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

Final Second Annual Report—Appendices

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Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration Second Annual Report—Appendices

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APPENDICES

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APPENDIX A
MAPCP DEMONSTRATION 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 conducted through telephone calls and in-person site visits 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 National Academy for State Health Policy (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)

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 process 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 transformation-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)	▪ Semistructured interviews conducted through in-person site visits with participating practices, CHTs, and other relevant clinical staff ▪ Key informant interviews conducted through telephone calls and in-person site visits with state officials and program staff ▪ PCMH practice recognition surveys ▪ Provider practice transformation survey ▪ State-level variables

(continued)

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: 18. (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? 19. (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? 20. (c) Improved adherence to evidence-based guidelines? If so, what features facilitate improved compliance and what outcomes result from these improvements? 21. (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 – To the extent that clinical data are available, analyses of achievement of control will be evaluated – To the extent that state-level reporting data are available, we will report additional non-claims-based quality of care measures ▪ Within-state univariate, bivariate, and multivariate quantitative analyses of health outcomes as measured by ambulatory care sensitive conditions (or "composite prevention quality indicators"), avoidance of serious medical events, and mortality ▪ 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 and PCMH recognition surveys to assess changes in quality of care and patient safety features of the practice	▪ Information obtained from semistructured interviews with participating practices, CHTs, and other relevant clinical staff ▪ PCMH practice recognition surveys ▪ Practice transformation questionnaire ▪ Focus groups with beneficiaries ▪ State-level reporting data, as available (including clinical quality measures) ▪ Practice-reported clinical data, as available ▪ Medicare and Medicaid claims data ▪ Medicare EDB and Medicaid eligibility files ▪ State-level variables ▪ Practice transformation-level variables

(continued)

Substantive area research questions	Methods	Data sources
Access to Care and Coordination of Care		
22. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in: 23. (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? 24. (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? 25. (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? 26. (d) Improved continuity of care for Medicare and Medicaid 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, semistructured interviews with providers, and key informant interviews 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 and beneficiary focus groups 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 using claims data: – Visit rates by primary care physicians and medical and surgical specialists – Primary care visits as a percentage of total visits – Rate of ER visits not leading to hospitalizations – Hospital admission rate – Rate of follow-up visits within 14 days after hospitalization – 30-day readmission rate – Continuity of care index	▪ Information obtained from semistructured interviews with participating practices, CHTs, and other relevant clinical staff ▪ Key informant interviews conducted through telephone calls and in-person site visits with state officials and program staff ▪ Practice transformation questionnaire ▪ State-level reporting data, as available ▪ Focus groups with beneficiaries ▪ Beneficiary survey data ▪ Medicare and Medicaid claims data ▪ Medicare EDB and Medicaid eligibility files ▪ MAPCP Demonstration Participation files ▪ State-level variables

(continued)

Substantive area research questions	Methods	Data sources
Access to Care and Coordination of Care (continued)		
	▪ To the extent that state-level reporting data are available, we will report additional non-claims-based access to and coordination of care measures: – Within-state quantitative analysis of practice transformation activities from practice transformation questionnaire to assess impact of practice features related to access and coordination of care on utilization and expenditures – Within-state quantitative analyses of impact of continuity of care index on utilization and expenditures – Within-state quantitative analyses of unique interventions related to access to care and continuity of care—for example, nurse care manager activities and the impact of nurse care manager activities on utilization and expenditures (North Carolina)	

(continued)

Substantive area research questions	Methods	Data sources
Special Populations		
27. Do features of the state initiative, or features of the PCMH practices or community health teams participating in the state initiative, result in: 28. (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? 29. (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? 30. (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 and beneficiary focus groups, semistructured interviews with providers, and key informant interviews to assess challenges and perceptions of changes for the special populations across a range of domains ▪ Within-state quantitative analyses by including many of the special populations as independent or control variables (e.g., race, dually eligible beneficiaries) or analyses conducted within special population subgroups (e.g., rural, SASH). More detailed analyses will include studies of dually eligible beneficiaries, people with disabilities, people with multiple chronic illnesses, people with behavioral health problems, beneficiaries in rural areas, and children with asthma. ▪ Within-state quantitative analyses for specific populations as determined jointly by RTI International and CMS. Likely outcomes include total costs and use and costs of total and ambulatory care sensitive condition hospitalizations and ER visits, readmissions, use of post-acute-care, use of home- and community-based services, etc.	▪ Key informant interviews with state officials, CHTs, and other community resources that provide services to special populations ▪ Semistructured interviews with practices with heavy concentrations of targeted special populations ▪ Beneficiary focus groups with special populations ▪ Beneficiary survey data, as available in sufficient sample sizes for the targeted special populations ▪ Medicare and Medicaid claims data, Chronic Condition Warehouse timeline, Minimum Data Set (MDS), and Outcome and Assessment Information Set (OASIS) files ▪ Medicare EDB and Medicaid eligibility files ▪ MAPCP Demonstration Participation files ▪ State-level variables ▪ Practice transformation-level variables

(continued)

Substantive area research questions	Methods	Data sources
Beneficiary Experience with Care		
31. 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? 32. 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? 33. 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? 34. 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 through focus groups, with some targeting of special populations ▪ Within-state quantitative analyses of Medicare and Medicaid beneficiary experience with care through analysis of PCMH-CAHPS surveys mailed to Medicare and Medicaid beneficiaries. Self-reported experience for six composite scales will be compared with national data deposited in the National CAHPS Benchmarking Database.	▪ Focus groups with beneficiaries and caregivers ▪ State-level variables ▪ Practice transformation-level variables ▪ Medicare beneficiary survey data ▪ Medicare EDB and Medicaid eligibility files ▪ MAPCP Demonstration Participation files

(continued)

Substantive area research questions	Methods	Data sources
Effectiveness: Patterns of Utilization and Expenditures		
35. 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? 36. 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? 37. 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?	▪ 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 testing of adequacy of 2-year baseline to capture Medicare pre-MAPCP Demonstration trends in expenditures and acute-care utilization ▪ Within-state decomposition of Medicare and Medicaid expenditures and gross savings into relative payment and utilization differences between PCMH and non-PCMH practices at baseline and changes over time by service categories (e.g., inpatient, outpatient, physician, skilled nursing facility) ▪ T-tests and incidence rate ratios (IRRs) of Medicare and Medicaid different rates of growth in both average payments per service (e.g., admission, office visit) and services per eligible beneficiary between participating PCMH and non-PCMH practices ▪ T-tests and IRRs of Medicare and Medicaid differences in baseline payments per service and utilization rates between PCMH and non-PCMH practices	▪ Medicare and Medicaid claims data ▪ Medicare EDB and Medicaid eligibility files ▪ MAPCP Demonstration Participation files ▪ State-level variables ▪ Practice transformation-level variables ▪ Key informant interviews ▪ Review of secondary documents
38. 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?	▪ Within-state multivariate analysis of gross savings and budget neutrality – Demonstration fee effect – Medical home effect – Participation effect	▪ Medicare claims data ▪ Medicare EDB files ▪ MAPCP Demonstration Participation files

(continued)

Substantive area research questions	Methods	Data sources
Cross-State Qualitative Analyses		
39. What are the commonalities among the state initiatives? How do they differ from one another? 40. What features of state initiatives are most responsible for the positive impacts seen? 41. 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
Cross-State Quantitative Analyses of Outcomes		
42. 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? 43. 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 and Medicaid. Outcomes variables include – Total expenditures – Expenditures for acute-care hospitals – Expenditures for hospital outpatient and physician services – Rate of all-cause hospitalizations – Rate of all-cause ER visits – Medicare budget neutrality	▪ Medicare claims data ▪ Medicare EDB eligibility files ▪ MAPCP Demonstration Participation files ▪ State-level variables ▪ Practice transformation-level variables

CAHPS = Consumer Assessment of Healthcare Providers and Systems; CHT = community health team; CMS = Centers for Medicare & Medicaid Services; EDB = Enrollment Data Base; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = Support and Services at Home.

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APPENDIX B
MAPCP DEMONSTRATION MEDICARE BENEFICIARY ASSIGNMENT ALGORITHMS BY STATE

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	
Base E&M Office Visit Codes	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 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
Transitional Care Management Services	99495, 99496

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

Minnesota

The Minnesota Health Care Homes (HCH) initiative is located in 24 Minnesota counties from which intervention group beneficiaries are identified from participating HCHs. Comparison group beneficiaries are drawn from the same counties. Demonstration staff requested that four counties in the southeast corner of the state (Fillmore, Houston, Olmstead, and Winona) be excluded from the evaluation because they included the Gunderson health system, which was participating in another demonstration.

Minnesota is one of two Multi-payer Advanced Primary Care Practice (MAPCP) Demonstration states that does not base PCMH status on National Committee for Quality Assurance (NCQA) Physician Practice Connection Patient-Centered Medical Home PPC®-PCMH™) recognition. Instead, it relies on a state-sponsored HCH certification program. Further, 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 HCHs to submit a claim for HCH services each month for each eligible patient. Because few practices have been submitting claims for HCH services, RTI developed an alternative assignment algorithm for purposes of monitoring and evaluation. To be included, beneficiaries had to meet the following MAPCP Demonstration general criteria and Minnesota-specific criteria:

- 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.

The beneficiary assignment algorithm is similar to that used by other states, in that it uses a 24-month look-back and plurality of evaluation and management (E&M) visits. Briefly, a Medicare FFS beneficiary was determined to be loyal to a participating HCH according to the most common claims-based assignment algorithm used by the other seven MAPCP Demonstration initiatives, which is a 24-month look-back period and plurality of E&M visits to primary care providers. To operationalize this assignment algorithm, for each beneficiary we determine if the plurality of the beneficiary's E&M visits to primary care providers were billed by an actively participating HCH. When using Medicare claims data for beneficiary assignment, we use the taxpayer identification number (TIN) as the unit of assignment. Because one TIN can be used by many practices, several participating HCHs (and non-HCHs) may be grouped together under a single TIN. Thus, the number of active participating HCHs is less than the number of TINs represented in our evaluation sample. E&M codes were: 99201-99215, 99304-99350, 99381-99387, 99391-99397, 99495-99496, G0402, G0438, and G0439.FQHC/RHC revenue codes were 0521, 0522, 0524 and 0525. Medicare FFS beneficiaries and participating HCHs were added quarterly to the intervention group based upon the steps above.

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. Use a tiered approach to beneficiary assignment.

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.

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APPENDIX C
COMPARISON GROUP COMPARABILITY TO MAPCP DEMONSTRATION BENEFICIARIES BY STATE

C.1 Weighting

As described in ***Section 1.2.3***, comparison group (CG) beneficiaries were weighted to increase their similarity with Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration beneficiaries on their observable characteristics just prior to the demonstration. The objective of weighting is to reduce any bias from observed group differences that could influence outcomes (i.e., gender, disability, overall health). Comparability after weighting increases the likelihood that changes in posttreatment outcomes are related to treatment itself and not to pretreatment differences. The regression models described in ***Section 1.2.6*** were estimated using weights designed to balance the sample on these types of observable characteristics.[1]

Traditionally, propensity scores have been used to generate weights that 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 through the use of 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 CG 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 various observed covariates are correlated with each other.

In this appendix, we calculated weighted means of the beneficiary- and practice-level characteristics using entropy-balanced weights, and examined the extent to which observed characteristics between groups are similar (or "balanced") after weighting. "Balanced" indicates support for the underlying assumption that the two groups are 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 CG also would have been observed in the treatment group in the absence of the intervention.

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[1] The final analytic weights are the product of (1) the eligibility fraction (EF) and (2) the beneficiary's entropy balanced weight (for the CG only; described in ***Section 1.2.3***). 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.

Sample covariate balance can be assessed by examining group means and their standardized differences. If a standardized difference between two means is less than 0.10, it was assumed that the difference between 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 small number of comparison beneficiaries. Covariate balance was evaluated after capping, because modification of the weights will always 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 generalizable 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 were always assigned a weight of one. 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 and CG (i.e., PCMH subsample and non-PCMH subsample). In addition to presenting standardized differences after weighting, for each state we displayed the distribution of the capped entropy weights (***Figure C-#a***) for both CGs as well as a visual examinations of the propensity scores before and after weighting (***Figure C-#b***).

Interpreting State Tables

In the following tables, demonstration and unweighted CG means are shown in the second and third columns, and standardized differences (for the unweighted means) are shown in the fourth column. The fifth column shows the effect of entropy balancing on the CG means, and the sixth column shows 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 that the majority of the distribution contains moderately sized values (e.g.,

less than 5) and that there are relatively few extreme values; this indicates that there was reasonable overlap between the propensity scores of the treatment 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 were 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.

C.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 preferred. 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 were rejected because they had median income or Medicare expenditure levels that were 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 comprised 88 percent New York beneficiaries and 12 percent Michigan beneficiaries.

The New York analyses are based on 40 MAPCP Demonstration practices, 48 comparison PCMHs (tax identification numbers [TIN]), and 160 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, the PCMH CG in New York was slightly younger and more likely to be non-White, disabled, or Medicaid dual-eligible. The non-PCMH CG was more likely to be non-White. Beneficiaries in the PCMH CG were located in 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 by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs by increasing the percent found in the PCMH CG by 14 percentage points and in the non-PCMH CG by 24 percentage points.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-1a
New York: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 24,999)	PCMH (N = 59,178)	STDF	PCMH	STDF
Age	69.3	67.6	0.11	69.3	0.00
Female	56.1%	55.6%	0.01	56.1%	0.00
Non-White	2.4%	9.9%	-0.32	2.4%	-0.01
Disabled	32.0%	37.8%	-0.12	32.0%	0.00
Medicaid dual eligible	23.8%	29.9%	-0.14	23.8%	0.00
ESRD	0.7%	0.9%	-0.02	0.7%	0.00
Institutionalized	0.1%	0.3%	-0.03	0.1%	0.00
HCC risk score	1.05	1.05	0.00	1.05	0.00
Charlson score	0.82	0.85	-0.02	0.82	0.00
Population density	214.5	1,743.2	-0.22	283.3	-0.03
Percent primary care	88%	67%	1.45	88%	0.00
Non-solo primary care	94%	97%	-0.17	94%	0.00
FQHC	38%	24%	0.32	38%	0.00
RHC	0%	0%	—	0%	—
CAH	4%	3%	0.10	4%	0.00
Median household income	50,700	49,300	0.24	50,700	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 TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-1b
New York: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

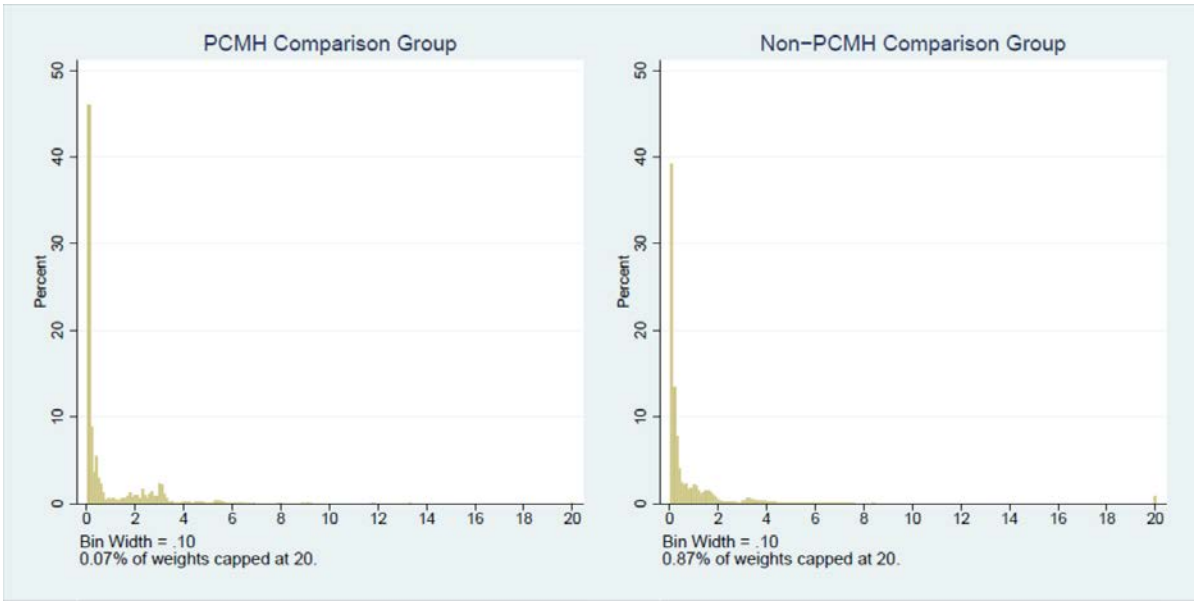
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 24,999)	Non-PCMH (N = 66,669)	STDF	Non-PCMH	STDF
Age	69.3	69.4	-0.01	69.5	-0.01
Female	56.1%	56.6%	-0.01	56.2%	0.00
Non-White	2.4%	9.8%	-0.32	2.4%	0.00
Disabled	32.0%	34.0%	-0.04	31.4%	0.01
Medicaid dual eligible	23.8%	25.7%	-0.04	23.3%	0.01
ESRD	0.7%	0.8%	-0.01	0.7%	0.00
Institutionalized	0.1%	0.2%	-0.02	0.1%	0.00
HCC risk score	1.05	1.06	-0.01	1.05	0.00
Charlson score	0.82	0.82	0.00	0.81	0.00
Population density	214.5	309.2	-0.04	219.3	0.00
Percent primary care	88%	82%	0.38	88%	0.01
Non-solo primary care	94%	76%	0.51	94%	0.00
FQHC	38%	14%	0.58	37%	0.02
RHC	0%	1%	-0.12	0%	-0.03
CAH	4%	4%	0.02	5%	0.00
Median household income	50,700	46,900	0.77	50,600	0.02

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TIN with more than one primary care provider.

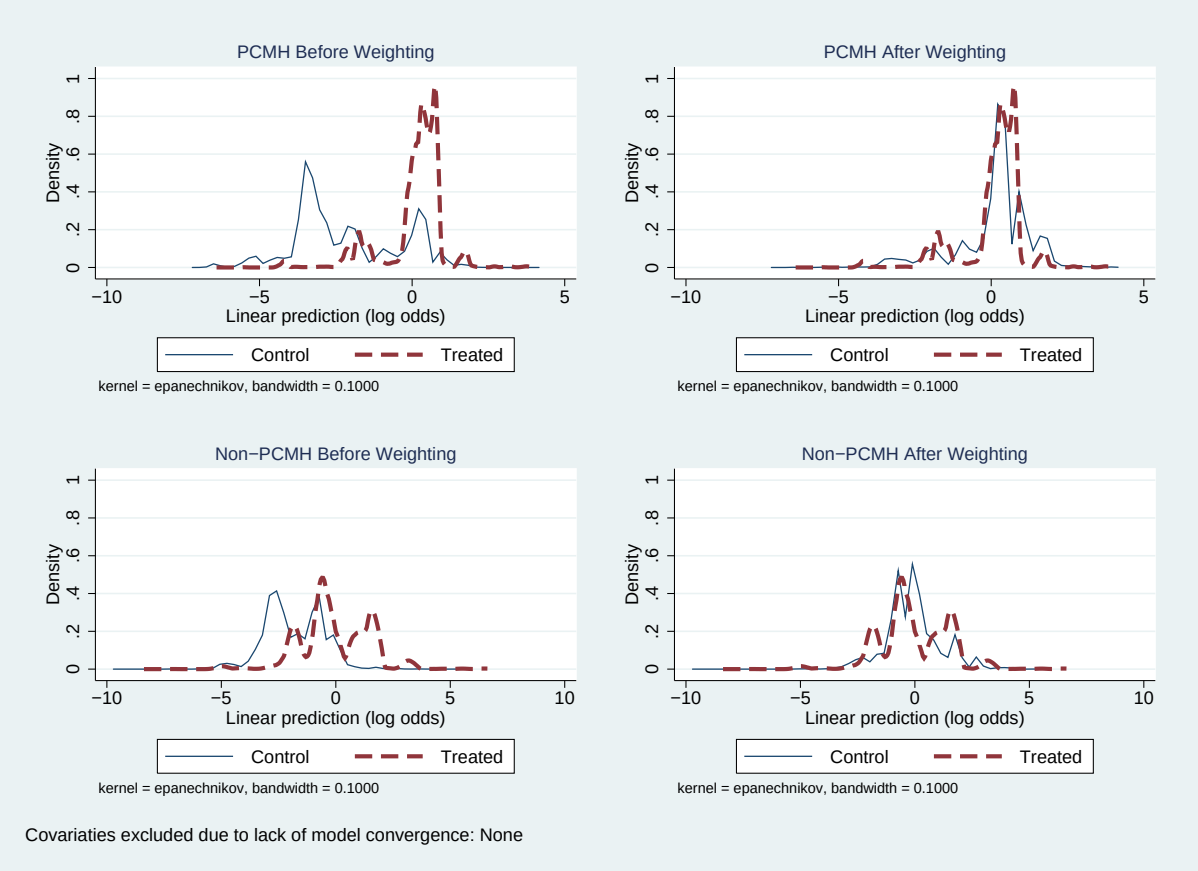
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-1a: Distribution of entropy balance weights in New York



PCMH = patient-centered medical home.

Figure C-1b: Distribution of propensity scores in New York before and after entropy balance weighting



PCMH = patient-centered medical home.

C.3 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 comprised 59 percent New Hampshire/Massachusetts beneficiaries and 41 percent Michigan/Maine beneficiaries.

The Vermont analysis involved 107 MAPCP Demonstration practices, 32 comparison PCMHs (TINs) and 157 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, the PCMH CG in Vermont was slightly younger and more likely to be non-White or disabled. The non-PCMH CG was more likely to be non-White but less likely to be Medicaid dual eligible. Beneficiaries in both CGs were located in more densely populated areas with higher median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs and RHCs relative to the demonstration group. In the PCMH CG, the percent of beneficiaries attributed to these types of practices increased by 12 and 5 percentage points, respectively. In the non-PCMH CG, the percent of beneficiaries attributed to these types of practices increased by 23 and 6 percentage points, respectively.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-2a
Vermont: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 66,547)	PCMH (N = 39,647)	STDF	PCMH	STDF
Age	70.1	68.8	0.10	70.2	-0.01
Female	57.0%	57.6%	-0.01	56.5%	0.01
Non-White	2.4%	6.3%	-0.19	2.2%	0.02
Disabled	26.1%	30.9%	-0.11	24.9%	0.03
Medicaid dual eligible	27.5%	23.5%	0.09	26.7%	0.02
ESRD	0.5%	0.6%	-0.01	0.5%	-0.01
Institutionalized	0.1%	0.4%	-0.07	0.1%	0.00
HCC risk score	0.98	1.03	-0.06	0.97	0.01
Charlson score	0.73	0.82	-0.06	0.73	0.00
Population density	122.2	313.4	-0.39	125.4	-0.01
Percent primary care	83%	73%	0.79	82%	0.11
Non-solo primary care	96%	100%	-0.27	99%	-0.14
FQHC	29%	17%	0.28	26%	0.05
RHC	10%	5%	0.20	11%	-0.01
CAH	13%	13%	0.00	14%	-0.03
Median household income	54,400	63,100	-0.80	54,700	-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 TIN 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.

Table C-2b
Vermont: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

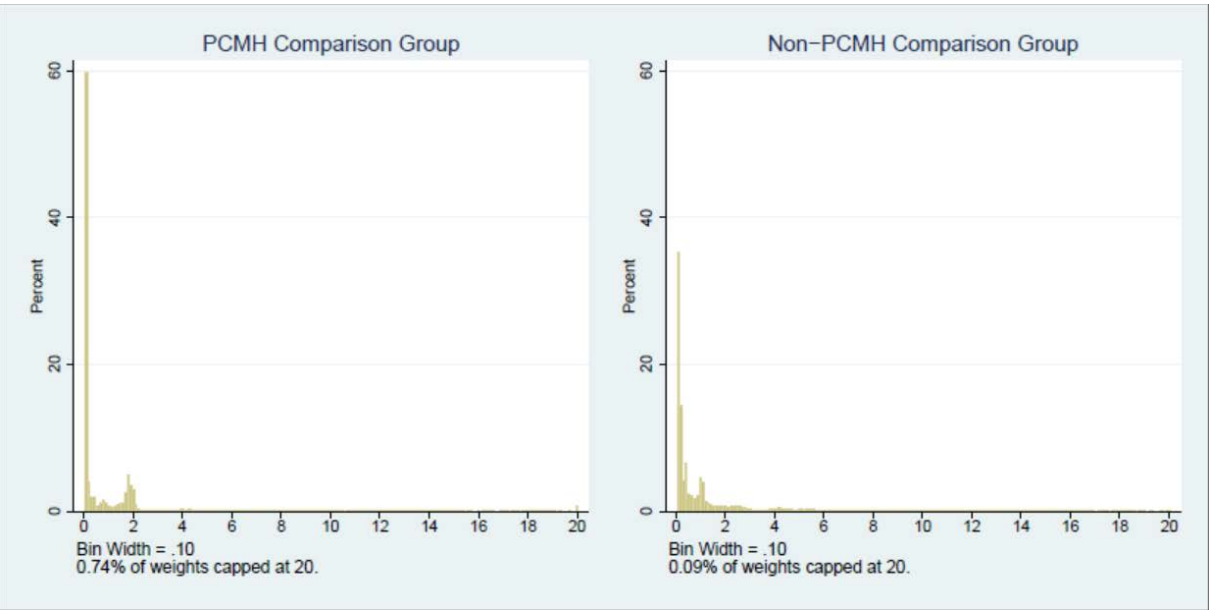
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 66,547)	Non-PCMH (N = 112,501)	STDF	Non-PCMH	STDF
Age	70.1	71.1	-0.08	70.1	0.00
Female	57.0%	57.8%	-0.02	57.0%	0.00
Non-White	2.4%	4.2%	-0.10	2.4%	0.00
Disabled	26.1%	24.0%	0.05	26.1%	0.00
Medicaid dual eligible	27.5%	15.9%	0.28	27.5%	0.00
ESRD	0.5%	0.5%	-0.01	0.5%	0.00
Institutionalized	0.1%	0.5%	-0.08	0.1%	0.00
HCC risk score	0.98	1.03	-0.06	0.98	0.00
Charlson score	0.73	0.77	-0.03	0.73	0.00
Population density	122.2	391.3	-0.51	122.3	0.00
Percent primary care	83%	78%	0.38	83%	0.00
Non-solo primary care	96%	87%	0.33	96%	0.00
FQHC	29%	6%	0.64	29%	0.00
RHC	10%	4%	0.27	10%	0.00
CAH	13%	16%	-0.09	13%	0.00
Median household income	54,400	59,000	-0.52	54,400	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 TIN with more than one primary care provider.

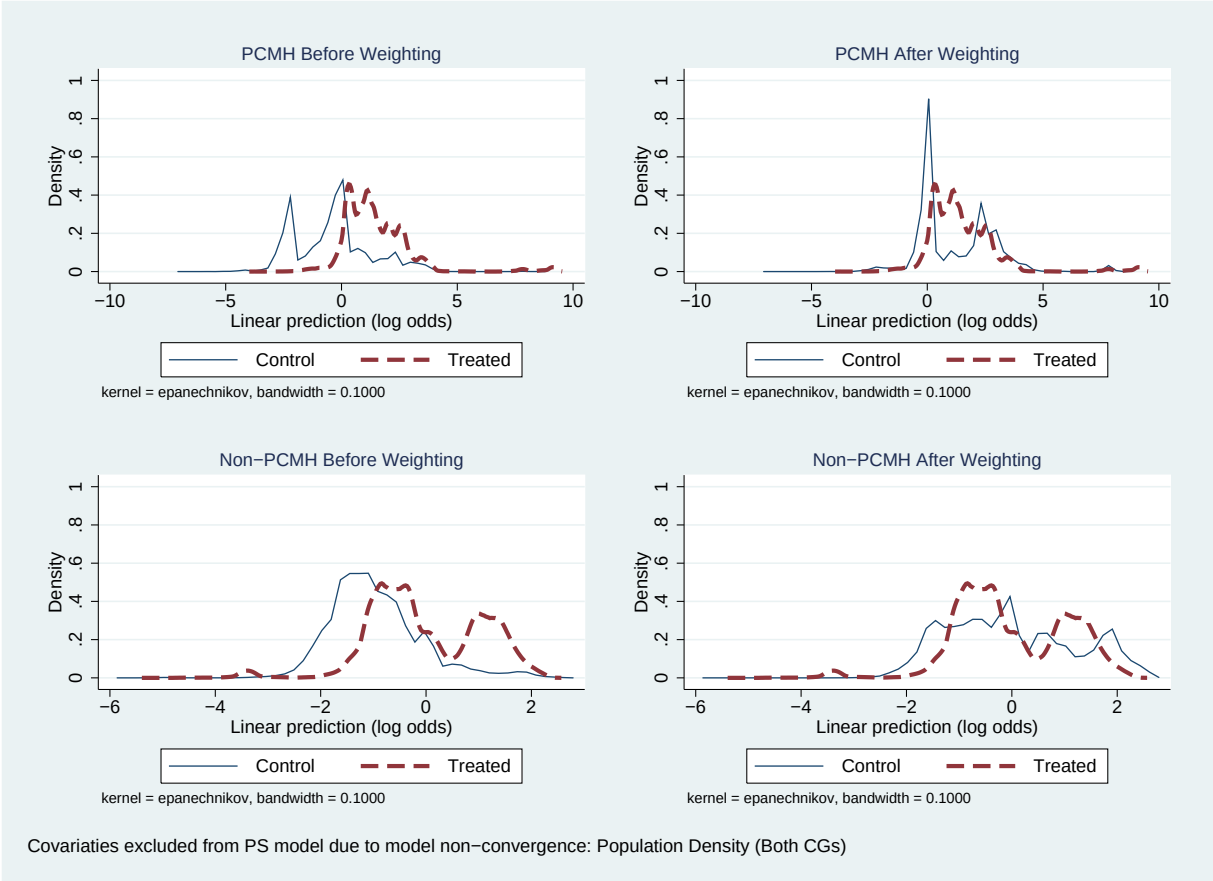
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-2a: Distribution of entropy balance weights in Vermont



PCMH = patient-centered medical home.

Figure C-2b: Distribution of propensity scores in Vermont before and after entropy balance weighting



CG = comparison group; PCMH = patient-centered medical home; PS = propensity score.

C.4 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* Rhode Island PCMH CG comprised 81 percent Rhode Island beneficiaries and 19 percent New York beneficiaries.

The Rhode Island analysis for the second annual report involved 17 MAPCP Demonstration practices, 48 comparison PCMHs (TINs), and 179 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, both CGs in Rhode Island were more likely to be disabled or Medicaid dual eligible, whereas the non-PCMH CG was also significantly older. Beneficiaries in the PCMH CG were located in less densely populated areas with lower median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs by decreasing the percent found in the PCMH CG by 38 percentage points and increasing the percent found in the non-PCMH CG by 10 percentage points.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-3a
Rhode Island: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 10,742)	PCMH (N =18,480)	STDF	PCMH	STDF
Age	66.4	65.0	0.09	66.4	0.00
Female	58.9%	56.1%	0.06	58.9%	0.00
Non-White	12.8%	15.9%	-0.09	12.8%	0.00
Disabled	37.9%	46.2%	-0.17	37.9%	0.00
Medicaid dual eligible	31.2%	36.0%	-0.10	31.2%	0.00
ESRD	0.6%	0.9%	-0.03	0.6%	0.00
Institutionalized	0.5%	0.6%	-0.01	0.5%	0.00
HCC risk score	1.03	1.07	-0.04	1.03	0.00
Charlson score	0.74	0.79	-0.03	0.74	0.00
Population density	1,086.3	854.3	0.22	1,086.3	0.00
Percent primary care	92%	76%	0.68	92%	0.00
Non-solo primary care	94%	86%	0.29	94%	0.00
FQHC	20%	58%	-0.84	20%	0.00
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	59,000	55,500	0.37	59,000	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 TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-3b
Rhode Island: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

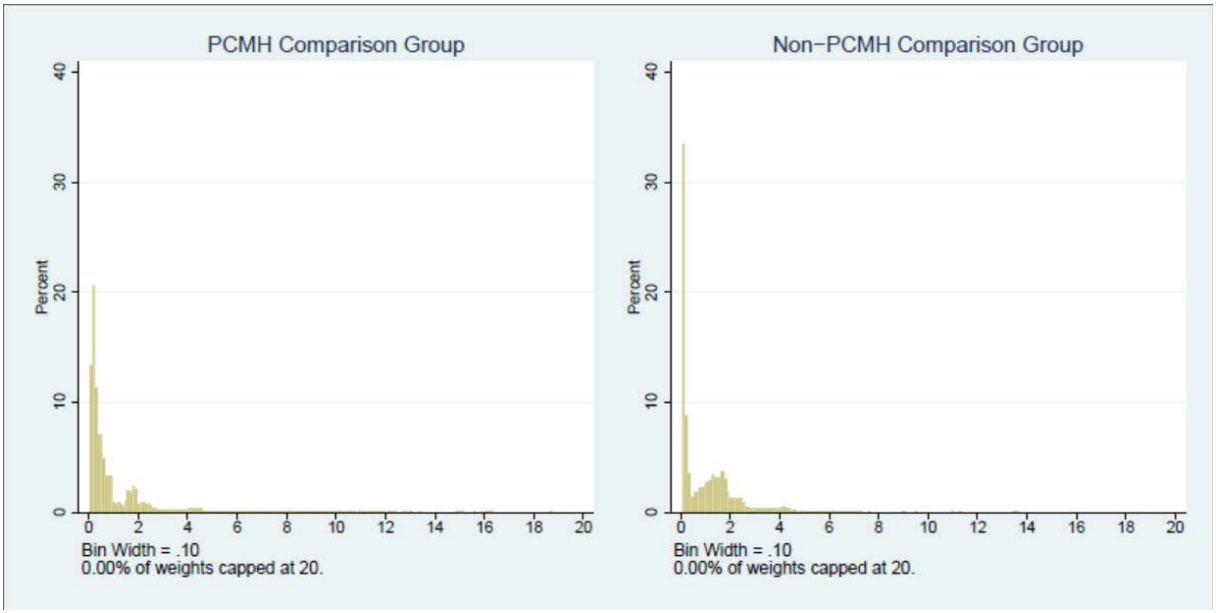
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 10,742)	Non-PCMH (N = 42,924)	STDF	Non-PCMH	STDF
Age	66.4	70.5	-0.27	66.4	0.00
Female	58.9%	58.5%	0.01	58.9%	0.00
Non-White	12.8%	10.0%	0.09	12.8%	0.00
Disabled	37.9%	30.5%	0.16	37.9%	0.00
Medicaid dual eligible	31.2%	23.8%	0.17	31.2%	0.00
ESRD	0.6%	0.7%	-0.01	0.6%	0.00
Institutionalized	0.5%	0.7%	-0.03	0.5%	0.00
HCC risk score	1.03	1.12	-0.09	1.03	0.00
Charlson score	0.74	0.78	-0.02	0.74	0.00
Population density	1,086.3	1,183.9	-0.20	1,086.3	0.00
Percent primary care	92%	92%	-0.03	92%	0.00
Non-solo primary care	94%	56%	0.99	94%	0.00
FQHC	20%	10%	0.30	20%	0.00
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	59,000	57,600	0.13	59,000	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 TIN with more than one primary care provider.

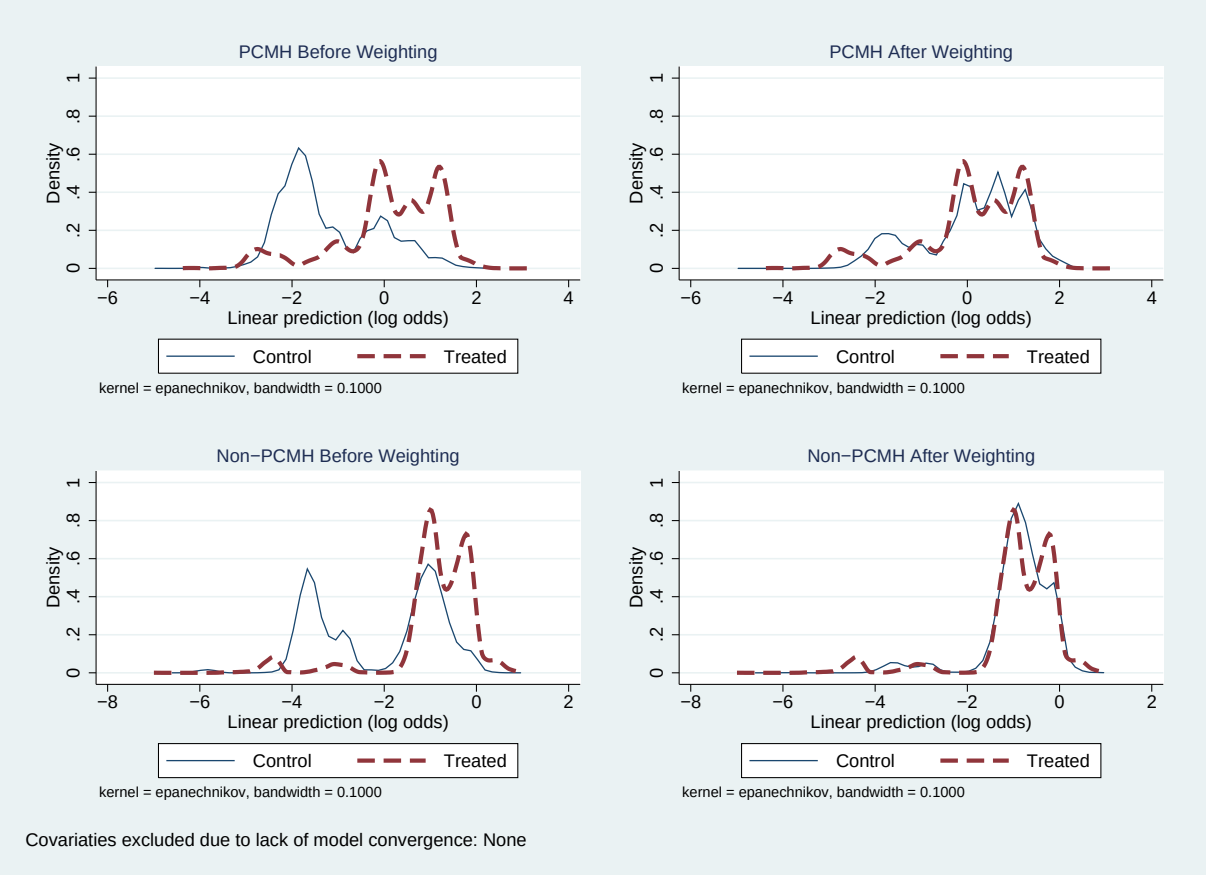
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-3a: Distribution of entropy balance weights in Rhode Island



PCMH = patient-centered medical home.

Figure C-3b: Distribution of propensity scores in Rhode Island before and after entropy balance weighting



PCMH = patient-centered medical home.

C.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 rural health centers (RHCs) in North Carolina were utilized in the CGs. Additionally, for the PCMH CG, CAHs from Maine were also. The final *weighted* PCMH CG composition was 86 percent North Carolina beneficiaries and 14 percent Maine beneficiaries.

During this quarter, the analyses were based on 53 MAPCP Demonstration practices, 49 comparison PCMHs (TINs), and 190 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, the PCMH CG in North Carolina was less likely to be non-White, disabled, or Medicaid dual-eligible. Beneficiaries in both CGs were located in more densely populated areas with higher median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to RHCs and CAHs relative to the demonstration group. In the PCMH CG, the percent of beneficiaries attributed to these types of practices increased by 7 percentage points, whereas in the non-PCMH CG, the percent of beneficiaries attributed to CAHs increased by 9 percentage points.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1.24 percent of weights in the PCMH CG capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-4a
North Carolina: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 31,151)	PCMH (N = 72,319)	STDF	PCMH	STDF
Age	70.0	70.7	-0.05	70.0	0.00
Female	57.6%	59.5%	-0.04	57.6%	0.00
Non-White	18.9%	10.7%	0.23	18.8%	0.00
Disabled	30.3%	25.9%	0.10	30.3%	0.00
Medicaid dual eligible	26.5%	21.0%	0.13	26.5%	0.00
ESRD	0.9%	0.9%	0.00	0.9%	0.00
Institutionalized	0.4%	1.0%	-0.08	0.4%	0.00
HCC risk score	1.04	1.03	0.01	1.05	0.00
Charlson score	0.82	0.82	0.00	0.82	0.00
Population density	91.9	323.0	-0.93	93.8	-0.02
Percent primary care	88%	80%	0.42	88%	0.00
Non-solo primary care	85%	95%	-0.34	85%	0.00
FQHC	0%	0%	—	0%	—
RHC	13%	6%	0.24	13%	0.00
CAH	14%	7%	0.23	14%	0.00
Median household income	37,700	42,900	-0.92	37,800	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 TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-4b
North Carolina: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

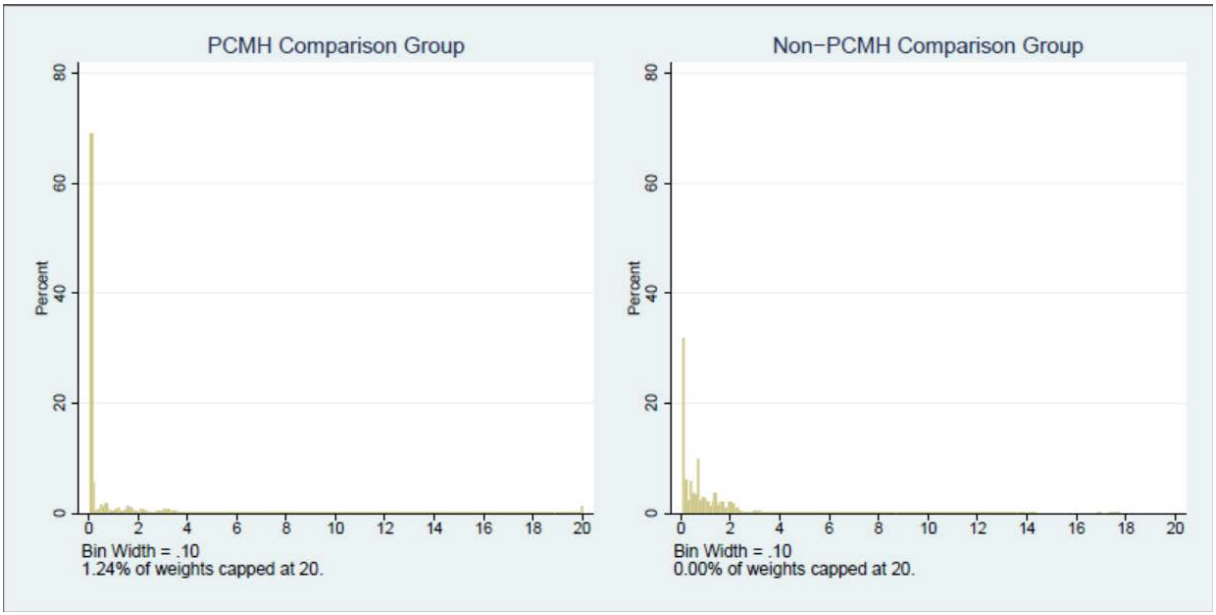
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 31,151)	Non-PCMH (N = 131,242)	STDF	Non-PCMH	STDF
Age	70.0	69.7	0.03	70.0	0.00
Female	57.6%	57.5%	0.00	57.6%	0.00
Non-White	18.9%	16.9%	0.05	18.8%	0.00
Disabled	30.3%	29.8%	0.01	30.3%	0.00
Medicaid dual eligible	26.5%	24.3%	0.05	26.5%	0.00
ESRD	0.9%	1.0%	-0.01	0.9%	0.00
Institutionalized	0.4%	0.9%	-0.06	0.4%	0.00
HCC risk score	1.04	1.03	0.01	1.04	0.00
Charlson score	0.82	0.79	0.02	0.82	0.00
Population density	91.9	213.4	-0.67	92.3	-0.01
Percent primary care	88%	88%	0.01	88%	0.00
Non-solo primary care	85%	79%	0.14	85%	0.00
FQHC	0%	0%	—	0%	—
RHC	13%	13%	0.01	13%	0.00
CAH	14%	5%	0.32	14%	0.00
Median household income	37,700	41,400	-0.60	37,700	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 TIN with more than one primary care provider.

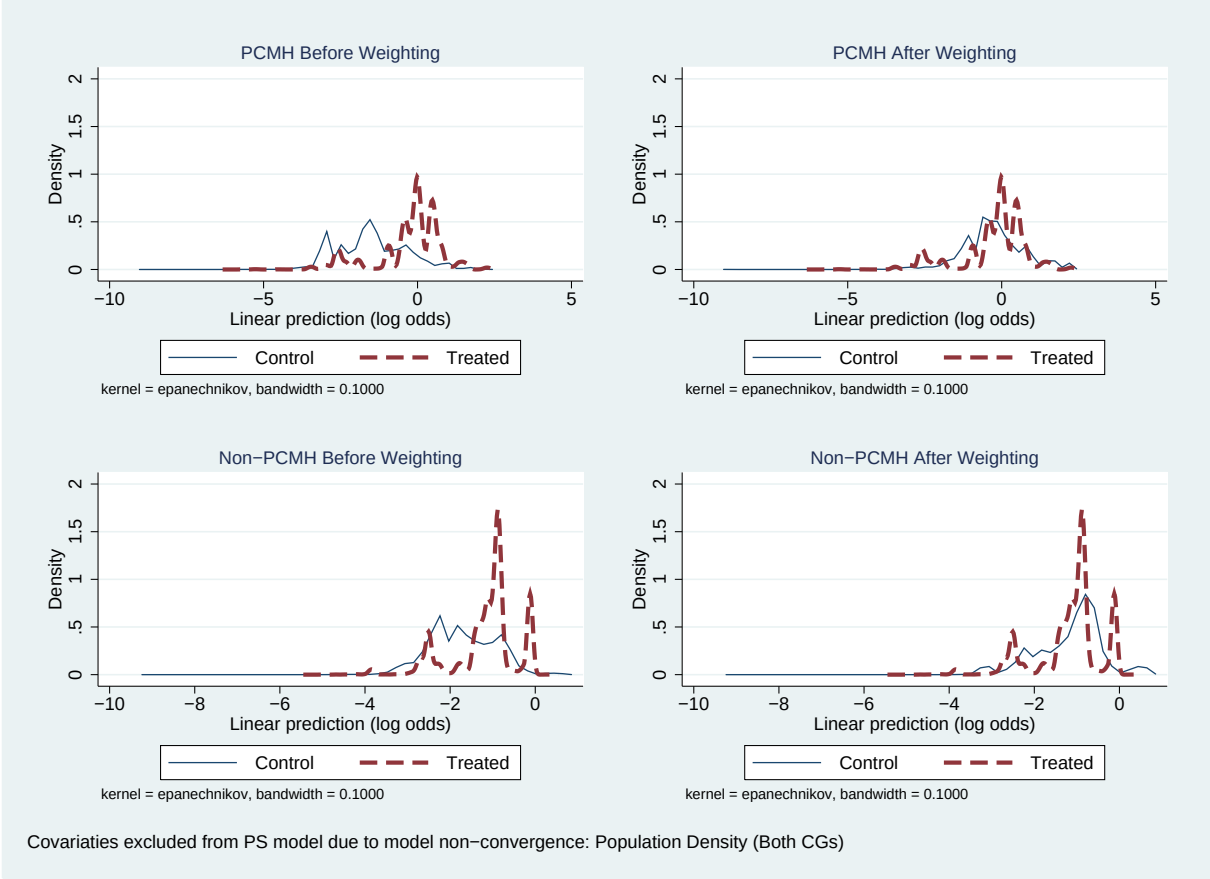
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-4a: Distribution of entropy balance weights in North Carolina



PCMH = patient-centered medical home.

Figure C-4b: Distribution of propensity scores in North Carolina before and after entropy balance weighting



CG = comparison group; PCMH = patient-centered medical home; PS = propensity score.

C.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 sample represented in the analyses included in this report are based on beneficiaries assigned (following Steps 1 and 2 above) to 230 participating HCH practices representing 47 TINs and 100 comparison non-HCHs representing 101 TINs.

Group Comparability

Relative to the demonstration group, the non-PCMH CG beneficiaries in Minnesota were slightly older and less likely to be non-White, disabled, or Medicaid dual eligible. They were also less likely to be institutionalized and, on average, possessed lower Hierarchical Condition Category (HCC) risk and Charlson comorbidity scores. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs and RHCs relative to the demonstration group. In the non-PCMH CG, the percent of beneficiaries attributed to these types of practices decreased by 3 and 6 percentage points, respectively.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed in most regions of the demonstration group's propensity score distribution.

Table C-5a
Minnesota: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

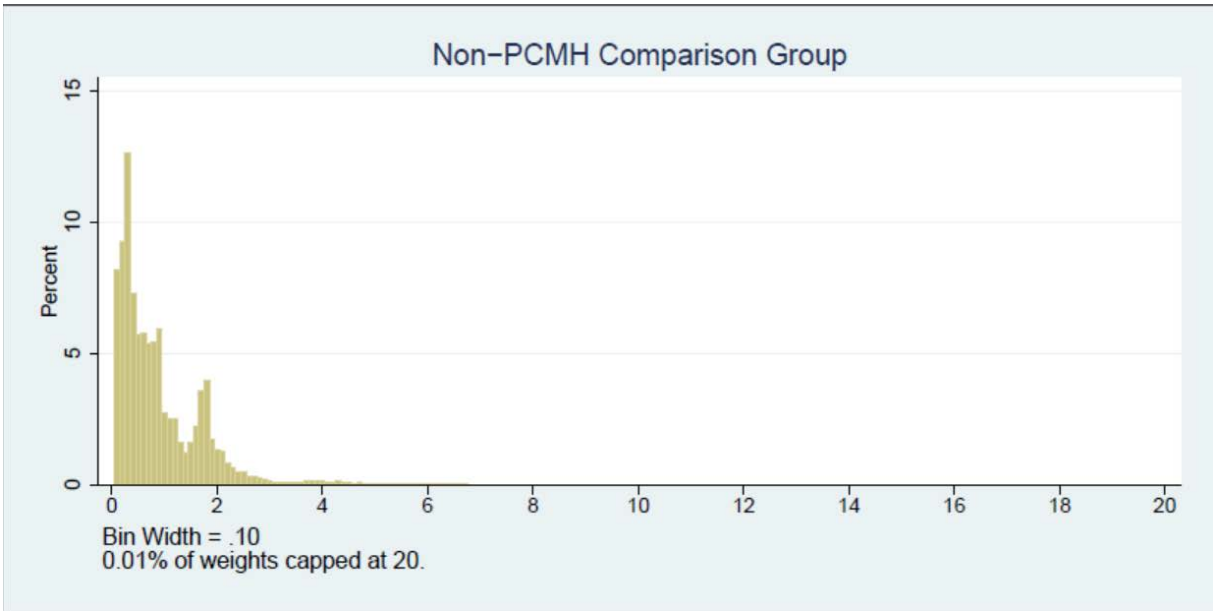
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 107,785)	Non-PCMH (N = 46,095)	STDF	Non-PCMH	STDF
Age	68.9	71.2	-0.15	68.9	0.00
Female	57.3%	56.1%	0.03	57.3%	0.00
Non-White	10.8%	7.3%	0.12	10.8%	0.00
Disabled	33.4%	25.7%	0.17	33.3%	0.00
Medicaid dual eligible	24.2%	16.9%	0.18	24.2%	0.00
ESRD	1.0%	0.9%	0.01	1.0%	0.00
Institutionalized	1.8%	0.3%	0.15	1.8%	0.00
HCC risk score	1.10	1.02	0.09	1.10	0.00
Charlson score	0.83	0.69	0.09	0.83	0.00
Population density	1,071.1	1,160.1	-0.08	1,071.9	0.00
Percent primary care	82%	73%	0.58	82%	0.00
Non-solo primary care	100%	95%	0.31	100%	0.05
FQHC	1%	4%	-0.20	1%	0.00
RHC	3%	9%	-0.23	3%	0.00
CAH	1%	1%	0.04	1%	0.00
Median household income	60,400	61,400	-0.10	60,400	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 TIN with more than one primary care provider.

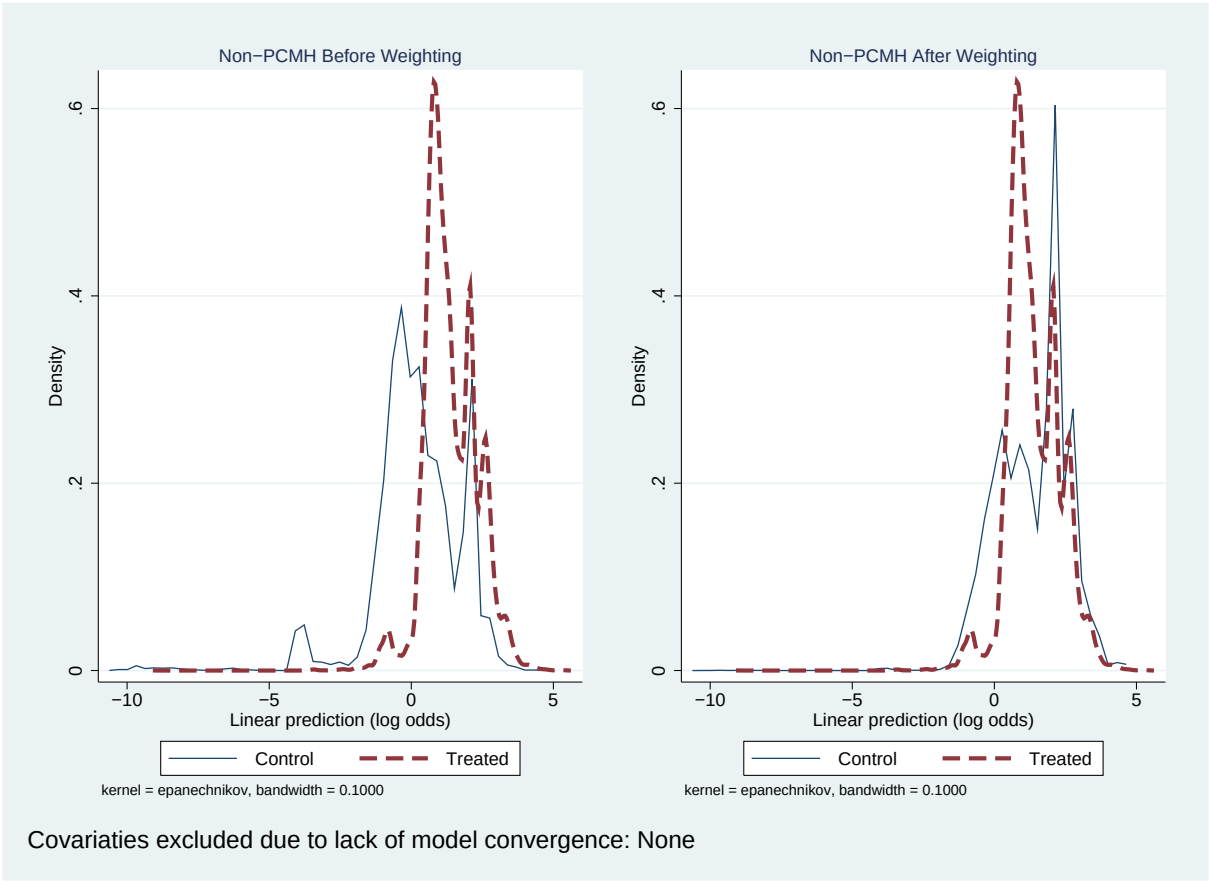
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-5a: Distribution of entropy balance weights in Minnesota



PCMH = patient-centered medical home.

Figure C-5b: Distribution of propensity scores in Minnesota before and after entropy balance weighting



PCMH = patient-centered medical home.

C.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 83 percent Maine beneficiaries and 17 percent New York beneficiaries.

The comparison pool in Maine was reduced by removing practices that were scheduled to be added to the Maine initiative in January 2013. The analyses in this report were based on 73 MAPCP Demonstration practices, 32 comparison PCMHs (TINs), and 111 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, the PCMH CG in Maine was more likely to be non-White but less likely to be disabled or Medicaid dual eligible. The non-PCMH CG was older and also less likely to be disabled or Medicaid dual eligible. Both CGs, on average, possessed lower HCC risk and Charlson comorbidity scores. Beneficiaries in the both CGs were located in more densely populated areas with somewhat higher median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs, RHCs, and CAHs. In the PCMH CG, the percent of beneficiaries attributed to these types of practices increased by 5 and 6 percentage points for FQHCs and RHCs, respectively, and decreased by19 percentage points for CAHs. In the non-PCMH CG, the percent of beneficiaries attributed to FQHCs and RHCs increased by 9 and 4 percentage points, respectively.

Looking at the entropy weights for both CGs, we found that the large majority of weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-6a
Maine: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 53,115)	PCMH (N = 19,609)	STDF	PCMH	STDF
Age	67.5	69.5	-0.14	67.5	0.00
Female	56.0%	56.4%	-0.01	56.0%	0.00
Non-White	2.1%	5.1%	-0.16	2.2%	0.00
Disabled	39.2%	28.5%	0.23	39.2%	0.00
Medicaid dual eligible	47.5%	31.4%	0.33	47.5%	0.00
ESRD	0.6%	0.6%	0.01	0.6%	0.00
Institutionalized	0.4%	0.4%	-0.01	0.4%	0.00
HCC risk score	1.14	1.02	0.12	1.14	0.00
Charlson score	0.94	0.80	0.09	0.94	0.00
Population density	109.0	243.5	-0.24	110.5	-0.01
Percent primary care	86%	71%	0.93	86%	0.00
Non-solo primary care	100%	98%	0.21	100%	0.05
FQHC	22%	17%	0.13	22%	0.00
RHC	11%	5%	0.23	11%	0.00
CAH	9%	28%	-0.49	9%	0.00
Median household income	46,500	51,500	-0.72	46,500	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 TIN 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.

Table C-6b
Maine: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

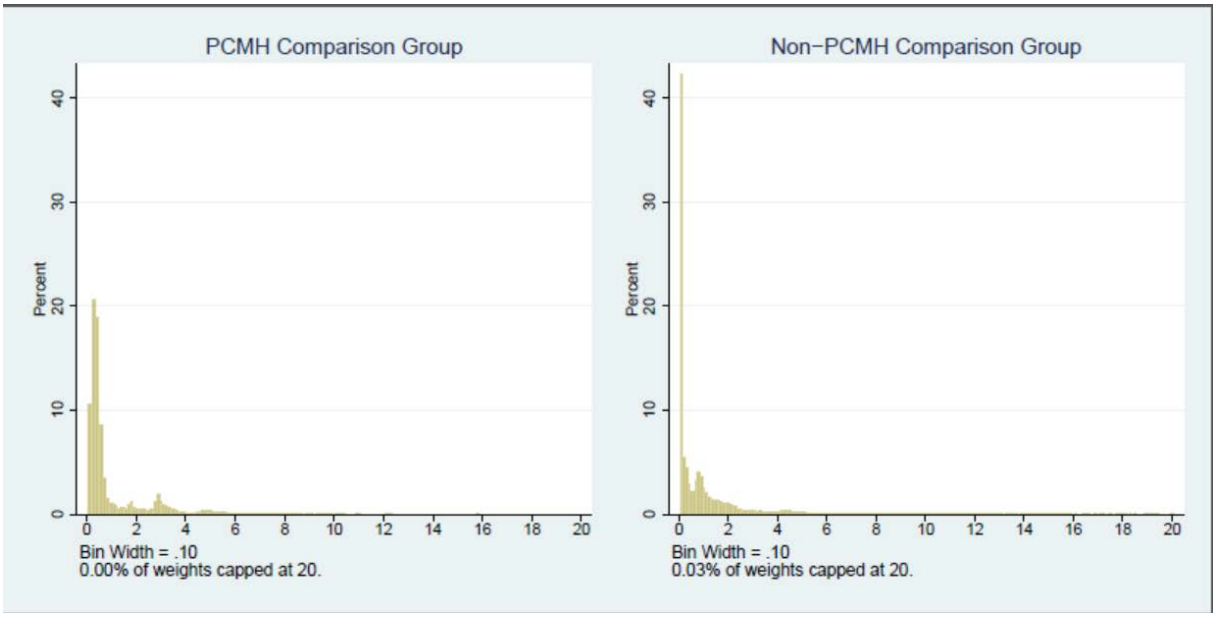
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 53,115)	Non-PCMH (N = 45,960)	STDF	Non-PCMH	STDF
Age	67.5	71.2	-0.26	67.5	0.00
Female	56.0%	57.7%	-0.03	56.0%	0.00
Non-White	2.1%	2.0%	0.01	2.1%	0.00
Disabled	39.2%	27.1%	0.26	39.0%	0.00
Medicaid dual eligible	47.5%	35.8%	0.24	47.4%	0.00
ESRD	0.6%	0.4%	0.03	0.6%	0.00
Institutionalized	0.4%	0.5%	-0.02	0.4%	0.00
HCC risk score	1.14	1.05	0.09	1.14	0.00
Charlson score	0.94	0.80	0.09	0.94	0.00
Population density	109.0	132.3	-0.22	109.7	-0.01
Percent primary care	86%	78%	0.46	86%	-0.01
Non-solo primary care	100%	75%	0.81	99%	0.16
FQHC	22%	13%	0.23	22%	0.01
RHC	11%	7%	0.14	11%	0.00
CAH	9%	10%	-0.02	9%	0.00
Median household income	46,500	49,200	-0.41	46,500	-0.01

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TIN with more than one primary care provider.

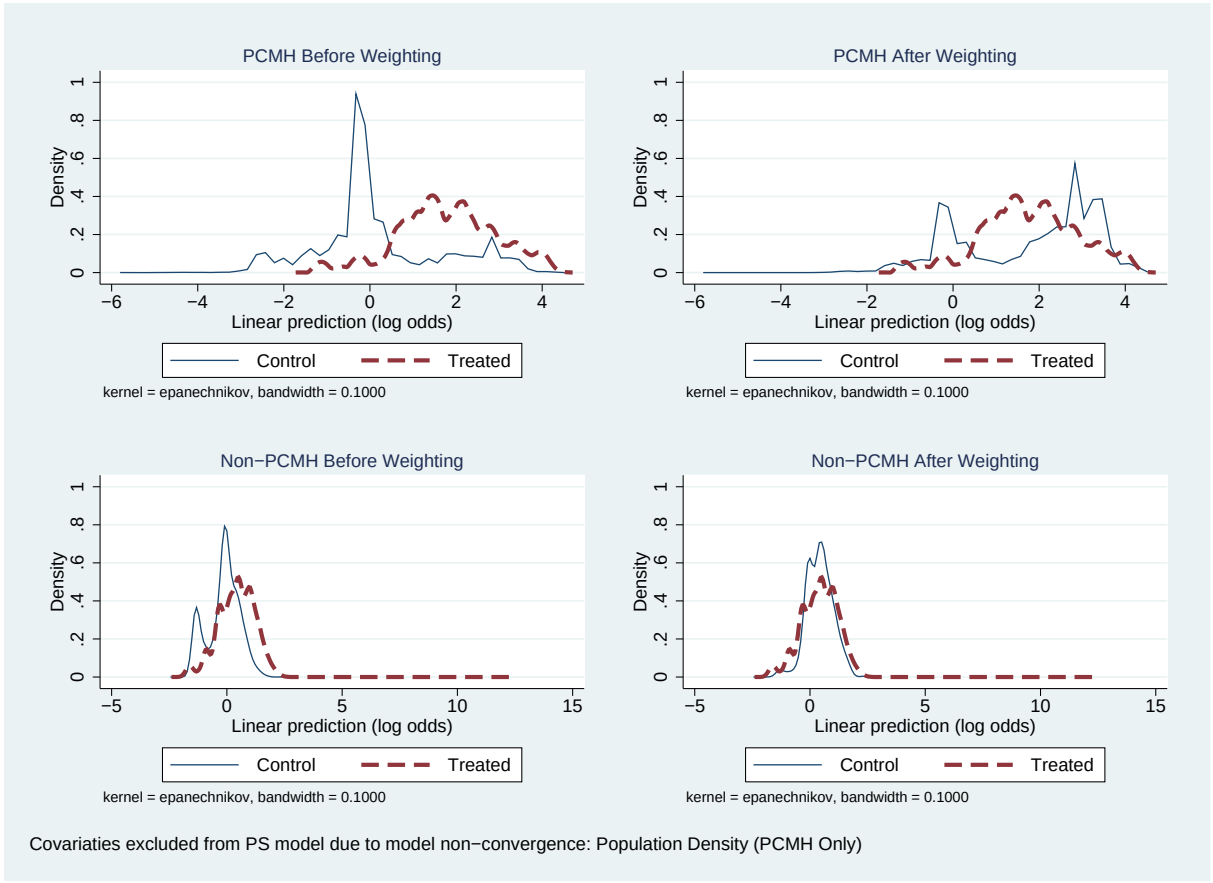
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-6a: Distribution of entropy balance weights in Maine



PCMH = patient-centered medical home.

Figure C-6b: Distribution of propensity scores in Maine before and after entropy balance weighting



PCMH = patient-centered medical home; PS = propensity score.

C.8 Michigan Demonstration and Comparison Groups

Michigan is the largest of the MAPCP Demonstration sites, covering 42 counties including portions of the Upper Peninsula. A 20 percent random sample of nondemonstration 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 analyses in this report are based on 387 MAPCP Demonstration practices, 50 comparison PCMHs (TINs), and 180 comparison non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, both the PCMH and non-PCMH CGs in Michigan were younger and more likely to be non-White, disabled, and Medicaid dual eligible. Beneficiaries in both CGs also possessed, on average, slightly higher HCC risk and Charlson comorbidity scores. All groups (demonstration and comparison) exhibited similar average population densities, although non-PCMH beneficiaries tended to come from areas with slightly lower median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of beneficiaries attributed to FQHCs, RHCs, and CAHs. In the PCMH CG, the percent of beneficiaries attributed to these types of practices decreased by 9 and 4 percentage points for FQHCs and RHCs, respectively. In the non-PCMH CG, the percent of beneficiaries attributed to FQHCs and RHCs decreased by 5 and 24 percentage points, respectively.

Looking at the entropy weights for both CGs, we found that all weights fell in the range of 0.05 through 5, with no weights capped at 20. Common support was observed across both CGs in all regions of the demonstration group's propensity score distribution.

Table C-7a
Michigan: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 270,427)	PCMH (N = 23,098)	STDF	PCMH	STDF
Age	70.5	67.2	0.24	70.5	0.00
Female	58.1%	56.9%	0.03	58.1%	0.00
Non-White	13.8%	20.3%	-0.17	13.8%	0.00
Disabled	26.4%	37.9%	-0.25	26.4%	0.00
Medicaid dual eligible	15.8%	26.8%	-0.27	15.8%	0.00
ESRD	1.1%	1.4%	-0.03	1.1%	0.00
Institutionalized	0.7%	1.1%	-0.05	0.7%	0.00
HCC risk score	1.07	1.17	-0.09	1.07	0.00
Charlson score	0.84	0.96	-0.07	0.84	0.00
Population density	946.3	929.7	0.02	946.3	0.00
Percent primary care	89%	87%	0.13	89%	0.00
Non-solo primary care	94%	75%	0.53	94%	0.00
FQHC	4%	13%	-0.34	4%	0.00
RHC	6%	10%	-0.15	6%	0.00
CAH	0%	0%	—	0%	—
Median household income	49,400	48,900	0.05	49,400	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 TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-7b
Michigan: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

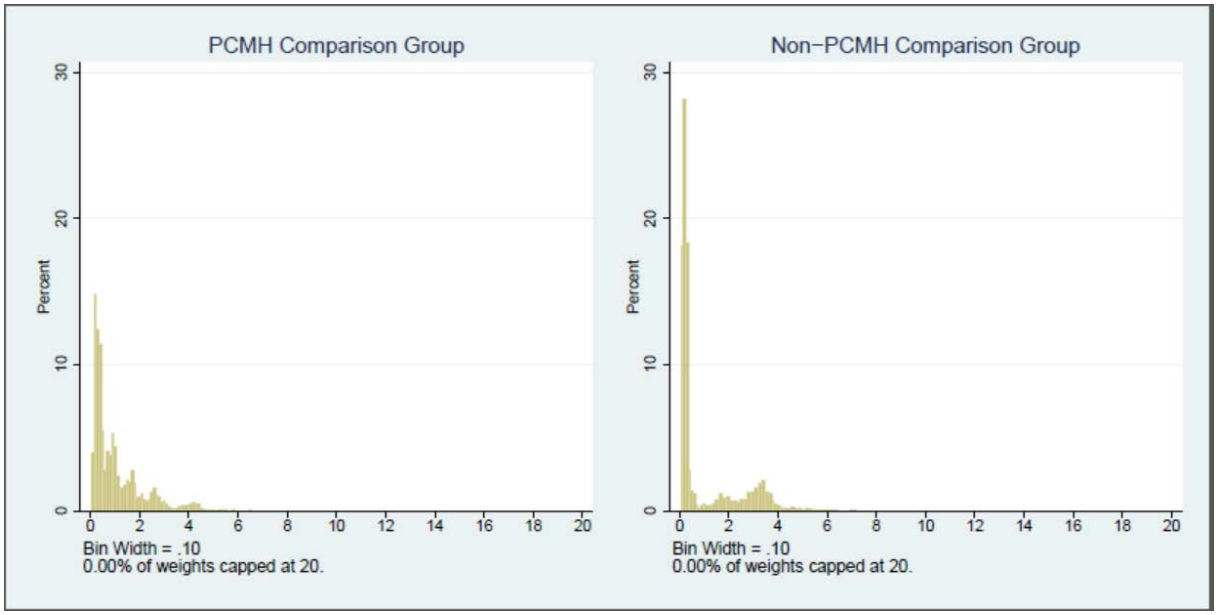
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 270,427)	Non-PCMH (N = 62,684)	STDF	Non-PCMH	STDF
Age	70.5	68.7	0.13	70.5	0.00
Female	58.1%	55.1%	0.06	58.1%	0.00
Non-White	13.8%	20.0%	-0.16	13.8%	0.00
Disabled	26.4%	34.2%	-0.17	26.4%	0.00
Medicaid dual eligible	15.8%	25.3%	-0.24	15.8%	0.00
ESRD	1.1%	1.0%	0.00	1.1%	0.00
Institutionalized	0.7%	0.9%	-0.02	0.7%	0.00
HCC risk score	1.07	1.14	-0.07	1.07	0.00
Charlson score	0.84	0.90	-0.04	0.84	0.00
Population density	946.3	996.4	-0.05	946.2	0.00
Percent primary care	89%	91%	-0.13	89%	0.00
Non-solo primary care	94%	66%	0.74	94%	0.00
FQHC	4%	9%	-0.23	4%	0.00
RHC	6%	30%	-0.66	6%	0.00
CAH	0%	0%	—	0%	—
Median household income	49,400	45,900	0.40	49,400	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 TIN with more than one primary care provider.

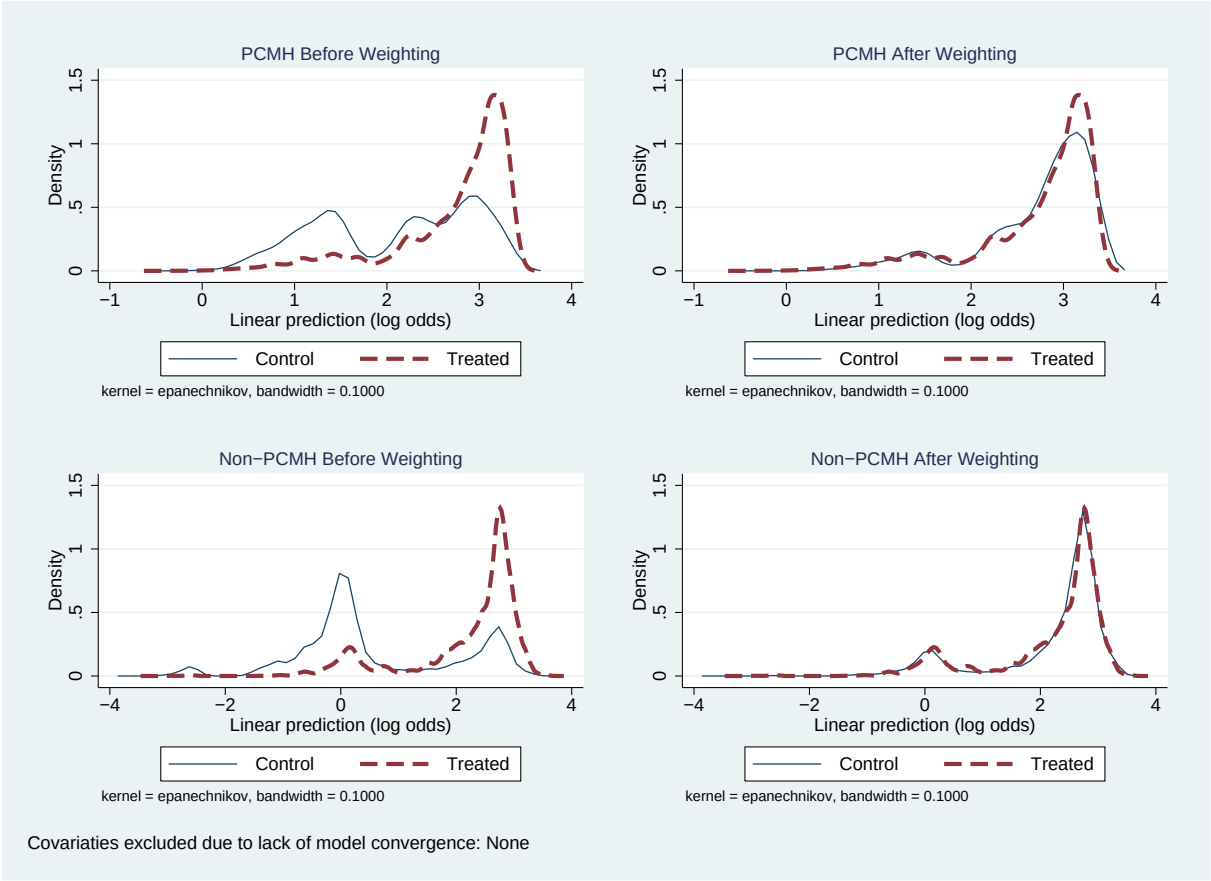
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-7a: Distribution of entropy balance weights in Michigan



PCMH = patient-centered medical home.

Figure C-7b: Distribution of propensity scores in Michigan before and after entropy balance weighting



PCMH = patient-centered medical home.

C.9 Pennsylvania Northeast Demonstration and Comparison Groups

Pennsylvania's initiative occurs in the northeast and southeast regions of the state. Separate CGs were identified for each region, because shared savings were calculated at the regional level. For the estimation of MAPCP Demonstration effects, the statewide sample was used; hence, CGs from both regions were combined.

Northeast Region

The northeast demonstration practices were located in four counties. Comparison beneficiaries were drawn from the same four counties. Because of a dearth 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.

Analyses for the northeast region were based on beneficiaries from 27 MAPCP Demonstration practices, 13 NCQA-recognized comparison PCMHs (TINs), and 110 non-PCMHs (TINs). There were no FQHCs, CAHs, or RHCs among the northeast practices.

Group Comparability

Relative to the demonstration group, the PCMH and non-PCMH CGs were fairly similar to the demonstration group across most beneficiary-level characteristics. Non-PCMH beneficiaries were slightly older than the demonstration group, while PCMH beneficiaries were located, on average, in areas with higher median household incomes. The greatest imbalance was found in practice characteristics. At the practice level in the PCMH group, the average ratio of primary care practitioners to total practitioners was 67 percent, relative to 91 percent among demonstration beneficiaries. At the practice level in the non-PCMH group, the percent of beneficiaries attributed to multipractitioner (non-solo) TINs was 47 percent, relative to 98 percent among demonstration beneficiaries. These overall group differences were eliminated, however, after reweighting by the entropy balance weights.

Looking at the entropy weights for both CGs, we found that all weights fell in the range of 0.05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-8a
Pennsylvania northeast: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 23,646)	PCMH (N = 34,235)	STDF	PCMH	STDF
Age	69.8	70.0	-0.01	69.9	-0.01
Female	58.1%	56.7%	0.03	58.2%	0.00
Non-White	5.2%	6.3%	-0.05	5.1%	0.00
Disabled	28.6%	27.1%	0.03	28.4%	0.00
Medicaid dual eligible	20.8%	18.7%	0.05	20.5%	0.01
ESRD	0.9%	1.0%	-0.02	0.9%	0.00
Institutionalized	0.9%	0.6%	0.03	0.9%	0.00
HCC risk score	1.08	1.07	0.01	1.08	0.00
Charlson score	0.90	0.81	0.06	0.90	0.00
Population density	354.9	324.1	0.09	322.4	0.05
Percent primary care	91%	67%	1.88	91%	0.02
Non-solo Primary care	98%	100%	-0.19	100%	-0.19
FQHC	0%	0%	—	0%	—
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	47,600	50,300	-0.45	47,700	-0.01

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-8b
Pennsylvania northeast: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

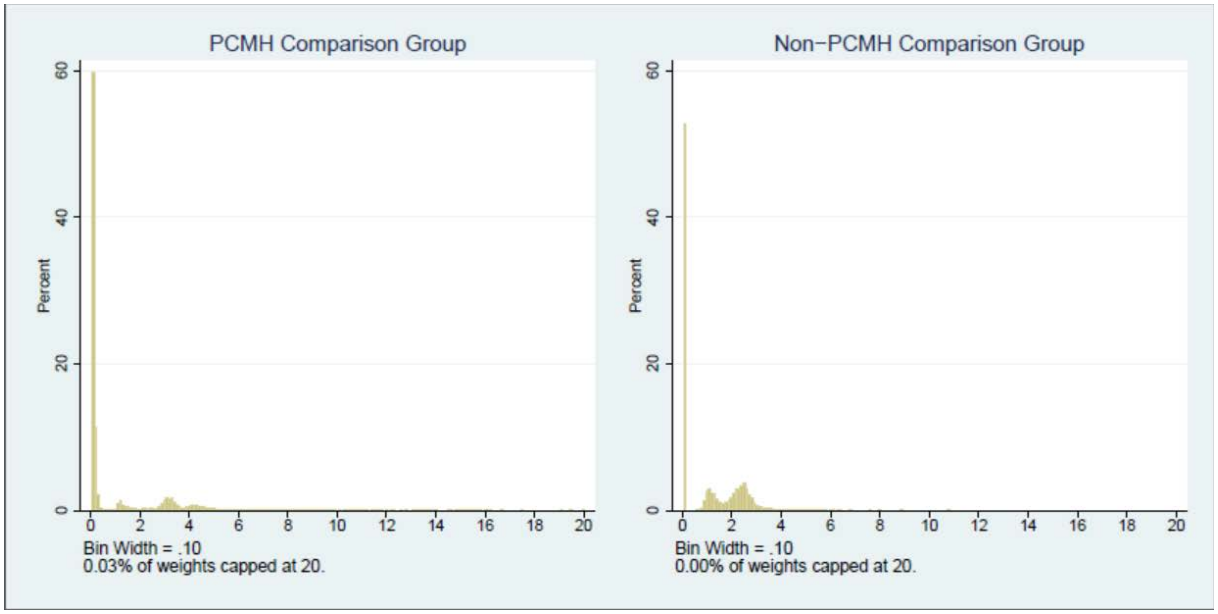
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 23,646)	Non-PCMH (N = 44,390)	STDF	Non-PCMH	STDF
Age	69.8	71.7	-0.15	69.9	0.00
Female	58.1%	59.5%	-0.03	58.2%	0.00
Non-White	5.2%	4.3%	0.04	5.2%	0.00
Disabled	28.6%	25.8%	0.06	28.6%	0.00
Medicaid dual eligible	20.8%	17.8%	0.08	20.7%	0.00
ESRD	0.9%	0.7%	0.02	0.9%	0.00
Institutionalized	0.9%	0.6%	0.03	0.9%	0.00
HCC risk score	1.08	1.09	-0.02	1.08	0.00
Charlson score	0.90	0.84	0.04	0.90	0.00
Population density	354.9	343.3	0.04	354.8	0.00
Percent primary care	91%	92%	-0.07	91%	0.00
Non-solo primary care	98%	47%	1.39	97%	0.06
FQHC	0%	0%	—	0%	—
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	47,600	47,300	0.05	47,600	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 TIN with more than one primary care provider.

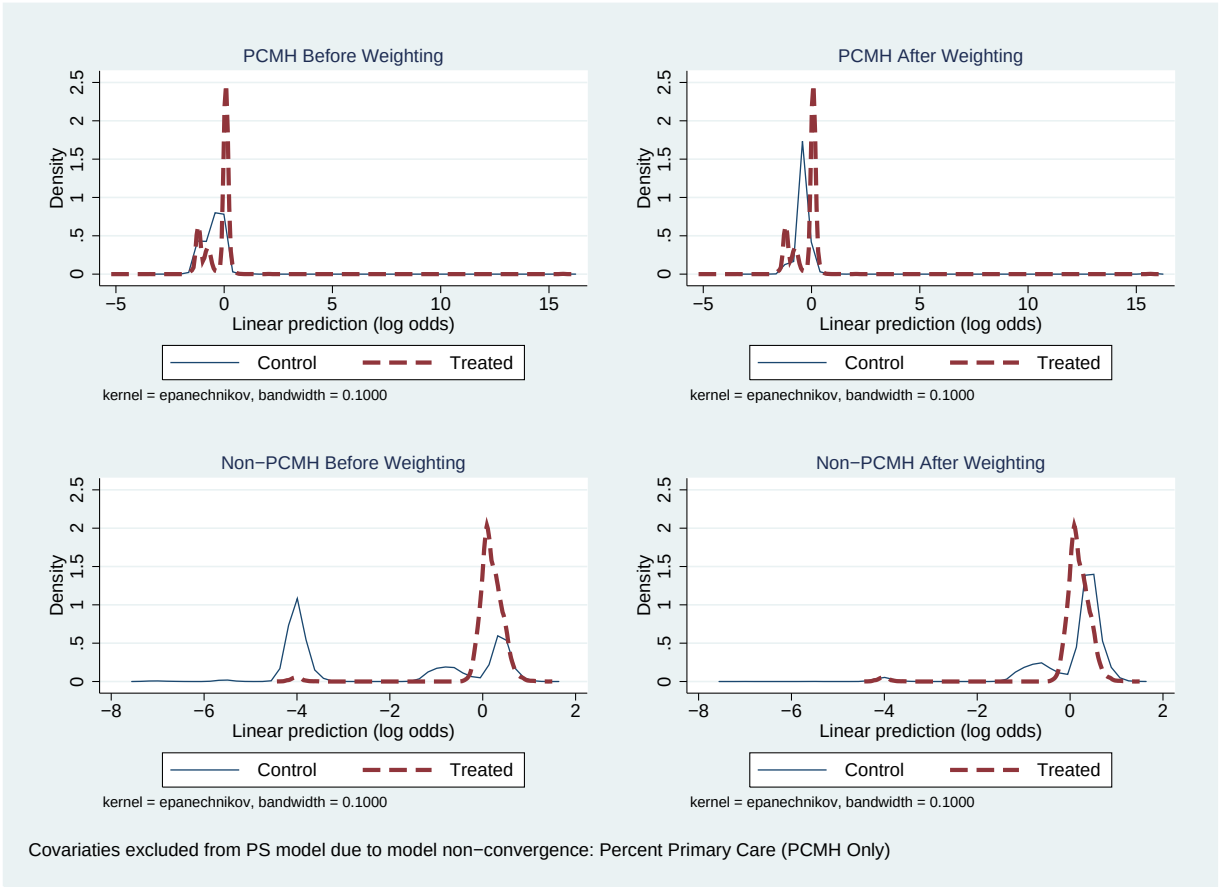
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-8a: Distribution of entropy balance weights in Pennsylvania northeast



PCMH = patient-centered medical home.

Figure C-8b: Distribution of propensity scores in Pennsylvania northeast before and after entropy balance weighting



PCMH = patient-centered medical home; PS = propensity score.

C.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 205 non-PCMHs (TINs).

Group Comparability

Relative to the demonstration group, both the PCMH and non-PCMH CGs in Pennsylvania southeast were less likely to be female and/or non-White. The non-PCMH CG was slightly older, with lower Charlson comorbidity scores and a lower probability of non-White or disabled beneficiaries. Beneficiaries in both CGs were located, on average, in areas of lower population density and higher median household incomes. These average differences were eliminated, however, after reweighting by the entropy balance weights. Weighting also corrected imbalances in the number of comparison beneficiaries attributed to FQHCs. In the PCMH CG, the percent of beneficiaries attributed to FQHCs decreased by 3 percentage points, while in the non-PCMH CG, that percentage decreased by 6 percentage points.

Looking at the entropy weights for both CGs, we found that all weights fell in the range of .05 through 5, with less than 1 percent of weights capped at 20. Common support was observed across both CGs in most regions of the demonstration group's propensity score distribution.

Table C-9a
Pennsylvania southeast: Average characteristics of MAPCP and PCMH comparison beneficiaries before and after weighting

	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 14,574)	PCMH (N = 16,471)	STDF	PCMH	STDF
Age	68.1	68.7	-0.04	68.1	0.00
Female	62.2%	58.2%	0.08	62.2%	0.00
Non-White	40.6%	31.6%	0.19	40.6%	0.00
Disabled	29.1%	30.1%	-0.02	29.1%	0.00
Medicaid dual eligible	23.6%	23.2%	0.01	23.6%	0.00
ESRD	1.8%	1.8%	0.00	1.8%	0.00
Institutionalized	0.8%	0.9%	-0.01	0.8%	0.00
HCC risk score	1.07	1.08	-0.01	1.07	0.00
Charlson score	0.89	0.85	0.02	0.89	0.00
Population density	7,274.7	5,446.0	0.38	7,271.1	0.00
Percent primary care	90%	89%	0.03	90%	0.00
Non-solo primary care	99%	93%	0.32	99%	0.01
FQHC	4%	7%	-0.14	4%	0.00
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	52,600	61,500	-0.45	52,600	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 TIN 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; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Table C-9b
Pennsylvania southeast: Average characteristics of MAPCP and non-PCMH comparison beneficiaries before and after weighting

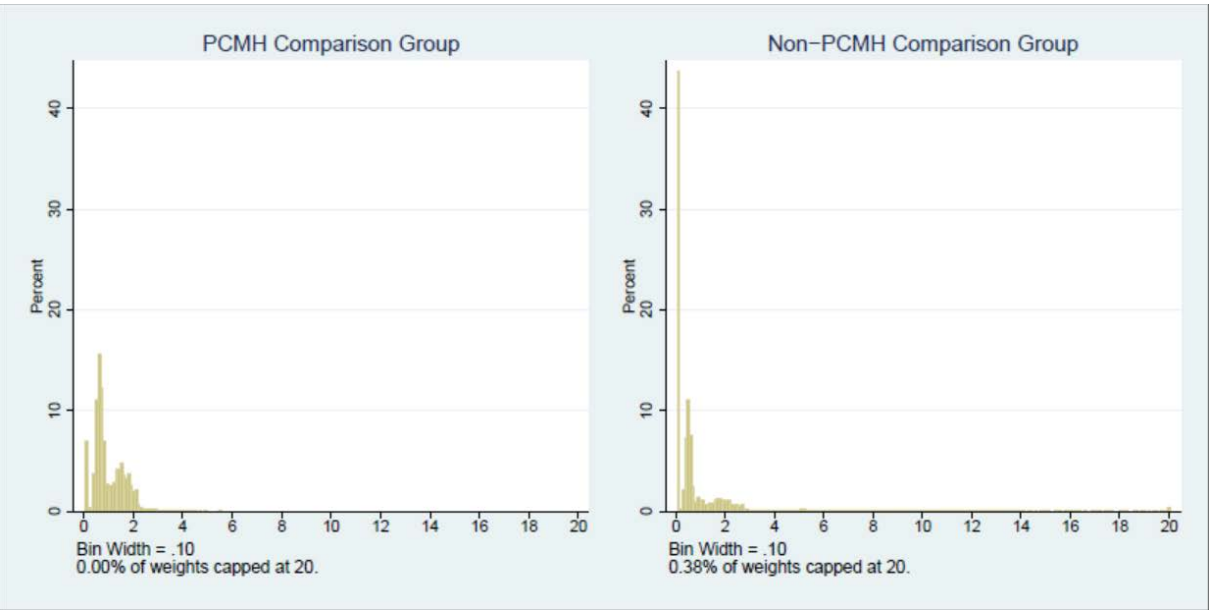
	Unweighted means and standardized differences			Weighted means and standardized differences	
	MAPCP (N = 14,574)	Non-PCMH (N = 58,808)	STDF	Non-PCMH	STDF
Age	68.1	71.0	-0.22	68.2	0.00
Female	62.2%	57.7%	0.09	62.1%	0.00
Non-White	40.6%	20.9%	0.44	40.3%	0.01
Disabled	29.1%	22.5%	0.15	28.9%	0.00
Medicaid dual eligible	23.6%	20.9%	0.06	23.2%	0.01
ESRD	1.8%	1.0%	0.08	1.8%	0.00
Institutionalized	0.8%	1.4%	-0.06	0.8%	0.00
HCC risk score	1.07	1.05	0.02	1.07	0.00
Charlson score	0.89	0.79	0.06	0.89	0.00
Population density	7,274.7	4,888.2	0.51	7,233.6	0.01
Percent primary care	90%	95%	-0.34	90%	-0.02
Non-solo primary care	99%	63%	1.05	98%	0.08
FQHC	4%	10%	-0.24	4%	0.00
RHC	0%	0%	—	0%	—
CAH	0%	0%	—	0%	—
Median household income	52,600	62,800	-0.54	52,700	-0.01

NOTES:

- Percent primary care is the proportion of TIN-associated providers that are primary care. Non-solo primary care is the proportion of TIN with more than one primary care provider.

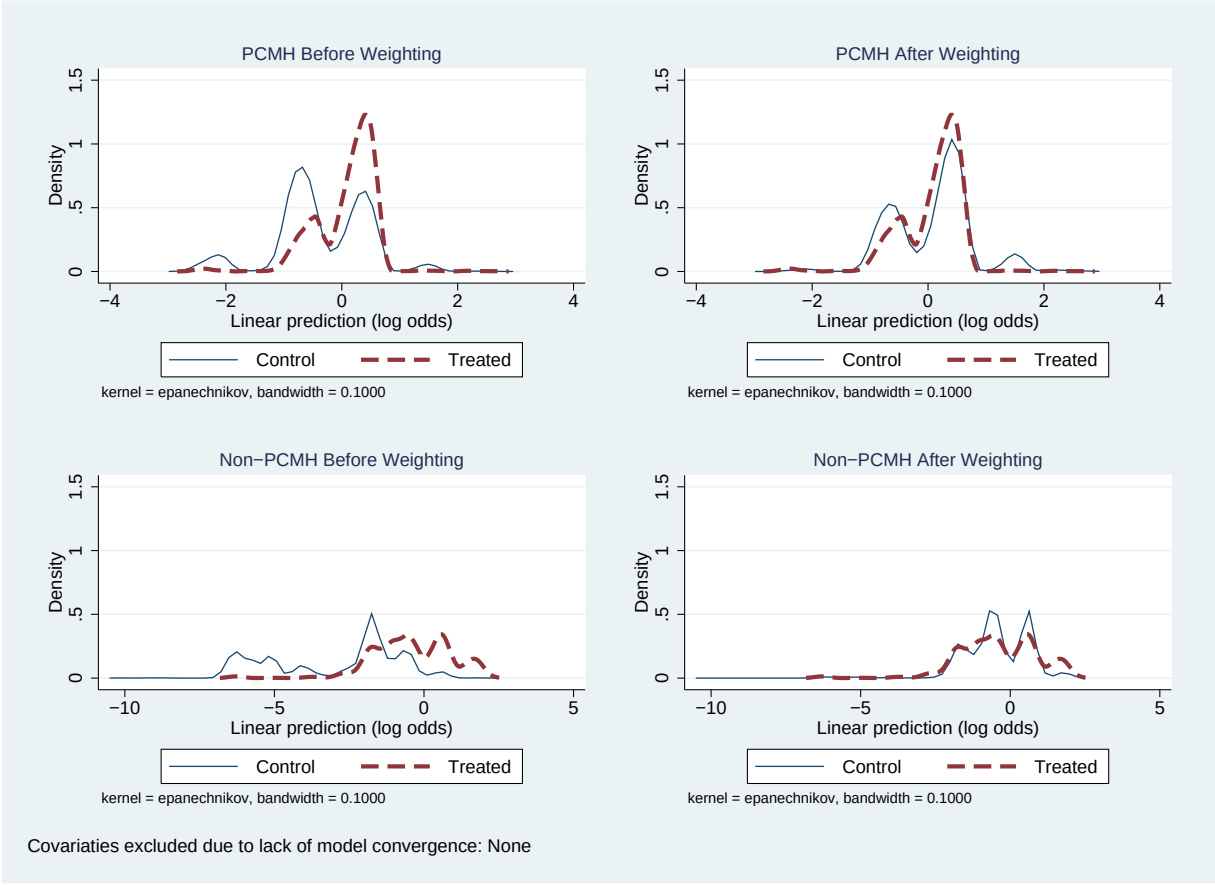
CAH = critical access hospital; ESRD = end-stage renal disease; FQHC = federally qualified health center; HCC = Hierarchical Condition Category; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home; RHC = rural health clinic; STDF = standardized difference; TIN = tax identification number.

Figure C-9a: Distribution of entropy balance weights in Pennsylvania southeast



PCMH = patient-centered medical home.

Figure C-9b: Distribution of propensity scores in Pennsylvania southeast before and after entropy balance weighting



PCMH = patient-centered medical home.

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

D.1 Demographic Characteristics

The following information was obtained from the Medicare Enrollment Data Base:

- Beneficiary age at the time of first assignment to an intervention or comparison group
  - Age less than 65 (%)
  - Ages 65 to 75 (%)
  - Ages 76 to 85 (%)
  - Age greater than 85 (%)
  - 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 (%)—enrolled in Medicaid at any time the year before first assignment
- Disabled (%)—based on Medicare's original reason for entitlement
- End-stage renal disease (ESRD) (%)—at any time the year before first assignment
- Institutionalized (%)—two nursing home visits (*Current Procedural Terminology* [CPT] codes 99324–99337) within 120 days using Medicare claims data for the one year before first assignment

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 fee-for-service (FFS) beneficiaries' health risk scores, which is calculated using the CMS HCC risk adjustment model.

The community HCC risk score was calculated for beneficiaries using claims one year before their initial assignment to a MAPCP Demonstration provider 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.

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

Beneficiaries were then 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 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

[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.

- 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. Below is the list of International Classification of Diseases, Ninth Revision (ICD-9), 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
- Dementias = 290
- Strokes = 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

D.3 Practice and Area-Level Characteristics

Practice type. A dummy indicator was created using the Provider ID on the 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).

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 that were primary care providers. This measure was created from the claims data, using provider specialty data for the unique providers that billed to a practice.

Size of the assigned practice. A binary variable was constructed to indicate whether 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 claims data, using the number of unique providers that billed to a practice.

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

Medicare MAPCP Demonstration fee payments. We removed MAPCP Demonstration service payments before calculating the expenditures by removing Medicare payments made to participating patient-centered medical homes (PCMHs) for fees associated with codes on the Part A or B claims, as shown in ***Table D-1***.

Table D-1
HCPCS codes used for billing for medical home services 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

(continued)

Table D-1 (continued)
HCPCS codes used for billing for medical home services for attributed Medicare beneficiaries

State	Procedure code
Pennsylvania	G9008 G9002 G9005 G9009 G9010
Rhode Island	G9002 G9005 G9151 G9152
Vermont	G9008 G9152

HCPCS = Healthcare Common Procedure Coding System.

Quarterly Medicare expenditures. Per beneficiary per month (PBPM) expenditure calculations included Medicare expenditures only and excluded third-party and beneficiary liability payments. Medicare 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 Medicare expenditures*. Overall expenditure amounts from the physician, inpatient, skilled nursing facility (SNF), OPD, home health, hospice, and durable medical equipment files. Paid amount was used in all expenditure calculations.
2. *Total Medicare expenditures for services with a primary diagnosis of a behavioral health condition*. Total Medicare 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 Medicare expenditures for services with a primary diagnosis of a behavioral health condition*. Total Medicare 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*. Identified using provider numbers 0001–0879 (traditional acute-care hospitals) and 1300–1399 (CAHs).
5. *Emergency room (ER) visits and observation stays*. Facility and physician expenditures for ER visits and observation stays that did not lead to hospitalization. Facility expenditures for ER visits that did not lead to a hospitalization were identified in the 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 where only radiological or pathology/laboratory services were provided). Physician claims were identified on the physician file using BETOS = M3x.

6. *Post-acute-care*. Combined expenditures for SNFs, long-term care hospitals (LTCHs), rehabilitation hospitals, and distinct part units; skilled nursing facilities (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 outpatient department*. Payments from the OPD file including FQHCs and RHCs and ER/observation beds (see F) and including ESRD clinics (type of bill = 72x) from the inpatient file. FQHC and RHCs were identified using the OPD file, select 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 specialties, excluding laboratory, imaging, and ER (see ***Table D-2***).

Table D-2
Primary care and specialty care provider specialties

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 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

(continued)

Table D-2 (continued)
Primary care and specialty care provider specialties

Specialty providers (continued)	
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. Count of all admissions reported in the inpatient file for that quarter. Some records in the inpatient claims file may appear to be multiple admissions, but 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).

Behavioral health inpatient hospitalizations. Defined as described above for all-cause hospitalizations, but with the additional criteria 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 (ER) visits. Count of ER visits not leading to hospitalization. ER visits that did not lead to hospitalization were identified on the Outpatient Department (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 where only radiological or pathology/laboratory services were provided). This was only applicable for OPD claims.

Behavioral health ER visits. Defined as described above for ER visits, but with the additional criteria 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.

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

- Deceased discharge status = 20, 41
- Beneficiary did not remain eligible for the demonstration for the full 30-day follow-up period.
- Included acute-care psychiatric claims in the creation of unplanned admissions, but did not include psychiatric unit or psychiatric facility claims.

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

- Admissions for maintenance chemotherapy or rehabilitation.
- 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's (AHRQ) Clinical Classification

Software (CCS), we collapsed ICD-9 codes into 231 mutually exclusive procedure categories. Next, 33 CCS procedure code categories and 5 additional ICD-9 procedure codes were identified as indicative of a planned admission (see ***Table D-3***).

Table D-3
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 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; OR = operating room.

To determine which of these potentially planned readmissions were actually 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 codes developed by the Yale researchers. The AHRQ CCS was used to collapse the ICD-9 codes into 285 mutually exclusive condition categories. Next, a list of 34 CCS condition categories were identified as indicative of an acute condition or complication of care (see ***Table D-4***).

Table D-4
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	Congestive heart failure; 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	Chronic obstructive pulmonary disease 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.

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's Prevention Quality Indicators (PQIs).[2] The nine ACSCs include the following:

- 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
- 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's PQIs. The three ACSCs include the following:

- 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's PQIs.

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 with a type 1 or type 2 diabetes claims-based diagnosis of diabetes, we present the percentage that had

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[2] 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.

- Low-density lipoprotein cholesterol (LDL-C) screening.
- HbA1c testing.
- Retinal eye examination.
- Medical attention for nephropathy.
- All four diabetes tests.
- None of the four diabetes tests.

See ***Table D-5, D-6,*** and ***D-7*** for the detailed specifications for these measures.

For beneficiaries 18 years of age and older with a diagnosis of ischemic vascular disease (IVD), we present the percentage that had a total lipid panel test. See ***Tables D-8*** and ***D-9*** for the detailed specification for this measure.

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 restriction 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 non-acute encounters with a diabetes diagnosis, or at least one acute inpatient visit with a diabetes diagnosis. 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 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
- A nephrologist visit was identified by specialty-provider code (no restriction on the diagnosis or procedure code submitted)

Beneficiaries were considered to have IVD if they had, in the demonstration year and the year before the demonstration year (2 years) at least one outpatient or non-acute 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.

Comprehensive Adult Diabetes Care (CDC)

For consistent comparisons over time, 2012 specifications were used across all years.

Table D-5
Diabetes quality of care measures specification

Description	
The percentage of patients 18–75 years of age with type 1 or type 2 diabetes who had each of the following	
▪ Hemoglobin A1c (HbA1c) testing ▪ Eye exam (retinal) performed ▪ LDL-C screening	▪ Medical attention for nephropathy ▪ All 4 measures ▪ None of the 4 measures
Eligible population	
Age	18–75 years of age at the beginning of the measurement year
Patient inclusion criteria	Continuous FFS Part A and Part B enrollment in the measurement year Did not have any months of Medicare Advantage (HMO flag from Denominator file) in the year Did not have any months of Medicare as a secondary payer due to working age in the year ▪ Baseline Year One (7/1/09–6/30/10) (365 days)—for cohort 1 (Vermont, Rhode Island, New York) ▪ Baseline Year One (10/1/09–9/30/10) (365 days)—for cohort 2 (North Carolina) ▪ Demonstration Year One (1/1/11–12/31/11) (365 days)
Event/diagnosis	Use claims data to identify diabetic patients Claims data. Patients who had two face-to-face encounters in an outpatient setting or non-acute inpatient setting on different dates of service, with a diagnosis of diabetes (ICD-9-CM codes 250, 357.2, 362.0, 366.41, 648.0), or one face-to-face encounter in an acute inpatient or emergency room setting, with a diagnosis of diabetes, during the measurement period (Baseline Year or Demonstration Year) or the year before either of these years. Services occurring over both years could be counted. Refer to Table D-6 for codes to identify the visit type. To clarify, patients were considered to have diabetes if, in the measurement year (Baseline Year or Demonstration Year) or the year before either of these measurement years, they had: ▪ At least two outpatient or non-acute encounters (see Table D-6) in the Part A outpatient claims or Part B Carrier claims with a diabetes diagnosis (ICD-9-CM codes 250, 357.2, 362.0, 366.41, 648.0), or ▪ At least one acute inpatient visit (see Table D-6) in the Part A inpatient claims with a diabetes diagnosis (ICD-9-CM codes 250, 357.2, 362.0, 366.41, 648.0). Dates for establishing diabetes diagnosis: ▪ New York, Rhode Island, Vermont Q1 and Q2 assigned (Baseline Year plus 1 year prior) – Baseline Year One = 7/1/08–6/30/10 (2 years) ▪ North Carolina Q2 assigned (Baseline Year plus 1 year prior) – Baseline 1 = 10/1/08–9/30/10 (2 years) ▪ New York, Rhode Island, Vermont, and North Carolina) (Demonstration Year plus 1 year prior) – Demonstration Year One = 1/1/10–12/31/11 (2 years)
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).

CDC = comprehensive adult diabetes care; FFS = fee for service; HMO = health maintenance organization.

Table D-6
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
Non-acute 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

CDC = comprehensive adult diabetes care; CPT = Current Procedural Terminology; ER = emergency room.

Table D-7
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 edition, Clinical Modification.

Diabetes Quality of Care Measures: Numerators

- *HbA1c testing.* An HbA1c test performed during the measurement year as identified by claim/ encounter or electronic laboratory data. Use code 83036 or 83037.

- *Eye exam.* An eye screening for diabetic retinal disease as identified by electronic 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. Following are the codes used to identify eye exams:[3]

  – 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

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

- HCPCS: S0620, S0621, S0625,[4] 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 claim/encounter or automated laboratory data. Use code 80061, 83700, 83701, 83704, or 83721.

- *Medical attention for nephropathy.* Nephropathy screening test ***or*** evidence of nephropathy, as documented through electronic data.

- *Nephropathy screening test.* Nephropathy screening test during the measurement year, as identified by a claim in the physician and OPD files. Use 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: 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: 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 consistent comparisons over time, 2012 specifications were used across all years.

[4] 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.

Table D-8
Ischemic vascular disease quality of care measure specification

Description	
The percentage of patients 18 years of age and older who had a diagnosis of IVD during the measurement year and the year before the measurement year and who had the following during the measurement year: ▪ Complete lipid profile	
Eligible population	
Age	18 years of age or older at the beginning of the measurement year
Patient inclusion criteria	Continuous FFS Part A and Part B enrollment in the measurement year Did not have any months of Medicare Advantage (HMO flag from Denominator file) in the year Did not have any months of Medicare as a secondary payer due to working age in the year ▪ Baseline Year One (7/1/09–6/30/10) (365 days)—for cohort 1 (Vermont, Rhode Island, New York) ▪ Baseline Year One (10/1/09–9/30/10) (365 days)—for cohort 2 (North Carolina) ▪ Demonstration Year One (1/1/11–12/31/11) (365 days)
Event/diagnosis	Patients who had IVD and met at least one of the two criteria below, during both the measurement year (Baseline Year or Demonstration Year) and the year before either of these measurement years. Criteria need not be the same across both years. ▪ At least one outpatient visit (see Table D-9) 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-9) 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) Time periods for 2-year identification ▪ New York, Rhode Island, Vermont Q1 and Q2 assigned (Baseline Year plus 1 year prior) – Baseline Year One = 7/1/08–6/30/10 (2 years) ▪ North Carolina Q2 assigned (Baseline Year plus 1 year prior) – Baseline Year One = 10/1/08–9/30/10 (2 years) ▪ New York, Rhode Island, Vermont, and North Carolina (Demonstration Year plus 1 year prior) – Demonstration Year One = 1/1/10–12/31/11 (2 years)
Exclusions	None

FFS = fee for service; HMO = health maintenance organization; IVD = ischemic vascular disease.

Table D-9
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.

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 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.

Mortality. Identified according to date of death in the Medicare Enrollment Data Base file.

D.7 Access to and Coordination of Care

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

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

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 medical home practice or providers seen through a referral from the medical home practice were counted as a single provider and all unreferred providers were counted individually.

The continuity of care index produces a score between 0 and 1, where 1 is the highest care continuity. The continuity of care 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 12-month period, but they must have had at least three ambulatory visits during the 12-month period to calculate the index.

ER visits not leading to hospitalization. Count of all ER visits, including visits not leading to hospitalization. ER visits not leading to hospitalization were identified on the OPD claims file using revenue center line items equal to 045X or 0981 (emergency room 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 where only radiological or pathology/laboratory services were provided). This was applicable only for OPD claims. We limited counts of ER visits to one per day.

Primary care visits. Count of visits identified using selected E&M CPT codes in the physician file provided by select 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.)

Specialist care visits. Count of visits identified using selected E&M CPT codes in the physician file provided by select primary 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.)

Surgical specialty visits. Count of visits identified using selected E&M CPT codes in the physician file provided by select primary 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.)

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 3rd digit)
   v. Swing-bed hospital designation (provider ID: U, W, Y, Z in 3rd 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 long-term care hospital

   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.

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

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 are weighted by the final analytic weight. This weight equals the product of the beneficiary's quarterly eligibility fraction and, in the case of the comparison group, their entropy balanced weight. 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 in the case of the quality of care measures, this means four-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 accounted for 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 who are not yet attributed.

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New York E1-1
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	89.9	91.6	86.2	62.7	57.9	59.6	86.2	85.0	83.8	54.1	51.8	49.1
Pre-3	90.0	91.1	87.6	64.4	57.6	57.5	84.9	84.9	85.6	56.4	52.8	52.1
Pre-2	89.7	90.3	85.7	64.4	55.8	56.9	85.6	84.2	81.7	57.2	57.1	50.8
Pre-1	89.5	89.2	85.6	60.7	54.0	55.6	84.6	81.2	82.4	60.5	60.4	50.9
Post-1	90.8	91.0	86.4	61.6	53.2	53.9	83.8	81.6	79.7	60.3	60.4	50.8
Post-2	91.1	89.8	88.0	63.5	56.0	52.4	84.9	81.7	81.7	60.0	64.5	51.2

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	34.5	30.2	29.0	3.0	3.1	4.9	80.0	80.0	79.5
Pre-3	35.3	30.3	28.7	3.6	2.6	3.9	77.7	79.7	80.2
Pre-2	36.2	30.2	27.4	3.2	3.3	5.8	77.5	79.2	76.6
Pre-1	36.4	30.8	27.4	3.6	3.5	4.2	76.6	76.0	75.8
Post-1	36.1	29.8	27.3	3.3	3.4	5.3	74.5	74.3	72.5
Post-2	38.3	34.4	27.1	3.6	3.4	4.2	75.5	73.4	74.6

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-2
Quarterly 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	4.7	5.2	3.4	9.9	7.8	10.3	3.8	3.8	4.0	6.1	4.0	6.3
2009:Q4	5.0	5.6	6.3	11.0	11.1	9.7	4.2	5.5	4.9	6.8	5.6	4.8
2010:Q1	5.7	6.1	6.7	12.6	11.6	10.5	5.1	5.3	4.2	7.5	6.3	6.4
2010:Q2	4.2	5.8	4.9	12.2	9.1	9.6	4.9	3.8	3.3	7.2	5.3	6.3
2010:Q3	6.7	4.5	6.0	10.7	9.4	10.0	4.8	4.9	4.8	5.9	4.5	5.2
2010:Q4	5.7	5.9	7.0	11.3	15.8	10.4	5.3	6.8	4.4	6.0	9.1	6.0
2011:Q1	6.6	5.4	7.3	13.0	12.9	14.7	5.5	5.1	6.2	7.5	7.8	8.5
2011:Q2	6.7	7.0	5.3	14.5	16.0	15.8	5.9	6.4	7.1	8.6	9.6	8.7
2011:Q3	7.7	7.9	7.0	12.7	14.7	15.1	5.0	7.0	6.7	7.7	7.7	8.4
2011:Q4	8.7	7.7	8.2	15.0	15.8	17.5	6.3	7.8	8.0	8.7	8.0	9.5
2012:Q1	8.6	9.8	9.5	17.6	21.7	19.6	6.3	8.5	8.5	11.3	13.1	11.1
2012:Q2	9.6	8.5	9.6	14.8	17.2	15.0	5.9	8.1	5.2	8.9	9.1	9.8
2012:Q3	9.0	9.0	9.7	13.8	15.1	17.0	5.2	6.7	8.6	8.6	8.4	8.4
2012:Q4	8.6	11.6	14.0	16.2	16.3	18.8	5.8	6.3	9.5	10.4	10.0	9.4
2013:Q1	9.5	11.6	10.0	18.7	19.3	19.0	7.6	6.8	8.3	11.1	12.5	10.7
2013:Q2	9.5	10.0	9.8	14.5	17.2	16.7	6.6	7.0	8.1	8.0	10.2	8.6

NOTES:

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

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

New York E1-3
Quarterly 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	771.2	819.0	891.1	565.7	576.6	588.4	126.4	136.6	129.0	146.0	127.4	168.8	666.5	673.2	634.3
2009:Q4	791.0	831.4	903.8	599.6	593.3	609.6	125.9	132.2	116.5	138.6	134.5	206.8	565.7	679.5	693.0
2010:Q1	780.7	799.0	860.7	627.4	611.5	621.1	152.1	146.5	143.0	154.8	154.5	144.3	626.1	713.9	668.6
2010:Q2	831.2	895.6	941.6	696.3	719.2	713.1	170.3	169.6	147.1	131.3	147.3	142.1	614.3	682.1	625.0
2010:Q3	777.5	809.6	865.7	641.8	673.6	663.5	157.5	166.5	152.9	147.0	137.6	168.6	583.3	662.2	670.0
2010:Q4	777.1	831.0	854.7	671.6	683.4	671.1	151.1	153.6	140.1	143.1	184.3	159.2	591.4	656.2	595.3
2011:Q1	748.8	795.2	818.8	633.2	643.2	623.1	155.3	153.5	133.9	147.6	152.6	152.9	711.0	752.7	670.4
2011:Q2	812.9	871.4	888.0	693.0	739.4	703.4	166.4	170.9	142.4	176.7	156.0	158.0	757.5	751.2	726.8
2011:Q3	761.2	784.6	819.9	638.1	661.3	654.8	162.4	161.2	143.9	181.8	184.2	193.1	717.1	774.1	686.2
2011:Q4	770.4	804.8	795.2	677.8	703.5	674.1	154.4	152.3	134.5	177.7	176.6	273.2	751.4	739.5	737.1
2012:Q1	743.5	778.4	742.1	631.5	652.1	622.5	154.7	151.0	124.4	175.5	217.1	187.3	730.9	775.5	741.8
2012:Q2	802.6	838.6	782.1	666.9	710.0	686.6	159.8	159.5	139.7	171.4	215.5	194.9	747.7	824.5	683.5
2012:Q3	739.6	779.9	731.4	624.6	622.7	622.4	152.9	157.5	133.7	181.3	181.3	202.5	788.7	774.1	705.1
2012:Q4	773.9	843.8	803.2	656.8	660.4	653.3	154.4	151.2	132.1	182.1	206.2	184.8	718.3	779.6	679.6
2013:Q1	726.4	822.6	780.1	665.0	676.9	674.0	141.7	144.2	138.7	163.4	194.3	203.2	751.7	782.6	730.1
2013:Q2	784.7	931.8	864.9	742.2	772.9	736.4	162.6	167.2	145.8	141.5	175.1	184.4	727.2	746.8	771.0

NOTES:

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

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

New York E1-4
Quarterly 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	479	493	179	143	164	28	26	33	20	17	19
2009:Q4	538	502	521	198	166	184	34	31	33	22	17	19
2010:Q1	539	494	480	216	168	163	38	40	31	24	16	19
2010:Q2	570	550	533	204	180	175	40	32	34	24	20	21
2010:Q3	566	549	553	200	175	171	38	34	41	26	20	24
2010:Q4	580	608	558	206	223	189	36	42	39	24	20	21
2011:Q1	572	553	558	217	203	199	48	40	51	27	19	23
2011:Q2	653	671	585	236	237	187	57	62	46	31	21	25
2011:Q3	663	676	644	232	234	211	58	60	56	37	22	27
2011:Q4	711	737	678	274	279	250	53	54	53	35	23	26
2012:Q1	715	730	685	284	303	263	58	59	56	36	22	28
2012:Q2	736	757	733	272	286	255	57	56	55	36	24	30
2012:Q3	720	694	760	258	261	274	52	46	64	32	25	31
2012:Q4	729	771	760	262	301	290	59	63	53	32	25	30
2013:Q1	730	746	745	286	309	298	64	63	65	38	26	30
2013:Q2	734	768	775	261	295	293	59	61	63	35	29	30

(continued)

New York E1-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	113	89	81	62	73	68	24	25	26	14	15	17
2009:Q4	106	84	89	65	71	71	25	27	28	14	18	16
2010:Q1	105	78	84	59	66	64	19	22	19	14	21	22
2010:Q2	118	91	91	71	81	75	25	30	27	13	20	24
2010:Q3	118	92	97	67	78	74	27	31	29	13	20	21
2010:Q4	120	88	92	70	80	75	28	35	31	12	20	22
2011:Q1	115	91	93	62	67	68	21	25	23	12	19	21
2011:Q2	131	102	101	72	82	75	28	35	30	13	23	23
2011:Q3	140	106	108	71	87	78	30	35	33	12	23	22
2011:Q4	135	106	107	75	98	82	32	41	34	15	22	25
2012:Q1	143	109	110	69	88	78	27	31	27	15	24	26
2012:Q2	154	117	120	76	92	92	32	39	33	17	26	29
2012:Q3	161	107	125	75	87	92	30	37	35	16	21	22
2012:Q4	152	110	118	76	91	90	31	42	37	19	25	26
2013:Q1	144	107	123	66	82	74	24	31	29	20	25	29
2013:Q2	161	114	133	76	92	88	29	40	35	22	26	30

(continued)

New York E1-4 (cont.)
Quarterly 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	23	26	6	12	10	18	18	17	0	10	9
2009:Q4	21	25	28	6	13	11	17	19	17	0	7	2
2010:Q1	19	22	26	6	13	10	15	17	15	0	9	4
2010:Q2	22	27	30	6	14	10	18	21	19	0	7	5
2010:Q3	23	27	33	6	12	9	17	19	18	0	13	4
2010:Q4	23	28	32	7	13	11	17	20	18	0	11	2
2011:Q1	20	26	27	6	13	9	14	17	15	0	7	3
2011:Q2	24	29	30	6	14	10	16	21	17	0	9	10
2011:Q3	24	30	34	6	12	10	15	21	17	0	10	7
2011:Q4	26	32	34	7	13	11	16	21	17	0	12	3
2012:Q1	24	28	33	7	14	10	14	18	15	0	4	5
2012:Q2	26	32	37	6	14	10	15	21	18	0	14	7
2012:Q3	26	32	41	6	13	11	15	19	18	0	8	5
2012:Q4	28	33	39	6	13	10	14	19	18	0	10	8
2013:Q1	25	33	36	6	13	10	12	17	15	0	8	5
2013:Q2	27	34	40	6	14	11	14	22	18	0	8	4

NOTES:

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

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

New York E1-5
Quarterly 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	62.3	47.2	58.7	127.7	113.6	135.6
2009:Q4	62.0	59.7	63.6	120.3	111.0	130.1
2010:Q1	68.1	57.5	60.2	125.0	104.4	130.5
2010:Q2	64.4	57.7	63.1	132.6	116.9	139.4
2010:Q3	64.1	57.7	61.3	133.7	124.6	152.2
2010:Q4	60.6	69.5	66.4	126.6	120.9	140.3
2011:Q1	65.7	64.9	71.5	128.1	122.9	149.0
2011:Q2	73.1	75.5	71.5	145.7	131.6	161.3
2011:Q3	71.2	67.6	74.7	154.8	137.7	169.7
2011:Q4	80.0	80.8	85.1	148.1	127.7	162.7
2012:Q1	83.2	89.8	88.3	142.8	124.5	170.6
2012:Q2	80.6	85.2	84.3	156.1	135.8	185.5
2012:Q3	72.8	77.5	87.1	156.1	146.0	194.6
2012:Q4	74.6	80.3	87.8	152.2	136.8	170.7
2013:Q1	79.2	84.5	89.2	150.0	143.9	164.2
2013:Q2	75.8	82.8	82.5	152.7	148.8	169.7

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 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	568	536	590	468	464	376	575	540	606
2009:Q4	572	516	555	523	451	419	605	575	575
2010:Q1	595	485	528	489	429	364	594	556	561
2010:Q2	608	552	560	535	541	414	628	630	583
2010:Q3	612	609	729	507	482	475	637	629	700
2010:Q4	627	666	606	576	566	440	641	671	623
2011:Q1	637	611	673	538	477	427	648	637	659
2011:Q2	734	687	705	628	564	437	729	721	691
2011:Q3	720	668	794	602	615	484	731	767	772
2011:Q4	742	757	696	658	733	524	787	821	784
2012:Q1	802	728	828	691	623	599	782	792	807
2012:Q2	789	774	835	741	646	605	824	826	851
2012:Q3	778	747	833	732	600	589	798	808	834
2012:Q4	782	822	802	795	761	536	817	842	808
2013:Q1	842	880	865	728	763	580	820	844	830
2013:Q2	853	880	804	700	686	526	844	868	875

(continued)

New York E1-6 (cont.)
Quarterly 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	472	479	493	470	479	493	560	479	493
2009:Q4	520	502	521	504	502	521	571	502	521
2010:Q1	493	494	480	523	494	480	565	494	480
2010:Q2	509	550	533	527	550	533	623	550	533
2010:Q3	494	549	553	522	549	553	622	549	553
2010:Q4	611	608	558	535	608	558	607	608	558
2011:Q1	561	553	558	538	553	558	603	553	558
2011:Q2	646	671	585	601	671	585	697	671	585
2011:Q3	677	676	644	616	676	644	697	676	644
2011:Q4	729	737	678	655	737	678	751	737	678
2012:Q1	689	730	685	654	730	685	772	730	685
2012:Q2	725	757	733	695	757	733	773	757	733
2012:Q3	693	694	760	625	694	760	807	694	760
2012:Q4	751	771	760	702	771	760	746	771	760
2013:Q1	689	746	745	703	746	745	763	746	745
2013:Q2	640	768	775	686	768	775	801	768	775

NOTES:

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

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

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	88.5	91.7	83.8	65.2	59.4	61.6	84.7	83.3	80.3	59.5	57.1	52.6
Pre-3	89.0	89.7	84.7	64.8	59.2	59.7	83.2	82.0	81.3	61.9	57.9	58.0
Pre-2	90.3	89.1	85.4	64.2	57.7	58.5	84.2	81.3	76.7	65.2	62.9	61.2
Pre-1	88.7	87.2	84.8	62.1	55.8	58.7	83.2	77.3	79.2	67.0	67.8	67.2
Post-1	87.8	88.9	83.6	61.3	52.8	56.5	79.4	73.6	76.0	65.2	67.5	57.0
Post-2	89.2	86.9	89.1	64.1	56.2	52.7	81.5	75.1	77.2	65.7	68.1	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	38.3	34.7	30.6	3.4	3.2	6.0	78.4	78.3	76.8
Pre-3	37.3	32.1	33.6	3.2	2.5	4.1	75.3	78.2	76.4
Pre-2	38.9	33.7	29.9	2.4	2.7	5.2	75.3	76.9	72.3
Pre-1	39.3	33.0	33.7	2.7	3.1	3.3	72.8	73.3	71.4
Post-1	36.7	28.5	29.1	4.1	4.1	4.2	69.5	68.7	67.3
Post-2	40.8	32.2	31.2	4.2	4.3	2.1	71.5	69.5	69.8

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

New York E1-8
Quarterly 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	10.7	10.9	7.3	25.3	21.3	22.1	7.9	9.9	8.7	17.4	11.4	13.4
2009:Q4	11.2	11.4	14.2	29.3	31.4	23.1	9.7	13.8	10.4	19.6	17.6	12.8
2010:Q1	11.4	16.0	18.3	33.1	30.2	26.7	12.1	12.7	10.0	21.0	17.6	16.7
2010:Q2	10.6	15.3	12.4	33.4	25.9	24.5	12.4	10.2	7.6	21.0	15.8	16.9
2010:Q3	22.0	13.1	18.9	35.3	30.3	26.9	14.4	14.7	10.7	20.9	15.6	16.2
2010:Q4	19.2	19.9	19.5	35.1	51.7	32.6	15.2	20.4	14.2	19.9	31.3	18.3
2011:Q1	23.1	18.4	24.2	42.1	41.5	46.0	16.6	14.7	17.3	25.5	26.8	28.7
2011:Q2	23.3	22.5	16.6	48.0	51.6	49.5	19.2	18.7	19.7	28.8	32.9	29.8
2011:Q3	19.6	20.3	17.9	35.8	42.1	42.5	11.6	18.1	17.2	24.2	24.0	25.3
2011:Q4	21.3	18.5	19.9	42.5	40.5	49.4	16.8	17.7	21.3	25.7	22.9	28.0
2012:Q1	20.9	23.9	23.2	50.9	63.2	53.3	16.7	23.5	21.6	34.2	39.7	31.7
2012:Q2	21.0	22.2	24.9	38.5	48.1	40.3	12.6	21.1	12.1	26.0	27.0	28.2
2012:Q3	19.9	22.8	26.7	39.3	40.1	45.6	13.9	14.1	20.1	25.4	26.0	25.5
2012:Q4	19.5	28.1	41.4	45.2	46.6	51.0	13.2	17.5	24.6	32.0	29.1	26.4
2013:Q1	19.6	28.6	26.1	48.5	53.3	48.5	17.3	16.8	22.0	31.2	36.6	26.4
2013:Q2	23.5	22.8	21.4	38.4	47.4	48.3	16.1	18.8	24.2	22.3	28.7	24.1

NOTES:

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

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

New York E1-9
Quarterly 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	1,005.2	1,122.3	1,114.3	895.3	926.0	891.3	179.6	201.5	179.4	197.8	155.0	234.6	751.6	745.7	679.2
2009:Q4	1,039.4	1,093.0	1,070.8	936.0	937.7	909.9	180.0	184.6	146.2	194.0	155.2	293.1	621.3	743.8	792.9
2010:Q1	1,048.7	1,112.3	1,087.2	1,009.7	973.7	958.7	212.1	206.7	190.2	210.2	187.2	183.4	684.4	810.8	678.2
2010:Q2	1,109.7	1,224.8	1,144.9	1,121.8	1,128.6	1,117.1	246.3	235.7	227.7	171.5	185.4	192.8	688.4	729.5	646.1
2010:Q3	1,087.1	1,155.9	1,091.5	1,081.9	1,123.4	1,062.0	245.6	253.8	218.6	183.5	178.5	232.9	645.4	693.8	714.3
2010:Q4	1,094.9	1,153.0	1,066.3	1,141.3	1,145.7	1,077.1	228.1	236.9	206.4	171.6	227.5	194.0	631.9	727.0	665.2
2011:Q1	1,071.8	1,178.7	1,062.6	1,093.6	1,120.3	1,020.6	251.9	227.1	204.7	182.5	194.7	191.7	759.1	816.2	676.5
2011:Q2	1,148.9	1,210.3	1,087.2	1,181.5	1,251.8	1,152.9	255.9	252.6	222.5	222.6	197.5	199.2	843.9	807.0	778.4
2011:Q3	1,046.0	1,116.6	982.8	1,049.3	1,131.9	1,074.1	249.9	220.0	222.0	236.2	242.0	249.5	820.7	852.9	701.6
2011:Q4	1,005.8	1,050.1	940.7	1,074.8	1,143.3	1,027.8	239.4	220.5	199.1	231.7	238.5	375.6	800.5	784.3	822.3
2012:Q1	979.2	1,054.0	912.6	1,003.1	1,043.0	975.8	210.4	220.9	179.4	214.0	287.9	259.1	794.5	852.4	762.8
2012:Q2	1,024.8	1,061.6	939.1	1,028.2	1,128.7	997.7	217.5	215.8	189.3	216.8	280.7	275.0	804.3	896.2	696.8
2012:Q3	960.7	1,009.1	870.7	944.9	1,003.0	896.2	208.7	190.4	177.5	249.2	207.8	260.5	868.5	847.4	754.9
2012:Q4	1,012.9	1,046.4	939.6	985.6	1,017.8	918.8	197.7	195.0	158.4	260.5	279.6	243.5	807.1	861.3	736.5
2013:Q1	905.9	1,078.3	957.7	980.0	1,038.0	984.6	185.1	176.0	193.7	216.4	270.2	234.2	787.6	876.2	814.2
2013:Q2	962.2	1,210.6	1,004.6	1,105.1	1,169.8	1,061.3	205.2	216.6	186.5	169.4	229.3	254.6	764.7	810.7	822.9

NOTES:

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

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

New York E1-10
Quarterly 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	969	893	951	358	278	337	63	57	87	34	33	34
2009:Q4	1,046	962	1,006	426	349	399	78	72	76	37	32	36
2010:Q1	1,078	1,049	986	463	395	365	89	107	71	47	29	35
2010:Q2	1,173	1,136	1,066	462	425	387	105	79	79	39	37	41
2010:Q3	1,370	1,280	1,272	589	498	467	116	95	124	57	42	50
2010:Q4	1,453	1,493	1,286	637	648	513	120	124	107	51	45	45
2011:Q1	1,533	1,421	1,385	690	619	578	155	121	139	60	42	47
2011:Q2	1,690	1,691	1,474	733	710	571	201	199	142	67	48	53
2011:Q3	1,489	1,551	1,532	571	580	572	173	173	158	71	43	57
2011:Q4	1,482	1,569	1,524	626	630	625	130	127	143	62	46	54
2012:Q1	1,542	1,621	1,469	666	732	584	150	140	139	62	44	57
2012:Q2	1,487	1,635	1,548	586	696	576	149	134	146	61	46	62
2012:Q3	1,434	1,460	1,584	557	612	631	119	112	130	60	47	61
2012:Q4	1,487	1,619	1,636	602	697	685	134	166	125	58	49	59
2013:Q1	1,495	1,640	1,521	646	739	668	149	162	139	68	51	60
2013:Q2	1,488	1,538	1,524	574	654	613	146	134	148	57	56	55

(continued)

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

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	212	163	142	96	125	111	38	40	40	34	35	41
2009:Q4	194	154	164	102	121	116	41	43	43	34	40	39
2010:Q1	191	149	160	96	119	113	37	45	36	36	49	56
2010:Q2	223	165	167	120	146	129	45	60	45	34	51	58
2010:Q3	233	187	192	123	147	144	53	61	53	37	59	55
2010:Q4	244	180	185	130	156	145	56	72	54	38	57	62
2011:Q1	248	194	186	132	140	146	53	64	52	40	57	62
2011:Q2	273	209	213	134	162	151	62	78	57	43	68	72
2011:Q3	292	227	224	120	167	155	57	71	59	36	65	64
2011:Q4	261	214	225	121	187	155	60	81	61	41	61	68
2012:Q1	283	226	229	116	165	138	56	69	55	40	57	62
2012:Q2	272	219	233	117	166	158	59	75	62	44	67	69
2012:Q3	295	200	254	116	150	147	54	70	63	41	50	53
2012:Q4	277	202	236	116	152	144	55	79	66	46	61	65
2013:Q1	250	203	218	105	152	118	49	63	59	50	65	69
2013:Q2	287	199	238	117	149	137	52	72	60	55	64	69

(continued)

New York E1-10 (cont.)
Quarterly 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	36	50	8	19	15	27	28	26	1	20	28
2009:Q4	37	39	56	10	19	14	25	27	25	0	15	3
2010:Q1	34	38	57	9	21	16	25	27	24	0	17	7
2010:Q2	42	48	65	9	21	16	29	35	29	0	11	13
2010:Q3	45	51	69	10	20	15	31	34	31	0	25	5
2010:Q4	44	53	66	10	21	17	30	37	30	0	34	5
2011:Q1	44	52	60	10	21	14	28	32	25	1	20	12
2011:Q2	50	57	64	10	21	15	29	37	28	0	17	38
2011:Q3	44	57	73	9	19	15	25	34	28	0	31	21
2011:Q4	50	56	74	10	20	14	25	33	25	0	33	6
2012:Q1	47	56	68	9	19	14	23	29	23	0	9	10
2012:Q2	52	63	77	8	20	13	23	34	27	0	21	12
2012:Q3	50	62	92	7	18	12	21	31	25	0	12	17
2012:Q4	52	59	82	8	17	13	21	28	26	0	12	29
2013:Q1	51	65	75	8	18	13	19	26	23	0	19	12
2013:Q2	56	64	88	8	19	13	21	31	25	0	20	7

NOTES:

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

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

New York E1-11
Quarterly 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	125.4	97.6	118.7	199.3	190.3	241.3
2009:Q4	135.0	122.5	135.9	194.9	180.7	232.5
2010:Q1	148.2	130.5	136.9	205.9	172.6	228.1
2010:Q2	144.5	130.4	137.5	216.0	211.2	249.1
2010:Q3	180.1	158.3	161.3	245.0	234.5	303.1
2010:Q4	177.4	196.3	176.8	239.3	238.0	260.0
2011:Q1	195.4	186.4	202.8	242.4	239.0	287.5
2011:Q2	217.5	215.7	203.5	278.9	251.5	316.6
2011:Q3	170.9	160.6	191.2	256.7	240.3	313.2
2011:Q4	189.3	186.0	217.2	258.0	224.8	309.8
2012:Q1	193.6	220.2	205.6	250.8	222.8	320.5
2012:Q2	178.7	201.4	192.1	254.3	232.5	357.0
2012:Q3	157.1	174.9	205.0	266.0	260.6	367.6
2012:Q4	168.6	188.9	208.6	264.3	249.6	327.8
2013:Q1	172.1	193.3	203.1	246.5	256.3	276.2
2013:Q2	169.4	186.0	177.9	257.8	258.8	284.2

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures among beneficiaries with behavioral health 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	687	688	816	205	175	271	38	38	47	51	78	87	121	112	158
2009:Q4	746	686	816	246	208	307	33	40	42	52	67	100	126	143	185
2010:Q1	762	735	722	282	227	197	39	36	39	49	60	100	131	162	132
2010:Q2	812	788	732	255	217	232	49	41	43	65	78	104	143	149	164
2010:Q3	808	856	928	277	273	302	49	47	57	64	87	106	139	156	214
2010:Q4	805	887	824	253	299	285	40	47	47	54	74	104	133	201	180
2011:Q1	868	815	806	319	268	285	42	45	46	53	62	94	220	237	228
2011:Q2	887	1,055	822	283	354	248	50	50	55	69	79	122	223	265	230
2011:Q3	858	889	999	265	267	318	55	51	65	59	76	107	210	227	260
2011:Q4	867	946	926	284	326	365	56	48	54	68	73	114	244	282	326
2012:Q1	871	837	921	296	314	321	52	44	64	57	64	119	256	249	304
2012:Q2	875	1,012	1,009	293	351	311	49	48	66	67	80	131	254	264	298
2012:Q3	826	977	974	248	348	325	52	53	71	68	72	119	211	304	308
2012:Q4	801	900	1,039	221	298	350	47	50	62	67	70	125	213	230	342
2013:Q1	810	924	969	270	327	373	51	51	56	69	72	117	259	284	324
2013:Q2	876	940	878	287	341	255	49	52	59	78	79	144	245	294	240

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	36	52	71	1,220	1,690	1,393	36	52	71	1,220	1,690	1,393	36	52	71
2009:Q4	28	37	64	1,170	1,674	1,422	28	37	64	1,170	1,674	1,422	28	37	64
2010:Q1	30	35	49	1,252	1,642	1,574	30	35	49	1,252	1,642	1,574	30	35	49
2010:Q2	37	43	61	1,315	1,648	1,639	37	43	61	1,315	1,648	1,639	37	43	61
2010:Q3	33	51	64	1,283	1,650	1,558	33	51	64	1,283	1,650	1,558	33	51	64
2010:Q4	31	43	57	1,277	1,609	1,443	31	43	57	1,277	1,609	1,443	31	43	57
2011:Q1	30	36	59	1,256	1,586	1,448	30	36	59	1,256	1,586	1,448	30	36	59
2011:Q2	35	60	77	1,305	1,761	1,551	35	60	77	1,305	1,761	1,551	35	60	77
2011:Q3	31	54	88	1,200	1,742	1,441	31	54	88	1,200	1,742	1,441	31	54	88
2011:Q4	29	50	75	1,183	1,673	1,407	29	50	75	1,183	1,673	1,407	29	50	75
2012:Q1	23	46	79	1,181	1,695	1,437	23	46	79	1,181	1,695	1,437	23	46	79
2012:Q2	34	64	92	1,273	1,750	1,421	34	64	92	1,273	1,750	1,421	34	64	92
2012:Q3	38	50	81	1,118	1,669	1,471	38	50	81	1,118	1,669	1,471	38	50	81
2012:Q4	34	42	69	1,180	1,677	1,488	34	42	69	1,180	1,677	1,488	34	42	69
2013:Q1	37	65	45	1,227	1,787	1,546	37	65	45	1,227	1,787	1,546	37	65	45
2013:Q2	41	60	81	1,241	1,882	1,646	41	60	81	1,241	1,882	1,646	41	60	81

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among beneficiaries with disabilities

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	201	154	200	30	26	34	73	57	78	213	204	280	151	159	306
2009:Q4	227	207	206	31	27	32	72	66	75	199	192	257	168	182	335
2010:Q1	234	181	181	35	24	29	78	66	74	214	183	243	170	229	191
2010:Q2	211	222	184	37	28	36	75	68	74	229	191	270	165	212	204
2010:Q3	226	213	228	37	29	44	72	71	77	228	203	307	190	206	278
2010:Q4	221	247	208	35	30	36	69	79	78	208	204	271	120	223	184
2011:Q1	258	233	231	33	28	42	77	75	86	210	212	288	182	168	203
2011:Q2	273	253	229	42	28	42	79	82	89	237	209	317	199	145	200
2011:Q3	268	291	266	50	34	44	76	79	97	256	228	333	207	253	264
2011:Q4	315	315	322	41	33	42	85	90	105	226	206	301	208	210	353
2012:Q1	313	332	300	46	32	47	87	96	106	225	216	350	229	257	236
2012:Q2	311	322	271	42	33	48	95	93	96	252	211	333	241	240	214
2012:Q3	292	319	282	42	37	53	79	91	96	248	247	374	217	235	261
2012:Q4	302	329	274	43	36	45	81	81	94	235	228	293	264	199	245
2013:Q1	337	334	322	46	38	43	88	89	97	234	240	287	197	239	224
2013:Q2	313	337	318	49	39	46	92	93	87	232	228	305	195	199	228

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among beneficiaries in Pod 2

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	142	143	164	20	17	19	54	47	59	133	114	136	152	127	169
2009:Q4	150	166	184	19	17	19	54	60	64	121	111	130	145	134	207
2010:Q1	194	168	163	20	16	19	62	57	60	120	104	131	154	155	144
2010:Q2	153	180	175	19	20	21	58	58	63	124	117	139	111	147	142
2010:Q3	163	175	171	19	20	24	57	58	61	129	125	152	126	138	169
2010:Q4	165	223	189	20	20	21	53	70	66	122	121	140	120	184	159
2011:Q1	187	203	199	18	19	23	68	65	72	115	123	149	170	153	153
2011:Q2	194	237	187	23	21	25	70	75	71	144	132	161	193	156	158
2011:Q3	197	234	211	22	22	27	69	68	75	144	138	170	179	184	193
2011:Q4	228	279	250	24	23	26	72	81	85	141	128	163	171	177	273
2012:Q1	230	303	263	25	22	28	75	90	88	138	124	171	154	217	187
2012:Q2	232	286	255	26	24	30	79	85	84	153	136	185	186	215	195
2012:Q3	189	261	274	27	25	31	66	77	87	145	146	195	142	181	202
2012:Q4	230	301	290	27	25	30	76	80	88	144	137	171	207	206	185
2013:Q1	251	309	298	26	26	30	77	84	89	144	144	164	142	194	203
2013:Q2	211	295	293	27	29	30	76	83	82	155	149	170	149	175	184

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Rhode Island E2-1
Mean 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	80.5	88.3	84.3	63.4	62.1	59.2	81.7	82.6	81.0	60.4	50.7	52.4
Pre-3	80.4	88.6	85.3	66.5	65.3	60.7	80.9	84.9	81.0	62.8	57.4	51.8
Pre-2	80.1	86.5	85.0	63.4	63.7	59.4	81.0	82.6	80.5	62.8	59.0	51.8
Pre-1	90.6	87.4	86.9	65.7	60.4	60.5	82.5	80.3	80.2	65.4	62.3	54.7
Post-1	91.1	87.2	86.7	64.5	55.5	60.2	83.3	81.6	80.5	64.9	59.2	53.2
Post-2	92.6	85.4	87.6	67.3	63.5	61.3	85.5	83.6	80.5	63.8	61.1	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	33.2	30.3	29.5	5.3	5.4	5.6	79.5	77.2	76.7
Pre-3	38.2	36.2	30.0	4.4	4.4	4.9	79.0	79.5	76.3
Pre-2	35.2	36.0	30.8	5.0	4.5	5.6	75.7	75.3	75.1
Pre-1	40.5	35.4	32.0	3.2	3.6	4.5	77.5	75.7	73.8
Post-1	40.5	33.4	30.7	3.3	4.0	4.2	75.0	76.3	73.1
Post-2	41.5	37.7	33.3	2.4	5.6	4.5	75.1	74.8	72.5

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-2
Quarterly 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	3.2	6.0	4.6	7.5	6.2	10.3	4.1	3.3	4.5	3.3	2.9	5.8
2009:Q4	3.0	3.7	4.1	9.1	10.1	11.0	3.0	4.1	4.0	6.1	6.0	7.0
2010:Q1	3.7	6.2	6.2	9.6	11.1	13.9	4.3	4.3	5.1	5.4	6.8	8.8
2010:Q2	3.6	2.9	5.4	9.3	7.4	11.8	3.8	3.0	4.7	5.5	4.4	7.2
2010:Q3	4.6	4.1	6.3	10.7	7.7	10.5	4.1	3.5	3.9	6.6	4.3	6.6
2010:Q4	3.9	3.3	5.0	11.0	11.4	12.2	3.5	5.7	4.5	7.4	5.6	7.7
2011:Q1	5.2	5.4	5.4	13.9	15.5	15.0	5.3	5.7	7.2	8.6	9.8	7.8
2011:Q2	4.4	6.4	5.5	13.2	14.9	13.9	5.1	3.7	6.1	8.0	11.2	7.8
2011:Q3	5.5	5.9	7.0	11.4	12.5	12.7	5.3	5.8	6.4	6.2	6.7	6.3
2011:Q4	6.1	8.3	8.2	14.7	13.5	14.8	4.9	5.4	6.6	9.8	8.1	8.2
2012:Q1	7.1	7.5	8.2	13.1	14.1	15.8	5.8	5.3	6.4	7.3	8.8	9.4
2012:Q2	8.0	5.3	7.2	11.1	13.8	13.9	4.6	6.4	5.9	6.5	7.3	8.0
2012:Q3	7.3	7.4	7.9	11.3	13.2	12.8	4.9	5.2	5.5	6.4	8.1	7.3
2012:Q4	7.2	6.7	9.7	15.3	13.4	14.4	5.1	5.1	5.6	10.2	8.4	8.8
2013:Q1	8.5	10.4	9.4	16.5	14.9	13.8	5.2	6.1	5.2	11.3	8.8	8.7
2013:Q2	7.7	10.2	8.8	13.7	13.8	13.1	4.1	4.1	4.6	9.6	9.8	8.5

NOTES:

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

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

Rhode Island E2-3
Quarterly 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	916.8	876.5	856.7	802.8	764.0	743.0	165.7	149.7	145.4	96.4	145.0	168.4	634.1	571.6	561.8
2009:Q4	922.7	867.3	849.2	831.4	785.9	755.3	157.9	157.6	141.7	139.5	158.6	135.1	550.0	616.9	564.7
2010:Q1	909.7	884.5	827.8	841.4	835.3	782.9	184.6	182.6	167.7	166.4	165.0	178.1	688.1	683.7	606.0
2010:Q2	964.6	928.4	901.1	923.3	919.6	880.1	196.7	206.4	188.0	141.6	191.0	184.1	651.1	646.7	616.1
2010:Q3	932.7	884.8	863.1	877.5	846.5	808.2	193.8	191.9	177.2	140.9	90.9	167.0	641.5	638.7	595.1
2010:Q4	934.6	902.0	861.7	885.3	858.1	830.2	186.4	192.1	166.3	167.0	187.4	173.2	666.7	624.8	586.8
2011:Q1	894.1	864.6	838.1	842.3	802.7	787.1	199.6	178.6	169.6	165.2	185.4	168.6	687.2	701.1	631.2
2011:Q2	980.0	931.0	886.3	942.1	913.2	893.3	230.8	201.6	184.9	170.2	208.3	180.4	712.1	710.7	663.3
2011:Q3	899.1	850.0	821.0	880.5	823.3	818.4	219.7	199.0	187.0	206.8	232.4	205.7	717.7	651.8	676.0
2011:Q4	915.0	887.1	842.0	891.8	868.6	846.2	219.2	197.5	181.7	184.5	271.2	187.4	677.4	756.7	634.6
2012:Q1	921.8	861.1	826.5	893.9	846.2	834.8	209.7	182.3	174.3	200.9	260.4	212.2	748.3	747.7	638.9
2012:Q2	956.6	932.2	849.0	972.7	895.1	888.9	224.1	188.3	185.4	197.2	206.5	200.1	728.2	700.0	683.7
2012:Q3	869.8	849.7	811.2	905.6	855.6	848.2	212.9	170.3	182.6	182.3	212.2	176.7	752.0	697.8	643.9
2012:Q4	925.2	894.7	829.2	911.5	877.9	850.5	205.0	177.1	167.7	190.3	216.7	199.2	746.4	663.4	649.7
2013:Q1	879.1	871.4	814.3	926.2	913.0	867.6	191.5	167.4	167.3	224.1	217.1	189.3	756.3	736.7	644.3
2013:Q2	991.3	959.6	883.4	1,052.1	1,054.4	972.6	219.6	211.0	180.9	187.4	204.9	185.4	693.5	729.0	699.8

NOTES:

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

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

Rhode Island E2-4
Quarterly 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	562	635	649	169	207	200	39	55	70	32	28	29
2009:Q4	587	641	640	170	204	198	34	60	68	26	28	29
2010:Q1	535	601	646	157	205	207	35	55	77	30	27	30
2010:Q2	621	673	707	173	216	215	32	52	76	34	36	33
2010:Q3	647	642	700	196	183	197	43	59	81	34	35	36
2010:Q4	669	758	721	200	257	210	49	78	89	39	32	35
2011:Q1	658	674	711	198	215	218	65	92	100	32	31	33
2011:Q2	737	766	780	209	224	213	79	92	106	36	32	36
2011:Q3	745	744	809	211	214	228	66	86	116	41	36	37
2011:Q4	797	887	853	255	334	264	68	91	109	40	37	36
2012:Q1	817	793	836	264	255	267	83	104	114	38	36	35
2012:Q2	815	798	879	240	235	260	63	83	107	41	36	38
2012:Q3	778	782	844	228	231	254	69	88	101	39	47	39
2012:Q4	841	837	880	261	280	281	81	79	106	41	37	38
2013:Q1	872	875	872	295	314	298	98	116	108	40	36	36
2013:Q2	880	877	891	281	280	290	83	91	105	43	52	39

(continued)

Rhode Island E2-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	82	82	79	83	86	85	30	33	33	26	28	29
2009:Q4	93	71	76	89	87	82	30	31	32	32	33	31
2010:Q1	83	75	80	74	73	75	24	25	27	31	25	33
2010:Q2	105	81	93	95	94	91	31	34	35	37	28	37
2010:Q3	93	87	87	89	87	89	33	34	35	35	29	37
2010:Q4	95	88	89	96	96	89	35	40	38	38	37	37
2011:Q1	105	84	88	83	74	78	30	30	31	36	35	40
2011:Q2	108	115	103	99	93	98	38	41	40	42	30	40
2011:Q3	112	105	111	101	93	90	38	40	42	39	35	38
2011:Q4	115	94	111	102	105	94	41	43	44	39	36	40
2012:Q1	123	99	108	94	89	89	34	32	38	46	41	41
2012:Q2	125	104	118	110	100	105	39	41	44	48	42	41
2012:Q3	113	101	116	106	97	95	38	41	42	46	32	39
2012:Q4	121	111	108	107	101	97	44	45	44	47	35	44
2013:Q1	122	106	116	96	88	84	35	35	36	49	41	45
2013:Q2	130	114	117	112	104	97	43	44	44	50	47	49

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Rhode Island E2-4 (cont.)
Quarterly 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	30	34	31	13	15	14	24	24	25	0	11	1
2009:Q4	30	34	30	13	15	14	25	23	24	0	11	0
2010:Q1	30	32	30	14	16	15	21	21	20	0	11	0
2010:Q2	32	36	33	14	17	16	25	25	24	3	12	0
2010:Q3	34	37	34	14	16	16	23	24	24	0	14	0
2010:Q4	31	40	34	15	16	15	23	25	23	0	11	0
2011:Q1	30	34	32	13	15	14	21	20	20	0	11	0
2011:Q2	34	40	36	15	17	16	23	25	25	0	13	0
2011:Q3	37	41	38	14	16	16	23	23	23	0	14	0
2011:Q4	37	44	40	16	17	16	23	26	23	0	13	0
2012:Q1	36	43	38	16	17	17	22	22	22	2	6	0
2012:Q2	40	43	41	18	19	18	24	23	25	0	17	5
2012:Q3	39	45	41	17	19	18	22	22	22	0	9	0
2012:Q4	40	46	41	15	18	17	22	22	23	0	10	0
2013:Q1	39	45	39	13	16	16	18	20	19	0	8	0
2013:Q2	40	47	41	14	19	17	21	23	22	0	8	0

NOTES:

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

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

Rhode Island E2-5
Quarterly 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	57.4	58.2	61.0	184.0	165.2	159.5
2009:Q4	54.3	63.5	59.7	154.3	150.6	149.0
2010:Q1	52.2	60.7	64.4	159.7	137.8	148.0
2010:Q2	55.9	65.2	68.3	169.8	154.9	166.4
2010:Q3	60.5	57.0	60.9	191.7	167.5	164.7
2010:Q4	60.1	72.5	65.6	164.6	150.6	157.3
2011:Q1	68.0	73.3	70.9	154.9	154.6	150.3
2011:Q2	64.3	70.4	71.2	180.6	163.1	160.5
2011:Q3	70.6	66.6	73.1	200.8	172.8	170.5
2011:Q4	73.0	88.7	78.3	181.4	171.2	164.5
2012:Q1	78.0	80.1	81.1	188.9	168.3	167.2
2012:Q2	71.2	71.2	74.5	196.0	156.6	180.1
2012:Q3	69.5	68.4	74.6	192.8	182.3	183.1
2012:Q4	73.3	74.5	78.2	188.7	174.0	174.2
2013:Q1	79.3	82.7	78.0	183.9	160.9	160.1
2013:Q2	74.4	83.4	78.0	188.3	182.8	176.8

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average total Medicare expenditures among special populations

Period	Dually eligible beneficiaries			Disabled beneficiaries			Non-White beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	639	671	716	658	694	726	515	537	673
2009:Q4	643	670	720	660	705	734	621	529	609
2010:Q1	626	597	675	635	672	710	591	571	565
2010:Q2	752	674	754	771	762	733	680	688	622
2010:Q3	740	645	777	753	672	756	602	582	607
2010:Q4	718	749	787	744	745	778	575	849	685
2011:Q1	686	648	735	739	661	722	548	716	598
2011:Q2	764	784	787	811	769	801	592	697	675
2011:Q3	814	763	843	818	730	820	589	740	738
2011:Q4	914	807	893	829	857	867	718	1,046	753
2012:Q1	861	762	871	875	830	855	638	728	702
2012:Q2	863	875	885	924	877	876	600	759	726
2012:Q3	840	875	817	831	876	847	700	707	775
2012:Q4	913	991	921	943	912	937	711	930	833
2013:Q1	946	1,009	893	974	919	929	933	799	771
2013:Q2	900	902	910	971	880	915	703	841	833

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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	86.9	83.1	64.3	63.9	60.1	79.5	79.3	78.3	66.0	53.3	54.8
Pre-3	77.4	87.0	84.2	67.1	63.2	63.6	78.2	81.4	77.2	65.3	63.3	55.6
Pre-2	76.4	85.0	84.7	63.1	64.3	59.4	77.0	77.5	77.2	66.2	60.8	55.6
Pre-1	89.0	82.3	85.6	63.6	59.8	60.6	79.7	75.0	77.2	68.4	70.0	60.1
Post-1	87.2	81.5	83.6	63.2	56.1	60.4	78.7	72.6	76.9	66.3	63.3	61.1
Post-2	90.4	82.6	83.7	69.9	61.5	63.4	82.0	76.3	76.2	65.2	72.1	59.3

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	33.0	30.9	28.6	3.8	7.0	4.6	78.1	75.6	75.4
Pre-3	38.2	38.0	31.5	4.0	6.5	5.0	76.9	79.5	74.5
Pre-2	33.2	35.5	30.9	5.8	4.4	5.6	72.9	74.4	72.1
Pre-1	39.9	35.4	33.7	4.1	4.2	4.1	73.6	70.8	69.6
Post-1	39.2	32.4	32.6	4.5	7.0	4.1	71.3	72.2	67.4
Post-2	41.3	38.0	34.2	1.8	4.9	4.0	71.5	74.4	67.4

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Rhode Island E2-8
Quarterly 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	5.1	11.9	10.2	21.8	15.5	28.6	12.2	8.4	12.1	9.6	7.0	16.5
2009:Q4	6.0	8.6	9.2	26.6	31.8	32.4	6.5	11.8	10.7	20.1	20.0	21.6
2010:Q1	9.9	10.0	14.1	28.4	33.1	36.8	11.8	11.8	12.8	16.6	21.3	24.0
2010:Q2	10.3	8.6	13.8	26.6	23.4	33.5	7.0	8.1	10.1	19.6	15.2	23.5
2010:Q3	15.1	13.1	20.5	38.0	24.8	35.3	12.8	10.8	12.2	25.2	14.0	23.1
2010:Q4	14.9	10.0	17.8	37.0	38.4	41.3	10.4	17.6	14.4	26.6	20.8	26.9
2011:Q1	18.7	16.0	19.0	49.4	55.0	50.7	16.9	18.6	22.8	32.5	36.3	27.8
2011:Q2	15.0	19.8	19.4	48.8	47.1	46.4	18.4	9.4	18.4	30.4	37.7	28.0
2011:Q3	16.6	17.7	19.8	33.6	40.3	39.8	15.3	16.4	17.2	18.3	23.9	22.7
2011:Q4	17.3	16.9	22.0	47.0	40.1	44.2	13.6	15.1	17.8	33.4	25.1	26.5
2012:Q1	17.7	20.5	21.6	40.5	39.2	42.9	15.0	14.6	15.2	25.5	24.6	27.7
2012:Q2	22.4	15.4	19.2	36.2	45.2	37.1	12.9	20.5	13.7	23.4	24.8	23.4
2012:Q3	16.3	22.8	19.8	34.0	44.1	35.2	11.3	13.6	15.3	22.7	30.5	19.9
2012:Q4	15.4	18.4	24.9	48.9	46.3	40.7	15.9	17.3	14.8	32.9	28.9	25.9
2013:Q1	21.0	29.7	20.9	50.6	46.0	40.0	16.2	19.5	12.1	34.5	26.5	27.9
2013:Q2	17.5	24.0	24.8	43.2	43.2	39.2	10.5	9.0	12.3	32.7	34.2	26.9

NOTES:

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

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

Rhode Island E2-9
Quarterly 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	1,217	1,150	1,082	1,277	1,146	1,153	234	205	200	128	180	227	729	638	629
2009:Q4	1,197	1,137	1,045	1,267	1,173	1,116	224	231	197	165	190	176	610	645	627
2010:Q1	1,246	1,119	1,044	1,372	1,240	1,230	248	260	241	229	262	222	771	734	669
2010:Q2	1,304	1,231	1,154	1,424	1,345	1,378	277	273	263	189	263	265	694	660	712
2010:Q3	1,309	1,219	1,136	1,430	1,308	1,320	299	266	268	163	109	222	686	676	640
2010:Q4	1,281	1,231	1,100	1,428	1,325	1,314	282	269	242	212	260	216	729	727	635
2011:Q1	1,289	1,152	1,081	1,437	1,284	1,301	313	255	250	201	203	211	739	731	685
2011:Q2	1,400	1,220	1,120	1,546	1,415	1,447	336	271	279	228	256	230	788	750	722
2011:Q3	1,253	1,111	1,008	1,435	1,285	1,291	333	285	278	269	318	285	778	735	722
2011:Q4	1,160	1,120	979	1,405	1,295	1,287	324	249	249	240	279	253	754	709	731
2012:Q1	1,209	1,098	1,001	1,421	1,299	1,272	289	244	232	291	366	296	825	884	720
2012:Q2	1,232	1,097	988	1,522	1,413	1,290	309	251	237	245	273	264	772	799	734
2012:Q3	1,150	1,064	978	1,453	1,331	1,266	291	226	238	244	261	231	833	772	719
2012:Q4	1,163	1,103	932	1,409	1,362	1,243	263	227	222	222	273	263	810	669	698
2013:Q1	1,120	1,090	930	1,391	1,430	1,263	248	206	221	325	288	226	867	811	680
2013:Q2	1,255	1,167	962	1,599	1,531	1,365	302	305	245	197	305	271	696	808	754

NOTES:

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

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

Rhode Island E2-10
Quarterly 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	1,087	1,260	1,348	356	436	482	82	116	180	63	60	51
2009:Q4	1,197	1,296	1,292	402	419	419	74	162	178	52	61	57
2010:Q1	1,141	1,246	1,386	358	493	491	92	135	201	50	51	56
2010:Q2	1,345	1,396	1,565	430	500	526	83	122	203	66	79	68
2010:Q3	1,655	1,494	1,787	617	464	612	140	189	260	74	86	75
2010:Q4	1,724	1,907	1,892	627	741	638	164	243	303	91	81	80
2011:Q1	1,732	1,821	1,917	607	674	660	232	307	339	69	71	71
2011:Q2	1,943	2,033	2,052	657	723	663	283	326	360	87	77	83
2011:Q3	1,808	1,691	1,950	567	532	606	213	220	341	87	83	77
2011:Q4	1,834	2,007	1,980	656	788	660	206	248	320	86	86	70
2012:Q1	1,906	1,931	1,953	686	680	680	238	308	308	74	88	73
2012:Q2	1,842	1,838	1,952	586	679	613	179	224	302	85	69	70
2012:Q3	1,770	1,835	1,774	562	626	551	194	276	251	91	94	74
2012:Q4	1,878	2,037	1,958	633	755	687	218	240	293	83	86	74
2013:Q1	1,841	2,171	1,931	653	855	711	229	326	281	85	75	69
2013:Q2	1,858	1,850	1,924	656	602	668	188	212	264	96	131	75

(continued)

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

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	168	170	148	131	141	141	51	55	58	62	63	72
2009:Q4	196	137	148	145	135	135	46	52	57	80	83	78
2010:Q1	170	133	163	134	120	134	48	48	56	75	51	76
2010:Q2	232	164	192	162	158	160	58	63	69	98	70	101
2010:Q3	211	198	190	170	150	177	64	67	73	94	85	102
2010:Q4	215	205	211	179	186	181	67	81	77	117	104	116
2011:Q1	244	194	211	170	155	165	68	72	72	113	101	129
2011:Q2	250	256	229	190	175	191	78	86	83	121	91	128
2011:Q3	271	240	256	180	159	170	76	76	82	117	101	112
2011:Q4	254	205	249	173	198	166	73	84	82	108	86	105
2012:Q1	272	234	239	167	167	155	69	70	82	125	102	107
2012:Q2	282	233	254	187	176	169	75	75	87	132	127	110
2012:Q3	254	212	232	181	168	160	68	80	77	133	89	100
2012:Q4	284	267	221	175	177	160	78	87	82	115	96	99
2013:Q1	242	247	229	164	160	141	66	75	73	127	118	112
2013:Q2	283	237	233	180	166	155	73	78	79	120	125	122

(continued)

Rhode Island E2-10 (cont.)
Quarterly 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	54	52	20	23	23	36	37	37	0	20	2
2009:Q4	49	57	52	19	23	22	36	35	37	0	20	0
2010:Q1	55	50	56	22	27	26	33	31	34	0	19	0
2010:Q2	59	61	62	22	27	24	41	44	41	0	11	0
2010:Q3	69	68	69	22	24	26	39	41	44	0	26	0
2010:Q4	59	74	70	25	25	25	39	42	40	0	28	0
2011:Q1	61	71	70	21	23	24	38	35	37	0	27	0
2011:Q2	66	83	78	21	27	26	39	40	43	0	18	0
2011:Q3	75	86	76	21	24	25	36	36	38	0	34	0
2011:Q4	62	87	78	24	26	24	35	43	37	0	29	0
2012:Q1	71	92	78	25	26	25	35	37	37	0	10	0
2012:Q2	80	87	80	26	28	26	37	35	37	0	20	20
2012:Q3	77	89	77	26	26	25	33	35	36	0	14	0
2012:Q4	77	98	78	22	27	25	31	35	37	0	17	0
2013:Q1	65	99	74	18	25	25	25	34	31	0	21	0
2013:Q2	68	84	78	19	26	26	29	34	34	0	22	0

NOTES:

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

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

Rhode Island E2-11
Quarterly 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	121.3	120.8	136.4	303.1	314.1	256.6
2009:Q4	122.4	141.9	133.6	257.7	258.7	234.4
2010:Q1	121.4	145.5	151.1	269.6	229.7	259.6
2010:Q2	131.6	153.2	162.2	301.8	307.0	287.9
2010:Q3	177.8	146.6	182.1	350.1	343.6	301.1
2010:Q4	176.8	199.9	197.0	319.7	315.9	292.7
2011:Q1	203.4	223.8	209.6	272.9	285.3	274.8
2011:Q2	200.9	210.6	213.9	347.8	327.1	296.6
2011:Q3	189.6	166.8	191.2	383.9	333.8	293.4
2011:Q4	183.0	214.0	193.5	344.0	315.1	290.6
2012:Q1	199.5	218.1	197.5	364.4	329.0	292.6
2012:Q2	185.9	194.4	180.3	383.5	281.6	297.8
2012:Q3	167.2	190.5	170.4	381.4	361.0	313.5
2012:Q4	181.8	221.4	192.3	385.4	351.1	299.7
2013:Q1	193.0	226.8	184.9	330.5	310.4	269.1
2013:Q2	167.4	199.2	182.2	370.1	362.7	311.7

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures among beneficiaries with behavioral health 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	687	688	816	205	175	271	38	38	47	51	78	87	121	112	158
2009:Q4	746	686	816	246	208	307	33	40	42	52	67	100	126	143	185
2010:Q1	762	735	722	282	227	197	39	36	39	49	60	100	131	162	132
2010:Q2	812	788	732	255	217	232	49	41	43	65	78	104	143	149	164
2010:Q3	808	856	928	277	273	302	49	47	57	64	87	106	139	156	214
2010:Q4	805	887	824	253	299	285	40	47	47	54	74	104	133	201	180
2011:Q1	868	815	806	319	268	285	42	45	46	53	62	94	220	237	228
2011:Q2	887	1,055	822	283	354	248	50	50	55	69	79	122	223	265	230
2011:Q3	858	889	999	265	267	318	55	51	65	59	76	107	210	227	260
2011:Q4	867	946	926	284	326	365	56	48	54	68	73	114	244	282	326
2012:Q1	871	837	921	296	314	321	52	44	64	57	64	119	256	249	304
2012:Q2	875	1,012	1,009	293	351	311	49	48	66	67	80	131	254	264	298
2012:Q3	826	977	974	248	348	325	52	53	71	68	72	119	211	304	308
2012:Q4	801	900	1,039	221	298	350	47	50	62	67	70	125	213	230	342
2013:Q1	810	924	969	270	327	373	51	51	56	69	72	117	259	284	324
2013:Q2	876	940	878	287	341	255	49	52	59	78	79	144	245	294	240

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	93	71	108	280	302	398	7	12	16	36	52	71	1,220	1,690	1,393
2009:Q4	99	90	99	252	287	343	6	8	15	28	37	64	1,170	1,674	1,422
2010:Q1	105	96	90	284	264	331	6	7	14	30	35	49	1,252	1,642	1,574
2010:Q2	101	91	99	321	299	328	7	10	15	37	43	61	1,315	1,648	1,639
2010:Q3	96	100	106	306	320	409	9	17	11	33	51	64	1,283	1,650	1,558
2010:Q4	88	114	110	283	307	351	3	11	19	31	43	57	1,277	1,609	1,443
2011:Q1	106	99	130	286	320	368	6	6	22	30	36	59	1,256	1,586	1,448
2011:Q2	104	117	114	327	344	422	7	10	27	35	60	77	1,305	1,761	1,551
2011:Q3	88	85	135	329	367	481	5	6	22	31	54	88	1,200	1,742	1,441
2011:Q4	102	110	146	305	319	394	5	8	22	29	50	75	1,183	1,673	1,407
2012:Q1	97	104	130	290	309	464	4	9	20	23	46	79	1,181	1,695	1,437
2012:Q2	100	114	125	315	317	463	6	13	25	34	64	92	1,273	1,750	1,421
2012:Q3	81	100	124	310	348	533	5	10	18	38	50	81	1,118	1,669	1,471
2012:Q4	83	93	128	289	321	416	6	8	17	34	42	69	1,180	1,677	1,488
2013:Q1	88	98	121	299	342	359	8	8	16	37	65	45	1,227	1,787	1,546
2013:Q2	96	100	91	295	325	397	10	10	27	41	60	81	1,241	1,882	1,646

NOTES:

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

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

Vermont E3-1
Mean 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	92.7	92.0	90.6	60.6	63.1	60.3	84.5	84.4	84.1	54.7	57.4	56.4
Pre-3	91.6	86.5	90.1	60.6	64.2	57.4	82.5	82.9	83.0	57.2	60.5	56.3
Pre-2	92.0	85.0	90.3	58.6	64.8	57.9	81.8	84.3	82.2	57.5	61.9	59.3
Pre-1	92.0	86.7	89.6	56.7	57.0	56.5	79.9	84.7	80.7	60.8	63.3	58.4
Post-1	91.9	91.5	90.7	56.2	60.5	57.6	78.0	83.7	79.2	60.6	67.1	59.7
Post-2	91.5	91.1	91.0	57.8	68.4	57.0	78.5	83.0	79.3	60.7	65.4	60.4

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	32.6	35.7	34.2	2.9	1.9	3.5	75.1	78.6	75.5
Pre-3	33.6	38.4	32.4	3.1	2.5	3.9	74.1	77.7	74.1
Pre-2	32.3	38.6	31.7	3.0	2.6	2.9	74.0	76.3	72.6
Pre-1	32.3	35.7	31.4	2.7	3.2	3.5	71.2	74.6	69.3
Post-1	31.5	40.0	31.3	3.1	3.3	3.3	67.7	73.5	68.8
Post-2	32.5	43.7	32.8	3.3	3.9	3.5	65.8	72.4	68.2

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-2
Quarterly 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	3.7	4.2	3.3	5.9	5.6	8.9	3.0	2.7	4.0	2.9	2.9	4.9
2009:Q4	3.5	3.8	4.3	8.2	7.1	9.2	3.8	3.2	4.5	4.4	3.9	4.7
2010:Q1	4.4	3.1	4.2	7.4	9.3	10.1	3.5	4.3	4.6	3.9	5.1	5.5
2010:Q2	4.3	5.5	4.7	9.3	8.5	9.6	4.5	3.1	4.8	4.8	5.4	4.8
2010:Q3	4.6	3.5	3.3	7.2	8.9	7.9	4.0	3.7	3.2	3.3	5.2	4.7
2010:Q4	5.1	5.1	4.1	9.0	7.5	11.3	4.4	3.2	5.2	4.7	4.4	6.1
2011:Q1	4.6	5.5	4.6	10.1	8.1	11.9	4.9	3.7	5.2	5.3	4.4	6.7
2011:Q2	5.0	6.7	5.1	10.6	10.6	12.3	5.3	6.4	6.1	5.4	4.2	6.2
2011:Q3	5.3	8.0	5.8	9.6	10.6	10.2	4.1	4.9	4.5	5.4	5.7	5.7
2011:Q4	6.5	8.4	6.4	10.9	13.4	12.9	5.1	6.9	5.9	5.8	6.5	7.1
2012:Q1	6.7	8.7	7.6	14.3	14.0	13.4	6.7	5.1	6.2	7.6	8.9	7.2
2012:Q2	7.0	7.7	6.6	12.7	12.2	14.5	5.8	6.6	6.0	6.9	5.5	8.5
2012:Q3	7.5	7.8	5.5	11.0	10.7	11.4	5.0	4.5	4.5	6.0	6.3	6.9
2012:Q4	6.7	7.0	7.3	11.1	11.5	14.3	5.1	5.4	6.6	6.0	6.1	7.6
2013:Q1	7.7	7.0	7.9	14.1	12.1	15.6	6.6	5.3	7.2	7.6	6.7	8.4
2013:Q2	7.5	7.9	8.2	12.4	13.1	14.1	5.6	4.9	5.9	6.8	8.2	8.2

NOTES:

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

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

Vermont E3-3
Quarterly 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	646.2	613.1	601.7	468.7	485.9	438.9	105.0	115.6	123.9	136.4	192.5	121.1	669.8	636.9	690.0
2009:Q4	657.8	609.2	635.9	481.8	501.4	463.0	96.6	117.9	123.6	119.3	127.2	132.7	618.5	572.1	632.9
2010:Q1	648.9	626.0	624.3	537.0	552.6	505.9	126.3	141.0	150.8	125.1	88.5	128.2	651.9	590.1	627.3
2010:Q2	703.9	639.1	662.4	581.8	578.6	557.6	138.9	155.0	162.8	118.8	142.1	126.7	642.4	586.7	663.1
2010:Q3	645.9	584.7	632.8	544.4	548.8	517.9	131.7	147.5	158.3	127.1	89.8	129.7	624.0	579.7	650.6
2010:Q4	655.5	578.7	630.6	530.4	532.3	541.4	120.0	146.2	147.0	130.0	131.7	121.0	592.3	498.2	633.7
2011:Q1	614.2	590.5	607.1	507.7	517.4	516.0	119.5	149.2	141.3	132.4	144.9	122.1	684.6	687.2	647.9
2011:Q2	666.8	627.7	659.0	537.0	573.8	546.9	131.0	150.6	164.9	146.5	104.2	150.9	699.9	686.6	716.9
2011:Q3	616.7	581.5	619.1	500.9	533.3	506.9	123.4	146.0	156.5	164.2	115.3	156.5	739.7	662.7	700.2
2011:Q4	627.7	661.9	621.2	517.2	562.8	524.7	123.4	146.3	143.0	155.1	176.3	174.1	710.6	659.4	693.5
2012:Q1	632.4	635.8	585.8	516.9	558.2	530.8	121.5	135.9	137.7	152.3	220.6	165.4	761.0	702.9	777.2
2012:Q2	656.2	671.0	626.1	543.6	553.4	562.7	129.2	142.3	155.5	159.0	153.1	164.8	769.9	760.8	739.4
2012:Q3	609.6	607.0	590.5	510.7	534.6	501.0	111.6	132.2	147.1	166.7	113.5	178.5	755.1	666.5	721.2
2012:Q4	636.6	658.6	606.5	521.3	541.9	531.7	106.5	142.4	143.6	139.5	153.3	177.5	718.3	667.8	748.6
2013:Q1	635.0	665.6	613.1	550.3	577.5	556.1	99.8	146.4	139.2	141.3	148.4	139.0	755.2	688.7	753.3
2013:Q2	673.4	730.7	623.1	598.0	637.4	613.3	109.5	158.8	162.9	148.4	168.6	135.4	759.9	770.8	771.4

NOTES:

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

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

Vermont E3-4
Quarterly 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	516	502	574	166	138	162	44	48	70	23	25	33
2009:Q4	528	511	610	170	144	178	42	49	70	24	25	33
2010:Q1	516	465	565	183	122	177	44	54	72	23	24	30
2010:Q2	560	565	612	181	167	175	44	59	65	26	28	34
2010:Q3	561	527	591	179	142	157	52	50	72	26	28	35
2010:Q4	588	537	613	202	152	164	49	51	76	25	26	35
2011:Q1	546	543	621	181	158	186	60	72	90	25	23	36
2011:Q2	617	606	692	200	160	193	65	70	98	28	29	39
2011:Q3	621	632	697	203	163	205	61	91	94	28	31	40
2011:Q4	677	689	817	233	207	260	65	80	128	28	30	39
2012:Q1	690	735	786	253	233	263	69	92	114	30	30	40
2012:Q2	720	769	792	253	221	241	72	114	100	31	32	42
2012:Q3	691	716	762	234	212	223	69	78	96	32	33	44
2012:Q4	723	755	850	254	233	277	69	94	108	32	30	48
2013:Q1	696	763	829	255	261	278	68	107	124	30	31	45
2013:Q2	725	750	855	251	226	273	69	96	116	32	32	46

(continued)

Vermont E3-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	129	117	141	51	57	53	17	19	20	24	26	25
2009:Q4	135	119	143	51	62	56	18	20	23	26	25	26
2010:Q1	128	109	129	45	52	50	13	15	16	26	27	28
2010:Q2	147	121	147	54	64	60	18	21	21	30	28	32
2010:Q3	143	125	145	54	62	55	18	20	22	28	29	26
2010:Q4	147	123	152	53	62	58	20	20	24	32	29	28
2011:Q1	139	121	145	45	56	53	14	18	18	29	31	25
2011:Q2	158	142	163	54	65	61	19	23	25	32	39	31
2011:Q3	159	137	163	52	65	58	20	24	25	31	34	29
2011:Q4	167	139	169	55	70	61	22	29	28	34	39	32
2012:Q1	162	141	167	53	64	59	18	25	22	34	43	33
2012:Q2	170	152	180	59	69	64	22	30	26	36	42	34
2012:Q3	168	155	178	56	70	59	22	26	26	33	43	32
2012:Q4	172	137	178	57	75	65	23	29	29	34	43	33
2013:Q1	163	127	172	51	67	57	18	25	23	37	50	36
2013:Q2	179	144	185	56	74	67	22	29	27	38	45	35

(continued)

Vermont E3-4 (cont.)
Quarterly 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	24	5	6	6	9	15	10	0	0	5
2009:Q4	22	22	26	5	6	7	10	15	11	0	3	4
2010:Q1	19	22	22	6	6	7	8	13	9	0	0	3
2010:Q2	22	30	27	6	6	7	10	15	11	0	1	5
2010:Q3	22	26	26	5	6	6	9	14	10	0	1	4
2010:Q4	22	27	27	6	6	6	9	14	10	0	2	2
2011:Q1	19	24	24	4	6	6	7	13	9	0	0	3
2011:Q2	23	27	27	4	7	7	8	16	10	0	0	2
2011:Q3	24	30	29	4	7	6	8	16	10	0	0	2
2011:Q4	25	30	32	5	7	7	8	16	11	0	0	5
2012:Q1	24	29	30	5	7	7	7	15	10	0	2	1
2012:Q2	27	32	32	5	7	7	8	16	10	0	2	3
2012:Q3	27	32	32	5	6	6	8	14	9	0	1	2
2012:Q4	27	33	35	5	6	7	8	15	10	0	1	5
2013:Q1	26	33	31	5	6	7	7	13	9	0	0	3
2013:Q2	27	32	35	5	7	7	8	14	10	0	3	3

NOTES:

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

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

Vermont E3-5
Quarterly 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	44.6	47.4	50.6	139.1	158.9	183.2
2009:Q4	43.9	48.6	54.4	128.8	143.6	171.4
2010:Q1	46.0	50.4	51.7	127.4	138.7	157.0
2010:Q2	47.8	54.1	52.5	141.5	170.0	180.2
2010:Q3	45.4	51.4	46.8	146.1	165.1	191.0
2010:Q4	48.7	50.8	49.7	134.3	145.4	179.5
2011:Q1	48.0	55.7	54.5	137.0	141.3	179.1
2011:Q2	51.6	57.5	57.6	148.5	167.9	192.8
2011:Q3	53.6	58.0	57.4	158.8	175.8	196.5
2011:Q4	57.4	71.5	66.1	144.1	162.9	186.7
2012:Q1	63.2	76.2	65.8	157.6	151.5	186.0
2012:Q2	61.5	69.4	64.9	163.3	171.1	196.3
2012:Q3	56.8	62.3	60.0	162.3	169.8	202.3
2012:Q4	58.8	65.0	66.7	149.7	155.9	198.0
2013:Q1	62.0	67.6	69.3	147.1	155.0	189.7
2013:Q2	60.5	66.8	67.7	156.7	159.5	201.8

NOTES:

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

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

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

Period	Dually eligible beneficiaries			Rural beneficiaries			Disabled beneficiaries			SASH Beneficiaries		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	621	566	704	498	472	577	662	584	718	654	502	574
2009:Q4	633	581	810	517	494	572	639	539	752	679	511	610
2010:Q1	614	488	732	496	342	506	621	455	655	666	465	565
2010:Q2	653	633	757	582	446	576	656	547	735	773	565	612
2010:Q3	668	607	693	552	472	564	687	531	695	808	527	591
2010:Q4	683	602	736	570	478	596	715	556	699	755	537	613
2011:Q1	638	567	718	522	520	620	643	592	729	673	543	621
2011:Q2	715	618	854	584	660	662	715	627	790	763	606	692
2011:Q3	727	631	804	579	554	691	726	594	778	737	632	697
2011:Q4	762	727	980	660	557	785	750	632	957	755	689	817
2012:Q1	801	787	931	659	561	679	823	671	931	760	735	786
2012:Q2	806	847	915	680	725	768	806	733	934	850	769	792
2012:Q3	804	790	869	700	561	705	796	682	874	903	716	762
2012:Q4	823	693	972	693	670	804	829	719	925	971	755	850
2013:Q1	801	704	953	680	762	777	779	807	936	980	763	829
2013:Q2	819	815	1026	724	554	806	849	834	966	902	750	855

NOTES:

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

MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = support and 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	92.7	92.0	89.8	61.6	66.9	60.1	82.8	80.6	81.4	58.5	64.5	55.9
Pre-3	90.7	88.5	89.2	60.7	69.7	57.4	79.3	77.8	79.8	61.0	63.2	58.4
Pre-2	91.8	83.0	90.1	59.1	72.6	57.1	79.0	79.6	77.0	62.2	60.2	62.4
Pre-1	90.3	86.5	86.7	57.0	64.0	58.2	76.7	80.8	76.8	66.9	64.4	62.6
Post-1	88.9	87.6	87.1	55.3	59.5	55.8	71.9	77.7	74.6	63.7	66.6	62.4
Post-2	88.7	89.8	88.8	57.4	68.2	57.2	72.1	78.7	73.3	63.8	70.6	63.2

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	34.9	39.4	33.3	2.7	1.6	3.4	73.7	76.7	72.4
Pre-3	34.8	41.9	32.4	3.3	1.3	3.5	71.1	74.2	71.7
Pre-2	33.1	38.0	31.6	2.8	1.5	2.9	70.8	73.3	70.1
Pre-1	34.1	39.1	32.4	2.5	3.0	3.7	66.2	71.1	65.7
Post-1	30.9	37.6	28.9	3.9	4.7	3.7	60.6	67.9	63.4
Post-2	30.5	47.4	32.3	3.5	4.0	3.7	59.5	67.2	63.7

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Vermont E3-8
Quarterly 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	7.9	10.7	6.7	17.3	17.2	23.5	8.1	8.0	8.8	9.3	9.2	14.6
2009:Q4	8.5	7.2	9.5	22.8	19.4	23.1	9.8	7.9	10.3	13.1	11.6	12.8
2010:Q1	9.4	7.0	10.0	21.0	26.6	27.3	8.7	11.7	12.2	12.3	15.0	15.1
2010:Q2	9.2	12.8	11.1	26.9	23.2	25.2	12.5	7.7	11.2	14.4	15.5	14.1
2010:Q3	13.6	8.5	10.8	22.7	27.2	26.3	12.1	8.0	9.9	10.6	19.2	16.4
2010:Q4	16.4	17.4	14.4	29.4	22.2	36.0	13.4	10.5	14.8	16.0	11.7	21.2
2011:Q1	15.6	16.8	15.2	33.6	29.3	38.4	15.8	13.2	16.0	17.8	16.2	22.3
2011:Q2	16.8	23.7	18.7	36.5	37.4	41.9	17.4	20.9	19.3	19.1	16.4	22.6
2011:Q3	13.5	20.0	13.8	28.8	38.5	29.9	11.6	16.3	12.0	17.3	22.2	17.9
2011:Q4	16.3	26.3	16.1	33.0	41.8	36.7	14.9	22.5	15.1	18.1	19.3	21.6
2012:Q1	16.9	21.6	19.6	43.5	41.0	37.9	19.5	12.3	16.0	24.1	28.7	21.9
2012:Q2	16.7	14.4	15.1	37.2	32.6	39.7	15.9	14.0	14.6	21.3	18.6	25.1
2012:Q3	16.8	15.0	12.8	31.2	30.7	32.4	12.6	10.6	11.8	18.6	20.2	20.6
2012:Q4	16.4	20.0	14.3	33.1	32.6	37.8	14.6	13.7	16.2	18.5	18.9	21.5
2013:Q1	17.6	15.4	21.7	40.8	36.0	42.2	17.2	13.9	18.7	23.6	22.1	23.5
2013:Q2	17.3	14.0	17.6	34.9	41.2	35.5	14.5	13.4	13.9	20.4	27.8	21.7

NOTES:

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

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

Vermont E3-9
Quarterly 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	885.0	813.9	808.7	741.9	734.6	708.3	148.9	146.1	176.5	185.5	213.2	162.8	779.7	743.7	762.7
2009:Q4	896.9	796.7	810.5	750.4	762.6	724.6	138.9	156.6	181.0	173.7	178.2	139.1	722.2	687.8	753.6
2010:Q1	899.3	862.3	836.4	857.4	906.3	812.2	181.9	185.1	221.4	175.0	84.8	174.3	746.4	647.2	731.1
2010:Q2	970.6	852.1	908.6	928.2	915.9	905.0	206.9	204.1	250.0	154.2	163.0	179.8	731.8	749.1	765.3
2010:Q3	922.7	838.4	891.6	897.2	901.5	861.4	199.0	188.0	242.8	153.5	119.1	160.8	689.5	648.4	705.0
2010:Q4	920.3	792.7	874.4	892.4	882.8	904.7	182.0	203.7	244.1	159.9	164.1	153.6	668.6	603.6	710.4
2011:Q1	887.6	848.1	866.5	872.3	895.1	886.0	196.5	230.1	231.1	163.3	160.2	162.0	761.5	746.8	722.9
2011:Q2	952.2	889.9	912.9	924.7	1017.1	915.8	199.3	227.8	264.0	176.2	135.9	197.7	784.5	831.9	779.8
2011:Q3	873.6	795.8	826.2	839.7	900.4	819.8	182.2	210.2	230.0	200.3	156.0	187.4	846.6	732.5	749.5
2011:Q4	851.4	901.3	801.1	840.8	929.0	836.8	189.5	221.6	205.6	209.2	214.8	204.7	792.0	732.7	750.9
2012:Q1	876.4	862.0	776.6	858.1	954.7	843.5	175.2	178.6	208.3	195.0	316.9	205.9	854.0	736.8	843.7
2012:Q2	890.8	930.8	805.2	883.0	899.3	856.4	183.4	161.8	216.6	197.5	224.3	240.1	876.2	829.3	758.1
2012:Q3	835.3	848.0	740.2	826.5	844.3	778.7	165.3	162.4	205.7	205.6	131.2	259.6	830.1	798.4	849.5
2012:Q4	829.9	860.4	755.0	822.4	839.5	807.9	147.2	186.5	188.7	174.9	184.2	237.0	787.4	758.5	855.9
2013:Q1	844.7	859.2	799.3	865.0	912.5	839.3	143.1	191.8	192.7	184.5	183.0	172.2	830.4	725.6	790.9
2013:Q2	888.8	942.5	779.6	917.4	956.8	897.8	156.9	239.7	214.4	198.6	222.0	160.3	820.7	787.8	832.9

NOTES:

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

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

Vermont E3-10
Quarterly 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	970	977	1,109	344	320	343	88	123	158	41	41	61
2009:Q4	1,030	971	1,128	367	295	338	105	114	161	45	46	59
2010:Q1	1,052	951	1,144	405	280	395	108	146	175	43	41	55
2010:Q2	1,150	1,112	1,287	409	349	405	114	160	179	52	46	65
2010:Q3	1,302	1,124	1,394	502	356	444	144	142	230	57	52	73
2010:Q4	1,399	1,221	1,480	569	432	481	147	147	249	56	55	78
2011:Q1	1,381	1,355	1,601	523	455	549	193	227	305	58	49	83
2011:Q2	1,565	1,556	1,756	607	474	589	215	259	338	65	61	87
2011:Q3	1,428	1,424	1,546	515	424	495	174	222	269	58	61	80
2011:Q4	1,501	1,598	1,742	578	553	595	170	233	319	57	63	79
2012:Q1	1,542	1,651	1,721	623	557	634	183	248	283	61	54	79
2012:Q2	1,562	1,562	1,594	607	494	504	188	253	258	64	58	84
2012:Q3	1,463	1,430	1,570	546	442	509	172	189	242	63	55	82
2012:Q4	1,494	1,391	1,730	570	438	655	173	214	259	63	53	90
2013:Q1	1,469	1,607	1,778	579	568	658	170	259	300	61	62	89
2013:Q2	1,460	1,546	1,684	542	497	559	167	249	284	64	68	83

(continued)

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

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	220	195	243	80	87	87	28	33	34	60	64	56
2009:Q4	228	205	241	81	94	89	29	34	36	62	61	53
2010:Q1	233	192	222	79	88	86	25	29	31	64	67	64
2010:Q2	265	218	261	91	98	103	33	38	40	74	71	77
2010:Q3	265	232	269	98	101	100	34	38	42	76	69	71
2010:Q4	271	221	283	97	112	107	37	39	46	91	82	80
2011:Q1	279	255	297	93	109	109	31	42	42	85	94	74
2011:Q2	308	319	314	105	126	113	39	49	52	94	106	91
2011:Q3	308	276	300	92	115	97	36	47	45	92	104	80
2011:Q4	313	276	309	96	116	101	39	59	50	92	102	77
2012:Q1	303	276	310	97	110	102	37	52	45	91	114	79
2012:Q2	304	279	316	101	110	99	41	55	49	96	99	83
2012:Q3	299	309	314	92	110	91	39	47	47	89	100	73
2012:Q4	293	240	300	95	104	98	40	49	50	90	104	76
2013:Q1	291	227	315	85	113	91	35	51	47	94	125	82
2013:Q2	305	240	317	89	108	97	39	52	48	99	113	77

(continued)

Vermont E3-10 (cont.)
Quarterly 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	40	42	8	9	9	15	22	16	0	1	11
2009:Q4	34	33	44	8	10	10	15	23	17	0	12	10
2010:Q1	31	33	38	10	10	9	13	21	15	1	1	7
2010:Q2	38	43	48	10	8	11	16	22	18	0	3	15
2010:Q3	39	44	51	9	9	10	16	22	18	1	5	14
2010:Q4	40	39	51	10	10	11	16	24	19	0	9	9
2011:Q1	40	41	49	8	10	10	14	22	18	0	1	9
2011:Q2	46	47	54	7	12	11	15	27	19	0	1	9
2011:Q3	46	56	54	6	12	9	13	25	16	0	2	6
2011:Q4	44	55	62	7	9	11	14	25	17	0	1	11
2012:Q1	46	55	60	7	11	10	13	23	16	0	1	3
2012:Q2	49	54	58	7	10	9	14	23	15	0	3	6
2012:Q3	47	55	59	6	9	9	12	21	14	0	1	7
2012:Q4	48	50	62	7	9	9	12	18	15	1	1	14
2013:Q1	45	58	60	7	9	9	11	19	14	0	0	6
2013:Q2	47	61	64	6	11	9	12	19	15	0	1	6

NOTES:

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

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

Vermont E3-11
Quarterly 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	91.9	97.2	105.7	228.7	247.0	292.3
2009:Q4	94.6	96.7	106.3	230.1	229.5	276.9
2010:Q1	100.1	115.9	113.4	229.3	215.4	267.0
2010:Q2	108.5	110.0	119.6	258.9	258.7	310.1
2010:Q3	122.2	123.0	129.0	288.8	304.4	358.5
2010:Q4	134.8	138.5	139.5	273.7	264.0	347.8
2011:Q1	137.3	159.0	154.6	277.8	254.3	348.4
2011:Q2	149.5	169.7	170.7	305.4	292.4	361.6
2011:Q3	134.8	150.2	136.1	301.4	314.0	355.6
2011:Q4	141.2	193.3	154.3	277.1	301.5	336.4
2012:Q1	156.8	192.8	154.6	291.6	253.8	326.9
2012:Q2	148.7	158.1	143.8	310.1	268.7	347.8
2012:Q3	132.5	129.8	136.2	299.4	281.0	353.7
2012:Q4	136.2	132.8	150.6	275.0	239.0	342.1
2013:Q1	143.3	163.3	158.3	270.9	269.3	362.2
2013:Q2	135.6	148.8	138.7	285.1	273.9	338.6

NOTES:

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

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

Vermont E3-12
Quarterly average expenditures among beneficiaries with behavioral health 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	833	699	954	250	208	275	48	46	64	75	44	60	151	151	171
2009:Q4	766	770	1,069	215	211	320	44	44	62	76	54	60	139	169	212
2010:Q1	817	712	889	282	173	254	46	50	57	62	52	56	161	119	178
2010:Q2	800	780	998	233	203	277	47	51	63	72	53	65	160	123	158
2010:Q3	847	857	907	269	218	201	51	57	70	76	51	63	171	170	154
2010:Q4	894	828	956	291	243	253	48	50	67	78	47	59	198	144	191
2011:Q1	856	852	945	270	235	263	47	45	67	60	38	50	217	191	221
2011:Q2	929	879	993	304	206	249	50	51	67	72	60	64	252	204	231
2011:Q3	910	975	913	295	208	235	53	58	66	73	46	65	252	202	220
2011:Q4	877	990	1,096	285	272	307	48	53	62	70	58	73	248	257	281
2012:Q1	923	933	1,050	311	240	315	50	49	62	59	45	64	279	187	319
2012:Q2	928	992	1,054	299	231	326	51	59	65	73	55	79	263	199	313
2012:Q3	867	907	948	270	222	237	53	59	70	63	46	62	251	208	228
2012:Q4	902	945	1,076	290	229	301	50	53	73	68	54	62	250	210	283
2013:Q1	870	828	1,033	289	191	307	52	47	68	60	44	58	264	191	283
2013:Q2	885	1,041	1,065	285	316	301	50	57	69	73	75	71	269	251	258

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	71	84	84	329	367	409	8	6	9	36	36	48	1,730	1,324	1,343
2009:Q4	67	90	87	297	302	371	7	11	6	32	32	39	1,707	1,399	1,394
2010:Q1	72	83	82	293	320	345	5	14	7	31	42	42	1,673	1,524	1,432
2010:Q2	70	77	86	308	384	372	6	5	7	34	52	38	1,753	1,507	1,490
2010:Q3	73	83	76	343	410	423	8	3	7	41	77	41	1,748	1,449	1,447
2010:Q4	78	80	80	303	338	387	8	7	5	35	31	37	1,693	1,410	1,455
2011:Q1	75	81	78	300	304	379	7	4	4	36	20	38	1,663	1,428	1,463
2011:Q2	77	81	83	320	363	379	8	7	7	39	25	44	1,808	1,505	1,486
2011:Q3	83	77	76	348	382	391	8	3	9	39	29	43	1,684	1,477	1,421
2011:Q4	79	106	83	296	346	352	5	7	6	33	48	39	1,642	1,447	1,360
2012:Q1	82	91	88	312	294	349	4	5	5	32	24	37	1,615	1,425	1,301
2012:Q2	79	76	84	321	399	369	7	3	8	35	32	38	1,736	1,506	1,398
2012:Q3	76	79	75	323	358	384	5	4	3	35	37	33	1,620	1,265	1,428
2012:Q4	71	79	81	290	310	369	4	5	5	30	38	32	1,641	1,498	1,402
2013:Q1	74	61	87	288	302	362	4	3	5	27	26	32	1,626	1,483	1,439
2013:Q2	76	87	84	301	334	382	6	9	8	29	52	37	1,717	1,673	1,534

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among beneficiaries with disabilities

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	218	184	221	40	43	53	59	63	70	278	342	360	200	322	135
2009:Q4	203	150	233	38	40	52	55	63	65	246	278	332	179	168	162
2010:Q1	216	128	202	37	33	45	56	66	62	243	257	301	198	136	189
2010:Q2	209	158	220	39	42	50	58	64	70	258	311	333	133	149	184
2010:Q3	228	143	187	41	40	55	59	63	58	277	323	376	166	97	172
2010:Q4	257	181	195	38	36	57	62	57	59	246	265	343	178	216	157
2011:Q1	205	197	224	37	36	55	57	61	64	246	275	336	142	166	132
2011:Q2	242	164	230	40	45	57	62	68	68	260	319	355	153	87	183
2011:Q3	238	143	241	41	49	60	66	54	72	281	332	363	202	125	198
2011:Q4	263	200	333	40	42	56	67	70	77	246	291	336	183	226	221
2012:Q1	312	202	353	41	40	61	75	76	76	263	253	343	166	215	242
2012:Q2	276	199	319	44	44	59	71	69	79	276	301	348	220	104	263
2012:Q3	276	199	286	47	49	65	67	68	76	286	297	368	210	190	290
2012:Q4	295	222	296	45	44	66	67	68	80	256	294	351	164	245	246
2013:Q1	285	257	321	42	45	65	68	65	80	245	297	344	184	236	163
2013:Q2	313	264	300	47	47	67	71	76	76	271	282	357	180	181	135

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Vermont E3-15
Quarterly average expenditures and utilization among dual eligible beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	199	165	211	39	41	51	58	60	67	264	301	337	178	330	126
2009:Q4	210	171	264	37	40	53	56	66	78	235	251	317	164	172	196
2010:Q1	215	134	234	37	38	46	57	61	69	239	258	288	174	150	162
2010:Q2	212	206	227	40	43	49	61	67	67	255	299	315	162	192	158
2010:Q3	213	178	182	43	39	57	58	73	61	276	313	358	149	108	163
2010:Q4	237	214	212	40	41	55	60	65	64	248	261	328	170	149	157
2011:Q1	207	185	207	38	34	53	60	63	66	245	257	319	150	132	137
2011:Q2	246	139	255	43	44	62	66	61	77	266	300	349	180	121	189
2011:Q3	242	151	249	41	48	59	68	64	76	274	317	348	198	162	172
2011:Q4	267	251	317	41	44	61	70	95	80	250	299	335	180	232	188
2012:Q1	300	251	336	44	42	59	76	95	76	270	258	323	174	295	194
2012:Q2	281	250	311	46	48	60	74	90	82	275	283	339	200	200	236
2012:Q3	287	275	266	48	47	67	72	80	76	284	303	357	204	128	242
2012:Q4	300	206	313	46	45	69	72	65	81	253	274	339	162	164	235
2013:Q1	303	193	331	46	43	68	73	59	85	251	276	344	164	181	142
2013:Q2	289	262	348	47	48	70	72	80	83	268	281	354	166	251	158

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Vermont E3-16
Quarterly average expenditures and utilization among rural beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	157	139	158	25	28	28	42	54	50	146	161	148	116	716	96
2009:Q4	157	163	151	26	35	30	41	54	49	138	164	145	98	50	135
2010:Q1	161	98	153	25	25	28	43	41	50	140	156	136	112	98	132
2010:Q2	189	127	171	29	25	29	48	41	53	156	170	151	94	107	122
2010:Q3	171	150	152	28	25	30	45	58	46	150	187	153	113	24	103
2010:Q4	190	132	170	29	33	29	46	46	48	153	194	152	124	50	98
2011:Q1	167	163	189	29	20	32	47	50	56	159	155	159	115	32	88
2011:Q2	177	209	168	32	30	34	47	64	52	172	176	174	118	57	106
2011:Q3	171	147	185	30	31	34	49	55	54	176	193	174	151	40	179
2011:Q4	234	150	244	31	28	36	59	46	66	166	169	170	152	168	210
2012:Q1	239	175	206	31	19	33	59	62	60	180	114	141	146	263	120
2012:Q2	227	222	234	36	28	37	57	81	58	188	155	168	152	207	159
2012:Q3	236	127	182	37	29	42	53	44	54	185	168	168	131	47	117
2012:Q4	235	220	251	39	18	47	54	51	65	175	111	173	119	232	202
2013:Q1	250	284	251	36	35	51	57	58	63	173	177	176	145	144	152
2013:Q2	251	159	244	37	18	44	56	42	63	169	118	170	118	241	150

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Vermont E3-17
Quarterly average expenditures and utilization among SASH/MAPCP beneficiaries and full comparison group

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q3	207	138	162	33	25	33	61	47	51	221	159	183	153	193	121
2009:Q4	226	144	178	35	25	33	58	49	54	177	144	171	184	127	133
2010:Q1	253	122	177	32	24	30	63	50	52	160	139	157	114	89	128
2010:Q2	259	167	175	30	28	34	66	54	53	180	170	180	111	142	127
2010:Q3	290	142	157	41	28	35	75	51	47	229	165	191	126	90	130
2010:Q4	257	152	164	37	26	35	63	51	50	207	145	180	86	132	121
2011:Q1	231	158	186	35	23	36	63	56	54	193	141	179	82	145	122
2011:Q2	246	160	193	42	29	39	62	57	58	240	168	193	152	104	151
2011:Q3	235	163	205	40	31	40	64	58	57	240	176	196	181	115	157
2011:Q4	255	207	260	45	30	39	74	71	66	227	163	187	202	176	174
2012:Q1	232	233	263	43	30	40	70	76	66	224	152	186	102	221	165
2012:Q2	275	221	241	46	32	42	78	69	65	253	171	196	144	153	165
2012:Q3	318	212	223	44	33	44	80	62	60	236	170	202	323	113	178
2012:Q4	345	233	277	43	30	48	84	65	67	238	156	198	145	153	177
2013:Q1	386	261	278	47	31	45	88	68	69	226	155	190	214	148	139
2013:Q2	275	226	273	46	32	46	82	67	68	231	160	202	171	169	135

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home; SASH = support and services at home.

North Carolina E4-1
Mean 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	90.5	90.4	88.4	57.3	57.6	55.3	86.1	83.9	80.4	45.6	49.2	40.3
Pre-3	89.6	90.4	88.6	58.3	57.1	56.5	84.7	81.8	80.7	45.2	50.2	44.3
Pre-2	90.4	91.8	88.9	56.9	57.1	53.8	84.4	82.8	80.3	44.6	53.2	44.8
Pre-1	92.4	92.1	89.3	57.0	56.7	53.3	87.2	84.0	80.3	51.5	55.6	48.2
Post-1	92.4	91.9	88.6	52.4	55.3	50.8	86.9	83.1	80.7	54.3	57.1	51.2
Post-2	92.8	90.4	88.1	56.5	54.6	51.3	87.6	83.1	80.2	58.5	56.7	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	27.3	20.3	3.1	2.5	4.2	80.6	78.6	75.1
Pre-3	25.2	26.2	23.1	3.3	2.8	3.7	80.7	77.8	75.3
Pre-2	24.3	27.7	21.4	3.0	2.7	4.0	80.4	78.8	75.5
Pre-1	27.8	31.0	23.7	2.3	2.6	3.6	80.8	77.4	74.7
Post-1	26.4	30.7	24.1	2.3	2.6	4.0	79.6	74.3	72.0
Post-2	31.8	28.8	23.6	2.1	3.9	4.6	81.1	77.8	70.8

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-2
Quarterly 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	4.5	4.6	4.5	10.2	10.7	11.9	4.3	4.3	4.2	5.9	6.4	7.7
2010:Q1	5.4	5.5	5.5	11.4	12.8	13.4	4.9	5.1	5.8	6.5	7.7	7.6
2010:Q2	5.4	5.8	5.7	12.0	11.1	12.2	5.6	4.2	5.4	6.4	6.9	6.8
2010:Q3	5.0	4.3	6.6	9.8	8.8	11.1	4.5	3.6	4.1	5.3	5.2	7.1
2010:Q4	6.4	5.8	5.8	12.3	11.6	10.4	5.0	4.3	4.1	7.3	7.3	6.4
2011:Q1	6.0	6.3	7.2	15.3	11.3	15.5	5.9	4.3	6.7	9.4	7.0	8.8
2011:Q2	5.5	4.8	7.4	13.5	12.6	12.1	6.1	4.6	5.0	7.4	8.0	7.1
2011:Q3	7.3	5.1	7.4	13.0	8.9	11.4	6.3	3.3	4.4	6.7	5.6	7.0
2011:Q4	7.7	6.7	7.6	16.2	14.6	14.9	7.8	6.2	5.5	8.4	8.4	9.4
2012:Q1	8.9	8.4	9.5	17.9	14.3	17.5	8.2	5.2	7.0	9.7	9.1	10.4
2012:Q2	8.5	9.2	9.4	16.6	17.8	15.9	8.0	7.2	6.5	8.6	10.7	9.4
2012:Q3	8.1	9.5	9.6	16.8	14.7	15.6	8.3	5.1	6.7	8.5	9.6	8.8
2012:Q4	8.5	9.7	11.7	17.4	14.9	17.1	8.6	7.0	7.1	8.8	7.9	10.0
2013:Q1	9.4	9.9	10.3	18.5	18.7	19.1	9.0	8.5	7.3	9.5	10.2	11.8
2013:Q2	8.8	8.9	10.6	15.9	15.4	15.7	7.1	5.1	6.5	8.8	10.3	9.2
2013:Q3	8.3	10.0	12.0	16.0	14.0	12.7	7.3	4.3	4.7	8.8	9.7	7.9

NOTES:

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

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

North Carolina E4-3
Quarterly 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	1,001.7	988.2	968.8	572.7	657.2	675.6	194.5	158.5	184.9	131.2	161.6	141.3	670.5	701.8	674.3
2010:Q1	1,012.5	976.8	1,003.9	613.4	752.7	751.0	221.1	175.5	206.9	130.8	129.7	144.5	705.6	670.0	661.2
2010:Q2	1,046.6	1,005.1	1,015.4	670.9	722.7	754.1	234.8	186.4	215.1	135.2	162.4	152.7	738.2	653.1	717.8
2010:Q3	1,013.8	1,026.1	1,000.2	665.2	707.8	764.6	237.8	198.0	228.2	130.8	137.6	150.2	713.4	634.2	711.7
2010:Q4	992.2	988.7	996.1	615.6	711.7	730.0	216.3	170.0	201.9	158.0	147.9	138.4	677.0	613.6	664.3
2011:Q1	1,044.6	1,084.9	1,060.3	680.2	734.4	778.0	239.1	185.7	212.4	142.7	190.4	153.8	710.2	745.1	732.1
2011:Q2	1,058.4	1,033.6	1,051.5	679.5	747.3	783.3	239.9	181.5	204.5	154.4	126.6	144.8	759.2	766.5	702.4
2011:Q3	1,056.7	983.3	991.8	674.7	716.2	786.5	237.1	165.3	205.7	171.5	144.9	165.5	749.4	723.2	707.7
2011:Q4	1,036.6	1,033.4	979.6	650.2	720.7	763.0	229.6	165.1	192.8	176.1	192.6	177.3	746.7	726.8	706.4
2012:Q1	1,060.5	1,048.8	1,024.6	675.7	740.8	792.5	240.0	176.9	203.5	190.9	153.6	166.7	725.1	682.5	707.7
2012:Q2	1,073.4	1,052.2	1,016.3	656.1	721.0	773.1	229.1	163.6	196.8	182.2	188.8	179.0	771.4	759.1	700.7
2012:Q3	1,052.2	994.3	994.1	640.3	699.3	762.0	233.1	163.3	190.7	192.8	144.0	168.3	742.9	705.2	737.9
2012:Q4	1,030.8	1,090.7	995.9	620.5	692.2	740.5	214.5	158.3	179.5	176.6	142.9	189.4	678.9	685.0	676.3
2013:Q1	1,051.3	1,066.2	1,016.5	646.6	742.6	796.9	215.8	173.8	186.1	164.8	138.0	170.4	717.1	682.6	687.0
2013:Q2	1,077.4	1,118.6	1,025.6	663.8	782.7	823.8	222.1	179.3	184.1	179.5	158.7	164.2	738.7	676.3	695.9
2013:Q3	1,034.6	1,104.0	1,025.2	649.8	767.5	815.9	240.4	165.4	191.2	161.5	197.9	175.1	713.5	746.7	688.8

NOTES:

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

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

North Carolina E4-4
Quarterly 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	516	541	537	159	172	171	30	34	37	23	23	23
2010:Q1	537	542	545	193	191	195	39	36	38	24	23	24
2010:Q2	578	585	580	184	187	184	41	38	44	25	26	27
2010:Q3	586	567	610	181	174	199	40	33	42	26	23	27
2010:Q4	596	626	603	189	203	186	42	51	48	26	27	26
2011:Q1	602	611	608	203	199	208	51	59	54	26	26	27
2011:Q2	658	673	645	202	219	200	51	50	55	29	28	29
2011:Q3	699	628	659	227	175	198	60	54	58	30	26	30
2011:Q4	701	672	678	226	196	209	63	63	64	29	28	30
2012:Q1	747	724	725	263	238	253	73	74	67	32	28	31
2012:Q2	763	751	767	248	242	276	72	78	62	33	30	32
2012:Q3	762	733	745	250	225	245	64	78	64	35	29	34
2012:Q4	770	724	775	259	234	267	69	65	73	35	28	33
2013:Q1	773	749	770	271	265	277	84	70	76	33	30	33
2013:Q2	783	750	775	259	246	257	76	68	72	34	29	33
2013:Q3	750	783	756	234	280	245	68	69	63	34	31	33

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North Carolina E4-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	93	89	83	71	79	77	29	31	30	22	23	20
2010:Q1	92	90	86	66	75	74	21	20	22	22	23	20
2010:Q2	101	105	93	77	81	83	30	29	30	25	28	22
2010:Q3	103	106	95	81	81	87	32	31	32	24	24	23
2010:Q4	101	103	94	79	78	87	34	34	34	26	32	24
2011:Q1	108	107	97	76	76	81	24	28	26	26	24	22
2011:Q2	124	122	105	89	84	91	32	33	34	28	31	24
2011:Q3	122	122	111	89	82	92	36	33	35	27	27	23
2011:Q4	120	121	105	87	81	90	39	38	38	29	27	25
2012:Q1	127	129	115	82	81	89	29	30	30	31	32	25
2012:Q2	133	129	117	87	82	96	37	36	37	30	33	26
2012:Q3	135	127	118	88	84	97	38	37	39	31	29	26
2012:Q4	134	113	111	87	84	98	40	43	42	28	29	26
2013:Q1	132	116	114	82	82	92	29	30	31	30	31	25
2013:Q2	134	125	118	92	90	101	37	39	38	31	31	28
2013:Q3	140	116	120	93	93	102	39	42	40	28	35	25

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North Carolina E4-4 (cont.)
Quarterly 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	24	30	20	18	18	16	20	20	0	1	2
2010:Q1	20	23	27	19	19	19	14	17	17	0	0	3
2010:Q2	21	26	31	20	19	19	17	18	19	0	1	2
2010:Q3	21	27	32	20	20	20	16	18	20	0	1	3
2010:Q4	23	29	32	20	18	20	15	18	19	0	1	3
2011:Q1	21	26	32	19	18	19	15	18	18	0	0	2
2011:Q2	23	29	36	19	19	20	16	20	19	0	0	2
2011:Q3	25	30	39	18	18	19	16	17	19	0	0	3
2011:Q4	26	33	42	16	18	19	15	18	19	0	0	2
2012:Q1	26	31	40	19	19	21	14	17	18	0	0	1
2012:Q2	28	33	42	18	19	20	15	18	18	0	0	2
2012:Q3	28	36	45	18	18	20	14	17	18	0	0	2
2012:Q4	29	36	46	16	18	19	14	18	18	0	0	2
2013:Q1	27	38	43	17	17	19	13	16	16	0	0	2
2013:Q2	29	35	45	18	18	20	14	18	18	0	0	3
2013:Q3	26	36	44	17	19	20	14	18	18	0	1	3

NOTES:

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

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

North Carolina E4-5
Quarterly 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	54.1	58.7	60.5	125.9	128.3	132.4
2010:Q1	62.3	61.2	67.1	126.9	134.2	137.6
2010:Q2	62.6	62.7	64.8	143.4	152.1	153.2
2010:Q3	60.4	54.2	65.8	138.7	138.8	157.5
2010:Q4	63.7	65.8	62.0	132.6	137.9	147.9
2011:Q1	69.1	64.9	73.0	143.0	142.1	153.7
2011:Q2	68.8	69.8	68.5	150.9	154.7	163.9
2011:Q3	73.4	60.0	67.9	165.9	144.1	167.6
2011:Q4	74.3	69.6	72.7	152.4	140.3	159.6
2012:Q1	84.3	77.9	84.4	164.3	152.2	164.1
2012:Q2	78.5	74.6	79.6	166.3	156.3	168.4
2012:Q3	76.3	74.5	79.2	169.5	154.4	173.6
2012:Q4	77.8	75.4	81.5	165.8	141.7	175.0
2013:Q1	80.4	79.6	84.1	155.5	146.1	167.5
2013:Q2	74.2	74.1	77.3	164.1	151.9	174.0
2013:Q3	74.8	78.2	74.3	159.1	159.1	169.7

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 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	659	746	720	543	560	568	657	700	694	642	540	635
2010:Q1	719	785	745	566	537	583	663	711	706	665	608	636
2010:Q2	781	767	819	610	584	626	718	707	774	723	655	719
2010:Q3	826	726	833	628	550	604	714	747	792	753	611	706
2010:Q4	830	847	860	635	667	625	753	783	770	718	635	740
2011:Q1	831	824	848	638	626	620	755	786	763	742	646	701
2011:Q2	887	890	890	696	729	642	815	862	821	794	785	783
2011:Q3	961	826	921	750	662	671	941	804	840	821	757	816
2011:Q4	910	946	911	729	753	690	872	869	864	833	791	825
2012:Q1	1,054	1,003	992	790	785	732	927	915	908	930	852	912
2012:Q2	1,014	1,041	966	808	782	744	947	899	1,024	974	843	1,098
2012:Q3	1,034	964	1,020	800	747	785	923	876	916	910	796	943
2012:Q4	989	992	1,037	803	758	778	913	854	924	879	879	955
2013:Q1	1,009	899	990	805	796	773	931	939	917	1,003	844	915
2013:Q2	978	969	991	832	799	776	935	935	947	933	804	916
2013:Q3	981	967	950	790	870	775	901	975	912	899	860	874

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North Carolina E4-6 (cont.)
Quarterly average total Medicare expenditures among special populations

Period	Network 1			Network 2			Network 3			Network 4		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	457	541	537	415	541	537	601	541	537	551	541	537
2010:Q1	450	542	545	447	542	545	645	542	545	569	542	545
2010:Q2	487	585	580	497	585	580	696	585	580	580	585	580
2010:Q3	489	567	610	460	567	610	724	567	610	595	567	610
2010:Q4	512	626	603	474	626	603	709	626	603	633	626	603
2011:Q1	515	611	608	495	611	608	712	611	608	645	611	608
2011:Q2	594	673	645	492	673	645	787	673	645	645	673	645
2011:Q3	641	628	659	516	628	659	835	628	659	670	628	659
2011:Q4	644	672	678	521	672	678	834	672	678	679	672	678
2012:Q1	668	724	725	561	724	725	906	724	725	746	724	725
2012:Q2	699	751	767	572	751	767	897	751	767	772	751	767
2012:Q3	697	733	745	587	733	745	927	733	745	688	733	745
2012:Q4	696	724	775	629	724	775	916	724	775	762	724	775
2013:Q1	675	749	770	672	749	770	907	749	770	820	749	770
2013:Q2	704	750	775	625	750	775	900	750	775	865	750	775
2013:Q3	667	783	756	613	783	756	899	783	756	730	783	756

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of demonstration effects found in the state chapters. See Appendix C 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	90.0	89.6	88.7	58.5	56.6	56.5	84.7	80.0	78.5	50.6	53.9	46.4
Pre-3	89.5	90.5	88.0	58.8	57.5	57.8	82.4	79.6	77.8	50.5	55.5	52.0
Pre-2	89.6	90.9	87.8	56.6	58.0	54.8	81.5	79.0	76.6	51.8	58.5	51.9
Pre-1	90.3	90.0	86.9	57.9	55.7	53.3	84.3	77.2	77.7	60.1	63.0	59.9
Post-1	89.4	89.1	85.6	50.9	53.7	50.5	82.8	78.3	75.7	60.7	60.9	59.1
Post-2	90.5	88.6	85.7	57.1	50.7	50.9	84.1	80.3	75.3	65.0	58.9	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	27.4	27.4	22.3	3.0	2.3	3.3	79.3	74.2	73.1
Pre-3	26.6	27.2	25.0	2.8	2.2	2.9	78.6	74.2	72.8
Pre-2	26.0	29.4	23.0	3.1	2.5	3.7	76.8	75.3	71.4
Pre-1	30.1	32.0	27.3	1.7	3.2	3.1	78.0	74.0	70.6
Post-1	27.1	27.9	25.1	2.6	1.8	4.3	74.9	69.2	66.0
Post-2	34.5	27.5	24.6	2.3	4.9	4.0	76.4	73.8	66.0

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

North Carolina E4-8
Quarterly 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	10.3	7.1	9.1	26.4	25.8	31.0	10.0	11.5	10.2	16.4	14.4	20.9
2010:Q1	12.2	14.6	11.7	32.9	29.6	34.9	13.4	13.4	14.8	19.6	16.3	20.1
2010:Q2	12.0	14.2	13.0	33.0	25.8	32.8	13.9	10.6	13.8	19.1	15.1	19.0
2010:Q3	12.7	6.8	13.9	27.1	23.9	29.8	10.0	10.8	9.1	17.2	13.0	20.7
2010:Q4	19.6	10.9	16.2	37.4	35.0	33.3	13.9	11.7	13.4	23.5	23.3	19.9
2011:Q1	19.3	18.5	21.7	50.0	33.5	47.4	18.4	13.4	19.6	31.6	20.1	27.8
2011:Q2	18.0	13.3	22.6	45.1	38.8	37.0	19.7	13.0	15.1	25.3	25.8	21.9
2011:Q3	24.8	17.3	24.0	42.9	28.7	36.4	20.4	9.9	12.9	22.5	18.8	23.6
2011:Q4	22.6	17.4	19.7	50.5	42.5	45.3	23.2	16.4	16.0	27.4	26.1	29.3
2012:Q1	23.1	25.5	24.9	53.4	42.7	49.7	23.2	14.0	18.2	30.2	28.7	31.5
2012:Q2	20.9	24.1	24.4	46.5	51.3	45.1	20.7	18.8	17.4	25.8	32.5	27.8
2012:Q3	18.5	24.7	21.8	47.0	41.8	42.2	20.9	13.8	16.5	26.2	28.1	25.7
2012:Q4	18.4	23.9	28.4	48.7	41.6	47.9	21.5	14.8	18.6	27.1	26.8	29.4
2013:Q1	19.7	24.4	24.9	48.8	50.3	50.3	21.3	18.9	18.4	27.5	31.3	31.9
2013:Q2	17.9	14.0	25.9	42.8	43.0	42.3	18.7	15.6	16.3	24.0	27.5	25.9
2013:Q3	17.5	25.2	26.8	48.2	46.8	35.3	22.3	11.4	12.0	25.9	35.4	23.3

NOTES:

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

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

North Carolina E4-9
Quarterly 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	1,336.4	1,360.4	1,229.4	800.3	991.5	981.0	272.9	241.7	249.2	181.2	185.3	189.9	754.4	757.7	769.9
2010:Q1	1,375.7	1,331.2	1,288.1	885.9	1,156.1	1,098.6	314.0	244.5	271.5	160.7	135.6	216.6	774.3	701.5	757.1
2010:Q2	1,417.4	1,388.9	1,323.0	979.6	1,100.7	1,110.2	343.5	263.5	296.2	190.5	236.7	205.5	826.3	758.3	792.1
2010:Q3	1,402.4	1,453.7	1,313.0	981.1	1,078.0	1,127.5	351.2	289.1	325.3	184.6	176.1	209.3	800.3	684.4	813.2
2010:Q4	1,380.5	1,409.2	1,334.0	915.7	1,112.4	1,102.7	329.2	246.9	301.2	203.7	195.5	184.0	728.6	674.4	733.0
2011:Q1	1,480.5	1,569.3	1,448.2	1,063.5	1,187.5	1,206.1	380.1	272.7	308.8	183.3	257.3	195.4	771.9	855.9	810.4
2011:Q2	1,524.0	1,552.2	1,427.9	1,067.6	1,193.1	1,230.6	386.0	288.1	306.5	189.6	173.7	193.0	822.6	841.2	767.7
2011:Q3	1,519.0	1,450.0	1,393.1	1,055.0	1,159.0	1,260.3	391.8	265.8	306.3	211.3	180.4	202.6	802.4	783.7	767.0
2011:Q4	1,459.8	1,533.7	1,288.8	1,006.5	1,152.1	1,187.9	365.5	273.3	278.5	214.2	212.3	232.3	798.0	797.2	782.1
2012:Q1	1,453.5	1,557.4	1,353.8	1,023.9	1,231.2	1,218.8	368.7	271.0	292.9	244.3	201.5	214.7	796.1	795.7	782.9
2012:Q2	1,448.5	1,508.0	1,370.7	980.5	1,168.3	1,199.8	339.8	250.3	289.4	224.1	240.1	216.1	820.7	812.9	764.6
2012:Q3	1,411.2	1,438.4	1,321.3	932.3	1,118.3	1,162.3	340.2	218.6	270.2	229.4	157.1	221.5	796.9	732.4	784.5
2012:Q4	1,353.6	1,542.5	1,270.3	897.0	1,048.0	1,119.2	312.5	224.3	252.9	219.5	172.7	243.2	745.7	689.4	716.5
2013:Q1	1,414.3	1,487.2	1,322.8	925.3	1,164.0	1,199.5	299.7	250.4	255.4	217.2	177.9	208.2	775.4	732.9	753.8
2013:Q2	1,428.3	1,544.2	1,332.0	965.2	1,170.6	1,207.5	314.0	267.8	250.7	235.8	206.4	221.7	804.6	711.9	749.0
2013:Q3	1,384.2	1,458.2	1,326.8	937.9	1,145.3	1,197.4	336.0	222.4	253.3	214.4	279.7	239.2	782.6	812.5	738.9

NOTES:

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

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

North Carolina E4-10
Quarterly 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	996	1,046	1,030	341	399	356	72	73	81	44	37	44
2010:Q1	1,118	1,008	1,090	448	361	412	93	89	89	44	38	47
2010:Q2	1,160	1,095	1,155	391	383	395	108	80	108	48	43	50
2010:Q3	1,229	1,169	1,265	429	421	459	106	84	107	49	43	54
2010:Q4	1,410	1,367	1,340	542	498	482	129	135	137	55	52	57
2011:Q1	1,521	1,443	1,437	600	522	553	169	179	167	62	56	59
2011:Q2	1,666	1,557	1,538	623	569	552	177	147	172	66	59	65
2011:Q3	1,817	1,511	1,627	724	508	579	202	180	189	69	58	67
2011:Q4	1,698	1,573	1,529	630	520	519	197	189	188	63	58	62
2012:Q1	1,719	1,718	1,614	650	632	607	197	218	174	68	59	66
2012:Q2	1,662	1,694	1,749	588	611	714	180	221	161	70	61	66
2012:Q3	1,595	1,574	1,594	574	499	561	157	200	168	69	59	68
2012:Q4	1,669	1,520	1,641	621	540	603	181	128	180	70	58	68
2013:Q1	1,617	1,624	1,673	596	596	642	199	184	198	63	59	69
2013:Q2	1,588	1,519	1,648	547	511	596	185	158	179	64	56	68
2013:Q3	1,498	1,626	1,537	499	634	530	155	140	145	68	60	64

(continued)

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

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	174	163	168	110	121	124	47	51	46	52	48	44
2010:Q1	176	167	180	111	121	125	40	37	40	53	58	45
2010:Q2	196	196	189	125	128	138	51	51	50	60	54	51
2010:Q3	205	203	200	135	139	149	53	50	53	61	59	56
2010:Q4	210	218	202	144	135	153	61	59	58	71	80	59
2011:Q1	233	237	212	148	146	153	55	57	54	74	61	56
2011:Q2	269	260	233	170	157	172	64	62	65	81	85	70
2011:Q3	273	258	251	166	152	177	70	60	67	84	69	68
2011:Q4	260	269	230	152	149	167	74	67	63	88	77	71
2012:Q1	270	282	245	146	156	168	61	62	58	88	84	65
2012:Q2	269	260	249	147	144	175	68	66	67	79	92	69
2012:Q3	267	279	246	136	147	168	65	66	68	81	75	66
2012:Q4	268	243	238	142	142	170	65	71	70	73	77	62
2013:Q1	260	243	238	134	135	159	57	56	61	75	77	61
2013:Q2	257	260	245	146	146	168	65	63	66	75	76	68
2013:Q3	256	262	247	144	157	168	67	68	67	74	87	64

(continued)

North Carolina E4-10 (cont.)
Quarterly 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	33	35	55	28	27	26	25	29	29	0	2	6
2010:Q1	38	35	50	27	29	27	23	25	26	1	0	5
2010:Q2	39	41	58	28	28	27	26	27	30	1	3	7
2010:Q3	40	42	60	30	30	29	28	28	31	0	2	7
2010:Q4	47	55	64	30	27	28	28	29	31	0	4	6
2011:Q1	48	51	70	27	26	28	27	29	29	0	0	6
2011:Q2	51	60	80	26	29	28	30	32	32	0	0	6
2011:Q3	58	61	88	24	27	29	29	28	32	0	2	8
2011:Q4	54	69	87	22	28	26	26	31	29	0	0	4
2012:Q1	58	61	86	24	27	29	24	29	30	0	0	4
2012:Q2	57	63	91	23	25	28	23	29	29	0	0	4
2012:Q3	56	69	93	20	24	27	22	27	28	0	0	5
2012:Q4	59	68	94	20	24	25	21	28	27	0	1	4
2013:Q1	57	78	90	23	24	26	20	23	25	0	1	5
2013:Q2	55	69	93	23	22	27	21	28	27	0	1	6
2013:Q3	52	68	94	21	27	26	20	27	26	0	1	8

NOTES:

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

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

North Carolina E4-11
Quarterly 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	112.8	131.0	124.9	217.0	206.4	229.8
2010:Q1	138.9	122.6	139.4	217.8	222.8	246.4
2010:Q2	136.1	125.6	138.5	245.2	246.1	272.4
2010:Q3	136.3	122.2	146.9	250.0	242.8	297.5
2010:Q4	172.6	159.4	160.3	256.7	256.3	288.4
2011:Q1	195.1	166.3	191.0	295.4	277.6	306.4
2011:Q2	201.6	181.6	184.8	315.5	310.3	327.2
2011:Q3	215.3	172.7	193.9	339.1	290.6	341.8
2011:Q4	197.7	179.6	182.3	306.4	274.6	308.3
2012:Q1	207.2	201.8	200.4	321.4	285.5	316.1
2012:Q2	185.2	182.4	194.3	327.1	290.3	317.3
2012:Q3	169.2	175.8	180.9	318.0	295.4	327.9
2012:Q4	178.6	177.8	187.2	319.2	263.5	326.0
2013:Q1	181.7	188.0	193.0	291.4	261.7	310.3
2013:Q2	164.1	163.4	178.7	308.4	290.8	332.7
2013:Q3	170.6	186.1	161.8	299.1	295.5	303.4

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures among beneficiaries with behavioral health 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	810	850	825	272	278	240	52	45	53	40	67	40	146	184	139
2010:Q1	859	754	899	288	225	317	50	47	55	37	54	35	141	138	170
2010:Q2	997	872	901	347	300	269	57	56	63	53	63	47	169	142	168
2010:Q3	1,034	1,027	1,042	328	369	355	58	60	66	53	59	53	151	161	160
2010:Q4	974	1,136	976	298	354	287	58	65	64	59	65	49	176	231	191
2011:Q1	1,011	1,015	1,022	344	281	335	56	59	63	52	45	42	272	225	251
2011:Q2	1,114	1,208	1,097	327	386	366	68	71	70	71	53	52	276	282	267
2011:Q3	1,204	1,137	1,128	409	315	335	65	68	73	73	66	55	338	258	263
2011:Q4	1,096	1,104	1,053	356	302	322	55	62	67	49	65	53	292	271	247
2012:Q1	1,045	1,210	1,071	340	425	350	63	65	66	46	56	42	281	355	296
2012:Q2	1,030	1,030	1,033	302	305	321	66	66	72	47	51	55	260	281	290
2012:Q3	1,054	1,221	1,076	335	378	360	63	60	67	40	60	46	302	334	299
2012:Q4	1,037	977	1,034	340	284	338	65	55	68	44	55	45	293	219	280
2013:Q1	1,068	947	1,047	366	283	355	62	54	66	37	43	40	317	254	282
2013:Q2	982	973	1,093	276	297	352	57	61	65	34	50	52	246	299	314
2013:Q3	984	1,070	1,009	329	361	312	55	69	63	41	45	46	261	314	286

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	106	93	320	313	339	9	16	7	30	42	31	796	1,016	893
2010:Q1	109	91	112	330	306	341	7	10	6	34	30	30	875	1,046	922
2010:Q2	117	111	115	366	355	413	13	12	9	38	36	39	1,015	1,108	959
2010:Q3	118	109	118	348	372	425	10	8	10	37	43	45	1,059	1,176	985
2010:Q4	114	122	111	327	373	383	13	11	9	42	42	35	1,004	1,114	952
2011:Q1	123	102	125	348	352	392	12	6	9	46	30	35	1,027	1,124	1,013
2011:Q2	125	113	121	400	405	419	16	6	9	45	44	39	1,036	1,164	984
2011:Q3	135	126	125	405	388	440	20	12	11	50	49	38	1,091	1,159	997
2011:Q4	127	118	125	346	343	388	14	11	12	24	33	33	902	1,096	829
2012:Q1	124	131	130	379	351	385	11	13	7	36	32	34	874	1,045	818
2012:Q2	112	101	126	376	357	414	8	6	13	34	30	39	906	1,025	837
2012:Q3	104	121	121	391	345	401	5	11	8	24	45	30	883	1,061	780
2012:Q4	115	99	110	364	292	403	7	10	8	32	28	30	849	1,041	780
2013:Q1	117	98	120	347	316	373	5	6	8	29	25	31	937	987	777
2013:Q2	101	98	113	321	339	404	1	7	8	22	28	34	891	928	817
2013:Q3	112	98	108	311	397	392	5	6	8	27	41	31	944	905	824

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among network 2 beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2009:Q4	105	172	171	23	23	23	34	59	60	101	128	132	53	162	141
2010:Q1	136	191	195	25	23	24	44	61	67	105	134	138	99	130	145
2010:Q2	137	187	184	27	26	27	48	63	65	128	152	153	126	162	153
2010:Q3	99	174	199	29	23	27	36	54	66	128	139	157	138	138	150
2010:Q4	110	203	186	28	27	26	45	66	62	116	138	148	130	148	138
2011:Q1	139	199	208	26	26	27	48	65	73	121	142	154	88	190	154
2011:Q2	108	219	200	31	28	29	43	70	68	140	155	164	71	127	145
2011:Q3	162	175	198	26	26	30	49	60	68	152	144	168	78	145	165
2011:Q4	155	196	209	26	28	30	48	70	73	142	140	160	83	193	177
2012:Q1	173	238	253	27	28	31	58	78	84	153	152	164	103	154	167
2012:Q2	174	242	276	31	30	32	52	75	80	160	156	168	87	189	179
2012:Q3	180	225	245	33	29	34	52	75	79	163	154	174	106	144	168
2012:Q4	173	234	267	38	28	33	58	75	81	162	142	175	112	143	189
2013:Q1	225	265	277	37	30	33	58	80	84	154	146	168	105	138	170
2013:Q2	177	246	257	38	29	33	53	74	77	170	152	174	63	159	164
2013:Q3	172	280	245	37	31	33	54	78	74	156	159	170	123	198	175

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Minnesota E5-1
Mean 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	92.4	89.5	64.0	63.4	86.7	80.2	68.2	62.4	42.6	38.2	2.4	3.2	76.5	72.4
Pre-3	93.2	89.5	63.1	59.7	87.6	80.5	70.4	60.9	43.5	34.6	2.3	3.7	75.2	73.2
Pre-2	93.6	89.4	61.0	61.8	87.2	79.6	71.9	62.4	42.7	33.4	2.2	3.3	73.3	70.5
Pre-1	94.4	89.7	59.6	59.7	88.3	78.0	73.2	62.1	42.8	33.6	1.8	3.4	71.4	68.7
Post-1	93.3	87.8	56.1	52.1	86.7	77.2	74.9	60.3	41.2	27.5	2.5	4.1	67.6	64.8
Post-2	94.4	89.2	56.8	54.7	90.1	77.3	79.9	63.2	44.4	31.6	1.9	5.1	68.5	64.5

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-2
Quarterly 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	4.8	5.5	8.6	9.5	3.6	4.3	5.0	5.2
2010:Q2	4.9	5.2	8.7	10.0	4.1	5.3	4.6	4.7
2010:Q3	4.9	5.9	8.0	8.1	3.4	3.8	4.6	4.3
2010:Q4	5.5	6.6	9.2	11.1	4.1	5.7	5.1	5.4
2011:Q1	5.5	6.5	11.3	13.7	4.9	6.4	6.4	7.3
2011:Q2	5.8	6.3	10.9	12.3	4.6	4.8	6.3	7.5
2011:Q3	5.6	7.1	9.5	12.1	4.3	4.4	5.3	7.8
2011:Q4	6.4	8.5	10.8	12.7	4.5	4.8	6.3	7.8
2012:Q1	7.2	7.5	13.0	19.0	5.5	7.2	7.5	11.9
2012:Q2	7.7	9.8	11.6	13.0	4.7	5.7	6.9	7.2
2012:Q3	7.9	10.8	11.8	10.7	4.8	4.3	7.0	6.4
2012:Q4	9.1	11.2	14.0	15.4	5.9	7.2	8.1	8.2
2013:Q1	9.9	14.1	15.8	15.5	6.6	6.5	9.2	9.0
2013:Q2	9.1	10.0	13.8	12.4	5.0	5.4	8.8	7.0
2013:Q3	9.1	9.4	12.4	15.3	4.6	5.7	7.8	9.6
2013:Q4	9.5	8.7	13.0	12.6	4.9	4.7	8.2	7.8

NOTES:

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

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

Minnesota E5-3
Quarterly 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	1,016.8	1,003.5	488.5	568.4	114.3	128.5	160.5	140.6	713.0	750.0
2010:Q2	1,101.9	1,067.7	514.4	598.6	124.4	146.9	173.2	134.9	715.7	741.0
2010:Q3	1,071.4	1,035.4	489.6	579.4	122.1	141.0	174.1	162.0	719.8	769.4
2010:Q4	1,055.7	1,029.4	472.8	558.7	112.7	126.9	168.4	156.0	697.3	742.8
2011:Q1	1,039.6	990.3	474.7	565.1	111.5	126.1	162.8	152.4	723.6	704.3
2011:Q2	1,082.0	1,056.0	507.7	622.7	120.8	139.8	160.6	178.0	731.9	736.1
2011:Q3	1,040.5	996.8	473.1	598.5	112.4	126.3	168.3	207.3	710.0	788.7
2011:Q4	1,054.2	963.1	483.3	600.8	111.1	121.2	183.8	215.0	734.2	706.9
2012:Q1	1,056.4	933.4	484.6	574.4	110.5	115.9	190.3	198.8	756.8	746.9
2012:Q2	1,103.5	935.1	515.4	612.2	115.7	129.9	192.4	197.7	776.6	739.0
2012:Q3	1,068.4	943.6	489.3	566.3	108.1	134.3	182.3	183.4	772.6	700.4
2012:Q4	1,103.4	987.1	493.0	595.4	106.5	128.3	189.9	213.7	764.2	806.5
2013:Q1	1,109.3	980.0	528.1	617.0	105.4	115.6	192.1	188.9	787.7	793.2
2013:Q2	1,207.3	1,055.4	591.2	672.1	116.5	135.8	192.4	197.9	811.5	753.9
2013:Q3	1,131.2	1,114.2	571.8	611.7	113.7	141.1	188.3	191.8	782.9	795.1
2013:Q4	1,120.0	1,123.4	555.9	610.1	106.8	129.0	190.5	196.4	735.4	737.1

NOTES:

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

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

Minnesota E5-4
Quarterly average Medicare expenditures

Period	Total		Acute-care		Post-acute-care		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	531	588	203	212	47	59	22	27
2010:Q2	585	667	210	228	47	65	25	28
2010:Q3	590	698	207	247	52	74	25	28
2010:Q4	607	693	216	233	61	67	25	29
2011:Q1	573	707	213	254	59	93	23	28
2011:Q2	641	782	224	264	66	94	26	29
2011:Q3	643	797	227	273	62	94	26	30
2011:Q4	653	789	232	266	60	84	25	28
2012:Q1	672	795	250	273	66	85	27	28
2012:Q2	737	895	264	328	71	93	29	33
2012:Q3	732	844	261	284	67	104	30	31
2012:Q4	788	858	296	301	74	95	30	30
2013:Q1	789	885	313	339	84	106	31	30
2013:Q2	815	877	304	316	77	96	32	31
2013:Q3	786	839	283	277	75	92	32	32
2013:Q4	809	791	294	274	79	70	32	31

(continued)

Minnesota E5-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient		Specialty physician		PC physician		Home health	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	90	94	57	70	24	25	16	18
2010:Q2	103	110	67	85	31	33	18	20
2010:Q3	102	109	67	86	34	35	17	18
2010:Q4	101	110	66	88	36	37	19	23
2011:Q1	102	107	58	80	26	30	17	22
2011:Q2	114	126	69	97	35	38	19	22
2011:Q3	114	131	66	95	36	40	19	23
2011:Q4	115	136	68	94	39	41	20	24
2012:Q1	119	136	64	93	31	35	23	29
2012:Q2	129	136	75	102	40	41	24	26
2012:Q3	130	126	74	104	41	45	22	25
2012:Q4	131	126	76	105	45	46	25	26
2013:Q1	127	123	69	97	35	40	26	25
2013:Q2	138	132	80	107	44	43	27	29
2013:Q3	139	126	77	105	43	47	26	23
2013:Q4	140	122	77	97	47	50	28	26

(continued)

Minnesota E5-4 (cont.)
Quarterly average Medicare expenditures

Period	Other non-facility		Laboratory		Imaging		Other facility	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	19	19	10	12	14	15	0	0
2010:Q2	22	23	11	14	16	19	0	0
2010:Q3	23	24	11	13	15	18	0	0
2010:Q4	23	23	10	13	15	18	0	1
2011:Q1	19	22	9	12	13	16	1	2
2011:Q2	24	24	10	13	15	19	1	1
2011:Q3	24	24	10	12	14	18	0	1
2011:Q4	24	26	10	12	15	18	0	1
2012:Q1	22	24	10	12	14	16	0	0
2012:Q2	25	28	11	12	16	19	0	0
2012:Q3	26	28	10	12	15	19	0	1
2012:Q4	27	28	10	13	16	20	0	0
2013:Q1	25	25	9	11	13	16	0	1
2013:Q2	27	29	10	12	15	18	0	1
2013:Q3	28	28	9	11	15	18	0	0
2013:Q4	28	28	9	12	15	16	0	0

NOTES:

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

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

Minnesota E5-5
Quarterly average rates of utilization

Period	All-cause inpatient admissions		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	64.4	67.7	117.3	122.0
2010:Q2	67.3	69.2	129.8	128.3
2010:Q3	65.8	70.0	136.7	138.3
2010:Q4	67.0	77.5	128.5	124.8
2011:Q1	68.7	79.8	126.4	130.0
2011:Q2	70.5	84.0	140.3	139.4
2011:Q3	70.8	88.4	148.0	148.9
2011:Q4	72.3	81.2	137.8	137.9
2012:Q1	78.4	88.5	144.9	136.4
2012:Q2	78.6	91.7	155.3	153.4
2012:Q3	78.0	86.6	162.9	147.5
2012:Q4	83.8	88.8	154.6	142.1
2013:Q1	87.5	93.2	153.3	135.0
2013:Q2	83.7	84.8	157.2	143.4
2013:Q3	80.0	80.8	161.4	148.2
2013:Q4	78.4	80.5	147.5	136.7

NOTES:

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

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

Minnesota E5-6
Quarterly 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	656	765	516	541	685	744	742	868
2010:Q2	735	768	571	630	740	828	739	1,062
2010:Q3	729	870	577	571	747	870	748	915
2010:Q4	742	817	644	690	751	809	728	902
2011:Q1	729	853	578	630	727	888	756	1,011
2011:Q2	782	917	649	632	793	944	810	1,023
2011:Q3	795	930	654	752	810	953	814	1,072
2011:Q4	793	914	641	707	796	978	806	1,082
2012:Q1	820	868	666	698	837	904	812	934
2012:Q2	871	967	751	786	894	1,051	885	1,082
2012:Q3	862	940	708	841	877	979	896	1,003
2012:Q4	898	904	783	707	917	994	930	1,063
2013:Q1	905	941	822	1,017	924	1,033	913	1,038
2013:Q2	940	946	827	1,114	968	1,027	955	1,199
2013:Q3	908	1,000	782	968	935	1,001	918	998
2013:Q4	899	902	776	909	938	882	942	931

NOTES:

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

Minnesota E5-7
Mean 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		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	91.6	88.7	64.5	61.5	84.4	79.0	69.9	66.1	42.8	37.8	2.2	3.0	73.8	69.0
Pre-3	92.1	88.8	63.2	57.7	84.4	77.7	72.5	66.4	43.0	33.8	2.1	3.6	72.1	70.6
Pre-2	92.3	88.2	60.9	60.4	83.9	74.7	74.2	66.9	42.3	29.6	2.3	2.9	69.9	66.7
Pre-1	92.7	87.9	59.2	59.8	85.4	72.6	77.7	72.3	43.3	34.8	1.5	2.1	66.9	63.8
Post-1	90.7	84.5	55.8	49.2	82.7	71.9	76.8	65.0	40.5	24.5	2.9	4.7	62.3	58.3
Post-2	92.6	86.4	57.0	54.5	87.6	67.9	82.0	65.5	42.9	27.1	1.4	5.8	65.5	58.3

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Minnesota E5-8
Quarterly 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	10.5	11.1	21.8	24.9	7.8	9.9	14.0	15.0
2010:Q2	10.7	11.3	22.2	27.0	9.3	12.6	12.9	14.4
2010:Q3	10.9	13.0	20.8	24.8	7.8	11.0	13.0	13.9
2010:Q4	15.6	20.8	27.5	34.5	10.7	16.1	16.8	18.4
2011:Q1	16.1	21.1	33.1	45.5	12.9	19.8	20.2	25.6
2011:Q2	17.3	20.8	32.4	40.0	12.7	14.9	19.6	25.1
2011:Q3	17.2	23.3	29.6	42.5	12.2	15.3	17.4	27.2
2011:Q4	19.1	22.9	33.8	37.0	13.1	12.1	20.8	24.9
2012:Q1	19.7	18.0	38.5	55.1	15.2	18.9	23.3	36.2
2012:Q2	20.1	20.7	33.8	36.9	12.8	14.4	21.0	22.5
2012:Q3	19.5	23.9	33.1	30.9	12.7	11.4	20.4	19.5
2012:Q4	23.8	25.4	38.8	40.9	14.9	15.9	24.0	25.0
2013:Q1	25.4	35.5	44.7	41.2	17.3	14.4	27.4	26.8
2013:Q2	22.0	21.5	38.3	29.9	12.8	11.5	25.5	18.3
2013:Q3	21.6	19.3	35.3	42.9	12.1	13.7	23.2	29.2
2013:Q4	20.1	16.2	33.1	33.8	11.3	10.6	21.8	23.2

NOTES:

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

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

Minnesota E5-9
Quarterly 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	1,446.6	1,462.4	783.4	898.7	168.5	184.5	214.2	191.1	791.5	863.7
2010:Q2	1,569.1	1,526.4	824.7	965.4	178.3	200.7	237.7	193.4	806.6	842.0
2010:Q3	1,548.7	1,490.4	794.6	953.0	182.4	215.5	242.6	218.7	808.2	885.3
2010:Q4	1,549.2	1,558.5	783.8	944.8	166.6	196.4	220.9	189.3	795.0	830.5
2011:Q1	1,564.1	1,547.1	811.4	1,019.5	173.7	206.0	210.6	197.7	795.2	799.9
2011:Q2	1,619.2	1,610.1	867.0	1,111.8	192.5	215.2	207.1	233.6	791.0	825.2
2011:Q3	1,569.3	1,555.7	815.2	1,055.3	173.2	196.9	210.0	254.8	780.3	834.6
2011:Q4	1,560.6	1,372.6	834.9	1,036.6	178.6	176.2	236.8	288.9	814.1	783.2
2012:Q1	1,606.8	1,381.9	849.1	990.8	175.0	163.3	248.0	269.2	834.2	813.6
2012:Q2	1,645.4	1,319.5	869.3	992.3	175.8	164.1	244.5	272.4	840.1	804.9
2012:Q3	1,600.6	1,288.4	826.3	911.2	164.8	160.5	248.9	230.1	854.7	742.1
2012:Q4	1,621.4	1,330.7	820.8	904.0	156.0	169.2	242.1	289.8	823.0	826.0
2013:Q1	1,649.4	1,310.4	867.9	960.5	159.1	153.6	254.8	244.1	854.7	862.3
2013:Q2	1,758.2	1,408.9	963.6	1,044.3	170.4	170.8	249.0	270.7	887.2	787.2
2013:Q3	1,686.0	1,558.6	925.9	926.0	168.2	183.1	250.0	274.3	842.3	897.4
2013:Q4	1,611.5	1,505.8	874.0	885.5	145.9	173.0	252.0	293.7	777.1	781.7

NOTES:

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

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

Minnesota E5-10
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Total		Acute-care		Post-acute-care		ER visits not leading to hospitalizations	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	1,065	1,261	429	498	103	140	41	47
2010:Q2	1,165	1,431	455	535	105	168	46	52
2010:Q3	1,213	1,617	462	634	124	210	47	58
2010:Q4	1,365	1,723	556	672	164	199	48	62
2011:Q1	1,362	1,944	557	784	170	292	49	67
2011:Q2	1,550	2,122	622	826	193	306	54	68
2011:Q3	1,570	2,214	634	874	187	322	57	70
2011:Q4	1,594	1,933	655	712	184	242	53	57
2012:Q1	1,623	1,864	662	665	191	208	56	56
2012:Q2	1,689	2,047	672	808	193	247	59	69
2012:Q3	1,662	1,869	657	632	180	284	61	54
2012:Q4	1,772	1,813	733	658	194	223	60	56
2013:Q1	1,817	1,928	793	795	214	248	61	58
2013:Q2	1,812	1,775	749	674	191	193	62	56
2013:Q3	1,725	1,748	687	626	183	191	64	65
2013:Q4	1,656	1,632	647	622	172	154	60	61

(continued)

Minnesota E5-10 (cont.)
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient		Specialty physician		PC physician		Home health	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	179	201	100	130	45	47	35	38
2010:Q2	199	233	113	158	56	57	40	50
2010:Q3	206	234	115	163	60	64	39	50
2010:Q4	210	252	119	175	65	72	47	59
2011:Q1	221	268	114	188	54	70	47	64
2011:Q2	252	310	134	216	69	82	51	64
2011:Q3	254	331	126	208	69	88	54	68
2011:Q4	257	326	132	197	71	77	54	68
2012:Q1	271	333	128	192	66	70	62	82
2012:Q2	281	304	139	194	76	77	62	68
2012:Q3	284	297	133	197	75	83	58	60
2012:Q4	277	290	136	185	81	80	65	59
2013:Q1	276	274	126	183	73	78	67	54
2013:Q2	287	292	142	181	82	74	71	62
2013:Q3	288	278	135	174	80	81	65	50
2013:Q4	284	263	127	154	80	83	69	52

(continued)

Minnesota E5-10 (cont.)
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Other non-facility		Laboratory		Imaging		Other facility	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	30	30	16	20	22	25	0	0
2010:Q2	33	34	17	22	25	32	0	0
2010:Q3	36	38	17	23	25	32	0	1
2010:Q4	36	35	17	22	25	33	0	6
2011:Q1	33	40	15	20	22	34	2	6
2011:Q2	40	43	16	21	26	37	1	5
2011:Q3	40	41	16	21	25	35	1	4
2011:Q4	40	40	16	19	25	32	0	3
2012:Q1	39	41	16	18	24	28	1	2
2012:Q2	42	46	16	19	25	31	0	0
2012:Q3	43	43	15	17	24	30	1	4
2012:Q4	44	45	15	17	25	30	0	0
2013:Q1	43	40	14	15	21	26	1	5
2013:Q2	45	42	15	15	25	26	2	4
2013:Q3	46	42	14	16	24	28	0	0
2013:Q4	42	41	13	15	21	23	1	0

NOTES:

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

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

Minnesota E5-11
Quarterly 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	133.3	146.9	203.8	198.4
2010:Q2	143.7	147.0	226.9	218.7
2010:Q3	143.7	171.8	239.8	247.9
2010:Q4	166.4	210.0	236.6	231.2
2011:Q1	174.0	233.0	236.1	266.3
2011:Q2	186.7	251.6	267.3	275.1
2011:Q3	187.6	271.4	284.9	295.9
2011:Q4	192.2	209.7	265.3	263.4
2012:Q1	200.3	215.6	274.8	250.3
2012:Q2	194.6	218.4	290.7	286.3
2012:Q3	186.3	189.8	294.7	244.1
2012:Q4	201.5	194.2	284.0	243.7
2013:Q1	213.4	209.5	281.0	229.3
2013:Q2	201.2	181.3	288.2	249.4
2013:Q3	190.6	179.8	296.1	271.6
2013:Q4	172.5	175.5	262.2	260.4

NOTES:

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

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

Minnesota E5-12
Quarterly average expenditures among beneficiaries with behavioral health 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	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	789	831	286	297	43	45	72	66	178	192
2010:Q2	920	993	344	338	46	47	89	54	216	195
2010:Q3	888	1,019	306	332	49	53	85	65	200	209
2010:Q4	923	1,002	344	341	46	52	85	66	222	218
2011:Q1	910	1,106	341	427	46	49	73	64	282	332
2011:Q2	1,006	1,206	361	433	49	59	88	71	312	362
2011:Q3	1,034	1,184	382	428	54	60	95	68	326	330
2011:Q4	1,044	1,239	392	464	50	50	90	78	345	360
2012:Q1	1,052	1,184	408	410	52	53	89	61	364	335
2012:Q2	1,105	1,327	397	493	57	59	94	67	358	377
2012:Q3	1,072	1,174	385	375	57	49	90	62	344	323
2012:Q4	1,082	1,046	400	360	54	54	90	66	369	309
2013:Q1	1,097	1,115	431	428	54	47	88	59	391	347
2013:Q2	1,131	1,084	417	414	56	49	98	62	392	364
2013:Q3	1,080	1,115	391	339	60	57	97	63	360	328
2013:Q4	1,077	986	397	347	57	54	92	62	371	317

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health conditions

Period	All-cause admissions		ER visits not leading to hospitalization		BH inpatient admissions		BH ER visits		BH outpatient admissions	
	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH	MAPCP	Non-PCMH
2010:Q1	101	102	262	259	19	14	38	40	1,480	1,299
2010:Q2	116	98	282	263	21	10	43	27	1,517	1,331
2010:Q3	110	115	304	304	20	15	45	39	1,530	1,276
2010:Q4	112	119	280	262	20	12	41	27	1,470	1,307
2011:Q1	114	122	283	264	18	16	41	34	1,532	1,305
2011:Q2	118	129	302	298	20	15	45	41	1,563	1,318
2011:Q3	125	143	332	315	22	14	53	40	1,549	1,292
2011:Q4	122	141	307	290	19	17	47	51	1,546	1,288
2012:Q1	128	126	312	275	21	11	48	33	1,593	1,307
2012:Q2	126	139	332	303	19	10	50	43	1,623	1,352
2012:Q3	117	123	342	288	19	11	51	33	1,544	1,257
2012:Q4	119	116	315	279	17	12	44	32	1,524	1,261
2013:Q1	123	123	307	250	17	9	41	19	1,551	1,320
2013:Q2	121	111	320	280	18	8	46	32	1,633	1,413
2013:Q3	120	105	337	297	19	8	48	36	1,576	1,324
2013:Q4	113	104	300	270	16	9	42	25	1,479	1,265

NOTES:

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

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

Maine E6-1
Mean 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	90.6	93.3	92.2	66.4	63.7	64.9	84.8	86.8	84.5	64.8	62.8	65.0
Pre-3	90.4	93.3	91.0	65.7	65.0	62.3	84.7	90.1	83.4	65.8	66.8	64.9
Pre-2	91.1	92.4	90.0	65.5	64.2	63.0	83.8	89.2	83.9	68.7	68.8	67.3
Pre-1	91.3	92.7	91.3	63.3	61.3	62.6	83.9	88.3	82.8	71.3	70.4	71.6
Post-1	91.0	92.1	89.4	63.8	63.1	59.7	82.8	88.0	81.4	71.0	75.0	70.6
Post-2	91.8	93.9	91.6	65.5	70.4	59.0	84.1	89.2	80.9	71.6	68.8	70.5

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	42.6	41.8	41.2	3.1	1.9	2.7	78.7	82.0	76.9
Pre-3	41.3	44.5	38.5	2.6	2.0	3.2	78.1	82.3	77.5
Pre-2	43.0	44.2	40.8	2.8	3.0	3.0	77.8	81.6	77.8
Pre-1	42.8	42.8	42.6	2.7	2.9	2.5	75.1	81.1	75.1
Post-1	42.9	45.4	39.7	2.7	2.2	3.4	73.2	77.8	73.4
Post-2	43.9	48.0	41.1	2.8	2.3	2.2	74.4	81.6	73.5

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-2
Quarterly 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	4.9	6.1	4.8	8.5	12.8	8.6	3.8	3.4	3.0	4.7	9.4	5.5
2010:Q2	4.9	3.8	6.4	9.7	11.3	10.6	3.9	4.6	4.4	5.8	6.7	6.2
2010:Q3	4.8	4.8	5.2	7.7	10.6	10.6	3.0	4.3	5.0	4.8	6.3	5.6
2010:Q4	5.1	6.1	6.3	10.2	14.7	12.0	4.1	4.3	5.1	6.0	10.3	6.8
2011:Q1	5.3	6.7	8.9	11.3	13.8	12.6	4.7	6.7	4.9	6.6	7.1	7.7
2011:Q2	5.4	7.7	6.3	11.9	17.5	14.5	5.3	7.9	5.7	6.6	9.5	8.8
2011:Q3	5.4	5.2	7.6	9.7	15.5	13.1	3.9	6.2	4.7	5.8	9.4	8.4
2011:Q4	6.5	4.2	7.4	11.5	15.8	16.7	5.0	6.3	7.7	6.5	9.5	8.9
2012:Q1	6.0	7.2	5.8	13.4	17.4	16.6	6.0	8.6	8.2	7.3	8.8	8.4
2012:Q2	7.1	10.2	8.2	13.0	16.1	16.4	5.5	6.4	7.2	7.5	9.7	9.2
2012:Q3	7.5	7.8	8.5	11.6	15.6	13.0	4.7	5.9	5.9	6.8	9.7	7.1
2012:Q4	8.5	7.7	11.0	13.3	15.0	16.8	5.1	6.5	7.9	8.2	8.5	8.9
2013:Q1	9.2	10.0	9.4	16.4	15.4	18.1	6.9	5.0	8.9	9.5	10.5	9.1
2013:Q2	9.5	7.5	8.6	13.9	15.8	18.5	5.3	5.3	7.8	8.6	10.5	10.7
2013:Q3	8.6	8.6	9.0	11.7	11.4	12.8	4.6	5.3	5.5	7.1	6.1	7.3
2013:Q4	9.8	8.8	7.2	13.4	16.2	15.5	5.4	8.1	6.0	8.0	8.2	9.5

NOTES:

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

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

Maine E6-3
Quarterly 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	725.0	868.8	781.0	491.6	533.4	507.1	117.9	104.2	133.2	152.0	142.6	150.3	690.2	714.3	619.3
2010:Q2	758.4	916.1	807.8	508.2	590.5	537.1	134.3	126.2	139.6	147.6	151.5	187.8	697.4	750.8	667.5
2010:Q3	750.7	848.7	779.5	493.4	542.3	515.5	128.2	121.0	136.0	133.1	190.6	133.5	698.8	814.8	618.8
2010:Q4	748.1	865.2	766.5	490.0	550.7	529.7	123.7	119.4	130.0	152.2	238.0	163.1	711.8	856.1	636.3
2011:Q1	742.2	818.2	771.7	490.7	523.7	526.9	127.9	121.9	132.4	148.7	195.4	194.6	746.2	800.8	731.8
2011:Q2	769.4	853.4	798.7	525.5	585.5	557.6	131.4	124.0	142.2	161.3	189.8	131.1	752.7	802.3	687.8
2011:Q3	727.3	844.4	751.2	497.4	536.3	551.2	121.7	122.9	128.8	164.0	214.1	163.6	727.3	815.8	671.9
2011:Q4	754.5	849.6	762.6	496.0	575.7	566.3	122.8	120.1	125.2	154.4	170.8	185.5	738.2	748.8	741.6
2012:Q1	759.6	803.2	720.8	502.7	536.1	555.8	122.5	117.5	122.1	172.1	200.5	183.0	780.1	714.6	712.3
2012:Q2	798.2	839.9	769.1	527.1	571.0	537.5	127.6	124.9	127.0	166.3	210.2	172.0	789.9	781.9	688.7
2012:Q3	760.0	815.6	714.5	483.3	517.1	505.5	123.9	115.4	118.2	181.2	190.4	173.4	808.6	630.8	742.3
2012:Q4	784.2	873.5	758.6	485.0	549.5	520.8	119.5	113.6	106.4	164.3	166.1	155.5	741.3	686.2	677.7
2013:Q1	843.6	941.1	850.8	527.5	596.1	551.6	120.6	121.9	109.7	195.3	167.4	165.0	800.3	814.3	693.5
2013:Q2	900.3	983.5	882.9	571.9	647.3	607.4	129.1	131.4	120.3	175.7	192.8	156.6	777.4	834.7	769.5
2013:Q3	852.7	882.9	833.0	521.0	607.3	572.4	127.1	126.4	113.8	169.1	208.2	195.9	773.1	729.1	733.0
2013:Q4	818.6	769.2	760.9	525.2	588.6	556.8	116.9	110.3	97.3	178.6	174.5	158.2	719.7	688.2	654.7

NOTES:

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

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

Maine E6-4
Quarterly 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	524	572	523	171	212	185	50	45	37	25	23	29
2010:Q2	577	625	610	176	200	199	53	58	60	27	23	28
2010:Q3	562	611	583	156	195	179	56	56	54	28	26	32
2010:Q4	585	692	638	166	240	196	61	55	70	29	29	33
2011:Q1	586	659	665	179	197	234	69	100	72	27	29	35
2011:Q2	640	802	711	181	286	220	76	94	81	30	29	36
2011:Q3	613	779	733	167	266	236	68	83	77	30	29	40
2011:Q4	647	728	715	190	237	225	66	55	61	30	29	39
2012:Q1	653	734	726	197	229	232	74	78	79	31	29	38
2012:Q2	701	766	829	205	232	278	73	79	79	34	35	46
2012:Q3	706	715	761	204	224	233	78	59	72	35	34	41
2012:Q4	739	745	805	229	265	287	78	62	76	35	31	40
2013:Q1	769	736	726	258	280	250	90	55	82	35	29	36
2013:Q2	786	723	765	243	220	228	79	63	90	36	34	41
2013:Q3	753	719	734	229	223	237	79	59	62	36	32	40
2013:Q4	774	732	700	252	251	211	80	52	70	36	36	36

(continued)

Maine E6-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	122	107	122	52	60	51	16	21	18	21	21	21
2010:Q2	139	122	136	61	74	62	21	28	23	21	24	29
2010:Q3	140	126	136	60	70	63	22	28	25	20	21	22
2010:Q4	144	139	150	63	74	65	23	31	27	21	28	23
2011:Q1	140	132	147	57	65	59	19	23	22	22	23	25
2011:Q2	159	152	167	64	79	68	24	33	29	24	29	29
2011:Q3	157	160	172	60	77	68	24	31	29	22	29	25
2011:Q4	163	156	169	65	79	69	25	33	31	24	30	30
2012:Q1	163	167	168	59	75	63	21	23	24	27	31	32
2012:Q2	176	157	180	68	80	73	26	29	32	27	33	31
2012:Q3	177	153	178	65	75	69	26	30	31	26	28	29
2012:Q4	177	136	161	68	81	70	28	33	35	27	28	31
2013:Q1	176	143	162	61	74	54	24	27	26	29	28	29
2013:Q2	195	163	188	69	79	69	29	32	33	32	31	25
2013:Q3	182	155	175	66	80	65	29	32	33	27	27	28
2013:Q4	182	159	177	69	81	60	29	31	30	29	23	30

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Maine E6-4 (cont.)
Quarterly 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	22	18	10	14	9	10	15	11	0	3	0
2010:Q2	25	27	23	10	16	10	12	16	12	0	3	0
2010:Q3	24	27	22	9	15	10	11	16	12	0	2	0
2010:Q4	25	30	23	9	15	10	12	16	12	0	3	0
2011:Q1	23	26	23	9	14	9	10	14	11	0	1	0
2011:Q2	26	29	25	9	15	9	12	16	12	0	3	0
2011:Q3	26	30	25	9	15	9	11	16	11	0	2	0
2011:Q4	27	30	27	9	15	9	11	17	12	0	3	0
2012:Q1	26	30	26	9	15	10	10	14	10	0	4	0
2012:Q2	28	35	28	10	16	10	11	15	11	0	2	0
2012:Q3	29	33	30	9	15	9	10	16	11	0	3	0
2012:Q4	29	34	30	10	16	9	11	15	11	0	2	0
2013:Q1	29	32	25	9	14	9	9	12	9	0	5	0
2013:Q2	31	33	29	10	15	10	11	14	11	0	2	0
2013:Q3	32	33	31	9	13	11	10	14	10	0	5	0
2013:Q4	33	37	29	9	12	11	10	14	10	0	3	0

NOTES:

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

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

Maine E6-5
Quarterly 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	56.3	63.8	53.7	166.4	142.7	180.4
2010:Q2	57.8	58.6	66.6	183.6	154.8	178.9
2010:Q3	54.8	64.2	60.6	189.4	162.2	201.9
2010:Q4	57.3	73.7	64.4	176.5	160.3	190.0
2011:Q1	62.5	69.3	75.3	177.7	163.6	199.3
2011:Q2	63.1	83.6	76.4	191.8	173.8	213.0
2011:Q3	59.8	78.5	74.8	196.1	171.1	226.2
2011:Q4	64.8	70.4	77.9	186.2	163.9	218.1
2012:Q1	67.5	80.9	76.1	188.1	173.4	203.0
2012:Q2	67.9	79.3	81.2	205.0	191.8	225.6
2012:Q3	67.0	75.1	73.5	210.4	185.6	228.3
2012:Q4	69.6	73.2	80.8	196.2	167.9	213.2
2013:Q1	78.4	76.9	76.4	196.3	164.8	190.9
2013:Q2	73.4	69.5	73.8	199.8	182.2	200.8
2013:Q3	70.1	68.5	70.4	201.4	179.7	224.0
2013:Q4	72.2	74.7	68.5	184.3	176.4	175.3

NOTES:

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

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

Maine E6-6
Quarterly 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	588	668	565	528	722	522	589	615	579	575	467	514
2010:Q2	653	755	687	581	747	611	638	698	708	496	530	515
2010:Q3	621	715	642	538	639	622	614	671	638	497	725	549
2010:Q4	647	869	720	578	769	636	633	851	713	533	506	723
2011:Q1	660	781	792	603	798	715	647	800	749	699	559	736
2011:Q2	709	893	788	648	1092	771	686	914	734	753	779	982
2011:Q3	702	876	835	588	911	766	677	893	847	676	640	680
2011:Q4	713	785	792	629	879	740	689	878	748	700	772	616
2012:Q1	729	744	819	639	888	777	683	829	809	626	742	579
2012:Q2	774	837	922	696	915	854	747	862	938	671	634	1,075
2012:Q3	793	778	881	698	785	751	770	800	853	609	659	610
2012:Q4	815	851	896	738	780	758	783	819	832	628	671	691
2013:Q1	848	795	813	770	743	748	793	835	794	630	824	507
2013:Q2	865	794	908	765	790	729	840	846	861	636	667	654
2013:Q3	846	819	845	758	675	655	808	879	782	630	698	916
2013:Q4	867	773	749	789	678	650	799	827	745	706	615	623

NOTES:

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

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

Maine E6-7
Mean likelihood of receiving specific tests or examination:
Four quarter intervals preceding and following assignment among beneficiaries with multiple chronic conditions

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	90.7	92.2	93.5	67.1	61.9	66.4	83.4	83.6	82.3	67.2	63.8	67.9
Pre-3	89.7	91.6	92.3	66.9	67.3	64.9	82.8	87.0	82.8	68.2	66.9	67.9
Pre-2	91.1	91.2	90.8	65.2	65.4	63.4	82.6	85.8	83.2	72.8	71.6	71.9
Pre-1	90.0	91.2	90.4	62.9	61.7	63.5	82.2	84.1	82.5	77.0	74.9	76.0
Post-1	89.0	88.7	88.5	62.9	63.2	57.5	79.7	81.5	77.9	74.3	79.7	71.8
Post-2	90.1	91.7	91.2	64.6	68.0	60.8	80.6	84.3	76.5	74.7	69.0	73.8

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	43.7	40.6	41.9	3.1	2.0	2.4	77.1	79.0	74.6
Pre-3	41.5	41.8	41.1	2.7	1.7	2.1	75.9	79.7	76.1
Pre-2	44.5	43.3	42.4	2.5	2.6	2.0	75.3	78.9	76.5
Pre-1	44.1	42.4	43.4	2.5	2.8	1.5	71.8	77.8	72.2
Post-1	42.6	45.2	37.1	2.8	2.9	3.3	68.2	72.0	68.3
Post-2	43.5	46.7	39.2	3.1	3.8	1.3	71.9	76.7	70.4

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Maine E6-8
Quarterly 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	9.8	14.2	8.9	22.2	28.9	25.4	9.6	7.1	8.6	12.6	21.8	16.8
2010:Q2	9.6	8.7	15.5	24.2	28.9	30.8	8.8	12.3	12.1	15.4	16.6	18.7
2010:Q3	9.4	9.9	12.3	20.2	29.3	33.0	6.9	11.4	14.7	13.4	17.9	18.3
2010:Q4	12.3	18.7	15.9	28.6	44.5	34.4	10.8	9.5	13.3	17.8	35.0	21.1
2011:Q1	14.1	22.7	31.9	33.9	46.9	44.2	13.2	22.3	16.4	20.7	24.7	27.7
2011:Q2	15.0	27.2	21.2	35.8	56.1	48.9	15.6	24.5	18.6	20.2	31.6	30.3
2011:Q3	15.8	16.4	25.7	28.7	53.2	46.9	10.5	19.6	16.2	18.2	33.5	30.7
2011:Q4	19.2	13.2	25.5	34.3	52.4	59.3	13.8	19.4	27.0	20.4	33.0	32.4
2012:Q1	16.7	15.2	14.2	40.1	52.2	51.5	17.2	24.3	22.6	22.8	27.9	28.9
2012:Q2	19.4	30.0	20.1	38.2	43.6	50.3	14.8	15.5	20.8	23.4	28.2	29.5
2012:Q3	21.3	18.5	23.6	35.7	44.2	38.3	13.2	16.6	15.0	22.5	27.6	23.2
2012:Q4	24.1	15.9	29.6	41.9	50.9	49.6	15.3	23.4	20.7	26.6	27.5	28.9
2013:Q1	22.4	27.3	21.0	45.9	49.1	57.5	18.3	14.8	28.0	27.6	34.3	29.5
2013:Q2	22.1	14.8	20.1	37.8	38.8	55.8	13.3	12.0	17.6	24.5	26.8	38.1
2013:Q3	17.0	20.1	23.8	31.3	37.7	38.5	11.2	17.0	10.2	20.1	20.7	28.3
2013:Q4	22.3	19.5	15.6	36.4	42.7	50.6	13.0	25.2	16.6	23.4	17.5	34.0

NOTES:

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

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

Maine E6-9
Quarterly 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	991.1	1,186.4	1,093.7	763.8	877.3	828.7	158.0	144.1	187.9	206.7	162.8	230.4	778.5	768.7	714.9
2010:Q2	1,044.3	1,256.9	1,129.9	792.6	954.1	867.6	181.8	180.0	205.9	190.3	182.9	266.4	781.1	820.4	757.9
2010:Q3	1,060.4	1,200.1	1,140.1	764.5	936.4	855.6	180.1	175.2	189.8	172.8	287.3	176.3	771.7	929.6	711.9
2010:Q4	1,040.2	1,192.2	1,103.2	769.3	946.0	902.8	174.2	178.2	182.5	199.8	304.8	212.2	812.3	968.3	667.7
2011:Q1	1,066.0	1,203.0	1,151.9	793.0	944.3	937.2	183.7	208.1	202.4	188.1	255.7	247.1	833.6	906.9	793.0
2011:Q2	1,098.4	1,309.6	1,203.4	855.9	1,032.2	1,000.3	194.1	208.1	217.8	208.2	231.1	168.0	825.1	871.2	754.1
2011:Q3	1,051.3	1,318.5	1,139.8	825.3	963.6	980.2	177.0	191.6	188.8	204.1	259.8	201.6	791.6	893.5	707.6
2011:Q4	1,081.0	1,279.4	1,148.2	825.6	1,041.6	1,018.6	182.6	185.5	202.6	195.6	213.4	230.0	807.0	813.2	810.3
2012:Q1	1,122.1	1,181.7	1,087.3	844.5	965.7	1,000.9	180.3	185.4	197.5	217.3	254.7	263.2	853.6	792.1	798.9
2012:Q2	1,142.1	1,205.9	1,077.0	880.0	986.3	904.5	185.4	178.3	176.7	200.4	271.6	220.4	845.3	788.1	745.8
2012:Q3	1,113.3	1,147.1	1,000.0	804.9	866.8	841.3	181.6	164.1	163.1	221.3	245.1	199.2	868.2	664.4	793.0
2012:Q4	1,122.4	1,178.1	1,052.4	807.4	927.9	847.6	173.6	176.8	140.5	205.1	205.5	195.2	803.0	756.5	720.6
2013:Q1	1,172.2	1,340.1	1,139.6	849.1	993.2	921.3	173.0	199.8	132.8	241.3	212.0	217.9	824.3	886.2	748.3
2013:Q2	1,227.6	1,436.6	1,155.1	895.5	1,075.7	942.5	181.3	204.1	163.1	228.6	219.6	184.0	807.6	912.5	762.3
2013:Q3	1,181.2	1,300.9	1,113.8	804.2	992.5	956.1	170.7	179.3	159.9	236.0	245.3	290.6	816.6	824.7	801.3
2013:Q4	1,113.5	1,091.5	1,017.6	805.7	969.0	860.3	154.8	159.1	134.7	225.2	216.2	184.2	771.3	729.2	747.5

NOTES:

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

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

Maine E6-10
Quarterly 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	1,001	1,096	1,006	363	415	373	111	83	62	44	43	52
2010:Q2	1,069	1,274	1,301	360	471	478	116	112	155	48	41	58
2010:Q3	1,069	1,286	1,216	327	475	412	129	125	129	50	51	61
2010:Q4	1,162	1,623	1,435	383	684	490	153	129	203	53	62	73
2011:Q1	1,293	1,677	1,754	455	576	740	193	321	245	53	70	81
2011:Q2	1,438	2,187	1,854	482	921	687	217	323	263	60	68	88
2011:Q3	1,380	2,098	1,982	441	836	777	203	272	267	62	69	94
2011:Q4	1,468	1,891	1,899	501	742	721	201	183	205	61	74	98
2012:Q1	1,486	1,708	1,755	513	556	620	209	230	233	63	61	83
2012:Q2	1,551	1,717	1,887	524	575	720	200	205	197	71	83	105
2012:Q3	1,583	1,596	1,680	528	562	584	216	163	179	73	70	89
2012:Q4	1,687	1,716	1,698	610	701	659	221	168	168	75	62	85
2013:Q1	1,673	1,530	1,548	609	610	553	245	125	200	69	61	75
2013:Q2	1,592	1,506	1,720	534	498	584	190	159	246	72	68	88
2013:Q3	1,453	1,638	1,491	478	609	516	162	176	144	67	68	82
2013:Q4	1,518	1,526	1,345	538	592	437	187	113	135	69	79	72

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Maine E6-10 (cont.)
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	208	209	235	84	110	88	30	37	32	48	40	49
2010:Q2	237	224	250	98	139	112	36	49	41	45	55	72
2010:Q3	244	249	261	96	131	112	37	49	43	47	52	55
2010:Q4	245	296	301	99	145	119	41	55	48	51	67	61
2011:Q1	263	278	294	99	141	124	38	51	52	54	62	68
2011:Q2	298	333	350	114	170	144	45	73	61	65	89	91
2011:Q3	293	373	372	109	167	144	44	65	60	60	91	80
2011:Q4	316	335	366	114	164	140	47	65	62	66	95	91
2012:Q1	318	364	358	109	149	123	43	50	52	72	93	94
2012:Q2	333	305	345	121	152	128	48	58	60	75	86	75
2012:Q3	342	314	349	115	135	118	50	58	56	69	72	73
2012:Q4	342	277	305	119	153	110	53	58	58	74	76	81
2013:Q1	334	253	315	103	140	89	49	54	48	78	77	67
2013:Q2	357	299	358	109	133	118	51	60	58	80	85	72
2013:Q3	334	282	334	96	143	102	50	62	55	65	67	76
2013:Q4	321	275	317	103	142	97	50	58	51	66	64	69

(continued)

Maine E6-10 (cont.)
Quarterly 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	36	30	14	21	13	16	23	19	0	7	0
2010:Q2	39	49	37	14	22	15	19	26	21	0	6	0
2010:Q3	37	50	38	13	23	16	18	25	20	0	4	0
2010:Q4	40	57	39	13	22	13	19	28	22	0	3	0
2011:Q1	43	55	50	13	22	15	18	27	23	0	4	0
2011:Q2	46	61	50	13	23	16	20	30	23	0	9	0
2011:Q3	48	64	54	13	23	16	19	30	23	1	6	0
2011:Q4	46	59	61	14	23	15	19	29	23	0	8	0
2012:Q1	48	57	53	14	22	16	17	24	18	0	7	0
2012:Q2	49	71	54	15	23	15	18	24	18	0	3	0
2012:Q3	54	58	59	14	20	13	18	24	18	0	5	0
2012:Q4	52	57	56	14	22	13	18	23	17	0	5	0
2013:Q1	53	60	50	14	18	12	15	20	14	0	17	0
2013:Q2	55	57	53	14	22	14	17	22	18	0	8	0
2013:Q3	55	63	57	13	19	20	15	21	16	0	8	0
2013:Q4	53	65	48	13	18	20	15	19	16	0	7	0

NOTES:

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

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

Maine E6-11
Quarterly 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	114.9	130.5	119.3	261.3	248.3	307.4
2010:Q2	119.0	133.6	153.2	296.9	256.4	311.6
2010:Q3	115.0	148.6	139.0	297.6	286.9	358.7
2010:Q4	129.0	194.0	161.0	288.9	296.0	356.7
2011:Q1	155.8	197.1	222.4	313.9	333.0	373.9
2011:Q2	160.1	249.8	226.8	331.9	337.7	435.1
2011:Q3	151.7	233.7	232.4	340.3	324.9	449.3
2011:Q4	167.0	206.3	236.9	328.2	345.6	462.7
2012:Q1	170.3	200.1	194.0	334.7	328.6	388.4
2012:Q2	170.8	191.9	197.9	376.3	397.5	437.2
2012:Q3	170.7	189.5	181.2	381.8	347.4	434.8
2012:Q4	180.9	182.1	187.8	355.7	297.0	396.1
2013:Q1	181.5	178.5	181.3	343.3	294.9	351.0
2013:Q2	165.5	153.4	178.2	349.4	329.3	372.8
2013:Q3	149.3	179.2	161.5	342.2	347.9	417.6
2013:Q4	157.3	170.2	153.3	315.1	338.3	343.0

NOTES:

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

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

Maine E6-12
Quarterly average expenditures among beneficiaries with behavioral health 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	705	739	771	212	222	249	42	41	56	74	54	67	146	159	146
2010:Q2	776	863	853	223	255	291	47	41	50	81	67	71	155	144	162
2010:Q3	769	999	801	203	417	245	50	45	64	81	78	74	145	196	152
2010:Q4	783	1,169	916	216	467	298	50	49	63	77	64	79	161	248	198
2011:Q1	809	1,099	855	233	332	254	48	64	57	73	56	71	200	313	248
2011:Q2	858	1,167	903	226	389	245	53	55	65	86	77	84	193	267	207
2011:Q3	847	1,101	1,073	209	331	352	53	58	69	91	71	91	184	287	260
2011:Q4	838	1,092	910	218	397	267	51	60	69	86	66	83	196	376	250
2012:Q1	859	936	1,069	240	269	392	52	58	67	80	71	104	229	194	346
2012:Q2	892	1,002	1,145	246	312	381	58	63	74	88	74	87	242	255	363
2012:Q3	900	1,023	954	242	360	275	59	70	74	89	69	74	243	299	251
2012:Q4	924	914	864	272	278	261	57	56	57	85	75	64	270	253	224
2013:Q1	930	878	919	281	297	302	56	52	57	82	69	78	266	241	268
2013:Q2	936	953	1,016	271	323	328	58	57	58	92	76	80	267	284	248
2013:Q3	891	1,025	841	244	318	226	58	59	64	94	81	102	248	292	242
2013:Q4	856	775	823	257	230	222	55	52	70	88	69	88	257	216	217

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	80	79	79	330	286	391	12	3	9	53	26	49	1,926	1,688	1,857
2010:Q2	82	88	107	360	314	345	12	6	11	49	37	50	2,021	1,765	1,798
2010:Q3	79	121	88	384	288	437	12	10	12	58	44	52	2,003	1,789	1,816
2010:Q4	81	133	95	343	294	412	9	9	10	47	25	61	1,941	1,717	1,794
2011:Q1	88	107	104	357	372	403	11	8	14	50	40	58	2,001	1,593	1,812
2011:Q2	86	137	104	387	333	408	12	8	17	63	46	65	2,101	1,875	1,864
2011:Q3	86	111	114	398	369	433	13	7	16	64	44	59	2,078	1,842	1,919
2011:Q4	88	103	110	367	371	435	11	6	12	55	31	56	2,084	1,854	1,932
2012:Q1	89	116	118	358	352	402	11	9	13	55	50	58	2,140	1,788	1,876
2012:Q2	89	108	111	390	386	424	12	7	13	58	55	62	2,134	1,849	1,784
2012:Q3	90	118	91	412	394	456	11	9	8	65	54	61	2,061	1,717	1,752
2012:Q4	90	103	91	372	354	380	10	10	5	57	47	49	1,986	1,684	1,669
2013:Q1	92	94	95	366	325	358	10	8	11	53	39	49	1,997	1,758	1,744
2013:Q2	92	95	101	370	334	328	12	7	8	58	47	53	2,168	1,841	1,958
2013:Q3	86	102	85	381	372	431	11	10	14	59	41	70	2,090	1,784	2,040
2013:Q4	83	84	87	336	348	370	10	3	10	46	45	62	2,046	1,744	1,970

NOTES:

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

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

Michigan E7-1
Mean 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	89.6	87.5	87.2	58.1	52.1	51.9	84.3	82.1	79.6	61.6	57.1	49.5
Pre-3	89.9	86.8	87.7	58.3	52.8	54.2	84.3	82.4	79.4	64.7	59.0	53.1
Pre-2	90.3	86.2	88.3	58.1	52.9	52.8	84.5	83.0	79.5	68.6	60.9	54.6
Pre-1	90.0	87.9	87.8	57.6	50.9	50.9	83.6	84.1	78.3	70.1	63.3	55.9
Post-1	90.2	87.9	86.1	58.0	52.9	52.4	82.8	83.3	78.6	70.9	65.8	57.7
Post-2	90.9	87.7	87.8	60.5	53.3	53.5	83.8	79.7	79.1	72.4	64.4	57.2

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	35.3	29.0	24.6	3.3	4.8	4.1	77.6	74.1	76.4
Pre-3	37.2	29.5	27.0	3.3	4.4	4.0	77.1	74.2	76.0
Pre-2	38.9	31.9	27.9	3.2	4.2	4.0	77.3	74.8	74.5
Pre-1	38.4	30.0	26.5	3.0	3.0	4.2	75.8	75.3	73.2
Post-1	39.6	32.2	28.5	3.2	3.3	4.3	72.8	72.3	72.2
Post-2	42.0	31.2	28.5	2.9	4.6	4.0	73.1	70.2	71.4

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-2
Quarterly 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	5.2	6.4	4.8	10.5	12.1	10.3	3.8	4.4	3.3	6.6	7.7	7.0
2010:Q2	5.5	6.8	5.1	10.1	11.9	10.6	3.8	4.8	3.9	6.3	7.1	6.7
2010:Q3	5.6	5.4	5.8	8.8	10.5	9.7	3.2	3.8	3.6	5.6	6.8	6.1
2010:Q4	6.2	5.5	5.7	9.9	12.1	10.0	3.8	4.5	3.8	6.0	7.5	6.2
2011:Q1	6.8	7.6	6.9	11.9	13.9	12.5	4.3	5.0	4.0	7.6	8.8	8.5
2011:Q2	7.1	6.0	7.3	11.8	11.8	12.6	4.5	4.5	4.9	7.3	7.3	7.7
2011:Q3	7.3	7.6	7.1	10.5	10.8	11.0	4.1	4.2	4.2	6.4	6.5	6.8
2011:Q4	7.5	7.0	8.5	12.0	11.4	14.6	4.4	3.5	5.2	7.6	7.9	9.4
2012:Q1	8.8	8.0	8.8	14.2	16.2	15.0	5.5	5.8	5.8	8.7	10.4	9.2
2012:Q2	9.8	11.9	11.1	13.4	17.3	13.9	5.1	4.8	5.6	8.3	12.5	8.3
2012:Q3	9.9	10.7	10.5	12.0	14.0	13.6	4.6	4.9	5.6	7.4	9.1	8.1
2012:Q4	10.5	13.9	11.8	13.4	17.2	14.8	4.6	6.1	5.6	8.7	11.1	9.3
2013:Q1	11.2	13.9	10.9	15.2	20.2	17.9	5.7	6.9	6.5	9.4	13.3	11.3
2013:Q2	10.4	12.4	10.7	13.3	15.4	14.5	4.9	4.4	6.0	8.4	11.0	8.6
2013:Q3	10.2	13.0	11.8	11.9	14.7	12.6	4.5	4.4	5.2	7.4	10.3	7.4
2013:Q4	10.7	13.6	12.0	12.3	18.4	14.0	4.5	7.0	5.1	7.8	11.4	8.9

NOTES:

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

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

Michigan E7-3
Quarterly 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	953.6	978.3	1,014.2	688.6	685.9	733.9	153.3	146.4	158.8	159.1	169.8	126.2	702.3	723.7	696.6
2010:Q2	1,006.2	1,025.9	1,065.1	750.2	744.6	796.0	163.9	167.7	172.1	153.3	152.6	171.6	719.6	713.3	743.9
2010:Q3	970.5	983.4	1,038.4	730.8	695.7	748.9	161.9	163.5	169.7	154.9	148.9	144.6	709.4	706.3	728.7
2010:Q4	974.3	1,001.0	1,047.1	727.5	717.5	747.2	151.7	151.7	157.8	146.9	148.4	146.5	684.8	672.6	695.7
2011:Q1	946.0	976.3	1,017.1	704.3	682.4	718.1	149.8	145.7	161.1	160.4	154.5	153.8	715.5	710.5	686.9
2011:Q2	1,024.0	991.6	1,098.1	762.4	760.5	783.9	162.1	156.6	171.9	172.2	134.3	167.9	737.6	728.3	737.3
2011:Q3	974.0	942.8	1,025.0	731.2	726.5	755.8	157.6	156.1	162.0	179.2	172.3	194.2	747.1	755.9	761.2
2011:Q4	990.4	998.3	1,042.2	747.3	734.5	770.2	151.7	150.9	153.1	180.5	170.6	193.3	728.3	703.9	727.5
2012:Q1	980.2	973.7	1,038.8	737.2	730.9	756.9	150.8	149.0	146.4	192.9	235.6	199.8	756.1	742.8	731.0
2012:Q2	1,016.2	1,001.7	1,070.0	768.7	762.8	791.0	155.9	158.4	153.2	191.1	231.4	199.3	757.6	761.0	749.5
2012:Q3	947.3	948.1	1,014.3	719.8	728.6	749.7	151.2	153.5	152.3	185.3	194.4	187.8	761.0	745.0	774.6
2012:Q4	979.1	1,040.3	1,011.8	736.7	774.2	772.0	147.1	146.9	136.0	183.5	280.5	199.5	740.9	690.7	706.8
2013:Q1	964.0	1,075.4	1,008.7	739.6	804.7	769.2	140.6	144.8	130.1	179.8	198.4	173.0	747.0	765.0	728.8
2013:Q2	1,036.4	1,105.6	1,082.1	814.0	903.1	864.4	154.9	159.3	142.4	180.7	212.7	188.2	750.0	684.7	735.9
2013:Q3	966.5	1,056.2	1,049.1	774.7	863.0	835.0	154.5	153.1	148.5	181.2	185.9	182.8	743.4	739.4	715.1
2013:Q4	967.2	1,093.2	1,047.4	766.0	913.8	850.9	144.9	156.0	140.2	178.0	193.2	199.7	691.3	713.8	652.3

NOTES:

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

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

Michigan E7-4
Quarterly 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	595	627	599	210	214	205	44	53	44	20	23	19
2010:Q2	652	668	674	212	212	220	48	53	49	23	23	22
2010:Q3	657	662	670	209	205	208	50	49	52	24	24	23
2010:Q4	682	687	692	216	223	213	59	51	62	24	23	23
2011:Q1	662	642	647	225	214	210	66	64	63	23	22	21
2011:Q2	724	713	722	230	222	226	68	67	68	25	25	24
2011:Q3	734	677	747	227	202	234	71	55	68	25	25	25
2011:Q4	760	725	770	241	222	238	68	62	75	25	25	24
2012:Q1	787	798	790	269	273	262	77	83	84	26	25	26
2012:Q2	838	904	877	275	320	293	81	94	87	28	28	27
2012:Q3	817	867	835	266	286	271	77	87	82	29	30	28
2012:Q4	858	988	863	292	329	290	83	122	97	27	30	26
2013:Q1	839	990	820	301	365	285	91	124	100	28	28	27
2013:Q2	848	1,014	855	284	345	278	83	117	90	29	31	30
2013:Q3	829	1,009	870	272	332	286	82	135	101	28	31	30
2013:Q4	844	1,037	858	284	368	289	84	120	98	28	33	27

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Michigan E7-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	104	94	96	83	90	84	24	27	28	35	38	39
2010:Q2	114	101	105	96	101	102	33	37	37	39	45	44
2010:Q3	115	108	106	97	99	101	36	37	40	38	42	43
2010:Q4	117	103	106	98	101	101	38	41	42	40	47	44
2011:Q1	116	96	99	88	87	89	29	30	32	38	43	41
2011:Q2	130	115	114	103	101	104	38	38	42	40	44	44
2011:Q3	132	114	118	103	102	105	39	39	44	40	40	44
2011:Q4	135	116	123	106	107	107	42	43	48	41	47	48
2012:Q1	138	128	118	100	104	104	35	36	39	43	42	48
2012:Q2	146	129	125	110	114	119	43	45	48	44	51	49
2012:Q3	141	133	122	107	124	112	43	47	50	41	43	46
2012:Q4	142	136	119	110	132	113	46	59	51	43	48	41
2013:Q1	137	135	108	98	117	99	36	51	40	44	54	44
2013:Q2	145	143	124	108	137	115	42	59	48	44	55	46
2013:Q3	145	146	119	105	125	117	43	60	51	42	54	46
2013:Q4	145	144	114	105	131	116	45	62	52	44	56	45

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Michigan E7-4 (cont.)
Quarterly 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	21	24	24	10	12	13	17	21	21	0	0	0
2010:Q2	25	26	26	10	14	14	20	25	25	0	1	0
2010:Q3	25	28	27	10	13	13	19	22	25	0	0	0
2010:Q4	26	28	28	10	13	15	19	22	23	0	1	0
2011:Q1	23	24	25	9	11	13	16	18	20	0	1	1
2011:Q2	26	28	27	9	13	13	18	22	24	0	0	0
2011:Q3	27	28	28	9	12	13	18	20	24	0	0	0
2011:Q4	29	28	30	9	13	13	18	20	23	0	0	0
2012:Q1	28	30	32	10	13	14	16	19	21	0	0	0
2012:Q2	31	31	31	10	14	14	18	21	23	0	0	1
2012:Q3	31	32	32	9	13	13	17	20	22	0	0	0
2012:Q4	31	35	32	9	14	14	17	22	22	0	10	0
2013:Q1	29	33	30	9	13	14	15	20	19	0	1	0
2013:Q2	31	36	33	9	15	14	17	24	22	0	0	0
2013:Q3	32	36	34	9	13	13	16	22	22	0	1	0
2013:Q4	32	39	33	8	14	15	16	23	21	0	0	0

NOTES:

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

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

Michigan E7-5
Quarterly 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	65.8	71.0	66.1	107.6	114.7	104.0
2010:Q2	65.2	70.4	68.8	118.3	113.5	113.5
2010:Q3	64.5	65.0	63.5	123.3	125.9	123.4
2010:Q4	66.2	69.3	68.0	116.6	120.3	113.3
2011:Q1	69.6	72.7	71.5	117.0	111.4	109.7
2011:Q2	71.4	69.2	74.1	127.2	126.8	125.9
2011:Q3	71.0	69.3	76.6	134.8	129.6	127.4
2011:Q4	74.9	71.4	80.1	125.6	129.1	120.6
2012:Q1	82.7	87.3	84.8	132.4	127.8	132.8
2012:Q2	82.3	95.9	91.0	139.3	137.4	130.6
2012:Q3	80.1	86.7	84.2	144.8	145.8	136.2
2012:Q4	83.0	95.6	86.0	132.5	139.4	124.4
2013:Q1	85.5	103.8	83.3	131.8	131.0	126.1
2013:Q2	81.7	96.7	83.6	138.2	138.8	133.4
2013:Q3	77.8	94.3	85.0	138.5	145.6	142.7
2013:Q4	76.7	101.0	80.1	128.8	137.8	115.2

NOTES:

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

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

Michigan E7-6
Quarterly 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	793	857	698	494	470	480	792	841	718	790	876	743
2010:Q2	867	906	764	591	556	541	851	877	831	858	875	921
2010:Q3	876	896	845	562	589	546	849	806	843	845	841	929
2010:Q4	877	954	827	601	572	594	851	823	814	845	865	902
2011:Q1	896	845	759	570	571	516	861	747	752	858	848	821
2011:Q2	952	939	867	621	657	645	917	857	845	939	898	885
2011:Q3	942	914	913	618	552	616	922	794	848	948	872	930
2011:Q4	946	942	932	692	551	708	942	851	888	959	903	979
2012:Q1	994	984	956	659	717	646	1,000	934	898	1,020	1,050	976
2012:Q2	1,048	1,157	1,015	746	744	719	1,012	1,005	997	1,065	1,245	1,071
2012:Q3	1,017	1,112	999	698	693	712	992	1,032	996	1,047	1,117	1,004
2012:Q4	1,019	1,316	997	713	786	732	1,014	1,131	950	1,052	1,520	1,081
2013:Q1	1,015	1,239	1,033	710	1,002	622	1,014	1,187	936	1,004	1,320	1,021
2013:Q2	1,006	1,172	1,055	742	707	658	1,017	1,168	1,009	1,007	1,359	1,127
2013:Q3	966	1,251	1,074	745	802	647	984	1,264	1,004	997	1,477	1,041
2013:Q4	981	1,284	1,142	742	967	647	1,011	1,162	984	963	1,406	1,100

NOTES:

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

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

Michigan E7-7
Mean 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	88.7	86.4	86.9	58.7	53.3	53.3	81.3	78.3	77.4	64.7	61.1	56.6
Pre-3	88.8	85.3	86.5	58.0	51.1	54.2	81.2	79.6	76.0	67.9	63.3	57.7
Pre-2	89.1	85.1	87.0	57.5	54.1	53.5	81.0	79.3	76.3	71.7	65.8	60.7
Pre-1	88.2	85.1	86.3	57.0	48.7	51.6	80.3	79.8	75.6	75.0	67.3	64.1
Post-1	86.8	85.4	83.4	56.4	51.8	50.7	77.8	79.6	74.4	73.2	70.1	64.8
Post-2	88.4	89.2	85.3	58.8	53.6	52.7	78.9	79.0	73.1	75.1	68.3	64.6

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	35.8	29.6	26.8	3.3	4.8	3.7	75.5	72.6	74.3
Pre-3	36.9	28.4	26.5	3.1	4.5	3.9	74.4	70.8	73.9
Pre-2	37.9	32.4	29.4	3.1	3.6	3.7	74.1	70.4	72.3
Pre-1	37.9	29.9	27.3	2.4	2.8	3.4	71.9	69.9	69.8
Post-1	37.4	31.6	27.8	3.4	3.3	4.2	67.4	67.8	66.0
Post-2	40.0	28.9	28.2	3.1	3.1	4.3	68.4	66.0	65.9

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Michigan E7-8
Quarterly 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	11.3	14.0	9.7	28.8	30.6	26.1	9.5	9.1	8.2	19.3	21.5	17.9
2010:Q2	11.5	16.4	9.5	27.4	34.1	27.2	8.9	12.8	8.2	18.5	21.3	19.0
2010:Q3	12.6	13.5	13.2	24.7	31.0	29.0	8.1	8.8	9.8	16.7	22.1	19.2
2010:Q4	15.9	13.9	14.4	27.3	34.9	28.9	9.4	11.8	10.6	17.9	23.1	18.3
2011:Q1	22.1	26.1	24.2	39.0	49.2	41.5	13.0	16.9	11.7	26.1	32.3	29.8
2011:Q2	24.0	20.8	26.5	39.8	41.6	42.0	14.3	15.3	13.7	25.6	26.3	28.3
2011:Q3	24.7	25.5	25.4	35.9	38.9	38.3	13.2	13.7	14.0	22.7	25.3	24.3
2011:Q4	25.9	24.4	30.5	41.0	41.8	49.9	14.1	13.3	16.1	26.9	28.6	33.8
2012:Q1	22.6	22.1	22.7	42.5	46.6	44.0	15.2	15.6	15.4	27.3	31.0	28.6
2012:Q2	24.4	26.5	25.3	39.6	51.3	40.0	14.0	13.6	13.7	25.6	37.7	26.3
2012:Q3	23.7	27.2	24.4	35.7	38.6	40.4	12.1	12.6	14.8	23.7	26.1	25.6
2012:Q4	25.9	36.1	32.7	38.3	51.1	45.4	11.8	17.3	15.3	26.5	33.8	30.1
2013:Q1	27.3	31.4	26.3	43.4	60.5	50.1	14.7	18.4	16.6	28.7	42.1	33.5
2013:Q2	24.0	30.6	28.5	38.6	44.4	42.7	13.0	8.6	15.9	25.7	35.7	26.8
2013:Q3	24.1	30.6	29.2	34.4	40.9	32.5	11.2	13.0	11.2	23.2	27.9	21.3
2013:Q4	24.2	34.0	30.4	35.5	46.0	38.6	11.6	11.7	12.4	23.9	34.3	26.2

NOTES:

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

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

Michigan E7-9
Quarterly 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	1,321.1	1,373.7	1,398.4	1,104.7	1,120.3	1,169.8	222.7	211.7	222.1	210.8	253.8	184.7	790.7	811.0	789.9
2010:Q2	1,378.9	1,428.1	1,469.0	1,193.0	1,183.4	1,269.4	232.9	231.8	238.3	211.1	211.5	238.8	814.0	822.5	838.0
2010:Q3	1,355.2	1,395.1	1,448.8	1,181.2	1,109.0	1,208.3	236.1	236.0	248.0	217.9	218.5	211.4	799.7	828.8	828.4
2010:Q4	1,352.5	1,439.6	1,451.3	1,163.4	1,141.9	1,197.9	227.1	236.4	234.6	208.7	210.7	218.5	780.9	762.1	797.7
2011:Q1	1,382.9	1,474.5	1,497.9	1,206.2	1,206.9	1,255.0	240.4	241.7	246.0	205.6	197.7	198.6	798.5	798.2	765.7
2011:Q2	1,493.6	1,505.2	1,618.2	1,302.1	1,288.6	1,339.9	256.4	256.2	270.0	216.3	157.2	215.3	815.5	782.6	814.0
2011:Q3	1,449.2	1,436.4	1,523.8	1,284.2	1,269.9	1,316.1	256.8	261.3	260.8	225.8	221.3	252.0	828.9	812.9	839.7
2011:Q4	1,446.3	1,484.1	1,549.4	1,296.4	1,278.7	1,348.2	241.8	254.1	251.3	225.6	197.8	248.7	800.6	753.1	798.5
2012:Q1	1,427.8	1,434.0	1,516.6	1,277.2	1,263.4	1,325.6	232.5	219.2	224.4	259.7	318.5	273.7	840.6	816.3	802.9
2012:Q2	1,421.0	1,397.7	1,486.6	1,263.3	1,259.4	1,305.2	232.7	253.7	242.8	258.1	317.2	272.6	835.7	891.7	819.2
2012:Q3	1,345.4	1,395.0	1,422.9	1,181.5	1,233.5	1,223.4	223.9	238.1	230.6	245.5	271.7	249.6	827.9	819.9	870.7
2012:Q4	1,349.5	1,541.7	1,391.5	1,188.1	1,272.7	1,222.4	212.5	208.5	209.5	237.2	383.8	259.3	806.5	761.7	755.0
2013:Q1	1,350.3	1,639.2	1,392.5	1,200.1	1,301.6	1,241.4	204.9	214.0	181.4	238.8	271.2	227.1	813.4	849.3	816.0
2013:Q2	1,410.4	1,662.5	1,480.8	1,283.9	1,397.7	1,389.1	220.9	228.8	216.7	247.3	266.2	259.8	818.1	722.6	811.4
2013:Q3	1,337.3	1,554.5	1,450.5	1,227.5	1,329.7	1,376.0	217.3	218.8	226.3	252.5	234.9	207.5	818.0	802.1	733.6
2013:Q4	1,300.6	1,590.0	1,391.4	1,187.4	1,412.6	1,332.7	202.9	222.1	200.5	245.6	291.9	224.6	755.0	766.0	692.9

NOTES:

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

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

Michigan E7-10
Quarterly 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	1,197	1,283	1,188	448	466	437	102	128	102	37	42	36
2010:Q2	1,340	1,380	1,356	480	471	475	117	142	123	44	44	38
2010:Q3	1,361	1,362	1,408	470	440	492	127	133	135	46	45	43
2010:Q4	1,449	1,476	1,521	503	535	528	158	128	170	47	47	45
2011:Q1	1,683	1,651	1,684	661	623	639	210	211	205	50	47	47
2011:Q2	1,866	1,846	1,851	698	688	687	229	227	223	57	58	58
2011:Q3	1,911	1,784	1,929	698	623	719	245	198	229	58	58	56
2011:Q4	1,997	1,949	2,042	758	708	746	236	226	273	57	59	56
2012:Q1	1,910	1,899	1,913	705	646	685	230	260	242	54	52	53
2012:Q2	1,907	2,075	2,013	687	791	732	218	237	238	57	60	54
2012:Q3	1,824	1,981	1,862	649	735	650	205	214	217	58	63	54
2012:Q4	1,855	2,401	1,981	682	918	723	213	355	276	55	60	52
2013:Q1	1,866	2,398	1,950	714	933	734	227	357	291	54	56	56
2013:Q2	1,826	2,335	1,909	660	871	665	206	319	239	57	64	63
2013:Q3	1,751	2,392	1,958	615	812	684	203	417	285	56	59	61
2013:Q4	1,731	2,272	1,947	618	828	696	199	318	280	55	65	55

(continued)

Michigan E7-10 (cont.)
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	198	176	180	148	167	151	47	55	52	82	88	86
2010:Q2	218	195	203	170	180	182	61	71	69	94	107	99
2010:Q3	226	223	212	172	174	185	65	70	72	93	106	99
2010:Q4	229	214	227	178	188	184	68	76	77	98	113	104
2011:Q1	249	227	229	186	190	200	68	73	76	103	105	108
2011:Q2	281	262	251	214	210	214	81	84	89	117	122	129
2011:Q3	292	269	268	217	229	222	84	83	92	117	116	121
2011:Q4	300	279	284	220	237	232	87	91	100	121	137	136
2012:Q1	304	308	271	206	222	223	78	79	85	124	120	130
2012:Q2	301	278	271	208	229	235	85	93	96	117	127	126
2012:Q3	290	289	267	196	239	216	83	91	96	108	112	116
2012:Q4	284	302	260	194	268	220	85	124	101	110	126	98
2013:Q1	277	309	234	183	251	202	76	117	89	113	137	115
2013:Q2	287	312	261	192	265	214	81	125	96	112	138	111
2013:Q3	288	327	252	181	246	223	79	123	98	106	139	119
2013:Q4	284	313	247	174	241	226	79	131	97	110	130	119

(continued)

Michigan E7-10 (cont.)
Quarterly 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	34	42	37	16	20	21	29	34	34	0	0	0
2010:Q2	38	41	42	17	20	22	32	39	41	0	3	0
2010:Q3	39	43	40	17	21	21	31	35	38	0	0	0
2010:Q4	41	45	43	17	21	24	32	35	38	0	3	0
2011:Q1	43	44	45	15	18	22	30	34	37	0	6	0
2011:Q2	48	52	51	15	22	22	34	39	42	0	0	0
2011:Q3	49	54	53	16	21	21	33	37	43	0	0	0
2011:Q4	53	53	56	16	20	22	34	38	42	0	1	0
2012:Q1	51	52	62	16	20	23	29	34	36	0	0	0
2012:Q2	53	55	56	15	21	21	30	36	39	0	1	0
2012:Q3	52	56	55	14	21	20	28	35	35	0	1	0
2012:Q4	51	65	55	14	20	23	28	38	39	1	1	0
2013:Q1	51	64	53	14	20	21	25	35	34	0	0	0
2013:Q2	52	66	62	13	21	22	27	36	38	1	0	0
2013:Q3	54	69	57	12	19	21	25	37	37	0	3	0
2013:Q4	51	65	56	12	20	23	25	36	33	0	0	0

NOTES:

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

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

Michigan E7-11
Quarterly 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	139.5	153.1	138.4	183.5	197.7	177.1
2010:Q2	143.6	156.6	152.1	206.8	213.8	188.7
2010:Q3	142.9	144.3	149.4	214.5	223.1	214.8
2010:Q4	153.1	163.1	163.2	211.6	215.9	202.3
2011:Q1	197.1	208.2	212.8	228.4	215.0	209.4
2011:Q2	210.9	214.2	226.0	257.4	235.3	253.1
2011:Q3	211.6	209.2	232.9	271.1	250.6	239.8
2011:Q4	226.1	224.5	244.9	254.4	256.7	240.5
2012:Q1	210.3	205.7	213.4	251.7	236.1	245.1
2012:Q2	201.8	235.5	220.6	262.3	246.1	237.9
2012:Q3	191.6	213.0	204.5	268.2	279.7	243.5
2012:Q4	196.1	251.2	214.9	246.8	256.2	228.9
2013:Q1	201.7	256.6	202.4	241.2	226.3	243.3
2013:Q2	190.0	240.8	199.4	250.3	247.4	244.2
2013:Q3	178.6	231.3	200.7	251.6	255.3	259.7
2013:Q4	170.3	222.5	188.9	234.2	245.7	226.5

NOTES:

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

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

Michigan E7-12
Quarterly average expenditures among beneficiaries with behavioral health 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	1,020	1,086	1,094	353	338	378	45	52	41	43	53	41	174	154	169
2010:Q2	1,132	1,224	1,271	370	373	437	50	51	46	51	56	59	171	189	199
2010:Q3	1,155	1,111	1,322	370	335	459	53	57	55	53	55	50	176	185	203
2010:Q4	1,204	1,192	1,319	386	372	405	51	48	51	54	53	54	198	211	190
2011:Q1	1,224	1,281	1,221	412	456	385	49	45	45	46	51	45	274	346	272
2011:Q2	1,330	1,316	1,370	430	403	433	55	54	54	55	55	55	280	298	327
2011:Q3	1,348	1,278	1,479	415	388	482	57	51	52	60	57	57	288	261	364
2011:Q4	1,341	1,322	1,458	427	429	483	54	52	51	61	58	52	317	341	351
2012:Q1	1,306	1,299	1,344	425	402	420	53	48	54	51	52	51	332	335	338
2012:Q2	1,288	1,353	1,471	406	459	492	56	53	56	55	58	51	323	375	387
2012:Q3	1,228	1,429	1,358	384	492	457	57	56	53	55	54	50	312	396	363
2012:Q4	1,229	1,518	1,305	391	524	435	52	64	54	52	50	55	314	441	332
2013:Q1	1,197	1,510	1,321	393	554	452	53	59	55	52	58	48	313	441	341
2013:Q2	1,204	1,469	1,277	383	464	402	56	65	64	56	61	65	318	397	338
2013:Q3	1,163	1,538	1,360	361	495	455	55	63	67	57	69	67	302	373	379
2013:Q4	1,148	1,420	1,349	364	471	447	51	64	57	52	55	60	300	366	348

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	115	124	118	259	278	261	4	7	4	26	30	34	1,203	1,205	1,107
2010:Q2	117	133	142	292	307	278	5	9	8	29	37	33	1,246	1,364	1,174
2010:Q3	119	115	131	306	340	322	5	5	3	31	42	40	1,261	1,326	1,197
2010:Q4	123	125	131	288	284	292	6	4	5	29	40	31	1,257	1,312	1,157
2011:Q1	132	148	138	286	272	274	5	7	4	29	30	29	1,264	1,280	1,201
2011:Q2	136	125	155	313	307	309	5	5	7	32	34	34	1,331	1,301	1,214
2011:Q3	136	137	156	336	304	312	6	4	6	35	37	36	1,347	1,326	1,228
2011:Q4	139	150	167	303	302	284	6	7	5	32	30	34	1,337	1,311	1,213
2012:Q1	137	141	147	309	284	300	4	4	5	29	33	34	1,288	1,259	1,149
2012:Q2	127	145	143	315	314	295	4	7	4	31	34	29	1,304	1,213	1,132
2012:Q3	123	150	136	325	320	303	4	6	4	30	30	30	1,298	1,111	1,068
2012:Q4	119	154	130	291	309	286	4	4	6	26	25	32	1,286	1,137	1,097
2013:Q1	119	167	139	286	299	289	4	8	4	26	33	31	1,294	1,181	1,117
2013:Q2	116	136	131	302	321	314	4	6	6	28	32	41	1,374	1,281	1,278
2013:Q3	112	149	141	299	334	353	4	9	7	28	34	42	1,327	1,307	1,262
2013:Q4	105	144	133	268	309	271	3	4	5	22	35	28	1,241	1,240	1,213

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among beneficiaries with disabilities

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	281	313	244	33	40	31	88	102	83	208	221	208	226	238	155
2010:Q2	284	303	296	38	38	34	88	97	88	225	220	209	196	168	240
2010:Q3	279	275	287	40	42	38	87	83	83	236	247	237	218	175	228
2010:Q4	275	284	264	38	43	37	85	88	87	220	227	203	196	169	187
2011:Q1	302	248	250	36	36	33	91	84	89	220	224	201	200	180	192
2011:Q2	304	287	281	40	41	37	94	89	88	238	230	228	237	178	203
2011:Q3	303	237	275	42	44	38	94	83	90	253	255	229	227	210	267
2011:Q4	314	274	293	40	41	37	96	91	98	232	236	209	232	244	246
2012:Q1	355	346	303	42	41	40	106	111	101	245	240	237	259	260	258
2012:Q2	344	360	334	44	48	41	101	115	103	254	257	228	247	294	237
2012:Q3	335	355	358	46	52	41	99	116	104	265	272	239	244	257	232
2012:Q4	357	363	327	43	49	41	100	106	98	241	246	227	229	297	208
2013:Q1	372	423	346	43	47	41	101	116	95	233	241	225	221	237	188
2013:Q2	348	414	340	45	51	45	100	117	98	245	254	241	223	239	202
2013:Q3	330	432	340	44	50	50	96	119	103	243	264	265	228	205	215
2013:Q4	355	415	342	42	52	42	91	112	96	223	234	205	236	233	176

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Michigan E7-15
Quarterly average expenditures and utilization among dual eligible beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	277	319	223	39	52	33	92	103	75	252	300	234	225	241	117
2010:Q2	288	308	237	45	44	42	93	107	84	279	277	262	215	200	228
2010:Q3	287	292	275	46	50	42	92	95	83	290	320	282	254	195	167
2010:Q4	286	337	245	43	50	39	93	99	84	268	286	250	188	206	150
2011:Q1	317	273	243	43	42	40	96	97	86	272	273	254	218	194	160
2011:Q2	313	316	265	47	43	45	100	100	90	297	279	284	256	214	173
2011:Q3	302	289	278	49	52	45	99	102	95	312	306	280	252	251	255
2011:Q4	318	295	297	46	48	44	100	104	101	283	292	255	246	248	203
2012:Q1	349	331	296	49	53	49	108	114	100	302	300	287	283	223	274
2012:Q2	365	433	326	53	52	46	108	127	99	312	314	272	271	364	284
2012:Q3	341	391	336	54	58	48	104	128	106	324	343	285	262	206	219
2012:Q4	362	427	339	50	59	44	105	126	100	293	308	260	241	263	224
2013:Q1	372	474	375	50	55	47	105	130	103	288	295	260	238	245	208
2013:Q2	340	384	347	52	62	55	103	116	112	300	328	283	231	237	258
2013:Q3	321	442	363	52	62	56	97	123	110	298	341	301	248	199	231
2013:Q4	343	505	397	48	54	44	93	127	114	268	293	223	265	309	196

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Michigan E7-16
Quarterly average expenditures and utilization among non-White beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	278	316	221	29	37	23	85	102	70	170	206	155	223	214	167
2010:Q2	291	300	320	33	36	29	85	89	86	186	207	169	223	181	232
2010:Q3	268	293	297	35	38	31	79	86	80	196	217	187	220	174	233
2010:Q4	265	299	260	33	36	33	82	87	77	183	203	176	197	201	162
2011:Q1	297	295	250	32	34	27	88	90	84	182	196	162	214	246	196
2011:Q2	312	278	262	35	34	30	93	85	81	194	205	182	242	209	183
2011:Q3	311	272	280	36	37	34	95	80	85	203	202	183	245	183	285
2011:Q4	324	281	296	34	35	34	97	90	98	190	191	176	253	242	250
2012:Q1	365	393	316	36	42	36	106	117	101	197	207	189	278	271	253
2012:Q2	375	452	352	38	42	35	104	116	107	202	227	189	270	291	256
2012:Q3	372	380	325	37	44	37	103	116	95	202	238	199	248	245	205
2012:Q4	379	529	393	37	47	34	105	131	110	193	217	180	258	350	217
2013:Q1	369	486	341	37	42	36	100	122	90	192	209	198	239	216	182
2013:Q2	349	465	391	38	46	38	98	119	104	198	217	196	236	240	232
2013:Q3	353	520	346	37	42	41	96	130	102	193	204	200	254	243	187
2013:Q4	335	492	368	35	46	42	88	137	108	178	204	180	231	349	247

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

Pennsylvania E8-1
Mean 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	89.6	90.2	87.3	59.4	54.6	52.2	86.3	87.7	83.8	67.8	58.6	52.6
Pre-3	90.3	90.5	87.1	60.3	55.8	55.4	87.3	87.7	82.0	71.5	60.0	55.6
Pre-2	91.6	90.4	86.4	63.9	56.8	54.1	87.6	87.4	82.5	77.4	68.4	57.5
Pre-1	92.3	91.8	87.6	61.1	54.8	52.1	89.2	88.0	84.3	79.1	71.4	59.6
Post-1	92.3	90.7	86.3	61.8	53.7	53.3	89.5	87.2	81.6	79.5	75.2	59.8
Post-2	91.8	90.8	88.6	62.6	58.2	55.7	88.6	87.8	84.5	77.8	77.3	62.2

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	40.1	31.5	26.6	4.0	2.9	4.7	78.8	80.4	74.0
Pre-3	43.6	33.7	30.2	3.8	3.6	5.0	78.9	80.4	74.5
Pre-2	49.4	38.8	30.0	3.0	3.9	5.7	79.5	80.7	74.3
Pre-1	47.9	39.0	30.9	2.5	2.9	4.7	80.4	79.0	74.8
Post-1	49.2	40.2	31.7	2.7	3.8	5.4	78.2	75.3	71.3
Post-2	49.0	45.0	34.1	2.9	3.4	4.3	76.9	75.0	72.1

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-2
Quarterly 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	4.4	2.9	4.8	10.3	10.8	12.5	4.4	4.3	4.1	5.9	6.5	8.4
2010:Q2	4.8	4.0	5.3	10.6	9.7	12.9	3.8	4.2	4.5	6.8	5.4	8.5
2010:Q3	4.4	4.2	5.4	10.1	9.4	10.3	4.0	3.2	3.1	6.1	6.2	7.2
2010:Q4	4.4	4.7	4.9	11.9	12.8	13.0	4.8	4.0	4.8	7.1	8.8	8.3
2011:Q1	5.7	4.4	5.7	12.5	14.6	15.6	4.9	5.8	5.3	7.6	8.8	10.3
2011:Q2	4.6	5.0	6.0	12.8	12.1	14.3	4.8	4.6	5.1	8.0	7.6	9.2
2011:Q3	4.8	7.2	5.5	12.6	11.2	13.4	4.7	4.1	5.3	7.9	7.1	8.2
2011:Q4	5.6	7.2	6.0	14.0	11.3	15.1	4.6	4.6	5.8	9.4	6.7	9.3
2012:Q1	6.7	6.2	7.1	16.1	13.3	19.0	5.9	4.4	7.4	10.2	8.8	11.7
2012:Q2	7.8	8.4	7.4	16.0	13.5	16.8	6.2	4.9	6.3	9.8	8.6	10.5
2012:Q3	8.3	8.5	9.5	14.6	12.8	14.8	5.7	5.0	5.8	8.9	7.8	9.0
2012:Q4	7.6	9.4	9.7	16.2	13.3	17.5	6.3	4.9	6.0	9.9	8.4	11.5
2013:Q1	8.8	10.5	10.3	18.2	18.1	20.2	7.0	6.2	7.4	11.2	11.9	12.7
2013:Q2	7.6	9.3	9.6	15.7	15.3	15.9	5.5	5.3	6.1	10.2	10.0	9.8
2013:Q3	7.8	11.1	7.4	12.1	13.3	14.6	5.3	4.6	6.2	6.8	8.7	8.4
2013:Q4	8.6	9.2	10.7	13.1	15.3	14.9	4.0	4.7	4.8	9.1	10.6	10.1

NOTES:

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

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

Pennsylvania E8-3
Quarterly 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	970.9	977.0	985.9	804.7	706.4	865.7	171.3	170.4	192.8	153.1	145.8	158.8	715.2	657.7	628.5
2010:Q2	1,034.9	1,038.0	1,052.7	889.7	766.5	945.8	192.4	184.2	208.1	155.9	148.7	146.1	703.9	636.9	645.3
2010:Q3	1,006.8	1,000.1	1,022.0	857.6	745.2	911.3	188.6	188.7	203.8	136.3	129.3	160.3	719.9	662.1	632.2
2010:Q4	1,005.1	1,046.2	1,026.9	873.8	754.0	914.2	173.8	178.8	190.5	153.9	146.3	187.0	738.4	664.3	610.8
2011:Q1	985.3	1,038.2	986.8	832.6	710.8	873.8	172.3	171.6	189.3	149.8	136.9	175.8	706.2	656.6	670.3
2011:Q2	1,025.8	1,066.0	1,038.2	899.6	776.9	957.9	194.1	198.8	206.2	174.1	158.4	171.9	749.2	661.6	655.3
2011:Q3	993.7	1,016.7	986.5	840.5	736.2	918.4	180.5	183.0	204.0	176.5	165.3	197.8	723.2	707.5	655.4
2011:Q4	1,019.7	1,043.2	1,020.9	866.9	742.6	948.7	179.4	184.3	199.9	193.3	160.6	172.4	725.4	702.6	667.7
2012:Q1	1,044.2	1,042.6	1,019.5	878.3	760.4	942.2	180.6	186.7	200.9	195.7	167.7	228.4	765.4	707.8	709.8
2012:Q2	1,052.6	1,052.4	1,001.6	905.2	766.4	965.3	188.4	194.6	207.7	194.4	190.8	193.2	750.9	756.9	676.3
2012:Q3	1,013.2	1,012.6	952.9	845.3	731.0	914.8	177.6	187.0	203.2	192.4	171.8	199.8	771.6	735.2	688.3
2012:Q4	1,014.8	1,031.4	962.5	861.8	747.5	920.9	172.1	182.6	194.7	191.4	181.3	209.6	734.2	704.0	629.3
2013:Q1	1,042.6	1,045.5	977.0	898.1	785.1	965.2	173.9	167.1	195.3	178.7	184.5	194.9	753.7	675.9	651.5
2013:Q2	1,102.2	1,068.0	1,028.0	968.5	847.0	1,071.1	187.0	183.5	216.2	184.5	176.0	182.0	761.5	647.2	650.3
2013:Q3	1,030.0	1,032.3	986.7	932.6	818.4	1,022.4	182.5	195.6	210.8	165.9	158.1	212.1	756.1	696.2	684.6
2013:Q4	1,023.2	1,045.3	1,009.3	921.2	794.2	978.9	178.3	185.8	207.8	180.2	189.7	221.2	696.8	654.8	608.6

NOTES:

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

Pennsylvania E8-4
Quarterly 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	610	519	659	191	174	211	65	43	77	17	17	16
2010:Q2	703	610	710	214	189	213	69	56	65	19	19	19
2010:Q3	695	595	714	197	171	218	76	66	68	19	22	19
2010:Q4	712	653	740	199	196	211	78	69	88	20	21	20
2011:Q1	683	646	748	203	214	248	86	82	98	18	21	18
2011:Q2	761	708	821	210	208	245	99	87	107	20	25	21
2011:Q3	754	742	820	210	247	238	93	92	107	21	26	22
2011:Q4	811	770	897	224	233	281	110	109	116	21	22	21
2012:Q1	841	753	884	251	243	272	119	94	121	23	23	21
2012:Q2	918	815	927	272	244	271	128	111	128	23	26	23
2012:Q3	894	798	926	260	241	281	127	99	119	23	28	23
2012:Q4	925	853	932	280	264	290	135	119	128	23	25	23
2013:Q1	887	879	935	275	308	306	133	117	132	23	26	22
2013:Q2	905	875	959	281	270	300	117	121	126	23	28	23
2013:Q3	857	859	929	250	266	275	110	122	126	23	28	24
2013:Q4	895	911	989	274	314	334	118	121	135	22	24	22

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Pennsylvania E8-4 (cont.)
Quarterly average Medicare expenditures

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	96	84	88	88	76	99	23	21	25	36	22	41
2010:Q2	110	93	94	111	96	121	33	30	34	38	24	44
2010:Q3	108	89	91	110	94	120	36	33	37	38	25	44
2010:Q4	111	101	98	111	99	121	39	37	40	39	30	43
2011:Q1	110	98	99	99	90	111	26	26	30	36	29	42
2011:Q2	120	109	109	119	105	133	36	35	38	40	31	49
2011:Q3	122	106	110	114	99	132	38	39	41	38	28	46
2011:Q4	129	113	117	120	103	137	42	44	45	42	33	50
2012:Q1	138	118	126	114	98	127	32	32	34	47	34	55
2012:Q2	140	125	126	127	112	141	41	39	43	51	36	54
2012:Q3	134	126	122	125	107	141	43	42	44	46	33	50
2012:Q4	130	128	111	126	113	139	45	46	47	49	36	52
2013:Q1	131	134	122	111	101	129	35	36	37	48	38	52
2013:Q2	136	138	128	125	106	143	42	44	44	50	40	55
2013:Q3	137	135	130	121	105	141	44	46	46	46	38	54
2013:Q4	144	139	124	122	107	143	45	51	50	48	39	57

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Pennsylvania E8-4 (cont.)
Quarterly 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	28	28	35	14	14	17	21	15	22	0	0	0
2010:Q2	32	32	39	15	14	18	26	19	26	0	0	0
2010:Q3	33	32	39	15	15	18	24	18	26	0	0	0
2010:Q4	36	33	40	15	14	18	24	18	25	0	0	0
2011:Q1	31	29	35	13	14	17	20	15	22	1	0	0
2011:Q2	34	32	39	14	15	18	24	18	25	0	1	0
2011:Q3	35	35	42	13	15	17	23	17	24	0	0	0
2011:Q4	37	36	43	12	14	17	21	16	24	0	0	0
2012:Q1	37	36	44	13	15	18	19	15	22	0	0	0
2012:Q2	40	38	46	13	15	19	22	15	23	2	0	0
2012:Q3	38	37	45	13	15	18	20	14	22	0	0	0
2012:Q4	38	37	48	12	15	18	20	14	21	0	0	0
2013:Q1	38	39	45	12	15	17	18	13	19	0	0	0
2013:Q2	38	40	48	12	15	18	20	15	22	0	0	0
2013:Q3	38	39	45	12	15	18	19	14	21	0	0	0
2013:Q4	37	37	43	12	15	17	19	14	21	0	0	1

NOTES:

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

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

Pennsylvania E8-5
Quarterly 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	61.3	73.2	103.6	108.3	98.2
2010:Q2	65.6	62.2	72.5	113.1	117.6	105.6
2010:Q3	65.6	59.6	70.6	115.0	126.7	113.7
2010:Q4	66.7	65.9	75.0	116.6	125.5	111.0
2011:Q1	67.1	74.0	82.9	107.3	123.3	106.5
2011:Q2	71.0	68.4	80.2	117.9	132.1	116.1
2011:Q3	71.6	70.8	79.9	126.0	136.7	121.0
2011:Q4	74.3	73.1	86.4	124.1	127.0	120.4
2012:Q1	83.0	75.0	90.5	127.6	129.5	121.2
2012:Q2	88.1	81.1	88.4	132.4	135.5	125.8
2012:Q3	86.1	77.3	87.4	134.6	141.4	124.5
2012:Q4	85.2	83.2	89.1	130.3	129.0	118.2
2013:Q1	87.0	94.3	93.2	122.0	125.9	113.1
2013:Q2	83.6	83.6	89.2	123.2	136.8	120.5
2013:Q3	75.1	80.7	83.6	121.8	132.5	122.9
2013:Q4	76.6	81.8	85.8	113.2	122.1	105.3

NOTES:

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

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

Pennsylvania E8-6
Quarterly 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	770	686	767	450	325	563	777	654	797	827	701	754
2010:Q2	867	819	861	573	522	637	888	762	872	860	817	849
2010:Q3	924	752	830	586	413	760	868	746	826	944	831	841
2010:Q4	892	739	879	625	362	805	873	813	848	901	816	851
2011:Q1	875	805	874	643	452	604	840	817	861	849	833	900
2011:Q2	980	861	1,005	633	469	585	964	879	964	955	930	958
2011:Q3	939	897	987	638	434	754	937	931	954	929	920	975
2011:Q4	984	904	1,011	679	934	606	992	892	1,048	975	947	1,083
2012:Q1	1,003	937	1,003	800	559	725	974	928	1,011	998	890	1,006
2012:Q2	1,105	938	998	771	576	814	1,087	909	984	1,134	932	960
2012:Q3	1,123	930	1,076	722	741	847	1,087	951	1,105	1,124	1,009	1,017
2012:Q4	1,115	1,030	1,011	740	749	824	1,125	979	1,011	1,135	967	1,004
2013:Q1	1,114	1,086	1,052	623	790	858	1,072	1,040	1,014	1,097	965	1,005
2013:Q2	1,086	1,123	1,098	686	868	743	1,101	1,075	1,144	1,082	1,098	996
2013:Q3	973	957	987	734	1,162	781	1,033	1,013	1,044	1,037	1,054	1,028
2013:Q4	1,033	1,021	1,084	820	1,449	869	1,057	1,039	1,205	1,104	1,027	1,160

NOTES:

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

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

Pennsylvania E8-7
Mean 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	89.3	88.9	85.8	62.0	55.5	52.1	85.8	86.5	80.8	69.4	64.2	60.3
Pre-3	89.0	89.4	86.0	61.3	56.7	55.3	84.8	85.2	80.0	74.3	64.2	63.1
Pre-2	90.9	89.3	84.7	62.6	58.7	53.3	85.1	85.4	77.4	79.8	72.9	64.1
Pre-1	91.5	89.6	85.5	61.7	52.0	51.2	87.3	84.9	80.8	82.1	75.7	67.6
Post-1	89.8	88.1	82.5	61.6	50.7	51.7	86.0	82.4	75.4	81.7	78.5	65.3
Post-2	90.8	87.4	85.9	61.9	56.7	53.3	86.8	83.8	79.2	80.5	80.1	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	42.3	33.9	29.0	3.6	2.0	4.5	77.5	79.0	72.3
Pre-3	44.0	35.2	32.9	3.8	3.9	4.1	77.0	79.7	71.9
Pre-2	48.3	41.2	29.8	2.8	3.3	5.5	76.9	80.7	70.6
Pre-1	48.5	37.2	30.9	1.5	2.8	3.6	78.4	76.6	71.2
Post-1	48.9	38.2	30.4	3.3	4.3	5.3	74.0	72.3	66.2
Post-2	48.9	42.6	33.2	2.4	3.0	4.0	74.0	72.1	66.6

NOTES:

- Numbers represent percent of diabetic beneficiaries receiving specific tests or examination during each four quarter interval. Percentages are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.
- Pre-4: Four years pre-assignment; Pre-3: Three years pre-assignment; Pre-2: Two years pre-assignment; Pre-1: One year pre-assignment; Post-1: One year post-assignment; Post-2: Two years post-assignment.

HbA1c = hemoglobin A1C; LDL-C = low-density lipoprotein cholesterol; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.

Pennsylvania E8-8
Quarterly 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	9.6	4.7	10.3	24.2	28.0	33.3	9.8	9.6	10.0	14.4	18.3	23.2
2010:Q2	8.9	7.4	12.7	27.5	27.2	30.7	9.2	11.9	8.5	18.3	15.3	22.2
2010:Q3	9.3	7.1	12.3	24.1	25.7	26.1	8.6	8.3	7.7	15.5	17.4	18.5
2010:Q4	10.5	10.4	11.2	32.0	35.1	36.5	11.7	8.9	12.0	20.3	26.2	24.5
2011:Q1	17.8	12.1	18.9	39.0	44.8	49.2	14.5	16.5	15.9	24.6	28.3	33.3
2011:Q2	14.5	15.7	19.5	40.0	35.2	45.4	14.1	12.0	15.3	25.8	23.1	30.1
2011:Q3	15.6	22.2	17.7	39.0	33.2	43.4	14.1	11.0	16.4	25.0	22.2	27.0
2011:Q4	18.2	21.6	18.9	44.9	34.9	50.0	13.3	13.4	18.9	31.6	21.5	31.2
2012:Q1	16.8	15.9	16.9	45.1	38.3	56.6	14.9	11.4	19.3	30.2	26.8	37.3
2012:Q2	18.8	20.1	16.2	41.7	36.4	43.4	15.3	11.8	14.0	26.5	24.6	29.4
2012:Q3	18.2	20.7	22.4	35.9	36.3	41.0	11.8	13.4	15.3	24.0	22.8	25.7
2012:Q4	16.1	22.6	21.6	42.7	36.3	44.1	15.1	11.6	13.0	27.6	24.8	31.1
2013:Q1	21.8	25.2	26.2	50.7	50.7	53.2	18.0	16.0	17.1	32.7	34.7	36.2
2013:Q2	15.7	21.3	22.5	42.9	44.4	42.9	13.1	13.4	14.7	29.9	31.0	28.2
2013:Q3	14.0	28.7	17.0	29.7	36.7	43.5	10.2	11.8	14.7	19.4	24.9	28.8
2013:Q4	19.9	21.1	25.6	36.0	43.8	41.1	9.8	10.6	12.7	26.2	33.2	28.4

NOTES:

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

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

Pennsylvania E8-9
Quarterly 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	1,242.8	1,227.9	1,249.6	1,233.1	1,102.6	1,313.3	231.6	239.2	255.9	192.9	212.5	200.2	755.2	755.1	681.1
2010:Q2	1,335.4	1,313.8	1,338.2	1,350.9	1,186.0	1,415.8	250.6	264.3	267.2	219.7	212.7	172.5	789.4	706.1	723.1
2010:Q3	1,315.6	1,288.4	1,315.7	1,326.7	1,149.9	1,386.0	263.8	257.6	276.0	178.6	171.5	213.9	801.9	706.4	692.2
2010:Q4	1,297.7	1,356.9	1,288.9	1,317.8	1,201.8	1,380.0	243.7	259.9	266.3	210.9	220.6	252.0	799.8	779.0	669.7
2011:Q1	1,324.3	1,378.6	1,308.1	1,327.6	1,162.8	1,416.2	252.7	256.1	271.1	178.6	170.9	216.2	745.4	717.0	739.9
2011:Q2	1,399.2	1,420.2	1,383.5	1,451.2	1,283.1	1,559.1	280.9	303.5	300.7	216.7	208.2	214.2	805.5	730.5	696.4
2011:Q3	1,373.2	1,410.6	1,322.1	1,389.1	1,212.4	1,518.9	276.2	284.8	297.4	220.1	213.6	252.2	770.8	796.3	732.5
2011:Q4	1,375.5	1,399.9	1,349.9	1,410.0	1,207.6	1,557.5	264.3	282.2	289.3	228.5	211.5	207.6	789.3	770.6	707.4
2012:Q1	1,396.1	1,391.9	1,328.5	1,405.5	1,249.2	1,571.9	257.0	298.6	278.4	254.3	200.5	302.7	811.2	795.3	799.7
2012:Q2	1,372.9	1,386.0	1,283.8	1,414.3	1,256.3	1,520.8	272.9	286.2	290.9	248.9	260.3	249.1	808.4	835.6	738.9
2012:Q3	1,347.4	1,356.8	1,205.6	1,324.1	1,194.5	1,427.1	252.2	273.8	271.7	235.5	253.6	279.7	791.1	812.5	742.6
2012:Q4	1,307.6	1,329.8	1,188.4	1,335.3	1,189.5	1,405.2	235.5	273.8	264.9	216.1	223.2	268.2	763.8	751.6	655.1
2013:Q1	1,339.5	1,337.1	1,223.7	1,354.9	1,203.0	1,455.0	240.8	241.8	243.7	227.8	219.0	256.6	782.8	713.5	693.5
2013:Q2	1,402.4	1,383.5	1,272.3	1,465.8	1,278.5	1,614.0	249.2	272.9	276.2	226.2	215.1	237.0	797.1	705.2	670.4
2013:Q3	1,350.8	1,334.3	1,232.4	1,395.3	1,255.4	1,531.8	238.0	285.7	280.0	223.1	191.4	273.7	815.7	759.7	725.5
2013:Q4	1,283.5	1,303.7	1,244.4	1,377.6	1,144.5	1,422.8	231.0	246.5	259.7	253.3	279.5	326.8	744.3	696.5	629.0

NOTES:

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

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

Pennsylvania E8-10
Quarterly 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	1,217	1,002	1,365	403	349	469	140	95	181	31	29	28
2010:Q2	1,382	1,162	1,438	453	379	473	161	120	156	31	31	35
2010:Q3	1,391	1,179	1,480	424	370	504	174	142	164	34	41	32
2010:Q4	1,469	1,348	1,587	450	438	508	189	174	224	36	38	36
2011:Q1	1,657	1,589	1,928	577	592	735	250	250	311	36	44	36
2011:Q2	1,868	1,696	2,084	612	578	732	312	258	342	41	51	45
2011:Q3	1,875	1,852	2,116	614	709	724	297	290	350	43	51	47
2011:Q4	2,045	1,869	2,387	665	654	876	343	321	393	45	44	46
2012:Q1	1,942	1,742	2,138	622	592	688	325	274	351	44	44	43
2012:Q2	1,972	1,712	2,091	629	547	654	304	247	339	44	49	45
2012:Q3	1,921	1,751	2,112	598	596	696	310	233	314	46	60	43
2012:Q4	1,974	1,871	2,086	637	627	687	325	294	343	45	44	45
2013:Q1	1,953	2,003	2,166	649	744	749	330	312	362	42	47	47
2013:Q2	1,889	1,889	2,078	624	620	650	270	296	331	45	63	46
2013:Q3	1,717	1,912	2,050	510	612	655	252	336	312	41	58	48
2013:Q4	1,788	2,002	2,077	607	745	703	241	318	359	40	46	44

(continued)

Pennsylvania E8-10 (cont.)
Quarterly average Medicare expenditures among beneficiaries with multiple chronic conditions

Period	Outpatient			Specialty physician			PC physician			Home health		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	198	173	187	159	129	176	41	35	46	80	43	92
2010:Q2	219	192	192	188	154	208	54	48	56	87	53	105
2010:Q3	227	184	192	188	156	209	57	53	60	88	59	106
2010:Q4	243	214	217	189	169	214	61	60	66	94	62	104
2011:Q1	247	222	233	197	174	230	55	53	65	94	75	112
2011:Q2	263	242	250	231	200	266	70	64	77	109	82	138
2011:Q3	280	249	265	224	188	265	72	70	81	107	79	131
2011:Q4	297	270	283	239	191	283	77	76	86	121	89	146
2012:Q1	301	270	305	222	181	258	63	60	69	130	92	155
2012:Q2	304	285	291	222	198	258	72	67	79	125	94	141
2012:Q3	285	278	281	219	196	262	72	71	78	114	80	129
2012:Q4	277	299	256	215	199	249	74	77	80	122	90	135
2013:Q1	277	305	276	200	186	239	68	73	75	120	94	137
2013:Q2	282	293	287	208	178	247	70	78	81	125	107	143
2013:Q3	278	305	306	194	180	245	71	79	80	109	100	141
2013:Q4	280	305	269	194	177	232	70	82	84	111	98	146

(continued)

Pennsylvania E8-10 (cont.)
Quarterly 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	47	50	69	21	20	26	32	25	35	0	0	0
2010:Q2	52	57	74	22	22	27	38	29	38	0	0	0
2010:Q3	55	60	74	23	23	28	37	30	39	0	0	0
2010:Q4	63	61	77	21	22	28	36	28	40	1	0	0
2011:Q1	60	55	73	20	21	26	34	27	40	0	0	0
2011:Q2	65	63	80	21	21	27	40	32	43	1	0	0
2011:Q3	70	71	90	20	22	27	40	30	44	0	0	0
2011:Q4	74	71	96	19	22	26	38	29	42	0	0	0
2012:Q1	69	72	98	19	23	27	32	25	37	0	0	0
2012:Q2	71	68	94	19	21	25	35	25	37	5	0	0
2012:Q3	71	70	97	19	20	25	32	24	35	1	0	0
2012:Q4	71	72	113	17	22	25	31	24	32	0	0	0
2013:Q1	78	78	106	17	21	25	28	23	31	0	0	0
2013:Q2	73	82	113	17	20	25	29	23	33	0	0	0
2013:Q3	70	80	94	16	21	24	28	22	31	0	0	0
2013:Q4	68	70	88	16	19	21	29	22	29	0	0	0

NOTES:

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

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

Pennsylvania E8-11
Quarterly 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	127.8	119.4	159.8	163.9	161.9	153.6
2010:Q2	133.8	126.9	157.1	175.0	188.3	177.2
2010:Q3	140.6	126.9	152.5	192.2	218.9	174.9
2010:Q4	147.4	138.5	173.8	193.4	216.6	184.6
2011:Q1	184.0	199.4	236.0	189.1	225.5	188.8
2011:Q2	195.9	186.1	232.1	209.1	228.4	220.4
2011:Q3	196.6	190.9	228.3	232.8	248.3	227.6
2011:Q4	210.8	199.0	255.3	233.4	220.7	221.1
2012:Q1	200.0	175.8	221.0	221.1	212.7	217.8
2012:Q2	198.2	182.0	204.5	227.3	228.8	220.9
2012:Q3	194.7	185.4	203.3	239.2	239.2	203.0
2012:Q4	193.5	196.1	208.3	229.6	210.5	206.3
2013:Q1	202.0	228.4	227.9	210.3	217.9	203.1
2013:Q2	184.5	194.2	204.6	217.0	244.2	223.0
2013:Q3	155.6	185.9	197.4	209.9	229.0	215.3
2013:Q4	165.3	184.1	196.8	194.5	199.6	189.5

NOTES:

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

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

Pennsylvania E8-12
Quarterly average expenditures among beneficiaries with behavioral health 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	971	870	1,122	317	276	365	38	38	36	56	61	58	155	145	157
2010:Q2	1,128	1,074	1,283	372	350	427	43	49	42	71	65	74	163	149	223
2010:Q3	1,125	1,051	1,301	327	307	425	42	56	43	67	62	64	170	139	176
2010:Q4	1,144	1,088	1,403	336	333	424	48	46	42	70	61	64	198	150	217
2011:Q1	1,165	1,154	1,326	358	388	446	44	47	41	61	50	68	233	236	304
2011:Q2	1,307	1,345	1,565	372	387	520	48	51	47	78	68	73	267	222	346
2011:Q3	1,301	1,373	1,464	373	419	461	51	58	47	74	71	74	258	293	318
2011:Q4	1,379	1,369	1,661	397	416	539	51	47	49	80	71	73	291	250	385
2012:Q1	1,254	1,344	1,505	359	424	466	49	49	42	60	54	62	272	277	339
2012:Q2	1,285	1,303	1,438	351	372	420	54	52	47	64	60	72	273	283	306
2012:Q3	1,252	1,259	1,469	382	347	451	50	64	45	69	71	65	258	267	322
2012:Q4	1,235	1,186	1,352	333	315	419	49	51	43	67	70	65	250	257	333
2013:Q1	1,211	1,288	1,378	348	439	403	46	47	45	61	62	65	277	330	306
2013:Q2	1,168	1,384	1,504	338	365	521	46	55	47	70	78	69	265	281	403
2013:Q3	1,123	1,279	1,325	286	402	377	47	47	45	65	65	73	229	276	273
2013:Q4	1,106	1,286	1,370	337	443	436	42	41	38	67	57	66	264	254	299

NOTES:

- Numbers represent average expenditures and are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average utilization among beneficiaries with behavioral health 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	108	135	256	273	239	7	14	11	38	44	28	1,362	1,391	1,352
2010:Q2	114	114	136	277	317	257	8	9	11	39	47	34	1,528	1,475	1,445
2010:Q3	115	119	137	285	350	271	7	9	8	37	42	31	1,498	1,461	1,473
2010:Q4	112	123	151	309	336	259	8	8	9	47	35	24	1,445	1,390	1,471
2011:Q1	119	144	158	276	326	261	9	6	12	42	39	33	1,414	1,394	1,462
2011:Q2	131	137	160	299	338	282	9	10	8	39	46	40	1,520	1,488	1,652
2011:Q3	126	140	154	333	369	288	7	11	11	46	50	38	1,527	1,487	1,547
2011:Q4	131	127	167	321	332	291	9	10	8	46	51	38	1,522	1,493	1,588
2012:Q1	129	126	160	309	340	258	7	6	8	37	57	33	1,535	1,419	1,493
2012:Q2	128	138	143	339	347	277	6	7	9	44	51	27	1,529	1,358	1,491
2012:Q3	134	138	138	319	374	273	8	12	7	47	52	32	1,533	1,376	1,404
2012:Q4	117	114	132	325	318	248	6	10	8	38	42	27	1,488	1,390	1,455
2013:Q1	118	160	133	291	306	261	6	10	8	34	40	32	1,513	1,423	1,524
2013:Q2	108	130	132	292	316	260	7	11	8	35	47	29	1,606	1,501	1,677
2013:Q3	99	125	124	286	288	257	5	7	8	36	41	29	1,535	1,503	1,662
2013:Q4	97	115	119	258	262	210	7	6	7	41	24	20	1,482	1,373	1,564

NOTES:

- Numbers represent rates per 1,000 beneficiary quarters. Rates are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C 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 average expenditures and utilization among rural beneficiaries

Period	Acute-care expenditures			Expenditures for ER visits not leading to hospitalizations			All-cause admissions			ER visits not leading to hospitalization			30-day unplanned readmissions		
	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH	MAPCP	PCMH	Non-PCMH
2010:Q1	95	73	194	13	11	16	35	38	91	75	73	99	188	29	102
2010:Q2	154	102	209	17	18	22	54	50	71	88	73	137	70	51	134
2010:Q3	176	157	280	16	28	18	54	40	70	70	132	109	216	0	110
2010:Q4	171	47	270	13	18	22	61	28	95	77	116	107	98	0	110
2011:Q1	233	181	180	15	14	22	64	45	68	96	89	128	87	337	157
2011:Q2	169	75	147	14	7	20	63	28	58	91	51	121	194	6	82
2011:Q3	161	112	202	18	20	21	62	43	82	111	221	128	73	8	200
2011:Q4	190	450	132	20	20	18	80	79	49	131	132	125	107	364	141
2012:Q1	283	213	256	19	10	16	92	60	75	110	102	111	169	145	70
2012:Q2	198	109	251	19	21	18	89	37	80	108	158	99	279	260	235
2012:Q3	185	226	314	19	29	21	72	55	107	108	140	126	145	279	367
2012:Q4	212	190	194	17	18	22	76	58	77	100	117	137	176	120	258
2013:Q1	148	309	313	17	12	16	65	91	94	91	103	107	70	95	167
2013:Q2	175	372	206	13	15	33	56	94	85	76	69	143	226	259	123
2013:Q3	184	484	187	16	20	21	69	131	72	95	120	135	145	393	271
2013:Q4	243	811	221	20	19	16	69	79	86	94	136	77	92	0	282

NOTES:

- 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 are calculated using the same weights that are used in the regression estimates of changes found in the state chapters. See Appendix C for more information on weights.

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

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APPENDIX F
DECOMPOSITION OF THE DIFFERENCE-IN-DIFFERENCES ESTIMATES

F.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. Decomposing the difference-in-differences estimates provides information as to whether each difference-in-differences estimate reflects large changes in the average outcome among MAPCP Demonstration beneficiaries, among comparison group beneficiaries, or among both beneficiary groups. For example, a large negative difference-in-differences estimate could occur because there were large increases among the comparison group and very small increases among the MAPCP Demonstration group. Alternatively, there could have been a large decrease among the MAPCP Demonstration group coupled with a modest increase among the comparison group. Without inspecting the component pieces of our difference-in-differences estimates, it would not be possible to determine which of these two situations occurred.

We begin by demonstrating the decomposition through equations. Let t^* generically denote any quarter such that the quarter occurs during the MAPCP Demonstration and such that the beneficiary has been assigned to either a MAPCP Demonstration practice or a comparison practice. From Equation F.1, the change in the average outcome among beneficiaries assigned to MAPCP Demonstration practices from the first baseline quarter to each demonstration quarter following assignment is given by

$$(\Delta Y_{ijt^*} \mid I_{ij} = 1) = \lambda + \beta_{0,t^*} + \gamma_{t^*}. \quad \text{(F.1)}$$

Similarly, the change in the average outcome among beneficiaries assigned to comparison practices from the first baseline quarter to each demonstration quarter following assignment is given by

$$(\Delta Y_{ijt^*} \mid I_{ij} = 0) = \lambda + \beta_{0,t^*}. \quad \text{(F.2)}$$

The difference between Equation F.1 and Equation F.2 yields the difference-in-differences estimate for quarter t^*, which is just the coefficient γ_{t^*}. In the main body of this report, we present average difference-in-differences estimates over the first year of the MAPCP Demonstration, over the second year of the MAPCP Demonstration, and over both of the first 2 years of the MAPCP Demonstration. This appendix presents decompositions of our difference-in-differences estimates that are analogously averaged. In particular, the tables in this appendix contain the following for beneficiaries assigned to MAPCP Demonstration practices:

$$\sum_t w_t*(\lambda + \beta_{0,t} + \gamma_t), \quad \text{(F.3)}$$

where t indexes the first four quarters of the MAPCP Demonstration (Year 1), the second four quarters of the MAPCP Demonstration (Year 2), or the first eight quarters of the MAPCP Demonstration (Overall). w_t denotes the quarter-specific weight, which is calculated as the

number of MAPCP Demonstration beneficiaries assigned in each quarter relative to the total number of beneficiary quarters in the sample. For beneficiaries assigned to comparison group practices, we present analogous quantities. For completeness we also present the differences between the values for beneficiaries assigned to MAPCP Demonstration practices and those for beneficiaries assigned to comparison group practices, which are the difference-in-differences estimates reported in the main body of this report.

The difference-in-differences estimates resulting from our nonlinear specifications (e.g., negative binomial) do not have a time series interpretation. Rather, they reflect a cross-sectional comparison of the outcomes associated with the MAPCP Demonstration group both in the presence of the MAPCP Demonstration and in the absence of the MAPCP Demonstration. In other words, these estimates represent the treatment effect on the treated. The appendix tables contain a decomposition similar to that described above, but we note that this decomposition presents the annual average of the outcome observed among MAPCP Demonstration beneficiaries compared with our estimate of the annual average of the outcome that would have been observed among MAPCP Demonstration beneficiaries in the absence of the MAPCP Demonstration. 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 percentages.

F.2 Decompositions of the New York Estimates

Table F-1 presents a decomposition of the estimates of the changes associated with the New York MAPCP Demonstration on process of care indicators.

Table F-1
New York: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	87.41*	86.17*	1.24	91.17*	89.65*	1.52
Year 2	87.57*	84.60*	2.97	91.31*	90.15*	1.16
Overall	87.48*	85.50*	1.97	91.23*	89.86*	1.37
Retinal eye examination						
Year 1	58.53*	56.09*	2.44*	71.29*	70.19*	1.10
Year 2	60.16*	58.73*	1.44	72.80*	67.22*	5.59*
Overall	59.22*	57.20*	2.02*	71.93*	68.93*	3.00*
LDL-C screening						
Year 1	83.09*	82.32*	0.77	76.77*	73.95*	2.82
Year 2	83.78*	82.13*	1.65	77.69*	73.99*	3.70
Overall	83.38*	82.24*	1.14	77.16*	73.97*	3.19
Medical attention for nephropathy						
Year 1	60.53*	61.56*	-1.03	62.27*	57.38*	4.89*
Year 2	60.51*	66.07*	-5.56	62.37*	59.16*	3.21
Overall	60.52*	63.47*	-2.95	62.31*	58.13*	4.18
Received all 4 diabetes tests						
Year 1	32.47*	30.77*	1.71	42.11*	40.23*	1.88
Year 2	34.50*	35.31*	-0.81	44.57*	40.14*	4.43
Overall	33.33*	32.69*	0.64	43.15*	40.19*	2.96
Received none of the 4 diabetes tests						
Year 1	4.30*	5.32*	-1.02	2.33*	2.98*	-0.65
Year 2	4.91*	4.87*	0.04	2.61*	2.53*	0.08
Overall	4.56*	5.13*	-0.57	2.45*	2.79*	-0.34
Total lipid panel						
Year 1	72.65*	71.51*	1.14	68.75*	66.39*	2.36
Year 2	72.60*	69.48*	3.12*	68.25*	66.93*	1.32
Overall	72.63*	70.64*	1.99	68.54*	66.62*	1.92

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-2 presents a decomposition of the estimates of the changes associated with the New York MAPCP Demonstration on selected health outcomes.

Table F-2
New York: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	6.72*	6.59*	0.12	6.62*	6.14*	0.48
Year 2	7.84*	8.76*	-0.92	7.75*	8.06*	-0.31
Overall	7.29*	7.70*	-0.41	7.20*	7.12*	0.07
PQI admissions—overall						
Year 1	11.30*	13.32*	-2.02*	11.17*	13.03*	-1.86
Year 2	12.82*	14.24*	-1.43	12.72*	14.35*	-1.64
Overall	12.08*	13.79*	-1.72	11.96*	13.70*	-1.74
PQI admissions—acute						
Year 1	4.68*	5.77*	-1.09	4.51*	5.39*	-0.88
Year 2	5.21*	5.39*	-0.18	5.05*	6.73*	-1.68
Overall	4.95*	5.58*	-0.63	4.79*	6.08*	-1.29
PQI admissions—chronic						
Year 1	6.41*	7.41*	-1.01	6.45	7.31	-0.87
Year 2	7.33*	8.76*	-1.43	7.41	7.37	0.05
Overall	6.88*	8.10*	-1.22	6.94	7.34	-0.40

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-3 presents decompositions of the estimates of the effects of the New York MAPCP Demonstration on access to care and coordination of care.

Table F-3
New York: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	644.70*	632.25*	12.45	687.40*	675.39*	12.00
Year 2	638.97*	682.79*	-43.81	681.86*	655.67*	26.19
Overall	641.77*	658.10*	-16.33	684.56*	665.31*	19.26
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	628.32*	644.00*	-15.67	624.76*	638.86*	-14.10
Year 2	662.86*	667.35*	-4.49	655.01*	654.84*	0.17
Overall	645.99*	655.94*	-9.96	640.23*	647.03*	-6.80
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	152.56*	134.66*	17.90*	151.83*	130.46*	21.37*
Year 2	148.97*	137.61*	11.36	148.46*	135.10*	13.37
Overall	150.73*	136.17*	14.56*	150.11*	132.83*	17.28*
Primary care visits as a percent of total visits						
Year 1						
1st quintile	27.10*	26.40*	0.70	27.67*	28.70*	-1.03
5th quintile	12.07*	12.45*	-0.38	12.47*	11.92*	0.55
Year 2						
1st quintile	29.05*	23.74*	5.31*	29.56*	27.56*	2.00
5th quintile	11.08*	14.08*	-3.00*	11.49*	12.53*	-1.03
Overall						
1st quintile	27.96*	25.22*	2.74	28.51*	28.20*	0.31
5th quintile	11.63*	13.17*	-1.54*	12.03*	12.19*	-0.16
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	748.14*	753.86*	-5.72	748.08*	737.94*	10.14
Year 2	769.59*	763.92*	5.68	770.84*	742.61*	28.23
Overall	758.72*	758.82*	-0.10	759.30*	740.24*	19.06

(continued)

Table F-3 (continued)
New York: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	165.96*	181.41*	-15.45	165.06*	166.89*	-1.83
Year 2	167.14*	182.80*	-15.66	166.65*	162.07*	4.58
Overall	166.54*	182.10*	-15.55	165.85*	164.52*	1.33
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	27.85*	24.17*	3.67*	28.01*	26.03*	1.98
5th quintile	14.45*	16.98*	-2.53*	15.35*	16.71*	-1.35
Year 2						
1st quintile	30.69*	24.80*	5.89*	30.84*	26.34*	4.50*
5th quintile	12.83*	16.51*	-3.67*	13.66*	16.48*	-2.82*
Overall						
1st quintile	29.11*	24.45*	4.66*	29.27*	26.17*	3.10*
5th quintile	13.73*	16.77*	-3.04*	14.60*	16.61*	-2.00*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-4 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on medical expenditures.

Table F-4
New York: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	405.15*	433.52*	-28.37	403.10*	400.55*	2.55
Year 2	441.48*	466.83*	-25.35	439.08*	475.45*	-36.37*
Overall	423.73*	450.56*	-26.82*	421.50*	438.86*	-17.36
Acute-care expenditures						
Year 1	153.45*	173.18*	-19.73*	163.59*	153.79*	9.80
Year 2	158.65*	194.44*	-35.79*	168.78*	198.05*	-29.28*
Overall	156.11*	184.05*	-27.94*	166.24*	176.43*	-10.19
Post-acute-care expenditures						
Year 1	47.69*	51.35*	-3.66	47.97*	51.31*	-3.35
Year 2	54.13*	54.50*	-0.38	54.44*	57.74*	-3.30
Overall	50.98*	52.96*	-1.98	51.28*	54.60*	-3.32
ER expenditures						
Year 1	21.36*	13.72*	7.64*	22.29*	17.28*	5.01*
Year 2	20.01*	17.36*	2.66	20.94*	19.37*	1.58
Overall	20.67*	15.58*	5.09*	21.60*	18.35*	3.25
Outpatient expenditures						
Year 1	76.64*	63.98*	12.66*	67.64*	55.44*	12.20*
Year 2	89.02*	66.16*	22.86*	79.74*	68.44*	11.30
Overall	82.98*	65.10*	17.88*	73.83*	62.09*	11.74*
Specialty physician expenditures						
Year 1	34.77*	43.00*	-8.23*	32.47*	35.32*	-2.85
Year 2	36.94*	42.36*	-5.42	34.45*	39.99*	-5.55*
Overall	35.88*	42.67*	-6.79*	33.48*	37.71*	-4.23*
Primary care physician expenditures						
Year 1	20.74*	25.62*	-4.88*	20.87*	22.65*	-1.77
Year 2	20.12*	26.62*	-6.50*	20.28*	24.06*	-3.78*
Overall	20.42*	26.13*	-5.71*	20.57*	23.37*	-2.80*
Home health expenditures						
Year 1	11.81*	16.86*	-5.06*	13.08*	20.52*	-7.44*
Year 2	17.55*	18.71*	-1.16	18.94*	22.17*	-3.23
Overall	14.74*	17.81*	-3.06	16.07*	21.36*	-5.29*

(continued)

Table F-4 (continued)
New York: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	13.98*	18.55*	-4.57*	14.49*	16.37*	-1.88
Year 2	17.02*	20.46*	-3.44*	17.64*	21.25*	-3.61*
Overall	15.54*	19.53*	-3.99*	16.10*	18.86*	-2.76*
Laboratory expenditures						
Year 1	2.25*	4.72*	-2.48*	1.67*	2.55*	-0.88*
Year 2	2.16*	4.36*	-2.19*	1.52*	2.77*	-1.24*
Overall	2.20*	4.54*	-2.33*	1.59*	2.66*	-1.07*
Imaging expenditures						
Year 1	-1.04	1.45	-2.49*	-1.38*	0.69	-2.07*
Year 2	-2.67*	0.87	-3.54*	-3.07*	0.60	-3.67*
Overall	-1.88*	1.15	-3.03*	-2.24*	0.65	-2.89*
Other facility expenditures						
Year 1	-0.09	0.37	-0.47	-2.73	-2.57	-0.16
Year 2	-0.07	-1.03	0.96	-2.96	-4.38	1.42
Overall	-0.08	-0.35	0.26	-2.85	-3.49	0.65

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-5 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on medical service utilizations.

Table F-5
New York: Decompositions of the medical service utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	67.75*	74.56*	-6.80*	67.12*	69.03*	-1.91
Year 2	68.36*	79.07*	-10.72*	67.84*	73.85*	-6.01*
Overall	68.06*	76.87*	-8.81*	67.49*	71.50*	-4.01*
ER visits not leading to hospitalization						
Year 1	124.08*	122.70*	1.38	123.28*	127.81*	-4.53
Year 2	130.75*	133.26*	-2.51	129.58*	132.87*	-3.29
Overall	127.49*	128.10*	-0.61	126.50*	130.40*	-3.90

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-6 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-6
New York: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Multiple chronic conditions only						
Year 1	847.97*	915.51*	-67.54	855.72*	888.60*	-32.87
Year 2	862.23*	929.22*	-66.99	871.96*	966.93*	-94.97
Overall	854.95*	922.22*	-67.27	863.68*	926.96*	-63.29
Behavioral health conditions only						
Year 1	483.26*	506.85*	-23.59	441.82*	475.62*	-33.80
Year 2	462.82*	551.10*	-88.28*	421.04*	492.28*	-71.23
Overall	472.94*	529.19*	-56.25	431.33*	484.03*	-52.70
Disabled beneficiaries only						
Year 1	432.38*	466.63*	-34.25	404.18*	426.09*	-21.91
Year 2	482.08*	521.10*	-39.02	454.26*	450.75*	3.50
Overall	457.71*	494.40*	-36.69*	429.71*	438.66*	-8.96
Dually eligible only						
Year 1	427.05*	415.63*	11.42	416.65*	428.11*	-11.47
Year 2	489.36*	519.07*	-29.71	478.88*	455.84*	23.04
Overall	458.47*	467.79*	-9.32	448.03*	442.09*	5.94
Rural beneficiaries only						
Year 1	384.41*	396.73*	-12.32	340.65*	352.24*	-11.59
Year 2	482.58*	461.63*	20.95	436.14*	339.01*	97.13*
Overall	434.40*	429.78*	4.62	389.28*	345.50*	43.78
Pod 1 and all comparisons						
Year 1	432.12*	430.45*	1.67	429.11*	396.96*	32.15*
Year 2	434.46*	461.58*	-27.11	431.69*	470.65*	-38.95*
Overall	433.33*	446.50*	-13.17	430.44*	434.96*	-4.51
Pod 2 and all comparisons						
Year 1	382.91*	426.78*	-43.87*	380.28*	394.21*	-13.93
Year 2	410.20*	459.63*	-49.44*	407.79*	468.48*	-60.70*
Overall	396.87*	443.59*	-46.72*	394.36*	432.21*	-37.86*

(continued)

Table F-6 (continued)
New York: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Pod 3 and all comparisons						
Year 1	408.05*	433.60*	-25.55	406.41*	400.06*	6.35
Year 2	461.11*	465.67*	-4.57	458.66*	474.40*	-15.74
Overall	435.12*	449.96*	-14.85	433.06*	437.98*	-4.92

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-7 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-7
New York: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	84.65*	85.19*	-0.54	85.42*	85.07*	0.35
Year 2	85.86*	82.52*	3.33	86.43*	89.28*	-2.85
Overall	85.15*	84.09*	1.05	85.83*	86.80*	-0.96
Retinal eye examination						
Year 1	54.32*	51.10*	3.22*	60.38*	60.69*	-0.32
Year 2	57.22*	54.89*	2.33	62.77*	54.12*	8.64*
Overall	55.51*	52.66*	2.86*	61.36*	57.99*	3.37
LDL-C screening						
Year 1	80.10*	78.05*	2.05	68.64*	70.88*	-2.24
Year 2	81.30*	78.31*	2.99	70.16*	69.23*	0.93
Overall	80.59*	78.16*	2.44	69.27*	70.21*	-0.94
Medical attention for nephropathy						
Year 1	70.24*	73.80*	-3.56	68.08*	60.85*	7.23*
Year 2	71.34*	75.06*	-3.73	69.19*	65.33*	3.87
Overall	70.69*	74.32*	-3.63	68.54*	62.69*	5.85*
Received all 4 diabetes tests						
Year 1	33.12*	29.42*	3.70	35.93*	34.11*	1.82
Year 2	37.03*	33.04*	3.98	39.84*	35.17*	4.67
Overall	34.72*	30.91*	3.81	37.54*	34.55*	2.99
Received none of the 4 diabetes tests						
Year 1	5.23*	5.77*	-0.55	4.57*	3.24*	1.32
Year 2	5.58*	5.78*	-0.20	4.86*	1.87*	2.99*
Overall	5.37*	5.78*	-0.41	4.69*	2.68*	2.01
Total lipid panel						
Year 1	67.22*	64.51*	2.71	67.98*	66.95*	1.03
Year 2	67.60*	63.98*	3.63	68.12*	67.66*	0.46
Overall	67.37*	64.30*	3.07	68.03*	67.23*	0.80

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-8 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-8
New York: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	18.12*	19.07*	-0.95	18.22*	17.38*	0.84
Year 2	19.82*	23.99*	-4.17	19.83*	24.61*	-4.79
Overall	18.96*	21.48*	-2.53	19.00*	20.92*	-1.92
PQI admissions—overall						
Year 1	38.09*	45.38*	-7.28*	37.91*	46.33*	-8.42
Year 2	40.28*	46.00*	-5.73	40.43*	49.98*	-9.55
Overall	39.16*	45.68*	-6.52*	39.14*	48.12*	-8.97
PQI admissions—acute						
Year 1	13.32*	17.80*	-4.48	12.97*	16.38*	-3.41
Year 2	13.92*	15.58*	-1.66	13.69*	21.81*	-8.13
Overall	13.61*	16.71*	-3.10	13.32*	19.04*	-5.72
PQI admissions—chronic						
Year 1	23.90*	26.65*	-2.75	24.19	28.87	-4.68
Year 2	25.31*	29.67*	-4.37	25.89	26.74	-0.85
Overall	24.59*	28.13*	-3.54	25.02	27.83	-2.80

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-9 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-9
New York: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	870.25*	836.96*	33.29	911.37*	883.83*	27.54
Year 2	825.42*	874.09*	-48.67	863.91*	854.52*	9.39
Overall	848.29*	855.14*	-6.85	888.13*	869.48*	18.65
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	1,024.31*	1,040.61*	-16.30	1,011.97*	1,017.51*	-5.54
Year 2	988.56*	1,010.37*	-21.81	973.33*	972.01*	1.33
Overall	1,006.80*	1,025.80*	-19.00	993.05*	995.22*	-2.17
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	222.40*	182.61*	39.79*	219.69*	196.35*	23.33
Year 2	192.81*	165.23*	27.58*	190.66*	179.95*	10.71
Overall	207.91*	174.10*	33.81*	205.47*	188.32*	17.15
Primary care visits as a percent of total visits						
Year 1						
1st quintile	32.28*	31.84*	0.44	30.86*	31.91*	-1.05
5th quintile	11.50*	11.71*	-0.21	12.56*	12.03*	0.52
Year 2						
1st quintile	33.22*	27.71*	5.51*	31.58*	29.14*	2.44
5th quintile	11.08*	13.92*	-2.84*	12.20*	13.49*	-1.29
Overall						
1st quintile	32.68*	30.09*	2.59	31.17*	30.74*	0.43
5th quintile	11.32*	12.65*	-1.32	12.40*	12.65*	-0.25
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	812.34*	828.22*	-15.88	813.90*	769.17*	44.73
Year 2	820.61*	839.63*	-19.01	825.76*	814.37*	11.38
Overall	816.13*	833.45*	-17.32	819.34*	789.90*	29.44

(continued)

Table F-9 (continued)
New York: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	213.25*	254.57*	-41.32	213.00*	225.47*	-12.47
Year 2	222.03*	246.19*	-24.16	221.84*	202.33*	19.50
Overall	217.29*	250.72*	-33.43	217.07*	214.83*	2.23
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	27.98*	22.62*	5.36*	28.39*	24.82*	3.57*
5th quintile	12.66*	16.15*	-3.49*	13.77*	16.09*	-2.32*
Year 2						
1st quintile	29.53*	23.75*	5.78*	29.93*	24.83*	5.11*
5th quintile	11.84*	15.31*	-3.46*	12.90*	16.08*	-3.18*
Overall						
1st quintile	28.64*	23.11*	5.54*	29.05*	24.82*	4.23*
5th quintile	12.31*	15.79*	-3.48*	13.40*	16.09*	-2.69*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-10 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-10
New York: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	847.97*	915.51*	-67.54	855.72*	888.60*	-32.87
Year 2	862.23*	929.22*	-66.99	871.96*	966.93*	-94.97
Overall	854.95*	922.22*	-67.27	863.68*	926.96*	-63.29
Acute-care expenditures						
Year 1	337.77*	388.25*	-50.48	371.14*	351.67*	19.47
Year 2	333.70*	424.76*	-91.06*	368.27*	437.19*	-68.91*
Overall	335.78*	406.13*	-70.36*	369.74*	393.56*	-23.82
Post-acute-care expenditures						
Year 1	106.99*	110.29*	-3.31	111.49*	124.68*	-13.20
Year 2	105.69*	116.84*	-11.15	110.54*	121.31*	-10.77
Overall	106.35*	113.50*	-7.15	111.02*	123.03*	-12.01
ER expenditures						
Year 1	38.64*	28.70*	9.94*	39.49*	34.74*	4.75
Year 2	36.17*	34.25*	1.92	36.85*	37.91*	-1.06
Overall	37.43*	31.42*	6.02*	38.20*	36.29*	1.90
Outpatient expenditures						
Year 1	157.64*	132.08*	25.56*	134.50*	121.62*	12.87
Year 2	161.92*	117.02*	44.89*	138.41*	124.83*	13.58
Overall	159.73*	124.70*	35.03*	136.41*	123.20*	13.22
Specialty physician expenditures						
Year 1	53.33*	70.70*	-17.37*	53.51*	69.30*	-15.80*
Year 2	51.58*	59.25*	-7.67	52.05*	58.21*	-6.16
Overall	52.47*	65.09*	-12.62*	52.79*	63.87*	-11.08*
Primary care physician expenditures						
Year 1	40.12*	50.24*	-10.12*	38.88*	39.09*	-0.21
Year 2	35.63*	48.13*	-12.50*	34.38*	42.50*	-8.11*
Overall	37.92*	49.21*	-11.29*	36.68*	40.76*	-4.08

(continued)

Table F-10 (continued)
New York: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	29.53*	40.94*	-11.41*	32.18*	51.56*	-19.39*
Year 2	38.81*	41.45*	-2.63	41.65*	49.00*	-7.35
Overall	34.08*	41.19*	-7.11	36.82*	50.31*	-13.49*
Other expenditures						
Year 1	25.13*	36.89*	-11.76*	25.91*	30.76*	-4.86
Year 2	33.85*	39.61*	-5.75	34.39*	43.11*	-8.72
Overall	29.40*	38.22*	-8.81*	30.06*	36.81*	-6.75*
Laboratory expenditures						
Year 1	3.11*	6.37*	-3.27*	2.23*	2.92*	-0.69
Year 2	2.02*	4.46*	-2.45*	1.17	1.65	-0.47
Overall	2.57*	5.44*	-2.87*	1.71*	2.30*	-0.58
Imaging expenditures						
Year 1	-0.78	2.58	-3.36*	-4.09*	-0.72	-3.38*
Year 2	-3.88*	0.06	-3.94*	-7.08*	-1.56	-5.52*
Overall	-2.29	1.35	-3.64*	-5.56*	-1.13	-4.43*
Other facility expenditures						
Year 1	-0.13	0.60	-0.73	-4.44	-3.37	-1.07
Year 2	-0.72	-5.76	5.04	-5.90	-5.28	-0.63
Overall	-0.42	-2.51	2.10	-5.16	-4.31	-0.85

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-11 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-11
New York: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	167.93*	188.51*	-20.57*	167.93*	171.60*	-3.67
Year 2	157.43*	189.05*	-31.62*	157.75*	179.78*	-22.03*
Overall	162.79*	188.77*	-25.98*	162.94*	175.60*	-12.66
ER visits not leading to hospitalization						
Year 1	219.76*	213.04*	6.72	217.31*	229.57*	-12.26
Year 2	228.63*	232.00*	-3.37	224.94*	230.25*	-5.31
Overall	224.10*	222.33*	1.78	221.05*	229.90*	-8.86

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-12 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-12
New York: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	483.26*	506.85*	-23.59	441.82*	475.62*	-33.80
Year 2	462.82*	551.10*	-88.28*	421.04*	492.28*	-71.23
Overall	472.94*	529.19*	-56.25	431.33*	484.03*	-52.70
Acute-care expenditures						
Year 1	183.07*	220.62*	-37.55	180.35*	179.62*	0.73
Year 2	160.50*	243.98*	-83.48*	158.02*	201.02*	-43.00
Overall	171.67*	232.41*	-60.74*	169.08*	190.42*	-21.35
Expenditures for ER visits not leading to hospitalization						
Year 1	29.59*	23.11*	6.49	29.54*	33.73*	-4.18
Year 2	26.43*	28.16*	-1.73	26.24*	32.78*	-6.54
Overall	27.99*	25.66*	2.34	27.88*	33.25*	-5.37
Total for principal diagnosis of BHC						
Year 1	24.93*	16.71*	8.22	36.00*	44.89*	-8.89
Year 2	31.49*	20.09*	11.40*	41.53*	43.98*	-2.45
Overall	28.24*	18.42*	9.82*	38.79*	44.43*	-5.64
Total for secondary diagnosis of BHC						
Year 1	200.79*	196.22*	4.57	189.12*	198.55*	-9.43
Year 2	194.31*	229.11*	-34.80	182.82*	222.28*	-39.46
Overall	197.52*	212.82*	-15.30	185.94*	210.53*	-24.59

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-13 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-13
New York: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	79.15*	86.33*	-7.18	77.85*	86.90*	-9.04
Year 2	74.72*	89.82*	-15.10*	73.80*	79.83*	-6.02
Overall	76.91*	88.09*	-11.18*	75.81*	83.33*	-7.52
ER visits not leading to hospitalization						
Year 1	251.79*	267.67*	-15.88	246.22*	267.18*	-20.95
Year 2	250.86*	269.47*	-18.61	246.23*	262.50*	-16.28
Overall	251.32*	268.58*	-17.26	246.22*	264.82*	-18.59
Behavioral health inpatient admissions						
Year 1	3.11*	3.09*	0.02	2.49*	2.32*	0.17
Year 2	4.88*	3.28*	1.61*	4.13*	2.62*	1.51*
Overall	4.00*	3.18*	0.82	3.32*	2.47*	0.85*
Behavioral health ER visits						
Year 1	19.69*	26.05*	-6.36	17.28*	16.78*	0.50
Year 2	25.15*	27.41*	-2.26	22.12*	16.41*	5.70*
Overall	22.45*	26.74*	-4.29	19.72*	16.60*	3.12
Behavioral health outpatient visits						
Year 1	668.38*	628.98*	39.41	655.93*	645.62*	10.31
Year 2	606.09*	639.86*	-33.78	593.20*	648.58*	-55.38*
Overall	637.02*	634.46*	2.57	624.35*	647.11*	-22.76

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-14 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on expenditures and health care utilization for disabled beneficiaries.

Table F-14
New York: Decompositions of the expenditure and health care utilization estimates for disabled Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs	
Acute-care expenditures			
Year 1	184.75*	206.19*	-21.44
Year 2	195.78*	228.74*	-32.96
Overall	190.37*	217.69*	-27.31*
Expenditures for ER visits not leading to hospitalization			
Year 1	23.34*	17.99*	5.35*
Year 2	24.16*	22.59*	1.57
Overall	23.76*	20.34*	3.42
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	70.17*	78.29*	-8.12*
Year 2	72.58*	82.26*	-9.68*
Overall	71.40*	80.31*	-8.92*
ER visits not leading to hospitalization			
Year 1	199.39*	201.17*	-1.78
Year 2	205.66*	218.56*	-12.90
Overall	202.59*	210.03*	-7.45
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	205.96*	198.31*	7.65
Year 2	216.57*	193.60*	22.97
Overall	211.26*	195.96*	15.30

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-15 presents decompositions of the estimates of the changes associated with the New York MAPCP Demonstration on expenditures and health care utilization for beneficiaries attributed to Pod 2.

Table F-15
New York: Decompositions of the expenditure and health care utilization estimates among Medicare beneficiaries attributed to Pod 2

Outcome	Model predicted average change from baseline		
	MAPCP	CG PCMHs	Difference
Acute-care expenditures			
Year 1	137.14*	166.58*	-29.44*
Year 2	132.44*	187.71*	-55.28*
Overall	134.73*	177.39*	-42.66*
Expenditures for ER visits not leading to hospitalization			
Year 1	12.85*	13.25*	-0.40
Year 2	15.69*	17.14*	-1.45
Overall	14.31*	15.24*	-0.94
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	63.14*	65.70*	-2.56
Year 2	65.72*	69.58*	-3.86
Overall	64.46*	67.69*	-3.23
ER visits not leading to hospitalization			
Year 1	114.74*	115.58*	-0.84
Year 2	120.49*	125.62*	-5.14
Overall	117.68*	120.72*	-3.04
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	162.68*	179.39*	-16.72
Year 2	166.12*	179.95*	-13.83
Overall	164.41*	179.67*	-15.27

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.3 Decompositions of the Rhode Island Estimates

Table F-16 presents a decomposition of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on process of care indicators.

Table F-16
Rhode Island: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	92.23*	85.75*	6.48	89.90*	82.74*	7.16
Year 2	94.05*	83.93*	10.12*	92.02*	82.96*	9.05*
Overall	92.92*	85.06*	7.85*	90.70*	82.82*	7.88
Retinal eye examination						
Year 1	66.34*	61.68*	4.66	67.15*	67.33*	-0.18
Year 2	68.26*	68.91*	-0.65	69.02*	68.80*	0.23
Overall	67.06*	64.41*	2.65	67.86*	67.88*	-0.03
LDL-C screening						
Year 1	85.68*	83.87*	1.81	79.98*	77.28*	2.70
Year 2	87.17*	85.89*	1.28	81.61*	76.28*	5.34
Overall	86.24*	84.63*	1.61	80.60*	76.90*	3.70
Medical attention for nephropathy						
Year 1	76.36*	78.07*	-1.71	70.30*	68.76*	1.54
Year 2	77.00*	79.85*	-2.85	70.72*	70.60*	0.11
Overall	76.60*	78.74*	-2.14	70.46*	69.45*	1.00
Received all 4 diabetes tests						
Year 1	44.95*	42.04*	2.91	41.51*	37.61*	3.90*
Year 2	46.52*	46.86*	-0.34	42.66*	40.34*	2.31
Overall	45.54*	43.86*	1.68	41.94*	38.64*	3.30*
Received none of the 4 diabetes tests						
Year 1	2.02*	2.10*	-0.08	3.20*	3.60*	-0.39
Year 2	1.39*	2.79*	-1.40	2.22*	3.74*	-1.52
Overall	1.78*	2.36*	-0.58	2.83*	3.65*	-0.82
Total lipid panel						
Year 1	75.17*	77.47*	-2.29	72.14*	72.97*	-0.83
Year 2	74.16*	75.31*	-1.15	70.79*	70.39*	0.40
Overall	74.76*	76.59*	-1.83	71.59*	71.92*	-0.33

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-17 presents a decomposition of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on selected health outcomes.

Table F-17
Rhode Island: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	5.13*	5.41*	-0.28	5.01	4.75*	0.26
Year 2	6.76*	7.04*	-0.28	6.62*	5.99*	0.63
Overall	6.00*	6.28*	-0.28	5.87*	5.41*	0.46
PQI admissions—overall						
Year 1	9.33*	11.30*	-1.97	9.40	8.69	0.71
Year 2	10.80*	11.87*	-1.08	10.86	9.16	1.70
Overall	10.11*	11.61*	-1.49	10.18	8.94	1.24
PQI admissions—acute						
Year 1	4.20*	5.11*	-0.91	4.23	4.01	0.22
Year 2	4.05*	4.65*	-0.59	4.07	3.54	0.53
Overall	4.12*	4.86*	-0.74	4.14	3.76	0.38
PQI admissions—chronic						
Year 1	4.89*	5.90*	-1.02	4.92	4.49	0.43
Year 2	6.55*	7.01*	-0.46	6.58	5.38	1.20
Overall	5.78*	6.49*	-0.72	5.81	4.96	0.84

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-18 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on access to care and coordination of care.

Table F-18
Rhode Island: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	899.07*	799.14*	99.92*	891.39*	849.40*	41.98
Year 2	868.25*	834.70*	33.55	856.84*	856.77*	0.07
Overall	882.59*	818.15*	64.44	872.91*	853.34*	19.57
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	873.89*	833.41*	40.48	877.63*	883.50*	-5.87
Year 2	921.45*	921.16*	0.30	921.17*	947.67*	-26.51
Overall	899.32*	880.32*	19.00	900.91*	917.81*	-16.90
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	209.93*	186.45*	23.48	210.22*	195.68*	14.54
Year 2	201.54*	181.69*	19.85	201.58*	189.77*	11.81
Overall	205.44*	183.90*	21.54	205.60*	192.52*	13.08
Primary care visits as a percent of total visits						
Year 1						
1st quintile	32.22*	33.19*	-0.97	37.20*	39.32*	-2.11
5th quintile	11.82*	11.37*	0.45	10.14*	9.35*	0.79
Year 2						
1st quintile	34.71*	35.59*	-0.88	40.18*	40.91*	-0.74
5th quintile	10.70*	10.34*	0.36	9.05*	8.80*	0.25
Overall						
1st quintile	33.26*	34.19*	-0.93	38.44*	39.98*	-1.54
5th quintile	11.35*	10.94*	0.42	9.68*	9.12*	0.56
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	133.14*	140.14*	-7.00	136.74*	137.72*	-0.98
Year 2	138.53*	142.82*	-4.29	142.27*	141.06*	1.21
Overall	136.02*	141.57*	-5.55	139.69*	139.51*	0.19

(continued)

Table F-18 (continued)
Rhode Island: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	733.97*	722.81*	11.16	735.59*	712.55*	23.04
Year 2	732.03*	728.56*	3.47	733.97*	734.30*	-0.33
Overall	732.96*	725.79*	7.18	734.75*	723.82*	10.93
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	185.39*	227.59*	-42.20	186.01	162.88	23.13
5th quintile	184.85*	204.03*	-19.19	186.16	162.31	23.86
Year 2						
1st quintile	185.10*	215.12*	-30.02	186.09	162.58	23.51
5th quintile	19.77*	23.62*	-3.86*	25.05*	25.97*	-0.92
Overall						
1st quintile	19.06*	15.79*	3.26*	15.33*	14.72*	0.62
5th quintile	20.07*	23.19*	-3.12*	25.68*	27.61*	-1.93

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-19 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on medical expenditures.

Table F-19
Rhode Island: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	460.38*	503.57*	-43.20	464.19*	472.77*	-8.58
Year 2	527.84*	550.25*	-22.41	533.07*	528.46*	4.60
Overall	496.45*	528.53*	-32.08	501.02*	502.55*	-1.53
Acute-care expenditures						
Year 1	126.29*	161.52*	-35.23	116.08*	115.59*	0.49
Year 2	156.65*	182.54*	-25.89	146.36*	153.16*	-6.80
Overall	142.52*	172.76*	-30.23	132.27*	135.68*	-3.41
Post-acute-care expenditures						
Year 1	74.70*	90.68*	-15.98	85.31*	95.45*	-10.14
Year 2	94.04*	94.69*	-0.64	106.23*	97.18*	9.05
Overall	85.04*	92.82*	-7.78	96.49*	96.38*	0.12
ER expenditures						
Year 1	24.02*	25.38*	-1.36	21.76*	21.18*	0.58
Year 2	27.78*	31.03*	-3.25	25.37*	22.93*	2.44
Overall	26.03*	28.40*	-2.37	23.69*	22.11*	1.58
Outpatient expenditures						
Year 1	63.54*	51.50*	12.04*	61.43*	60.58*	0.85
Year 2	63.50*	61.05*	2.44	61.32*	65.27*	-3.95
Overall	63.51*	56.61*	6.91	61.37*	63.09*	-1.72
Specialty physician expenditures						
Year 1	44.95*	40.66*	4.29	44.51*	41.10*	3.41
Year 2	48.95*	42.76*	6.19	48.19*	41.11*	7.07*
Overall	47.09*	41.78*	5.31	46.48*	41.11*	5.37*
Primary care physician expenditures						
Year 1	26.17*	24.48*	1.70	26.54*	27.74*	-1.20
Year 2	27.48*	27.25*	0.23	27.91*	28.28*	-0.37
Overall	26.87*	25.96*	0.91	27.27*	28.03*	-0.76
Home health expenditures						
Year 1	36.89*	33.59*	3.30	36.98*	31.22*	5.77*
Year 2	41.72*	36.47*	5.26*	41.75*	37.85*	3.90
Overall	39.47*	35.13*	4.34	39.53*	34.76*	4.77*

(continued)

Table F-19 (continued)
Rhode Island: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	24.71*	28.69*	-3.99	23.90*	24.60*	-0.70
Year 2	26.76*	31.62*	-4.86	25.90*	26.86*	-0.96
Overall	25.81*	30.26*	-4.45	24.97*	25.81*	-0.84
Laboratory expenditures						
Year 1	6.71*	9.42*	-2.71	6.78*	6.89*	-0.11
Year 2	5.77*	8.86*	-3.08	5.94*	7.14*	-1.20
Overall	6.21*	9.12*	-2.91	6.33*	7.03*	-0.69
Imaging expenditures						
Year 1	3.54*	3.53*	0.00	2.76*	3.13*	-0.37
Year 2	0.79	1.78	-0.99	0.01	2.02*	-2.00*
Overall	2.07*	2.60*	-0.53	1.29	2.53*	-1.24*
Other facility expenditures						
Year 1	1.53	1.78	-0.26	0.35	1.07	-0.73
Year 2	0.49	-0.91	1.40	-0.48	-0.12	-0.36
Overall	0.97	0.34	0.63	-0.09	0.44	-0.53

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-20 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on medical service utilizations.

Table F-20
Rhode Island: Decompositions of the medical service utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	61.87*	66.00*	-4.12	61.93*	58.29*	3.64
Year 2	65.10*	67.83*	-2.73	65.17*	63.06*	2.11
Overall	63.60*	66.98*	-3.38	63.66*	60.84*	2.82
ER visits not leading to hospitalization						
Year 1	133.14*	140.14*	-7.00	136.74*	137.72*	-0.98
Year 2	138.53*	142.82*	-4.29	142.27*	141.06*	1.21
Overall	136.02*	141.57*	-5.55	139.69*	139.51*	0.19

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-21 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-21
Rhode Island: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Multiple chronic conditions only						
Year 1	1,002.72*	1,063.77*	-61.04	1,065.18*	1,075.95*	-10.77
Year 2	1,058.70*	1,196.10*	-137.40	1,120.92*	1,080.39*	40.54
Overall	1,031.15*	1,130.96*	-99.82	1,093.48*	1,078.20*	15.28
Behavioral health conditions only						
Year 1	560.32*	592.09*	-31.77	621.34*	616.56*	4.78
Year 2	601.66*	627.71*	-26.04	664.21*	663.26*	0.95
Overall	582.26*	610.99*	-28.73	644.09*	641.34*	2.75
Disabled beneficiaries only						
Year 1	378.41*	431.17*	-52.76	388.14*	387.84*	0.30
Year 2	469.74*	489.87*	-20.12	481.06*	458.80*	22.26
Overall	427.81*	462.92*	-35.11	438.40*	426.22*	12.18
Dually eligible only						
Year 1	397.97*	400.54*	-2.57	447.36*	434.25*	13.11
Year 2	443.11*	537.84*	-94.73	492.69*	471.81*	20.88
Overall	422.94*	476.50*	-53.56	472.44*	455.03*	17.41
Non-White beneficiaries only						
Year 1	311.18*	465.66*	-154.48	349.37*	389.91*	-40.55
Year 2	449.73*	484.97*	-35.24	493.45*	478.48*	14.97
Overall	392.96*	477.06*	-84.09	434.42*	442.19*	-7.77

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-22 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-22
Rhode Island: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	89.27*	80.64*	8.63	85.36*	77.03*	8.33
Year 2	92.45*	82.86*	9.59	89.40*	76.08*	13.31*
Overall	90.45*	81.47*	8.99	86.86*	76.68*	10.18*
Retinal eye examination						
Year 1	64.60*	60.80*	3.81	64.29*	64.80*	-0.51
Year 2	70.14*	67.12*	3.02	69.41*	67.46*	1.95
Overall	66.67*	63.15*	3.51	66.20*	65.80*	0.40
LDL-C screening						
Year 1	83.93*	80.24*	3.69	74.57*	73.38*	1.18
Year 2	86.58*	84.29*	2.29	77.70*	71.45*	6.25
Overall	84.92*	81.75*	3.17	75.74*	72.66*	3.07
Medical attention for nephropathy						
Year 1	77.66*	80.13*	-2.48	67.62*	71.79*	-4.16
Year 2	78.01*	87.01*	-9.00*	67.53*	70.07*	-2.54
Overall	77.79*	82.70*	-4.91*	67.59*	71.15*	-3.56
Received all 4 diabetes tests						
Year 1	41.69*	37.53*	4.16	35.52*	33.50*	2.02
Year 2	44.27*	45.46*	-1.19	37.29*	34.36*	2.94
Overall	42.65*	40.49*	2.17	36.18*	33.82*	2.36
Received none of the 4 diabetes tests						
Year 1	1.65	1.91	-0.26	5.17*	4.59*	0.58
Year 2	0.63	1.07	-0.44	2.10*	4.43*	-2.33*
Overall	1.27*	1.60	-0.33	4.03*	4.53*	-0.50
Total lipid panel						
Year 1	68.16*	69.02*	-0.85	67.06*	66.02*	1.04
Year 2	67.20*	70.38*	-3.18	65.93*	64.33*	1.60
Overall	67.79*	69.54*	-1.75	66.62*	65.37*	1.25

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-23 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-23
Rhode Island: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	15.60*	18.19*	-2.59	15.30	14.35*	0.95
Year 2	16.96*	24.01*	-7.04	16.74*	16.61*	0.13
Overall	16.29*	21.15*	-4.85	16.03*	15.50*	0.54
PQI admissions—overall						
Year 1	35.56*	40.64*	-5.09	35.64	29.98	5.66
Year 2	39.84*	43.88*	-4.04	40.09	30.52	9.57
Overall	37.73*	42.29*	-4.56	37.90	30.26	7.65
PQI admissions—acute						
Year 1	13.48*	15.93*	-2.45	13.39	10.74	2.64
Year 2	12.46*	14.74*	-2.27	12.41	9.72	2.69
Overall	12.97*	15.32*	-2.36	12.89	10.22	2.67
PQI admissions—chronic						
Year 1	20.71*	23.00*	-2.30	20.99	18.43	2.57
Year 2	26.16*	27.82*	-1.66	26.57	20.03	6.54
Overall	23.47*	25.45*	-1.98	23.82	19.24	4.58

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-24 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-24
Rhode Island: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	1,198.79*	1,050.45*	148.34	1,186.07*	1,078.33*	107.74
Year 2	1,117.92*	1,082.52*	35.41	1,103.02*	1,033.83*	69.19
Overall	1,157.73*	1,066.73*	91.00	1,143.90*	1,055.74*	88.16
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	1,400.27*	1,334.01*	66.26	1,392.66*	1,385.37*	7.29
Year 2	1,426.31*	1,462.97*	-36.66	1,411.04*	1,401.80*	9.24
Overall	1,413.49*	1,399.49*	14.00	1,401.99*	1,393.71*	8.28
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	296.06*	233.08*	62.98*	296.11*	264.48*	31.63
Year 2	264.39*	224.36*	40.03	262.62*	244.04*	18.58
Overall	279.98*	228.65*	51.33*	279.11*	254.10*	25.00
Primary care visits as a percent of total visits						
Year 1						
1st quintile	21.29*	21.54*	-0.26	23.55*	26.02*	-2.47
5th quintile	15.34*	15.14*	0.20	13.77*	12.27*	1.50
Year 2						
1st quintile	21.73*	22.75*	-1.02	24.19*	27.20*	-3.01
5th quintile	15.00*	14.26*	0.74	13.36*	11.63*	1.73
Overall						
1st quintile	21.47*	22.03*	-0.56	23.81*	26.50*	-2.69
5th quintile	15.20*	14.79*	0.41	13.61*	12.01*	1.59
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	800.37*	839.64*	-39.27	797.94*	780.97*	16.97
Year 2	778.60*	834.56*	-55.96	779.85*	781.50*	-1.64
Overall	789.80*	837.17*	-47.37	789.16*	781.23*	7.94

(continued)

Table F-24 (continued)
Rhode Island: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	248.03*	303.60*	-55.57	248.66*	232.67*	15.99
Year 2	221.70*	278.05*	-56.35	223.50*	213.43*	10.07
Overall	235.21*	291.16*	-55.95	236.41*	223.30*	13.11
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	19.77*	23.82*	-4.06*	23.00*	23.09*	-0.09
5th quintile	18.35*	15.04*	3.31*	16.71*	16.64*	0.07
Year 2						
1st quintile	20.29*	23.01*	-2.73	23.70*	24.26*	-0.56
5th quintile	17.87*	15.62*	2.24	16.18*	15.77*	0.41
Overall						
1st quintile	19.97*	23.50*	-3.52*	23.28*	23.56*	-0.28
5th quintile	18.15*	15.27*	2.88*	16.50*	16.29*	0.21

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-25 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-25
Rhode Island: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	1,002.72*	1,063.77*	-61.04	1,065.18*	1,075.95*	-10.77
Year 2	1,058.70*	1,196.10*	-137.40	1,120.92*	1,080.39*	40.54
Overall	1,031.15*	1,130.96*	-99.82	1,093.48*	1,078.20*	15.28
Acute-care expenditures						
Year 1	282.79*	349.03*	-66.24	288.76*	275.47*	13.29
Year 2	304.20*	412.43*	-108.24*	309.34*	324.14*	-14.81
Overall	293.66*	381.22*	-87.56	299.21*	300.19*	-0.98
Post-acute-care expenditures						
Year 1	185.19*	212.50*	-27.31	217.24*	230.72*	-13.47
Year 2	210.00*	227.27*	-17.27	244.64*	210.95*	33.69*
Overall	197.79*	220.00*	-22.21	231.16*	220.68*	10.48
ER expenditures						
Year 1	50.70*	55.75*	-5.05	47.98*	43.54*	4.44
Year 2	64.26*	68.48*	-4.22	61.02*	44.69*	16.33*
Overall	57.59*	62.21*	-4.63	54.60*	44.12*	10.48*
Outpatient expenditures						
Year 1	147.87*	118.13*	29.74	139.97*	139.74*	0.22
Year 2	139.75*	134.11*	5.64	130.68*	122.63*	8.05
Overall	143.75*	126.25*	17.50	135.25*	131.05*	4.20
Specialty physician expenditures						
Year 1	69.14*	62.60*	6.54	73.61*	69.75*	3.86
Year 2	71.26*	61.21*	10.05	74.68*	59.55*	15.13
Overall	70.22*	61.89*	8.32	74.15*	64.57*	9.59
Primary care physician expenditures						
Year 1	47.19*	46.15*	1.04	48.91*	51.69*	-2.78
Year 2	45.33*	50.56*	-5.23	47.13*	48.59*	-1.46
Overall	46.24*	48.39*	-2.14	48.01*	50.12*	-2.11

(continued)

Table F-25 (continued)
Rhode Island: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	85.82*	72.28*	13.54	98.00*	76.95*	21.05*
Year 2	88.66*	80.99*	7.67	100.09*	81.57*	18.52*
Overall	87.26*	76.70*	10.56	99.06*	79.30*	19.76*
Other expenditures						
Year 1	45.93*	64.15*	-18.22	45.81*	49.03*	-3.22
Year 2	48.72*	67.14*	-18.42	48.87*	50.15*	-1.29
Overall	47.35*	65.67*	-18.32	47.36*	49.60*	-2.24
Laboratory expenditures						
Year 1	8.58*	12.50*	-3.91	9.67*	10.05*	-0.38
Year 2	6.65*	11.09*	-4.44	7.81*	10.62*	-2.81
Overall	7.60*	11.78*	-4.18	8.73*	10.34*	-1.62
Imaging expenditures						
Year 1	4.28*	6.25*	-1.98	2.87*	5.25*	-2.38
Year 2	-0.62	3.32	-3.95	-2.02	3.21*	-5.23*
Overall	1.79	4.77*	-2.98	0.39	4.22*	-3.83*
Other facility expenditures						
Year 1	1.36	-0.66	2.02	-0.41	4.72	-5.13
Year 2	-1.18	-3.34	2.16	-0.55	-0.36	-0.19
Overall	0.07	-2.02	2.09	-0.48	2.14	-2.62

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-26 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-26
Rhode Island: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	168.43*	176.58*	-8.15	168.35*	148.03*	20.32
Year 2	161.09*	187.31*	-26.22*	161.09*	148.86*	12.23
Overall	164.70*	182.03*	-17.32	164.67*	148.45*	16.21
ER visits not leading to hospitalization						
Year 1	272.58*	259.44*	13.14	277.40	247.68	29.72
Year 2	286.88*	270.87*	16.02	291.79	248.88	42.91
Overall	279.85*	265.24*	14.60	284.70	248.29	36.42

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-27 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-27
Rhode Island: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	560.32*	592.09*	-31.77	621.34*	616.56*	4.78
Year 2	601.66*	627.71*	-26.04	664.21*	663.26*	0.95
Overall	582.26*	610.99*	-28.73	644.09*	641.34*	2.75
Acute-care expenditures						
Year 1	168.26*	200.07*	-31.81	174.81*	152.92*	21.89
Year 2	172.58*	211.90*	-39.32	178.72*	191.49*	-12.78
Overall	170.55*	206.35*	-35.80	176.88*	173.39*	3.49
Expenditures for ER visits not leading to hospitalization						
Year 1	36.66*	35.12*	1.55	33.95*	28.35*	5.60
Year 2	41.33*	52.87*	-11.54	38.26*	30.05*	8.21
Overall	39.14*	44.54*	-5.40	36.24*	29.25*	6.98
Total for principal diagnosis of BHC						
Year 1	43.18*	44.91*	-1.73	40.72*	25.07*	15.65
Year 2	45.98*	42.96*	3.01	43.61*	34.98*	8.63
Overall	44.66*	43.88*	0.79	42.25*	30.33*	11.92*
Total for secondary diagnosis of BHC						
Year 1	211.69*	224.39*	-12.71	213.75*	198.33*	15.41
Year 2	206.57*	241.03*	-34.46	208.45*	236.57*	-28.12
Overall	208.97*	233.22*	-24.25	210.94*	218.62*	-7.69

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-28 presents decompositions of the estimates of the changes associated with the Rhode Island MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-28
Rhode Island: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	71.64*	72.22*	-0.57	71.42*	57.46*	13.96*
Year 2	69.54*	73.56*	-4.01	69.30*	60.47*	8.83*
Overall	70.53*	72.93*	-2.40	70.30*	59.06*	11.24*
ER visits not leading to hospitalization						
Year 1	340.27*	349.91*	-9.64	339.40*	318.55*	20.85
Year 2	347.42*	375.47*	-28.05	346.83*	326.20*	20.63
Overall	344.06*	363.48*	-19.41	343.34*	322.61*	20.73
Behavioral health inpatient admissions						
Year 1	3.02*	2.75*	0.27	3.17*	2.61*	0.56
Year 2	2.91*	2.92*	0.00	3.06*	3.01*	0.05
Overall	2.96*	2.84*	0.13	3.11*	2.82*	0.29
Behavioral health ER visits						
Year 1	26.38*	28.51*	-2.13	25.81*	20.68*	5.13*
Year 2	34.37*	30.69*	3.68	33.66*	24.99*	8.67*
Overall	30.62*	29.67*	0.95	29.98*	22.97*	7.01*
Behavioral health outpatient visits						
Year 1	546.11*	526.81*	19.30	537.05*	502.99*	34.06*
Year 2	487.48*	565.33*	-77.85*	477.11*	466.46*	10.65
Overall	515.18*	547.13*	-31.94	505.43*	483.72*	21.71

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.4 Decompositions of the Vermont Estimates

Table F-29 presents a decomposition of the estimates of the changes associated with the Vermont MAPCP Demonstration on process of care indicators.

Table F-29
Vermont: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	87.13*	91.47*	-4.34	90.62*	91.16*	-0.54
Year 2	86.90*	88.61*	-1.72	90.42*	91.82*	-1.39
Overall	87.04*	90.33*	-3.29	90.54*	91.43*	-0.88
Retinal eye examination						
Year 1	56.92*	56.82*	0.10	56.65*	58.76*	-2.11*
Year 2	58.30*	62.80*	-4.49*	58.06*	57.93*	0.13
Overall	57.47*	59.21*	-1.74	57.22*	58.43*	-1.21
LDL-C screening						
Year 1	73.79*	77.44*	-3.65*	76.68*	77.34*	-0.66
Year 2	74.01*	74.93*	-0.92	77.29*	78.00*	-0.71
Overall	73.88*	76.43*	-2.56	76.92*	77.60*	-0.68
Medical attention for nephropathy						
Year 1	56.00*	59.16*	-3.16	58.96*	58.37*	0.59
Year 2	56.79*	56.40*	0.39	60.40*	60.32*	0.08
Overall	56.32*	58.05*	-1.73	59.54*	59.15*	0.39
Received all 4 diabetes tests						
Year 1	27.72*	30.60*	-2.88	28.05*	27.95*	0.10
Year 2	28.64*	31.62*	-2.98	29.16*	29.46*	-0.30
Overall	28.09*	31.01*	-2.92	28.49*	28.56*	-0.06
Received none of the 4 diabetes tests						
Year 1	2.76*	3.47*	-0.71	2.57*	2.34*	0.23
Year 2	2.80*	4.25*	-1.45	2.59*	2.26*	0.33
Overall	2.78*	3.78*	-1.00	2.58*	2.31*	0.27
Total lipid panel						
Year 1	61.37*	63.78*	-2.42	67.70*	69.79*	-2.09
Year 2	57.93*	60.63*	-2.70	65.04*	68.07*	-3.02*
Overall	59.94*	62.47*	-2.54	66.59*	69.07*	-2.48

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-30 presents a decomposition of the estimates of the changes associated with the Vermont MAPCP Demonstration on selected health outcomes.

Table F-30
Vermont: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	5.21*	5.77*	-0.56	5.06*	5.20*	-0.14
Year 2	6.41*	5.62*	0.80	6.25*	5.98*	0.27
Overall	5.88*	5.68*	0.20	5.73*	5.64*	0.09
PQI admissions—overall						
Year 1	9.30*	8.41*	0.89	9.51*	7.75*	1.76*
Year 2	9.55*	7.97*	1.58	9.65*	8.73*	0.92*
Overall	9.44*	8.16*	1.28	9.59*	8.30*	1.29*
PQI admissions—acute						
Year 1	4.38*	4.33*	0.05	4.55*	3.87*	0.68*
Year 2	4.51*	3.72*	0.79	4.62*	4.25*	0.37
Overall	4.45*	3.99*	0.47	4.59*	4.08*	0.51
PQI admissions—chronic						
Year 1	4.76	3.87	0.88	4.77*	3.71*	1.07*
Year 2	4.86	3.98	0.88	4.83*	4.28*	0.55
Overall	4.81	3.93	0.88	4.80*	4.03*	0.77*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. CG = comparison group; PQI = Prevention Quality Indicator; MAPCP = Multi-Payer Advanced Primary Care Practice; PCMH = patient-centered medical home.
* Statistically significant at the 10 percent level.

Table F-31 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on access to care and coordination of care.

Table F-31
Vermont: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	469.85*	530.83*	-60.98	475.16*	496.84*	-21.68
Year 2	467.85*	520.68*	-52.82	472.36*	491.91*	-19.56
Overall	468.73*	525.15*	-56.42	473.59*	494.08*	-20.49
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	489.68*	490.13*	-0.45	488.47*	532.71*	-44.24*
Year 2	527.14*	525.19*	1.95	523.46*	560.45*	-36.99*
Overall	510.63*	509.73*	0.89	508.04*	548.22*	-40.18*
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	119.31*	124.28*	-4.96	119.14*	122.13*	-2.99
Year 2	103.27*	120.76*	-17.49*	102.51*	122.42*	-19.91*
Overall	110.34*	122.31*	-11.97*	109.84*	122.29*	-12.45
Primary care visits as a percent of total visits						
Year 1						
1st quintile	37.56*	34.17*	3.40	36.39*	38.30*	-1.90
5th quintile	11.12*	12.66*	-1.55	13.16*	12.26*	0.90
Year 2						
1st quintile	37.60*	35.83*	1.77	36.20*	39.06*	-2.86
5th quintile	11.10*	11.88*	-0.78	13.26*	11.92*	1.34
Overall						
1st quintile	37.58*	34.87*	2.71	36.31*	38.62*	-2.31
5th quintile	11.11*	12.33*	-1.22	13.20*	12.11*	1.09
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	760.64*	719.08*	41.56*	762.43*	752.55*	9.88
Year 2	758.41*	728.12*	30.29	760.02*	781.43*	-21.41
Overall	759.41*	724.07*	35.34	761.10*	768.50*	-7.40

(continued)

Table F-31 (continued)
Vermont: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	154.08*	169.37*	-15.29	153.82*	152.76*	1.06
Year 2	145.01*	157.41*	-12.40	145.08*	149.44*	-4.36
Overall	149.07*	162.76*	-13.69	148.99*	150.93*	-1.94
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	24.74*	25.83*	-1.08	25.03*	27.68*	-2.65*
5th quintile	12.13*	11.53*	0.60	12.61*	11.18*	1.43*
Year 2						
1st quintile	24.24*	25.68*	-1.45	24.44*	29.58*	-5.13*
5th quintile	12.43*	11.61*	0.82	12.96*	10.29*	2.67*
Overall						
1st quintile	24.52*	25.76*	-1.24	24.78*	28.50*	-3.72*
5th quintile	12.26*	11.57*	0.69	12.76*	10.79*	1.96*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-32 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on medical expenditures.

Table F-32
Vermont: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	413.44*	444.36*	-30.93	418.71*	471.36*	-52.65*
Year 2	443.26*	474.62*	-31.36	448.64*	524.00*	-75.36*
Overall	430.12*	461.28*	-31.17	435.45*	500.80*	-65.35*
Acute-care expenditures						
Year 1	134.28*	130.43*	3.86	133.77*	151.83*	-18.05
Year 2	147.20*	150.64*	-3.44	146.73*	170.20*	-23.47*
Overall	141.51*	141.73*	-0.22	141.02*	162.10*	-21.08*
Post-acute-care expenditures						
Year 1	65.54*	88.89*	-23.34*	70.43*	89.69*	-19.26*
Year 2	69.46*	85.14*	-15.68*	75.01*	95.88*	-20.87*
Overall	67.73*	86.79*	-19.06*	72.99*	93.15*	-20.16*
ER expenditures						
Year 1	18.27*	15.67*	2.60*	20.43*	22.58*	-2.15*
Year 2	20.04*	16.92*	3.12*	22.30*	27.58*	-5.28*
Overall	19.26*	16.37*	2.89*	21.48*	25.38*	-3.90*
Outpatient expenditures						
Year 1	102.01*	85.13*	16.88*	103.29*	103.09*	0.20
Year 2	105.55*	90.17*	15.37*	107.28*	113.83*	-6.55
Overall	103.99*	87.95*	16.04*	105.52*	109.09*	-3.58
Specialty physician expenditures						
Year 1	17.38*	21.03*	-3.65*	16.38*	20.48*	-4.10*
Year 2	18.49*	25.23*	-6.74*	17.28*	22.13*	-4.84*
Overall	18.00*	23.38*	-5.38*	16.89*	21.40*	-4.51*
Primary care physician expenditures						
Year 1	11.43*	16.51*	-5.08*	12.24*	14.90*	-2.66*
Year 2	12.28*	16.14*	-3.85*	13.03*	15.67*	-2.63*
Overall	11.91*	16.30*	-4.39*	12.69*	15.33*	-2.64*
Home health expenditures						
Year 1	28.13*	33.55*	-5.42*	24.51*	22.08*	2.43
Year 2	30.28*	37.02*	-6.74*	26.33*	25.09*	1.24
Overall	29.33*	35.49*	-6.16*	25.53*	23.76*	1.77

(continued)

Table F-32 (continued)
Vermont: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	15.10*	17.18*	-2.07*	14.86*	16.94*	-2.08
Year 2	16.53*	18.30*	-1.77	16.32*	19.12*	-2.81*
Overall	15.90*	17.80*	-1.90*	15.67*	18.16*	-2.49*
Laboratory expenditures						
Year 1	0.24	1.48*	-1.24*	-0.03	1.16*	-1.18*
Year 2	0.44	1.46*	-1.02	0.15	1.31*	-1.15*
Overall	0.35	1.47*	-1.12*	0.07	1.24*	-1.17*
Imaging expenditures						
Year 1	-1.92*	0.14	-2.06*	-2.56*	-1.28*	-1.28*
Year 2	-2.15*	-1.34*	-0.81	-2.82*	-1.67*	-1.15*
Overall	-2.05*	-0.68	-1.36*	-2.70*	-1.49*	-1.21*
Other facility expenditures						
Year 1	0.01	0.08	-0.08	-2.75*	-3.28*	0.53
Year 2	-0.02	0.49	-0.51	-2.91*	-3.94*	1.03
Overall	-0.01	0.31	-0.32	-2.84*	-3.65*	0.81

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-33 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on medical service utilizations.

Table F-33
Vermont: Decompositions of the medical service utilization estimates

	Model predicted utilization during demonstration			Model predicted utilization during demonstration		
Outcome	**MAPCP**	**CG PCMHs**	**Difference**	**MAPCP**	**CG non-PCMHs**	**Difference**
All-cause admissions						
Year 1	52.34*	53.60*	-1.26	52.15*	50.54*	1.61
Year 2	54.22*	52.32*	1.90	53.82*	53.61*	0.21
Overall	53.39*	52.89*	0.51	53.08*	52.26*	0.82
ER visits not leading to hospitalization						
Year 1	131.84*	115.71*	16.12*	133.29*	120.12*	13.17*
Year 2	129.98*	114.56*	15.42*	130.75*	122.51*	8.24
Overall	130.80*	115.07*	15.73*	131.87*	121.46*	10.41*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-34 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-34
Vermont: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Multiple chronic conditions only						
Year 1	876.16*	930.12*	-53.96	893.64*	963.68*	-70.04
Year 2	876.29*	947.85*	-71.56	888.53*	1,030.83*	-142.30*
Overall	876.23*	939.67*	-63.44	890.89*	999.82*	-108.94*
Behavioral health conditions only						
Year 1	463.77*	561.01*	-97.24	477.17*	531.82*	-54.65
Year 2	468.01*	527.60*	-59.59	479.87*	545.72*	-65.85*
Overall	466.12*	542.49*	-76.37	478.67*	539.52*	-60.86*
Disabled beneficiaries only						
Year 1	411.42*	337.93*	73.49*	415.06*	466.23*	-51.16
Year 2	425.99*	425.30*	0.70	430.68*	487.97*	-57.29*
Overall	419.69*	387.53*	32.16	423.93*	478.57*	-54.64*
Dually eligible only						
Year 1	431.70*	434.04*	-2.35	466.16*	500.48*	-34.33
Year 2	454.58*	414.41*	40.17	489.89*	546.37*	-56.47
Overall	444.57*	423.00*	21.57	479.51*	526.29*	-46.79*
Rural beneficiaries only						
Year 1	377.16*	332.06*	45.10	379.46*	445.95*	-66.48*
Year 2	436.92*	372.34*	64.58	440.87*	509.10*	-68.23*
Overall	409.05*	353.56*	55.50	412.24*	479.65*	-67.42*
SASH beneficiaries only						
Year 1	340.23*	447.18*	-106.94*	352.47*	474.09*	-121.62*
Year 2	491.54*	474.86*	16.67	495.46*	528.28*	-32.82
Overall	426.56*	462.97*	-36.41	434.06*	505.01*	-70.95*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. CG = comparison group; 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 F-35 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-35
Vermont: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	79.00*	84.21*	-5.21	84.42*	85.62*	-1.20
Year 2	78.50*	84.32*	-5.82	83.91*	87.55*	-3.64*
Overall	78.80*	84.25*	-5.45	84.22*	86.38*	-2.16
Retinal eye examination						
Year 1	56.81*	52.16*	4.65	57.40*	59.47*	-2.07
Year 2	59.00*	59.39*	-0.39	59.52*	59.74*	-0.22
Overall	57.67*	55.01*	2.66	58.24*	59.58*	-1.34
LDL-C screening						
Year 1	62.49*	69.55*	-7.06*	68.33*	72.18*	-3.85*
Year 2	62.42*	68.01*	-5.59	68.42*	71.12*	-2.70
Overall	62.46*	68.95*	-6.48*	68.37*	71.76*	-3.40
Medical attention for nephropathy						
Year 1	62.21*	64.83*	-2.63	61.72*	63.02*	-1.30
Year 2	63.34*	68.52*	-5.18	63.14*	64.51*	-1.38
Overall	62.65*	66.29*	-3.63	62.28*	63.61*	-1.33
Received all 4 diabetes tests						
Year 1	26.72*	28.74*	-2.02	25.39*	25.10*	0.29
Year 2	26.98*	35.38*	-8.40*	25.49*	27.40*	-1.91
Overall	26.83*	31.36*	-4.53*	25.43*	26.01*	-0.58
Received none of the 4 diabetes tests						
Year 1	3.90*	6.27*	-2.37	3.69*	2.82*	0.87
Year 2	3.46*	5.54	-2.07	3.34*	2.88*	0.46
Overall	3.73*	5.98*	-2.25	3.55*	2.84*	0.71
Total lipid panel						
Year 1	55.32*	58.45*	-3.14	60.87*	64.34*	-3.47*
Year 2	52.86*	55.82*	-2.96	58.83*	63.34*	-4.51*
Overall	54.35*	57.42*	-3.07	60.07*	63.95*	-3.88*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-36 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-36
Vermont: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	12.62*	12.54*	0.08	12.76*	14.06*	-1.31
Year 2	15.59*	12.40*	3.20	15.64*	15.34*	0.31
Overall	14.22*	12.46*	1.76	14.31*	14.75*	-0.44
PQI admissions—overall						
Year 1	33.54*	32.10*	1.44	33.89*	28.24*	5.66*
Year 2	32.43*	29.50*	2.93	32.35*	28.76*	3.59
Overall	32.94*	30.70*	2.24	33.06*	28.52*	4.54*
PQI admissions—acute						
Year 1	14.53*	14.08*	0.45	15.00*	12.63*	2.38
Year 2	13.71*	11.83*	1.88	13.98*	13.06*	0.92
Overall	14.09*	12.87*	1.22	14.45*	12.86*	1.59
PQI admissions—chronic						
Year 1	18.50*	17.15*	1.34	18.29*	14.94*	3.35*
Year 2	18.12*	16.66*	1.46	17.70*	15.10*	2.61
Overall	18.29*	16.89*	1.41	17.97*	15.02*	2.95

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-37 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-37
Vermont: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	644.56*	755.60*	-111.05	649.63*	674.35*	-24.72
Year 2	620.00*	707.98*	-87.98	626.03*	636.94*	-10.91
Overall	631.34*	729.97*	-98.63	636.93*	654.22*	-17.29
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	780.68*	795.81*	-15.14	775.78*	822.35*	-46.57*
Year 2	805.04*	817.76*	-12.72	798.64*	827.47*	-28.83
Overall	793.79*	807.63*	-13.84	788.09*	825.11*	-37.02
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	165.19*	170.08*	-4.90	164.65*	172.09*	-7.44
Year 2	141.60*	170.16*	-28.56*	140.74*	160.09*	-19.36
Overall	152.49*	170.13*	-17.64	151.78*	165.63*	-13.85
Primary care visits as a percent of total visits						
Year 1						
1st quintile	29.97*	24.92*	5.05*	30.94*	32.86*	-1.92
5th quintile	7.46*	9.42*	-1.96*	8.61*	7.94*	0.67
Year 2						
1st quintile	28.84*	26.43*	2.40	29.70*	32.14*	-2.44
5th quintile	7.85*	8.77*	-0.91	9.08*	8.18*	0.90
Overall						
1st quintile	29.50*	25.55*	3.95	30.42*	32.56*	-2.14
5th quintile	7.63*	9.15*	-1.52	8.80*	8.04*	0.77
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	857.31*	786.73*	70.59*	858.50*	823.46*	35.04
Year 2	820.20*	777.12*	43.08	821.45*	864.42*	-42.97
Overall	837.75*	781.66*	56.08*	838.97*	845.05*	-6.09

(continued)

Table F-37 (continued)
Vermont: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	199.90*	259.23*	-59.33	199.67*	200.54*	-0.87
Year 2	184.34*	207.68*	-23.33	182.25*	194.66*	-12.41
Overall	191.67*	231.95*	-40.28	190.45*	197.43*	-6.98
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	24.04*	25.98*	-1.95	23.29*	26.91*	-3.61*
5th quintile	11.78*	10.74*	1.04	12.94*	10.92*	2.02*
Year 2						
1st quintile	23.66*	27.23*	-3.58*	22.74*	28.05*	-5.31*
5th quintile	12.00*	10.14*	1.85*	13.29*	10.37*	2.92*
Overall						
1st quintile	23.88*	26.51*	-2.64*	23.06*	27.39*	-4.33*
5th quintile	11.87*	10.49*	1.38*	13.09*	10.69*	2.40*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-38 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-38
Vermont: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	876.16*	930.12*	-53.96	893.64*	963.68*	-70.04
Year 2	876.29*	947.85*	-71.56	888.53*	1,030.83*	-142.30*
Overall	876.23*	939.67*	-63.44	890.89*	999.82*	-108.94*
Acute-care expenditures						
Year 1	308.13*	299.07*	9.06	311.37*	334.69*	-23.32
Year 2	315.86*	316.25*	-0.38	316.70*	377.15*	-60.44*
Overall	312.29*	308.32*	3.98	314.24*	357.54*	-43.30
Post-acute-care expenditures						
Year 1	140.64*	186.11*	-45.47*	149.18*	188.18*	-39.00*
Year 2	145.31*	180.74*	-35.43	153.46*	194.18*	-40.72*
Overall	143.15*	183.22*	-40.06*	151.48*	191.41*	-39.93*
ER expenditures						
Year 1	34.31*	27.03*	7.28*	39.93*	43.83*	-3.90
Year 2	37.30*	32.93*	4.37	42.64*	49.78*	-7.14
Overall	35.92*	30.21*	5.71*	41.39*	47.03*	-5.64
Outpatient expenditures						
Year 1	188.45*	153.07*	35.38*	193.87*	181.99*	11.88
Year 2	176.47*	154.20*	22.26*	182.06*	193.06*	-10.99
Overall	182.00*	153.68*	28.32*	187.51*	187.95*	-0.43
Specialty physician expenditures						
Year 1	26.83*	30.36*	-3.53	26.66*	31.32*	-4.66
Year 2	24.96*	33.73*	-8.77*	24.58*	27.08*	-2.50
Overall	25.82*	32.17*	-6.35	25.54*	29.04*	-3.50
Primary care physician expenditures						
Year 1	20.31*	29.71*	-9.40*	21.48*	26.95*	-5.47*
Year 2	20.97*	27.44*	-6.47*	21.89*	27.41*	-5.52*
Overall	20.67*	28.49*	-7.82*	21.70*	27.20*	-5.49*

(continued)

Table F-38 (continued)
Vermont: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	67.43*	79.64*	-12.21	60.93*	48.39*	12.54*
Year 2	67.45*	83.73*	-16.27	60.51*	48.85*	11.66*
Overall	67.44*	81.84*	-14.40	60.70*	48.64*	12.07*
Other expenditures						
Year 1	27.83*	32.32*	-4.49	28.91*	33.58*	-4.67
Year 2	27.89*	34.47*	-6.58	28.71*	35.00*	-6.29*
Overall	27.86*	33.48*	-5.61	28.80*	34.35*	-5.55
Laboratory expenditures						
Year 1	-0.08	1.66	-1.74*	-0.15	2.36*	-2.51*
Year 2	-0.26	1.42	-1.67	-0.29	1.24*	-1.52*
Overall	-0.18	1.53	-1.71	-0.22	1.76*	-1.98*
Imaging expenditures						
Year 1	-3.11*	-1.05	-2.06*	-3.72*	-1.94*	-1.78*
Year 2	-3.87*	-4.18*	0.31	-4.46*	-3.07*	-1.39*
Overall	-3.52*	-2.73*	-0.78	-4.12*	-2.55*	-1.57*
Other facility expenditures						
Year 1	0.15	-1.13	1.28	-4.67	-5.77	1.11
Year 2	0.03	-1.63	1.66	-5.39	-7.15	1.76
Overall	0.09	-1.40	1.48	-5.06	-6.51	1.46

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-39 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-39
Vermont: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	129.53*	136.11*	-6.58	129.12*	120.15*	8.97*
Year 2	127.81*	124.37*	3.44	126.23*	121.42*	4.81
Overall	128.60*	129.79*	-1.19	127.56*	120.84*	6.73*
ER visits not leading to hospitalization						
Year 1	257.62*	224.74*	32.88*	259.10*	233.62*	25.48*
Year 2	247.61*	220.29*	27.32*	247.44*	230.41*	17.03
Overall	252.23*	222.34*	29.88*	252.82*	231.89*	20.93*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-40 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-40
Vermont: Decompositions of the expenditures for behavioral health care estimates

	Model predicted average change from baseline			Model predicted average change from baseline		
Outcome	**MAPCP**	**CG PCMHs**	**Difference**	**MAPCP**	**CG non-PCMHs**	**Difference**
Total Medicare expenditures						
Year 1	463.77*	561.01*	-97.24	477.17*	531.82*	-54.65
Year 2	468.01*	527.60*	-59.59	479.87*	545.72*	-65.85*
Overall	466.12*	542.49*	-76.37	478.67*	539.52*	-60.86*
Acute-care expenditures						
Year 1	155.91*	155.88*	0.03	146.30*	163.69*	-17.39
Year 2	160.97*	155.23*	5.74	150.83*	153.38*	-2.55
Overall	158.71*	155.52*	3.19	148.81*	157.98*	-9.16
Expenditures for ER visits not leading to hospitalization						
Year 1	24.28*	24.90*	-0.62	27.17*	26.69*	0.48
Year 2	25.88*	24.75*	1.13	28.72*	32.66*	-3.94
Overall	25.17*	24.82*	0.35	28.03*	30.00*	-1.97
Total for principal diagnosis of BHC						
Year 1	22.40*	22.71*	-0.30	20.80*	26.75*	-5.95
Year 2	19.73*	28.31*	-8.58*	18.97*	23.74*	-4.77
Overall	20.92*	25.82*	-4.89	19.78*	25.08*	-5.30
Total for secondary diagnosis of BHC						
Year 1	184.88*	159.53*	25.35	195.24*	224.86*	-29.62
Year 2	188.77*	167.40*	21.38	199.21*	203.66*	-4.45
Overall	187.04*	163.89*	23.15	197.44*	213.11*	-15.66

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-41 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-41
Vermont: Decompositions of the behavioral and non-behavioral health care utilization estimates

	Model predicted utilization during demonstration			Model predicted utilization during demonstration		
Outcome	**MAPCP**	**CG PCMHs**	**Difference**	**MAPCP**	**CG non-PCMHs**	**Difference**
All-cause inpatient admissions						
Year 1	68.33*	67.42*	0.91	67.46*	63.03*	4.42
Year 2	67.31*	60.34*	6.97	66.53*	64.25*	2.29
Overall	67.76*	63.50*	4.27	66.95*	63.71*	3.24
ER visits not leading to hospitalization						
Year 1	278.76*	263.86*	14.90	279.01*	249.84*	29.16*
Year 2	266.73*	247.94*	18.78	266.88*	250.61*	16.27
Overall	272.09*	255.04*	17.05	272.28*	250.27*	22.02*
Behavioral health inpatient admissions						
Year 1	4.52*	3.73*	0.79	4.13*	5.81*	-1.68
Year 2	3.82*	4.20*	-0.38	3.50*	4.64*	-1.14
Overall	4.13*	3.99*	0.14	3.78*	5.16*	-1.38*
Behavioral health ER visits						
Year 1	22.60*	17.94*	4.65	22.78*	20.00*	2.77
Year 2	20.00*	20.63*	-0.63	20.12*	17.43*	2.70
Overall	21.16*	19.43*	1.73	21.31*	18.57*	2.73
Behavioral health outpatient visits						
Year 1	627.00*	612.15*	14.86	615.44*	542.99*	72.44*
Year 2	596.81*	588.83*	7.98	582.98*	561.06*	21.93
Overall	610.29*	599.24*	11.05	597.47*	553.00*	44.47*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-42 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on expenditures and health care utilization for disabled beneficiaries.

Table F-42
Vermont: Decompositions of the expenditure and health care utilization estimates for disabled Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG non-PCMHs	
Acute-care expenditures			
Year 1	159.83*	196.74*	-36.91
Year 2	171.15*	181.55*	-10.40
Overall	166.25*	188.11*	-21.86
Expenditures for ER visits not leading to hospitalization			
Year 1	23.51*	26.37*	-2.86
Year 2	27.55*	33.05*	-5.50*
Overall	25.80*	30.16*	-4.36*
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	59.22*	53.20*	6.02*
Year 2	57.27*	56.75*	0.52
Overall	58.11*	55.22*	2.90
ER visits not leading to hospitalization			
Year 1	224.86*	214.27*	10.59
Year 2	227.76*	217.76*	10.00
Overall	226.51*	216.25*	10.25
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	193.49*	197.87*	-4.38
Year 2	175.13*	187.92*	-12.79
Overall	183.39*	192.40*	-9.00

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-43 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on expenditures and health care utilization for dually eligible beneficiaries.

Table F-43
Vermont: Decompositions of the expenditure and health care utilization estimates for dually eligible Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG non-PCMHs	
Acute-care expenditures			
Year 1	172.19*	197.71*	-25.52
Year 2	188.78*	203.45*	-14.67
Overall	181.52*	200.94*	-19.42
Expenditures for ER visits not leading to hospitalization			
Year 1	26.22*	28.16*	-1.94
Year 2	29.45*	37.15*	-7.70*
Overall	28.03*	33.22*	-5.18*
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	62.79*	55.17*	7.63*
Year 2	63.09*	59.51*	3.58
Overall	62.96*	57.61*	5.35*
ER visits not leading to hospitalization			
Year 1	229.29*	209.80*	19.49*
Year 2	227.92*	215.86*	12.06
Overall	228.52*	213.21*	15.31*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	190.71*	173.22*	17.49
Year 2	166.59*	182.41*	-15.82
Overall	177.40*	178.29*	-0.89

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-44 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on expenditures and health care utilization for rural beneficiaries.

Table F-44
Vermont: Decompositions of the expenditure and health care utilization estimates among rural Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG non-PCMHs	
Acute-care expenditures			
Year 1	121.57*	126.68*	-5.11
Year 2	147.65*	152.47*	-4.82
Overall	135.49*	140.45*	-4.96
Expenditures for ER visits not leading to hospitalization			
Year 1	21.03*	21.63*	-0.60
Year 2	26.55*	32.49*	-5.94*
Overall	23.98*	27.43*	-3.45
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	50.21*	46.56*	3.66
Year 2	50.86*	50.11*	0.75
Overall	50.56*	48.45*	2.11
ER visits not leading to hospitalization			
Year 1	157.22*	132.60*	24.62*
Year 2	157.63*	139.97*	17.66*
Overall	157.44*	136.53*	20.90*
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	143.14	147.84	-4.69
Year 2	125.21	144.95	-19.74
Overall	133.81	146.34	-12.53

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-45 presents decompositions of the estimates of the changes associated with the Vermont MAPCP Demonstration on expenditures and health care utilization for SASH beneficiaries.

Table F-45
Vermont: Decompositions of the expenditure and health care utilization estimates among SASH Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG non-PCMHs	
Acute-care expenditures			
Year 1	88.20*	147.40*	-59.20*
Year 2	163.08*	166.45*	-3.37
Overall	130.93*	158.27*	-27.34
Expenditures for ER visits not leading to hospitalization			
Year 1	23.04*	23.55*	-0.51
Year 2	25.58*	28.69*	-3.12
Overall	24.49*	26.48*	-2.00
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	59.34*	64.39*	-5.05
Year 2	69.80*	68.65*	1.15
Overall	65.31*	66.82*	-1.51
ER visits not leading to hospitalization			
Year 1	198.29*	181.08*	17.21
Year 2	199.03*	185.76*	13.27
Overall	198.71*	183.75*	14.96
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	138.03*	151.55*	-13.52
Year 2	197.87*	148.09*	49.77*
Overall	173.37*	149.51*	23.86

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.5 Decompositions of the North Carolina Estimates

Table F-46 presents a decomposition of the estimates of the changes associated with the North Carolina MAPCP Demonstration on process of care indicators.

Table F-46
North Carolina: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	93.18*	92.21*	0.97	93.11*	91.32*	1.79*
Year 2	93.15*	91.21*	1.94*	93.09*	91.97*	1.12
Overall	93.17*	91.81*	1.36*	93.10*	91.58*	1.52*
Retinal eye examination						
Year 1	52.38*	55.32*	-2.93*	53.61*	55.21*	-1.60
Year 2	56.91*	55.34*	1.57	58.10*	56.87*	1.23
Overall	54.18*	55.33*	-1.14	55.40*	55.87*	-0.47
LDL-C screening						
Year 1	85.88*	83.71*	2.17	86.86*	85.71*	1.15
Year 2	86.41*	83.71*	2.70	87.37*	86.21*	1.16
Overall	86.09*	83.71*	2.38	87.06*	85.91*	1.16
Medical attention for nephropathy						
Year 1	60.88*	58.88*	2.00	60.44*	59.94*	0.50
Year 2	65.10*	59.40*	5.71	64.67*	61.37*	3.30
Overall	62.56*	59.09*	3.47	62.12*	60.51*	1.61
Received all 4 diabetes tests						
Year 1	28.67*	30.63*	-1.95	28.49*	30.23*	-1.74
Year 2	34.06*	28.87*	5.18*	33.95*	31.82*	2.13
Overall	30.81*	29.93*	0.88	30.66*	30.86*	-0.20
Received none of the 4 diabetes tests						
Year 1	1.64*	2.10*	-0.46	1.96*	2.60*	-0.65*
Year 2	1.53*	2.52*	-0.99*	1.87*	2.57*	-0.70*
Overall	1.59*	2.27*	-0.67*	1.92*	2.59*	-0.67*
Total lipid panel						
Year 1	75.94*	72.57*	3.37	80.14*	78.73*	1.41
Year 2	77.33*	75.93*	1.40	81.38*	78.76*	2.61*
Overall	76.51*	73.95*	2.56	80.65*	78.74*	1.90

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-47 presents a decomposition of the estimates of the changes associated with the North Carolina MAPCP Demonstration on selected health outcomes.

Table F-47
North Carolina: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	6.80*	7.14*	-0.34	6.88*	6.94*	-0.07
Year 2	7.40*	8.06*	-0.66	7.57*	8.47*	-0.90*
Overall	7.12*	7.63*	-0.51	7.25*	7.76*	-0.52
PQI admissions—overall						
Year 1	12.25*	12.61*	-0.36	12.18*	12.40*	-0.23
Year 2	13.60*	12.49*	1.11	13.65*	12.48*	1.18
Overall	12.97*	12.54*	0.43	12.97*	12.44*	0.52
PQI admissions—acute						
Year 1	6.11*	6.12*	0.00	6.25*	5.73*	0.51
Year 2	6.64*	6.17*	0.48	6.76*	5.59*	1.17*
Overall	6.40*	6.14*	0.25	6.52*	5.65*	0.87*
PQI admissions—chronic						
Year 1	5.94	6.32	-0.38	5.75*	6.39*	-0.64
Year 2	6.67	6.17	0.50	6.60*	6.58*	0.02
Overall	6.33	6.24	0.09	6.21*	6.49*	-0.29

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-48 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on access to care and coordination of care.

Table F-48
North Carolina: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	933.55*	955.59*	-22.03	947.62*	939.36*	8.26
Year 2	920.52*	948.35*	-27.83	935.69*	950.94*	-15.25
Overall	926.57*	951.71*	-25.14	941.23*	945.56*	-4.33
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	628.63*	651.79*	-23.15	626.71*	640.41*	-13.70
Year 2	637.56*	644.97*	-7.41	638.32*	663.67*	-25.36*
Overall	633.41*	648.14*	-14.73	632.93*	652.87*	-19.94
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	224.96*	205.72*	19.23*	222.98*	198.91*	24.07*
Year 2	218.84*	195.07*	23.77*	218.03*	187.89*	30.13*
Overall	221.68*	200.02*	21.67*	220.33*	193.01*	27.32*
Primary care visits as a percent of total visits						
Year 1						
1st quintile	23.41*	23.58*	-0.17	25.44*	26.08*	-0.65
5th quintile	17.19*	17.05*	0.14	17.06*	16.59*	0.47
Year 2						
1st quintile	23.46*	25.01*	-1.55	25.41*	25.77*	-0.37
5th quintile	17.15*	15.98*	1.17	17.08*	16.81*	0.27
Overall						
1st quintile	23.43*	24.19*	-0.76	25.42*	25.95*	-0.53
5th quintile	17.17*	16.60*	0.58	17.07*	16.69*	0.39
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	743.58*	773.50*	-29.92	740.23*	739.96*	0.27
Year 2	725.59*	722.00*	3.59	726.63*	714.59*	12.04
Overall	734.30*	746.92*	-12.62	733.21*	726.86*	6.35

(continued)

Table F-48 (continued)
North Carolina: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	179.12*	185.45*	-6.33	178.90*	165.43*	13.47
Year 2	171.56*	159.38*	12.18	172.50*	169.45*	3.05
Overall	175.21*	171.96*	3.25	175.59*	167.51*	8.08
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	19.41*	19.07*	0.33	19.57*	19.96*	-0.39
5th quintile	18.64*	18.97*	-0.33	18.91*	18.54*	0.38
Year 2						
1st quintile	20.25*	19.82*	0.44	20.43*	20.71*	-0.28
5th quintile	17.84*	18.25*	-0.40	18.10*	17.85*	0.25
Overall						
1st quintile	19.77*	19.39*	0.38	19.94*	20.28*	-0.34
5th quintile	18.30*	18.66*	-0.36	18.57*	18.24*	0.32

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-49 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on medical expenditures.

Table F-49
North Carolina: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	440.82*	468.30*	-27.48	444.84*	461.38*	-16.54
Year 2	467.85*	471.16*	-3.31	473.48*	484.80*	-11.31
Overall	455.29*	469.83*	-14.54	460.18*	473.92*	-13.74
Acute-care expenditures						
Year 1	130.63*	129.55*	1.08	136.18*	155.48*	-19.31
Year 2	139.59*	149.25*	-9.66	146.17*	158.89*	-12.73
Overall	135.43*	140.10*	-4.67	141.52*	157.31*	-15.78
Post-acute-care expenditures						
Year 1	69.07*	80.13*	-11.07	72.11*	68.80*	3.31
Year 2	75.07*	72.37*	2.70	78.49*	74.81*	3.68
Overall	72.28*	75.98*	-3.69	75.53*	72.02*	3.51
ER expenditures						
Year 1	21.55*	20.66*	0.89	20.91*	20.32*	0.59
Year 2	23.08*	21.16*	1.92	22.58*	21.23*	1.34
Overall	22.37*	20.93*	1.44	21.80*	20.81*	0.99
Outpatient expenditures						
Year 1	67.99*	79.33*	-11.34	63.98*	62.27*	1.71
Year 2	78.19*	71.27*	6.92	74.14*	64.11*	10.04*
Overall	73.45*	75.02*	-1.56	69.42*	63.25*	6.17
Specialty physician expenditures						
Year 1	39.87*	39.04*	0.83	37.26*	40.54*	-3.28
Year 2	43.23*	39.16*	4.07	40.50*	44.93*	-4.43
Overall	41.67*	39.11*	2.56	39.00*	42.89*	-3.90
Primary care physician expenditures						
Year 1	20.91*	22.24*	-1.34	22.42*	23.08*	-0.66
Year 2	21.46*	23.05*	-1.59	23.02*	25.07*	-2.05
Overall	21.20*	22.68*	-1.47	22.74*	24.14*	-1.40
Home health expenditures						
Year 1	27.54*	29.15*	-1.62	24.89*	22.24*	2.65
Year 2	26.43*	28.84*	-2.41	23.82*	23.21*	0.61
Overall	26.95*	28.99*	-2.04	24.32*	22.76*	1.56

(continued)

Table F-49 (continued)
North Carolina: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	19.23*	21.31*	-2.08	22.38*	30.91*	-8.53*
Year 2	19.94*	23.73*	-3.79*	23.08*	31.71*	-8.64*
Overall	19.61*	22.61*	-3.00	22.76*	31.34*	-8.59*
Laboratory expenditures						
Year 1	4.83*	6.97*	-2.14	4.65*	7.14*	-2.49
Year 2	3.78*	5.13*	-1.35	3.71*	6.84*	-3.13
Overall	4.27*	5.99*	-1.72	4.15*	6.98*	-2.83
Imaging expenditures						
Year 1	-1.87*	-1.30	-0.57	-0.86	-0.36	-0.50
Year 2	-3.21*	-2.38*	-0.82	-2.07*	-0.92*	-1.15
Overall	-2.58*	-1.88	-0.70	-1.51	-0.66	-0.85
Other facility expenditures						
Year 1	-0.16	-0.66	0.50	0.22	-0.23	0.45
Year 2	-0.16	-0.42	0.25	0.20	0.34	-0.14
Overall	-0.16	-0.53	0.37*	0.21	0.07	0.14

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-50 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on medical service utilizations.

Table F-50
North Carolina: Decompositions of the medical service utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	68.01*	68.39*	-0.38	67.60*	68.29*	-0.69
Year 2	69.69*	69.54*	0.15	69.88*	67.99*	1.89
Overall	68.91*	69.00*	-0.10	68.82*	68.13*	0.69
ER visits not leading to hospitalization						
Year 1	138.72*	133.00*	5.72	136.66*	137.55*	-0.89
Year 2	141.59*	136.60*	4.99	139.98*	142.94*	-2.96
Overall	140.25*	134.93*	5.33	138.44*	140.44*	-2.00

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-51 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-51
North Carolina: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Multiple chronic conditions only						
Year 1	949.17*	1,000.12*	-50.95	970.69*	999.60*	-28.91
Year 2	902.90*	962.97*	-60.07	926.93*	1,004.47*	-77.53
Overall	925.55*	981.15*	-55.61	948.35*	1,002.09*	-53.74
Behavioral health conditions only						
Year 1	676.45*	774.20*	-97.75	616.06*	617.18*	-1.12
Year 2	656.42*	662.95*	-6.53	596.34*	635.64*	-39.29
Overall	666.15*	716.96*	-50.82	605.91*	626.67*	-20.76
Disabled beneficiaries only						
Year 1	469.54*	513.17*	-43.63	490.76*	542.68*	-51.92
Year 2	482.93*	522.12*	-39.18	507.71*	518.86*	-11.14
Overall	476.46*	517.79*	-41.33	499.52*	530.37*	-30.85
Dually eligible only						
Year 1	562.43*	569.66*	-7.23	595.76*	565.65*	30.11
Year 2	562.53*	537.36*	25.17	600.97*	586.49*	14.48
Overall	562.48*	553.13*	9.36	598.43*	576.32*	22.11
Rural beneficiaries only						
Year 1	469.65*	540.64*	-70.98	473.83*	465.60*	8.23
Year 2	505.69*	540.51*	-34.82	515.01*	498.50*	16.51
Overall	488.53*	540.57*	-52.04	495.41*	482.84*	12.57
Non-White beneficiaries only						
Year 1	476.38*	504.41*	-28.03	535.81*	638.26*	-102.45
Year 2	497.19*	518.18*	-20.99	563.45*	581.97*	-18.52
Overall	487.35*	511.67*	-24.32	550.38*	608.60*	-58.22
Network 1 beneficiaries only						
Year 1	434.59*	463.11*	-28.52	446.40*	457.30*	-10.90
Year 2	440.99*	464.29*	-23.30	450.71*	481.51*	-30.79
Overall	438.07*	463.75*	-25.68	448.75*	470.46*	-21.72

(continued)

Table F-51 (continued)
North Carolina: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Network 2 beneficiaries only						
Year 1	317.47*	464.92*	-147.45*	326.47*	466.33*	-139.86*
Year 2	396.51*	458.85*	-73.35*	405.30*	479.50*	-96.79*
Overall	363.08*	461.41*	-98.33*	371.97*	473.93*	-101.96*
Network 3 beneficiaries only						
Year 1	474.46*	463.66*	10.80	481.69*	454.33*	27.35
Year 2	506.14*	465.96*	40.18	515.28*	482.95*	32.33
Overall	489.97*	464.79*	25.18	498.13*	468.34*	29.79
Network 4 beneficiaries only						
Year 1	386.58*	466.28*	-79.70*	391.74*	469.09*	-77.36*
Year 2	472.92*	461.94*	11.63	480.39*	481.18*	-11.91
Overall	439.16*	463.64*	-24.48	445.73*	476.45*	-30.72

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-52 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-52
North Carolina: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	90.63*	89.72*	0.91	90.14*	88.61*	1.54
Year 2	91.18*	90.29*	0.89	90.79*	89.88*	0.91
Overall	90.84*	89.94*	0.90	90.38*	89.08*	1.30
Retinal eye examination						
Year 1	50.73*	54.52*	-3.79	51.76*	54.02*	-2.26
Year 2	57.40*	52.64*	4.76*	58.18*	55.52*	2.66
Overall	53.21*	53.82*	-0.61	54.15*	54.58*	-0.43
LDL-C screening						
Year 1	81.60*	80.86*	0.74	83.03*	81.95*	1.08
Year 2	83.30*	82.44*	0.86	84.46*	82.76*	1.69
Overall	82.23*	81.44*	0.79	83.56*	82.25*	1.31
Medical attention for nephropathy						
Year 1	68.47*	65.20*	3.27	66.88*	66.09*	0.79
Year 2	73.29*	64.06*	9.23*	71.67*	66.33*	5.34*
Overall	70.27*	64.78*	5.49	68.66*	66.18*	2.49
Received all 4 diabetes tests						
Year 1	29.56*	29.45*	0.11	28.84*	30.32*	-1.48
Year 2	37.77*	29.15*	8.62*	36.76*	31.76*	5.00*
Overall	32.61*	29.34*	3.28	31.79*	30.86*	0.93
Received none of the 4 diabetes tests						
Year 1	1.35*	1.00	0.35	2.26*	3.22*	-0.96
Year 2	1.10*	1.99*	-0.89*	1.92*	2.50*	-0.58
Overall	1.26*	1.37*	-0.11	2.13*	2.95*	-0.82*
Total lipid panel						
Year 1	70.29*	68.13*	2.16	75.44*	73.91*	1.53
Year 2	72.18*	72.24*	-0.05	77.00*	75.13*	1.88
Overall	71.00*	69.68*	1.32	76.03*	74.37*	1.66

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-53 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-53
North Carolina: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	18.10*	20.24*	-2.14	18.18*	19.25*	-1.07
Year 2	16.39*	21.30*	-4.91*	16.68*	22.87*	-6.19*
Overall	17.23*	20.78*	-3.55	17.41*	21.10*	-3.69*
PQI admissions—overall						
Year 1	42.14*	43.15*	-1.01	42.33*	41.98*	0.35
Year 2	42.65*	44.62*	-1.97	43.10*	40.12*	2.98
Overall	42.40*	43.90*	-1.50	42.72*	41.03*	1.69
PQI admissions—acute						
Year 1	18.44*	17.20*	1.24	18.25*	16.38*	1.87
Year 2	19.46*	16.60*	2.87	19.19*	15.69*	3.51*
Overall	18.96*	16.89*	2.07	18.73*	16.02*	2.71*
PQI admissions—chronic						
Year 1	22.93*	25.18*	-2.25	22.61*	24.02*	-1.41
Year 2	22.25*	26.87*	-4.61	22.25*	22.93*	-0.68
Overall	22.58*	26.04*	-3.46	22.43*	23.46*	-1.04

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-54 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-54
North Carolina: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	1,278.15*	1,323.45*	-45.29	1,286.28*	1,264.91*	21.37
Year 2	1,223.05*	1,269.81*	-46.76	1,239.55*	1,251.02*	-11.47
Overall	1,250.02*	1,296.06*	-46.04	1,262.42*	1,257.82*	4.60
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	928.54*	986.27*	-57.74	928.46*	955.18*	-26.72
Year 2	901.25*	929.35*	-28.10	908.97*	961.19*	-52.22*
Overall	914.61*	957.21*	-42.60	918.51*	958.25*	-39.74*
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	333.27*	277.30*	55.97*	330.11*	289.55*	40.56*
Year 2	299.99*	260.37*	39.63	300.53*	261.67*	38.86*
Overall	316.28*	268.65*	47.63*	315.00*	275.31*	39.69*
Primary care visits as a percent of total visits						
Year 1						
1st quintile	25.70*	25.94*	-0.24	27.74*	28.72*	-0.98
5th quintile	13.90*	13.75*	0.15	13.76*	13.19*	0.56
Year 2						
1st quintile	24.87*	26.15*	-1.28	26.73*	27.21*	-0.49
5th quintile	14.43*	13.62*	0.81	14.38*	14.08*	0.30
Overall						
1st quintile	25.36*	26.03*	-0.67	27.32*	28.10*	-0.78
5th quintile	14.12*	13.70*	0.42	14.01*	13.56*	0.46
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	796.53*	841.05*	-44.52	795.44*	795.42*	0.01
Year 2	780.57*	760.20*	20.37	782.31*	754.53*	27.78
Overall	788.84*	802.09*	-13.25	789.11*	775.72*	13.39

(continued)

Table F-54 (continued)
North Carolina: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	228.75*	239.03*	-10.28	228.60*	215.54*	13.05
Year 2	220.82*	206.16*	14.66	221.79*	214.71*	7.09
Overall	224.91*	223.11*	1.80	225.30*	215.14*	10.16
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	16.37*	15.95*	0.42	17.33*	17.90*	-0.57
5th quintile	21.75*	22.28*	-0.53	20.74*	20.10*	0.64
Year 2						
1st quintile	17.71*	16.45*	1.26	18.75*	17.92*	0.83
5th quintile	20.19*	21.66*	-1.47	19.20*	20.08*	-0.88
Overall						
1st quintile	16.93*	16.16*	0.77	17.92*	17.90*	0.02
5th quintile	21.10*	22.02*	-0.92	20.09*	20.09*	0.01

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-55 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-55
North Carolina: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	949.17*	1,000.12*	-50.95	970.69*	999.60*	-28.91
Year 2	902.90*	962.97*	-60.07	926.93*	1,004.47*	-77.53
Overall	925.55*	981.15*	-55.61	948.35*	1,002.09*	-53.74
Acute-care expenditures						
Year 1	287.75*	280.75*	7.01	320.64*	373.03*	-52.40
Year 2	265.06*	310.72*	-45.67	298.75*	359.64*	-60.89*
Overall	276.16*	296.05*	-19.89	309.46*	366.19*	-56.73
Post-acute-care expenditures						
Year 1	149.97*	178.07*	-28.10	157.22*	149.88*	7.35
Year 2	150.40*	135.79*	14.61	158.83*	159.11*	-0.28
Overall	150.19*	156.48*	-6.29	158.04*	154.59*	3.45
ER expenditures						
Year 1	41.14*	38.30*	2.84	41.06*	39.39*	1.67
Year 2	40.62*	40.23*	0.39	40.56*	40.80*	-0.24
Overall	40.87*	39.29*	1.59	40.81*	40.11*	0.70
Outpatient expenditures						
Year 1	145.71*	172.94*	-27.23*	134.29*	127.77*	6.52
Year 2	149.92*	156.73*	-6.82	139.31*	130.77*	8.53
Overall	147.86*	164.67*	-16.81	136.85*	129.30*	7.55
Specialty physician expenditures						
Year 1	67.34*	70.24*	-2.91	65.08*	72.18*	-7.10
Year 2	64.79*	63.59*	1.21	62.07*	73.84*	-11.77
Overall	66.04*	66.84*	-0.81	63.54*	73.03*	-9.49
Primary care physician expenditures						
Year 1	38.68*	39.69*	-1.01	39.01*	38.84*	0.17
Year 2	36.49*	37.98*	-1.49	37.04*	41.56*	-4.52
Overall	37.56*	38.81*	-1.25	38.01*	40.23*	-2.23

(continued)

Table F-55 (continued)
North Carolina: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	68.29*	70.95*	-2.66	62.47*	50.64*	11.83*
Year 2	56.62*	66.13*	-9.50	51.51*	48.75*	2.77
Overall	62.33*	68.48*	-6.15	56.88*	49.67*	7.20
Other expenditures						
Year 1	40.63*	41.23*	-0.60	45.66*	66.47*	-20.81*
Year 2	39.54*	48.69*	-9.16	43.35*	65.33*	-21.98*
Overall	40.07*	45.04*	-4.97	44.48*	65.89*	-21.41*
Laboratory expenditures						
Year 1	4.64	8.64*	-4.01	3.29	7.56*	-4.28
Year 2	4.17	6.02*	-1.85	2.95	7.12*	-4.16
Overall	4.40	7.30*	-2.90	3.12	7.33*	-4.22
Imaging expenditures						
Year 1	-0.34	1.39	-1.73	-0.91	0.18	-1.09
Year 2	-3.26*	-1.22	-2.05	-3.70*	-1.67*	-2.03
Overall	-1.83	0.06	-1.89	-2.34	-0.77	-1.57
Other facility expenditures						
Year 1	0.54	-0.87	1.42	1.74*	1.00*	0.74
Year 2	0.42	0.09	0.33	1.41*	2.02	-0.61
Overall	0.48	-0.38	0.86	1.57*	1.52*	0.05

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-56 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-56
North Carolina: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	170.66*	171.80*	-1.13	169.83*	170.81*	-0.98
Year 2	163.32*	173.83*	-10.52	163.80*	164.58*	-0.79
Overall	166.91*	172.84*	-5.92	166.75*	167.63*	-0.88
ER visits not leading to hospitalization						
Year 1	279.97*	263.14*	16.82	276.93*	269.11*	7.82
Year 2	276.28*	266.14*	10.14	273.00*	272.06*	0.94
Overall	278.08*	264.67*	13.41	274.92*	270.61*	4.31

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-57 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-57
North Carolina: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	676.45*	774.20*	-97.75	616.06*	617.18*	-1.12
Year 2	656.42*	662.95*	-6.53	596.34*	635.64*	-39.29
Overall	666.15*	716.96*	-50.82	605.91*	626.67*	-20.76
Acute-care expenditures						
Year 1	224.45*	254.95*	-30.50	193.38*	197.66*	-4.28
Year 2	215.83*	224.24*	-8.41	185.35*	209.27*	-23.92
Overall	220.01*	239.15*	-19.14	189.25*	203.64*	-14.39
Expenditures for ER visits not leading to hospitalization						
Year 1	35.66*	36.93*	-1.27	35.52*	37.38*	-1.86
Year 2	34.50*	35.58*	-1.08	34.84*	35.56*	-0.72
Overall	35.06*	36.24*	-1.17	35.17*	36.44*	-1.27
Total for principal diagnosis of BHC						
Year 1	9.12*	14.89	-5.77	6.41	16.02*	-9.61*
Year 2	7.92	10.82	-2.90	6.46	16.85*	-10.39*
Overall	8.50*	12.80*	-4.29	6.44*	16.45*	-10.01*
Total for secondary diagnosis of BHC						
Year 1	219.81*	266.91*	-47.11	208.96*	216.31*	-7.35
Year 2	215.85*	233.94*	-18.09	205.22*	229.79*	-24.57
Overall	217.77*	249.96*	-32.18	207.03*	223.24*	-16.21

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-58 presents decompositions of the estimates of the changes associated with the North Carolina MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-58
North Carolina: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	96.20*	103.99*	-7.79	97.19*	101.39*	-4.20
Year 2	98.82*	92.41*	6.42	99.42*	95.49*	3.93
Overall	97.55*	98.03*	-0.48	98.34*	98.35*	-0.02
ER visits not leading to hospitalization						
Year 1	313.76*	291.10*	22.66	314.40*	311.50*	2.90
Year 2	290.06*	277.33*	12.73	290.43*	314.82*	-24.39
Overall	301.57*	284.02*	17.55	302.07*	313.21*	-11.14
Behavioral health inpatient admissions						
Year 1	4.61*	7.22*	-2.61	5.55*	8.02*	-2.47
Year 2	2.88*	5.75*	-2.87	3.49*	7.81*	-4.32*
Overall	3.72*	6.46*	-2.74	4.49*	7.92*	-3.42*
Behavioral health ER visits						
Year 1	18.78*	21.25*	-2.46	20.94*	25.17*	-4.23
Year 2	18.44*	20.29*	-1.85	20.57*	25.76*	-5.19
Overall	18.61*	20.76*	-2.15	20.75*	25.48*	-4.72*
Behavioral health outpatient visits						
Year 1	365.72*	369.32*	-3.60	366.93*	367.88*	-0.95
Year 2	390.64*	407.36*	-16.72	393.98*	368.73*	25.24
Overall	378.48*	388.80*	-10.32	380.78*	368.32*	12.46

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.6 Decompositions of the Minnesota Estimates

Table F-59 presents a decomposition of the estimates of the changes associated with the Minnesota MAPCP Demonstration on process of care indicators.

Table F-59
Minnesota: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference
	MAPCP	CG non-PCMHs	
HbA1c testing			
Year 1	93.82*	92.80*	1.02
Year 2	93.38*	92.45*	0.93
Overall	93.71*	92.71*	1.00
Retinal eye examination			
Year 1	56.93*	53.89*	3.04*
Year 2	57.51*	57.17*	0.33
Overall	57.08*	54.71*	2.36
LDL-C screening			
Year 1	89.00*	88.32*	0.68
Year 2	90.89*	87.83*	3.06*
Overall	89.47*	88.19*	1.28
Medical attention for nephropathy			
Year 1	75.62*	70.97*	4.65*
Year 2	78.80*	74.20*	4.60
Overall	76.42*	71.78*	4.64*
Received all 4 diabetes tests			
Year 1	40.24*	34.36*	5.88*
Year 2	41.54*	39.20*	2.34
Overall	40.56*	35.57*	4.99*
Received none of the 4 diabetes tests			
Year 1	1.64*	1.71*	-0.07
Year 2	1.54*	2.36*	-0.82
Overall	1.61*	1.87*	-0.26
Total lipid panel			
Year 1	67.41*	68.54*	-1.12
Year 2	64.95*	66.14*	-1.19
Overall	66.84*	67.98*	-1.14

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-60 presents a decomposition of the estimates of the changes associated with the Minnesota MAPCP Demonstration on selected health outcomes.

Table F-60
Minnesota: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
Avoidable catastrophic events			
Year 1	7.42*	7.37*	0.04
Year 2	8.06*	8.05*	0.01
Overall	7.81*	7.79*	0.02
PQI admissions—overall			
Year 1	9.89*	10.26*	-0.37
Year 2	10.40*	10.78*	-0.38
Overall	10.20*	10.58*	-0.38
PQI admissions—acute			
Year 1	4.37*	4.63*	-0.26
Year 2	4.27*	4.45*	-0.18
Overall	4.31*	4.52*	-0.21
PQI admissions—chronic			
Year 1	5.34*	5.40*	-0.06
Year 2	5.92*	6.00*	-0.07
Overall	5.70*	5.76*	-0.07

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-61 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on access to care and coordination of care.

Table F-61
Minnesota: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)			
Year 1	1,016.99*	954.36*	62.64
Year 2	1,057.98*	1,080.21*	-22.23
Overall	1,042.13*	1,031.54*	10.59
Medical specialist visits (per 1,000 beneficiaries)			
Year 1	475.33*	484.45*	-9.12
Year 2	536.41*	536.41*	0.00
Overall	512.79*	516.31*	-3.52
Surgical specialist visits (per 1,000 beneficiaries)			
Year 1	104.73*	107.62*	-2.89
Year 2	105.68*	111.28*	-5.59
Overall	105.31*	109.86*	-4.55
Primary care visits as a percent of total visits			
Year 1			
1st quintile	24.80*	27.12*	-2.31*
5th quintile	17.60*	15.92*	1.68*
Year 2			
1st quintile	26.51*	27.94*	-1.43
5th quintile	16.34*	15.38*	0.97
Overall			
1st quintile	25.34*	27.38*	-2.03*
5th quintile	17.20*	15.75*	1.45*
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)			
Year 1	758.77*	754.84*	3.93
Year 2	768.78*	781.67*	-12.89
Overall	764.78*	770.94*	-6.17
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	172.84*	195.55*	-22.71*
Year 2	173.07*	195.77*	-22.71*
Overall	172.98*	195.69*	-22.71*

(continued)

Table F-61 (continued)
Minnesota: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
Continuity of care index (higher quintile = better care coordination)			
Year 1			
1st quintile	19.92*	20.03*	-0.10
5th quintile	20.66*	20.56*	0.11
Year 2			
1st quintile	20.24*	21.88*	-1.64
5th quintile	20.34*	18.79*	1.55
Overall			
1st quintile	20.03*	20.62*	-0.59
5th quintile	20.56*	19.99*	0.57

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-62 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on medical expenditures.

Table F-62
Minnesota: Decomposition of the medical expenditure estimates

Outcome	Model Predicted Average Change From Baseline		Difference
	MAPCP	CG PCMHs	
Total Medicare expenditures			
Year 1	474.11*	466.96*	7.15
Year 2	497.55*	477.19*	20.37
Overall	488.49*	473.23*	15.25
Acute-care expenditures			
Year 1	162.61*	152.76*	9.85
Year 2	172.65*	162.50*	10.14
Overall	168.77*	158.74*	10.03
Post-acute-care expenditures			
Year 1	72.14*	72.80*	-0.66
Year 2	77.50*	69.65*	7.85
Overall	75.43*	70.87*	4.56
ER expenditures			
Year 1	18.87*	16.58*	2.30*
Year 2	19.98*	18.20*	1.77
Overall	19.55*	17.57*	1.97*
Outpatient expenditures			
Year 1	74.79*	68.22*	6.58
Year 2	82.21*	68.61*	13.59*
Overall	79.34*	68.46*	10.88*
Specialty physician expenditures			
Year 1	33.11*	46.32*	-13.21*
Year 2	33.24*	46.93*	-13.69*
Overall	33.19*	46.69*	-13.51*
Primary care physician expenditures			
Year 1	27.99*	26.96*	1.03
Year 2	27.88*	30.81*	-2.94
Overall	27.92*	29.32*	-1.40
Home health expenditures			
Year 1	23.38*	21.66*	1.72
Year 2	25.07*	22.69*	2.38
Overall	24.41*	22.29*	2.12
Other expenditures			
Year 1	12.90*	12.80*	0.10
Year 2	13.71*	13.50*	0.21
Overall	13.40*	13.23*	0.17

(continued)

Table F-62 (continued)
Minnesota: Decomposition of the medical expenditure estimates

Outcome	Model Predicted Average Change From Baseline		Difference
	MAPCP	CG PCMHs	
Laboratory expenditures			
Year 1	3.74*	2.64*	1.10
Year 2	1.76*	1.98*	-0.21
Overall	2.53*	2.23*	0.29
Imaging expenditures			
Year 1	0.29	0.91	-0.62
Year 2	-0.73*	-0.18	-0.55
Overall	-0.34	0.24	-0.58
Other facility expenditures			
Year 1	-0.89	-1.15	0.25
Year 2	-0.99	-0.87	-0.12
Overall	-0.95	-0.98	0.02

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-63 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on medical service utilizations.

Table F-63
Minnesota: Decompositions of the medical service utilization estimates

	Model predicted utilization during demonstration		
Outcome	**MAPCP**	**CG non-PCMHs**	**Difference**
All-cause admissions			
Year 1	71.27*	70.60*	0.67
Year 2	70.43*	71.00*	-0.57
Overall	70.75*	70.84*	-0.09
ER visits not leading to hospitalization			
Year 1	170.84*	167.43*	3.42
Year 2	167.51*	164.88*	2.64
Overall	168.80*	165.86*	2.94

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-64 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-64
Minnesota: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		
	MAPCP	CG non-PCMHs	Difference
Multiple chronic conditions only			
Year 1	1,027.09*	949.54*	77.55
Year 2	1,033.19*	965.63*	67.56
Overall	1,030.82*	959.38*	71.44
Behavioral health conditions only			
Year 1	628.24*	619.22*	9.02
Year 2	632.71*	580.31*	52.40
Overall	630.99*	595.30*	35.68
Disabled beneficiaries only			
Year 1	497.53*	467.27*	30.26
Year 2	504.37*	472.90*	31.47
Overall	501.83*	470.81*	31.02
Dually eligible only			
Year 1	460.44*	425.55*	34.89
Year 2	466.14*	464.42*	1.73
Overall	464.03*	450.03*	14.00
Rural beneficiaries only			
Year 1	453.11*	367.63*	85.48*
Year 2	476.71*	542.69*	-65.98
Overall	467.95*	477.71*	-9.76
Non-White beneficiaries only			
Year 1	512.04*	512.21*	-0.17
Year 2	536.42*	554.64*	-18.23
Overall	527.52*	539.16*	-11.64

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-65 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-65
Minnesota: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference
	MAPCP	CG non-PCMHs	
HbA1c testing			
Year 1	91.65*	90.45*	1.20
Year 2	91.97*	90.55*	1.41
Overall	91.72*	90.47*	1.25
Retinal eye examination			
Year 1	55.81*	51.94*	3.87
Year 2	57.14*	58.45*	-1.30
Overall	56.13*	53.47*	2.65
LDL-C screening			
Year 1	85.96*	85.24*	0.72
Year 2	89.39*	82.35*	7.04*
Overall	86.77*	84.56*	2.20
Medical attention for nephropathy			
Year 1	79.68*	74.55*	5.13*
Year 2	83.06*	76.01*	7.05*
Overall	80.48*	74.89*	5.58*
Received all 4 diabetes tests			
Year 1	39.72*	31.95*	7.77*
Year 2	40.78*	35.82*	4.96
Overall	39.97*	32.86*	7.11*
Received none of the 4 diabetes tests			
Year 1	1.79*	1.91*	-0.12
Year 2	1.03*	2.43*	-1.40*
Overall	1.61*	2.03*	-0.42
Total lipid panel			
Year 1	61.94*	61.86*	0.08
Year 2	61.81*	60.10*	1.71
Overall	61.92*	61.49*	0.43

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-66 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-66
Minnesota: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
Avoidable catastrophic events			
Year 1	18.44*	17.16*	1.27
Year 2	19.15*	18.50*	0.65
Overall	18.87*	17.98*	0.89
PQI admissions—overall			
Year 1	30.97*	30.07*	0.90
Year 2	32.29*	30.73*	1.55
Overall	31.78*	30.48*	1.30
PQI admissions—acute			
Year 1	11.70*	11.43*	0.27
Year 2	11.65*	10.48*	1.18
Overall	11.67*	10.85*	0.82
PQI admissions—chronic			
Year 1	18.33*	17.65*	0.68
Year 2	19.71*	19.07*	0.64
Overall	19.17*	18.52*	0.65

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-67 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-67
Minnesota: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)			
Year 1	1,502.03*	1,339.68*	162.35*
Year 2	1,526.25*	1,514.52*	11.73
Overall	1,516.84*	1,446.58*	70.26
Medical specialist visits (per 1,000 beneficiaries)			
Year 1	807.77*	767.31*	40.46
Year 2	856.63*	825.01*	31.61
Overall	837.64*	802.59*	35.05
Surgical specialist visits (per 1,000 beneficiaries)			
Year 1	149.88*	135.02*	14.86
Year 2	146.48*	141.65*	4.82
Overall	147.80*	139.07*	8.73
Primary care visits as a percent of total visits			
Year 1			
1st quintile	25.34*	29.04*	-3.70*
5th quintile	13.25*	11.24*	2.01*
Year 2			
1st quintile	26.45*	27.50*	-1.05
5th quintile	12.59*	12.02*	0.57
Overall			
1st quintile	25.67*	28.58*	-2.91*
5th quintile	13.06*	11.47*	1.58*
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)			
Year 1	822.89*	788.21*	34.68
Year 2	819.40*	815.13*	4.28
Overall	820.81*	804.28*	16.53

(continued)

Table F-67 (continued)
Minnesota: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	230.99*	259.15*	-28.17
Year 2	234.38*	264.24*	-29.86
Overall	233.03*	262.22*	-29.18
Continuity of care index (higher quintile = better care coordination)			
Year 1			
1st quintile	18.80*	18.37*	0.43
5th quintile	20.99*	21.47*	-0.48
Year 2			
1st quintile	19.36*	19.20*	0.16
5th quintile	20.40*	20.57*	-0.16
Overall			
1st quintile	18.97*	18.62*	0.35
5th quintile	20.82*	21.20*	-0.38

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-68 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-68
Minnesota: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model Predicted Average Change From Baseline		Difference
	MAPCP	CG PCMHs	
Total Medicare expenditures			
Year 1	1,027.09*	949.54*	77.55
Year 2	1,033.19*	965.63*	67.56
Overall	1,030.82*	959.38*	71.44
Acute-care expenditures			
Year 1	361.94*	303.92*	58.02*
Year 2	384.56*	350.75*	33.82
Overall	375.77*	332.55*	43.22
Post-acute-care expenditures			
Year 1	163.01*	151.67*	11.35
Year 2	160.13*	134.04*	26.10
Overall	161.25*	140.89*	20.36
ER expenditures			
Year 1	35.14*	28.96*	6.19*
Year 2	35.90*	34.05*	1.85
Overall	35.61*	32.07*	3.54
Outpatient expenditures			
Year 1	166.53*	157.21*	9.32
Year 2	169.71*	147.71*	22.00
Overall	168.47*	151.40*	17.07
Specialty physician expenditures			
Year 1	58.22*	83.13*	-24.91*
Year 2	53.76*	76.19*	-22.43*
Overall	55.49*	78.89*	-23.39*
Primary care physician expenditures			
Year 1	48.69*	44.47*	4.22
Year 2	48.32*	52.34*	-4.02
Overall	48.46*	49.28*	-0.82
Home health expenditures			
Year 1	57.50*	47.69*	9.81
Year 2	57.02*	47.25*	9.78*
Overall	57.21*	47.42*	9.79*

(continued)

Table F-68 (continued)
Minnesota: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs	
Other expenditures			
Year 1	20.42*	20.54*	-0.12
Year 2	21.89*	21.23*	0.67
Overall	21.32*	20.96*	0.36
Laboratory expenditures			
Year 1	4.97*	2.33*	2.64*
Year 2	1.88*	0.89	0.99
Overall	3.08*	1.45*	1.63*
Imaging expenditures			
Year 1	0.92	0.81	0.12
Year 2	-1.45*	-1.29	-0.16
Overall	-0.53	-0.48	-0.05
Other facility expenditures			
Year 1	-2.63	-3.71	1.08
Year 2	-3.04	-2.69	-0.35
Overall	-2.88	-3.08	0.21

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-69 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-69
Minnesota: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
All-cause admissions			
Year 1	167.43*	156.04*	11.39*
Year 2	164.01*	159.05*	4.96
Overall	165.34*	157.88*	7.46
ER visits not leading to hospitalization			
Year 1	349.57*	327.95*	21.61*
Year 2	338.77*	335.14*	3.62
Overall	342.96*	332.35*	10.61

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-70 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-70
Minnesota: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG non-PCMHs	
Total Medicare expenditures			
Year 1	632.71*	580.31*	52.40
Year 2	630.99*	595.30*	35.68
Overall	239.14*	217.73*	21.41
Acute-care expenditures			
Year 1	237.10*	220.36*	16.73
Year 2	237.88*	219.35*	18.53
Overall	28.94*	25.43*	3.51
Expenditures for ER visits not leading to hospitalization			
Year 1	29.81*	27.69*	2.12
Year 2	29.48*	26.82*	2.66
Overall	28.41*	15.70*	12.71*
Total for principal diagnosis of BHC			
Year 1	34.48*	15.53*	18.95*
Year 2	32.14*	15.60*	16.54*
Overall	248.40*	222.87*	25.54
Total for secondary diagnosis of BHC			
Year 1	258.99*	240.38*	18.61
Year 2	254.91*	233.63*	21.28
Overall	632.71*	580.31*	52.40

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-71 presents decompositions of the estimates of the changes associated with the Minnesota MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-71
Minnesota: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference
	MAPCP	CG non-PCMHs	
All-cause inpatient admissions			
Year 1	97.50*	100.23*	-2.72
Year 2	94.93*	96.41*	-1.48
Overall	95.92*	97.88*	-1.96
ER visits not leading to hospitalization			
Year 1	249.24*	237.85*	11.39
Year 2	247.51*	229.74*	17.77
Overall	248.18*	232.87*	15.31
Behavioral health inpatient admissions			
Year 1	12.52*	11.04*	1.48
Year 2	11.42*	9.33*	2.09*
Overall	11.85*	9.99*	1.86*
Behavioral health ER visits			
Year 1	30.90*	30.28*	0.62
Year 2	29.64*	26.02*	3.62
Overall	30.12*	27.66*	2.46
Behavioral health outpatient visits			
Year 1	629.59*	649.63*	-20.04
Year 2	628.85*	659.67*	-30.83
Overall	629.13*	655.79*	-26.66

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.7 Decompositions of the Maine Estimates

Table F-72 presents a decomposition of the estimates of the changes associated with the Maine MAPCP Demonstration on process of care indicators.

Table F-72
Maine: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	89.15*	87.39*	1.75	89.02*	87.06*	1.96
Year 2	89.52*	88.84*	0.67	89.79*	88.99*	0.80
Overall	89.24*	87.76*	1.48	89.22*	87.55*	1.66
Retinal eye examination						
Year 1	60.06*	60.70*	-0.64	57.70*	55.87*	1.83
Year 2	60.07*	66.03*	-5.95*	57.72*	54.94*	2.78
Overall	60.06*	62.07*	-2.00*	57.70*	55.63*	2.07
LDL-C screening						
Year 1	76.06*	76.88*	-0.82	79.73*	79.42*	0.31
Year 2	75.24*	75.39*	-0.15	80.04*	78.11*	1.93
Overall	75.85*	76.50*	-0.65	79.81*	79.08*	0.73
Medical attention for nephropathy						
Year 1	68.19*	72.74*	-4.55*	72.65*	72.92*	-0.27
Year 2	68.37*	65.45*	2.92	73.43*	73.08*	0.35
Overall	68.24*	70.88*	-2.64	72.85*	72.96*	-0.11
Received all 4 diabetes tests						
Year 1	34.83*	36.34*	-1.51	37.28*	36.09*	1.19
Year 2	33.70*	36.10*	-2.40	36.69*	37.25*	-0.56
Overall	34.54*	36.28*	-1.74	37.13*	36.39*	0.74
Received none of the 4 diabetes tests						
Year 1	2.54*	2.57*	-0.03	2.60*	2.99*	-0.39
Year 2	2.94*	3.11*	-0.18	2.89*	2.02*	0.87
Overall	2.64*	2.71*	-0.06	2.68*	2.75*	-0.07
Total lipid panel						
Year 1	65.07*	64.79*	0.28	66.68*	68.01*	-1.33
Year 2	65.22*	67.14*	-1.92	67.29*	66.25*	1.04
Overall	65.11*	65.42*	-0.31	66.84*	67.54*	-0.69

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-73 presents a decomposition of the estimates of the changes associated with the Maine MAPCP Demonstration on selected health outcomes.

Table F-73
Maine: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	5.86*	5.76*	0.10	6.02*	5.86*	0.16
Year 2	7.47*	7.24*	0.23	7.57*	6.85*	0.72
Overall	6.99*	6.80*	0.19	7.10*	6.55*	0.55
PQI admissions—overall						
Year 1	8.94*	8.58*	0.36	9.06*	8.44*	0.62
Year 2	9.96*	9.37*	0.59	10.04*	9.89*	0.15
Overall	9.65*	9.13*	0.52	9.74*	9.45*	0.29
PQI admissions—acute						
Year 1	3.85*	4.12*	-0.26	3.92*	4.33*	-0.41
Year 2	4.19*	4.22*	-0.04	4.23*	4.71*	-0.48
Overall	4.09*	4.19*	-0.10	4.14*	4.60*	-0.46
PQI admissions—chronic						
Year 1	4.92*	4.28*	0.64	5.01*	3.99*	1.02
Year 2	5.55*	4.90*	0.65	5.62*	4.96*	0.66
Overall	5.36*	4.71*	0.65	5.44*	4.67*	0.77

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-74 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on access to care and coordination of care.

Table F-74
Maine: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	566.73*	597.47*	-30.73	565.74*	534.67*	31.07
Year 2	661.43*	618.66*	42.77	655.93*	587.95*	67.98*
Overall	633.00*	612.30*	20.70	628.85*	571.95*	56.90*
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	465.95*	456.72*	9.23	469.14*	476.99*	-7.85
Year 2	509.24*	520.42*	-11.18	509.79*	535.87*	-26.08
Overall	496.25*	501.29*	-5.05	497.59*	518.19*	-20.61
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	118.11*	114.47*	3.64	118.81*	112.07*	6.74
Year 2	119.23*	121.78*	-2.55	119.41*	107.33*	12.08*
Overall	118.89*	119.58*	-0.69	119.23*	108.75*	10.47*
Primary care visits as a percent of total visits						
Year 1						
1st quintile	28.83*	31.41*	-2.57	29.47*	31.34*	-1.87
5th quintile	12.06*	10.82*	1.24	11.96*	11.07*	0.90
Year 2						
1st quintile	28.57*	28.12*	0.46	29.54*	31.13*	-1.60
5th quintile	12.19*	12.44*	-0.24	11.93*	11.16*	0.77
Overall						
1st quintile	28.76*	30.52*	-1.75	29.49*	31.28*	-1.79
5th quintile	12.09*	11.26*	0.84	11.96*	11.09*	0.86
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	801.92*	671.07*	130.85*	802.11*	764.67*	37.45
Year 2	773.43*	729.13*	44.31	771.41*	783.72*	-12.31
Overall	781.98*	711.71*	70.27	780.62*	778.00*	2.62

(continued)

Table F-74 (continued)
Maine: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	162.36*	186.27*	-23.91*	162.89*	153.72*	9.16
Year 2	172.24*	183.02*	-10.78	172.07*	166.49*	5.58
Overall	169.26*	184.00*	-14.74	169.30*	162.64*	6.66
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	29.72*	32.69*	-2.96*	26.49*	26.99*	-0.50
5th quintile	11.15*	9.85*	1.30*	12.40*	12.13*	0.28
Year 2						
1st quintile	33.73*	38.47*	-4.74*	30.02*	33.06*	-3.04
5th quintile	9.44*	7.83*	1.62*	10.63*	9.36*	1.27
Overall						
1st quintile	30.86*	34.32*	-3.47*	27.49*	28.71*	-1.22
5th quintile	10.67*	9.28*	1.39*	11.90*	11.34*	0.56

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-75 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on medical expenditures.

Table F-75
Maine: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	429.79*	399.70*	30.08	426.92*	440.53*	-13.60
Year 2	489.36*	439.69*	49.66	484.86*	441.17*	43.69
Overall	471.47*	427.69*	43.78	467.46*	440.98*	26.49
Acute-care expenditures						
Year 1	120.60*	111.80*	8.80	119.98*	133.76*	-13.78
Year 2	155.72*	137.35*	18.37	154.42*	129.37*	25.05*
Overall	145.18*	129.68*	15.50	144.08*	130.69*	13.39
Post-acute-care expenditures						
Year 1	69.40*	55.31*	14.09	69.93*	66.06*	3.87
Year 2	75.85*	54.22*	21.63	75.78*	70.29*	5.49
Overall	73.91*	54.55*	19.36	74.02*	69.02*	5.00
ER expenditures						
Year 1	20.34*	21.06*	-0.72	21.37*	26.07*	-4.70
Year 2	22.00*	23.83*	-1.82	23.41*	26.32*	-2.91
Overall	21.50*	23.00*	-1.49	22.80*	26.25*	-3.45
Outpatient expenditures						
Year 1	104.49*	92.50*	11.99*	104.95*	98.59*	6.35
Year 2	112.85*	105.15*	7.70	113.62*	111.18*	2.45
Overall	110.34*	101.35*	8.99	111.02*	107.40*	3.62
Specialty physician expenditures						
Year 1	26.58*	29.92*	-3.34	25.19*	26.18*	-0.99
Year 2	28.23*	32.26*	-4.03	26.56*	21.90*	4.66*
Overall	27.74*	31.56*	-3.82	26.15*	23.18*	2.97
Primary care physician expenditures						
Year 1	15.94*	15.89*	0.05	16.16*	18.09*	-1.93
Year 2	18.85*	17.52*	1.33	18.91*	18.93*	-0.02
Overall	17.98*	17.03*	0.95	18.09*	18.68*	-0.59
Home health expenditures						
Year 1	22.65*	23.23*	-0.57	21.34*	20.43*	0.91
Year 2	26.14*	23.21*	2.93	24.50*	20.20*	4.30*
Overall	25.09*	23.22*	1.88	23.55*	20.26*	3.29

(continued)

Table F-75 (continued)
Maine: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	15.17*	17.32*	-2.15	14.00*	14.77*	-0.76
Year 2	17.26*	20.00*	-2.74	15.98*	16.55*	-0.57
Overall	16.63*	19.20*	-2.56	15.39*	16.01*	-0.63
Laboratory expenditures						
Year 1	3.86*	4.44*	-0.59	3.45*	2.94*	0.52
Year 2	3.14*	3.32*	-0.18	2.65*	3.18*	-0.54
Overall	3.36*	3.66*	-0.30	2.89*	3.11*	-0.22
Imaging expenditures						
Year 1	-2.54*	-2.49*	-0.05	-2.35*	-2.49*	0.14
Year 2	-3.08*	-3.21*	0.13	-2.98*	-2.38*	-0.60*
Overall	-2.92*	-2.99*	0.07	-2.79*	-2.41*	-0.38
Other facility expenditures						
Year 1	-0.28	-0.63	0.35	0.01	-0.19	0.20
Year 2	-0.26	0.09	-0.35	-0.02	-0.25	0.22
Overall	-0.27	-0.13	-0.14	-0.01	-0.23	0.22

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-76 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on medical service utilizations.

Table F-76
Maine: Decompositions of the medical service utilization estimates

	Model predicted utilization during demonstration			Model predicted utilization during demonstration		
Outcome	**MAPCP**	**CG PCMHs**	**Difference**	**MAPCP**	**CG non-PCMHs**	**Difference**
All-cause admissions						
Year 1	58.69*	59.30*	-0.61	59.12*	57.82*	1.30
Year 2	63.89*	61.94*	1.94	64.23*	59.47*	4.76
Overall	62.33*	61.15*	1.17	62.70*	58.98*	3.72
ER visits not leading to hospitalization						
Year 1	162.02*	170.14*	-8.12	161.91*	171.67*	-9.76
Year 2	159.23*	173.61*	-14.38*	160.27*	170.57*	-10.31
Overall	160.07*	172.56*	-12.50*	160.76*	170.90*	-10.14

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-77 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-77
Maine: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Multiple chronic conditions only						
Year 1	891.13*	801.90*	89.23	895.58*	989.57*	-93.99
Year 2	1,001.17*	843.13*	158.04	1,002.01*	865.25*	136.77*
Overall	967.63*	830.56*	137.07	969.58*	903.14*	66.44
Behavioral health conditions only						
Year 1	497.24*	481.03*	16.21	450.45*	478.02*	-27.57
Year 2	528.69*	496.69*	32.00	481.84*	432.17*	49.67
Overall	518.62*	491.68*	26.94	471.79*	446.85*	24.94
Disabled beneficiaries only						
Year 1	401.10*	389.36*	11.74	392.35*	434.66*	-42.31
Year 2	451.13*	458.94*	-7.81	442.10*	420.25*	21.85
Overall	436.09*	438.03*	-1.93	427.15*	424.58*	2.56
Dually eligible only						
Year 1	461.97*	418.37*	43.60	452.91*	487.26*	-34.35
Year 2	524.97*	459.92*	65.06	515.33*	485.24*	30.09
Overall	506.05*	447.44*	58.61	496.59*	485.85*	10.74
Rural beneficiaries only						
Year 1	421.74*	389.42*	32.32	409.33*	450.59*	-41.26
Year 2	486.14*	373.93*	112.21*	472.43*	437.41*	35.02
Overall	470.88*	377.60*	93.28	457.48*	440.53*	16.95
Non-White beneficiaries only						
Year 1	356.26*	376.38*	-20.12	453.93*	528.85*	-74.93
Year 2	420.09*	377.26*	42.83	516.45*	496.17*	20.28
Overall	402.15*	377.01*	25.13	498.87*	505.36*	-6.48

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-78 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-78
Maine: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	86.19*	83.79*	2.40	84.71*	81.58*	3.13
Year 2	86.63*	85.74*	0.89	85.69*	84.36*	1.34
Overall	86.30*	84.26*	2.04	84.95*	82.25*	2.70
Retinal eye examination						
Year 1	58.63*	60.15*	-1.52	56.49*	51.88*	4.61*
Year 2	58.62*	60.74*	-2.12	56.63*	54.84*	1.79
Overall	58.63*	60.29*	-1.66	56.52*	52.59*	3.93*
LDL-C screening						
Year 1	70.49*	70.07*	0.43	77.75*	76.08*	1.67
Year 2	68.38*	68.59*	-0.21	77.66*	73.49*	4.16
Overall	69.99*	69.71*	0.27	77.72*	75.46*	2.27
Medical attention for nephropathy						
Year 1	73.50*	80.96*	-7.46*	77.90*	75.81*	2.09
Year 2	73.23*	69.08*	4.15	78.65*	78.72*	-0.07
Overall	73.44*	78.11*	-4.67*	78.08*	76.51*	1.57
Received all 4 diabetes tests						
Year 1	33.01*	37.28*	-4.27	35.24*	31.35*	3.89*
Year 2	31.25*	33.96*	-2.71	34.23*	33.19*	1.04
Overall	32.59*	36.48*	-3.90	35.00*	31.79*	3.20*
Received none of the 4 diabetes tests						
Year 1	2.77*	3.39*	-0.62	3.07*	4.55*	-1.47
Year 2	3.37*	5.79*	-2.42	3.56*	2.09	1.46
Overall	2.92*	3.97*	-1.05	3.19*	3.96*	-0.77
Total lipid panel						
Year 1	60.24*	59.14*	1.09	62.68*	62.69*	-0.02
Year 2	63.33*	62.28*	1.05	66.29*	63.67*	2.62
Overall	60.98*	59.90*	1.08	63.54*	62.93*	0.62

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-79 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-79
Maine: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	15.53*	13.69*	1.84	15.72*	15.84*	-0.12
Year 2	18.92*	14.84*	4.08*	19.12*	16.43*	2.69*
Overall	17.89*	14.49*	3.40*	18.08*	16.25*	1.84
PQI admissions—overall						
Year 1	31.77*	26.97*	4.79*	32.45*	31.07*	1.38
Year 2	33.22*	25.00*	8.22*	33.53*	31.80*	1.72
Overall	32.78*	25.60*	7.18*	33.20*	31.58*	1.62
PQI admissions—acute						
Year 1	11.97*	10.84*	1.13	12.41*	12.68*	-0.27
Year 2	12.53*	11.07*	1.47	12.76*	11.97*	0.79
Overall	12.36*	11.00*	1.36	12.65*	12.18*	0.47
PQI admissions—chronic						
Year 1	19.07*	15.36*	3.72*	19.47*	17.72*	1.75
Year 2	19.83*	13.42*	6.41*	20.07*	19.10*	0.97
Overall	19.60*	14.01*	5.59*	19.88*	18.68*	1.20

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-80 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-80
Maine: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	800.26*	948.13*	-147.86*	800.08*	806.07*	-6.00
Year 2	931.19*	976.48*	-45.29	924.48*	822.49*	101.99*
Overall	891.29*	967.84*	-76.55	886.57*	817.49*	69.08
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	761.90*	754.50*	7.40	767.09*	791.06*	-23.97
Year 2	796.13*	790.14*	5.99	798.84*	798.91*	-0.07
Overall	785.70*	779.28*	6.42	789.17*	796.52*	-7.35
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	161.76*	148.52*	13.24	162.30*	159.18*	3.12
Year 2	160.63*	150.73*	9.90	161.02*	144.95*	16.07
Overall	160.97*	150.06*	10.92*	161.41*	149.29*	12.12
Primary care visits as a percent of total visits						
Year 1						
1st quintile	32.73*	35.20*	-2.46	31.23*	32.28*	-1.05
5th quintile	11.93*	10.82*	1.11	12.69*	12.16*	0.53
Year 2						
1st quintile	32.37*	28.88*	3.49	31.07*	31.49*	-0.42
5th quintile	12.10*	13.97*	-1.86	12.77*	12.55*	0.22
Overall						
1st quintile	32.64*	33.52*	-0.88	31.19*	32.07*	-0.88
5th quintile	11.97*	11.66*	0.32	12.71*	12.26*	0.44
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	855.86*	809.97*	45.90	852.89*	841.19*	11.70
Year 2	808.48*	736.04*	72.44	804.09*	827.85*	-23.76
Overall	823.10*	758.85*	64.25	819.15*	831.96*	-12.82

(continued)

Table F-80 (continued)
Maine: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	204.09*	214.70*	-10.61	205.26*	211.61*	-6.35
Year 2	222.50*	186.05*	36.46*	221.16*	205.02*	16.14
Overall	216.77*	194.97*	21.80	216.21*	207.07*	9.14
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	29.47*	31.62*	-2.14	25.84*	27.11*	-1.27
5th quintile	11.25*	10.28*	0.97	12.68*	11.98*	0.71
Year 2						
1st quintile	33.03*	36.22*	-3.19	29.11*	34.07*	-4.96
5th quintile	9.70*	8.53*	1.17	10.97*	8.92*	2.05*
Overall						
1st quintile	30.46*	32.90*	-2.43	26.75*	29.04*	-2.30
5th quintile	10.82*	9.80*	1.03	12.21*	11.13*	1.08

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-81 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-81
Maine: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	891.13*	801.90*	89.23	895.58*	989.57*	-93.99
Year 2	1,001.17*	843.13*	158.04	1,002.01*	865.25*	136.77*
Overall	967.63*	830.56*	137.07	969.58*	903.14*	66.44
Acute-care expenditures						
Year 1	270.90*	217.60*	53.30	273.44*	335.90*	-62.46
Year 2	343.88*	281.86*	62.02	343.05*	268.05*	75.00*
Overall	321.64*	262.27*	59.36	321.84*	288.73*	33.11
Post-acute-care expenditures						
Year 1	155.48*	141.52*	13.96	157.31*	157.35*	-0.04
Year 2	171.91*	123.20*	48.71	172.68*	153.51*	19.18
Overall	166.90*	128.78*	38.12	168.00*	154.68*	13.32
ER expenditures						
Year 1	39.72*	41.00*	-1.28	43.32*	55.36*	-12.04
Year 2	42.87*	47.15*	-4.27	47.30*	52.41*	-5.11
Overall	41.91*	45.27*	-3.36	46.08*	53.30*	-7.22
Outpatient expenditures						
Year 1	191.67*	175.45*	16.22	195.52*	194.27*	1.26
Year 2	207.77*	161.87*	45.91*	213.94*	196.84*	17.09
Overall	202.86*	166.00*	36.86*	208.33*	196.06*	12.27
Specialty physician expenditures						
Year 1	44.00*	44.56*	-0.56	40.59*	40.79*	-0.20
Year 2	39.34*	45.04*	-5.70	35.17*	24.29*	10.88*
Overall	40.76*	44.89*	-4.13	36.83*	29.32*	7.51
Primary care physician expenditures						
Year 1	27.24*	28.03*	-0.79	27.55*	31.66*	-4.11
Year 2	32.81*	31.83*	0.98	32.78*	30.07*	2.71
Overall	31.11*	30.67*	0.44	31.19*	30.55*	0.63

(continued)

Table F-81 (continued)
Maine: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	56.57*	52.67*	3.90	53.54*	49.79*	3.75
Year 2	60.47*	53.72*	6.75	56.34*	45.36*	10.98
Overall	59.28*	53.40*	5.88	55.48*	46.71*	8.78
Other expenditures						
Year 1	28.24*	28.84*	-0.60	26.76*	30.45*	-3.70
Year 2	31.36*	36.14*	-4.78	29.64*	31.82*	-2.17
Overall	30.41*	33.92*	-3.51	28.76*	31.40*	-2.64
Laboratory expenditures						
Year 1	5.49*	5.94*	-0.45	4.58*	3.60*	0.99
Year 2	4.43*	4.14*	0.28	3.56*	5.31*	-1.76
Overall	4.75*	4.69*	0.06	3.87*	4.79*	-0.92
Imaging expenditures						
Year 1	-3.60*	-5.51*	1.91	-2.93*	-3.20*	0.28
Year 2	-4.20*	-6.56*	2.36	-3.80*	-4.57*	0.77
Overall	-4.02*	-6.24*	2.22	-3.53*	-4.15*	0.62
Other facility expenditures						
Year 1	-0.84	-3.48	2.64	0.04	-0.89	0.93
Year 2	-0.10	2.37	-2.46	0.12	-1.16	1.28
Overall	-0.32	0.58	-0.91	0.09	-1.08	1.17

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-82 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-82
Maine: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	891.13*	801.90*	89.23	895.58*	989.57*	-93.99
Year 2	1,001.17*	843.13*	158.04	1,002.01*	865.25*	136.77*
Overall	967.63*	830.56*	137.07	969.58*	903.14*	66.44
ER visits not leading to hospitalization						
Year 1	300.56*	305.26*	-4.71	301.10*	322.87*	-21.78
Year 2	285.53*	313.68*	-28.15	287.22*	306.74*	-19.52
Overall	290.11*	311.12*	-21.01	291.45*	311.66*	-20.21

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-83 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-83
Maine: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	497.24*	481.03*	16.21	450.45*	478.02*	-27.57
Year 2	528.69*	496.69*	32.00	481.84*	432.17*	49.67
Overall	518.62*	491.68*	26.94	471.79*	446.85*	24.94
Acute-care expenditures						
Year 1	145.85*	166.96*	-21.11	127.86*	154.37*	-26.51
Year 2	171.03*	164.79*	6.23	152.62*	119.79*	32.83
Overall	162.97*	165.49*	-2.52	144.69*	130.86*	13.84
Expenditures for ER visits not leading to hospitalization						
Year 1	28.27*	35.65*	-7.38	31.29*	34.92*	-3.63
Year 2	29.74*	34.92*	-5.19	33.56*	36.53*	-2.97
Overall	29.27*	35.15*	-5.89	32.83*	36.01*	-3.18
Total for principal diagnosis of BHC						
Year 1	22.21*	13.84*	8.37*	25.11*	17.42*	7.68
Year 2	30.09*	24.80*	5.30	32.98*	31.62*	1.35
Overall	27.57*	21.29*	6.28	30.46*	27.08*	3.38
Total for secondary diagnosis of BHC						
Year 1	181.42*	177.64*	3.78	175.28*	191.32*	-16.04
Year 2	190.69*	185.10*	5.59	185.51*	160.86*	24.66
Overall	187.72*	182.71*	5.01	182.24*	170.61*	11.63

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-84 presents decompositions of the estimates of the changes associated with the Maine MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-84
Maine: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	69.42*	78.88*	-9.47*	68.62*	67.97*	0.65
Year 2	71.68*	70.78*	0.90	70.99*	66.37*	4.62
Overall	70.96*	73.38*	-2.42	70.23*	66.88*	3.35
ER visits not leading to hospitalization						
Year 1	314.64*	372.73*	-58.09*	311.77*	321.05*	-9.27
Year 2	310.87*	352.05*	-41.18*	309.44*	307.46*	1.98
Overall	312.08*	358.67*	-46.59*	310.19*	311.81*	-1.62
Behavioral health inpatient admissions						
Year 1	5.53*	7.12*	-1.59	5.48*	5.82*	-0.34
Year 2	7.54*	6.39*	1.14	7.45*	7.00*	0.45
Overall	6.89*	6.63*	0.27	6.82*	6.62*	0.20
Behavioral health ER visits						
Year 1	32.02*	49.31*	-17.29*	31.02*	28.06*	2.96
Year 2	33.17*	42.40*	-9.23*	32.55*	34.68*	-2.13
Overall	32.80*	44.61*	-11.81*	32.06*	32.56*	-0.50
Behavioral health outpatient visits						
Year 1	915.70*	847.26*	68.44*	916.45*	879.97*	36.48
Year 2	883.43*	831.99*	51.43	884.64*	876.28*	8.35
Overall	893.68*	836.84*	56.84	894.75*	877.45*	17.29

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.8 Decompositions of the Michigan Estimates

Table F-85 presents a decomposition of the estimates of the changes associated with the Michigan MAPCP Demonstration on process of care indicators.

Table F-85
Michigan: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	89.67*	90.21*	-0.54	89.83*	88.33*	1.49*
Year 2	89.90*	89.95*	-0.04	90.06*	89.56*	0.50
Overall	89.75*	90.11*	-0.36	89.91*	88.78*	1.13*
Retinal eye examination						
Year 1	57.58*	58.97*	-1.39	57.61*	58.17*	-0.56
Year 2	59.02*	58.93*	0.10	59.17*	58.64*	0.53
Overall	58.10*	58.95*	-0.85	58.18*	58.34*	-0.17
LDL-C screening						
Year 1	82.31*	84.29*	-1.98*	82.53*	83.86*	-1.33
Year 2	82.36*	79.99*	2.37	82.62*	83.64*	-1.02
Overall	82.33*	82.72*	-0.39	82.56*	83.78*	-1.22
Medical attention for nephropathy						
Year 1	71.07*	72.31*	-1.24	72.08*	71.71*	0.38
Year 2	72.23*	70.84*	1.39	73.39*	72.05*	1.35
Overall	71.50*	71.78*	-0.28	72.56*	71.83*	0.73
Received all 4 diabetes tests						
Year 1	37.31*	37.96*	-0.65	38.00*	38.60*	-0.60
Year 2	38.48*	36.58*	1.90	39.31*	38.32*	0.99
Overall	37.74*	37.46*	0.28	38.48*	38.50*	-0.02
Received none of the 4 diabetes tests						
Year 1	3.01*	2.39*	0.62*	2.94*	2.99*	-0.05
Year 2	2.97*	3.42*	-0.46	2.87*	2.92*	-0.06
Overall	2.99*	2.77*	0.23	2.91*	2.97*	-0.05
Total lipid panel						
Year 1	72.83*	75.11*	-2.28*	72.91*	75.04*	-2.13*
Year 2	72.19*	72.37*	-0.17	72.20*	73.11*	-0.92
Overall	72.59*	74.05*	-1.47	72.63*	74.30*	-1.66

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-86 presents a decomposition of the estimates of the changes associated with the Michigan MAPCP Demonstration on selected health outcomes.

Table F-86
Michigan: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	8.19*	9.20*	-1.01	8.15*	8.61*	-0.46
Year 2	9.52*	10.84*	-1.33*	9.48*	10.06*	-0.57
Overall	8.86*	10.03*	-1.17	8.82*	9.34*	-0.52
PQI admissions—overall						
Year 1	9.73*	10.71*	-0.97	9.74*	9.95*	-0.21
Year 2	10.51*	11.56*	-1.04	10.53*	11.19*	-0.66
Overall	10.13*	11.14*	-1.01	10.14*	10.58*	-0.44
PQI admissions—acute						
Year 1	3.99*	3.88*	0.12	3.99*	4.59*	-0.61*
Year 2	4.24*	4.37*	-0.13	4.23*	4.92*	-0.69
Overall	4.12*	4.12*	-0.01	4.11*	4.76*	-0.65
PQI admissions—chronic						
Year 1	5.54*	6.56*	-1.02	5.55*	5.20*	0.35
Year 2	6.04*	6.90*	-0.85	6.06*	6.08*	-0.02
Overall	5.79*	6.73*	-0.94	5.81*	5.65*	0.16

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-87 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on access to care and coordination of care.

Table F-87
Michigan: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	934.08*	883.05*	51.03	933.54*	904.79*	28.75*
Year 2	941.79*	1,000.42*	-58.64	941.51*	963.36*	-21.85
Overall	937.97*	942.25*	-4.29	937.56*	934.34*	3.23
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	709.12*	705.01*	4.11	708.28*	702.86*	5.42
Year 2	761.82*	825.71*	-63.89*	761.25*	780.27*	-19.01
Overall	735.71*	765.90*	-30.19	735.00*	741.90*	-6.90
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	144.47*	144.51*	-0.04	144.61*	136.29*	8.32*
Year 2	145.09*	150.76*	-5.67	145.32*	135.49*	9.83
Overall	144.78*	147.66*	-2.88	144.97*	135.88*	9.08*
Primary care visits as a percent of total visits						
Year 1						
1st quintile	26.19*	26.74*	-0.55	26.39*	25.87*	0.53
5th quintile	14.89*	14.54*	0.36	15.02*	15.37*	-0.35
Year 2						
1st quintile	27.52*	29.91*	-2.39*	27.68*	27.78*	-0.10
5th quintile	14.05*	12.70*	1.35*	14.20*	14.14*	0.06
Overall						
1st quintile	26.73*	28.03*	-1.30	26.92*	26.64*	0.27
5th quintile	14.55*	13.79*	0.76	14.68*	14.87*	-0.19
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	753.21*	731.73*	21.48	753.52*	727.74*	25.78*
Year 2	745.15*	732.68*	12.48	745.53*	716.90*	28.63*
Overall	749.26*	732.20*	17.06	749.60*	722.43*	27.18*

(continued)

Table F-87 (continued)
Michigan: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	168.79*	215.68*	-46.89*	168.53*	173.46*	-4.92
Year 2	174.58*	186.24*	-11.66	174.62*	178.55*	-3.93
Overall	171.64*	201.19*	-29.55*	171.53*	175.97*	-4.44
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	21.12*	21.38*	-0.25	21.26*	22.92*	-1.66*
5th quintile	17.64*	17.42*	0.22	17.70*	16.34*	1.37*
Year 2						
1st quintile	21.04*	23.86*	-2.83*	21.15*	22.50*	-1.35
5th quintile	17.71*	15.47*	2.25*	17.80*	16.67*	1.13
Overall						
1st quintile	21.09*	22.39*	-1.30	21.21*	22.75*	-1.54*
5th quintile	17.67*	16.63*	1.04	17.74*	16.48*	1.27*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-88 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on medical expenditures.

Table F-88
Michigan: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	493.15*	546.18*	-53.03*	492.33*	505.62*	-13.29
Year 2	528.87*	642.17*	-113.29*	528.14*	548.95*	-20.81
Overall	511.17*	594.60*	-83.43*	510.39*	527.48*	-17.09
Acute-care expenditures						
Year 1	154.94*	183.17*	-28.23*	153.92*	160.44*	-6.52
Year 2	173.80*	222.79*	-48.99*	172.77*	181.42*	-8.65
Overall	164.46*	203.15*	-38.70*	163.43*	171.02*	-7.59
Post-acute-care expenditures						
Year 1	79.93*	92.67*	-12.74	80.36*	89.04*	-8.68
Year 2	87.90*	112.37*	-24.47	88.34*	100.29*	-11.95*
Overall	83.95*	102.61*	-18.66*	84.39*	94.72*	-10.33*
ER expenditures						
Year 1	15.25*	16.42*	-1.17	15.02*	14.96*	0.06
Year 2	16.89*	18.06*	-1.17	16.66*	17.42*	-0.77
Overall	16.08*	17.25*	-1.17	15.85*	16.20*	-0.36
Outpatient expenditures						
Year 1	70.69*	69.87*	0.82	69.61*	60.38*	9.24*
Year 2	74.81*	81.31*	-6.50	73.67*	62.68*	10.99*
Overall	72.77*	75.64*	-2.87	71.66*	61.54*	10.12*
Specialty physician expenditures						
Year 1	49.43*	57.48*	-8.05*	49.20*	52.62*	-3.42
Year 2	48.54*	64.79*	-16.25*	48.35*	54.34*	-5.99*
Overall	48.98*	61.17*	-12.18*	48.77*	53.49*	-4.72*
Primary care physician expenditures						
Year 1	28.86*	30.15*	-1.29	29.23*	29.81*	-0.58
Year 2	28.90*	38.34*	-9.44*	29.31*	32.35*	-3.05*
Overall	28.88*	34.28*	-5.40*	29.27*	31.09*	-1.83
Home health expenditures						
Year 1	37.93*	37.68*	0.25	38.22*	38.13*	0.10
Year 2	41.07*	44.45*	-3.38	41.37*	40.69*	0.68
Overall	39.52*	41.10*	-1.58	39.81*	39.42*	0.39

(continued)

Table F-88 (continued)
Michigan: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	17.72*	18.32*	-0.60	17.94*	17.55*	0.39
Year 2	18.94*	21.18*	-2.24	19.16*	18.73*	0.43
Overall	18.33*	19.76*	-1.43	18.56*	18.15*	0.41
Laboratory expenditures						
Year 1	2.12*	2.81*	-0.69	2.33*	3.87*	-1.53*
Year 2	1.55*	3.34*	-1.79	1.77*	4.20*	-2.43*
Overall	1.83*	3.08*	-1.24	2.05*	4.04*	-1.98*
Imaging expenditures						
Year 1	-3.01*	-3.22*	0.22	-2.81*	-2.62*	-0.19
Year 2	-3.72*	-2.16*	-1.56*	-3.49*	-3.18*	-0.31
Overall	-3.37*	-2.69*	-0.68	-3.15*	-2.90*	-0.25
Other facility expenditures						
Year 1	-0.13	1.78	-1.91	-0.07	-0.20*	0.13*
Year 2	-0.17*	0.52	-0.69	-0.09	-0.34*	0.25
Overall	-0.15*	1.14	-1.29	-0.08	-0.27*	0.19*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-89 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on medical service utilizations.

Table F-89
Michigan: Decompositions of the medical service utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	69.48*	75.92*	-6.45*	69.40*	70.70*	-1.30
Year 2	72.51*	82.03*	-9.53*	72.46*	73.54*	-1.08
Overall	71.01*	79.00*	-8.00*	70.94*	72.13*	-1.19
ER visits not leading to hospitalization						
Year 1	110.29*	110.33*	-0.04	110.30*	108.31*	1.99
Year 2	113.72*	108.44*	5.28*	113.73*	110.81*	2.91
Overall	112.02*	109.38*	2.64	112.03*	109.57*	2.45

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-90 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-90
Michigan: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline			Model predicted average change from baseline		
	MAPCP	CG PCMHs	Difference	MAPCP	CG non-PCMHs	Difference
Multiple chronic conditions only						
Year 1	1,100.67*	1,241.83*	-141.16*	1,096.71*	1,149.28*	-52.57
Year 2	1,075.48*	1,477.10*	-401.62*	1,071.75*	1,232.69*	-160.94*
Overall	1,088.56*	1,354.90*	-266.33*	1,084.72*	1,189.37*	-104.65*
Behavioral health conditions only						
Year 1	745.66*	767.94*	-22.28	747.05*	800.84*	-53.79
Year 2	734.21*	874.53*	-140.32	736.17*	824.29*	-88.12*
Overall	739.97*	820.88*	-80.91	741.65*	812.49*	-70.84*
Disabled beneficiaries only						
Year 1	519.88*	560.02*	-40.14	523.28*	522.85*	0.43
Year 2	551.07*	666.44*	-115.36*	554.28*	562.09*	-7.82
Overall	535.82*	614.40*	-78.58*	539.12*	542.91*	-3.79
Dually eligible only						
Year 1	522.87*	578.40*	-55.53	511.84*	505.04*	6.80
Year 2	530.61*	667.05*	-136.45*	519.53*	598.25*	-78.72*
Overall	526.82*	623.70*	-96.88*	515.77*	552.67*	-36.90
Rural beneficiaries only						
Year 1	390.42*	491.17*	-100.75	397.36*	440.01*	-42.65
Year 2	440.05*	560.40*	-120.35	446.58*	422.14*	24.44
Overall	415.95*	526.79*	-110.83	422.68*	430.82*	-8.14
Non-White beneficiaries only						
Year 1	634.20*	745.56*	-111.36	624.86*	583.98*	40.88
Year 2	614.33*	883.82*	-269.50*	604.52*	654.34*	-49.82
Overall	624.02*	816.35*	-192.32*	614.45*	620.00*	-5.56

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-91 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-91
Michigan: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	86.26*	88.14*	-1.88	86.36*	85.50*	0.86
Year 2	87.20*	91.37*	-4.17*	87.20*	87.01*	0.20
Overall	86.59*	89.27*	-2.68	86.65*	86.02*	0.63
Retinal eye examination						
Year 1	56.27*	58.29*	-2.02	56.22*	55.69*	0.54
Year 2	57.42*	59.54*	-2.12	57.42*	57.57*	-0.15
Overall	56.67*	58.73*	-2.06	56.64*	56.34*	0.30
LDL-C screening						
Year 1	77.63*	81.04*	-3.41*	77.76*	79.60*	-1.83
Year 2	77.70*	79.97*	-2.27	77.83*	77.98*	-0.16
Overall	77.66*	80.67*	-3.01*	77.79*	79.03*	-1.25
Medical attention for nephropathy						
Year 1	75.46*	78.11*	-2.65	75.87*	77.23*	-1.36
Year 2	77.35*	76.73*	0.62	77.83*	77.59*	0.25
Overall	76.12*	77.63*	-1.51	76.56*	77.36*	-0.80
Received all 4 diabetes tests						
Year 1	35.37*	37.21*	-1.83	35.79*	36.12*	-0.33
Year 2	36.77*	34.11*	2.66	37.21*	36.65*	0.56
Overall	35.86*	36.13*	-0.27	36.28*	36.31*	-0.02
Received none of the 4 diabetes tests						
Year 1	2.94*	2.12*	0.82*	2.84*	2.71*	0.13
Year 2	2.99*	2.15*	0.84	2.85*	2.84*	0.01
Overall	2.96*	2.13*	0.83*	2.85*	2.76*	0.09
Total lipid panel						
Year 1	67.91*	71.73*	-3.82*	68.18*	68.93*	-0.75
Year 2	68.04*	69.37*	-1.33	68.26*	67.77*	0.50
Overall	67.96*	70.89*	-2.93*	68.21*	68.52*	-0.31

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-92 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-92
Michigan: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	21.01*	23.45*	-2.44	20.92*	22.11*	-1.19
Year 2	23.19*	28.04*	-4.85*	23.13*	25.98*	-2.85*
Overall	22.06*	25.66*	-3.60	21.98*	23.97*	-1.99*
PQI admissions—overall						
Year 1	33.47*	34.94*	-1.47	33.45*	34.61*	-1.16
Year 2	33.99*	35.10*	-1.11	34.01*	35.06*	-1.04
Overall	33.72*	35.02*	-1.30	33.72*	34.82*	-1.10
PQI admissions—acute						
Year 1	11.75*	11.36*	0.38	11.66*	13.84*	-2.18*
Year 2	11.74*	10.71*	1.03	11.67*	13.41*	-1.74
Overall	11.75*	11.05*	0.70	11.67*	13.64*	-1.97*
PQI admissions—chronic						
Year 1	20.64*	22.34*	-1.69	20.67*	19.73*	0.94
Year 2	21.14*	23.14*	-2.00	21.19*	20.62*	0.57
Overall	20.88*	22.73*	-1.84	20.92*	20.16*	0.76

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-93 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-93
Michigan: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	1,321.30*	1,252.34*	68.96	1,320.36*	1,267.68*	52.68*
Year 2	1,288.79*	1,413.12*	-124.33	1,287.62*	1,300.08*	-12.46
Overall	1,305.68*	1,329.61*	-23.93	1,304.63*	1,283.25*	21.38
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	1,185.91*	1,178.17*	7.73	1,185.24*	1,153.98*	31.26
Year 2	1,198.96*	1,312.11*	-113.15*	1,198.89*	1,232.40*	-33.51
Overall	1,192.18*	1,242.54*	-50.36	1,191.80*	1,191.66*	0.13
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	209.97*	216.24*	-6.27	210.50*	205.05*	5.45
Year 2	200.37*	213.44*	-13.07	200.97*	193.70*	7.27
Overall	205.36*	214.89*	-9.54	205.92*	199.59*	6.32
Primary care visits as a percent of total visits						
Year 1						
1st quintile	28.91*	30.16*	-1.26	29.27*	28.43*	0.84
5th quintile	10.83*	10.26*	0.57	10.89*	11.30*	-0.40
Year 2						
1st quintile	29.45*	31.36*	-1.91	29.79*	30.61*	-0.82
5th quintile	10.58*	9.75*	0.82	10.65*	10.29*	0.37
Overall						
1st quintile	29.12*	30.63*	-1.51	29.47*	29.28*	0.20
5th quintile	10.73*	10.06*	0.67	10.80*	10.91*	-0.11
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	829.76*	823.61*	6.15	830.01*	794.96*	35.05*
Year 2	803.08*	807.62*	-4.54	803.44*	768.60*	34.84
Overall	817.55*	816.29*	1.26	817.85*	782.89*	34.95*

(continued)

Table F-93 (continued)
Michigan: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	230.77*	308.23*	-77.46*	230.01*	234.22*	-4.21
Year 2	234.90*	252.69*	-17.79	234.46*	210.78*	23.68
Overall	232.68*	282.62*	-49.95*	232.06*	223.41*	8.65
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	22.19*	22.11*	0.08	22.48*	23.17*	-0.69
5th quintile	17.05*	17.11*	-0.06	16.99*	16.45*	0.54
Year 2						
1st quintile	21.80*	23.86*	-2.06	22.08*	23.34*	-1.26
5th quintile	17.37*	15.76*	1.61*	17.32*	16.31*	1.00
Overall						
1st quintile	22.04*	22.79*	-0.75	22.32*	23.23*	-0.91
5th quintile	17.17*	16.58*	0.59	17.12*	16.40*	0.72

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-94 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-94
Michigan: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	1,100.67*	1,241.83*	-141.16*	1,096.71*	1,149.28*	-52.57
Year 2	1,075.48*	1,477.10*	-401.62*	1,071.75*	1,232.69*	-160.94*
Overall	1,088.56*	1,354.90*	-266.33*	1,084.72*	1,189.37*	-104.65*
Acute-care expenditures						
Year 1	362.06*	449.08*	-87.02*	359.03*	380.33*	-21.30
Year 2	366.86*	538.03*	-171.17*	364.02*	426.02*	-62.00*
Overall	364.37*	491.83*	-127.46*	361.43*	402.29*	-40.86*
Post-acute-care expenditures						
Year 1	186.25*	215.02*	-28.77	188.16*	218.19*	-30.03*
Year 2	187.30*	285.03*	-97.73*	189.20*	251.91*	-62.71*
Overall	186.75*	248.67*	-61.91*	188.66*	234.39*	-45.73*
ER expenditures						
Year 1	29.68*	33.18*	-3.50	29.53*	27.65*	1.88
Year 2	30.67*	35.29*	-4.61	30.53*	34.20*	-3.67*
Overall	30.16*	34.19*	-4.03	30.01*	30.80*	-0.79
Outpatient expenditures						
Year 1	156.36*	157.59*	-1.23	154.27*	140.93*	13.33
Year 2	149.47*	182.40*	-32.93*	147.36*	136.13*	11.24
Overall	153.05*	169.51*	-16.46	150.95*	138.62*	12.33
Specialty physician expenditures						
Year 1	92.85*	115.69*	-22.84*	91.62*	107.26*	-15.64*
Year 2	79.13*	126.67*	-47.53*	77.91*	105.56*	-27.65*
Overall	86.26*	120.97*	-34.71*	85.03*	106.44*	-21.41*
Primary care physician expenditures						
Year 1	53.84*	55.13*	-1.29	54.33*	58.14*	-3.82
Year 2	51.08*	75.96*	-24.88	51.57*	60.80*	-9.23*
Overall	52.51*	65.14*	-12.63	53.00*	59.42*	-6.42*

(continued)

Table F-94 (continued)
Michigan: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	92.00*	87.01*	4.98	92.62*	88.82*	3.81
Year 2	89.42*	102.65*	-13.23*	90.05*	94.57*	-4.53
Overall	90.76*	94.53*	-3.77	91.38*	91.58*	-0.20
Other expenditures						
Year 1	30.71*	32.52*	-1.81	30.94*	32.71*	-1.77
Year 2	32.51*	37.93*	-5.43	32.74*	33.69*	-0.95
Overall	31.57*	35.12*	-3.55	31.80*	33.18*	-1.37
Laboratory expenditures						
Year 1	2.92*	4.09*	-1.17	3.18*	5.42*	-2.24*
Year 2	1.47*	3.99*	-2.52*	1.74*	5.73*	-4.00*
Overall	2.22*	4.04*	-1.82*	2.49*	5.57*	-3.08*
Imaging expenditures						
Year 1	-3.71*	-3.33*	-0.38	-3.53*	-2.78*	-0.75
Year 2	-5.83*	-2.49*	-3.34*	-5.62*	-3.99*	-1.63
Overall	-4.73*	-2.92*	-1.80	-4.53*	-3.36*	-1.17
Other facility expenditures						
Year 1	-0.31	-0.60	0.29	-0.24	-0.47*	0.23
Year 2	-0.30	-0.52	0.22	-0.22	-0.51*	0.29
Overall	-0.30	-0.56	0.26	-0.23	-0.49*	0.26

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-95 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-95
Michigan: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	173.12*	188.89*	-15.77*	172.79*	174.71*	-1.92
Year 2	169.44*	195.83*	-26.39*	169.22*	173.84*	-4.62
Overall	171.35*	192.22*	-20.87*	171.07*	174.29*	-3.21
ER visits not leading to hospitalization						
Year 1	206.76*	207.19*	-0.43	206.62*	198.73*	7.90
Year 2	204.64*	195.91*	8.73	204.62*	206.09*	-1.47
Overall	205.74*	201.77*	3.97	205.66*	202.26*	3.40

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-96 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-96
Michigan: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	745.66*	767.94*	-22.28	747.05*	800.84*	-53.79
Year 2	734.21*	874.53*	-140.32	736.17*	824.29*	-88.12*
Overall	739.97*	820.88*	-80.91	741.65*	812.49*	-70.84*
Acute-care expenditures						
Year 1	228.85*	258.67*	-29.83	230.29*	268.50*	-38.22*
Year 2	236.64*	288.88*	-52.23	238.27*	278.43*	-40.17*
Overall	232.72*	273.67*	-40.95*	234.25*	273.43*	-39.18*
Expenditures for ER visits not leading to hospitalization						
Year 1	26.83*	27.30*	-0.47	26.25*	25.56*	0.69
Year 2	29.35*	33.27*	-3.92	28.74*	33.77*	-5.03*
Overall	28.08*	30.27*	-2.19	27.49*	29.64*	-2.15
Total for principal diagnosis of BHC						
Year 1	18.87*	14.92*	3.95	18.24*	14.81*	3.44
Year 2	21.79*	21.52*	0.27	21.18*	25.24*	-4.06
Overall	20.32*	18.20*	2.12	19.70*	19.99*	-0.29
Total for secondary diagnosis of BHC						
Year 1	245.55*	271.82*	-26.26	247.89*	266.07*	-18.18
Year 2	250.74*	290.88*	-40.14	252.99*	281.07*	-28.08
Overall	248.13*	281.28*	-33.15	250.42*	273.52*	-23.10*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-97 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-97
Michigan: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	103.65*	110.81*	-7.16	103.43*	103.97*	-0.54
Year 2	102.81*	113.54*	-10.72*	102.66*	110.73*	-8.07*
Overall	103.23*	112.16*	-8.93*	103.05*	107.33*	-4.28
ER visits not leading to hospitalization						
Year 1	227.56*	219.03*	8.52	226.55*	215.67*	10.88
Year 2	225.85*	215.75*	10.10	224.71*	223.75*	0.96
Overall	226.71*	217.40*	9.31	225.63*	219.68*	5.95
Behavioral health inpatient admissions						
Year 1	3.09*	2.95*	0.14	3.06*	2.89*	0.17
Year 2	3.18*	3.66*	-0.48	3.15*	3.82*	-0.67
Overall	3.13*	3.30*	-0.17	3.10*	3.35*	-0.25
Behavioral health ER visits						
Year 1	19.92*	17.96*	1.96	19.42*	18.02*	1.41
Year 2	19.81*	19.11*	0.70	19.31*	20.39*	-1.08
Overall	19.87*	18.53*	1.33	19.37*	19.19*	0.17
Behavioral health outpatient visits						
Year 1	503.26*	497.70*	5.56	499.80*	478.87*	20.93
Year 2	491.35*	556.99*	-65.64*	487.45*	514.96*	-27.51
Overall	497.36*	527.09*	-29.73	493.68*	496.76*	-3.08

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-98 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on expenditures and health care utilization for disabled beneficiaries.

Table F-98
Michigan: Decompositions of the expenditure and health care utilization estimates for disabled Medicare beneficiaries

Outcome	Model Predicted Average Change From Baseline		Difference
	MAPCP	CG PCMHs	
Acute-care expenditures			
Year 1	177.02*	193.50*	-16.48
Year 2	195.20*	232.60*	-37.40
Overall	186.31*	213.48*	-27.17
Expenditures for ER visits not leading to hospitalization			
Year 1	21.06*	23.75*	-2.69
Year 2	22.46*	26.10*	-3.64
Overall	21.78*	24.95*	-3.17*
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	78.72*	89.66*	-10.94*
Year 2	81.08*	91.59*	-10.51*
Overall	79.93*	90.65*	-10.72*
ER visits not leading to hospitalization			
Year 1	199.76*	199.32*	0.44
Year 2	198.31*	192.37*	5.94
Overall	199.02*	195.77*	3.25
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	215.22*	253.15*	-37.92
Year 2	216.57*	212.95*	3.62
Overall	215.89*	233.08*	-17.19

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-99 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on expenditures and health care utilization for dually eligible beneficiaries.

Table F-99
Michigan: Decompositions of the expenditure and health care utilization estimates among dually eligible Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs	
Acute-care expenditures			
Year 1	184.93*	208.21*	-23.28
Year 2	190.56*	248.23*	-57.67*
Overall	187.81*	228.66*	-40.85
Expenditures for ER visits not leading to hospitalization			
Year 1	23.41*	25.90*	-2.49
Year 2	25.06*	28.16*	-3.11*
Overall	24.25*	27.06*	-2.81
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	79.74*	89.35*	-9.61*
Year 2	81.04*	90.91*	-9.87*
Overall	80.40*	90.15*	-9.74*
ER visits not leading to hospitalization			
Year 1	241.44*	238.71*	2.74
Year 2	241.44*	233.16*	8.28
Overall	241.44*	235.87*	5.57
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	226.93*	254.52*	-27.60
Year 2	229.37*	238.00*	-8.64
Overall	228.14*	246.33*	-18.19

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-100 presents decompositions of the estimates of the changes associated with the Michigan MAPCP Demonstration on expenditures and health care utilization for non-White beneficiaries.

Table F-100
Michigan: Decompositions of the expenditure and health care utilization estimates among non-White Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs	
Acute-care expenditures			
Year 1	232.78*	279.59*	-46.82
Year 2	227.24*	327.15*	-99.91*
Overall	229.94*	303.94*	-74.00
Expenditures for ER visits not leading to hospitalization			
Year 1	17.89*	20.64*	-2.75
Year 2	18.54*	23.72*	-5.18*
Overall	18.22*	22.21*	-3.99*
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	80.69*	92.78*	-12.09
Year 2	79.61*	98.22*	-18.60*
Overall	80.14*	95.56*	-15.43
ER visits not leading to hospitalization			
Year 1	158.81*	157.79*	1.03
Year 2	161.62*	156.48*	5.14
Overall	160.25*	157.12*	3.13
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	229.98*	290.44*	-60.47*
Year 2	226.51*	287.95*	-61.45*
Overall	228.29*	289.23*	-60.94*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

F.9 Decompositions of the Pennsylvania Estimates

Table F-101 presents a decomposition of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on process of care indicators.

Table F-101
Pennsylvania: Decomposition of the process of care estimates

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	94.96*	94.85*	0.11	91.30*	89.33*	1.96*
Year 2	94.20*	94.45*	-0.24	89.81*	90.59*	-0.78
Overall	94.66*	94.69*	-0.03	90.70*	89.84*	0.87
Retinal eye examination						
Year 1	60.23*	57.92*	2.30*	62.74*	62.46*	0.28
Year 2	59.16*	61.50*	-2.34*	61.85*	63.50*	-1.66
Overall	59.80*	59.35*	0.45	62.38*	62.88*	-0.49
LDL-C screening						
Year 1	92.22*	91.43*	0.79	88.81*	85.70*	3.11*
Year 2	90.65*	90.81*	-0.16	86.55*	86.94*	-0.39
Overall	91.60*	91.19*	0.41	87.91*	86.19*	1.71
Medical attention for nephropathy						
Year 1	81.40*	84.39*	-2.99	82.93*	80.65*	2.28*
Year 2	78.85*	85.44*	-6.59*	81.02*	82.83*	-1.81
Overall	80.38*	84.81*	-4.43*	82.17*	81.52*	0.65
Received all 4 diabetes tests						
Year 1	47.85*	48.74*	-0.89	49.87*	48.73*	1.14
Year 2	45.48*	52.44*	-6.96*	48.05*	50.87*	-2.82
Overall	46.91*	50.22*	-3.31	49.14*	49.58*	-0.44
Received none of the 4 diabetes tests						
Year 1	1.33*	1.53*	-0.20	2.17*	2.81*	-0.64*
Year 2	1.59*	1.50*	0.09	2.65*	2.36*	0.30
Overall	1.43*	1.52*	-0.09	2.36*	2.63*	-0.27
Total lipid panel						
Year 1	80.80*	78.46*	2.34	76.08*	74.29*	1.79
Year 2	78.89*	76.75*	2.14	73.68*	74.23*	-0.55
Overall	79.99*	77.74*	2.26	75.06*	74.26*	0.80

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-102 presents a decomposition of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on selected health outcomes.

Table F-102
Pennsylvania: Decomposition of the health outcome estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	6.37*	6.90*	-0.52	6.14*	6.41*	-0.28
Year 2	7.58*	8.62*	-1.04	7.37*	7.81*	-0.44
Overall	6.99*	7.78*	-0.79	6.77*	7.13*	-0.36
PQI admissions—overall						
Year 1	11.84*	10.66*	1.19	11.87*	11.61*	0.27
Year 2	11.93*	13.21*	-1.28	11.99*	12.47*	-0.48
Overall	11.89*	11.97*	-0.08	11.93*	12.05*	-0.12
PQI admissions—acute						
Year 1	4.89*	4.14*	0.74	4.94*	4.97*	-0.03
Year 2	4.77*	4.59*	0.18	4.82*	5.21*	-0.39
Overall	4.83*	4.37*	0.46	4.88*	5.09*	-0.21
PQI admissions—chronic						
Year 1	6.68*	6.32*	0.37	6.68*	6.44*	0.23
Year 2	6.87*	8.35*	-1.48	6.89*	7.06*	-0.16
Overall	6.78*	7.36*	-0.58	6.79*	6.76*	0.03

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-103 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on access to care and coordination of care.

Table F-103
Pennsylvania: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	1,037.34*	964.65*	72.69*	1,039.55*	976.39*	63.16*
Year 2	1,053.96*	1,003.44*	50.52*	1,055.06*	1,005.69*	49.37*
Overall	1,045.86*	984.55*	61.31*	1,047.51*	991.42*	56.08*
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	822.47*	857.05*	-34.58*	828.95*	853.44*	-24.50
Year 2	905.12*	931.85*	-26.73	916.07*	948.65*	-32.59
Overall	864.88*	895.43*	-30.55	873.64*	902.29*	-28.65
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	173.67*	179.49*	-5.82*	173.59*	175.95*	-2.36
Year 2	176.49*	177.47*	-0.98	175.86*	184.90*	-9.03*
Overall	175.12*	178.45*	-3.33	174.76*	180.54*	-5.78
Primary care visits as a percent of total visits						
Year 1						
1st quintile	23.15*	24.72*	-1.56	33.55*	36.21*	-2.66*
5th quintile	16.31*	15.17*	1.14	11.29*	10.17*	1.12*
Year 2						
1st quintile	25.18*	27.09*	-1.91	36.18*	39.38*	-3.20*
5th quintile	14.85*	13.64*	1.21	10.18*	9.00*	1.18*
Overall						
1st quintile	24.00*	25.71*	-1.71	34.65*	37.54*	-2.89*
5th quintile	15.70*	14.53*	1.17	10.82*	9.68*	1.15*
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	771.98*	742.12*	29.86	770.87*	726.54*	44.32*
Year 2	758.28*	699.95*	58.33	756.81*	711.59*	45.22*
Overall	765.23*	721.32*	43.90	763.94*	719.17*	44.77*

(continued)

Table F-103 (continued)
Pennsylvania: Decomposition of the access to care and coordination of care estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	177.74*	180.18*	-2.43	178.37*	183.56*	-5.19
Year 2	173.75*	184.34*	-10.58	174.60*	186.75*	-12.15
Overall	175.78*	182.23*	-6.45	176.51*	185.14*	-8.63
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	21.07*	22.00*	-0.93	28.89*	30.82*	-1.93*
5th quintile	16.68*	15.93*	0.75	11.86*	10.93*	0.93*
Year 2						
1st quintile	20.97*	22.84*	-1.87	28.95*	32.53*	-3.58*
5th quintile	16.77*	15.30*	1.47	11.83*	10.19*	1.64*
Overall						
1st quintile	21.03*	22.35*	-1.32	28.92*	31.54*	-2.62*
5th quintile	16.72*	15.66*	1.05	11.85*	10.62*	1.23*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-104 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on medical expenditures.

Table F-104
Pennsylvania: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	495.86*	469.64*	26.22	545.22*	554.06*	-8.83
Year 2	517.52*	557.03*	-39.51*	570.97*	618.44*	-47.48*
Overall	506.97*	514.48*	-7.50	558.43*	587.09*	-28.66
Acute-care expenditures						
Year 1	99.12*	90.64*	8.48	133.79*	139.75*	-5.96
Year 2	114.87*	136.72*	-21.85*	150.87*	173.68*	-22.81*
Overall	107.20*	114.28*	-7.08	142.55*	157.16*	-14.60
Post-acute-care expenditures						
Year 1	127.28*	111.53*	15.75*	132.16*	126.20*	5.96
Year 2	123.71*	128.47*	-4.76	129.18*	138.33*	-9.15
Overall	125.45*	120.22*	5.23	130.63*	132.42*	-1.79
ER expenditures						
Year 1	14.37*	15.59*	-1.22	13.20*	14.18*	-0.98
Year 2	15.12*	17.37*	-2.25*	13.86*	14.78*	-0.92
Overall	14.75*	16.50*	-1.75	13.54*	14.49*	-0.95
Outpatient expenditures						
Year 1	68.92*	73.67*	-4.75	66.19*	63.25*	2.94
Year 2	75.61*	85.10*	-9.49*	72.85*	72.15*	0.71
Overall	72.35*	79.53*	-7.18*	69.61*	67.81*	1.80
Specialty physician expenditures						
Year 1	57.90*	55.26*	2.65	65.45*	70.64*	-5.19
Year 2	56.78*	53.19*	3.60	65.06*	75.16*	-10.10*
Overall	57.33*	54.19*	3.13	65.25*	72.96*	-7.71*
Primary care physician expenditures						
Year 1	28.20*	26.12*	2.08*	29.03*	29.50*	-0.48
Year 2	29.71*	32.00*	-2.29	30.62*	32.73*	-2.11
Overall	28.97*	29.14*	-0.16	29.84*	31.16*	-1.32
Home health expenditures						
Year 1	39.31*	36.74*	2.57	45.26*	45.55*	-0.29
Year 2	41.15*	41.07*	0.08	48.02*	50.52*	-2.50
Overall	40.26*	38.96*	1.29	46.68*	48.10*	-1.42

(continued)

Table F-104 (continued)
Pennsylvania: Decomposition of the medical expenditure estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Other expenditures						
Year 1	19.55*	20.14*	-0.59	20.94*	24.49*	-3.55
Year 2	20.60*	22.61*	-2.00	22.23*	25.37*	-3.13
Overall	20.09*	21.40*	-1.31	21.61*	24.94*	-3.34*
Laboratory expenditures						
Year 1	3.65*	5.16*	-1.50*	3.48*	5.88*	-2.39*
Year 2	3.18*	5.74*	-2.56*	3.04*	5.20*	-2.15*
Overall	3.41*	5.46*	-2.04*	3.26*	5.53*	-2.27*
Imaging expenditures						
Year 1	-4.68*	-3.63*	-1.04	-4.77*	-4.13*	-0.64
Year 2	-5.89*	-4.28*	-1.61	-5.85*	-4.97*	-0.88
Overall	-5.30*	-3.96*	-1.33	-5.32*	-4.56*	-0.77
Other facility expenditures						
Year 1	-0.22	-0.05	-0.17	-0.24	0.05	-0.29
Year 2	-0.31*	-0.25*	-0.06	-0.30*	0.21	-0.51
Overall	-0.27	-0.15	-0.11	-0.27	0.13	-0.40*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-105 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on medical service utilizations.

Table F-105
Pennsylvania: Decompositions of the medical service utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause admissions						
Year 1	73.13*	71.53*	1.60	72.72*	69.05*	3.67
Year 2	73.23*	78.65*	-5.42	72.99*	72.96*	0.03
Overall	73.18*	75.18*	-2.00	72.86*	71.06*	1.80
ER visits not leading to hospitalization						
Year 1	100.25*	103.86*	-3.61	100.20*	101.99*	-1.79
Year 2	97.98*	101.73*	-3.75	97.94*	99.59*	-1.65
Overall	99.08*	102.77*	-3.68	99.04*	100.76*	-1.72

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-106 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on total Medicare expenditures for special populations.

Table F-106
Pennsylvania: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline			Model predicted average change from baseline		
	MAPCP	CG PCMHs	Difference	MAPCP	CG non-PCMHs	Difference
Multiple chronic conditions only						
Year 1	998.54*	890.60*	107.94	1,163.42*	1,193.13*	-29.71
Year 2	947.26*	1,114.14*	-166.89*	1,117.17*	1,231.51*	-114.35*
Overall	973.71*	998.85*	-25.14	1,141.02*	1,211.72*	-70.69
Behavioral health conditions only						
Year 1	484.85*	501.13*	-16.28	766.86*	862.76*	-95.90
Year 2	488.89*	609.72*	-120.83*	777.05*	889.44*	-112.39
Overall	486.89*	555.87*	-68.98*	771.99*	876.21*	-104.21
Disabled beneficiaries only						
Year 1	387.94*	357.92*	30.01	516.51*	512.95*	3.56
Year 2	415.25*	459.57*	-44.31	546.31*	610.00*	-63.69
Overall	402.01*	410.27*	-8.27	531.86*	562.94*	-31.08
Dually eligible only						
Year 1	430.89*	393.58*	37.31	570.62*	545.40*	25.22
Year 2	433.11*	486.04*	-52.93	575.72*	597.04*	-21.32
Overall	432.03*	440.95*	-8.92	573.23*	571.86*	1.38
Rural beneficiaries only						
Year 1	447.65*	383.00*	64.65*	482.22*	439.36*	42.86
Year 2	440.69*	796.04*	-355.35*	477.51*	481.50*	-3.99
Overall	444.12*	592.61*	-148.49*	479.83*	460.74*	19.08
Northeast beneficiaries only						
Year 1	449.64*	392.35*	57.28*	506.19*	504.77*	1.41
Year 2	473.87*	499.57*	-25.70	534.30*	564.25*	-29.95
Overall	461.96*	446.90*	15.07	520.49*	535.03*	-14.54
Southeast beneficiaries only						
Year 1	617.07*	609.82*	7.24	609.19*	616.71*	-7.52
Year 2	637.92*	682.39*	-44.46	626.95*	685.53*	-58.57
Overall	627.93*	647.62*	-19.69	618.44*	652.56*	-34.11

(continued)

Table F-106 (continued)
Pennsylvania: Decomposition of the total Medicare expenditure estimates for special population beneficiaries

Outcome	Model predicted average change from baseline			Model predicted average change from baseline		
	MAPCP	CG PCMHs	Difference	MAPCP	CG non-PCMHs	Difference
Non-White beneficiaries only						
Year 1	620.44*	578.98*	41.46	537.52*	507.07*	30.45
Year 2	649.19*	672.96*	-23.78	566.16*	597.41*	-31.25
Overall	635.50*	628.23*	7.27	552.52*	554.41*	-1.88

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-107 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on process of care indicators for beneficiaries with multiple chronic conditions.

Table F-107
Pennsylvania: Decomposition of the process of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted likelihood during demonstration		Difference	Model predicted likelihood during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
HbA1c testing						
Year 1	92.92*	93.27*	-0.34	87.31*	85.52*	1.78
Year 2	93.06*	92.22*	0.84	87.15*	87.62*	-0.47
Overall	92.98*	92.86*	0.12	87.25*	86.34*	0.91
Retinal eye examination						
Year 1	59.07*	54.53*	4.55*	64.78*	64.25*	0.53
Year 2	57.01*	59.10*	-2.09	63.17*	64.74*	-1.57
Overall	58.27*	56.31*	1.96	64.15*	64.44*	-0.29
LDL-C screening						
Year 1	90.85*	89.85*	1.00	85.54*	81.78*	3.76*
Year 2	90.57*	89.86*	0.71	84.88*	83.53*	1.35
Overall	90.74*	89.86*	0.89	85.29*	82.46*	2.82
Medical attention for nephropathy						
Year 1	83.39*	85.34*	-1.95	84.65*	81.25*	3.40*
Year 2	81.28*	86.12*	-4.84*	83.08*	83.35*	-0.27
Overall	82.57*	85.64*	-3.08	84.04*	82.07*	1.97*
Received all 4 diabetes tests						
Year 1	47.61*	46.33*	1.29	50.77*	47.78*	2.99
Year 2	45.27*	49.51*	-4.24*	48.95*	50.31*	-1.35
Overall	46.70*	47.56*	-0.86	50.06*	48.76*	1.30
Received none of the 4 diabetes tests						
Year 1	1.65*	1.79*	-0.14	2.59*	2.60*	-0.01
Year 2	1.45*	1.31*	0.14	2.36*	2.09*	0.26
Overall	1.57*	1.60*	-0.03	2.50*	2.40*	0.10
Total lipid panel						
Year 1	77.88*	75.93*	1.95	72.98*	71.46*	1.52
Year 2	77.03*	74.42*	2.60	71.95*	71.14*	0.80
Overall	77.55*	75.34*	2.21	72.57*	71.33*	1.24

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-108 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on selected health outcomes for beneficiaries with multiple chronic conditions.

Table F-108
Pennsylvania: Decomposition of the health outcome estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Avoidable catastrophic events						
Year 1	15.28*	17.15*	-1.87	15.02*	14.62*	0.40
Year 2	17.41*	21.19	-3.79	17.24*	18.35*	-1.12
Overall	16.31*	19.11	-2.80	16.09*	16.43*	-0.33
PQI admissions—overall						
Year 1	36.54*	31.36*	5.18*	36.59*	34.53*	2.06
Year 2	35.68*	40.12*	-4.44	35.85*	36.34*	-0.49
Overall	36.12*	35.60*	0.52	36.23*	35.40*	0.83
PQI admissions—acute						
Year 1	12.61	10.71	1.90	12.58*	12.28*	0.30
Year 2	11.93	11.71	0.22	11.92*	12.54*	-0.62
Overall	12.28	11.20	1.09	12.26*	12.40*	-0.14
PQI admissions—chronic						
Year 1	22.66*	19.79*	2.87	22.66*	21.15*	1.52
Year 2	22.49*	27.34*	-4.85	22.58*	22.69*	-0.11
Overall	22.58*	23.45*	-0.87	22.62*	21.89*	0.73

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. 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 F-109 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on access to care and coordination of care outcomes for beneficiaries with multiple chronic conditions.

Table F-109
Pennsylvania: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Primary care visits (per 1,000 beneficiaries)						
Year 1	1,363.14*	1,204.77*	158.38*	1,364.16*	1,216.28*	147.88*
Year 2	1,328.48*	1,222.61*	105.87*	1,327.99*	1,219.16*	108.83*
Overall	1,346.36*	1,213.41*	132.95*	1,346.64*	1,217.67*	128.97*
Medical specialist visits (per 1,000 beneficiaries)						
Year 1	1,309.91*	1,363.55*	-53.65	1,319.84*	1,336.71*	-16.87
Year 2	1,349.99*	1,368.15*	-18.16	1,362.52*	1,380.55*	-18.04
Overall	1,329.32*	1,365.78*	-36.46	1,340.51*	1,357.94*	-17.43
Surgical specialist visits (per 1,000 beneficiaries)						
Year 1	239.83*	247.03*	-7.20	240.32*	235.50*	4.82
Year 2	228.59*	230.06*	-1.47	228.52*	227.77*	0.75
Overall	234.39*	238.81*	-4.42	234.61*	231.76*	2.85
Primary care visits as a percent of total visits						
Year 1						
1st quintile	26.59*	28.56*	-1.97	38.37*	41.92*	-3.56*
5th quintile	21.05*	19.46*	1.59	14.64*	12.88*	1.76*
Year 2						
1st quintile	27.80*	30.63*	-2.82	40.02*	43.89*	-3.88*
5th quintile	20.05*	17.95*	2.10	13.79*	12.01*	1.79*
Overall						
1st quintile	27.08*	29.39*	-2.31	39.03*	42.72*	-3.69*
5th quintile	20.65*	18.85*	1.80	14.30*	12.53*	1.77*
Follow-up visits within 14 days after discharge (per 1,000 beneficiaries with a live discharge)						
Year 1	810.20*	778.00*	32.20	809.51*	782.34*	27.16
Year 2	787.29*	720.76*	66.53	786.84*	733.70*	53.14*
Overall	799.79*	751.98*	47.80	799.21*	760.23*	38.97*

(continued)

Table F-109 (continued)
Pennsylvania: Decomposition of the access to care and coordination of care estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)						
Year 1	220.16*	231.53*	-11.37	221.28*	242.35*	-21.07
Year 2	217.10*	231.24*	-14.14	218.49*	242.75*	-24.26
Overall	218.76*	231.40*	-12.63	220.01*	242.54*	-22.52
Continuity of care index (higher quintile = better care coordination)						
Year 1						
1st quintile	20.43*	20.46*	-0.03	28.47*	29.25*	-0.78
5th quintile	16.78*	16.76*	0.03	12.20*	11.80*	0.40
Year 2						
1st quintile	19.26*	21.11*	-1.85	27.19*	29.96*	-2.77*
5th quintile	17.84*	16.22*	1.62	12.90*	11.45*	1.45*
Overall						
1st quintile	19.96*	20.72*	-0.77	27.95*	29.54*	-1.58
5th quintile	17.21*	16.54*	0.67	12.49*	11.66*	0.82

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-110 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on medical expenditures for beneficiaries with multiple chronic conditions.

Table F-110
Pennsylvania: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	998.54*	890.60*	107.94	1,163.42*	1,193.13*	-29.71
Year 2	947.26*	1,114.14*	-166.89*	1,117.17*	1,231.51*	-114.35*
Overall	973.71*	998.85*	-25.14	1,141.02*	1,211.72*	-70.69
Acute-care expenditures						
Year 1	182.22*	144.92	37.31	301.51*	307.87*	-6.36
Year 2	190.50*	257.00*	-66.50*	310.88*	334.14*	-23.26
Overall	186.23*	199.19*	-12.96	306.05*	320.59*	-14.54
Post-acute-care expenditures						
Year 1	273.88*	219.67*	54.20*	295.75*	299.21*	-3.47
Year 2	241.62*	284.70*	-43.08*	264.73*	319.79*	-55.06*
Overall	258.26*	251.16*	7.10	280.73*	309.18*	-28.45
ER expenditures						
Year 1	25.74*	26.78*	-1.04	24.15*	24.95*	-0.80
Year 2	24.92*	32.94*	-8.03*	23.14*	28.01*	-4.88*
Overall	25.34*	29.77*	-4.42	23.66*	26.43*	-2.77
Outpatient expenditures						
Year 1	149.94*	166.91*	-16.97	139.94*	136.83*	3.11
Year 2	145.86*	184.12*	-38.26*	135.64*	141.61*	-5.97
Overall	147.97*	175.24*	-27.28*	137.86*	139.14*	-1.28
Specialty physician expenditures						
Year 1	96.10*	88.29*	7.81	116.06*	125.49*	-9.43
Year 2	80.60*	79.35*	1.25	101.29*	115.38*	-14.09
Overall	88.59*	83.96*	4.64	108.91*	120.59*	-11.69
Primary care physician expenditures						
Year 1	44.82*	39.28*	5.54*	48.00*	48.55*	-0.55
Year 2	44.53*	51.29*	-6.77*	47.84*	54.11*	-6.28*
Overall	44.68*	45.10*	-0.42	47.92*	51.25*	-3.32

(continued)

Table F-110 (continued)
Pennsylvania: Decomposition of the medical expenditure estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Home health expenditures						
Year 1	90.62*	81.57*	9.05*	103.71*	105.68*	-1.97
Year 2	85.85*	93.18*	-7.33*	100.09*	113.36*	-13.27*
Overall	88.31*	87.19*	1.12	101.95*	109.40*	-7.44
Other expenditures						
Year 1	35.55*	43.51*	-7.96	38.70*	51.08*	-12.38
Year 2	40.66*	50.07*	-9.40	44.28*	53.46*	-9.18
Overall	38.02*	46.68*	-8.66	41.40*	52.23*	-10.83
Laboratory expenditures						
Year 1	4.59*	3.84*	0.75	4.64*	6.65*	-2.01*
Year 2	2.88*	4.31*	-1.44	2.90*	4.85*	-1.95*
Overall	3.76*	4.07*	-0.31	3.80*	5.78*	-1.98*
Imaging expenditures						
Year 1	-5.84*	-5.38*	-0.46	-5.02*	-5.08*	0.05
Year 2	-8.72*	-6.79*	-1.93	-7.79*	-8.65*	0.85
Overall	-7.23*	-6.06*	-1.17	-6.36*	-6.80*	0.44
Other facility expenditures						
Year 1	-0.79	0.31	-1.10	-0.76*	0.30	-1.07*
Year 2	-0.73	-0.46	-0.27	-0.68	-0.23	-0.45
Overall	-0.76	-0.07	-0.69	-0.72	0.04	-0.77*

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-111 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on medical service utilizations for beneficiaries with multiple chronic conditions.

Table F-111
Pennsylvania: Decompositions of the medical service utilization estimates for multiple chronic conditions beneficiaries

Outcome	Model predicted utilization during demonstration			Model predicted utilization during demonstration		
	MAPCP	CG PCMHs	Difference	MAPCP	CG non-PCMHs	Difference
All-cause admissions						
Year 1	172.92*	162.47*	10.46*	173.00*	157.09*	15.90*
Year 2	162.07*	181.32*	-19.25	162.24*	162.20*	0.04
Overall	167.67*	171.60*	-3.93	167.79*	159.57*	8.22
ER visits not leading to hospitalization						
Year 1	176.56*	177.03*	-0.46	174.12*	174.82*	-0.69
Year 2	167.24*	178.33*	-11.09	164.37*	174.01*	-9.64
Overall	172.05*	177.66*	-5.61	169.40*	174.43*	-5.03

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-112 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on total Medicare expenditures for behavioral health care.

Table F-112
Pennsylvania: Decompositions of the expenditures for behavioral health care estimates

Outcome	Model predicted average change from baseline		Difference	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
Total Medicare expenditures						
Year 1	484.85*	501.13*	-16.28	766.86*	862.76*	-95.90
Year 2	488.89*	609.72*	-120.83*	777.05*	889.44*	-112.39
Overall	486.89*	555.87*	-68.98*	771.99*	876.21*	-104.21
Acute-care expenditures						
Year 1	-69.32	-65.61	-3.71	183.71*	233.27*	-49.57
Year 2	-49.93	7.84	-57.77	205.74*	252.61*	-46.87
Overall	-59.55	-28.59	-30.96	194.81*	243.02*	-48.21
Expenditures for ER visits not leading to hospitalization						
Year 1	27.17*	31.34*	-4.17	24.97*	23.51*	1.45
Year 2	25.81*	26.53*	-0.71	23.21*	23.95*	-0.74
Overall	26.49*	28.91*	-2.43	24.08*	23.73*	0.35
Total for principal diagnosis of BHC						
Year 1	13.40	6.20	7.20*	23.77*	25.42*	-1.65
Year 2	15.36	12.65	2.72	26.16*	28.56*	-2.41
Overall	14.39	9.45	4.94*	24.97*	27.00*	-2.03
Total for secondary diagnosis of BHC						
Year 1	163.09*	183.87*	-20.78	180.96*	223.43*	-42.48*
Year 2	179.90*	209.73*	-29.83*	199.86*	232.38*	-32.53
Overall	171.56*	196.90*	-25.34*	190.48*	227.95*	-37.46

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main body of this report. BHC = behavioral health condition; 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 F-113 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on behavioral and non-behavioral health care utilization.

Table F-113
Pennsylvania: Decompositions of the behavioral and non-behavioral health care utilization estimates

Outcome	Model predicted utilization during demonstration		Difference	Model predicted utilization during demonstration		Difference
	MAPCP	CG PCMHs		MAPCP	CG non-PCMHs	
All-cause inpatient admissions						
Year 1	102.19*	98.46*	3.73	100.67*	93.29*	7.38
Year 2	92.41*	106.96*	-14.55	91.03*	90.33*	0.70
Overall	97.26*	102.74*	-5.48	95.81*	91.80*	4.01
ER visits not leading to hospitalization						
Year 1	247.49*	243.70*	3.79	243.11*	230.88*	12.23
Year 2	232.00*	223.39*	8.61	227.81*	221.44*	6.37
Overall	239.68*	233.46*	6.22	235.40*	226.13*	9.28
Behavioral health inpatient admissions						
Year 1	4.46*	3.09*	1.38	3.83*	3.47*	0.36
Year 2	4.25*	3.78*	0.47	3.62*	3.29*	0.32
Overall	4.36*	3.44*	0.92	3.72*	3.38*	0.34
Behavioral health ER visits						
Year 1	24.72*	24.34*	0.38	24.09*	22.06*	2.03
Year 2	24.09*	21.38*	2.71	23.52*	20.44*	3.08
Overall	24.40*	22.85*	1.56	23.80*	21.24*	2.56
Behavioral health outpatient visits						
Year 1	757.01*	671.00*	86.01*	757.11*	737.82*	19.30
Year 2	731.29*	709.36*	21.92	730.48*	769.57*	-39.09
Overall	744.09*	690.26*	53.84	743.74*	753.76*	-10.02

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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 F-114 presents decompositions of the estimates of the changes associated with the Pennsylvania MAPCP Demonstration on expenditures and health care utilization for rural beneficiaries.

Table F-114
Pennsylvania: Decompositions of the expenditure and health care utilization estimates for rural Medicare beneficiaries

Outcome	Model predicted average change from baseline		Difference
	MAPCP	CG PCMHs	
Acute-care expenditures			
Year 1	105.23*	69.57*	35.66*
Year 2	87.65*	378.53*	-290.88*
Overall	96.31*	226.37*	-130.05*
Expenditures for ER visits not leading to hospitalization			
Year 1	11.03*	7.59*	3.44*
Year 2	10.63*	8.17*	2.46
Overall	10.83*	7.88*	2.94*
Model predicted utilization during demonstration			
All-cause admissions			
Year 1	64.00	52.31	11.69
Year 2	58.90	103.72	-44.82
Overall	61.41	78.40	-16.99
ER visits not leading to hospitalization			
Year 1	85.71	65.27	20.44
Year 2	79.94	71.15	8.79
Overall	82.78	68.25	14.53
30-day unplanned readmissions (per 1,000 beneficiaries with a live discharge)			
Year 1	148.85	357.82	-208.97
Year 2	116.48	379.26	-262.78
Overall	133.63	367.90	-234.27

NOTES: Table reports decomposition of the difference-in-differences estimates reported in the main 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.

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APPENDIX G
NUMBER OF WEIGHTED OBSERVATIONS USED IN ALL REPORTED ANALYSES

In this appendix we present the number of weighted observations used in all reported analyses. The numbers of observations are broken down by beneficiaries' assignment status (i.e., Multi-Payer Advanced Primary Care Practice [MAPCP], patient-centered medical home [PCMH], or non-PCMH). Where possible, we grouped together outcomes whenever the numbers of nonmissing observations were equivalent across outcomes.

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

	All beneficiaries			Beneficiaries with multiple chronic conditions		
Outcome	**MAPCP**	**CG PCMH**	**CG non-PCMH**	**MAPCP**	**CG PCMH**	**CG non-PCMH**
Expenditure, utilization, and access to care measures[1]						
Year 1	21,481	50,261	53,910	5,347	12,662	13,473
Year 2	22,767	49,809	59,759	5,284	11,629	14,139
Overall	24,755	58,358	64,857	6,014	14,132	15,796
30-day unplanned readmissions						
Year 1	3,733	8,383	8,469	1,798	4,085	4,040
Year 2	3,748	8,039	9,727	1,602	3,475	4,334
Overall	6,320	13,969	15,477	2,726	6,101	6,798
Follow-up visits within 14 days after discharge						
Year 1	3,098	6,896	6,691	1,463	3,306	3,119
Year 2	3,114	6,733	7,766	1,282	2,873	3,446
Overall	5,335	11,714	12,585	2,240	5,045	5,453
Diabetes process of care measures[2]						
Year 1	4,112	8,113	7,831	1,342	2,627	2,559
Year 2	3,087	5,465	4,290	967	1,635	1,290
Overall	4,113	8,145	7,831	1,342	2,632	2,559
Total lipid panel						
Year 1	6,603	12,352	13,842	2,942	5,838	6,393
Year 2	5,096	8,772	8,865	2,048	3,583	3,572
Overall	6,606	12,369	13,842	2,942	5,839	6,393
Primary care visits as a percentage of total visits						
Year 1	16,372	38,438	42,194	4,560	10,767	11,356
Year 2	13,542	27,077	29,916	3,498	7,148	7,399
Overall	16,377	38,480	42,197	4,560	10,769	11,357
Continuity of care index						
Year 1	21,461	47,724	53,290	5,750	12,642	14,040
Year 2	18,028	32,807	35,945	4,552	8,368	9,038
Overall	21,471	47,776	53,327	5,750	12,650	14,040

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 3-7***, (2) all the utilization outcomes reported in ***Table 3-8***, and (3) selected outcomes reported in ***Table 3-6*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 3-4***, except for total lipid panel.

CG = comparison group; 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 1	5,165	11,499	10,880
	Year 2	5,366	12,526	14,484
	Overall	5,895	13,936	15,169
Rural beneficiaries	Total Medicare expenditures			
	Year 1	4,143	5,712	5,763
	Year 2	4,337	5,503	6,717
	Overall	4,668	6,376	7,281
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year 1	6,858	15,515	14,992
	Year 2	7,241	16,563	19,387
	Overall	7,939	18,717	20,392
	30-day unplanned readmissions			
	Year 1	1,200	2,694	—
	Year 2	1,225	2,643	—
	Overall	2,006	4,486	—
Non-White beneficiaries	Total Medicare expenditures			
	Year 1	475	1,005	1,127
	Year 2	544	1,321	1,462
	Overall	587	1,419	1,552
Pod 1 and all comparisons	Total Medicare expenditures			
	Year 1	2,873	50,261	53,910
	Year 2	2,981	49,809	59,759
	Overall	3,206	58,358	64,857
Pod 2 and all comparisons	Expenditure and utilization measures[1]			
	Year 1	8,277	50,261	53,910
	Year 2	8,914	49,809	59,759
	Overall	9,729	58,358	64,857
	30-day unplanned readmissions			
	Year 1	1,358	8,383	8,469
	Year 2	1,409	8,039	9,727
	Overall	2,336	13,969	15,477
Pod 3 and all comparisons	Total Medicare expenditures			
	Year 1	10,331	50,261	53,910
	Year 2	10,872	49,809	59,759
	Overall	11,820	58,358	64,857
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[2]			
	Year 1	3,257	6,577	8,310
	Year 2	3,354	6,691	10,333
	Overall	3,791	7,658	10,922

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 3-16*** and ***Table 3-17***.

CG = comparison group; ER = emergency room; — = not applicable; 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, and access to care measures[1]						
Year 1	7,924	12,376	35,568	1,859	2,947	8,242
Year 2	9,671	17,023	38,528	2,064	3,733	8,189
Overall	10,654	18,329	42,402	2,379	4,108	9,434
30-day unplanned readmissions						
Year 1	1,263	1,960	5,521	628	962	2,555
Year 2	1,444	2,190	5,755	614	1,009	2,355
Overall	2,342	3,566	9,570	1,019	1,611	3,975
Follow-up visits within 14 days after discharge						
Year 1	1,031	1,529	4,107	488	733	1,805
Year 2	1,132	1,642	4,314	481	774	1,672
Overall	1,888	2,768	7,316	806	1,244	2,882
Diabetes process of care measures[2]						
Year 1	1,666	1,778	5,374	589	613	1,656
Year 2	1,009	1,276	3,701	351	400	1,026
Overall	1,667	1,782	5,376	589	613	1,656
Total lipid panel						
Year 1	2,279	2,720	8,247	1,033	1,306	3,656
Year 2	1,588	1,961	6,000	665	818	2,251
Overall	2,279	2,723	8,248	1,033	1,306	3,656
Primary care visits as a percentage of total visits						
Year 1	8,213	13,655	30,239	2,034	3,302	7,115
Year 2	6,250	7,727	21,456	1,472	1,896	4,790
Overall	8,217	13,659	30,239	2,034	3,303	7,115
Continuity of care index						
Year 1	9,417	15,413	35,458	2,276	3,761	8,564
Year 2	7,282	8,778	25,035	1,673	2,169	5,782
Overall	9,421	15,419	35,458	2,276	3,762	8,564

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 4-9***, (2) all the utilization outcomes reported in ***Table 4-10***, and (3) selected outcomes reported in ***Table 4-8*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 4-6***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Total Medicare expenditures Year 1	2,185	4,334	10,902
	Year 2	2,976	5,350	12,159
	Overall	3,333	5,735	13,289
Disabled beneficiaries	Total Medicare expenditures Year 1	2,802	5,011	13,156
	Year 2	3,605	6,463	14,685
	Overall	4,051	6,959	16,101
Non-White beneficiaries	Total Medicare expenditures Year 1	773	1,581	4,141
	Year 2	1,238	2,186	5,028
	Overall	1,368	2,330	5,428
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[1] Year 1	1,795	3,028	8,093
	Year 2	2,210	3,901	8,615
	Overall	2,519	4,226	9,716

NOTES:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 4-18*** and ***Table 4-19***.

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

	All beneficiaries			Beneficiaries with multiple chronic conditions		
Outcome	**MAPCP**	**CG PCMH**	**CG non-PCMH**	**MAPCP**	**CG PCMH**	**CG non-PCMH**
Expenditure, utilization, and access to care measures[1]						
Year 1	50,292	34,870	96,501	12,589	7,904	23,795
Year 2	62,371	35,460	101,495	14,341	7,638	23,344
Overall	65,857	37,266	111,869	15,637	8,334	26,659
30-day unplanned readmissions						
Year 1	6,731	4,709	13,467	3,344	2,139	6,374
Year 2	8,266	4,858	14,360	3,736	1,815	6,000
Overall	13,097	8,332	24,244	5,914	3,273	10,318
Follow-up visits within 14 days after discharge						
Year 1	5,316	3,737	10,225	2,599	1,686	4,646
Year 2	6,496	3,769	10,896	2,857	1,394	4,319
Overall	10,513	6,652	18,778	4,660	2,589	7,667
Diabetes process of care measures[2]						
Year 1	8,585	5,158	13,897	2,957	1,453	4,570
Year 2	5,818	3,330	9,160	1,966	768	2,849
Overall	8,588	5,159	13,897	2,959	1,453	4,570
Total lipid panel						
Year 1	13,644	8,620	20,915	6,498	3,531	9,670
Year 2	10,013	6,165	14,371	4,344	2,174	5,825
Overall	13,653	8,620	20,915	6,502	3,531	9,670
Primary care visits as a percentage of total visits						
Year 1	37,441	21,215	62,127	10,814	5,600	16,845
Year 2	29,453	16,268	45,690	8,193	3,692	11,804
Overall	37,454	21,216	62,127	10,814	5,600	16,845
Continuity of care index						
Year 1	55,659	30,097	92,491	14,834	7,340	24,481
Year 2	45,164	22,419	67,362	11,641	4,785	16,966
Overall	55,686	30,097	92,492	14,839	7,340	24,481

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 5-8***, (2) all the utilization outcomes reported in ***Table 5-9***, and (3) selected outcomes reported in ***Table 5-6*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 5-4***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Expenditure and utilization measures[1]			
	Year 1	14,036	9,177	25,881
	Year 2	17,104	9,666	28,116
	Overall	18,056	10,071	30,710
	30-day unplanned readmissions			
	Year 1	2,109	—	4,114
	Year 2	2,578	—	4,543
	Overall	4,040	—	7,450
Rural beneficiaries	Expenditure and utilization measures[1]			
	Year 1	14,804	4,648	12,056
	Year 2	17,046	4,963	13,016
	Overall	18,117	5,068	14,146
	30-day unplanned readmissions			
	Year 1	2,016	—	1,635
	Year 2	2,196	—	1,726
	Overall	3,696	—	2,914
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year 1	13,095	8,532	24,723
	Year 2	16,344	9,020	26,859
	Overall	17,239	9,320	29,317
	30-day unplanned readmissions			
	Year 1	1,908	—	3,593
	Year 2	2,312	—	4,025
	Overall	3,573	—	6,450
SASH beneficiaries	Expenditure and utilization measures[1]			
	Year 1	1,629	34,870	96,501
	Year 2	2,006	35,460	101,495
	Overall	2,035	37,266	111,869
	30-day unplanned readmissions			
	Year 1	262	—	13,467
	Year 2	364	—	14,360
	Overall	535	—	24,244
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[2]			
	Year 1	8,157	5,289	17,166
	Year 2	9,760	5,291	17,900
	Overall	10,457	5,691	20,001

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 5-17*** and ***Table 5-18***.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; 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, and access to care measures[1]						
Year 1	26,472	59,391	107,072	6,841	15,801	28,116
Year 2	27,808	64,471	121,535	6,580	15,958	29,670
Overall	30,836	71,510	130,091	7,623	18,155	32,993
30-day unplanned readmissions						
Year 1	4,243	7,380	16,482	2,194	4,025	8,391
Year 2	4,502	10,254	19,314	2,042	4,909	8,799
Overall	7,478	15,335	30,544	3,425	7,376	13,938
Follow-up visits within 14 days after discharge						
Year 1	3,492	6,056	13,800	1,769	3,273	6,831
Year 2	3,688	8,557	16,036	1,644	4,093	6,989
Overall	6,268	12,896	25,995	2,827	6,188	11,461
Diabetes process of care measures[2]						
Year 1	5,754	11,325	20,782	1,932	4,258	7,296
Year 2	3,821	4,917	11,420	1,165	1,786	3,785
Overall	5,759	11,325	20,792	1,933	4,259	7,296
Total lipid panel						
Year 1	7,348	16,351	27,090	3,509	7,466	12,806
Year 2	5,144	6,249	15,731	2,176	2,671	6,715
Overall	7,354	16,351	27,100	3,512	7,466	12,807
Primary care visits as a percentage of total visits						
Year 1	22,696	48,396	91,605	6,303	13,724	25,424
Year 2	17,199	28,603	61,277	4,538	7,875	16,136
Overall	22,707	48,397	91,635	6,306	13,724	25,429
Continuity of care index						
Year 1	26,871	57,724	104,664	7,243	16,051	28,859
Year 2	20,523	33,963	69,694	5,327	9,158	18,317
Overall	26,890	57,725	104,705	7,247	16,051	28,866

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 6-9***, (2) all the utilization outcomes reported in ***Table 6-10***, and (3) selected outcomes reported in ***Table 6-8*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 6-6***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Total Medicare expenditures Year 1	7,230	15,480	29,056
	Year 2	7,034	16,010	31,227
	Overall	8,120	18,868	34,293
Rural beneficiaries	Total Medicare expenditures Year 1	19,513	20,251	29,674
	Year 2	19,592	22,416	35,435
	Overall	21,961	26,254	37,835
Disabled beneficiaries	Total Medicare expenditures Year 1	8,246	17,740	32,755
	Year 2	8,186	19,186	36,476
	Overall	9,369	21,695	39,492
Non-White beneficiaries	Total Medicare expenditures Year 1	5,130	11,132	20,626
	Year 2	5,154	12,428	22,870
	Overall	5,804	13,422	24,499
Network 1 and all comparisons	Total Medicare expenditures Year 1	8,936	59,391	107,072
	Year 2	10,329	64,471	121,535
	Overall	11,165	71,510	130,091
Network 2 and all comparisons	Expenditure and utilization measures[1] Year 1	3,787	59,391	107,072
	Year 2	4,100	64,471	121,535
	Overall	4,347	71,510	130,091
	30-day unplanned readmissions Year 1	433	7,380	16,482
	Year 2	553	10,254	19,314
	Overall	876	15,335	30,544
Network 3 and all comparisons	Total Medicare expenditures Year 1	10,329	59,391	107,072
	Year 2	9,646	64,471	121,535
	Overall	11,418	71,510	130,091
Network 4 and all comparisons	Total Medicare expenditures Year 1	3,420	59,391	107,072
	Year 2	3,733	64,471	121,535
	Overall	3,906	71,510	130,091
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[2] Year 1	2,392	6,279	11,431
	Year 2	2,320	6,364	12,361
	Overall	2,762	7,497	13,617

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 6-18*** and ***Table 6-19***.

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

	All beneficiaries		Beneficiaries with multiple chronic conditions	
Outcome	MAPCP	CG non-PCMH	MAPCP	CG non-PCMH
Expenditure, utilization, and access to care measures[1]				
Year 1	63,391	38,759	15,945	9,376
Year 2	96,551	31,679	24,467	7,240
Overall	106,616	42,577	27,253	10,294
30-day unplanned readmissions				
Year 1	8,905	6,646	4,304	3,105
Year 2	13,546	4,948	6,482	2,009
Overall	19,811	10,050	9,163	4,258
Follow-up visits within 14 days after discharge				
Year 1	6,981	5,092	3,363	2,340
Year 2	10,433	3,718	4,966	1,493
Overall	15,588	7,757	7,187	3,238
Diabetes process of care measures[2]				
Year 1	10,652	4,573	3,790	1,699
Year 2	3,555	2,133	1,194	707
Overall	10,656	4,573	3,790	1,699
Total lipid panel				
Year 1	14,222	7,179	7,060	3,389
Year 2	4,376	3,695	1,964	1,478
Overall	14,225	7,179	7,061	3,389
Primary care visits as a percentage of total visits				
Year 1	65,649	26,402	21,320	7,483
Year 2	31,993	15,407	9,534	3,873
Overall	65,682	26,404	21,325	7,483
Continuity of care index				
Year 1	78,853	30,850	24,356	8,645
Year 2	39,351	17,333	11,290	4,386
Overall	78,906	30,852	24,366	8,645

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 7-8***, (2) all the utilization outcomes reported in ***Table 7-9***, and (3) selected outcomes reported in ***Table 7-7*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 7-5***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Total Medicare expenditures Year 1	14,973	9,621
	Year 2	23,892	8,045
	Overall	25,857	10,692
Rural beneficiaries	Total Medicare expenditures Year 1	6,480	4,314
	Year 2	8,977	3,050
	Overall	10,002	5,035
Disabled beneficiaries	Total Medicare expenditures Year 1	20,351	13,202
	Year 2	32,899	11,062
	Overall	35,697	14,689
Non-White beneficiaries	Total Medicare expenditures Year 1	6,804	4,130
	Year 2	10,629	3,699
	Overall	11,545	4,683
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[1] Year 1	13,463	8,950
	Year 2	20,822	7,015
	Overall	22,934	9,721

NOTES:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 7-17*** and ***Table 7-18***.

CG = comparison group; 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

	All beneficiaries			Beneficiaries with multiple chronic conditions		
Outcome	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year 1	21,549	16,002	42,719	5,708	4,254	10,928
Year 2	49,729	17,226	30,005	12,968	3,997	6,929
Overall	52,470	19,297	45,948	13,911	4,852	11,500
30-day unplanned readmissions						
Year 1	3,346	2,554	6,823	1,730	1,342	3,532
Year 2	7,726	2,567	4,273	3,789	1,154	1,991
Overall	10,028	4,384	9,734	4,848	2,073	4,697
Follow-up visits within 14 days after discharge						
Year 1	2,673	2,181	5,463	1,360	1,152	2,855
Year 2	6,244	2,252	3,474	3,034	977	1,596
Overall	8,149	3,827	7,916	3,896	1,776	3,790
Diabetes process of care measures[2]						
Year 1	7,756	2,659	6,554	3,045	910	2,586
Year 2	2,665	1,703	3,471	972	462	1,273
Overall	7,759	2,659	6,557	3,047	910	2,586
Total lipid panel						
Year 1	11,082	4,000	9,500	5,719	2,061	4,839
Year 2	4,124	2,703	5,073	1,851	1,185	2,103
Overall	11,089	4,000	9,506	5,723	2,061	4,841
Primary care visits as a percentage of total visits						
Year 1	30,603	11,069	23,240	9,793	3,373	7,190
Year 2	14,454	8,216	13,603	4,758	2,250	3,644
Overall	30,612	11,070	23,249	9,794	3,373	7,192
Continuity of care index						
Year 1	45,277	15,156	33,379	13,272	4,263	9,523
Year 2	22,437	10,283	18,528	6,957	2,667	4,694
Overall	45,303	15,157	33,388	13,278	4,263	9,524

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 8-7***, (2) all the utilization outcomes reported in ***Table 8-8***, and (3) selected outcomes reported in ***Table 8-6*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 8-4***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Total Medicare expenditures			
	Year 1	10,217	7,562	20,471
	Year 2	23,570	8,136	13,847
	Overall	24,957	9,144	21,766
Rural beneficiaries	Total Medicare expenditures			
	Year 1	5,839	4,327	15,915
	Year 2	18,711	3,928	8,644
	Overall	19,388	4,777	16,958
Disabled beneficiaries	Total Medicare expenditures			
	Year 1	8,502	5,812	16,698
	Year 2	19,445	6,829	11,760
	Overall	20,639	7,541	17,995
Non-White beneficiaries	Total Medicare expenditures			
	Year 1	423	256	877
	Year 2	1,058	402	723
	Overall	1,129	420	992
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[1]			
	Year 1	5,651	2,965	8,526
	Year 2	11,891	3,231	5,774
	Overall	12,765	3,664	9,127

NOTES:

[1] The expenditure and utilization measures include all outcomes reported in ***Table 8-16*** and ***Table 8-17***.

CG = comparison group; 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, and access to care measures[1]						
Year 1	226,872	20,750	56,240	55,478	4,909	13,800
Year 2	228,788	15,517	42,929	51,517	3,545	9,427
Overall	267,526	22,869	62,054	63,881	5,355	14,793
30-day unplanned readmissions						
Year 1	38,250	3,464	9,571	18,254	1,597	4,721
Year 2	37,350	2,776	6,999	15,814	1,229	3,009
Overall	64,799	5,403	14,303	27,729	2,309	6,437
Follow-up visits within 14 days after discharge						
Year 1	32,059	2,962	8,171	15,106	1,325	3,956
Year 2	31,078	2,310	5,889	12,967	1,016	2,482
Overall	55,095	4,626	12,375	23,317	1,941	5,496
Diabetes process of care measures[2]						
Year 1	41,111	3,259	8,923	13,822	1,104	2,985
Year 2	23,837	1,443	4,361	7,514	446	1,275
Overall	41,161	3,259	8,932	13,841	1,104	2,987
Total lipid panel						
Year 1	65,690	5,730	15,606	30,532	2,508	7,391
Year 2	41,939	2,677	8,005	17,202	1,004	3,314
Overall	65,741	5,731	15,613	30,550	2,509	7,393
Primary care visits as a percentage of total visits						
Year 1	194,753	14,415	40,607	54,420	3,946	11,328
Year 2	136,211	7,132	21,838	35,076	1,853	5,475
Overall	194,923	14,422	40,631	54,459	3,946	11,330
Continuity of care index						
Year 1	226,051	16,671	44,632	60,702	4,405	12,217
Year 2	159,619	8,034	23,774	39,833	2,013	5,921
Overall	226,315	16,679	44,657	60,755	4,405	12,219

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 9-8***, (2) all the utilization outcomes reported in ***Table 9-9***, and (3) selected outcomes reported in ***Table 9-7*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 9-5***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Expenditure and utilization measures[1]			
	Year 1	34,888	3,117	8,843
	Year 2	35,977	2,534	6,413
	Overall	42,345	3,611	9,811
	30-day unplanned readmissions			
	Year 1	6,345	618	—
	Year 2	6,359	497	—
	Overall	10,659	956	—
Rural beneficiaries	Total Medicare expenditures			
	Year 1	14,780	492	6,605
	Year 2	15,474	430	5,822
	Overall	17,898	603	7,435
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year 1	58,155	5,258	14,574
	Year 2	59,865	4,264	11,162
	Overall	70,679	6,030	16,369
	30-day unplanned readmissions			
	Year 1	10,589	953	—
	Year 2	10,665	834	—
	Overall	17,849	1,505	—
Non-White beneficiaries	Expenditure and utilization measures[1]			
	Year 1	30,383	2,688	7,293
	Year 2	31,595	2,467	6,235
	Overall	37,080	3,166	8,580
	30-day unplanned readmissions			
	Year 1	5,534	504	—
	Year 2	5,371	491	—
	Overall	9,166	801	—
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[2]			
	Year 1	30,058	2,556	7,101
	Year 2	29,899	1,974	5,019
	Overall	36,472	2,930	7,789

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 9-17*** and ***Table 9-18***.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; 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

	All beneficiaries			Beneficiaries with multiple chronic conditions		
Outcome	MAPCP	CG PCMH	CG non-PCMH	MAPCP	CG PCMH	CG non-PCMH
Expenditure, utilization, and access to care measures[1]						
Year 1	30,373	34,133	87,533	8,039	8,630	22,399
Year 2	32,782	47,640	87,814	7,938	11,805	20,065
Overall	36,350	50,488	102,517	9,312	12,749	24,970
30-day unplanned readmissions						
Year 1	5,465	5,770	15,339	2,796	2,874	7,644
Year 2	5,379	7,028	14,708	2,356	3,217	6,528
Overall	9,215	10,783	25,275	4,166	4,881	11,268
Follow-up visits within 14 days after discharge						
Year 1	4,603	4,664	12,657	2,308	2,286	6,164
Year 2	4,527	5,676	12,176	1,931	2,546	5,202
Overall	7,890	8,979	21,348	3,490	3,996	9,276
Diabetes process of care measures[2]						
Year 1	5,372	6,100	13,867	2,032	2,066	5,148
Year 2	3,640	3,944	8,428	1,336	1,274	2,792
Overall	5,382	6,102	13,867	2,036	2,066	5,148
Total lipid panel						
Year 1	8,429	8,129	24,339	4,050	3,978	11,388
Year 2	6,358	5,724	16,593	2,735	2,499	6,789
Overall	8,437	8,130	24,357	4,052	3,978	11,403
Primary care visits as a percentage of total visits						
Year 1	29,056	32,352	73,093	8,199	9,141	19,825
Year 2	21,381	20,486	48,992	5,647	5,347	12,518
Overall	29,079	32,359	73,128	8,201	9,141	19,843
Continuity of care index						
Year 1	31,063	34,083	76,338	8,804	9,672	20,919
Year 2	23,055	21,649	51,241	6,172	5,662	13,230
Overall	31,099	34,090	76,375	8,809	9,672	20,938

NOTES:

[1] The expenditure, utilization, and access to care measures include (1) all the expenditure outcomes reported in ***Table 10-8***, (2) all the utilization outcomes reported in ***Table 10-9***, and (3) selected outcomes reported in ***Table 10-7*** (primary care visits, medical specialist visits, and surgical specialist visits).

[2] The diabetes process of care measures include all the measures reported in ***Table 10-5***, except for total lipid panel.

CG = comparison group; 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
Dually eligible beneficiaries	Expenditure and utilization measures[1]			
	Year 1	6,432	8,177	19,280
	Year 2	6,959	9,914	18,749
	Overall	7,890	10,853	22,766
Rural beneficiaries	Expenditure and utilization measures[1]			
	Year 1	1,237	424	1,809
	Year 2	1,305	561	1,405
	Overall	1,434	580	1,920
	30-day unplanned readmissions			
	Year 1	207	41	—
	Year 2	197	77	—
	Overall	358	101	—
Disabled beneficiaries	Expenditure and utilization measures[1]			
	Year 1	8,448	10,240	25,189
	Year 2	9,258	13,398	24,831
	Overall	10,428	14,439	29,556
Non-White beneficiaries	Expenditure and utilization measures[1]			
	Year 1	5,358	6,874	20,298
	Year 2	5,959	7,339	22,224
	Overall	6,760	8,355	25,802
Northeast	Expenditure and utilization measures[1]			
	Year 1	19,276	19,478	39,768
	Year 2	20,614	33,336	36,288
	Overall	22,547	34,185	44,209
Southeast	Expenditure and utilization measures[1]			
	Year 1	11,097	14,654	47,766
	Year 2	12,168	14,304	51,526
	Overall	13,803	16,303	58,308
Beneficiaries with behavioral health conditions	Expenditure and utilization measures[2]			
	Year 1	4,483	4,686	11,899
	Year 2	4,746	5,846	10,918
	Overall	5,514	6,405	13,674

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 10-17*** and ***Table 10-18***.

CG = comparison group; ER = emergency room; MAPCP = Multi-Payer Advanced Primary Care Practice; — = not applicable; PCMH = patient-centered medical home.

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APPENDIX H
HIGHLIGHTS OF QUANTITATIVE OUTCOMES ANALYSIS

In this appendix we present tables that summarize key outcome changes that are associated with the MAPCP Demonstration. These estimates represent changes over the initial two years of the demonstration. The first table contains values across all eight demonstration states. The remaining tables separately present information for each MAPCP Demonstration state.

Table 1
Changes associated with MAPCP, first 2 years: Across all states

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare savings			
Total gross savings	Total	$396,992,963	
Net savings	Total	$323,577,266	

Source: Medicare claims from 2006 to 2013.

NOTES:

- Statistical significance cannot be determined for the total of gross or net savings across all states.
- Total MAPCP Demonstration fees was $73,415,655. Thus, for each dollar spent on MAPCP Demonstration fees, there was a savings of $5.41 in Medicare expenditures.

Table 2
Changes associated with MAPCP, first 2 years: New York

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$12,637,119*	
Net savings	Total	$9,379,041	
Expenditures			
Total Medicare Expenditures	Total	-$4,212,374*	-$2,726,063
	PBPM	-$26.82*	-$17.36
– Acute care expenditures	Total	-$4,387,981*	-$1,599,737
	PBPM	-$27.94*	-$10.19
– Outpatient expenditures	Total	$2,807,650*	$1,844,008*
	PBPM	$17.88*	$11.74*
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$2,514,800	-$2,365,811
	PBPM	-$67.27	-$63.29
Utilization			
All cause admissions	Total	-1,383*	-629*
	Rate	-8.81*	-4.01*
Admissions for potentially avoidable conditions	Total	-269	-274
	Rate	-1.72	-1.74
30-day unplanned readmissions	Total	-149	13
	Rate	-15.55	1.33
ER visits not leading to hospitalization	Total	-96	-612
	Rate	-0.61	-3.90
Primary care visits	Total	-2,564	3,024
	Rate	-16.33	19.26
Medical specialist visits	Total	-1,563	-1,068
	Rate	-9.96	-6.80

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $3,258,078. Thus, for each dollar spent on MAPCP Demonstration fees in New York, there was a savings of $3.88 in Medicare expenditures.

Table 3
Changes associated with MAPCP, first 2 years: Vermont

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$35,699,155	
Net savings	Total	$27,095,327	
Expenditures			
Total Medicare Expenditures	Total	-$11,899,718	-$24,950,201*
	PBPM	-$31.17	-$65.35*
– Acute care expenditures	Total	-$84,436	-$8,049,990*
	PBPM	-$0.22	-$21.08*
– Outpatient expenditures	Total	$6,122,929*	-$1,365,167
	PBPM	$16.04*	-$3.58
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$5,768,273	-$9,905,473*
	PBPM	-$63.44	-$108.94*
Utilization			
All cause admissions	Total	194	315
	Rate	0.51	0.82
Admissions for potentially avoidable conditions	Total	488	493*
	Rate	1.28	1.29*
30-day unplanned readmissions	Total	-1,040	-147
	Rate	-13.69	-1.94
ER visits not leading to hospitalization	Total	6,006*	3,975*
	Rate	15.73*	10.41*
Primary care visits	Total	-21,542	-7,824
	Rate	-56.42	-20.49
Medical specialist visits	Total	341	-15,343*
	Rate	0.89	-40.18*

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $8,603,828. Thus, for each dollar spent on MAPCP Demonstration fees in Vermont, there was a savings of $4.15 in Medicare expenditures.

Table 4
Changes associated with MAPCP, first 2 years: Rhode Island

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$5,795,880	
Net savings	Total	$4,786,506	
Expenditures			
Total Medicare Expenditures	Total	-$1,931,960	-$92,257
	PBPM	-$32.08	-$1.53
– Acute care expenditures	Total	-$1,820,548	-$205,257
	PBPM	-$30.23	-$3.41
– Outpatient expenditures	Total	$415,969	-$103,295
	PBPM	$6.91	-$1.72
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$1,334,860	$204,375
	PBPM	-$99.82	$15.28
Utilization			
All cause admissions	Total	-203	170
	Rate	-3.38	2.82
Admissions for potentially avoidable conditions	Total	-90	75
	Rate	-1.49	1.24
30-day unplanned readmissions	Total	-103	81
	Rate	-30.02	23.51
ER visits not leading to hospitalization	Total	-334	11
	Rate	-5.55	0.19
Primary care visits	Total	3,880	1,179
	Rate	64.44	19.57
Medical specialist visits	Total	1,144	-1,018
	Rate	19.00	-16.90

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $1,009,374. Thus, for each dollar spent on MAPCP Demonstration fees in Rhode Island, there was a savings of $5.74 in Medicare expenditures.

Table 5
Changes associated with MAPCP, first 2 years: North Carolina

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$9,955,916	
Net savings	Total	$5,789,426	
Expenditures			
Total Medicare Expenditures	Total	-$2,597,546	-$2,455,573
	PBPM	-$14.54	-$13.74
– Acute care expenditures	Total	-$834,178	-$2,820,625
	PBPM	-$4.67	-$15.78
– Outpatient expenditures	Total	-$279,479	$1,102,394
	PBPM	-$1.56	$6.17
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$2,448,800	-$2,366,444
	PBPM	-$55.61	-$53.74
Utilization			
All cause admissions	Total	-17	123
	Rate	-0.10	0.69
Admissions for potentially avoidable conditions	Total	77	93
	Rate	0.43	0.52
30-day unplanned readmissions	Total	36	89
	Rate	3.25	8.08
ER visits not leading to hospitalization	Total	952	-357
	Rate	5.33	-2.00
Primary care visits	Total	-4,492	-774
	Rate	-25.14	-4.33
Medical specialist visits	Total	-2,631	-3,563
	Rate	-14.73	-19.94

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $4,166,490. Thus, for each dollar spent on MAPCP Demonstration fees in North Carolina, there was a savings of $2.39 in Medicare expenditures.

Table 6
Changes associated with MAPCP, first 2 years: Minnesota

Outcome		Vs. non-PCMH CG
Medicare Savings		
Total gross savings	Total	-$19,553,595
Net savings	Total	-$20,811,903
Expenditures		
Total Medicare Expenditures	Total	$6,517,864
	PBPM	$15.25
– Acute care expenditures	Total	$4,285,389
	PBPM	$10.03
– Outpatient expenditures	Total	$4,648,484*
	PBPM	$10.88*
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	$7,624,857
	PBPM	$71.44
Utilization		
All cause admissions	Total	-38
	Rate	-0.09
Admissions for potentially avoidable conditions	Total	-161
	Rate	-0.38
30-day unplanned readmissions	Total	-626*
	Rate	-22.71*
ER visits not leading to hospitalization	Total	2,184
	Rate	5.11
Primary care visits	Total	4,525
	Rate	10.59
Medical specialist visits	Total	-1,506
	Rate	-3.52

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $1,258,309. Thus, for each dollar spent on MAPCP Demonstration fees in Minnesota, there was a savings of -$15.54 in Medicare expenditures.

Table 7
Changes associated with MAPCP, first 2 years: Maine

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	-$32,518,083	
Net savings	Total	-$39,756,696	
Expenditures			
Total Medicare Expenditures	Total	$10,839,363	$6,556,933
	PBPM	$43.78	$26.49
– Acute care expenditures	Total	$3,837,278	$3,314,931
	PBPM	$15.50	$13.39
– Outpatient expenditures	Total	$2,226,276	$895,973
	PBPM	$8.99	$3.62
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	$8,817,973	$4,274,270
	PBPM	$137.07	$66.44
UTILIZATION			
All cause admissions	Total	291	920
	Rate	1.17	3.72
Admissions for potentially avoidable conditions	Total	130	72
	Rate	0.52	0.29
30-day unplanned readmissions	Total	-206	93
	Rate	-14.74	6.66
ER visits not leading to hospitalization	Total	-3,094*	-2,511
	Rate	-12.50*	-10.14
Primary care visits	Total	5,124	14,086*
	Rate	20.70	56.90*
Medical specialist visits	Total	-1,250	-5,101
	Rate	-5.05	-20.61

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $7,238,613. Thus, for each dollar spent on MAPCP Demonstration fees in Maine, there was a savings of -$4.49 in Medicare expenditures

Table 8
Changes associated with MAPCP, first 2 years: Michigan

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$380,069,806*	
Net savings	Total	$336,104,971*	
Expenditures			
Total Medicare Expenditures	Total	-$126,689,968*	-$25,944,970
	PBPM	-$83.43*	-$17.09
– Acute care expenditures	Total	-$58,764,822*	-$11,529,666
	PBPM	-$38.70*	-$7.59
– Outpatient expenditures	Total	-$4,359,048	$15,368,589*
	PBPM	-$2.87	$10.12*
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$93,297,502*	-$36,658,870*
	PBPM	-$266.33*	-$104.65*
Utilization			
All cause admissions	Total	-12,147*	-1,808
	Rate	-8.00*	-1.19
Admissions for potentially avoidable conditions	Total	-1,534	-664
	Rate	-1.01	-0.44
30-day unplanned readmissions	Total	-2,808*	-422
	Rate	-29.55*	-4.44
ER visits not leading to hospitalization	Total	4,010	3,727
	Rate	2.64	2.45
Primary care visits	Total	-6,513	4,897
	Rate	-4.29	3.23
Medical specialist visits	Total	-45,845	-10,481
	Rate	-30.19	-6.90

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $43,964,835. Thus, for each dollar spent on MAPCP Demonstration fees in Minnesota, there was a savings of $8.64 in Medicare expenditures.

Table 9
Changes associated with MAPCP, first 2 years: Pennsylvania

Outcome		Vs. PCMH CG	Vs. non-PCMH CG
Medicare Savings			
Total gross savings	Total	$4,906,765	
Net savings	Total	$990,594	
Expenditures			
Total Medicare Expenditures	Total	-$1,635,588	-$6,247,866
	PBPM	-$7.50	-$28.66
– Acute care expenditures	Total	-$1,543,123	-$3,183,248
	PBPM	-$7.08	-$14.60
– Outpatient expenditures	Total	-$1,565,299*	$391,356
	PBPM	-$7.18*	$1.80
Total Medicare expenditures for beneficiaries with multiple chronic conditions	Total	-$1,367,103	-$3,844,042
	PBPM	-$25.14	-$70.69
Utilization			
All cause admissions	Total	-437	393
	Rate	-2.00	1.80
Admissions for potentially avoidable conditions	Total	-17	-25
	Rate	-0.08	-0.12
30-day unplanned readmissions	Total	-90	-120
	Rate	-6.45	-8.63
ER visits not leading to hospitalization	Total	-803	-374
	Rate	-3.68	-1.72
Primary care visits	Total	13,366*	12,226*
	Rate	61.31*	56.08*
Medical specialist visits	Total	-6,661	-6,245
	Rate	-30.55	-28.65

Source: Medicare claims from 2006 to 2013.

NOTES:

- PBPM = per beneficiary per month
- Utilization rates (except readmissions) are per 1,000 beneficiary quarters. Readmission rates are per 1,000 beneficiary quarters with a live discharge.
- Total MAPCP Demonstration fees was $3,916,170. Thus, for each dollar spent on MAPCP Demonstration fees in Pennsylvania, there was a savings of $1.25 in Medicare expenditures.