entities. For chronic PQI admissions relative to non-PCMH comparison practices, we found that states with favorable outcomes included performance incentives in their payment methodology AND adjusted payments based on patient characteristics.

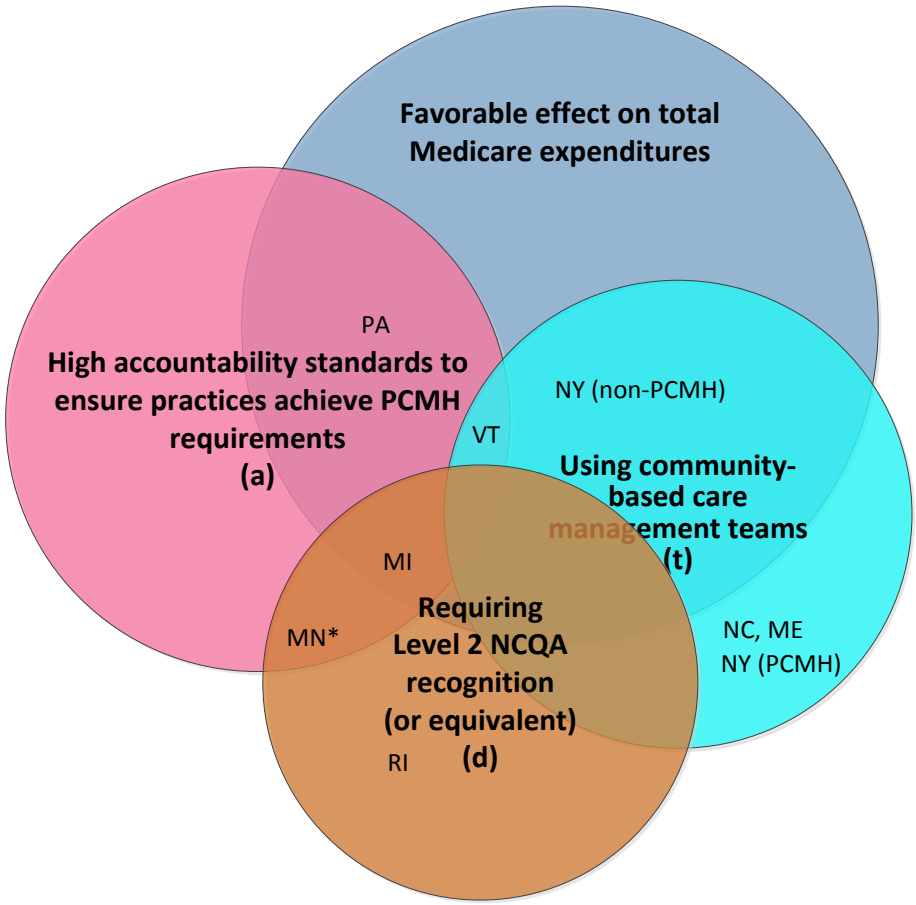
- For the unplanned readmissions measure, states with a favorable outcome did not pay higher payments to practices achieving higher levels of PCMH certification AND either included performance incentives in their payment methodology OR made payments to nonpractice entities. Relative to non-PCMH comparison practices, we found that states with favorable outcomes adjusted payments based on patient characteristics OR used a methodology that included performance incentives AND made payments to nonpractice entities.

- For the emergency room (ER) visits measure, a somewhat more complex solution was identified, but it was the same for both CGs with the same modest level of consistency and coverage (0.67 and 0.60, respectively). The solution we identified was either: (1) the use of performance incentives AND not making payments to nonpractice entities, in the payment methodology, OR (2) not paying higher payments to practices achieving higher levels of PCMH certification AND not including performance incentives AND payments to nonpractice entities in the payment methodology.

Initiative features (non-payment-related) (Analysis 2). The features we used in this QCA are described in ***Section 1.2.11*** of this report and ***Section X.4*** in this appendix. Similar to analysis 1, we conducted an analysis for each outcome and for each CG (PCMH practices and non-PCMH practices).

We illustrate the relationships among several non-payment-related initiative features and the total Medicare expenditure outcome in ***Figure X-2***. In this figure, states are located within or outside the circles representing the initiative features and outcomes used in this analysis. States with a favorable outcome (i.e., slower growth in total Medicare expenditures among MAPCP Demonstration practices relative to comparison practices) appear in the largest circle, labeled "Favorable effect on total Medicare expenditures."

Figure X-2
Relationship between combinations of non-payment-related state initiative features and total Medicare expenditures[1]



[1] The effect on total Medicare expenditures is measured over the first 12, 13 or 14 quarters of the MAPCP Demonstration (depending on when the state's demonstration began), and compares Medicare beneficiaries assigned to demonstration practices to beneficiaries assigned to PCMH or non-PCMH CGs.

CG = comparison group; MAPCP = Multi-Payer Advanced Primary Care Practice; NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home.

* Minnesota findings only reflect the analysis using non-PCMH practices as a CG, since the state does not have a CG of PCMH practices.

The states within this circle are Vermont, New York (relative to the non-PCMH CG), Pennsylvania, and Michigan. Each state's location in this figure also reflects which initiative features were present in that state. For example, Michigan's initiative included high accountability standards to ensure MAPCP Demonstration practices had met PCMH requirements, and therefore appears in the circle labeled as such. Michigan also required MAPCP Demonstration practices to attain advanced PCMH certification (e.g., National Committee for Quality Assurance [NCQA] PCMH Level 3 or its equivalent) at some point during the demonstration, and therefore appears in the circle labeled as such. Michigan did not use community-based care management teams, and therefore appears outside of the circle labeled as such.

Findings are presented in ***Table X-8***. In this table, we list the combination of non-payment-related initiative features sufficient for a favorable outcome and unfavorable outcome for each expenditure or utilization outcome, along with each solution's parameters of fit (i.e., consistency[1] and coverage[2]). The remainder of this subsection describes the findings from this table.

Total Medicare expenditure outcome. We identified a similar solution for a favorable outcome in the two comparison groups:

- For the PCMH CG, the solution we identified suggests that having high accountability standards to ensure that practices meet PCMH requirements is sufficient for a favorable effect on total Medicare expenditures (consistency 1.0) and is the explanation for a modest proportion of states with favorable effects (coverage 0.69).

- For the non-PCMH CG, having high accountability standards to ensure that practices meet PCMH requirements AND not requiring Level 3 NCQA PCMH recognition (or its equivalent) is sufficient for a favorable effect on total Medicare expenditures (consistency 0.84). This combination, however, explains a low proportion of states with favorable effects (coverage 0.46).

Consistent with QCA best practices, we conducted a separate analysis to identify nonpayment-related features associated with an unfavorable outcome (i.e., faster growth in total Medicare expenditures among beneficiaries in MAPCP Demonstration practices relative to beneficiaries in comparison practices). We identified similar combinations of features for both CGs:

- For the PCMH CG, the absence of high accountability standards AND not using community-based care management teams was sufficient for an unfavorable effect. This combination has only modest consistency (0.67), and coverage was low (0.29).

- For the non-PCMH CG, the absence of high accountability standards AND either not using community-based care management teams OR not requiring Level 3 NCQA recognition (or its equivalent) were sufficient combinations for unfavorable effects on total Medicare expenditures. This solution explains a reasonable proportion of states with an unfavorable outcome (coverage 0.62) and has modest consistency (0.67). New York (relative to its non-PCMH CG) is an aberrant case in this analysis; it shares similar features with states having an unfavorable outcome, yet it has a favorable outcome.

Table X-8
Sufficient combinations of non-payment-related initiative features associated with favorable and unfavorable outcomes

Outcome[5]	Combinations of features in states with favorable outcomes (consistency[1], coverage[2])		Combinations of features in states without favorable outcomes (consistency[1], coverage[2])	
	PCMH[3]	**non-PCMH[4]**	**PCMH[3]**	**non-PCMH[4]**
Total Medicare expenditures	a 1.0, 0.69	a AND ~d 0.84, 0.46	~a AND ~t 0.67, 0.29	~a AND (~t OR ~d) 0.67, 0.62
Acute-care expenditures	a OR d 0.84, 0.72	a AND ~d 0.67, 0.37	None identified	~a AND (~t OR ~d) 0.67, 0.62
Post-acute care expenditures	a 0.89, 0.73	a AND ~d 0.84, 0.50	~a AND (~t OR ~d) 0.75, 0.90	~a AND (~t OR ~d) 0.83, 0.71
Outpatient expenditures	a AND ~t AND ~d 0.67, 0.34	~a AND d 0.67, 0.34	(d AND ~t) OR (t AND ~d) 0.78, 0.93	~d OR (a AND ~t) 0.81, 0.95
Specialty care expenditures	(a AND d) OR t 0.80, 0.86	a 1, 0.67	~t AND (~a OR ~d) 0.67, 0.57	~a AND ~t 0.67, 0.34
All-cause admissions	a OR d 0.84, 0.67	None identified	a AND t AND ~d 0.67, 0.29	~d OR (~a AND ~t) 0.72, 0.81
Chronic PQI admissions	(a AND ~t AND ~d) OR (~a AND d) 0.84, 0.50	a AND ~t AND ~d 0.67, 0.34	(t AND ~d) OR (a AND d AND ~t) 0.67, 0.91	(t AND ~d) OR (d AND ~t) 0.81, 0.95
Unplanned readmissions (per 1,000 hospital discharges)	a AND d 0.75, 0.64	a 0.67, 0.67	None identified	(~a AND ~t) OR (a AND t AND ~d) 0.84, 0.39

(continued)

Table X-8 (continued)
Sufficient combinations of nonpayment-related initiative features associated with favorable and unfavorable outcomes

Outcome[5]	Combinations of features in states with favorable outcomes (consistency[1], coverage[2])		Combinations of features in states without favorable outcomes (consistency[1], coverage[2])	
	PCMH[3]	non-PCMH[4]	PCMH[3]	non-PCMH[4]
ER visits	(~a AND d) OR (a AND ~t AND ~d) 0.67, 0.40	(~a AND d) OR (a AND ~t AND ~d) 0.67, 0.40	a AND ((t AND ~d) OR (~t AND d)) 0.84, 0.46	a AND ((t AND ~d) OR (~t AND d)) 0.89, 0.57

[1] Consistency is the proportion of states with the combination of features identified that have the identified outcome (i.e., either favorable or unfavorable); consistency ranges from 0 to 1 with higher values representing a stronger set relationship (i.e., consistency = 1 when the identified outcome is ***always*** present when the combinations of features identified are present).

[2] Coverage is the proportion of states with the identified outcome (i.e., either favorable or unfavorable) that are represented by the identified combinations; coverage ranges from 0 to 1 with higher values representing larger empirical relevance of the combinations identified for explaining the outcome (i.e., coverage = 1 if all states with the identified outcome are explained by the identified combinations).

[3] Outcomes relative to the PCMH CG within the state; note that Minnesota is excluded from these analyses as the state did not have a PCMH CG.

[4] Outcomes relative to the non-PCMH CG within the state.

[5] Outcomes from the first 12, 13, or 14 quarters of the MAPCP Demonstration (depending on when the state's demonstration began), comparing Medicare beneficiaries assigned to demonstration practices to beneficiaries assigned to comparison PCMH and non-PCMH practices. Favorable and unfavorable outcomes as calibrated using the rubric defined in ***Table X-1***.

a = state initiatives with high accountability standards to ensure practices meet PCMH requirements; d = state initiatives that require Level 3 NCQA PCMH recognition (or its equivalent) at some point during the demonstration; t = state initiatives that use community-based care management teams; ~ refers to the absence of the initiative feature (i.e., a, d, or t). CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; NCQA = National Committee for Quality Assurance; PQI = Prevention Quality Indicators.

Findings for acute and post-acute care expenditures were similar to total Medicare expenditure outcomes. The combinations of features we identified as sufficient for outpatient and specialty care expenditures were somewhat different.

Nonexpenditure outcomes. The solutions that we identified for favorable outcomes across the four utilization measures varied (***Table X-8***):

- For the all-cause admission measure, we identified a reasonably consistent solution for the PCMH CG that suggests that having either high accountability standards to ensure that practices meet PCMH requirements OR requiring Level 3 NCQA recognition (or its equivalent) AND not using community-based care management teams is sufficient for a favorable effect. This combination has only modest coverage. The data did not support the identification of a solution in relation to non-PCMH comparison practices for this outcome.

- For the chronic PQI admissions measure, we identified one combination that was the same for both PCMH and non-PCMH CGs: not having community-based care management team AND not requiring Level 3 NCQA recognition (or its equivalent) AND high accountability standards. In addition, we identified a second combination for the PCMH CG: requiring Level 3 NCQA recognition (or its equivalent) AND not having high accountability standards. Solutions for both CGs had moderate-to-high consistency, but modest-to-low coverage.

- For the unplanned readmissions measure, we identified one combination—high accountability standards AND requiring Level 3 NCQA recognition (or its equivalent). For the non-PCMH CG, high accountability standards were sufficient on their own. Both CG solutions for this outcome had moderate consistency and coverage levels.

- For the ER visits measure, we identified two combinations for a favorable outcome that were the same for the PCMH and non-PCMH CGs. The first combination was the absence of high accountability standards AND requiring Level 3 NCQA recognition (or its equivalent). The second combination was the use of high accountability standards AND the absence of community-based care teams AND the absence of requiring Level 3 NCQA recognition (or its equivalent). This solution has moderate consistency and low coverage. The combinations we identified for an unfavorable outcome for ER visits were also the same between both CGs.

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APPENDIX Y
QUANTITATIVE CROSS-STATE ANALYSES

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Tables Y-1 through ***Y-4*** provide additional detail on the quantitative cross-state analyses presented in ***Chapter 2***. The cross-state quantitative analyses, which were limited to the Medicare population, used pooled data for all eight Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration states to examine the effectiveness of initiative features and practice characteristics in reducing four selected expenditure and utilization outcomes.

Regression models for analyses of state initiative features were estimated using two comparison groups (CGs): beneficiaries assigned to comparison patient-centered medical homes (PCMHs) and beneficiaries assigned to comparison non-PCMHs. ***Table 2-3*** in ***Section 2.4.2*** reports difference-in-difference-in-difference (D-D-D) estimates that are the differences between the covariate-adjusted difference in growth between demonstration and CG beneficiaries in states with a given initiative feature and the covariate-adjusted difference in growth between demonstration and CG beneficiaries in states without the initiative feature. While Table 2-3 only shows the D-D-D estimate to simplify the presentation of results, ***Table Y-1*** shows the covariate-adjusted differences in the rate of growth between demonstration and CG beneficiaries stratified by whether the beneficiary resides in a state with a given initiative feature that underlie the D-D-D estimate. The covariate-adjusted difference between demonstration and CG beneficiaries in states that have a given initiative feature is shown in the rows labeled "Yes," while the covariate-adjusted difference in states that do not have a given initiative feature is shown in the rows labeled "No." The estimates reported in each row are the difference-in-difference (DD) within each stratum of states. The D-D-D estimate, reported in Table 2-3 and shown in Table Y 1 in the rows labeled "Difference," is the difference between the DD estimates for the two strata. ***Table Y-2*** presents comparable estimates associated with the D-D-D estimates reported in ***Table 2-4***. Estimates in Table Y-2 and Table 2-4 stratify states by whether they have the combinations of payment and non-payment initiatives features found in states with slower growth in the four expenditure and utilization outcomes analyzed. Numbers in the regression models in Table Y-2 and Table 2-4 are shown in ***Table Y-3***. For all of the estimates in Table Y-1 and Y-2, a *negative* value corresponds to *slower growth* in expenditures or utilization relative to the comparison group, while a *positive* value corresponds to *faster growth*. For both the DD and D-D-D estimates, a negative value is considered a favorable outcome and a positive value is considered unfavorable.

Analyses of practice features using data from the MAPCP Demonstration provider survey to rate practices on various dimensions of practice transformation were limited to beneficiaries in demonstration practices that responded to the survey and, therefore, did not include beneficiaries in CG practices. ***Table 2-6*** displays results for the PCMH activities associated with a statistically significant impact on at least one of the four outcome measures. Complete results for all 23 PCMH survey questions are in ***Table Y-4***. Like Table 2-6, Table Y-4 reports covariate-adjusted differences in the rate of growth for four selected expenditure and utilization outcomes between demonstration beneficiaries attributed to practices that had adopted a particular PCMH capability at a high level compared to demonstration beneficiaries attributed to practices that had not adopted a particular PCMH capability at a high level. Practices were considered to have adopted a PCMH capability at a high level if they selected the third (most advanced) answer option associated with a particular PCMH activity in the provider survey. DD estimates in these tables are interpreted as the difference in the rate of growth in per beneficiary per month (PBPM) expenditures or utilization per 1,000 beneficiary quarters for practices adopting a particular PCMH capability at a high level relative to other practices. A *negative* value corresponds to *slower growth* in expenditures or utilization and is considered a favorable outcome, while a *positive* value corresponds to *faster growth* and is considered an unfavorable outcome.

Table Y-1
Comparison of average changes for selected utilization and expenditure outcomes for Medicare beneficiaries in all states combined, by presence or absence of state initiative payment and non-payment model features and FQHC status

	Total Medicare expenditures		Acute-care expenditures		All-cause admissions		ER visits not leading to hospitalization	
	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG
Payment model features incorporated in state initiative								
Payments to non-practice supporting entities								
Yes (N = 491,532)	−4.36	3.43	−5.54	1.12	−1.30	0.78	4.51	2.64
No (N = 49,206/208,643)	−2.70	16.13	−14.81	4.68	−3.85	2.06	−5.20	0.09
Difference	1.66	−12.70	9.28	−3.56	2.55	−1.28	9.71	2.55
Payments for practice performance								
Yes (N = 371,322)	−11.37	−6.74	−18.08*	−3.39	−4.52*	−0.01	−1.65	1.11
No (N = 169,260/328,697)	3.87	23.02*	4.50	9.17*	1.14	2.68*	5.94	2.33
Difference	−15.23	−29.75*	−22.57*	−12.56	−5.66*	−2.69	−7.59	−1.22
Payments for higher medical home recognition status								
Yes (N = 112,457)	−17.29	−5.51	−6.37	−2.34	0.98	2.05*	11.68*	5.75*
No (N = 429,544/588,981)	−0.69	8.96	−9.37	2.55	−3.02*	0.84	−2.40	0.33
Difference	−16.60	−14.47	3.00	−4.89	3.99	1.21	14.09*	5.42
Payments for patient characteristics								
Yes (N = 40,982/200,419)	−42.51*	12.43	−25.34*	0.77	−6.09*	0.98	−2.75	1.35
No (N = 500,527)	0.94	5.24	−5.45	2.36	−1.38	1.34	2.59	1.68
Difference	−43.45*	7.19	−19.89*	−1.59	−4.71	−0.36	−5.35	−0.33

(continued)

Table Y-1 (continued)
Comparison of average changes for selected utilization and expenditure outcomes for Medicare beneficiaries in all states combined, by presence or absence of state initiative payment and non-payment model features and FQHC status

	Total Medicare expenditures		Acute-care expenditures		All-cause admissions		ER visits not leading to hospitalization	
	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG
Non-payment model features incorporated in state initiative								
Advanced PCMH recognition								
Yes (N = 300,283/459,720)	−9.11	14.07	−14.72	4.53	−3.37	1.45	−1.45	4.27
No (N = 240,690)	−2.36	0.19	−5.58	−0.18	−1.39	1.04	2.94	0.07
Difference	−6.75	13.88	−9.14	4.71	−1.98	0.42	−4.38	4.20
Community-based care management								
Yes (N = 198,893)	6.01	7.66	−1.15	3.31	−0.64	1.22	4.13	1.04
No (N = 343,905/503,342)	−20.04	6.00	−18.30*	0.60	−4.16*	1.27	−1.80	2.08
Difference	26.05	1.66	17.15	2.70	3.52	−0.05	5.93	−1.04
High accountability of practices to achieve PCMH requirements								
Yes (N = 415,498/574,118)	−40.68*	−4.82	−19.23*	−3.04	−2.82*	0.72	6.53*	5.46*
No (N = 130,482)	23.38*	18.70	0.45	7.42	−0.97	1.83	−1.54	−2.19
Difference	−64.06*	−23.52	−19.68*	−10.46	−1.85	−1.11	8.07	7.65*

(continued)

Table Y-1 (continued)
Comparison of average changes for selected utilization and expenditure outcomes for Medicare beneficiaries in all states combined, by presence or absence of state initiative payment and non-payment model features and FQHC status

	Total Medicare expenditures		Acute-care expenditures		All-cause admissions		ER visits not leading to hospitalization	
	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG
FQHC status								
Yes (N = 60,657)	−3.42	3.87	−10.84	−10.81	0.36	1.36	0.43	−1.30
No (N = 480,780/640,217)	−2.69	4.47	−6.29	2.54	−2.55	0.17	1.24	1.29
Difference	−0.73	−0.60	−4.55	−13.35	2.91	1.18	−0.80	−2.58

NOTES:

- Total Medicare expenditures and acute-care expenditures are PBPM expenditures.
- All-cause admissions and ER visits not leading to hospitalization are rates per 1,000 beneficiary quarters.
- PCMH comparison group estimates excluded Minnesota because there were no PCMH comparison group practices in this state.
- Numbers in parentheses represent sample sizes of unique MAPCP Demonstration participants in a state initiative, weighted so every state is an equal share within each stratum. In cases where there are two numbers, the first number is for the PCMH estimates, which excluded Minnesota; the second number is for the non-PCMH estimates, which included Minnesota.
- Estimates in this table are interpreted as the difference in the rate of growth in expenditures events among MAPCP Demonstration beneficiaries across the first 3 years of the demonstration overall. A *negative* value corresponds to a *decrease* in the growth in expenditures or the rate of events. A *positive* value corresponds to an *increase* in the growth in expenditures or the rate of events.
- Change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the first 3 years of the MAPCP Demonstration.

CG = comparison group; ER = emergency room; FQHC = federally qualified health center; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table Y-2
Comparison of average changes for selected utilization and expenditure outcomes for Medicare beneficiaries in all states combined, by presence or absence of successful model feature

State initiative incorporates:	Total Medicare expenditures		Acute-care expenditures		All-cause admissions		ER visits not leading to hospitalization	
	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG
Successful set of payment model features								
Yes	−21.66*	−10.41	−18.08*	−9.48	−4.52*	−3.03*	−4.21*	−4.82
No	39.48*	40.04*	4.50	9.50*	1.14	2.46*	6.95*	5.64*
Difference	−61.14*	−50.45*	−22.57*	−18.98*	−5.66*	−5.49*	−10.89*	−10.46*
Successful set of non-payment model features								
Yes	−40.68*	−23.58*	−15.59*	−7.72	−2.53*	—	−5.22	−4.50
No	23.38*	17.03*	1.75	5.26	−0.88	—	4.51	3.48*
Difference	−64.06*	−40.61*	−17.34	−12.98	−1.65	—	−9.71	−7.98

NOTES:

- The sets of successful payment model features and non-payment model features were identified using qualitative comparative analyses. The set of features associated with reductions for total Medicare expenditures, acute-care expenditures, all-cause admissions, and ER visits not leading to hospitalization are shown in ***Table 2-4***. A set of successful non-payment model features relative to the non-PCMH CG could not be identified for all-cause admissions (—).
- Total Medicare expenditures and acute-care expenditures are PBPM expenditures.
- All-cause admissions and ER visits not leading to hospitalization are rates per 1,000 beneficiary quarters.
- PCMH comparison group estimates excluded Minnesota because there were no PCMH comparison group practices in this state.
- Numbers in regression models are shown in ***Table Y-3***.
- Estimates in this table are interpreted as the difference in the rate of growth in expenditures or events among MAPCP Demonstration beneficiaries across the first 3 years of the demonstration overall. A *negative* value corresponds to a *decrease* in the growth of expenditures or the rate of events. A *positive* value corresponds to an *increase* in the growth of expenditures or the rate of events.
- Change estimates are calculated as weighted averages of individual quarterly estimates, with weights equal to the number of beneficiaries attributed to demonstration practices in each quarter divided by total number of beneficiaries attributed during the first 3 years of the MAPCP Demonstration.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table Y-3
Number of observations in regression models for selected utilization and expenditure outcomes for Medicare beneficiaries in all states combined, by presence or absence of successful model feature

State initiative incorporates:	Total Medicare expenditures		Acute-care expenditures		All-cause admissions		ER visits not leading to hospitalization	
	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG	Vs. PCMH CG	Vs. non-PCMH CG
Successful set of payment model features								
Yes	474,165	474,165	372,545	364,682	372,545	320,130	111,597	111,597
No	66,589	226,026	170,178	339,232	170,178	380,395	429,086	588,523
Successful set of non-payment model features								
Yes	415,498	121,787	424,236	121,787	424,236	—	53,037	53,037
No	130,482	581,068	117,332	581,068	117,332	—	489,738	649,175

NOTES:

- The sets of successful payment model features and non-payment model features were identified using qualitative comparative analyses. The set of features associated with reductions for total Medicare expenditures, acute-care expenditures, all-cause admissions, and ER visits not leading to hospitalization are shown in ***Table 2-4***. A set of successful non-payment model features relative to the non-PCMH CG could not be identified for all-cause admissions (—).
- Numbers represent sample sizes of unique MAPCP Demonstration participants in a state initiative included in the regression model, weighted so every state is an equal share within each stratum. PCMH comparison group models excluded Minnesota because there were no PCMH comparison group practices in this state.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Table Y-4
Differences in the rate of growth of selected expenditure and utilization measures for Medicare beneficiaries in demonstration practices with high-level adoption of specific PCMH activities, compared to other demonstration practices

PCMH activity asked about in MAPCP Demonstration provider survey …And third and most advanced answer option	Total Medicare expenditures	Acute-care expenditures	All-cause admissions	ER visits not leading to hospitalization
Appointment systems… Have prescheduled appointments, the ability to schedule urgent visits, and the capacity for walk-ins or same-day visits. (N = 261,421)	14.26	8.62	0.40	0.79
Respond to urgent problems… Clinician/practice team has a system in place to triage patient problems though phone or e-mail communications or face-to-face visits, with same-day appointments usually available. (N = 249,727)	3.51	−7.02	−0.87	−2.41
After-hours access (24 hours, 7 days a week) to practice team for urgent care... Is available by phone for urgent care, and in-person during some evenings and/or weekends. The practice actively participates in coordinating emergency department care, and follows-up with patients after visits to the emergency department. (N = 221,180)	0.80	−1.63	0.05	0.93
Alternate types of contact (e-mail, Web, text message) with practice team… Are a core component of patient-practice team communication, and responses are provided within a timely and consistent timeframe. (N = 219,862)	18.90	1.35	0.51	−7.82*
Patient-clinician continuity... For ambulatory/outpatient care, patients are assigned to a specific clinician and care team, and are encouraged to seek care from this designated clinician and practice team. The practice monitors patients' care during hospital and post-acute facility stays and is involved as needed. (N = 231,611)	−13.98	−13.47	−0.92	−5.31
Registries… Are available to practice teams and routinely used for previsit planning, reminders to providers, patient outreach, and population health monitoring across a comprehensive set of diseases and high-risk patients. (N = 195,454)	−20.28	−12.90*	−1.82	−4.69
Visit focus… Is organized around the specific reason for a patient's visit, but with consistent attention to ongoing chronic care and prevention needs (e.g., through the use of electronic health record care alerts). (N = 257,753)	−5.59	−7.83	0.05	−1.73

(continued)

Table Y-4 (continued)
Differences in the rate of growth of selected expenditure and utilization measures for Medicare beneficiaries in demonstration practices with high-level adoption of specific PCMH activities, compared to other demonstration practices

PCMH activity asked about in MAPCP Demonstration provider survey …And third and most advanced answer option	Total Medicare expenditures	Acute-care expenditures	All-cause admissions	ER visits not leading to hospitalization
Medication review for patients on multiple medications… Is done on a regular basis for patients during care transitions, when patients receive new medications, and during all regularly scheduled visits. (N = 288,051)	24.99*	6.08	4.18*	10.50
Care plans for patients with chronic conditions... Are developed collaboratively with patients and families, recorded in patient medical records, include self-management and clinical goals, are used to guide ongoing care, and are given to the patient and family to support their care. (N = 154,457)	−9.00	−9.99	−0.96	1.82
Clinical management for complex patients... Is accomplished by identifying patients for whom care management might be beneficial. The practice actively coordinates care management with other providers and caregivers, and provides educational resources and ongoing support to assist with self-management. (N = 262,793)	−0.49	−0.70	−2.74	−10.40*
Preventive screenings... Are delivered at visits specifically scheduled for this purpose. Practice staff also identify needed preventive services at other visits. In addition, registries or other clinical decision support tools are used to identify patients who have not received recommended preventive services, and reminders are given to patients to schedule these. (N = 255,713)	−52.30*	−35.11*	−5.58*	−6.85
Assessing patient and family values and preferences... Is systematically done for all patients with significant health problems or who articulate values and preferences themselves. The practice team incorporates patient preferences and values into planning and organizing care. (N = 139,814)	−19.42	−11.58*	−1.03	−5.41
Involving patients and caregivers in health care decision making... Is a priority and systematically done. Patients are supported to consider the likely outcomes of treatment options through the use of clinical decision aids, motivational interviewing, and/or teach-back techniques. (N = 194,611)	6.21	5.81	0.90	−4.44

(continued)

Table Y-4 (continued)
Differences in the rate of growth of selected expenditure and utilization measures for Medicare beneficiaries in demonstration practices with high-level adoption of specific PCMH activities, compared to other demonstration practices

PCMH activity asked about in MAPCP Demonstration provider survey …And third and most advanced answer option	Total Medicare expenditures	Acute-care expenditures	All-cause admissions	ER visits not leading to hospitalization
Patient self-management support for chronic conditions... Is provided through goal-setting and action planning with members of the practice team trained in patient education, empowerment, and problem-solving methodologies. Ongoing support is available through individualized care or group interventions. (N = 145,774)	−12.93	−12.40*	−3.47*	−8.67*
Tracking and follow-up with patients for important referrals… Is consistently done. (N = 212,774)	−4.85	−5.06	1.79	0.39
Tracking and follow-up with patients about test results… Is consistently done. (N = 264,325)	2.63	−7.87	−0.10	−3.05
Relationships with commonly referred-to practices… Are formalized with practice agreements and referral protocols. (N = 137,568)	−7.68	−5.53	−1.68	−9.91*
Patient referral information to specialists, hospital, and other medical care providers... Is consistently transmitted by the practice. Referrals contain reason for referral, clinical information relevant to the referral (e.g., test results, medical history), and core patient information (e.g., medications, allergies). (N = 267,210)	21.02	5.43	0.44	1.69
Patients in need of behavioral health support or community-based resources... Are referred to partners with whom the practice has established relationships, relevant patient information is communicated to them, and timely follow-up with patients occurs where necessary. (N = 154,769)	29.47*	11.71	1.06	−2.13
Follow-up with patients seen in the emergency room or hospital... Is done routinely after receiving notification from the emergency room or hospital. Practice has agreements in place with the hospitals and facilities patients most commonly use. Practice tracks patients and follows up with them either by visit, phone, or other forms of communication within a short and specified timeframe. (N = 249,858)	−13.91	−7.16	0.33	−3.72

(continued)

Table Y-4 (continued)
Differences in the rate of growth of selected expenditure and utilization measures for Medicare beneficiaries in demonstration practices with high-level adoption of specific PCMH activities, compared to other demonstration practices

PCMH activity asked about in MAPCP Demonstration provider survey …And third and most advanced answer option	Total Medicare expenditures	Acute-care expenditures	All-cause admissions	ER visits not leading to hospitalization
Quality improvement activities… Are based on systematic quality improvement approaches (e.g., plan-do-study-act cycles, or tracking performance on quality measures) and are used in meeting organizational goals. (N = 246,132)	7.63	2.22	0.58	−10.68*
Feedback to the practice from patients and their families… Is regularly collected through a formal approach (e.g., patient survey, focus group) and through specific patients' concerns and is incorporated into practice improvements. (N = 231,731)	−2.30	0.39	−0.22	−4.20

NOTES:

- Numbers in parentheses represent sample sizes of unique MAPCP Demonstration participants attributed to practices self-reporting high-level adoption of this PCMH activity (i.e., reporting at least 7 out of 9 on the question). The total number of Medicare FFS beneficiaries who participated in the demonstration for at least 3 months and were attributed to practices that responded to the MAPCP Demonstration provider survey was 302,719.

ER = emergency room; FFS = fee for service; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

* Statistically significantly at the 10 percent level.

APPENDIX Z
DETAILED RESULTS ON SPECIAL POPULATIONS

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Section 3.5.5 of the report summarizes selected outcomes for special populations, including various sociodemographic groups and Medicare and Medicaid beneficiaries with multiple chronic conditions. ***Appendix Z*** presents the detailed, state-specific values for each outcome included and the statistical significance of these estimates.

Table Z-1
Comparison of average changes in total Medicare and Medicaid expenditures among special populations

	Multiple chronic conditions			BH conditions			Disabled			Dually eligible
	Medicare	Medicaid adult	Medicaid child	Medicare	Medicaid adult	Medicaid child	Medicare	Medicaid adult	Medicaid child	Medicare
New York										
vs. PCMH CG	1.15	42.90*	NANA	−11.24	−36.88	40.06	25.95	63.99*	−60.21	15.46
vs. non-PCMH CG	−4.50	12.35	NANA	30.14	96.17*	−14.89	34.90	1.56	−169.92*	44.91
Rhode Island										
vs. PCMH CG	45.29	31.24	NANA	48.94	9.41	NANA	86.24*	−41.86*	NANA	37.53
vs. non-PCMH CG	83.32	7.44	NANA	68.51	54.71*	NA	70.03	43.70	NA	71.35
Vermont										
vs. PCMH CG	−34.77	49.42*	NA	−39.79	−28.01	287.36*	9.43	72.03	49.82	5.05
vs. non-PCMH CG	2.39	4.79	NA	20.45	45.60	331.36*	6.82	14.52	−998.92	1.40
North Carolina										
vs. PCMH CG	12.06	17.01	NA	−31.21	−282.73*	442.59	−13.82	−2.18	50.54	56.79
vs. non-PCMH CG	32.32	24.58	NA	27.53	−23.68	176.80*	14.64	16.39	109.77*	75.03*
Minnesota										
vs. PCMH CG	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
vs. non-PCMH CG	197.75*	NA	NA	88.48*	NA	NA	39.93	NA	NA	11.61
Maine										
vs. PCMH CG	145.85*	NA	NA	24.33	NA	NA	−3.89	NA	NA	44.69
vs. non-PCMH CG	130.35*	4.01	NA	55.98	37.96	−100.27	40.62	−70.19	−332.83*	68.04*
Michigan										
vs. PCMH CG	−118.93*	NA	NA	−49.07	NA	NA	−23.81	NA	NA	−61.97*
vs. non-PCMH CG	−133.37*	NA	NA	−54.26	NA	NA	10.35	NA	NA	−30.69
Pennsylvania										
vs. PCMH CG	−63.96	NA	NA	−80.40*	NA	NA	−11.28	NA	NA	−33.60
vs. non-PCMH CG	−25.47	NA	NA	−1.59	NA	NA	11.35	NA	NA	14.46

(continued)

Table Z-1 (continued)
Comparison of average changes in total Medicare and Medicaid expenditures among special populations

	Non-White			Rural		
	Medicare	Medicaid adult	Medicaid child	Medicare	Medicaid adult	Medicaid child
New York						
vs. PCMH CG	NA	70.43*	−9.64	−9.96	27.07*	11.16*
vs. non-PCMH CG	NA	−19.71	−14.09	58.36	22.67*	−2.68
Rhode Island						
vs. PCMH CG	−42.69	NA	NA	NA	NA	NA
vs. non-PCMH CG	88.69*	NA	NA	NA	NA	NA
Vermont						
vs. PCMH CG	NA	NA	NA	−51.57	36.90	27.72
vs. non-PCMH CG	NA	NA	NA	−55.82*	−4.76	20.81
North Carolina						
vs. PCMH CG	100.08*	0.78	22.57*	119.56*	53.45	46.68*
vs. non-PCMH CG	23.36	24.80	23.46*	78.15*	166.80	45.00*
Minnesota						
vs. PCMH CG	NA	NA	NA	NA	NA	NA
vs. non-PCMH CG	44.50	NA	NA	48.85	NA	NA
Maine						
vs. PCMH CG	62.49	NA	NA	108.51*	NA	NA
vs. non-PCMH CG	118.80*	0.96	18.40	50.57	−4.87	−8.50
Michigan						
vs. PCMH CG	−20.85	NA	NA	−14.01	NA	NA
vs. non-PCMH CG	−83.86	NA	NA	8.29	NA	NA

(continued)

Table Z-1 (continued)
Comparison of average changes in total Medicare and Medicaid expenditures among special populations

	Non-White			Rural		
	Medicare	**Medicaid adult**	**Medicaid child**	**Medicare**	**Medicaid adult**	**Medicaid child**
Pennsylvania						
vs. PCMH CG	−40.09	NA	NA	−126.23*	NA	NA
vs. non-PCMH CG	7.17	NA	NA	−19.21	NA	NA

NOTES:

- All measures are PBPM total expenditures. For Medicaid, expenditures that exceeded the 99th percentile of the distribution were recoded at the 99th percentile.
- Estimates in this table are interpreted as the difference in the rate of growth in expenditures relative to the CG. A *negative* value corresponds to *slower growth* in expenditures relative to the CG. A *positive* value corresponds to *faster growth* relative to the CG.
- Expenditures for Medicare-Medicaid enrollees (dual eligibles) were calculated using the Medicare claims data.
- Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible.
- Michigan, Minnesota, and Pennsylvania did not report Medicaid expenditures, so expenditure results are not available.
- For the Maine Medicaid analysis, PCMH comparison practices were excluded. There were relatively few PCMH CG practices, and the number of Medicaid beneficiaries attributed to those practices was low. The small sample size results in unstable estimates of change.

BH = behavioral health; CG = comparison group; HCH = Health Care Homes; MAPCP = Multi-Payer Advanced Primary Care Practice; NA = not available; PBPM = per beneficiary per month; PCMH = patient-centered medical home.

* Statistically significant at the 10 percent level.

Table Z-2
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Medicare beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	New York		Rhode Island		Vermont	
		ADK PCMHs vs. CG PCMHs	ADK PCMHs vs. CG non-PCMHs	CSI practices vs. CG PCMHs	CSI practices vs. CG non-PCMHs	Blueprint for Health practices vs. CG PCMHs	Blueprint for Health practices vs. CG non-PCMHs
Primary care visits (per 1,000 beneficiary quarters)	+	−15.46	−0.64	86.84*	63.65	0.88	−24.64
Medical specialist visits (per 1,000 beneficiary quarters)	−	−31.33	−14.7	17.96	21.08	−21.62	−56.72
Surgical specialist visits (per 1,000 beneficiary quarters)	−	28.31*	19.23*	46.33*	30.13*	−27.80*	−10.22
Follow-up visit within 14 days after discharge (per 1,000 beneficiaries with a live discharge)	+	−13.83	0.12	−2.45	3.07	7.82	−32.73
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)	−	−25.22	−13.42	−5.74	31.85	−5.79	−3.19
Total Medicare expenditures	−	13.9	−3.41	51.9	82.8	−38.19	19.92
Acute-care expenditures	−	−49.76*	−3.25	−31.43	35.07	20.7	14.6
Post-acute-care expenditures	−	11.82	−10.11	9.41	31.48*	−31.61	−15.74
ER expenditures	−	4.55	8.63*	−5.21	4.26	1.18	−2.91
Outpatient expenditures	−	45.35*	24.76	6.08	−3.26	22.12*	15.52
Specialty physician expenditures	−	−8.81	−0.36	12.73*	12.81*	−13.45*	−0.75
Primary care physician expenditures	−	−6.72*	−3.01	4.47	1.92	−2.82	−3.24
All-cause admissions	−	−17.27**	−3.23	−11.87	17.79	11.25	12.96**
ER visits not leading to hospitalization	−	−5.07	27.07*	12.12	23.14	25.56*	26.64**
HbA1c testing	+	0.8	−1.5	8.4	8.24	0.29	−1.07
Retinal eye examination	+	2.38	5.70*	−1.25	−2.99	−2.91	−0.55
LDL-C screening	+	0.74	1.13	1.33	1.12	−6.54***	−2.46
Medical attention for nephropathy	+	−3.76	2.09	−6.18*	−5.72	−1.07	−3.33

(continued)

Table Z-2 (continued)
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Medicare beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	New York		Rhode Island		Vermont	
		ADK PCMHs vs. CG PCMHs	ADK PCMHs vs. CG non-PCMHs	CSI practices vs. CG PCMHs	CSI practices vs. CG non-PCMHs	Blueprint for Health practices vs. CG PCMHs	Blueprint for Health practices vs. CG non-PCMHs
Received all 4 diabetes tests	+	2.04	2.36	0.42	−2.08	−5.11***	−0.65
Received none of the 4 diabetes tests	−	0.28	0.55	0.29	−1.97	0.36	0.49
Total lipid panel	+	1.49	−1.56	1.49	−1.01	−2.84	−3.81*
Avoidable catastrophic events	−	0.38	0.34	−1.28	2.85	1.96	1.07
PQI admissions—overall	−	−4.02*	−4.16	−3.68	6.19	4.54	5.86**
PQI admissions—acute	−	−1.56	−2.35	−0.3	2.5	3.31	2.52*
PQI admissions—chronic	−	−2.54	−1.72	−3.59	3.22	1.44	3.47*

(continued)

Table Z-2 (continued)
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Medicare beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	North Carolina		Minnesota	Maine		Michigan		Pennsylvania	
		North Carolina MAPCP Demonstration vs. CG PCMHs	North Carolina MAPCP Demonstration vs. CG non-PCMHs	HCH practices vs. CG non-PCMHs	Maine PCMH Pilot vs. CG PCMHs	Maine PCMH Pilot vs. CG non-PCMHs	MiPCT practices vs. CG PCMHs	MiPCT practices vs. CG non-PCMHs	CCI PCMHs vs. CG PCMHs	CCI PCMHs vs. CG non-PCMHs
Primary care visits (per 1,000 beneficiary quarters)	+	−14.4	48.32	161.82	−4.39	104.03	28.61	−37.57	113.31*	116.69**
Medical specialist visits (per 1,000 beneficiary quarters)	−	−6.26	−56.64*	84.85*	−48.88	24.32	−32.12	−47.59	−0.41	15.01
Surgical specialist visits (per 1,000 beneficiary quarters)	−	55.04**	48.11***	2.06	−13.78	13.71	−0.59	11.85	−12.02	4.53
Follow-up visit within 14 days after discharge (per 1,000 beneficiaries with a live discharge)	+	−2.51	−2.93	29.47	−90.11	30.96	27.04*	22.28	65.84*	23.64
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)	−	4.80	8.49	−8.47	−29.49	15.84	−31.32	2.17	−14.77	−5.97
Total Medicare expenditures	−	−13.79	37.98	197.75***	145.85*	130.35*	−118.93*	−133.37*	−63.96	−25.47
Acute-care expenditures	−	−17.2	0.35	72.56*	63.77*	61.86*	−57.68*	−68.31*	−40.13*	6.28
Post-acute-care expenditures	−	2.06	15.08*	31.25	45.41*	15.01	−29.34**	−43.58*	−9.46	−12.83
ER expenditures	−	0.15	1.95	11.73***	7.47	−0.82	−2.25	−0.44	−2.27	−1.44
Outpatient expenditures	−	−14.19	7.38	36.68*	29.74	29.97*	−3.13	20.91	−22.62*	−5.85
Specialty physician expenditures	−	4.73	−7.89	−4.82	−10.31	9.45*	−25.73***	−24.90**	6.54	−11.7
Primary care physician expenditures	−	1.46	1.25	1.02	−1.2	2.65	−5.76*	−10.41	−4.88*	−3.26
All-cause admissions	−	3.71	10.07*	17.83**	10.43	17.78**	−10.82	−5.85	−9.25	12.65*
ER visits not leading to hospitalization	−	16.49	4.27	22.55*	15.65	−2.79	7.95	7.51	0.36	−2.60

(continued)

Table Z-2 (continued)
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Medicare beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	North Carolina		Minnesota	Maine		Michigan		Pennsylvania	
		North Carolina MAPCP Demonstration vs. CG PCMHs	North Carolina MAPCP Demonstration vs. CG non-PCMHs	HCH practices vs. CG non-PCMHs	Maine PCMH Pilot vs. CG PCMHs	Maine PCMH Pilot vs. CG non-PCMHs	MiPCT practices vs. CG PCMHs	MiPCT practices vs. CG non-PCMHs	CCI PCMHs vs. CG PCMHs	CCI PCMHs vs. CG non-PCMHs
HbA1c testing	+	0.16	1.21	1.21	4.08	2.83	−1.64	0.49	−0.10	−0.33
Retinal eye examination	+	0.57	0.73	3.54	1.60	1.69	−0.52	−1.78	0.37	−0.54
LDL-C screening	+	−1.3	0.29	1.23	9.33*	1.5	−1.86	−2.43	0.78	0.35
Medical attention for nephropathy	+	3.23	3.16	1.16	−2.37	−0.33	−1.51	−2.08*	−5.46***	0.02
Received all 4 diabetes tests	+	3.36*	1.38	3.31	1.97	1.03	−0.21	−3.73	−4.24*	−0.43
Received none of the 4 diabetes tests	−	−0.11	−0.76*	0.03	−1.78	−0.98	0.64*	−0.11	−0.15	0.57
Total lipid panel	+	−0.14	0.29	−1.91	3.90	−1.84	−1.29	−2.74*	0.80	−1.20
Avoidable catastrophic events	−	−2.36	−2.05	1.42	3.43	2.96**	−0.64	−0.92	−2.50*	1.53
PQI admissions—overall	−	2.31	5.00*	3.86	5.97	6.30*	−0.04	−0.50	−1.65	0.64
PQI admissions—acute	−	2.74	2.9*	1.79	−1.75	2.13	−1.23	−1.64*	0.26	−0.33
PQI admissions—chronic	−	−0.32	2.13	1.76	7.14*	4.31*	1.17	1.03	−2.04	0.85

NOTE:

- Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible.

ADK = Adirondack Medical Home Demonstration; CCI = Chronic Care Initiative; CG = comparison group; CSI = Chronic Care Sustainability Initiative; ER = emergency room; HCH = Health Care Homes; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; MiPCT = Michigan Primary Care Transformation Project; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* indicates the presence of a change estimate that is statistically significant at the 10 percent level; ** at the 5 percent level; and *** at the 1 percent level.

Table Z-3
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Adult Medicaid beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	New York		Rhode Island		Vermont	
		ADK Demonstration vs. CG PCMHs	ADK Demonstration vs. CG non-PCMHs	CSI vs. CG PCMHs	CSI vs. CG non-PCMHs	Blueprint for Health vs. CG PCMHs	Blueprint for Health vs. CG non-PCMHs
Primary care visits (per 1,000 beneficiary quarters)	+	9.64*	9.50*	−0.32	−1.31	NA	NA
Medical specialist visits (per 1,000 beneficiary quarters)	−	−3.01*	−1.53	0.89	1.69	NA	NA
Surgical specialist visits (per 1,000 beneficiary quarters)	−	−1.04	−1.61*	1.52	0.42	NA	NA
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)	−	0.01	0.18	6.09	0.48	2.49	3.06*
Total Medicaid expenditures	−	42.90*	12.35	31.24	7.44	49.42*	4.79
Acute-care expenditures	−	−3.2	19.92*	34.78	−4.06	16.22*	24.56*
ER expenditures	−	−2.39	−1.12	−4.09	1.32	2.82	1.47
Specialty physician expenditures	−	1.39	3.76	1.64	−0.63	NA	NA
Primary care physician expenditures	+	12.46*	18.48*	0.46	−0.83	NA	NA
All-cause admissions	−	−0.42	−0.43	0.26	−0.22	0.38*	0.73*
ER visits not leading to hospitalization	−	1.73*	0.90	−0.16	−0.17	0.42	0.63
HbA1c testing	+	−0.3	2.00	−4.42	6.98	−1.56	−2.1
Retinal eye examination	+	−12.5	−7.12	−28.80*	0.39	−6.31*	−2.49
LDL-C screening	+	1.74	−0.91	5.67	2.58	−8.20*	−10.58*
Medical attention for nephropathy	+	0.77	−0.04	−9.90*	−4.72	4.38	−2
Received all 4 diabetes tests	+	−6.71	−2.94	−6.83	1.73	−3.91	−2.71
Received none of the 4 diabetes tests	−	−0.16	−0.07	22.7	4.25	1.37	0.31

(continued)

Table Z-3 (continued)
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Adult Medicaid beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	North Carolina		Minnesota	Maine	Michigan		Pennsylvania	
		North Carolina MAPCP Demonstration vs. PCMH	North Carolina MAPCP Demonstration vs. non-PCMH	HCH vs. non-PCMH	Maine PCMH Pilot vs. non-PCMHs	MiPCT Practices vs. PCMHs	MiPCT Practices vs. non-PCMHs	CCI vs. PCMHs	CCI vs. non-PCMHs
Primary care visits (per 1,000 beneficiary quarters)	+	−0.82	0.88	2.16*	4.87	−4.82*	−1.51	−1.14	−2.89
Medical specialist visits (per 1,000 beneficiary quarters)	−	2.37	−0.42	1.75	0.68	0.86	−0.66	−1.18	−1.18
Surgical specialist visits (per 1,000 beneficiary quarters)	−	1.92	2.04	−0.07	1.23*	−1.15*	1.03	0.04	0.33
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)	−	2.05	−0.27	−0.28	−6.13*	−0.05	−1.02	−1.65	0.41
Total Medicaid expenditures	−	17.01	24.58	NA	4.01	NA	NA	NA	NA
Acute-care expenditures	−	0.98	7.8	NA	−6.89	NA	NA	NA	NA
ER expenditures	−	4.88	4.98	NA	2.02	NA	NA	NA	NA
Specialty physician expenditures	−	2.06	4.8	NA	1.48	NA	NA	NA	NA
Primary care physician expenditures	+	6.42	−1.13	NA	5.62	NA	NA	NA	NA
All-cause admissions	−	0.59	0.52	0.23	−0.34	−0.18	0.34*	0.89	−0.1
ER visits not leading to hospitalization	−	1.24	1.02*	−1.23*	1.81*	0.44	1.55*	−0.11	−2.44*
HbA1c testing	+	1.54	−1.54	8.84*	−5.65	14.85*	5.37	NA	NA
Retinal eye examination	+	−3.73	9.63*	−0.65	1.79	−2.52	−4.11*	NA	NA
LDL-C screening	+	−0.11	−2.74	9.31*	−0.27	11.02*	5.13	NA	NA

(continued)

Table Z-3 (continued)
Comparison of average changes of MAPCP Demonstration on selected outcomes among adult beneficiaries with multiple chronic conditions: Adult Medicaid beneficiaries assigned to MAPCP Demonstration PCMHs and comparison PCMHs

Outcome	Expected direction	North Carolina		Minnesota	Maine	Michigan		Pennsylvania	
		North Carolina MAPCP Demonstration vs. PCMH	North Carolina MAPCP Demonstration vs. non-PCMH	HCH vs. non-PCMH	Maine PCMH Pilot vs. non-PCMHs	MiPCT Practices vs. PCMHs	MiPCT Practices vs. non-PCMHs	CCI vs. PCMHs	CCI vs. non-PCMHs
Medical attention for nephropathy	+	0.00	−0.24	15.25*	−10.34*	5.68	5.76*	NA	NA
Received all 4 diabetes tests	+	−0.94	5.73	0.99	1.01	5.13	0.74	NA	NA
Received none of the 4 diabetes tests	−	0	0.09	−6.08*	2.20	−5.79*	−1.69	NA	NA

NOTES:

- Cells marked NA indicate not available. Estimates not available for the following reasons:
  - Michigan, Minnesota, and Pennsylvania did not report Medicaid expenditures, so expenditure results are not available.
  - Quality of care measures related to diabetes cannot be calculated due to data limitations in the Pennsylvania and Rhode Island Medicaid claims files.
  - Vermont did not report provider specialty accurately in the Medicaid claims data, so primary care, medical specialist, and surgical specialist visits and expenditures could not be reported.
  - Minnesota does not have a PCMH CG because the HCH certification is so widespread that identifying sufficient numbers of non-HCH practices to create a PCMH CG is not possible.
  - The quality of care measure related to receipt of a total lipid panel was not calculated for the Medicaid population.
  - For the Maine Medicaid analysis, PCMH comparison practices were excluded. There were relatively few PCMH CG practices, and the number of Medicaid beneficiaries attributed to those practices was low. The small sample size results in unstable estimates of change.

ADK = Adirondack Medical Home Demonstration; CCI = Chronic Care Initiative; CG = comparison group; CSI = Chronic Care Sustainability Initiative; ER = emergency room; HCH = Health Care Homes; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; MiPCT = Michigan Primary Care Transformation Project; PCMH = patient-centered medical home; PQI = Prevention Quality Indicator.

* indicates the presence of a change estimate that is statistically significant at the 10 percent level; ** at the 5 percent level; and *** at the 1 percent level.