# ECONOMETRICA, INC.

#### **REPORT**

# **Appendix B – Annual Report 2014 Tables and Figures**

**Evaluation and Monitoring of the Bundled Payments for Care Improvement Model 1 Initiative** 

Contract No.: HHSM-500-2011-00015I

Order No.: HHSM-500-T0008

Project No.: 2248-000

#### **Submitted To:**

#### Centers for Medicare & Medicaid Services

Attn.: Arpit Misra
Contracting Officer's Representative
Center for Medicare & Medicaid Innovation
7205 Windsor Boulevard, Mail Stop C3-21-28
Baltimore, MD 21244

#### Submitted By:

#### Econometrica, Inc.

7475 Wisconsin Avenue Suite 1000 Bethesda, MD 20814 www.Econometricalnc.com

July 9, 2015

# CONOMETRICA, NC.

July 9, 2015

Mr. Arpit Misra Contracting Officer's Representative Centers for Medicare & Medicaid Services Center for Medicare & Medicaid Innovation 7205 Windsor Boulevard, Mail Stop C3-21-28 Baltimore, MD 21244-1850

Contract No.: HHSM-500-2011-00015I; Order No.: HHSM-500-T0008; Reference:

"Evaluation and Monitoring of the Bundled Payments for Care Improvement

Model 1 Initiative" (Project No.: 2248-000).

Dear Mr. Misra:

Econometrica is pleased to submit this Appendix B – Annual Report 2014 Tables and Figures as part of the Annual Report to the Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation, regarding work being conducted under the above-referenced contract.

Appendixes A, C, D, and E are being submitted as separate files.

If you wish to discuss any aspect of this submission, please feel free to contact me at (301) 395-2281.

Sincerely,

Econometrica, Inc.

Monique Sheppard, Ph.D.

Mange Dheppard

**Project Director** 

cc: Contract File



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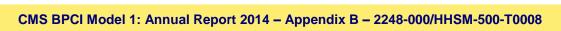




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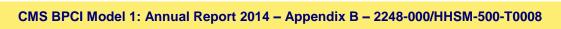




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## **Appendix B: Annual Report 2014 Tables and Figures**

This appendix presents data tables and figures associated with findings discussed in the Evaluation and Monitoring of Bundled Payments for Care Improvement (BPCI) Model 1 Annual Report 2014, regarding work being conducted under Contract No. HHSM-500-2011-015I, Order No. HHSM-500-T0008.



## **B.1.** Episode Case Mix and Patient Characteristics

**Table B.1: Patient and Episode Characteristics – Full Cohort** 

<b>Hospital Cohort</b>	Measure	Baseline		Since BPCI Inception		BPCI – Year 1		BPCI – PQ 5	
		Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted
	Patient Age								
BPCI	Mean	76.63	76.08	76.42***	76.09	76.42***	76.11	76.42***	76.00
	95% CI	[76.58, 76.67]	[75.31, 76.85]	[76.36, 76.49]	[75.33, 76.85]	[76.35, 76.49]	[75.35, 76.87]	[76.28, 76.56]	[75.24, 76.76
	N	282,896		149,233		118,799		30,434	
Comparison	Mean	75.18	74.70	74.87***	74.61***	74.85***	74.63***	74.95***	74.53***
	95% CI	[75.15, 75.20]	[73.81, 75.59]	[74.83, 74.91]	[73.77, 75.45]	[74.81, 74.89]	[73.81, 75.45]	[74.87, 75.04]	[73.63, 75.42
	N	892,495		464,815		372,482		92,333	
	CMS-HCC S	core	·		,				
BPCI	Mean	1.72	1.69	1.64***	1.64***	1.66***	1.67***	1.55***	1.53***
	95% CI	[1.72, 1.73]	[1.61, 1.77]	[1.63, 1.64]	[1.56, 1.72]	[1.65, 1.67]	[1.59, 1.75]	[1.54, 1.56]	[1.46, 1.61]
	N	282,896		149,233		118,799		30,434	
Comparison	Mean	1.68	1.62	1.61***	1.60***	1.63***	1.62	1.54***	1.51***
	95% CI	[1.67, 1.68]	[1.53, 1.70]	[1.61, 1.62]	[1.51, 1.68]	[1.63, 1.63]	[1.53, 1.70]	[1.53, 1.55]	[1.43, 1.60]
	N	892,497		464,815		372,482		92,333	
	<b>Episode MS</b>	-DRG Weight							
BPCI	Mean	1.58	1.58	1.62***	1.59***	1.62***	1.58	1.64***	1.62***
	95% CI	[1.57, 1.59]	[1.50, 1.65]	[1.62, 1.63]	[1.50, 1.67]	[1.61, 1.63]	[1.50, 1.66]	[1.63, 1.66]	[1.54, 1.69]
	N	282,896		149,233		118,799		30,434	
Comparison	Mean	1.62	1.62	1.66***	1.65***	1.66***	1.65***	1.66***	1.67***
	95% CI	[1.61, 1.62]	[1.53, 1.71]	[1.65, 1.66]	[1.57, 1.74]	[1.65, 1.66]	[1.56, 1.74]	[1.65, 1.67]	[1.58, 1.76]
	N	892,497		464,815		372,482		92,333	

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline within adjusted or unadjusted statistics. Table 10 (in Annual Report 2014) details cohort membership.



Table B.2: Patient and Episode Characteristics - Active Cohort

Hospital Cohort	Measure	Baseline		Since BPC	I Inception	BPCI -	Year 1	BPCI – PQ 5			
		Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted		
	Patient Age	)									
BPCI	Mean	76.23	75.84	76.00***	75.88	76.01***	75.92	75.97**	75.75		
	95% CI	[76.16, 76.29]	[74.99, 76.70]	[75.91, 76.09]	[75.04, 76.73]	[75.90, 76.11]	[75.08, 76.76]	[75.77, 76.18]	[74.90, 76.59]		
	N	144,068		74,042		59,129		14,913			
Comparison	Mean	74.80	74.35	74.53***	74.38	74.53***	74.44***	74.56***	74.16***		
	95% CI	[74.76, 74.83]	[73.42, 75.29]	[74.49, 74.58]	[73.54, 75.23]	[74.47, 74.58]	[73.63, 75.26]	[74.45, 74.66]	[73.22, 75.10]		
	N	571,049		298,017		238,789		59,228			
CMS-HCC Score											
BPCI	Mean	1.76	1.68	1.67***	1.66***	1.70***	1.69	1.58***	1.53***		
	95% CI	[1.75, 1.76]	[1.60, 1.77]	[1.66, 1.68]	[1.57, 1.74]	[1.69, 1.71]	[1.60, 1.78]	[1.56, 1.60]	[1.45, 1.61]		
	N	144,068		74,042		59,129		14,913			
Comparison	Mean	1.70	1.62	1.64***	1.62	1.65***	1.64***	1.57***	1.53***		
	95% CI	[1.70, 1.71]	[1.53, 1.70]	[1.63, 1.64]	[1.53, 1.70]	[1.65, 1.66]	[1.56, 1.72]	[1.56, 1.58]	[1.44, 1.62]		
	N	571,050		298,017		238,789		59,228			
	Episode MS	S-DRG Weight									
BPCI	Mean	1.49	1.51	1.51***	1.49***	1.50**	1.48***	1.51**	1.52*		
	95% CI	[1.48, 1.50]	[1.43, 1.58]	[1.50, 1.52]	[1.41, 1.57]	[1.49, 1.51]	[1.40, 1.56]	[1.49, 1.54]	[1.44, 1.60]		
	N	144,068		74,042		59,129		14,913			
Comparison	Mean	1.61	1.61	1.64***	1.63***	1.64***	1.62***	1.64***	1.64***		
	95% CI	[1.60, 1.61]	[1.52, 1.70]	[1.64, 1.65]	[1.54, 1.71]	[1.64, 1.65]	[1.54, 1.71]	[1.63, 1.65]	[1.55, 1.73]		
	N	571,050		298,017		238,789		59,228			

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline within adjusted or unadjusted statistics. Table 10 (in Annual Report 2014) details cohort membership.



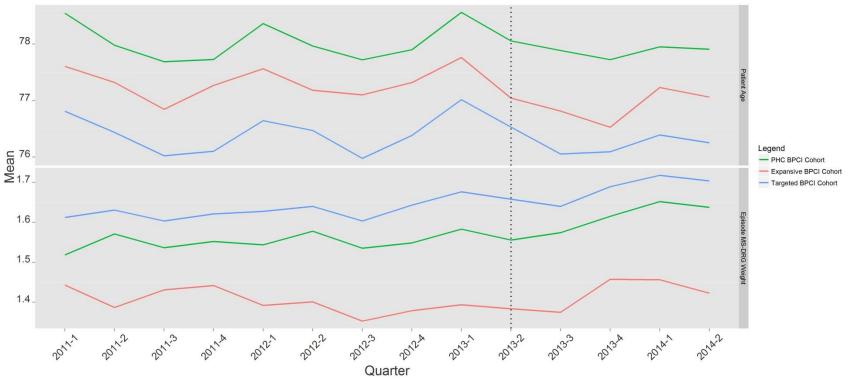
Table B.3: Patient and Episode Characteristics – Exiting Cohort

Hospital	Massaura	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted
	Patient Age	)							
BPCI	Mean	77.04	76.48	76.84***	76.42	76.84***	76.41	76.85*	76.42
	95% CI	[76.98, 77.11]	[75.86, 77.11]	[76.75, 76.93]	[75.78, 77.05]	[76.74, 76.93]	[75.78, 77.05]	[76.67, 77.04]	[75.81, 77.04]
	N	138,828		75,191		59,670		15,521	
Comparison	Mean	75.11	74.91	74.77***	74.58***	74.73***	74.54***	74.92***	74.76**
	95% CI	[75.07, 75.15]	[74.14, 75.69]	[74.71, 74.82]	[73.79, 75.38]	[74.67, 74.79]	[73.74, 75.35]	[74.80, 75.05]	[73.98, 75.54]
	N	403,965		209,467		167,988		41,479	
	CMS-HCC S	Score							
BPCI	Mean	1.68	1.70	1.60***	1.62***	1.62***	1.64***	1.52***	1.53***
	95% CI	[1.68, 1.69]	[1.63, 1.77]	[1.59, 1.61]	[1.55, 1.69]	[1.61, 1.63]	[1.57, 1.71]	[1.50, 1.54]	[1.47, 1.60]
	N	138,828		75,191		59,670		15,521	
Comparison	Mean	1.63	1.62	1.57***	1.56***	1.59***	1.58***	1.50***	1.48***
	95% CI	[1.63, 1.63]	[1.54, 1.70]	[1.56, 1.58]	[1.48, 1.64]	[1.58, 1.59]	[1.50, 1.66]	[1.49, 1.51]	[1.41, 1.56]
	N	403,966		209,467		167,988		41,479	
	<b>Episode M</b>	S-DRG Weight							
BPCI	Mean	1.67	1.70	1.74***	1.74***	1.73***	1.74***	1.77***	1.77***
	95% CI	[1.67, 1.68]	[1.61, 1.78]	[1.73, 1.75]	[1.66, 1.82]	[1.72, 1.75]	[1.65, 1.82]	[1.74, 1.80]	[1.69, 1.85]
	N	138,828		75,191		59,670		15,521	
Comparison	Mean	1.66	1.66	1.70***	1.71***	1.70***	1.71***	1.70***	1.73***
	95% CI	[1.65, 1.66]	[1.57, 1.76]	[1.69, 1.71]	[1.62, 1.81]	[1.69, 1.71]	[1.62, 1.80]	[1.69, 1.72]	[1.63, 1.82]
	N	403,966		209,467		167,988		41,479	

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline within adjusted or unadjusted statistics. Table 10 (in Annual Report 2014) details cohort membership.



Figure B.1: Unadjusted Quarterly Trends for Patient Age, Episode MS-DRG Weight, and CMS-HCC Score for PHC, Expansive, and Targeted Cohorts



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



#### **B.2.** Health Care Resource Utilization and Outcomes

Table B.4: Episode Weighted, Unadjusted and Adjusted 30-Day All-Cause Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazza	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean (%)	7.54	8.13	7.62	8.31	7.67	8.35	7.45	8.18
	95% CI	[7.45, 7.64]	[7.82, 8.43]	[7.49, 7.76]	[7.99, 8.63]	[7.52, 7.82]	[8.03, 8.66]	[7.16, 7.75]	[7.86, 8.50
	N	284,383		150,096		119,578		30,518	-
Comparison	Mean (%)	7.44	7.23	7.46	7.33	7.49	7.36	7.30	7.21
	95% CI	[7.39, 7.50]	[6.77, 7.69]	[7.38, 7.53]	[6.86, 7.80]	[7.41, 7.58]	[6.90, 7.83]	[7.14, 7.48]	[6.73, 7.69
	N	890,054		463,915		372,086		91,829	
Active Cohort									
BPCI	Mean (%)	7.42	8.06	7.61	8.40	7.67*	8.44	7.41	8.22
	95% CI	[7.29, 7.56]	[7.61, 8.50]	[7.42, 7.81]	[7.93, 8.87]	[7.45, 7.88]	[7.97, 8.91]	[6.99, 7.84]	[7.76, 8.69
	N	144,411		74,410		59,560		14,850	-
Comparison	Mean (%)	7.45	7.26	7.43	7.32	7.48	7.36	7.22**	7.16
	95% CI	[7.38, 7.52]	[6.80, 7.73]	[7.33, 7.52]	[6.85, 7.79]	[7.37, 7.59]	[6.89, 7.83]	[7.01, 7.43]	[6.67, 7.66
	N	569,740		297,237		238,463		58,774	
xiting Cohort									
BPCI	Mean (%)	7.66	9.37	7.63	9.41	7.67	9.43	7.49	9.32
	95% CI	[7.52, 7.80]	[8.96, 9.78]	[7.44, 7.82]	[8.99, 9.83]	[7.45, 7.88]	[9.02, 9.85]	[7.08, 7.91]	[8.89, 9.76
	N	139,972	•	75,686	_	60,018	·	15,668	
Comparison	Mean (%)	7.42	6.92	7.46	7.05	7.48	7.06	7.38	6.98
	95% CI	[7.34, 7.50]	[6.50, 7.33]	[7.34, 7.57]	[6.63, 7.47]	[7.35, 7.60]	[6.64, 7.48]	[7.13, 7.64]	[6.55, 7.41
	N	401,702	•	208,678	•	167,376	•	41,302	

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.5: Unweighted, Unadjusted 30-Day All-Cause Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	7.37	7.50	7.57**	7.25
	95% CI	[5.95, 9.04]	[6.01, 9.26]	[6.07, 9.33]	[5.80, 8.97]
	N	284,383	150,096	119,578	30,518
Comparison	Mean (%)	7.37	7.41	7.44	7.25
	95% CI	[5.90, 9.13]	[5.89, 9.24]	[5.92, 9.28]	[5.75, 9.07]
	N	890,054	463,915	372,086	91,829
ve Cohort					
BPCI	Mean (%)	7.33	7.56**	7.61**	7.36
	95% CI	[5.81, 9.12]	[5.95, 9.46]	[6.00, 9.52]	[5.77, 9.25]
	N	144,411	74,410	59,560	14,850
Comparison	Mean (%)	7.47	7.46	7.51	7.27*
	95% CI	[6.00, 9.19]	[5.95, 9.24]	[6.00, 9.29]	[5.77, 9.03]
	N	569,740	297,237	238,463	58,774
ing Cohort					
BPCI	Mean (%)	7.43	7.41	7.50	7.08*
	95% CI	[6.16, 8.91]	[6.11, 8.94]	[6.17, 9.04]	[5.84, 8.52]
	N	139,972	75,686	60,018	15,668
Comparison	Mean (%)	7.21	7.29	7.31	7.19
-	95% CI	[5.81, 8.97]	[5.81, 9.14]	[5.83, 9.17]	[5.74, 9.01]
	N	401,702	208,678	167,376	41,302

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.6: Since BPCI DiD Estimates for 30-Day All-Cause Mortality for Full, Active, and Exiting Cohort\*

	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.01	1.04**	0.98
95% CI	(0.98, 1.04)	(1.00, 1.08)	(0.94, 1.03)
Sample Size	1,788,446	1,085,797	826,037

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



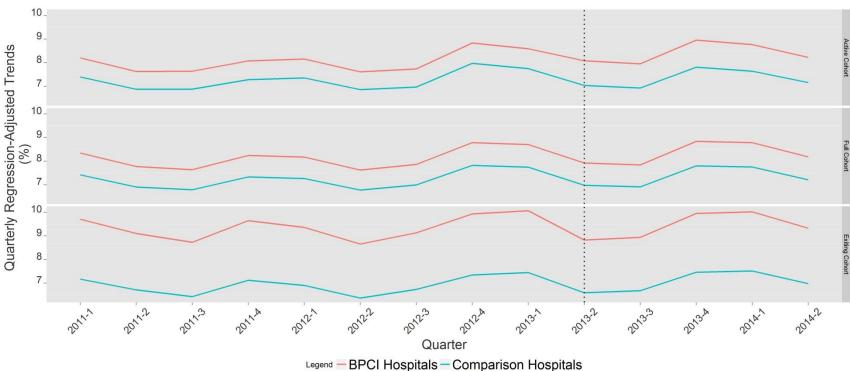
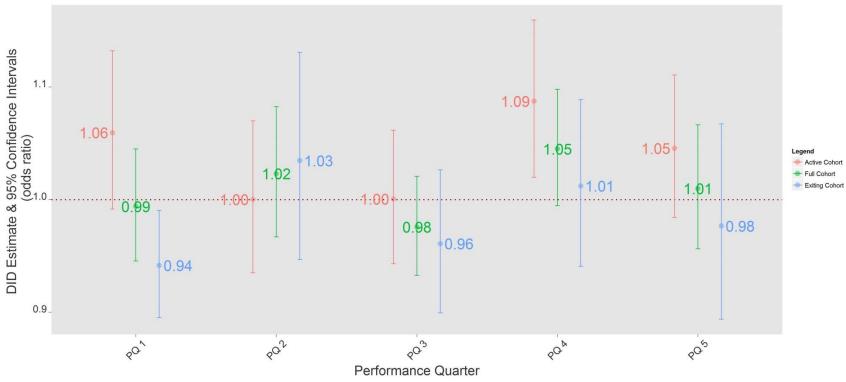


Figure B.2: Adjusted Quarterly Trends for 30-Day All-Cause Mortality for Full, Active, and Exiting Cohorts\*

<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.3: Performance Quarter DiD Estimates for 30-Day All-Cause Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.7: Episode Weighted, Unadjusted and Adjusted 30-Day All-Cause Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital	Magazira	Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI – PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Col	hort								
BPCI	Mean (%)	7.42	8.28	7.69	8.77	7.72	8.86*	7.57	8.43
	95% CI	[7.22, 7.63]	[7.87, 8.69]	[7.40, 7.99]	[8.32, 9.23]	[7.39, 8.05]	[8.40, 9.32]	[6.93, 8.26]	[8.00, 8.86]
	N	62,147		31,655		25,370		6,285	
Comparison	Mean (%)	7.31	7.08	7.37	7.21	7.47*	7.28	6.97**	6.93
	95% CI	[7.21, 7.41]	[6.61, 7.56]	[7.23, 7.51]	[6.73, 7.70]	[7.31, 7.63]	[6.81, 7.76]	[6.66, 7.28]	[6.41, 7.44]
	N	249,646		130,290		104,369		25,921	
Targeted Coho	ort								
BPCI	Mean (%)	7.57	9.53	7.60	9.66	7.65	9.68	7.42	9.58
	95% CI	[7.47, 7.69]	[9.16, 9.91]	[7.45, 7.76]	[9.27, 10.05]	[7.48, 7.82]	[9.30, 10.06]	[7.09, 7.75]	[9.19, 9.98]
	N	222,236	•	118,441	-	94,208		24,233	
Comparison	Mean (%)	7.47	6.93	7.49	7.04	7.51	7.06	7.44	6.99
	95% CI	[7.40, 7.53]	[6.55, 7.32]	[7.40, 7.58]	[6.65, 7.43]	[7.41, 7.60]	[6.67, 7.45]	[7.24, 7.64]	[6.59, 7.38]
	N	669,128		348,118		279,356		68,762	
PHC Cohort									
BPCI	Mean (%)	8.22	9.92	8.17	9.91	8.20	9.95	8.05	9.77
	95% CI	[8.05, 8.39]	[9.45, 10.40]	[7.93, 8.41]	[9.43, 10.40]	[7.93, 8.47]	[9.47, 10.43]	[7.53, 8.59]	[9.24, 10.29
	N	97,506		50,529	-	40,191		10,338	
Comparison	Mean (%)	7.78	7.26	7.76	7.36	7.80	7.39	7.60	7.25
	95% CI	[7.68, 7.88]	[6.80, 7.72]	[7.62, 7.90]	[6.90, 7.82]	[7.64, 7.95]	[6.93, 7.85]	[7.29, 7.92]	[6.77, 7.73]
	N	270,528	_	140,014		112,220		27,794	-

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.8: Unweighted, Unadjusted 30-Day All-Cause Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	7.30	7.65*	7.67*	7.58
	95% CI	[5.72, 9.18]	[5.95, 9.68]	[5.97, 9.69]	[5.88, 9.62]
	N	62,147	31,655	25,370	6,285
Comparison	Mean (%)	7.33	7.34	7.43	6.97**
	95% CI	[5.79, 9.14]	[5.76, 9.20]	[5.84, 9.30]	[5.43, 8.81]
	N	249,646	130,290	104,369	25,921
argeted Cohort					
BPCI	Mean (%)	7.40	7.44	7.52	7.10*
	95% CI	[6.05, 8.97]	[6.04, 9.07]	[6.11, 9.17]	[5.76, 8.68]
	N	222,236	118,441	94,208	24,233
Comparison	Mean (%)	7.36	7.44	7.45*	7.40
	95% CI	[5.93, 9.09]	[5.95, 9.26]	[5.96, 9.28]	[5.91, 9.21]
	N	669,128	348,118	279,356	68,762
HC Cohort		•			
BPCI	Mean (%)	8.25	8.06	8.13	7.81
	95% CI	[6.96, 9.71]	[6.76, 9.55]	[6.81, 9.62]	[6.55, 9.24]
	N	97,506	50,529	40,191	10,338
Comparison	Mean (%)	7.90	7.88	7.91	7.78
	95% CI	[6.44, 9.58]	[6.38, 9.62]	[6.41, 9.64]	[6.29, 9.51]
	N	270,528	140,014	112,220	27,794

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.9: Since BPCI DiD Estimates for 30-Day All-Cause Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

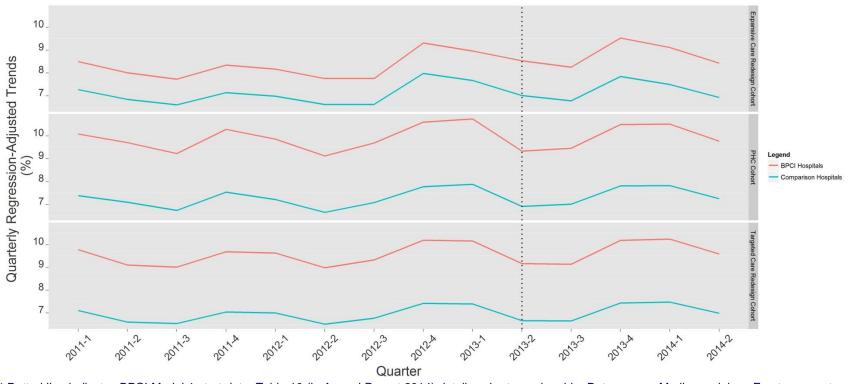
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	0.98	1.05*	1.00
95% CI	(0.93, 1.04)	(1.00, 1.10)	(0.97, 1.03)
Sample Size	558,576	473,738	1,357,921

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



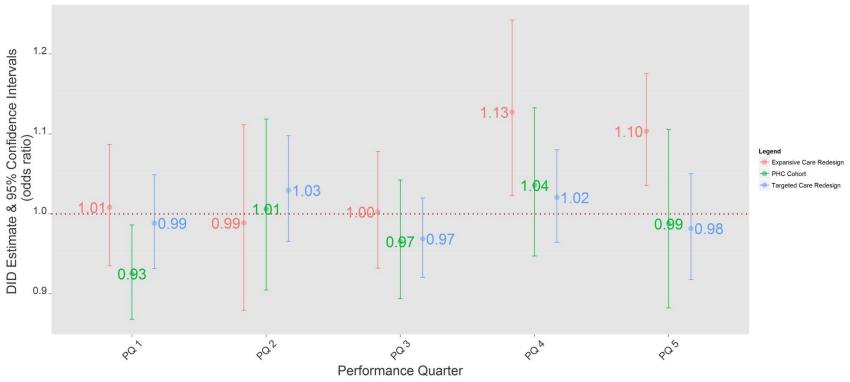
Figure B.4: Adjusted Quarterly Trends for 30-Day All-Cause Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.5: Performance Quarter DiD Estimates for 30-Day All-Cause Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.10: Episode Weighted, Unadjusted and Adjusted 30-Day Acute Myocardial Infarction Mortality for Full, Active, and Exiting Cohorts<sup>†</sup>

Hospital	Magazira	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean (%)	11.89	10.53	11.04	10.09	11.03	10.19	11.10	9.68
	95% CI	[11.19, 12.62]	[7.58, 13.47]	[10.12, 12.01]	[7.16, 13.03]	[10.00, 12.12]	[7.24, 13.15]	[9.10, 13.36]	[6.81, 12.55]
	N	8,023		4,320		3,437		883	
Comparison	Mean (%)	11.91	12.24	11.08**	11.72	11.22*	11.83	10.52**	11.25
	95% CI	[11.50, 12.33]	[9.32, 15.15]	[10.53, 11.65]	[8.85, 14.59]	[10.60, 11.86]	[8.96, 14.70]	[9.35, 11.79]	[8.39, 14.11]
	N	23,670		12,284		9,775		2,509	
Active Cohort									
BPCI	Mean (%)	14.08	16.75	12.99	16.01	13.22	16.29	12.04	14.90
	95% CI	[12.93, 15.30]	[13.00, 20.49]	[11.47, 14.63]	[12.08, 19.94]	[11.51, 15.08]	[12.32, 20.25]	[8.86, 15.88]	[11.10, 18.70
	N	3,387		1,794		1,437		357	
Comparison	Mean (%)	11.80	11.21	11.03*	10.77	11.26	10.97	10.13**	9.97
	95% CI	[11.29, 12.33]	[8.36, 14.06]	[10.35, 11.74]	[7.93, 13.60]	[10.49, 12.07]	[8.13, 13.81]	[8.69, 11.71]	[7.16, 12.78]
	N	14,951		7,860		6,260		1,600	
<b>Exiting Cohort</b>									
BPCI	Mean (%)	10.29	13.32	9.66	12.83	9.45	12.79	10.46	13.00
	95% CI	[9.43, 11.20]	[9.47, 17.16]	[8.54, 10.88]	[8.90, 16.77]	[8.20, 10.82]	[8.88, 16.70]	[7.97, 13.39]	[8.99, 17.01]
	N	4,636		2,526		2,000		526	
Comparison	Mean (%)	11.65	10.38	10.86	9.98	10.82	9.95	11.00	10.11
	95% CI	[11.05, 12.26]	[6.40, 14.37]	[10.04, 11.72]	[6.05, 13.91]	[9.91, 11.78]	[6.04, 13.86]	[9.21, 13.00]	[6.08, 14.14]
	N	10,913		5,434		4,334		1,100	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.11: Unweighted, Unadjusted 30-Day Acute Myocardial Infarction Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	12.93	11.88*	12.07	11.11*
	95% CI	[4.09, 32.44]	[3.47, 32.11]	[3.51, 32.56]	[3.32, 30.28]
	N	8,023	4,320	3,437	883
Comparison	Mean (%)	12.67	12.07*	12.36	10.92***
	95% CI	[3.78, 31.78]	[3.27, 31.41]	[3.33, 31.70]	[3.03, 30.29]
	N	23,670	12,284	9,775	2,509
ive Cohort					
BPCI	Mean (%)	14.35	12.87*	13.17	11.67*
	95% CI	[4.17, 38.05]	[3.38, 37.65]	[3.52, 38.27]	[2.85, 35.19]
	N	3,387	1,794	1,437	357
Comparison	Mean (%)	12.16	11.49*	11.71	10.59**
	95% CI	[3.59, 31.06]	[3.13, 30.74]	[3.20, 31.07]	[2.85, 29.41]
	N	14,951	7,860	6,260	1,600
ting Cohort					
BPCI	Mean (%)	10.73	10.33	10.35	10.22
	95% CI	[3.95, 23.71]	[3.61, 23.49]	[3.50, 23.70]	[4.05, 22.65]
	N	4,636	2,526	2,000	526
Comparison	Mean (%)	13.03	12.62	12.93	11.37*
	95% CI	[4.00, 31.41]	[3.41, 31.25]	[3.43, 31.34]	[3.31, 30.88]
	N	10,913	5,434	4,334	1,100

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



# Table B.12: Since BPCI DiD Estimates for 30-Day Acute Myocardial Infarction Mortality for Full, Active, and Exiting Cohort<sup>+</sup>

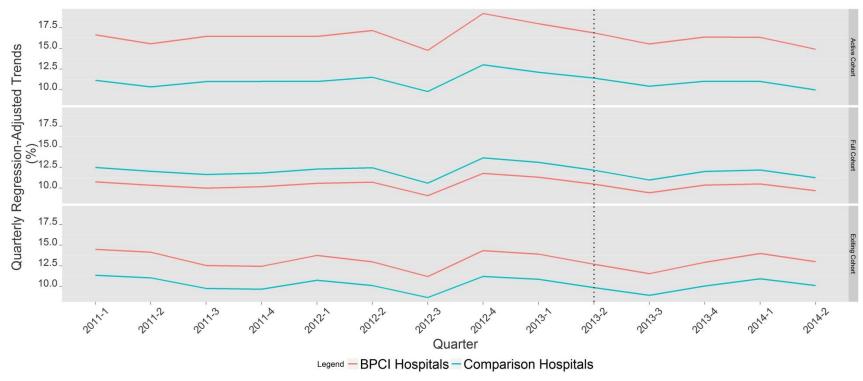
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.00	0.99	1.00
95% CI	(0.88, 1.14)	(0.83, 1.18)	(0.84, 1.20)
Sample Size	48,297	27,992	23,509

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



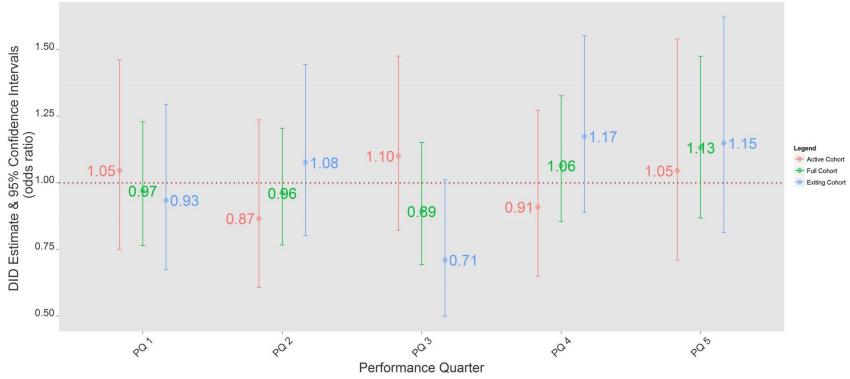
Figure B.6: Adjusted Quarterly Trends for 30-Day Acute Myocardial Infarction Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.7: Performance Quarter DiD Estimates for 30-Day Acute Myocardial Infarction Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.13: Episode Weighted, Unadjusted and Adjusted 30-Day Acute Myocardial Infarction Mortality for Expansive, Targeted Cohorts<sup>+</sup>

<u> </u>	, . u. gotou								
Hospital	Managemen	Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Col	hort								
BPCI	Mean (%)	15.08	11.98	14.39	11.75	14.80	12.26	12.86	9.74
	95% CI	[13.13, 17.20]	[8.30, 15.67]	[11.82, 17.29]	[8.24, 15.27]	[11.88, 18.12]	[8.63, 15.88]	[7.80, 19.56]	[6.69, 12.79]
	N	1,240		667		527		140	
Comparison	Mean (%)	12.39	12.81	11.72	12.60	12.31	13.13	9.46**	10.46
	95% CI	[11.58, 13.24]	[9.33, 16.30]	[10.66, 12.85]	[9.11, 16.09]	[11.09, 13.60]	[9.59, 16.68]	[7.39, 11.87]	[7.19, 13.73]
	N	6,132		3,404		2,706		698	
Targeted Coho	ort								
BPCI	Mean (%)	11.31	13.97	10.43	13.35	10.34	13.30	10.77	13.55
	95% CI	[10.56, 12.09]	[10.23, 17.72]	[9.46, 11.47]	[9.60, 17.11]	[9.26, 11.51]	[9.57, 17.04]	[8.63, 13.22]	[9.69, 17.41]
	N	6,783		3,653		2,910		743	
Comparison	Mean (%)	11.76	10.79	10.79**	10.13	10.73**	10.09	11.03	10.29
	95% CI	[11.30, 12.24]	[6.86, 14.73]	[10.17, 11.44]	[6.35, 13.92]	[10.04, 11.46]	[6.34, 13.85]	[9.66, 12.52]	[6.39, 14.18]
	N	18,328	-	9,312		7,408		1,904	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.14: Unweighted, Unadjusted 30-Day Acute Myocardial Infarction Mortality for Expansive, Targeted Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI - PQ 5
ansive Cohort					
BPCI	Mean (%)	15.26	13.40	13.62	12.50
	95% CI	[4.05, 40.05]	[3.31, 39.33]	[3.58, 39.76]	[2.24, 37.62]
	N	1,240	667	527	140
Comparison	Mean (%)	12.55	12.08	12.57	10.11**
	95% CI	[3.42, 33.58]	[3.08, 33.07]	[3.27, 33.53]	[2.30, 31.26]
	N	6,132	3,404	2,706	698
rgeted Cohort					
BPCI	Mean (%)	11.92	11.21	11.39	10.50
	95% CI	[4.11, 29.11]	[3.54, 28.95]	[3.48, 29.42]	[3.80, 27.07]
	N	6,783	3,653	2,910	743
Comparison	Mean (%)	12.67	11.93**	12.07	11.39*
	95% CI	[3.94, 30.74]	[3.31, 30.33]	[3.28, 30.48]	[3.45, 29.73]
	N	18,328	9,312	7,408	1,904

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.15: Since BPCI DiD Estimates for 30-Day Acute Myocardial Infarction Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

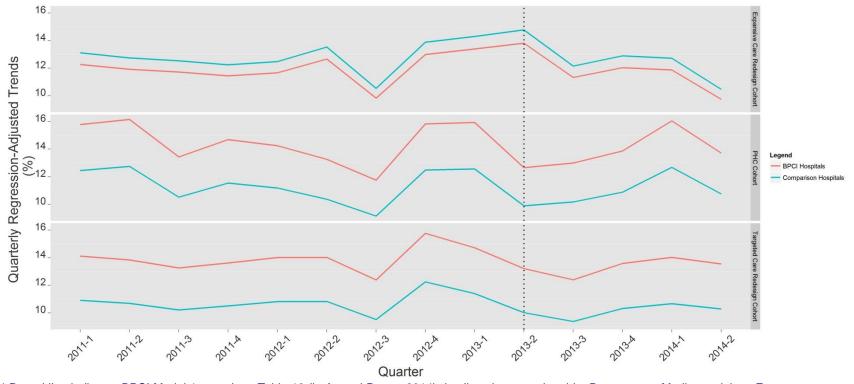
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	1.00	1.00	1.02
95% CI	(0.79, 1.26)	(0.75, 1.32)	(0.88, 1.17)
Sample Size	14,044	11,443	38,076

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



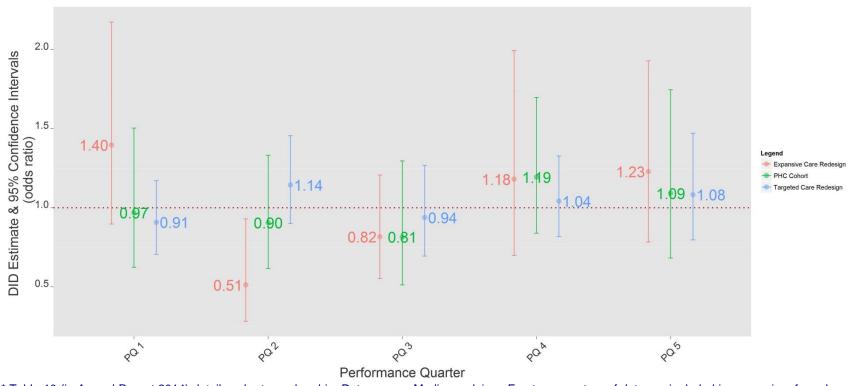
Figure B.8: Adjusted Quarterly Trends for 30-Day Acute Myocardial Infarction Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.9: Performance Quarter DiD Estimates for 30-Day Acute Myocardial Infarction Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.16: Episode Weighted, Unadjusted and Adjusted 30-Day Pneumonia-Related Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazza	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean (%)	10.20	9.04	10.40	9.54	10.63	9.67	9.57	8.98
	95% CI	[9.64, 10.78]	[7.10, 10.98]	[9.59, 11.25]	[7.52, 11.55]	[9.70, 11.60]	[7.63, 11.72]	[7.91, 11.43]	[7.08, 10.88]
	N	11,046		5,270		4,141		1,129	
Comparison	Mean (%)	10.72	11.08	10.54	10.93	10.70	11.08	9.86	10.30
	95% CI	[10.40, 11.05]	[9.43, 12.73]	[10.07, 11.02]	[9.29, 12.56]	[10.18, 11.25]	[9.44, 12.73]	[8.85, 10.95]	[8.70, 11.90]
	N	34,127		16,187		13,004		3,183	
ctive Cohort									
BPCI	Mean (%)	10.06	9.91	10.55	10.72	10.74	11.01	9.90	9.56
	95% CI	[9.28, 10.88]	[7.43, 12.39]	[9.40, 11.79]	[7.95, 13.48]	[9.42, 12.17]	[8.20, 13.81]	[7.60, 12.61]	[6.96, 12.16]
	N	5,529		2,616		2,030		586	
Comparison	Mean (%)	10.49	10.46	10.38	10.41	10.72	10.69	9.00**	9.28
	95% CI	[10.09, 10.90]	[8.78, 12.14]	[9.81, 10.98]	[8.69, 12.12]	[10.07, 11.40]	[8.96, 12.42]	[7.81, 10.32]	[7.61, 10.94]
	N	22,114		10,556		8,479		2,077	
xiting Cohort									
BPCI	Mean (%)	10.35	14.45	10.25	14.80	10.52	14.81	9.21	14.79
	95% CI	[9.56, 11.18]	[11.40, 17.50]	[9.12, 11.47]	[11.78, 17.82]	[9.24, 11.90]	[11.76, 17.86]	[6.91, 11.96]	[11.89, 17.69
	N	5,517		2,654		2,111		543	
Comparison	Mean (%)	11.01	9.87	10.56	9.49	10.51	9.49	10.77	9.48
	95% CI	[10.52, 11.52]	[5.10, 14.64]	[9.85, 11.30]	[4.89, 14.08]	[9.72, 11.34]	[4.89, 14.09]	[9.19, 12.53]	[4.89, 14.06]
	N	15,243		7,035		5,652		1,383	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.17: Unweighted, Unadjusted 30-Day Pneumonia-Related Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	9.82	10.14	10.66	8.08**
	95% CI	[3.37, 23.82]	[3.38, 24.91]	[3.51, 25.69]	[2.87, 21.80]
	N	11,046	5,270	4,141	1,129
Comparison	Mean (%)	10.72	10.40	10.58	9.68**
	95% CI	[3.62, 25.84]	[3.29, 27.14]	[3.39, 27.18]	[2.88, 26.95]
	N	34,127	16,187	13,004	3,183
ive Cohort					
BPCI	Mean (%)	9.70	10.02	10.40	8.51
	95% CI	[3.02, 24.31]	[3.14, 25.62]	[3.23, 26.36]	[2.79, 22.66]
	N	5,529	2,616	2,030	586
Comparison	Mean (%)	10.43	10.33	10.52	9.58
	95% CI	[3.53, 24.42]	[3.27, 25.14]	[3.44, 25.29]	[2.60, 24.51]
	N	22,114	10,556	8,479	2,077
ing Cohort					
BPCI	Mean (%)	10.02	10.33	11.06	7.41**
	95% CI	[3.92, 23.07]	[3.75, 23.81]	[3.95, 24.65]	[2.98, 20.47]
	N	5,517	2,654	2,111	543
Comparison	Mean (%)	11.23	10.35**	10.54	9.59**
	95% CI	[3.91, 27.48]	[3.31, 29.40]	[3.33, 29.33]	[3.22, 29.66]
	N	15,243	7,035	5,652	1,383

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having <u>equal weight</u>.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



### Table B.18: Since BPCI DiD Estimates for 30-Day Pneumonia-Related Mortality for Full, Active, and Exiting Cohort<sup>+</sup>

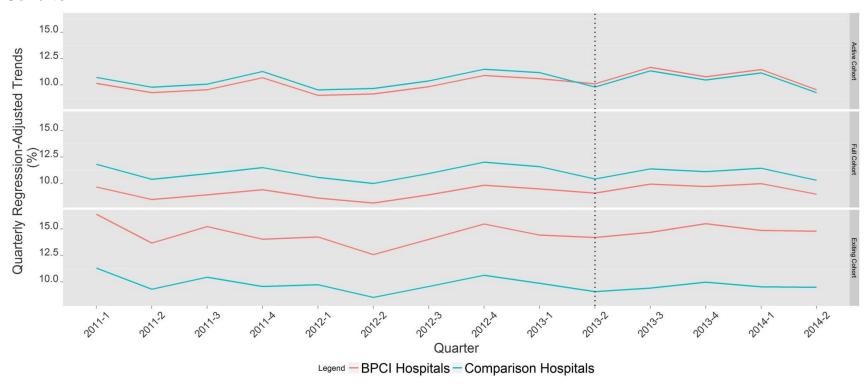
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.08	1.10	1.08
95% CI	(0.96, 1.22)	(0.92, 1.32)	(0.91, 1.28)
Sample Size	66,625	40,815	30,444

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



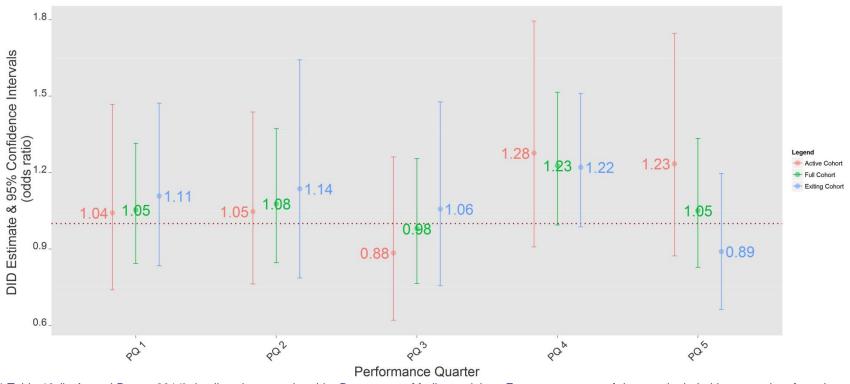
Figure B.10: Adjusted Quarterly Trends for 30-Day Pneumonia-Related Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.11: Performance Quarter DiD Estimates for 30-Day Pneumonia-Related Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.19: Episode Weighted, Unadjusted and Adjusted 30-Day Pneumonia-Related Mortality for Expansive, Targeted Cohorts<sup>+</sup>

rargetea c										
Hospital	Magaura	Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	
<b>Expansive Co</b>	Expansive Cohort									
BPCI	Mean (%)	10.22	10.20	11.73	12.07	12.08	12.52	10.55	10.28	
	95% CI	[9.11, 11.41]	[7.99, 12.42]	[9.98, 13.67]	[8.88, 15.26]	[10.07, 14.33]	[9.31, 15.72]	[7.18, 14.79]	[7.14, 13.42]	
	N	2,750		1,219		944		275		
Comparison	Mean (%)	10.89	10.75	10.58	10.64	11.10	11.04	8.47***	9.04	
	95% CI	[10.30, 11.51]	[8.85, 12.66]	[9.76, 11.45]	[8.69, 12.59]	[10.17, 12.09]	[9.08, 13.01]	[6.85, 10.33]	[7.14, 10.94]	
	N	10,437		5,218		4,179		1,039		
<b>Targeted Cohe</b>	ort									
BPCI	Mean (%)	10.20	14.33	10.00	14.50	10.20	14.62	9.25	14.00	
	95% CI	[9.55, 10.87]	[11.36, 17.29]	[9.09, 10.96]	[11.53, 17.47]	[9.17, 11.30]	[11.62, 17.63]	[7.39, 11.40]	[11.17, 16.83]	
	N	8,296		4,051		3,197		854		
Comparison	Mean (%)	10.63	9.61	10.63	9.58	10.70	9.67	10.37	9.23	
	95% CI	[10.25, 11.01]	[5.07, 14.16]	[10.08, 11.21]	[5.04, 14.12]	[10.08, 11.34]	[5.10, 14.24]	[9.15, 11.69]	[4.83, 13.63]	
	N	24,959		11,634		9,348		2,286		

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.20: Unweighted, Unadjusted 30-Day Pneumonia Related Mortality for Expansive, Targeted Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	9.67	10.28	10.64	8.84
	95% CI	[3.20, 23.37]	[3.50, 25.87]	[3.55, 26.71]	[3.30, 22.49]
	N	2,750	1,219	944	275
Comparison	Mean (%)	10.70	10.41	10.79	8.89**
	95% CI	[3.55, 24.95]	[3.29, 25.05]	[3.55, 25.45]	[2.25, 23.43]
	N	10,437	5,218	4,179	1,039
rgeted Cohort					
BPCI	Mean (%)	9.89	10.08	10.66	7.75**
	95% CI	[3.45, 24.03]	[3.33, 24.49]	[3.49, 25.24]	[2.68, 21.50]
	N	8,296	4,051	3,197	854
Comparison	Mean (%)	10.75	10.53	10.68	9.96
	95% CI	[3.65, 26.22]	[3.36, 28.13]	[3.42, 28.11]	[3.14, 28.23]
	N	24,959	11,634	9,348	2,286

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



### Table B.21: Since BPCI DiD Estimates for 30-Day Pneumonia-Related Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

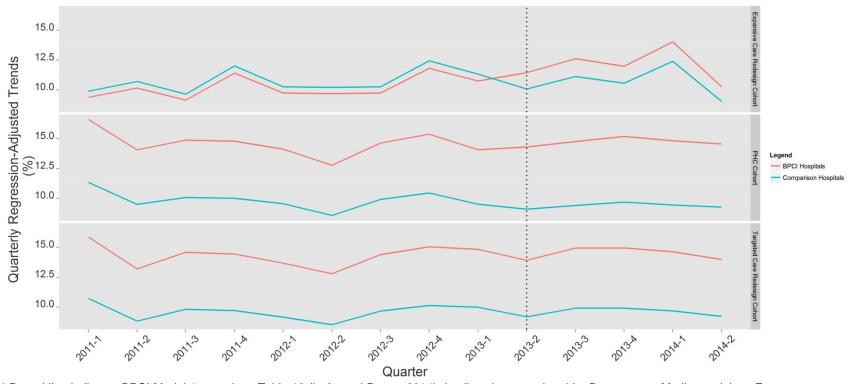
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	1.07	1.24*	1.02
95% CI	(0.89, 1.30)	(0.97, 1.57)	(0.89, 1.17)
Sample Size	23,016	19,624	48,935

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



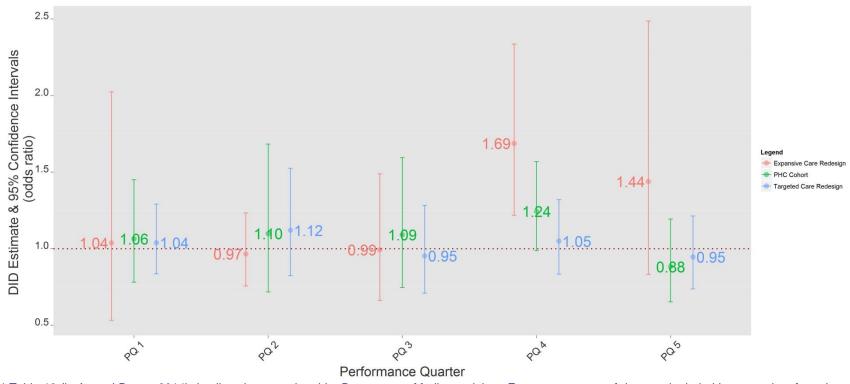
Figure B.12: Adjusted Quarterly Trends for 30-Day Pneumonia-Related Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.13: Performance Quarter DiD Estimates for 30-Day Pneumonia-Related Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.22: Episode Weighted, Unadjusted and Adjusted 30-Day Heart Failure-Related Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazira	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean (%)	9.78	10.10	9.89	10.45	10.02	10.51	9.34	10.24
	95% CI	[9.35, 10.23]	[8.35, 11.85]	[9.28, 10.52]	[8.58, 12.32]	[9.34, 10.74]	[8.62, 12.39]	[8.03, 10.78]	[8.44, 12.05]
	N	17,552		9,001		7,202		1,799	
Comparison	Mean (%)	9.98	9.76	10.09	10.01	10.14	10.06	9.91	9.81
	95% CI	[9.71, 10.26]	[7.10, 12.43]	[9.72, 10.48]	[7.26, 12.76]	[9.72, 10.57]	[7.29, 12.83]	[9.10, 10.77]	[7.14, 12.48]
	N	45,892		24,622		19,596		5,026	
Active Cohort									
BPCI	Mean (%)	9.48	9.35	9.48	9.50	9.48	9.45	9.49	9.69
	95% CI	[8.90, 10.09]	[7.01, 11.70]	[8.65, 10.37]	[7.12, 11.87]	[8.55, 10.47]	[7.10, 11.81]	[7.62, 11.64]	[7.23, 12.14]
	N	9,452		4,578		3,714		864	_
Comparison	Mean (%)	9.74	9.72	9.95	10.00	9.91	9.96	10.10	10.20
	95% CI	[9.40, 10.09]	[7.02, 12.42]	[9.48, 10.43]	[7.20, 12.81]	[9.39, 10.45]	[7.15, 12.76]	[9.08, 11.20]	[7.39, 13.02]
	N	29,016		15,517		12,340		3,177	
xiting Cohort									
BPCI	Mean (%)	10.14	10.67	10.31	11.27	10.61	11.40	9.20	10.79
	95% CI	[9.49, 10.81]	[8.72, 12.63]	[9.43, 11.24]	[9.06, 13.49]	[9.60, 11.68]	[9.13, 13.67]	[7.42, 11.23]	[8.78, 12.80]
	N	8,100		4,423		3,488		935	
Comparison	Mean (%)	10.10	9.76	10.03	9.88	10.10	9.99	9.73	9.45
	95% CI	[9.69, 10.51]	[7.62, 11.90]	[9.48, 10.59]	[7.69, 12.07]	[9.49, 10.74]	[7.76, 12.22]	[8.56, 11.01]	[7.41, 11.49]
	N	20,934	•	11,439	•	9,107	•	2,332	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.23: Unweighted, Unadjusted 30-Day Heart Failure-Related Mortality for Full, Active, and Exiting Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
ohort					
BPCI	Mean (%)	9.50	9.37	9.40	9.25
	95% CI	[4.12, 19.33]	[3.94, 19.50]	[3.97, 19.54]	[3.84, 19.33]
	N	17,552	9,001	7,202	1,799
Comparison	Mean (%)	10.07	10.18	10.25	9.91
	95% CI	[3.98, 21.12]	[4.03, 21.51]	[4.06, 21.63]	[3.91, 21.05]
	N	45,892	24,622	19,596	5,026
Cohort					
BPCI	Mean (%)	9.25	9.06	8.91	9.67
	95% CI	[3.74, 19.77]	[3.45, 20.21]	[3.40, 19.98]	[3.68, 21.13]
	N	9,452	4,578	3,714	864
Comparison	Mean (%)	9.78	10.17	10.20	10.05
	95% CI	[3.75, 20.95]	[3.94, 21.57]	[3.92, 21.66]	[3.99, 21.23]
	N	29,016	15,517	12,340	3,177
g Cohort					
BPCI	Mean (%)	9.89	9.86	10.17	8.62
	95% CI	[4.71, 18.65]	[4.70, 18.39]	[4.86, 18.86]	[4.10, 16.54]
	N	8,100	4,423	3,488	935
Comparison	Mean (%)	10.31	9.94	9.99	9.73
	95% CI	[4.34, 20.69]	[4.14, 20.58]	[4.19, 20.64]	[3.92, 20.33]
	N	20,934	11,439	9,107	2,332

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.24: Since BPCI DiD Estimates for 30-Day Heart Failure-Related Mortality for Full, Active, and Exiting Cohort<sup>+</sup>

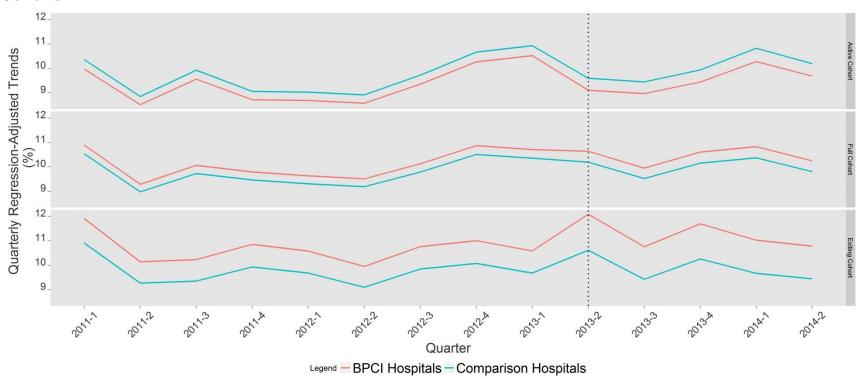
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.01	0.98	1.05
95% CI	(0.92, 1.11)	(0.87, 1.12)	(0.92, 1.20)
Sample Size	97,067	58,563	44,896

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



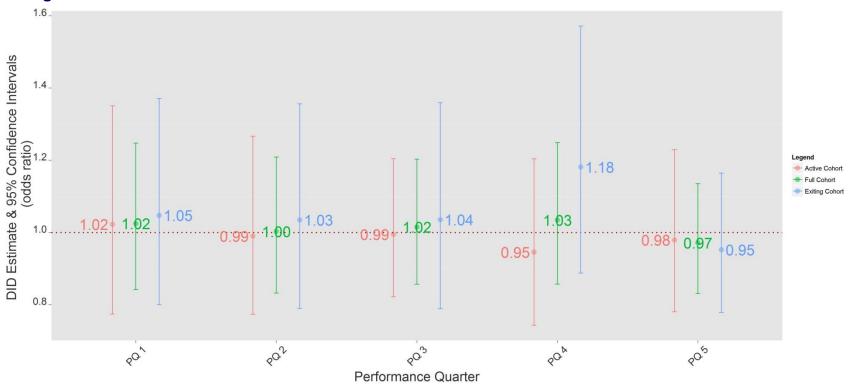
Figure B.14: Adjusted Quarterly Trends for 30-Day Heart Failure-Related Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.15: Performance Quarter DiD Estimates for 30-Day Heart Failure-Related Mortality for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.25: Episode Weighted, Unadjusted and Adjusted 30-Day Heart Failure-Related Mortality for Expansive, Targeted Cohorts<sup>+</sup>

Hospital		Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>Expansive Col</b>	Expansive Cohort								
BPCI	Mean (%)	9.47	10.37	9.85	10.99	9.96	10.98	9.37	11.04
	95% CI	[8.61, 10.38]	[8.44, 12.30]	[8.61, 11.21]	[8.86, 13.12]	[8.58, 11.49]	[8.83, 13.12]	[6.68, 12.68]	[8.96, 13.12]
	N	4,330		2,091	-	1,696		395	
Comparison	Mean (%)	10.00	9.63	10.20	9.97	10.19	9.96	10.22	10.02
	95% CI	[9.49, 10.53]	[6.81, 12.44]	[9.49, 10.94]	[7.00, 12.95]	[9.40, 11.02]	[6.97, 12.96]	[8.71, 11.90]	[7.12, 12.93]
	N	12,961		6,866		5,418		1,448	
<b>Targeted Coho</b>	ort								
BPCI	Mean (%)	9.89	10.70	9.90	10.99	10.04	11.06	9.33	10.73
	95% CI	[9.38, 10.41]	[8.85, 12.55]	[9.20, 10.63]	[9.01, 12.97]	[9.26, 10.87]	[9.06, 13.06]	[7.86, 10.97]	[8.83, 12.62]
	N	13,222		6,910		5,506		1,404	
Comparison	Mean (%)	9.93	9.55	10.09	9.84	10.14	9.90	9.88	9.60
	95% CI	[9.62, 10.25]	[7.43, 11.66]	[9.66, 10.53]	[7.66, 12.02]	[9.66, 10.64]	[7.70, 12.10]	[8.95, 10.88]	[7.48, 11.71]
	N	34,472		18,555		14,801		3,754	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.26: Unweighted, Unadjusted 30-Day Heart Failure-Related Mortality for Expansive, Targeted Cohorts <sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI - PQ 5
Expansive Cohort					
BPCI	Mean (%)	9.35	9.72	9.79	9.45
	95% CI	[3.75, 19.60]	[3.66, 21.01]	[3.73, 21.02]	[3.35, 20.98]
	N	4,330	2,091	1,696	395
Comparison	Mean (%)	10.34	10.59	10.60	10.55
	95% CI	[3.77, 22.50]	[3.90, 22.82]	[3.88, 22.94]	[3.99, 22.36]
	N	12,961	6,866	5,418	1,448
Targeted Cohort					
BPCI	Mean (%)	9.57	9.22	9.23	9.17
	95% CI	[4.28, 19.22]	[4.07, 18.84]	[4.07, 18.90]	[4.06, 18.61]
	N	13,222	6,910	5,506	1,404
Comparison	Mean (%)	9.93	10.06	10.15	9.68
	95% CI	[4.05, 20.50]	[4.10, 21.02]	[4.15, 21.15]	[3.91, 20.50]
	N	34,472	18,555	14,801	3,754

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.27: Since BPCI DiD Estimates for 30-Day Heart Failure-Related Mortality for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

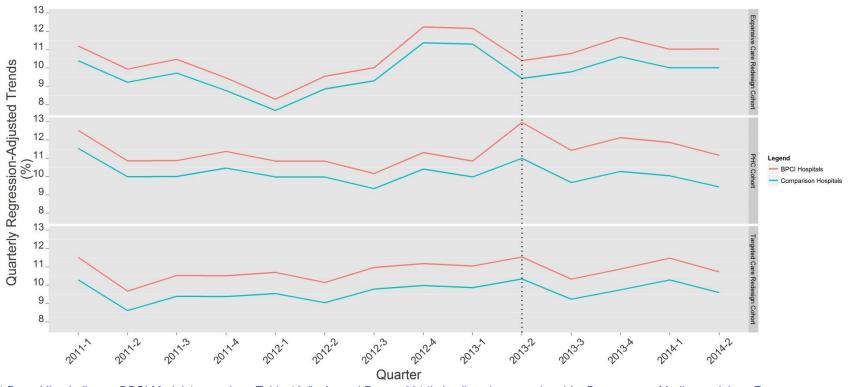
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	1.10	1.03	1.00
95% CI	(0.94, 1.28)	(0.85, 1.23)	(0.90, 1.11)
Sample Size	30,970	26,248	73,159

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



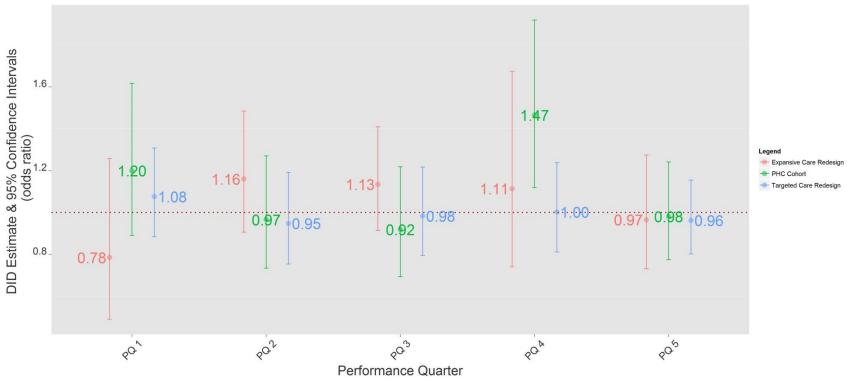
Figure B.16: Adjusted Quarterly Trends for 30-Day Heart Failure-Related Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.17: Performance Quarter DiD Estimates for 30-Day Heart Failure-Related Mortality for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.28: Episode Weighted, Unadjusted and Adjusted 30-Day All-Cause Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital		Base	eline	Since BPC	Inception	BPCI -	Year 1	BPCI – PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean (%)	18.97	19.94	18.18***	19.32	18.24***	19.34	17.96***	19.24
	95% CI	[18.82, 19.12]	[19.32, 20.56]	[17.98, 18.38]	[18.68, 19.97]	[18.01, 18.46]	[18.70, 19.98]	[17.51, 18.40]	[18.58, 19.89]
	N	267,923		141,494		112,594		28,900	
Comparison	Mean (%)	18.24	17.91	17.52***	17.26	17.61***	17.28	17.16***	17.19
	95% CI	[18.16, 18.33]	[17.15, 18.68]	[17.41, 17.63]	[16.51, 18.02]	[17.48, 17.73]	[16.53, 18.04]	[16.91, 17.41]	[16.44, 17.93]
	N	846,223		440,463		352,987		87,476	
<b>Active Cohort</b>									
BPCI	Mean (%)	19.41	20.15	18.95**	19.81	19.02**	19.84	18.68**	19.67
	95% CI	[19.20, 19.63]	[19.33, 20.96]	[18.66, 19.24]	[18.88, 20.73]	[18.69, 19.34]	[18.93, 20.75]	[18.04, 19.34]	[18.71, 20.64]
	N	136,072		69,855		55,772		14,083	
Comparison	Mean (%)	18.73	18.52	17.97***	17.84	18.07***	17.87	17.58***	17.71
	95% CI	[18.63, 18.84]	[17.70, 19.35]	[17.83, 18.11]	[17.02, 18.66]	[17.91, 18.23]	[17.04, 18.69]	[17.26, 17.89]	[16.90, 18.52]
	N	541,355		282,591		226,186		56,405	
<b>Exiting Cohort</b>									
BPCI	Mean (%)	18.51	19.98	17.43***	19.08*	17.47***	19.07*	17.26***	19.09*
	95% CI	[18.30, 18.72]	[19.33, 20.62]	[17.15, 17.71]	[18.39, 19.76]	[17.16, 17.78]	[18.40, 19.75]	[16.66, 17.88]	[18.38, 19.79]
	N	131,851		71,639		56,822		14,817	
Comparison	Mean (%)	17.65	17.15	17.17***	16.74	17.24***	16.74	16.91***	16.75
	95% CI	[17.53, 17.77]	[16.30, 17.99]	[17.01, 17.34]	[15.93, 17.55]	[17.05, 17.42]	[15.93, 17.55]	[16.54, 17.29]	[15.93, 17.57]
	N	382,746		198,195		159,179		39,016	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.29: Unweighted, Unadjusted 30-Day All-Cause Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
II Cohort					
BPCI	Mean (%)	18.34	18.10*	18.25	17.51***
	95% CI	[16.02, 20.97]	[15.74, 20.70]	[15.88, 20.85]	[15.18, 20.11]
	N	267,923	141,494	112,594	28,900
Comparison	Mean (%)	17.27	17.11**	17.31	16.32***
	95% CI	[14.89, 20.38]	[14.73, 19.90]	[14.93, 20.04]	[13.95, 19.34]
	N	846,223	440,463	352,987	87,476
ive Cohort					
BPCI	Mean (%)	17.98	18.30*	18.57***	17.28**
	95% CI	[15.52, 20.84]	[15.77, 21.12]	[16.02, 21.38]	[14.78, 20.13]
	N	136,072	69,855	55,772	14,083
Comparison	Mean (%)	17.21	17.34	17.61***	16.34***
	95% CI	[14.86, 20.51]	[15.01, 20.12]	[15.28, 20.29]	[13.99, 19.49]
	N	541,355	282,591	226,186	56,405
ting Cohort					
BPCI	Mean (%)	18.95	17.77***	17.75***	17.88***
	95% CI	[16.86, 21.18]	[15.70, 20.02]	[15.66, 20.01]	[15.83, 20.08]
	N	131,851	71,639	56,822	14,817
Comparison	Mean (%)	17.61	17.04***	17.13***	16.70***
	95% CI	[15.27, 20.22]	[14.65, 19.72]	[14.73, 19.82]	[14.34, 19.34]
	N	382,746	198,195	159,179	39,016

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.30: Since BPCI DiD Estimates for 30-Day All-Cause Readmission for Full, Active, and Exiting Cohort<sup>+</sup>

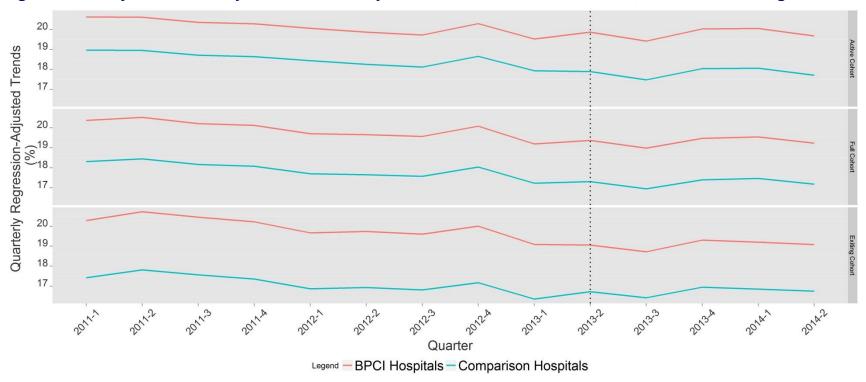
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.01	1.03	0.97*
95% CI	(0.98, 1.03)	(0.99, 1.06)	(0.94, 1.00)
Sample Size	1,696,103	1,029,873	784,431

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



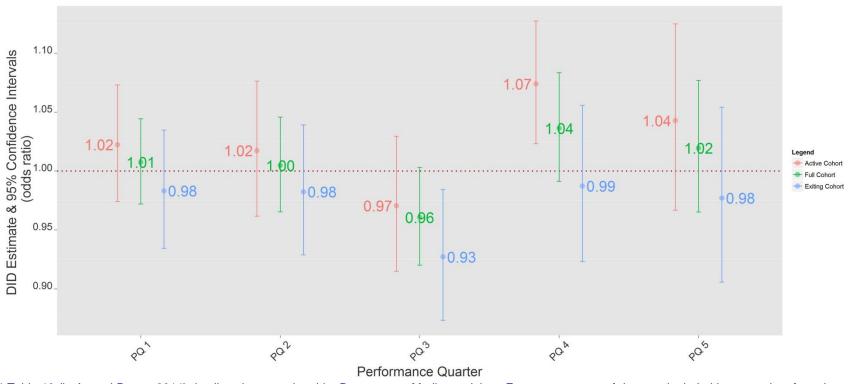
Figure B.18: Adjusted Quarterly Trends for 30-Day All-Cause Readmissions for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.19: Performance Quarter DiD Estimates for 30-Day All-Cause Readmissions for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.31: Episode Weighted, Unadjusted and Adjusted 30-Day All-Cause Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital	Massure	Baseline		Since BPCI Inception		BPCI –	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Col	hort								
BPCI	Mean (%)	18.09	19.11	17.38***	18.43	17.48**	18.46	16.99**	18.29
	95% CI	[17.78, 18.40]	[18.28, 19.94]	[16.95, 17.81]	[17.57, 19.29]	[17.00, 17.96]	[17.59, 19.33]	[16.06, 17.96]	[17.47, 19.10
	N	59,689		29,979		23,900		6,079	
Comparison	Mean (%)	17.91	17.67	17.01***	16.77	17.13***	16.80	16.51***	16.64*
	95% CI	[17.76, 18.06]	[16.80, 18.53]	[16.80, 17.22]	[15.90, 17.64]	[16.90, 17.37]	[15.92, 17.68]	[16.06, 16.98]	[15.83, 17.45
	N	239,593		123,887		98,818		25,069	
Targeted Coho	ort								
BPCI	Mean (%)	19.22	20.69	18.39***	20.08	18.44***	20.11	18.21***	19.97
	95% CI	[19.05, 19.39]	[20.03, 21.35]	[18.17, 18.62]	[19.38, 20.77]	[18.19, 18.70]	[19.42, 20.79]	[17.71, 18.72]	[19.25, 20.69
	N	208,234	•	111,515		88,694		22,821	
Comparison	Mean (%)	18.35	17.85	17.67***	17.28	17.75***	17.30	17.32***	17.19
	95% CI	[18.25, 18.44]	[17.00, 18.70]	[17.54, 17.80]	[16.46, 18.10]	[17.61, 17.90]	[16.49, 18.12]	[17.03, 17.61]	[16.36, 18.0
	N	633,184		330,091		265,010		65,081	
PHC Cohort									
BPCI	Mean (%)	18.45	19.70	16.98***	18.42**	17.13***	18.43**	16.39***	18.37***
	95% CI	[18.20, 18.71]	[19.02, 20.37]	[16.64, 17.32]	[17.69, 19.14]	[16.75, 17.52]	[17.71, 19.15]	[15.66, 17.14]	[17.63, 19.10
	N	91,372	-	47,525		37,836		9,689	
Comparison	Mean (%)	17.31	16.86	16.69***	16.33	16.73***	16.34	16.52***	16.28
	95% CI	[17.16, 17.45]	[15.99, 17.73]	[16.49, 16.89]	[15.49, 17.16]	[16.51, 16.96]	[15.51, 17.17]	[16.07, 16.98]	[15.43, 17.13
	N	257,641	•	132,512		106,450		26,062	-

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.32: Unweighted, Unadjusted 30-Day All-Cause Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	15.86	16.78***	17.08***	15.69
	95% CI	[13.40, 18.89]	[14.19, 19.72]	[14.49, 19.99]	[13.12, 18.72]
	N	59,689	29,979	23,900	6,079
Comparison	Mean (%)	15.52	16.12***	16.48***	14.83***
	95% CI	[13.04, 19.53]	[13.71, 19.22]	[14.07, 19.40]	[12.39, 18.58]
	N	239,593	123,887	98,818	25,069
geted Cohort					
BPCI	Mean (%)	19.63	18.71***	18.79***	18.41***
	95% CI	[17.38, 22.05]	[16.46, 21.15]	[16.52, 21.24]	[16.20, 20.80]
	N	208,234	111,515	88,694	22,821
Comparison	Mean (%)	18.30	17.58***	17.71***	17.08***
	95% CI	[15.97, 20.86]	[15.22, 20.20]	[15.33, 20.34]	[14.75, 19.67]
	N	633,184	330,091	265,010	65,081
C Cohort			·		
BPCI	Mean (%)	18.33	16.93***	17.06***	16.41***
	95% CI	[16.39, 20.40]	[15.02, 18.99]	[15.13, 19.13]	[14.56, 18.41]
	N	91,372	47,525	37,836	9,689
Comparison	Mean (%)	17.38	16.75***	16.80***	16.58***
	95% CI	[15.24, 19.70]	[14.57, 19.13]	[14.62, 19.17]	[14.39, 18.98]
	N	257,641	132,512	106,450	26,062

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



### Table B.33: Since BPCI DiD Estimates for 30-Day All-Cause Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

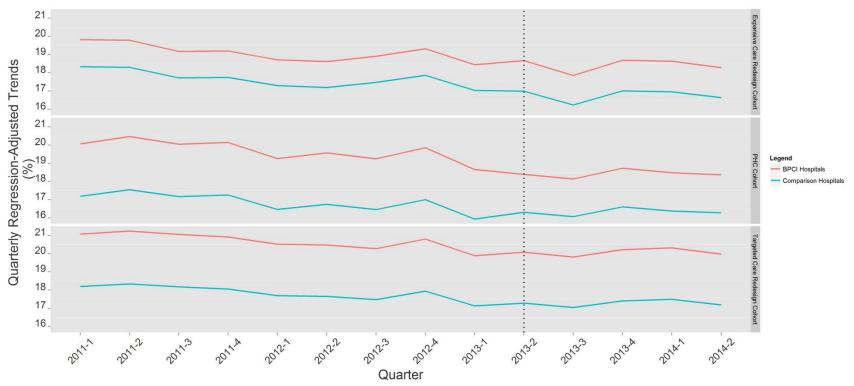
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	0.96**	1.02	1.00
95% CI	(0.92, 1.00)	(0.97, 1.07)	(0.98, 1.03)
Sample Size	529,050	453,148	1,283,024

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



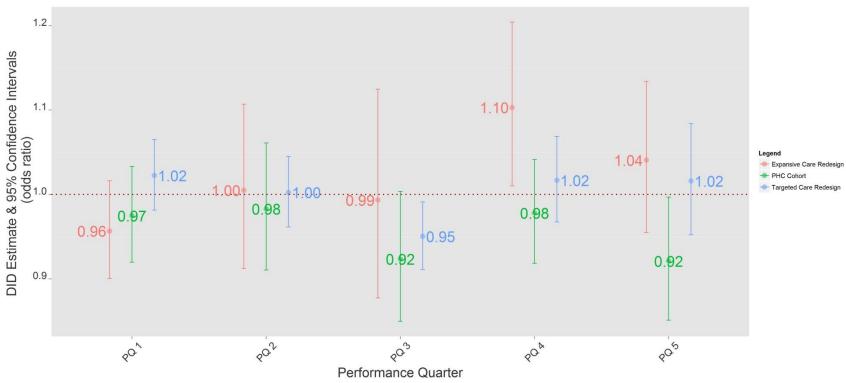
Figure B.20: Adjusted Quarterly Trends for 30-Day All-Cause Readmissions for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.21: Performance Quarter DiD Estimates for 30-Day All-Cause Readmissions for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.34: Episode Weighted, Unadjusted and Adjusted 30-Day Acute Myocardial Infarction Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Measure	Baseline		Since BPCI Inception		BPCI -	Year 1	BPCI – PQ 5	
Cohort		Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean (%)	21.26	19.96	18.43***	17.76	18.02***	17.93	20.07	17.09
	95% CI	[20.15, 22.40]	[13.62, 26.31]	[17.03, 19.89]	[11.89, 23.64]	[16.47, 19.65]	[12.02, 23.85]	[16.88, 23.57]	[11.38, 22.80
	N	5,169		2,892		2,314		578	
Comparison	Mean (%)	19.72	19.88	17.76***	18.29	18.10***	18.46	16.48***	17.60
	95% CI	[19.16, 20.29]	[16.81, 22.94]	[17.02, 18.52]	[15.35, 21.23]	[17.26, 18.96]	[15.48, 21.44]	[14.92, 18.14]	[14.82, 20.38
	N	18,925		10,093		7,994		2,099	
Active Cohort									
BPCI	Mean (%)	23.12	17.51	20.16*	15.89	19.55**	16.03	22.46	15.32
	95% CI	[21.30, 25.01]	[12.11, 22.90]	[17.86, 22.62]	[10.43, 21.34]	[17.00, 22.31]	[10.53, 21.53]	[17.30, 28.32]	[10.06, 20.58
	N	2,033		1,131		895		236	
Comparison	Mean (%)	20.28	21.13	18.77**	20.09	19.11*	20.25	17.49**	19.41
	95% CI	[19.56, 21.01]	[17.59, 24.67]	[17.82, 19.74]	[16.63, 23.54]	[18.03, 20.22]	[16.75, 23.76]	[15.50, 19.63]	[16.16, 22.65
	N	11,840		6,431		5,082		1,349	
<b>Exiting Cohort</b>									
BPCI	Mean (%)	20.06	25.98	17.32**	22.96	17.05**	23.27	18.42	21.74
	95% CI	[18.67, 21.50]	[18.42, 33.54]	[15.58, 19.17]	[15.79, 30.13]	[15.13, 19.11]	[16.03, 30.50]	[14.46, 22.94]	[14.84, 28.63
	N	3,136		1,761		1,419		342	
Comparison	Mean (%)	18.96	17.23	16.62***	15.40	17.02***	15.63	15.02***	14.50
	95% CI	[18.15, 19.78]	[12.89, 21.57]	[15.54, 17.73]	[11.31, 19.50]	[15.81, 18.28]	[11.47, 19.79]	[12.77, 17.49]	[10.69, 18.31
	N	9,000		4,544		3,625		919	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.35: Unweighted, Unadjusted 30-Day Acute Myocardial Infarction Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Full Cohort					
BPCI	Mean (%)	21.52	18.71***	18.02***	21.42
	95% CI	[7.13, 50.20]	[5.78, 47.80]	[5.52, 47.52]	[6.77, 48.91]
	N	5,169	2,892	2,314	578
Comparison	Mean (%)	20.41	18.27***	18.49***	17.41***
	95% CI	[7.04, 44.57]	[5.80, 42.47]	[5.92, 43.00]	[5.33, 40.34]
	N	18,925	10,093	7,994	2,099
<b>Active Cohort</b>					
BPCI	Mean (%)	22.06	19.75*	18.45***	24.86
	95% CI	[6.06, 56.32]	[5.19, 54.72]	[4.88, 54.27]	[6.41, 56.49]
	N	2,033	1,131	895	236
Comparison	Mean (%)	20.91	18.92***	19.05***	18.39**
	95% CI	[7.13, 45.18]	[6.20, 43.32]	[6.26, 43.73]	[5.97, 41.70]
	N	11,840	6,431	5,082	1,349
Exiting Cohort				ì	
BPCI	Mean (%)	20.71	17.11***	17.37***	16.06**
	95% CI	[8.78, 40.83]	[6.67, 37.20]	[6.50, 37.22]	[7.33, 37.11]
	N	3,136	1,761	1,419	342
Comparison	Mean (%)	19.52	17.47***	17.91**	15.72***
	95% CI	[7.25, 42.15]	[5.55, 40.24]	[5.84, 41.02]	[4.40, 37.16]
	N	9,000	4,544	3,625	919

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



# Table B.36: Since BPCI DiD Estimates for 30-Day Acute Myocardial Infarction Readmission for Full, Active, and Exiting Cohort<sup>+</sup>

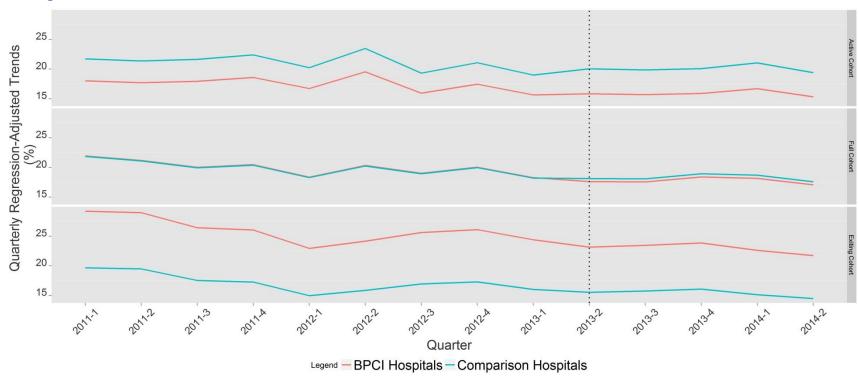
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	0.96	0.95	0.97
95% CI	(0.84, 1.10)	(0.78, 1.16)	(0.80, 1.17)
Sample Size	37,079	21,435	18,441

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



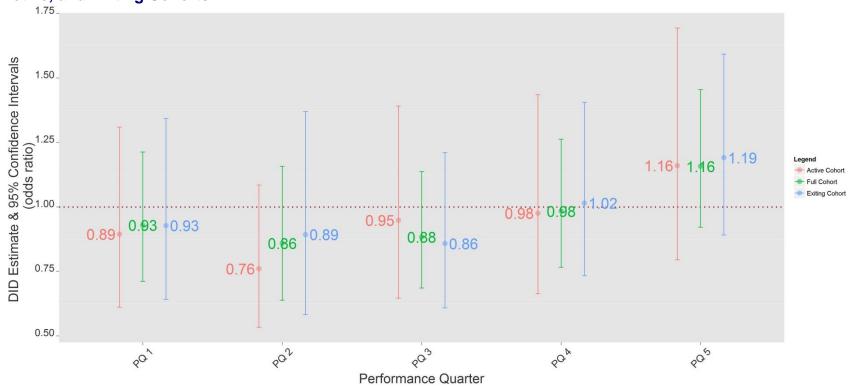
Figure B.22: Adjusted Quarterly Trends for 30-Day Acute Myocardial Infarction Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.23: Performance Quarter DiD Estimates for 30-Day Acute Myocardial Infarction Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.37: Episode Weighted, Unadjusted and Adjusted 30-Day Acute Myocardial Infarction Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

, rargeteu	, and i no our	10113						
Moasuro	Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI – PQ 5	
Wieasure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
hort								
Mean (%)	21.28	20.65	20.16	20.36	18.37	20.77	26.51	18.68
95% CI	[18.28, 24.54]	[13.94, 27.35]	[16.22, 24.57]	[13.23, 27.49]	[14.11, 23.28]	[13.52, 28.02]	[17.42, 37.34]	[12.03, 25.33]
N	686		377		294		83	
Mean (%)	21.12	20.97	19.23*	19.64	20.09	20.05	16.18***	18.01
95% CI	[19.94, 22.33]	[16.78, 25.16]	[17.75, 20.78]	[15.90, 23.39]	[18.38, 21.88]	[16.26, 23.84]	[13.28, 19.43]	[14.44, 21.59]
N	4,584		2,652		2,071		581	
ort								
Mean (%)	21.26	27.00	18.17***	23.93	17.97***	24.14	18.99	23.09
95% CI	[20.07, 22.49]	[19.19, 34.81]	[16.68, 19.73]	[16.59, 31.27]	[16.32, 19.72]	[16.76, 31.52]	[15.63, 22.73]	[15.92, 30.26]
N	4,483		2,515		2,020		495	
Mean (%)	19.36	17.86	17.30***	16.27	17.56***	16.43	16.28***	15.64
95% CI	[18.73, 20.00]	[13.40, 22.32]	[16.46, 18.16]	[12.07, 20.48]	[16.62, 18.53]	[12.18, 20.68]	[14.50, 18.19]	[11.61, 19.67]
N	14,887		7,753		6,162		1,591	
Mean (%)	19.16	25.54	17.69	23.98	17.84	24.62	17.02	21.45
95% CI	[17.40, 21.01]	[17.80, 33.29]	[15.37, 20.20]	[16.26, 31.71]	[15.26, 20.66]	[16.79, 32.45]	[11.94, 23.17]	[14.15, 28.75]
N	1,879		995		807		188	
Mean (%)	19.03	17.21	16.25***	14.98	16.82**	15.42	13.91***	13.21
95% CI	[18.00, 20.10]	[12.57, 21.84]	[14.87, 17.69]	[10.60, 19.36]	[15.27, 18.46]	[10.91, 19.94]	[11.08, 17.14]	[9.38, 17.04]
N	5,444		2,702		2,170		532	
	Measure hort  Mean (%)  95% CI  N  Mean (%)  95% CI  N  Ort  Mean (%)  95% CI  N  Mean (%)  95% CI  N  Mean (%)  95% CI  N  Mean (%)  95% CI  N	Measure	Mean (%)   21.28   20.65   95% CI   [18.28, 24.54]   [13.94, 27.35]   N   686   Mean (%)   21.12   20.97   95% CI   [19.94, 22.33]   [16.78, 25.16]   N   4,584   Ort   Mean (%)   21.26   27.00   95% CI   [20.07, 22.49]   [19.19, 34.81]   N   4,483   Mean (%)   19.36   17.86   95% CI   [18.73, 20.00]   [13.40, 22.32]   N   14,887   Mean (%)   19.16   25.54   95% CI   [17.40, 21.01]   [17.80, 33.29]   N   1,879   Mean (%)   19.03   17.21   95% CI   [18.00, 20.10]   [12.57, 21.84]	Baseline         Since BPC           Unadjusted         Adjusted         Unadjusted           hort         Wean (%)         21.28         20.65         20.16           95% CI         [18.28, 24.54]         [13.94, 27.35]         [16.22, 24.57]           N         686         377           Mean (%)         21.12         20.97         19.23*           95% CI         [19.94, 22.33]         [16.78, 25.16]         [17.75, 20.78]           N         4,584         2,652           ort         21.26         27.00         18.17****           95% CI         [20.07, 22.49]         [19.19, 34.81]         [16.68, 19.73]           N         4,483         2,515           Mean (%)         19.36         17.86         17.30****           95% CI         [18.73, 20.00]         [13.40, 22.32]         [16.46, 18.16]           N         14,887         7,753           Mean (%)         19.16         25.54         17.69           95% CI         [17.40, 21.01]         [17.80, 33.29]         [15.37, 20.20]           N         1,879         995           Mean (%)         19.03         17.21         16.25****           95	Baseline         Since BPCI Inception           Measure         Unadjusted         Adjusted         Unadjusted         Adjusted           hort         Mean (%)         21.28         20.65         20.16         20.36           95% CI         [18.28, 24.54]         [13.94, 27.35]         [16.22, 24.57]         [13.23, 27.49]           N         686         377         19.23*         19.64           95% CI         [19.94, 22.33]         [16.78, 25.16]         [17.75, 20.78]         [15.90, 23.39]           N         4,584         2,652           Dort         8         2,652         27.00         18.17***         23.93           95% CI         [20.07, 22.49]         [19.19, 34.81]         [16.68, 19.73]         [16.59, 31.27]           N         4,483         2,515         2,515         3.2515         3.2515         3.2515         3.2515         3.27	Measure         Baseline         Since BPCI Inception         BPCI – Unadjusted           Mean (%)         21.28         20.65         20.16         20.36         18.37           95% CI         [18.28, 24.54]         [13.94, 27.35]         [16.22, 24.57]         [13.23, 27.49]         [14.11, 23.28]           N         686         377         294           Mean (%)         21.12         20.97         19.23*         19.64         20.09           95% CI         [19.94, 22.33]         [16.78, 25.16]         [17.75, 20.78]         [15.90, 23.39]         [18.38, 21.88]           N         4,584         2,652         2,071           Ort           Mean (%)         21.26         27.00         18.17***         23.93         17.97***           95% CI         [20.07, 22.49]         [19.19, 34.81]         [16.68, 19.73]         [16.59, 31.27]         [16.32, 19.72]           N         4,483         2,515         2,020           Mean (%)         19.36         17.86         17.30****         16.27         17.56***           95% CI         [18.73, 20.00]         [13.40, 22.32]         [16.46, 18.16]         [12.07, 20.48]         [16.62, 18.53]           N         14,887         7,75	Measure         Baseline         Since BPCI Inception         BPCI – Year 1           Mean (%)         21.28         20.65         20.16         20.36         18.37         20.77           95% CI         [18.28, 24.54]         [13.94, 27.35]         [16.22, 24.57]         [13.23, 27.49]         [14.11, 23.28]         [13.52, 28.02]           N         686         377         294           Mean (%)         21.12         20.97         19.23*         19.64         20.09         20.05           95% CI         [19.94, 22.33]         [16.78, 25.16]         [17.75, 20.78]         [15.90, 23.39]         [18.38, 21.88]         [16.26, 23.84]           N         4,584         2,652         2,071           ort         Mean (%)         21.26         27.00         18.17***         23.93         17.97***         24.14           95% CI         [20.07, 22.49]         [19.19, 34.81]         [16.68, 19.73]         [16.59, 31.27]         [16.32, 19.72]         [16.76, 31.52]           N         4,483         2,515         2,020         20.00         Mean (%)         19.36         17.86         17.30****         16.27         17.56****         16.43           95% CI         [18.73, 20.00]         [13.40, 22.32]         [16.	Baseline   Since BPCI   Inception   BPCI - Year 1   BPCI -

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.38: Unweighted, Unadjusted 30-Day Acute Myocardial Infarction Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	20.65	19.32	17.29	27.46
	95% CI	[4.58, 56.88]	[4.17, 55.86]	[3.44, 54.65]	[7.08, 60.70]
	N	686	377	294	83
Comparison	Mean (%)	22.14	19.31***	19.55***	18.33**
	95% CI	[6.59, 49.46]	[5.50, 46.52]	[5.66, 47.10]	[4.88, 44.23]
	N	4,584	2,652	2,071	581
rgeted Cohort					
BPCI	Mean (%)	21.91	18.43***	18.35***	18.77*
	95% CI	[8.26, 47.23]	[6.49, 44.23]	[6.45, 44.35]	[6.64, 43.75]
	N	4,483	2,515	2,020	495
Comparison	Mean (%)	19.67	17.84***	18.14***	16.62***
	95% CI	[7.28, 42.28]	[5.96, 40.51]	[6.11, 41.17]	[5.40, 37.90]
	N	14,887	7,753	6,162	1,591
C Cohort	,				
BPCI	Mean (%)	19.04	17.11	18.08	13.20**
	95% CI	[7.26, 41.11]	[6.09, 39.58]	[6.21, 40.14]	[5.60, 37.35]
	N	1,879	995	807	188
Comparison	Mean (%)	19.14	16.84***	17.23**	15.29**
	95% CI	[6.58, 44.05]	[4.65, 42.05]	[4.96, 42.84]	[3.42, 38.88]
	N	5,444	2,702	2,170	532

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



# Table B.39: Since BPCI DiD Estimates for 30-Day Acute Myocardial Infarction Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

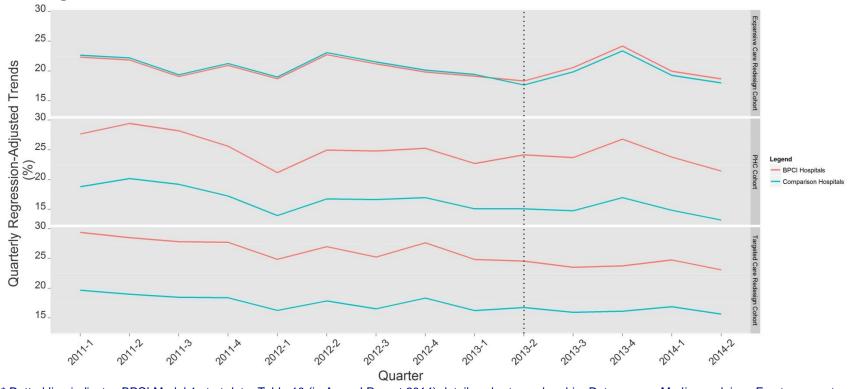
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	1.09	1.07	0.95
95% CI	(0.85, 1.38)	(0.75, 1.53)	(0.82, 1.10)
Sample Size	11,020	8,299	29,638

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



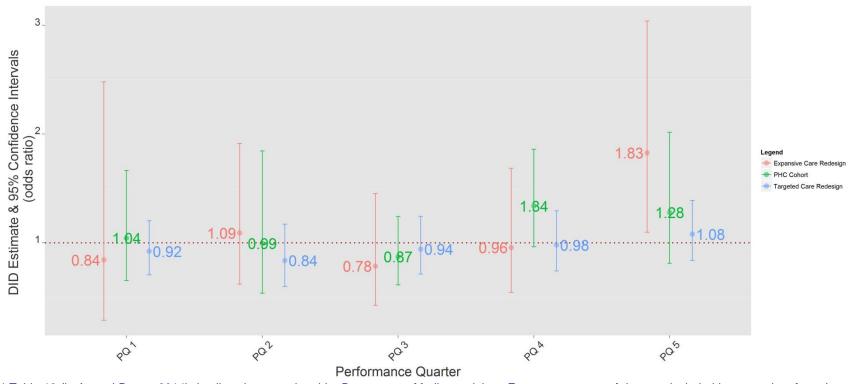
Figure B.24: Adjusted Quarterly Trends for 30-Day Acute Myocardial Infarction Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.25: Performance Quarter DiD Estimates for 30-Day Acute Myocardial Infarction Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.40: Episode Weighted, Unadjusted and Adjusted 30-Day Pneumonia-Related Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazza	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean (%)	17.97	16.83	16.84*	16.02	16.55**	16.16	17.91	15.48
	95% CI	[17.23, 18.73]	[14.48, 19.19]	[15.81, 17.92]	[13.69, 18.36]	[15.39, 17.76]	[13.81, 18.51]	[15.64, 20.35]	[13.20, 17.77]
	N	10,190		4,916		3,855		1,061	
Comparison	Mean (%)	18.68	19.01	17.87**	18.31	18.29	18.46	16.18***	17.71
	95% CI	[18.25, 19.11]	[16.96, 21.06]	[17.26, 18.50]	[16.23, 20.39]	[17.60, 18.99]	[16.37, 20.55]	[14.87, 17.56]	[15.68, 19.74]
	N	31,446		15,011		12,063		2,948	
Active Cohort									
BPCI	Mean (%)	18.97	18.00	18.05	17.27	17.22*	17.34	20.91	17.00
	95% CI	[17.91, 20.07]	[14.99, 21.02]	[16.54, 19.63]	[14.09, 20.45]	[15.55, 18.99]	[14.16, 20.52]	[17.58, 24.55]	[13.82, 20.18]
	N	5,118		2,449		1,899		550	
Comparison	Mean (%)	18.99	19.21	17.80**	18.09	18.21	18.16	16.16***	17.81
	95% CI	[18.45, 19.54]	[17.07, 21.34]	[17.05, 18.57]	[15.92, 20.26]	[17.36, 19.08]	[15.98, 20.34]	[14.55, 17.87]	[15.67, 19.94]
	N	20,317		9,813		7,870		1,943	
<b>Exiting Cohort</b>									
BPCI	Mean (%)	16.96	17.32	15.65	16.32	15.90	16.59	14.68	15.24
	95% CI	[15.93, 18.02]	[14.61, 20.04]	[14.23, 17.14]	[13.52, 19.12]	[14.31, 17.60]	[13.75, 19.42]	[11.72, 18.05]	[12.58, 17.91]
	N	5,072		2,467		1,956		511	
Comparison	Mean (%)	18.36	18.12	18.16	18.05	18.60	18.34	16.38*	16.89
	95% CI	[17.72, 19.01]	[13.49, 22.74]	[17.23, 19.12]	[13.41, 22.70]	[17.55, 19.68]	[13.65, 23.03]	[14.39, 18.53]	[12.43, 21.35]
	N	14,147	Danalina Cina	6,519		5,243		1,276	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.41: Unweighted, Unadjusted 30-Day Pneumonia-Related Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	18.42	16.25***	15.78***	18.11
	95% CI	[8.13, 34.95]	[6.78, 33.09]	[6.47, 32.76]	[8.02, 34.43]
	N	10,190	4,916	3,855	1,061
Comparison	Mean (%)	19.36	17.41***	17.95***	15.27***
	95% CI	[8.35, 36.27]	[7.16, 36.16]	[7.43, 36.53]	[6.08, 34.68]
	N	31,446	15,011	12,063	2,948
ive Cohort					
BPCI	Mean (%)	18.95	16.87**	16.20***	19.57
	95% CI	[8.12, 36.26]	[6.78, 34.77]	[6.22, 34.30]	[9.05, 36.68]
	N	5,118	2,449	1,899	550
Comparison	Mean (%)	19.06	17.39***	17.74***	15.98***
	95% CI	[8.56, 35.45]	[7.18, 34.38]	[7.41, 34.70]	[6.29, 33.08]
	N	20,317	9,813	7,870	1,943
ting Cohort					
BPCI	Mean (%)	17.59	15.28***	15.14***	15.83
	95% CI	[8.16, 32.91]	[6.78, 30.48]	[6.87, 30.36]	[6.40, 30.94]
	N	5,072	2,467	1,956	511
Comparison	Mean (%)	19.86	17.50***	18.34**	14.26***
	95% CI	[8.32, 36.96]	[7.34, 38.32]	[7.68, 38.83]	[5.99, 36.36]
	N	14,147	6,519	5,243	1,276

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.42: Since BPCI DiD Estimates for 30-Day Pneumonia-Related Readmission for Full, Active, and Exiting Cohort<sup>+</sup>

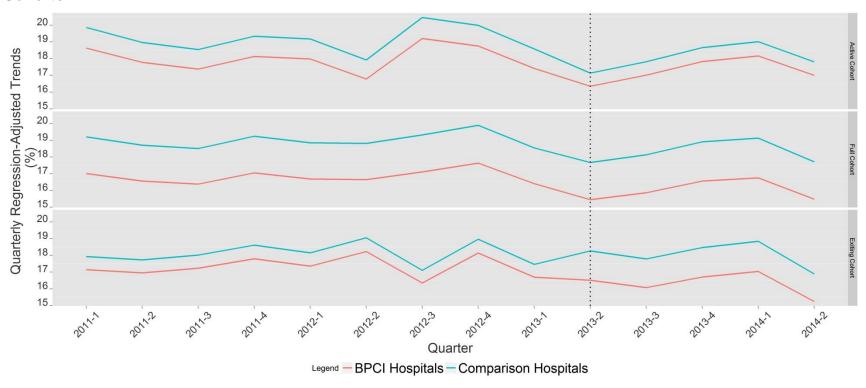
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	0.99	1.02	0.93
95% CI	(0.89, 1.10)	(0.89, 1.17)	(0.80, 1.09)
Sample Size	61,563	37,697	28,205

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



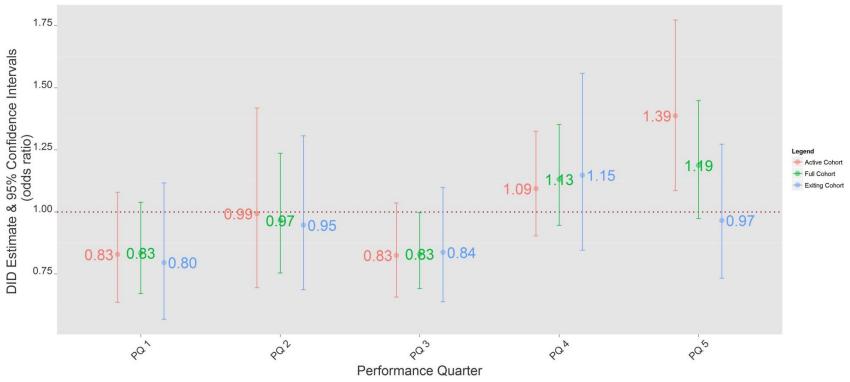
Figure B.26: Adjusted Quarterly Trends for 30-Day Pneumonia-Related Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.27: Performance Quarter DiD Estimates for 30-Day Pneumonia-Related Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.43: Episode Weighted, Unadjusted and Adjusted 30-Day Pneumonia-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital	Magaura	Bas	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>Expansive Col</b>	hort								
BPCI	Mean (%)	18.57	17.59	17.41	16.66	17.00	16.91	18.77	15.65
	95% CI	[17.08, 20.13]	[15.11, 20.07]	[15.26, 19.72]	[14.06, 19.25]	[14.59, 19.64]	[14.27, 19.54]	[14.22, 24.05]	[13.20, 18.10
	N	2,563		1,149		888		261	
Comparison	Mean (%)	18.96	19.27	17.08***	17.34	17.61*	17.60	14.95***	16.31*
	95% CI	[18.18, 19.76]	[16.68, 21.87]	[16.03, 18.17]	[14.76, 19.92]	[16.43, 18.85]	[14.97, 20.23]	[12.76, 17.35]	[13.93, 18.68
	N	9,611		4,848		3,878		970	
Targeted Coho	ort								
BPCI	Mean (%)	17.77	17.50	16.67	16.69	16.41*	16.82	17.63	16.14
	95% CI	[16.91, 18.64]	[14.94, 20.07]	[15.49, 17.90]	[14.10, 19.27]	[15.10, 17.80]	[14.23, 19.42]	[15.05, 20.45]	[13.59, 18.69
	N	7,627		3,767		2,967		800	
Comparison	Mean (%)	18.51	18.51	18.01	18.15	18.42	18.29	16.36**	17.56
	95% CI	[18.01, 19.02]	[13.76, 23.25]	[17.29, 18.75]	[13.45, 22.84]	[17.61, 19.25]	[13.57, 23.01]	[14.80, 18.01]	[12.98, 22.14
	N	22,996		10,780		8,671		2,109	
PHC Cohort									
BPCI	Mean (%)	17.16	17.63	15.16**	15.90	15.24*	16.20	14.84	14.68
	95% CI	[16.02, 18.36]	[14.71, 20.54]	[13.60, 16.82]	[12.95, 18.84]	[13.49, 17.13]	[13.22, 19.19]	[11.55, 18.65]	[11.90, 17.46
	N	4,067		1,966		1,555		411	
Comparison	Mean (%)	18.40	18.12	18.43	18.29	18.98	18.64	16.10*	16.93
	95% CI	[17.66, 19.16]	[13.54, 22.71]	[17.35, 19.56]	[13.69, 22.90]	[17.76, 20.24]	[13.97, 23.30]	[13.76, 18.65]	[12.58, 21.27
	N	10,457	•	4,817	•	3,910	•	907	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.44: Unweighted, Unadjusted 30-Day Pneumonia-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	17.96	17.13	16.50	19.66
	95% CI	[7.96, 34.09]	[6.55, 35.00]	[6.09, 34.61]	[8.38, 36.57]
	N	2,563	1,149	888	261
Comparison	Mean (%)	18.65	16.46***	17.01**	14.23***
	95% CI	[8.24, 35.17]	[6.65, 33.18]	[6.92, 33.84]	[5.58, 30.53]
	N	9,611	4,848	3,878	970
rgeted Cohort					
BPCI	Mean (%)	18.62	15.86***	15.47***	17.42
	95% CI	[8.21, 35.33]	[6.88, 32.26]	[6.64, 31.95]	[7.85, 33.50]
	N	7,627	3,767	2,967	800
Comparison	Mean (%)	19.70	17.72***	18.28***	15.52***
	95% CI	[8.41, 36.75]	[7.32, 37.24]	[7.60, 37.54]	[6.21, 36.07]
	N	22,996	10,780	8,671	2,109
IC Cohort					
BPCI	Mean (%)	16.96	14.66**	14.84**	13.93*
	95% CI	[9.14, 28.03]	[7.27, 25.82]	[7.36, 26.08]	[6.89, 24.75]
	N	4,067	1,966	1,555	411
Comparison	Mean (%)	18.76	18.61	19.54	14.92***
	95% CI	[8.84, 34.14]	[8.13, 35.77]	[8.61, 36.76]	[6.19, 31.79]
	N	10,457	4,817	3,910	907

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.45: Since BPCI DiD Estimates for 30-Day Pneumonia-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

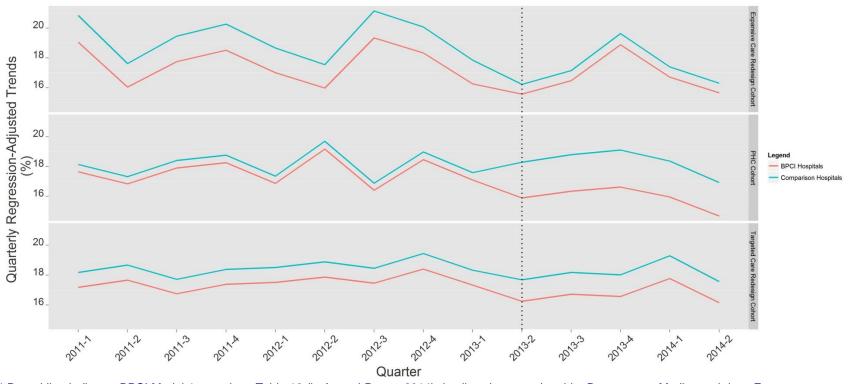
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	0.87	1.07	0.97
95% CI	(0.74, 1.03)	(0.90, 1.27)	(0.85, 1.10)
Sample Size	21,307	18,171	45,170

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



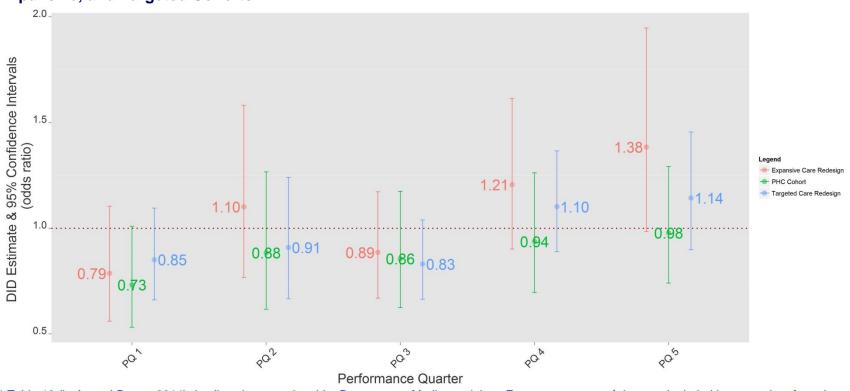
Figure B.28: Adjusted Quarterly Trends for 30-Day Pneumonia-Related Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.29: Performance Quarter DiD Estimates for 30-Day Pneumonia-Related Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.46: Episode Weighted, Unadjusted and Adjusted 30-Day Heart Failure-Related Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Moocure	Basel	ine	Since BPC	I Inception	BPCI -	Year 1	BPCI ·	– PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean (%)	26.10	25.89	23.86***	23.99	24.05***	24.01	23.11***	23.91
	95% CI	[25.41, 26.79]	[22.07, 29.70]	[22.93, 24.80]	[20.32, 27.67]	[23.01, 25.11]	[20.33, 27.69]	[21.09, 25.24]	[20.28, 27.55
	N	15,713		8,081		6,450		1,631	
Comparison	Mean (%)	24.31	24.30	23.11***	23.22	23.16***	23.24	22.92**	23.14
	95% CI	[23.90, 24.73]	[21.17, 27.43]	[22.56, 23.67]	[20.18, 26.26]	[22.55, 23.79]	[20.19, 26.29]	[21.71, 24.16]	[20.12, 26.16
	N	41,861		22,558		17,933		4,625	
<b>Active Cohort</b>									
BPCI	Mean (%)	26.39	28.22	24.70**	26.95	25.02	27.16	23.30*	26.13
	95% CI	[25.46, 27.34]	[25.46, 30.97]	[23.39, 26.04]	[24.26, 29.65]	[23.56, 26.52]	[24.47, 29.85]	[20.38, 26.43]	[23.42, 28.84
	N	8,484		4,134		3,353		781	
Comparison	Mean (%)	24.96	24.33	23.58***	23.13	23.82**	23.32	22.67***	22.39
	95% CI	[24.44, 25.49]	[21.02, 27.64]	[22.88, 24.29]	[19.93, 26.34]	[23.03, 24.61]	[20.11, 26.53]	[21.17, 24.24]	[19.24, 25.55
	N	26,336		14,190		11,266		2,924	
xiting Cohort									
BPCI	Mean (%)	25.76	28.46	22.98***	25.58	22.99***	25.34	22.94*	26.57
	95% CI	[24.75, 26.78]	[24.41, 32.50]	[21.67, 24.32]	[21.72, 29.45]	[21.52, 24.51]	[21.47, 29.21]	[20.15, 25.92]	[22.72, 30.41
	N	7,229		3,947		3,097		850	
Comparison	Mean (%)	23.35	22.48	22.97	22.10	22.73	21.88	23.90	22.99
	95% CI	[22.75, 23.95]	[19.13, 25.82]	[22.17, 23.79]	[18.82, 25.39]	[21.84, 23.65]	[18.61, 25.14]	[22.11, 25.76]	[19.62, 26.37
	N	19,294		10,531		8,380		2,151	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.47: Unweighted, Unadjusted 30-Day Heart Failure-Related Readmission for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	25.86	23.51***	23.73***	22.60***
	95% CI	[15.71, 38.95]	[13.58, 36.71]	[13.75, 36.96]	[12.87, 35.70]
	N	15,713	8,081	6,450	1,631
Comparison	Mean (%)	24.02	22.87***	22.86***	22.91*
	95% CI	[13.56, 38.05]	[12.47, 37.06]	[12.46, 37.10]	[12.51, 36.88]
	N	41,861	22,558	17,933	4,625
tive Cohort					
BPCI	Mean (%)	26.13	24.11**	24.49*	22.57**
	95% CI	[15.38, 40.11]	[13.35, 38.56]	[13.67, 38.93]	[12.07, 37.08]
	N	8,484	4,134	3,353	781
Comparison	Mean (%)	24.51	23.16***	23.25***	22.80**
	95% CI	[13.81, 38.82]	[12.56, 37.54]	[12.63, 37.68]	[12.27, 37.00]
	N	26,336	14,190	11,266	2,924
ting Cohort					
BPCI	Mean (%)	25.44	22.58***	22.56***	22.65*
	95% CI	[16.23, 37.13]	[13.94, 33.83]	[13.89, 33.90]	[14.12, 33.54]
	N	7,229	3,947	3,097	850
Comparison	Mean (%)	23.32	22.85	22.70	23.44
	95% CI	[13.49, 36.38]	[13.01, 36.17]	[12.88, 36.07]	[13.54, 36.55]
	N	19,294	10,531	8,380	2,151

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.48: Since BPCI DiD Estimates for 30-Day Heart Failure-Related Readmission for Full, Active, and Exiting Cohort<sup>+</sup>

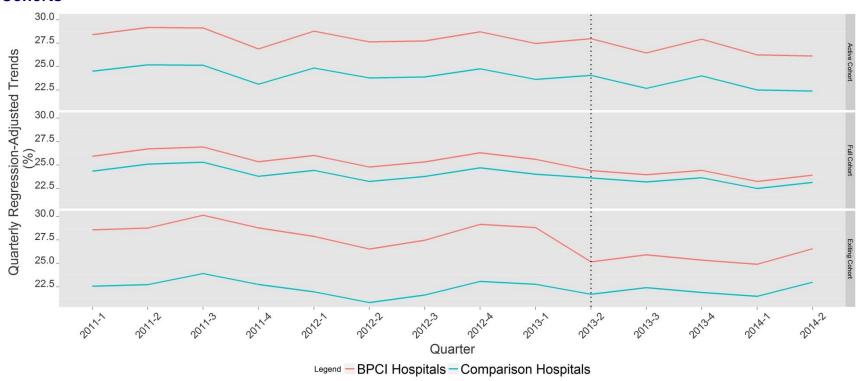
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	0.96	1.00	0.88**
95% CI	(0.89, 1.03)	(0.91, 1.10)	(0.79, 0.98)
Sample Size	88,213	53,144	41,001

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



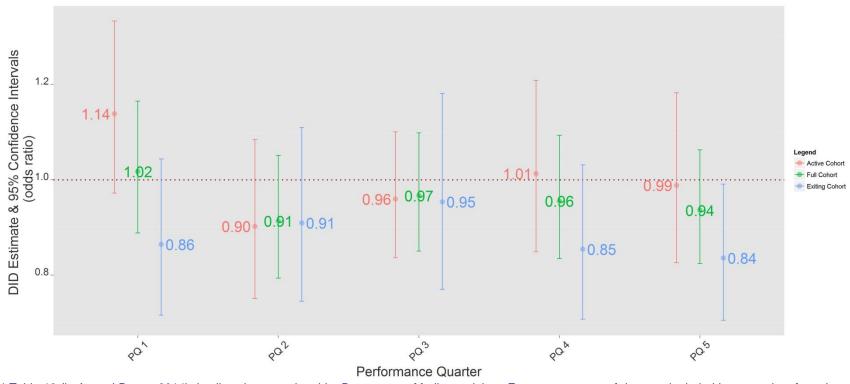
Figure B.30: Adjusted Quarterly Trends for 30-Day Heart Failure-Related Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.31: Performance Quarter DiD Estimates for 30-Day Heart Failure-Related Readmission for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.49: Episode Weighted, Unadjusted and Adjusted 30-Day Heart Failure-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hespital Cabout	Magazina	Bas	eline	Since BPCI I	nception	BPCI – Y	ear 1	BPCI -	- PQ 5
Hospital Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
xpansive Cohort									
BPCI	Mean (%)	24.59	27.03	22.61*	25.23	22.33*	25.19	23.82	25.36
	95% CI	[23.24, 25.97]	[23.84, 30.23]	[20.75, 24.56]	[21.78, 28.67]	[20.28, 24.49]	[21.78, 28.60]	[19.52, 28.56]	[21.77, 28.9
	N	3,872		1,906		1,545		361	
Comparison	Mean (%)	24.62	23.76	22.59***	21.97	22.73***	21.94	22.08**	22.09
	95% CI	[23.84, 25.41]	[20.22, 27.29]	[21.56, 23.65]	[18.54, 25.39]	[21.56, 23.92]	[18.53, 25.35]	[19.87, 24.42]	[18.59, 25.5
	N	11,759		6,246		4,928		1,318	
argeted Cohort									
BPCI	Mean (%)	26.59	28.88	24.24***	26.78	24.59***	26.82	22.91***	26.61
	95% CI	[25.80, 27.40]	[24.77, 33.00]	[23.18, 25.33]	[22.80, 30.76]	[23.39, 25.82]	[22.82, 30.82]	[20.63, 25.33]	[22.70, 30.5
	N	11,841		6,175		4,905		1,270	
Comparison	Mean (%)	24.11	23.31	23.30**	22.60	23.32*	22.64	23.21	22.45
	95% CI	[23.64, 24.59]	[20.02, 26.60]	[22.67, 23.94]	[19.40, 25.81]	[22.61, 24.05]	[19.44, 25.84]	[21.81, 24.65]	[19.23, 25.6
	N	31,487		17,030		13,561		3,469	
HC Cohort									
BPCI	Mean (%)	25.56	28.24	21.84***	24.37	21.55***	23.95	22.86	26.07
	95% CI	[24.38, 26.77]	[24.13, 32.35]	[20.29, 23.45]	[20.53, 28.22]	[19.80, 23.37]	[20.10, 27.80]	[19.54, 26.45]	[22.24, 29.9
	N	5,187		2,688		2,093		595	
Comparison	Mean (%)	23.11	22.23	22.55	21.66	22.16	21.27	24.10	23.23
	95% CI	[22.39, 23.83]	[18.80, 25.66]	[21.59, 23.53]	[18.26, 25.07]	[21.09, 23.25]	[17.89, 24.65]	[21.92, 26.39]	[19.72, 26.7
	N	13,308		7,171		5,723		1,448	

<sup>\*</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.50: Unweighted, Unadjusted 30-Day Heart Failure-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	24.40	22.29*	22.19*	22.70
	95% CI	[14.05, 38.03]	[11.98, 36.37]	[11.89, 36.20]	[12.36, 37.07]
	N	3,872	1,906	1,545	361
Comparison	Mean (%)	23.93	22.50**	22.41**	22.87
	95% CI	[12.85, 39.18]	[11.49, 37.70]	[11.41, 37.70]	[11.84, 37.69]
	N	11,759	6,246	4,928	1,318
rgeted Cohort			·		_
BPCI	Mean (%)	26.50	24.04***	24.41***	22.56***
	95% CI	[16.44, 39.35]	[14.28, 36.85]	[14.57, 37.29]	[13.10, 35.09]
	N	11,841	6,175	4,905	1,270
Comparison	Mean (%)	23.94	23.07**	23.14*	22.79
	95% CI	[13.78, 37.43]	[12.90, 36.85]	[12.94, 36.98]	[12.75, 36.34]
	N	31,487	17,030	13,561	3,469
C Cohort			•		
BPCI	Mean (%)	24.33	20.54***	19.97***	22.80
	95% CI	[15.78, 35.48]	[12.45, 31.49]	[11.99, 30.97]	[14.29, 33.58]
	N	5,187	2,688	2,093	595
Comparison	Mean (%)	23.04	22.32	21.89*	24.02
	95% CI	[13.38, 35.96]	[12.67, 35.61]	[12.35, 35.23]	[13.94, 37.13]
	N	13,308	7,171	5,723	1,448

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.51: Since BPCI DiD Estimates for 30-Day Heart Failure-Related Readmission for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

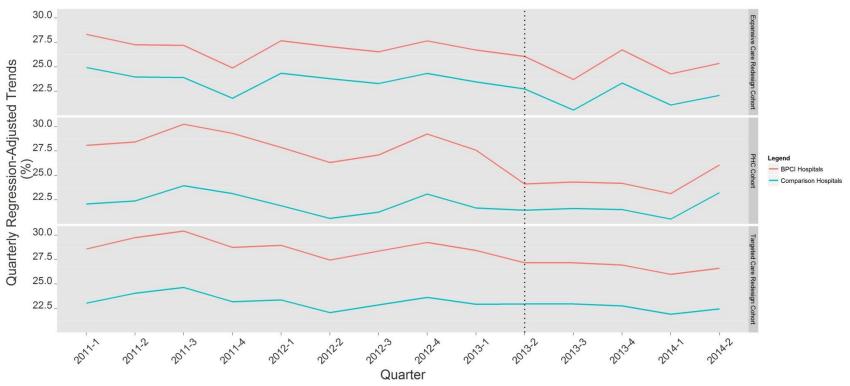
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	0.84***	1.01	0.94
95% CI	(0.75, 0.96)	(0.87, 1.17)	(0.86, 1.01)
Sample Size	28,354	23,783	66,533

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



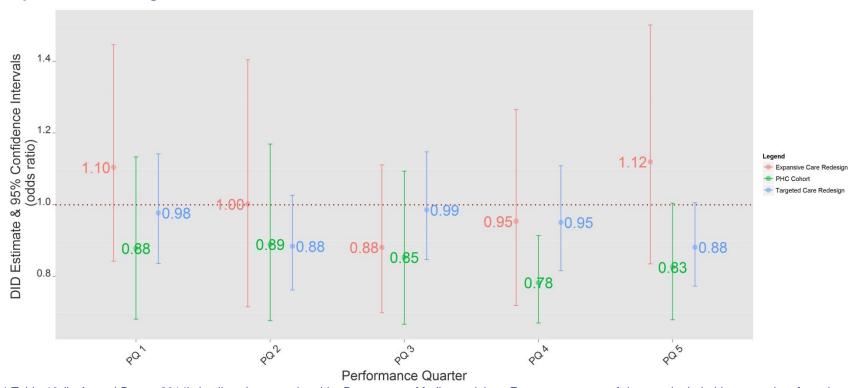
Figure B.32: Adjusted Quarterly Trends for 30-Day Heart Failure-Related Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.33: Performance Quarter DiD Estimates for 30-Day Heart Failure-Related Readmission for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.52: Episode Weighted, Unadjusted and Adjusted ICU Use for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazza	Basel	ine	Since BPC	I Inception	BPCI -	Year 1	BPCI – PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean (%)	12.24	9.66	13.00***	10.10	13.03***	10.15*	12.90***	9.90
	95% CI	[12.12, 12.37]	[9.29, 10.03]	[12.83, 13.17]	[9.65, 10.56]	[12.83, 13.22]	[9.70, 10.60]	[12.53, 13.29]	[9.42, 10.39]
	N	281,247		148,907		118,635		30,272	
Comparison	Mean (%)	13.53	15.12	13.63	14.77	13.71***	14.84	13.30**	14.49
	95% CI	[13.46, 13.60]	[14.53, 15.72]	[13.53, 13.73]	[14.11, 15.42]	[13.60, 13.82]	[14.19, 15.48]	[13.08, 13.52]	[13.78, 15.21]
	N	887,693		463,977		372,062		91,915	
Active Cohort									
BPCI	Mean (%)	12.32	5.95	13.55***	6.50	13.62***	6.54	13.27***	6.33
	95% CI	[12.15, 12.49]	[5.45, 6.45]	[13.31, 13.80]	[5.90, 7.10]	[13.35, 13.90]	[5.95, 7.14]	[12.73, 13.83]	[5.71, 6.94]
	N	142,419		73,716		58,965		14,751	
Comparison	Mean (%)	13.99	18.25	13.79**	17.51	13.91	17.61	13.31***	17.09**
	95% CI	[13.90, 14.08]	[17.58, 18.93]	[13.67, 13.92]	[16.71, 18.30]	[13.77, 14.05]	[16.84, 18.37]	[13.04, 13.59]	[16.18, 18.01]
	N	566,246		297,179		238,369		58,810	
Exiting Cohort		· ·							
BPCI	Mean (%)	12.17	20.47	12.46**	20.49	12.44*	20.50	12.55	20.46
	95% CI	[12.00, 12.34]	[19.64, 21.31]	[12.22, 12.70]	[19.48, 21.50]	[12.17, 12.70]	[19.48, 21.51]	[12.03, 13.08]	[19.44, 21.48]
	N	138,828		75,191		59,670		15,521	
Comparison	Mean (%)	12.35	11.13	12.75***	11.16	12.76***	11.16	12.75**	11.14
	95% CI	[12.25, 12.45]	[9.83, 12.43]	[12.61, 12.90]	[9.80, 12.51]	[12.60, 12.92]	[9.81, 12.51]	[12.43, 13.07]	[9.76, 12.52]
	N	403,966		209,467		167,988		41,479	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.53: Unweighted, Unadjusted ICU Use for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	13.74	15.15***	15.18***	15.06***
	95% CI	[11.82, 15.87]	[13.07, 17.44]	[13.09, 17.46]	[13.01, 17.32]
	N	281,247	148,907	118,635	30,272
Comparison	Mean (%)	13.86	13.80	13.91	13.35***
	95% CI	[12.00, 15.98]	[11.89, 15.98]	[12.00, 16.10]	[11.47, 15.50]
	N	887,693	463,977	372,062	91,915
e Cohort					
BPCI	Mean (%)	13.45	15.21***	15.31***	14.81***
	95% CI	[11.45, 15.69]	[13.01, 17.65]	[13.11, 17.75]	[12.63, 17.22]
	N	142,419	73,716	58,965	14,751
Comparison	Mean (%)	14.45	14.07***	14.20***	13.54***
	95% CI	[12.52, 16.57]	[12.13, 16.22]	[12.26, 16.35]	[11.63, 15.67]
	N	566,246	297,179	238,369	58,810
ng Cohort					
BPCI	Mean (%)	14.20	15.06***	14.96***	15.46***
	95% CI	[12.40, 16.16]	[13.16, 17.11]	[13.06, 17.01]	[13.59, 17.48]
	N	138,828	75,191	59,670	15,521
Comparison	Mean (%)	12.43	12.76***	12.81***	12.56
	95% CI	[10.77, 14.42]	[11.02, 14.85]	[11.06, 14.91]	[10.84, 14.61]
	N	403,966	209,467	167,988	41,479

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.54: Since BPCI DiD Estimates for ICU Use for Full, Active, and Exiting Cohort<sup>+</sup>

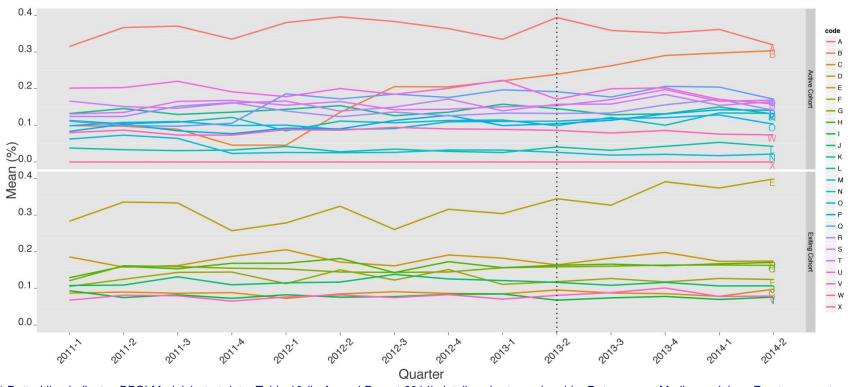
	Full Cohort	Active Cohort	Exiting Cohort
DiD (Odds Ratio)	1.10***	1.20***	1.00
95% CI	(1.05, 1.16)	(1.12, 1.30)	(0.94, 1.06)
Sample Size	1,764,189	1,079,559	809,818

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



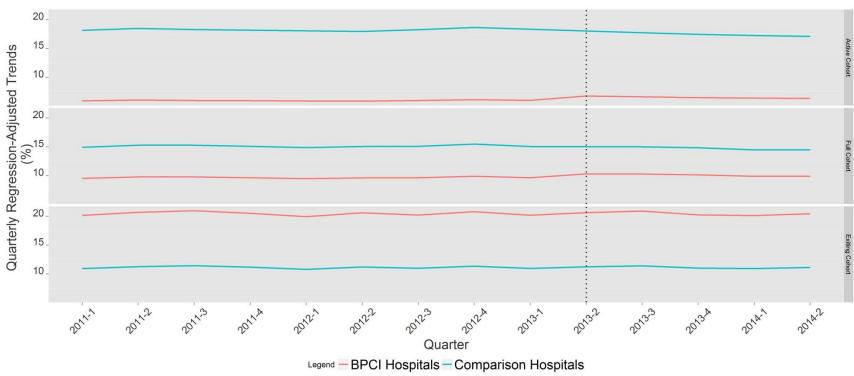
Figure B.34: Unadjusted Quarterly Trends for ICU Use By Awardee Hospital for Active and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014. Hospital names are coded with alphabet letters.



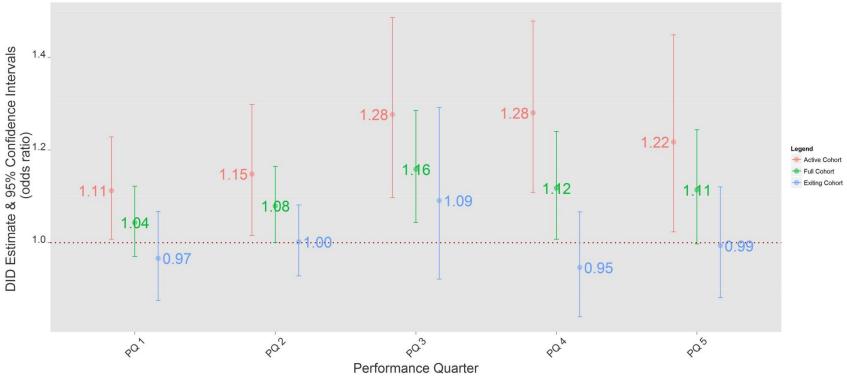




<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.36: Performance Quarter DiD Estimates for Episode ICU Use for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.55: Episode Weighted, Unadjusted and Adjusted ICU Use for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

			seline		I Inception	BPCI -		BPCI – PQ 5	
Hospital Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>Expansive Cohort</b>									
BPCI	Mean (%)	13.95	16.23	14.82***	17.23	14.94***	17.44	14.37	16.39
	95% CI	[13.67, 14.22]	[15.34, 17.12]	[14.43, 15.22]	[15.99, 18.47]	[14.50, 15.38]	[16.26, 18.63]	[13.50, 15.26]	[14.94, 17.84]
	N	61,136		31,197		24,981		6,216	
Comparison	Mean (%)	14.44	14.09	14.38	13.55	14.60	13.73	13.54***	12.87*
	95% CI	[14.30, 14.58]	[13.33, 14.85]	[14.19, 14.58]	[12.61, 14.50]	[14.38, 14.81]	[12.86, 14.60]	[13.12, 13.96]	[11.63, 14.10]
	N	247,156		129,594		103,821		25,773	
Targeted Cohort									
BPCI	Mean (%)	11.77	21.46	12.52***	22.18	12.52***	22.22	12.52***	22.05
	95% CI	[11.64, 11.91]	[20.72, 22.21]	[12.33, 12.71]	[21.26, 23.10]	[12.30, 12.73]	[21.31, 23.12]	[12.11, 12.95]	[21.09, 23.02]
	N	220,111		117,710		93,654		24,056	
Comparison	Mean (%)	13.25	11.75	13.44**	11.57	13.47***	11.58	13.30	11.49
	95% CI	[13.17, 13.33]	[10.38, 13.13]	[13.32, 13.55]	[10.18, 12.95]	[13.34, 13.60]	[10.21, 12.96]	[13.04, 13.55]	[10.09, 12.89]
	N	668,504		348,605		279,659		68,946	
PHC Cohort									
BPCI	Mean (%)	11.63	21.14	12.20***	21.37	12.19***	21.47	12.23*	20.99
	95% CI	[11.43, 11.84]	[20.12, 22.15]	[11.91, 12.49]	[20.28, 22.47]	[11.87, 12.52]	[20.41, 22.52]	[11.60, 12.88]	[19.73, 22.24]
	N	96,243		49,876		39,712		10,164	
Comparison	Mean (%)	12.63	10.94	13.42***	11.11	13.47***	11.16	13.22***	10.88
	95% CI	[12.51, 12.76]	[9.62, 12.26]	[13.24, 13.60]	[9.73, 12.48]	[13.27, 13.67]	[9.81, 12.52]	[12.82, 13.62]	[9.43, 12.32]
	N	271,554	ing Since BDCL In	140,080		112,235		27,845	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.56: Unweighted, Unadjusted ICU Use for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean (%)	14.04	15.00***	15.14***	14.44
	95% CI	[11.84, 16.49]	[12.64, 17.64]	[12.77, 17.79]	[12.11, 17.04]
	N	61,136	31,197	24,981	6,216
Comparison	Mean (%)	14.75	14.33***	14.58	13.34***
	95% CI	[12.69, 17.03]	[12.28, 16.63]	[12.51, 16.89]	[11.34, 15.58]
	N	247,156	129,594	103,821	25,773
rgeted Cohort					
BPCI	Mean (%)	13.61	15.22***	15.19***	15.34***
	95% CI	[11.81, 15.60]	[13.26, 17.35]	[13.23, 17.32]	[13.40, 17.44]
	N	220,111	117,710	93,654	24,056
Comparison	Mean (%)	13.51	13.67**	13.71***	13.51
	95% CI	[11.73, 15.57]	[11.82, 15.81]	[11.85, 15.85]	[11.66, 15.63]
	N	668,504	348,605	279,659	68,946
IC Cohort					
BPCI	Mean (%)	11.99	12.27	12.25	12.37
	95% CI	[10.42, 13.71]	[10.66, 14.04]	[10.64, 14.02]	[10.78, 14.11]
	N	96,243	49,876	39,712	10,164
Comparison	Mean (%)	13.44	13.89***	14.02***	13.37
	95% CI	[11.66, 15.40]	[12.03, 15.94]	[12.15, 16.08]	[11.57, 15.38]
	N	271,554	140,080	112,235	27,845

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.57: Since BPCI DiD Estimates for ICU Use for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

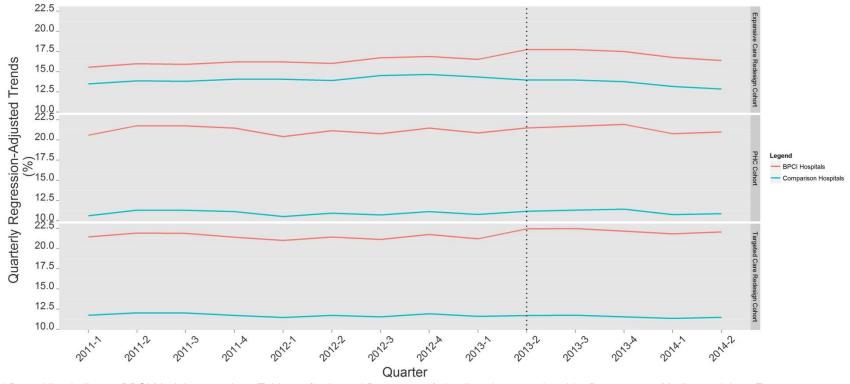
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (Odds Ratio)	1.00	1.15***	1.08**
95% CI	(0.93, 1.07)	(1.05, 1.26)	(1.02, 1.14)
Sample Size	557,752	469,083	1,337,295

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



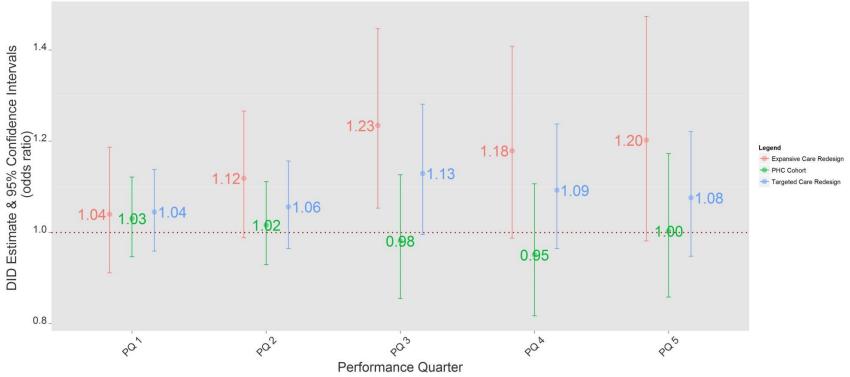




<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.38: Performance Quarter DiD Estimates for Episode ICU Use for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30,



Table B.58: Episode Weighted, Unadjusted and Adjusted Episode Length of Stay for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazira	Base	eline	Since BPCI	Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean (%)	6.62	7.29	6.62	7.24	6.63	7.24	6.58	7.23
	95% CI	[6.60, 6.64]	[7.11, 7.47]	[6.59, 6.65]	[7.06, 7.41]	[6.60, 6.67]	[7.06, 7.41]	[6.52, 6.64]	[7.06, 7.41]
	N	282,895		149,233		118,799		30,434	
Comparison	Mean (%)	6.42	6.23	6.47***	6.22	6.47***	6.23	6.44	6.22
	95% CI	[6.41, 6.43]	[6.15, 6.31]	[6.45, 6.48]	[6.15, 6.30]	[6.46, 6.49]	[6.15, 6.30]	[6.41, 6.48]	[6.14, 6.30]
	N	892,496		464,815		372,482		92,333	
Active Cohort									
BPCI	Mean (%)	6.63	6.98	6.59	6.92	6.60	6.92	6.54*	6.91
	95% CI	[6.60, 6.66]	[6.83, 7.14]	[6.55, 6.64]	[6.76, 7.07]	[6.55, 6.65]	[6.77, 7.07]	[6.46, 6.63]	[6.75, 7.06]
	N	144,067		74,042		59,129		14,913	
Comparison	Mean (%)	6.41	6.35	6.46***	6.34	6.47***	6.35	6.42	6.33
	95% CI	[6.40, 6.43]	[6.26, 6.43]	[6.44, 6.48]	[6.26, 6.43]	[6.45, 6.50]	[6.27, 6.43]	[6.38, 6.46]	[6.25, 6.42]
	N	571,049		298,017		238,789		59,228	
Exiting Cohort									
BPCI	Mean (%)	6.61	7.35	6.65	7.31	6.66*	7.32	6.61	7.30
	95% CI	[6.58, 6.64]	[7.12, 7.58]	[6.61, 6.69]	[7.09, 7.54]	[6.61, 6.70]	[7.10, 7.54]	[6.52, 6.69]	[7.08, 7.53]
	N	138,828		75,191		59,670		15,521	
Comparison	Mean (%)	6.46	6.23	6.48	6.20	6.49*	6.20	6.46	6.19
	95% CI	[6.44, 6.48]	[6.12, 6.34]	[6.46, 6.51]	[6.10, 6.30]	[6.46, 6.52]	[6.10, 6.30]	[6.41, 6.51]	[6.08, 6.29]
	N	403,966	•	209,467	_	167,988	_	41,479	•

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.59: Unweighted, Unadjusted Episode Length of Stay for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean (%)	6.37	6.42***	6.45***	6.32*
	95% CI	[6.08, 6.66]	[6.11, 6.73]	[6.13, 6.76]	[6.03, 6.60]
	N	282,895	149,233	118,799	30,434
Comparison	Mean (%)	6.09	6.28***	6.31***	6.16***
	95% CI	[5.79, 6.40]	[5.96, 6.59]	[5.99, 6.62]	[5.86, 6.46]
	N	892,496	464,815	372,482	92,333
e Cohort					
BPCI	Mean (%)	6.30	6.33	6.37***	6.18***
	95% CI	[6.01, 6.59]	[6.00, 6.65]	[6.04, 6.70]	[5.89, 6.48]
	N	144,067	74,042	59,129	14,913
Comparison	Mean (%)	6.03	6.28***	6.32***	6.11***
	95% CI	[5.73, 6.33]	[5.98, 6.58]	[6.02, 6.62]	[5.82, 6.40]
	N	571,049	298,017	238,789	59,228
g Cohort					
BPCI	Mean (%)	6.50	6.56***	6.57***	6.54
	95% CI	[6.21, 6.78]	[6.28, 6.85]	[6.28, 6.86]	[6.28, 6.80]
	N	138,828	75,191	59,670	15,521
Comparison	Mean (%)	6.28	6.31***	6.33***	6.27
	95% CI	[5.95, 6.60]	[5.98, 6.65]	[5.99, 6.66]	[5.97, 6.58]
	N	403,966	209,467	167,988	41,479

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having <u>equal weight</u>.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.60: Since BPCI DiD Estimates for Episode Length of Stay for Full, Active, and Exiting Cohort<sup>+</sup>

	Full Cohort	Active Cohort	Exiting Cohort
DiD (in days)	-0.05	-0.06	-0.01
95% CI	(-0.12, 0.02)	(-0.15, 0.02)	(-0.11, 0.09)
Sample Size	1,789,437	1,087,174	827,451

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



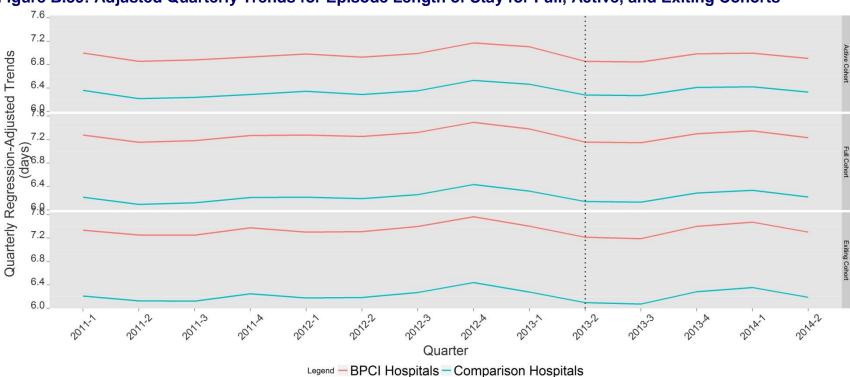
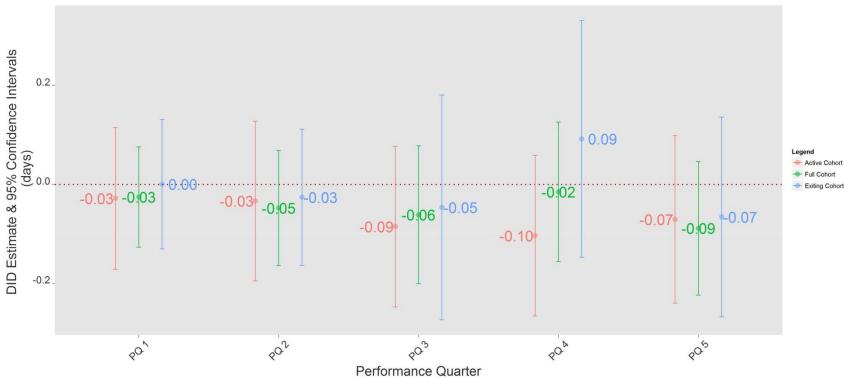


Figure B.39: Adjusted Quarterly Trends for Episode Length of Stay for Full, Active, and Exiting Cohorts\*

<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.40: Performance Quarter DiD Estimates for Episode Length of Stay for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.61: Episode Weighted, Unadjusted and Adjusted Episode Length of Stay for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hespital Cohert	Magazira	Basel	ine	Since BPCI	Inception	BPCI -	Year 1	BPCI -	- PQ 5
Hospital Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Cohort									
BPCI	Mean (%)	6.28	6.79	6.15***	6.63	6.16***	6.62	6.11***	6.67
	95% CI	[6.25, 6.32]	[6.64, 6.93]	[6.09, 6.21]	[6.47, 6.79]	[6.09, 6.23]	[6.46, 6.78]	[6.00, 6.21]	[6.49, 6.85]
	N	62,785		31,523		25,145		6,378	
Comparison	Mean (%)	6.11	6.01	6.19***	6.02	6.19***	6.01	6.19**	6.06
	95% CI	[6.09, 6.13]	[5.93, 6.10]	[6.17, 6.22]	[5.92, 6.12]	[6.16, 6.22]	[5.92, 6.10]	[6.13, 6.25]	[5.93, 6.19]
	N	251,960		130,432		104,241		26,191	
argeted Cohort									
BPCI	Mean (%)	6.71	7.49	6.75	7.46	6.76*	7.47	6.70	7.44
	95% CI	[6.69, 6.74]	[7.27, 7.70]	[6.71, 6.78]	[7.25, 7.67]	[6.72, 6.80]	[7.25, 7.68]	[6.63, 6.77]	[7.23, 7.65]
	N	220,110		117,710		93,654		24,056	
Comparison	Mean (%)	6.54	6.31	6.58***	6.31	6.59***	6.31	6.55	6.28
	95% CI	[6.53, 6.56]	[6.21, 6.40]	[6.56, 6.60]	[6.21, 6.40]	[6.57, 6.61]	[6.22, 6.40]	[6.51, 6.59]	[6.19, 6.37]
	N	668,503		348,605		279,659		68,946	
HC Cohort									
BPCI	Mean (%)	6.63	7.33	6.72***	7.36	6.71**	7.35	6.76**	7.37
	95% CI	[6.59, 6.66]	[7.12, 7.54]	[6.67, 6.76]	[7.16, 7.56]	[6.65, 6.76]	[7.16, 7.55]	[6.66, 6.86]	[7.18, 7.57]
	N	96,243		49,876		39,712		10,164	
Comparison	Mean (%)	6.43	6.22	6.50***	6.20	6.50***	6.20	6.50**	6.22
	95% CI	[6.41, 6.45]	[6.10, 6.33]	[6.47, 6.53]	[6.10, 6.30]	[6.47, 6.53]	[6.10, 6.30]	[6.44, 6.57]	[6.12, 6.31]
	N	271,554		140,080		112,235		27,845	

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.62: Unweighted, Unadjusted Episode Length of Stay for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
ansive Cohort					
BPCI	Mean (%)	5.94	6.02**	6.08***	5.80***
	95% CI	[5.67, 6.21]	[5.70, 6.33]	[5.74, 6.41]	[5.54, 6.06]
	N	62,785	31,523	25,145	6,378
Comparison	Mean (%)	5.69	6.08***	6.14***	5.86***
	95% CI	[5.40, 5.98]	[5.78, 6.39]	[5.84, 6.45]	[5.57, 6.16]
	N	251,960	130,432	104,241	26,191
geted Cohort	·				
BPCI	Mean (%)	6.60	6.61	6.61	6.58
	95% CI	[6.30, 6.90]	[6.30, 6.91]	[6.30, 6.92]	[6.28, 6.87]
	N	220,110	117,710	93,654	24,056
Comparison	Mean (%)	6.35	6.40***	6.41***	6.35
	95% CI	[6.03, 6.67]	[6.08, 6.72]	[6.09, 6.74]	[6.05, 6.65]
	N	668,503	348,605	279,659	68,946
C Cohort	·				
BPCI	Mean (%)	6.64	6.70*	6.69	6.73
	95% CI	[6.38, 6.91]	[6.43, 6.96]	[6.41, 6.96]	[6.48, 6.98]
	N	96,243	49,876	39,712	10,164
Comparison	Mean (%)	6.34	6.41***	6.41***	6.39
	95% CI	[6.04, 6.63]	[6.10, 6.71]	[6.10, 6.72]	[6.10, 6.68]
	N	271,554	140,080	112,235	27,845

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.63: Since BPCI DiD Estimates for Episode Length of Stay for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

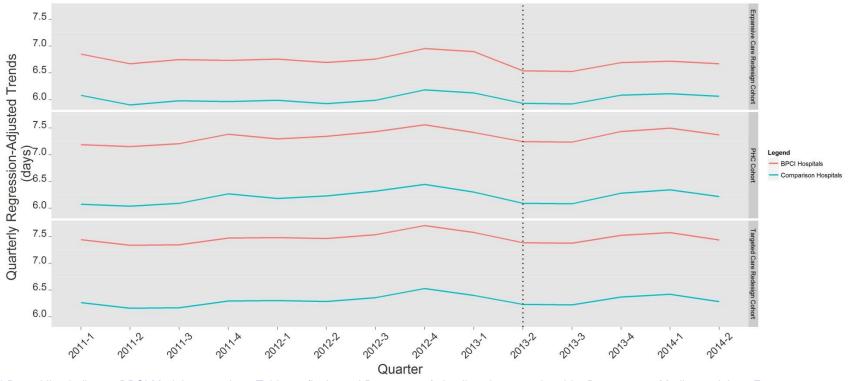
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (in Days)	0.04	-0.16***	-0.02
95% CI	(-0.06, 0.14)	(-0.27, -0.05)	(-0.10, 0.06)
Sample Size	557,752	476,700	1,354,926

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



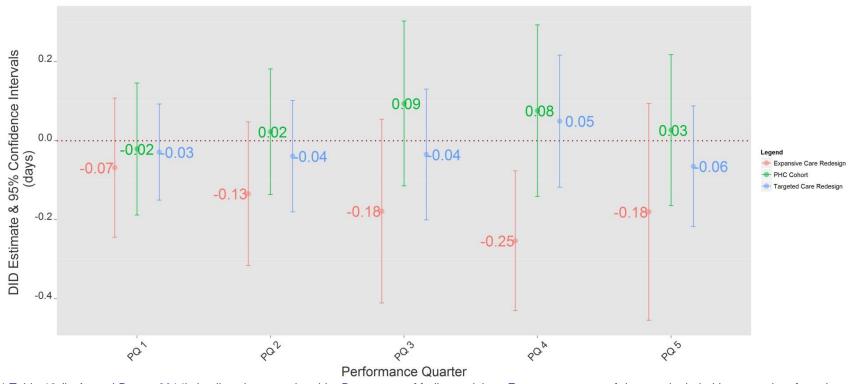
Figure B.41: Adjusted Quarterly Trends for Episode Length of Stay for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.42: Performance Quarter DiD Estimates for Episode Length of Stay for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



#### **B.3.** Medicare Payments

Table B.64: Episode Weighted, Unadjusted and Adjusted Total Medicare Episode Payments Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazira	Base	line	Since BPC	I Inception	BPCI -	Year 1	BPCI – PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Full Cohort									
BPCI	Mean	12,925	13,401	13,434***	13,486	13,391***	13,464	13,600***	13,576**
	95% CI	[12,875, 12,974]	[13,307, 13,494]	[13,364, 13,503]	[13,376, 13,597]	[13,313, 13,469]	[13,355, 13,573]	[13,447, 13,754]	[13,460, 13,691]
	N	270,986		143,008		113,822		29,186	
Comparison	Mean	12,329	11,370	12,829***	11,579***	12,808***	11,556***	12,913***	11,668***
	95% CI	[12,301, 12,356]	[11,308, 11,432]	[12,791, 12,867]	[11,501, 11,657]	[12,766, 12,851]	[11,482, 11,631]	[12,831, 12,995]	[11,579, 11,758]
	N	858,480		447,497		358,458		89,039	
<b>Active Cohort</b>									
BPCI	Mean	12,340	13,209	12,741***	13,368	12,726***	13,353	12,798***	13,425*
	95% CI	[12,274, 12,406]	[13,072, 13,346]	[12,645, 12,836]	[13,212, 13,523]	[12,620, 12,833]	[13,202, 13,504]	[12,586, 13,011]	[13,254, 13,596]
	N	138,045		70,833		56,550		14,283	
Comparison	Mean	12,551	11,529	12,978***	11,713***	12,973***	11,699***	12,998***	11,771***
	95% CI	[12,517, 12,586]	[11,448, 11,609]	[12,929, 13,026]	[11,617, 11,809]	[12,918, 13,028]	[11,609, 11,789]	[12,896, 13,099]	[11,651, 11,891]
	N	549,755		287,143		229,963		57,180	
<b>Exiting Cohort</b>									
BPCI	Mean	13,532	11,068	14,114***	11,080	14,048***	11,048	14,369***	11,208
	95% CI	[13,458, 13,606]	[10,886, 11,250]	[14,013, 14,215]	[10,876, 11,284]	[13,934, 14,161]	[10,844, 11,251]	[14,150, 14,588]	[11,000, 11,416]
	N	132,941		72,175		57,272		14,903	
Comparison	Mean	12,482	12,498	13,070***	12,729***	13,042***	12,697**	13,186***	12,857***
	95% CI	[12,439, 12,525]	[12,397, 12,598]	[13,009, 13,131]	[12,606, 12,852]	[12,972, 13,111]	[12,575, 12,819]	[13,057, 13,315]	[12,732, 12,982]
	N	388,147		201,531		161,579		39,952	

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.65: Unweighted, Unadjusted Total Medicare Episode Payments for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean	12,420	12,762***	12,737***	12,858***
	95% CI	[11,754, 13,086]	[12,070, 13,453]	[12,040, 13,433]	[12,186, 13,530]
	N	270,986	143,008	113,822	29,186
Comparison	Mean	11,939	12,431***	12,406***	12,526***
	95% CI	[11,216, 12,662]	[11,719, 13,142]	[11,694, 13,117]	[11,814, 13,238]
	N	858,480	447,497	358,458	89,039
ve Cohort					
BPCI	Mean	11,711	12,017***	12,006***	12,062***
	95% CI	[11,059, 12,364]	[11,330, 12,705]	[11,313, 12,698]	[11,392, 12,732]
	N	138,045	70,833	56,550	14,283
Comparison	Mean	12,040	12,460***	12,448***	12,505***
	95% CI	[11,320, 12,760]	[11,772, 13,148]	[11,762, 13,134]	[11,810, 13,201]
	N	549,755	287,143	229,963	57,180
ing Cohort					
BPCI	Mean	13,627	13,953***	13,894***	14,185***
	95% CI	[12,939, 14,315]	[13,255, 14,651]	[13,191, 14,598]	[13,509, 14,862]
	N	132,941	72,175	57,272	14,903
Comparison	Mean	12,177	12,762***	12,730***	12,890***
•	95% CI	[11,451, 12,903]	[12,006, 13,518]	[11,968, 13,492]	[12,157, 13,624]
	N	388,147	201,531	161,579	39,952

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.66: Since BPCI DiD Estimates Total Medicare Episode Payments for Full, Active, and Exiting Cohort<sup>+</sup>

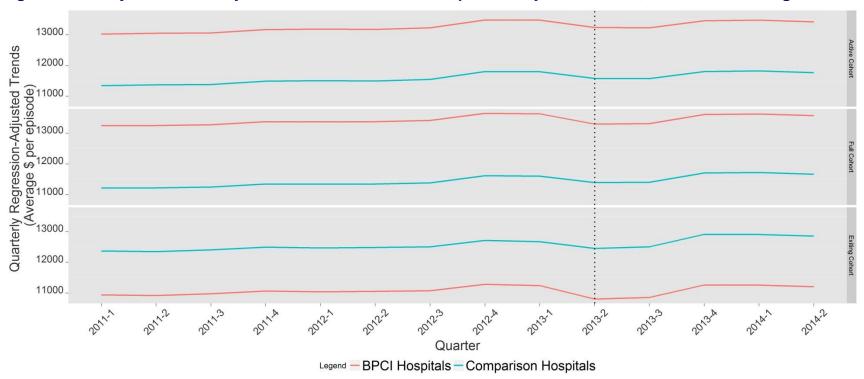
	Full Cohort	Active Cohort	Exiting Cohort
DiD (\$)	-123.10***	-26.14	-219.26***
95% CI	(-213.90, -32.31)	(-134.70, 82.43)	(-355.21, -83.30)
Sample Size	1,685,572	1,024,861	778,899

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



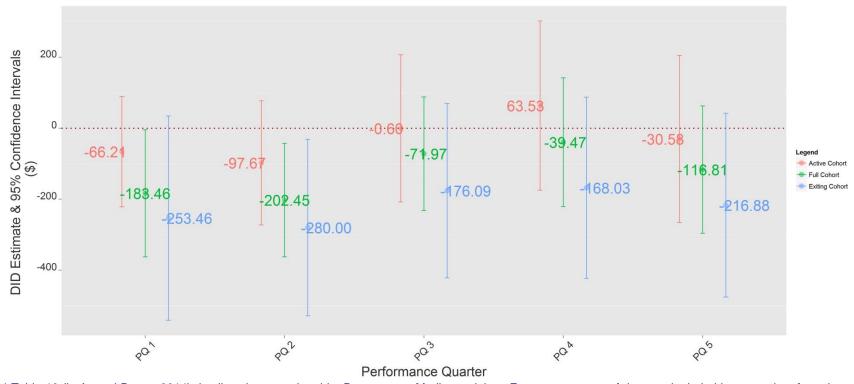
Figure B.43: Adjusted Quarterly Trends for Total Medicare Episode Payment for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.44: Performance Quarter DiD Estimates for Total Medicare Episode Payment for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.67: Episode Weighted, Unadjusted and Adjusted Total Medicare Episode Payments for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hespital Cabout	Magazira	Base	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Hospital Cohort	weasure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>Expansive Cohort</b>									
BPCI	Mean	10,735	12,353	10,952***	12,463	10,958***	12,453	10,927*	12,505
	95% CI	[10,662, 10,808]	[12,225, 12,482]	[10,850, 11,054]	[12,298, 12,629]	[10,841, 11,075]	[12,289, 12,617]	[10,726, 11,128]	[12,333, 12,677
	N	60,363		30,298		24,159		6,139	
Comparison	Mean	11,326	10,337	11,740***	10,502**	11,734***	10,492**	11,761***	10,543**
	95% CI	[11,284, 11,368]	[10,243, 10,431]	[11,682, 11,798]	[10,382, 10,622]	[11,669, 11,800]	[10,375, 10,608]	[11,636, 11,886]	[10,408, 10,679]
	N	242,999		125,624		100,333		25,291	
Targeted Cohort									
BPCI	Mean	13,552	11,203	14,101***	11,277	14,047***	11,252	14,312***	11,377
	95% CI	[13,492, 13,612]	[11,030, 11,375]	[14,018, 14,184]	[11,093, 11,462]	[13,953, 14,140]	[11,069, 11,435]	[14,127, 14,498]	[11,186, 11,568]
	N	210,623		112,710		89,663		23,047	
Comparison	Mean	12,698	12,603	13,226***	12,839***	13,200***	12,814***	13,334***	12,939***
	95% CI	[12,665, 12,732]	[12,515, 12,692]	[13,180, 13,272]	[12,738, 12,940]	[13,147, 13,252]	[12,716, 12,912]	[13,235, 13,434]	[12,826, 13,051]
	N	642,471		335,544		269,103		66,441	
PHC Cohort									
BPCI	Mean	11,929	9,845	12,343***	9,848	12,282***	9,825	12,585***	9,943
	95% CI	[11,856, 12,001]	[9,661, 10,029]	[12,242, 12,445]	[9,637, 10,060]	[12,168, 12,396]	[9,616, 10,033]	[12,358, 12,811]	[9,720, 10,167]
	N	92,083		47,831		38,093		9,738	
Comparison	Mean	11,338	11,399	11,985***	11,555*	11,940***	11,532	12,164***	11,650***
	95% CI	[11,292, 11,384]	[11,290, 11,509]	[11,921, 12,049]	[11,411, 11,700]	[11,869, 12,012]	[11,390, 11,673]	[12,020, 12,307]	[11,495, 11,806]
<sup>+</sup> Table 6 (in App	N	260,565		134,597		107,823		26,774	

<sup>\*</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.68: Unweighted, Unadjusted Total Medicare Episode Payments for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
ansive Cohort					
BPCI	Mean	10,742	10,811	10,813	10,802
	95% CI	[10,208, 11,276]	[10,224, 11,397]	[10,207, 11,419]	[10,286, 11,319
	N	60,363	30,298	24,159	6,139
Comparison	Mean	11,370	11,702***	11,674***	11,806***
•	95% CI	[10,644, 12,095]	[11,028, 12,377]	[11,008, 12,339]	[11,102, 12,510
	N	242,999	125,624	100,333	25,291
geted Cohort					
BPCI	Mean	13,294	13,664***	13,608***	13,886***
	95% CI	[12,559, 14,028]	[12,924, 14,404]	[12,871, 14,346]	[13,136, 14,636
	N	210,623	112,710	89,663	23,047
Comparison	Mean	12,281	12,812***	12,782***	12,928***
	95% CI	[11,559, 13,003]	[12,083, 13,540]	[12,050, 13,515]	[12,215, 13,642
	N	642,471	335,544	269,103	66,441
Cohort					
BPCI	Mean	11,657	11,950***	11,902***	12,142***
	95% CI	[11,133, 12,181]	[11,412, 12,489]	[11,359, 12,446]	[11,623, 12,661
	N	92,083	47,831	38,093	9,738
Comparison	Mean	10,978	11,593***	11,556***	11,740***
	95% CI	[10,395, 11,561]	[10,974, 12,211]	[10,934, 12,178]	[11,136, 12,344
	N	260,565	134,597	107,823	26,774

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.69: Since BPCI DiD Estimates for Total Medicare Episode Payments for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

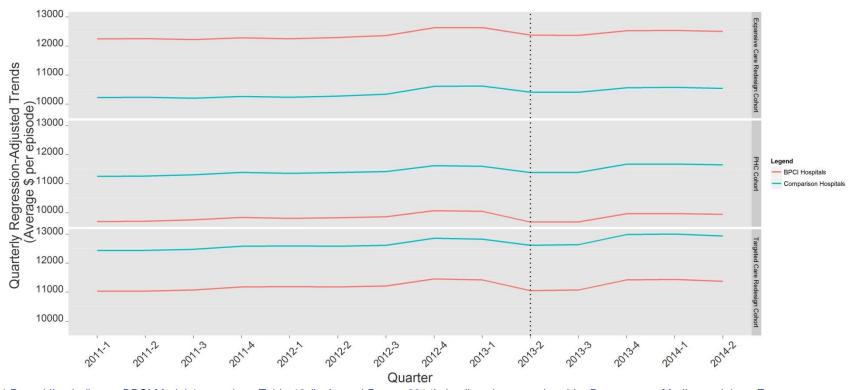
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (\$)	-152.66**	-55.32	-160.89***
95% CI	(-289.79, -15.52)	(-216.18, 105.54)	(-265.58, -56.21)
Sample Size	524,374	450,099	1,275,320

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



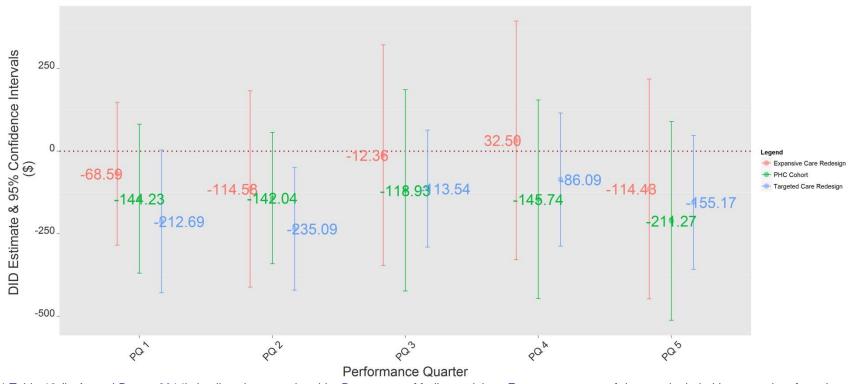
Figure B.45: Adjusted Quarterly Trends for Total Medicare Episode Payment for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.46: Performance Quarter DiD Estimates for Total Medicare Episode Payment for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.70: Episode Weighted, Unadjusted and Adjusted Medicare Episode Payment – Hospital Only for Full, Active, and Exiting Cohorts<sup>+</sup>

Moocure	Baseline		Since BPCI Inception		BPCI – Year 1		BPCI – PQ 5	
weasure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Mean	10,825	11,410	11,331***	11,537	11,277***	11,510	11,540***	11,643***
95% CI	[10,781, 10,869]	[11,310, 11,509]	[11,269, 11,393]	[11,422, 11,652]	[11,208, 11,347]	[11,396, 11,624]	[11,403, 11,677]	[11,522, 11,76
N	270,986		143,008		113,822		29,186	
Mean	10,493	9,735	10,970***	9,945***	10,948***	9,919***	11,057***	10,051***
95% CI	[10,468, 10,518]	[9,675, 9,795]	[10,936, 11,004]	[9,870, 10,020]	[10,909, 10,987]	[9,846, 9,991]	[10,983, 11,130]	[9,965, 10,137
N	858,480		447,497		358,458		89,039	
Mean	10,342	11,193	10,754***	11,391*	10,730***	11,373	10,847***	11,464**
95% CI	[10,283, 10,401]	[11,046, 11,340]	[10,669, 10,838]	[11,226, 11,556]	[10,635, 10,825]	[11,210, 11,535]	[10,657, 11,037]	[11,286, 11,64
N	138,045		70,833		56,550		14,283	
Mean	10,717	9,926	11,120***	10,112***	11,112***	10,094***	11,153***	10,185***
95% CI	[10,686, 10,748]	[9,849, 10,003]	[11,076, 11,164]	[10,019, 10,204]	[11,062, 11,162]	[10,007, 10,181]	[11,061, 11,245]	[10,070, 10,300
N	549,755		287,143		229,963		57,180	
Mean	11,327	8,836	11,898***	8,889	11,818***	8,854	12,205***	9,028
95% CI	[11,261, 11,393]	[8,657, 9,015]	[11,808, 11,987]	[8,687, 9,090]	[11,717, 11,919]	[8,654, 9,053]	[12,009, 12,401]	[8,819, 9,238]
N	132,941		72,175		57,272		14,903	
Mean	10,695	10,974	11,256***	11,198***	11,230***	11,163**	11,362***	11,337***
95% CI	[10,656, 10,735]	[10,878, 11,070]	[11,200, 11,312]	[11,080, 11,315]	[11,167, 11,294]	[11,046, 11,279]	[11,244, 11,479]	[11,216, 11,459
N	388,147		201.531		161.579		39.952	
	Mean 95% CI N	Measure         Unadjusted           95% CI         [10,781, 10,869]           N         270,986           Mean         10,493           95% CI         [10,468, 10,518]           N         858,480           Mean         10,342           95% CI         [10,283, 10,401]           N         138,045           Mean         10,717           95% CI         [10,686, 10,748]           N         549,755           Mean         11,327           95% CI         [11,261, 11,393]           N         132,941           Mean         10,695           95% CI         [10,656, 10,735]	Baseline           Unadjusted         Adjusted           Mean         10,825         11,410           95% CI         [10,781, 10,869]         [11,310, 11,509]           N         270,986         [11,310, 11,509]           Mean         10,493         9,735           95% CI         [10,468, 10,518]         [9,675, 9,795]           N         858,480           Mean         10,342         11,193           95% CI         [10,283, 10,401]         [11,046, 11,340]           N         138,045         [9,849, 10,003]           Mean         10,717         9,926           95% CI         [10,686, 10,748]         [9,849, 10,003]           N         549,755           Mean         11,327         8,836           95% CI         [11,261, 11,393]         [8,657, 9,015]           N         132,941         10,695         10,974           95% CI         [10,656, 10,735]         [10,878, 11,070]	Baseline         Since BPC           Measure         Unadjusted         Adjusted         Unadjusted           Mean         10,825         11,410         11,331***           95% CI         [10,781, 10,869] [11,310, 11,509] [11,269, 11,393]         143,008           Mean         10,493         9,735         10,970***           95% CI         [10,468, 10,518] [9,675, 9,795] [10,936, 11,004]         10,936, 11,004]           N         858,480         447,497           Mean         10,342         11,193         10,754***           95% CI         [10,283, 10,401] [11,046, 11,340] [10,669, 10,838]         70,833           Mean         10,717         9,926         11,120***           95% CI         [10,686, 10,748] [9,849, 10,003] [11,076, 11,164]         N           549,755         287,143           Mean         11,327         8,836         11,898***           95% CI         [11,261, 11,393] [8,657, 9,015] [11,808, 11,987]         N           132,941         72,175         Mean         10,695         10,974         11,256***           95% CI         [10,656, 10,735] [10,878, 11,070] [11,200, 11,312]         11,200, 11,312]	Baseline         Since BPCI Inception           Mean         10,825         11,410         11,331***         11,537           95% CI         [10,781, 10,869]         [11,310, 11,509]         [11,269, 11,393]         [11,422, 11,652]           N         270,986         143,008           Mean         10,493         9,735         10,970****         9,945****           95% CI         [10,468, 10,518]         [9,675, 9,795]         [10,936, 11,004]         [9,870, 10,020]           N         858,480         447,497           Mean         10,342         11,193         10,754***         11,391*           95% CI         [10,283, 10,401]         [11,046, 11,340]         [10,669, 10,838]         [11,226, 11,556]           N         138,045         70,833         10,112***         10,112***           95% CI         [10,686, 10,748]         [9,849, 10,003]         [11,076, 11,164]         [10,019, 10,204]           N         549,755         287,143         8,889           95% CI         [11,261, 11,393]         [8,657, 9,015]         [11,808, 11,987]         [8,687, 9,090]           N         132,941         72,175         11,198***           Mean         10,695         10,974	Measure         Baseline         Since BPCI Inception         BPCI –           Unadjusted         Adjusted         Unadjusted         Adjusted           Wean         10,825         11,410         11,331***         11,537         11,277***           95% CI         [10,781, 10,869]         [11,310, 11,509]         [11,269, 11,393]         [11,422, 11,652]         [11,208, 11,347]           N         270,986         143,008         113,822           Mean         10,493         9,735         10,970***         9,945***         10,948***           95% CI         [10,468, 10,518]         [9,675, 9,795]         [10,936, 11,004]         [9,870, 10,020]         [10,909, 10,987]           N         858,480         447,497         358,458           Mean         10,342         11,193         10,754***         11,391*         10,730***           95% CI         [10,283, 10,401]         [11,046, 11,340]         [10,669, 10,838]         [11,226, 11,556]         [10,635, 10,825]           N         138,045         70,833         56,550           Mean         10,717         9,926         11,120****         10,112****         11,112****           95% CI         [10,686, 10,748]         [9,849, 10,003]         [11,076, 11,164]	Measure         Baseline         Since BPCI Inception         BPCI – Year 1           Unadjusted         Adjusted         Unadjusted         Adjusted           Mean         10,825         11,410         11,331****         11,537         11,277****         11,510           95% CI         [10,781, 10,869]         [11,310, 11,509]         [11,269, 11,393]         [11,422, 11,652]         [11,208, 11,347]         [11,396, 11,624]           N         270,986         143,008         113,822         10,948***         9,919****           95% CI         [10,468, 10,518]         [9,675, 9,795]         [10,936, 11,004]         [9,870, 10,020]         [10,909, 10,987]         [9,846, 9,991]           N         858,480         447,497         358,458           Mean         10,342         11,193         10,754****         11,391**         10,730****         11,373           95% CI         [10,283, 10,401]         [11,046, 11,340]         [10,669, 10,838]         [11,226, 11,556]         [10,635, 10,825]         [11,210, 11,535]           N         138,045         70,833         56,550         11,112***         10,04***           95% CI         [10,686, 10,748]         [9,849, 10,003]         [11,076, 11,164]         [10,019, 10,204]         [11,062, 11,162]	Measure         Baseline         Since BPCI Inception         BPCI - Year 1         BPCI - Madjusted         Mean         Incompany         Mean         10,825         11,410         11,331***         11,537         11,277***         11,510         11,540***           95% CI         [10,781, 10,869]         [11,310, 11,509]         [11,269, 11,393]         [11,422, 11,652]         [11,208, 11,347]         [11,396, 11,624]         [11,403, 11,677]           N         270,986         143,008         113,822         29,186           Mean         10,493         9,735         10,970***         9,945***         10,948***         9,919***         11,057***           95% CI         [10,468, 10,518]         [9,675, 9,795]         [10,936, 11,004]         [9,870, 10,020]         [10,909, 10,987]         [9,846, 9,991]         [10,983, 11,130]           N         858,480         447,497         358,458         89,039           Mean         10,342         11,193         10,754****         11,391*         10,730***         11,373         10,847***           95% CI         [10,283, 10,401]         [11,046, 11,340]         [10,669, 10,838]         [11,226, 11,556]         [10,635, 10,825]         [11,210, 11,555]         [10,657, 11,037]           N         138,045         70,83

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.71: Unweighted, Unadjusted Medicare Episode Payment – Hospital Only for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
Cohort					
BPCI	Mean	10,393	10,748***	10,711***	10,894***
	95% CI	[9,806, 10,981]	[10,137, 11,359]	[10,095, 11,326]	[10,298, 11,490]
	N	270,986	143,008	113,822	29,186
Comparison	Mean	10,142	10,610***	10,584***	10,712***
	95% CI	[9,498, 10,786]	[9,977, 11,244]	[9,951, 11,217]	[10,078, 11,347]
	N	858,480	447,497	358,458	89,039
ive Cohort					
BPCI	Mean	9,745	10,088***	10,064***	10,182***
	95% CI	[9,171, 10,318]	[9,483, 10,693]	[9,455, 10,672]	[9,591, 10,772]
	N	138,045	70,833	56,550	14,283
Comparison	Mean	10,250	10,655***	10,639***	10,716***
	95% CI	[9,606, 10,895]	[10,041, 11,270]	[10,027, 11,252]	[10,094, 11,337]
	N	549,755	287,143	229,963	57,180
ing Cohort					
BPCI	Mean	11,499	11,804***	11,735***	12,082***
	95% CI	[10,887, 12,111]	[11,183, 12,426]	[11,109, 12,361]	[11,477, 12,686]
	N	132,941	72,175	57,272	14,903
Comparison	Mean	10,399	10,948***	10,918***	11,070***
-	95% CI	[9,753, 11,045]	[10,274, 11,623]	[10,239, 11,597]	[10,416, 11,724]
	N	388,147	201,531	161,579	39,952

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

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<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



#### Table B.72: Since BPCI DiD Estimates for Medicare Episode Payment – Hospital Only for Full, Active, and Exiting Cohort<sup>+</sup>

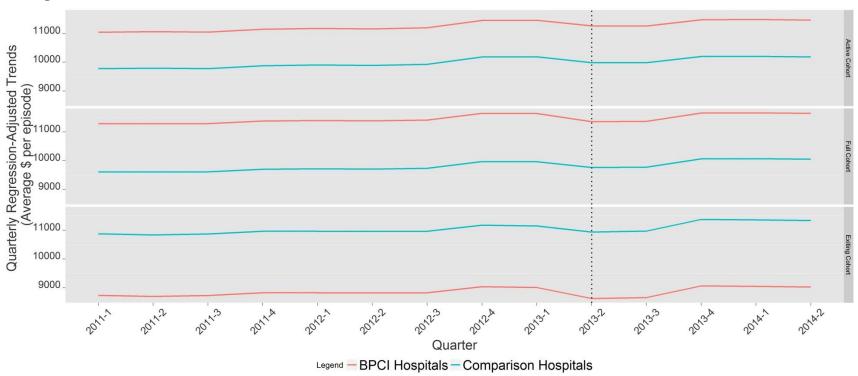
	Full Cohort	Active Cohort	Exiting Cohort
DiD (\$)	-83.13*	11.68	-171.18**
95% CI	(-170.26, 4.00)	(-90.49, 113.84)	(-303.24, -39.12)
Sample Size	1,666,112	1,012,698	769,143

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



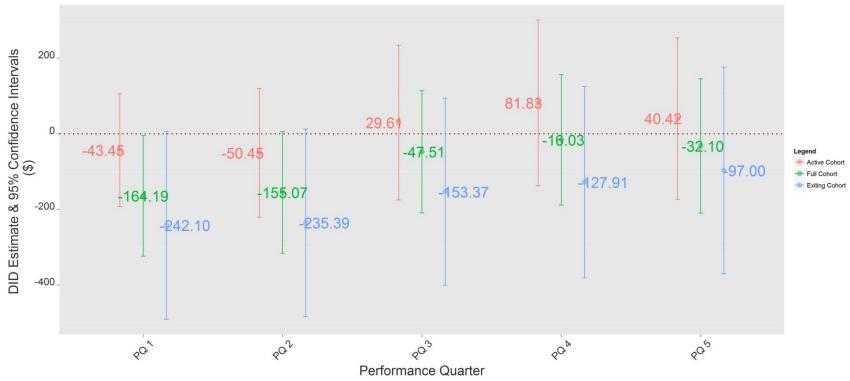
Figure B.47: Adjusted Quarterly Trends for Medicare Episode Payment – Hospital Only for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.48: Performance Quarter DiD Estimates for Medicare Episode Payment – Hospital Only for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.73: Episode Weighted, Unadjusted and Adjusted Medicare Episode Payment – Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hespital Cabart	Measure.	Ras	eline	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
<b>Hospital Cohort</b>	weasure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>Expansive Cohort</b>									
BPCI	Mean	8,866	10,534	9,141***	10,720*	9,140***	10,707*	9,143***	10,771**
	95% CI	[8,802, 8,930]	[10,409, 10,659]	[9,051, 9,230]	[10,560, 10,880]	[9,037, 9,243]	[10,549, 10,866]	[8,967, 9,320]	[10,605, 10,937
	N	60,363		30,298		24,159		6,139	
Comparison	Mean	9,544	8,686	9,945***	8,865**	9,939***	8,852**	9,971***	8,916***
	95% CI	[9,507, 9,582]	[8,595, 8,777]	[9,894, 9,997]	[8,746, 8,983]	[9,881, 9,997]	[8,737, 8,966]	[9,860, 10,082]	[8,779, 9,052]
	N	242,999		125,624		100,333		25,291	
Targeted Cohort									
BPCI	Mean	11,386	8,931	11,920***	9,035	11,853***	9,006	12,179***	9,153*
	95% CI	[11,333, 11,440]	[8,759, 9,102]	[11,846, 11,994]	[8,852, 9,219]	[11,770, 11,936]	[8,824, 9,188]	[12,013, 12,345]	[8,963, 9,343]
	N	210,623		112,710		89,663		23,047	
Comparison	Mean	10,837	11,039	11,338***	11,268***	11,310***	11,238***	11,448***	11,386***
	95% CI	[10,807, 10,868]	[10,954, 11,124]	[11,296, 11,380]	[11,172, 11,364]	[11,263, 11,358]	[11,145, 11,332]	[11,359, 11,538]	[11,279, 11,492
	N	642,471		335,544		269,103		66,441	
PHC Cohort									
BPCI	Mean	9,776	7,605	10,162***	7,624	10,089***	7,598	10,448***	7,727
	95% CI	[9,713, 9,838]	[7,433, 7,777]	[10,074, 10,251]	[7,428, 7,819]	[9,990, 10,188]	[7,405, 7,791]	[10,250, 10,646]	[7,519, 7,934]
	N	92,083		47,831		38,093		9,738	
Comparison	Mean	9,561	9,842	10,171***	9,993*	10,129***	9,967	10,341***	10,096***
	95% CI	[9,520, 9,602]	[9,742, 9,942]	[10,114, 10,229]	[9,861, 10,125]	[10,065, 10,193]	[9,837, 10,098]	[10,211, 10,470]	[9,957, 10,236]
Table 6 (in Ann	N	260,565		134,597		107,823		26,774	

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.74: Unweighted, Unadjusted Medicare Episode Payment – Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort Measure		Baseline	Baseline Since BPCI Inception		BPCI – PQ 5	
pansive Cohort						
BPCI	Mean	8,872	9,009***	9,001**	9,039**	
	95% CI	[8,408, 9,336]	[8,498, 9,521]	[8,473, 9,530]	[8,588, 9,489]	
	N	60,363	30,298	24,159	6,139	
Comparison	Mean	9,593	9,919***	9,889***	10,028***	
	95% CI	[8,945, 10,242]	[9,320, 10,518]	[9,297, 10,480]	[9,401, 10,655]	
	N	242,999	125,624	100,333	25,291	
rgeted Cohort						
BPCI	Mean	11,186	11,552***	11,485***	11,822***	
	95% CI	[10,533, 11,838]	[10,895, 12,210]	[10,831, 12,140]	[11,153, 12,490]	
	N	210,623	112,710	89,663	23,047	
Comparison	Mean	10,464	10,965***	10,934***	11,088***	
	95% CI	[9,822, 11,107]	[10,316, 11,613]	[10,282, 11,586]	[10,452, 11,724]	
	N	642,471	335,544	269,103	66,441	
IC Cohort						
BPCI	Mean	9,546	9,815***	9,757***	10,049***	
	95% CI	[9,093, 9,999]	[9,350, 10,281]	[9,288, 10,225]	[9,597, 10,502]	
	N	92,083	47,831	38,093	9,738	
Comparison	Mean	9,250	9,822***	9,786***	9,966***	
-	95% CI	[8,734, 9,767]	[9,273, 10,372]	[9,234, 10,338]	[9,428, 10,505]	
	N	260,565	134,597	107,823	26,774	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

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<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.75: Since BPCI DiD Estimates for Medicare Episode Payment – Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

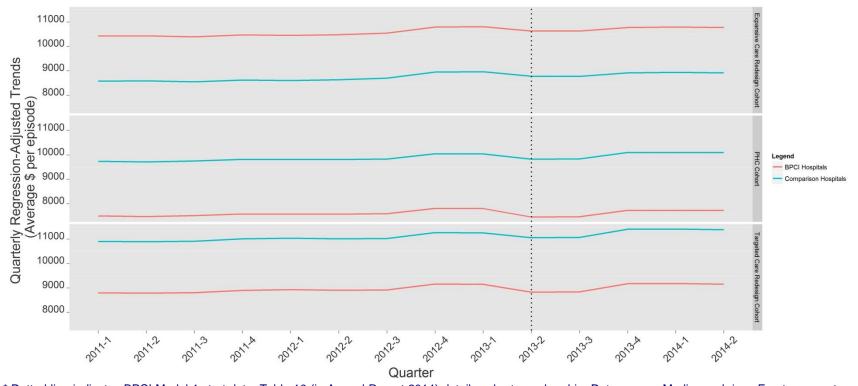
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (\$)	-132.50**	7.49	-124.14**
95% CI	(-255.14, -9.87)	(-142.74, 157.72)	(-225.46, -22.82)
Sample Size	519,541	446,851	1,258,896

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



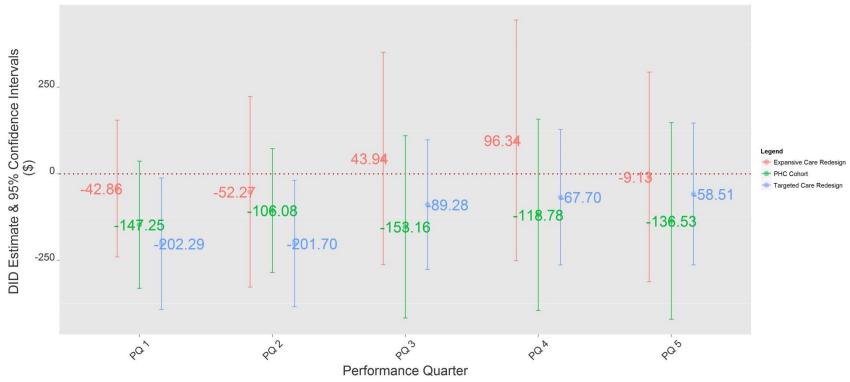
Figure B.49: Adjusted Quarterly Trends for Medicare Episode Payment – Hospital Only for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.50: Performance Quarter DiD Estimates for Medicare Episode Payment – Hospital Only for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.76: Episode Weighted, Unadjusted and Adjusted Medicare Episode Payment – Non-Hospital Only for Full, Active, and Exiting Cohorts<sup>†</sup>

Hospital	Magazira	Base	line	Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean	2,100	2,080	2,103	2,043*	2,114*	2,044*	2,060***	2,037**
	95% CI	[2,092, 2,107]	[2,051, 2,109]	[2,092, 2,113]	[2,013, 2,073]	[2,102, 2,126]	[2,014, 2,074]	[2,038, 2,082]	[2,006, 2,068
	N	270,986		143,008		113,822		29,186	
Comparison	Mean	1,836	1,732	1,859***	1,735	1,860***	1,737	1,856***	1,729
	95% CI	[1,832, 1,839]	[1,718, 1,746]	[1,854, 1,865]	[1,720, 1,750]	[1,854, 1,866]	[1,722, 1,751]	[1,845, 1,868]	[1,712, 1,746
	N	858,480		447,497		358,458		89,039	
Active Cohort									
BPCI	Mean	1,998	2,078	1,987	2,041	1,996	2,044	1,952***	2,033
	95% CI	[1,989, 2,008]	[2,041, 2,115]	[1,973, 2,001]	[2,001, 2,082]	[1,980, 2,012]	[2,004, 2,084]	[1,921, 1,982]	[1,992, 2,073
	N	138,045		70,833		56,550		14,283	
Comparison	Mean	1,835	1,709	1,857***	1,711	1,860***	1,714	1,845	1,702
	95% CI	[1,830, 1,839]	[1,692, 1,725]	[1,851, 1,864]	[1,694, 1,729]	[1,853, 1,868]	[1,696, 1,731]	[1,830, 1,859]	[1,682, 1,722
	N	549,755		287,143		229,963		57,180	
Exiting Cohort									
BPCI	Mean	2,205	2,321	2,216	2,286	2,230**	2,285	2,164**	2,288
	95% CI	[2,194, 2,216]	[2,286, 2,356]	[2,201, 2,232]	[2,248, 2,323]	[2,213, 2,247]	[2,248, 2,322]	[2,132, 2,196]	[2,250, 2,327
	N	132,941	-	72,175		57,272		14,903	
Comparison	Mean	1,787	1,634	1,814***	1,640	1,811***	1,640	1,824***	1,643
	95% CI	[1,781, 1,792]	[1,614, 1,654]	[1,806, 1,821]	[1,618, 1,663]	[1,803, 1,820]	[1,617, 1,662]	[1,808, 1,841]	[1,619, 1,667
	N	388,147		201,531	-	161,579		39,952	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.77: Unweighted, Unadjusted Medicare Episode Payment – Non-Hospital Only for Full, Active, and Exiting Cohorts<sup>+</sup>

<b>Hospital Cohort</b>	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
I Cohort					
BPCI	Mean	2,026	2,013**	2,026	1,964***
	95% CI	[1,921, 2,132]	[1,905, 2,122]	[1,916, 2,137]	[1,863, 2,065]
	N	270,986	143,008	113,822	29,186
Comparison	Mean	1,797	1,820***	1,822***	1,813***
	95% CI	[1,688, 1,907]	[1,713, 1,927]	[1,715, 1,929]	[1,708, 1,919]
	N	858,480	447,497	358,458	89,039
tive Cohort					
BPCI	Mean	1,967	1,929***	1,942***	1,880***
	95% CI	[1,858, 2,075]	[1,818, 2,041]	[1,829, 2,055]	[1,776, 1,984]
	N	138,045	70,833	56,550	14,283
Comparison	Mean	1,790	1,805***	1,809***	1,790
	95% CI	[1,682, 1,898]	[1,702, 1,907]	[1,707, 1,911]	[1,686, 1,893]
	N	549,755	287,143	229,963	57,180
titing Cohort			•		
BPCI	Mean	2,128	2,148**	2,160***	2,104
	95% CI	[2,028, 2,228]	[2,044, 2,253]	[2,053, 2,266]	[2,007, 2,200]
	N	132,941	72,175	57,272	14,903
Comparison	Mean	1,778	1,814***	1,812***	1,820***
	95% CI	[1,671, 1,885]	[1,703, 1,924]	[1,701, 1,923]	[1,714, 1,927]
	N	388,147	201,531	161,579	39,952

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having equal weight.

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<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



# Table B.78: Since BPCI DiD Estimates for Medicare Episode Payment – Non-Hospital Only for Full, Active, and Exiting Cohort<sup>+</sup>

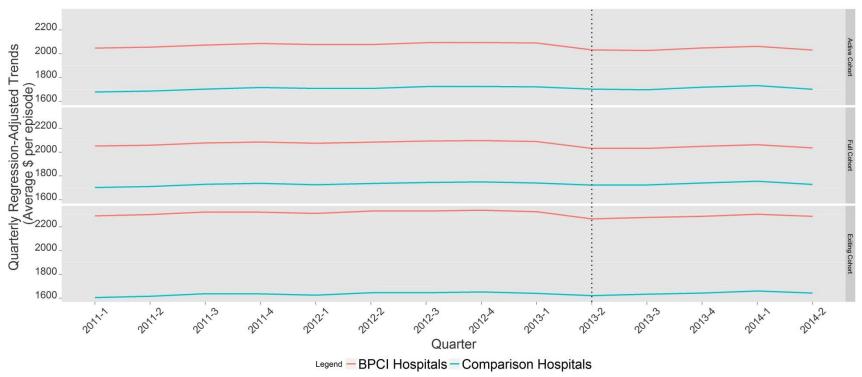
	Full Cohort	Active Cohort	Exiting Cohort
DiD (\$)	-40.47***	-39.21***	-41.70***
95% CI	(-56.83, -24.11)	(-60.02, -18.41)	(-67.32, -16.07)
Sample Size	1,685,571	1,024,859	778,898

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



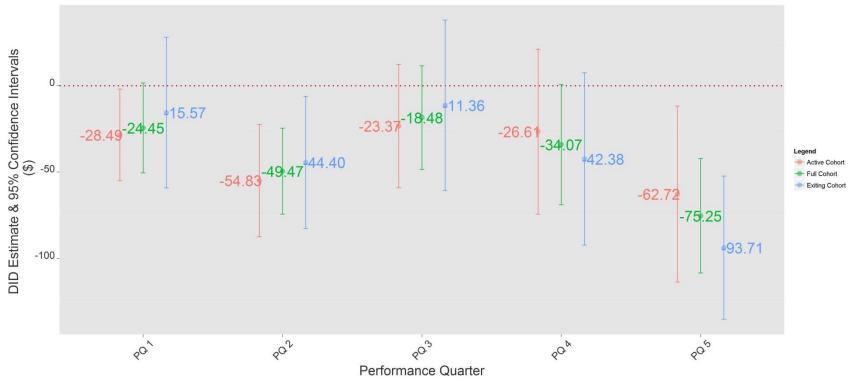
Figure B.51: Adjusted Quarterly Trends for Medicare Episode Payment – Non-Hospital Only for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.52: Performance Quarter DiD Estimates for Medicare Episode Payment – Non-Hospital Only for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.79: Episode Weighted, Unadjusted and Adjusted Medicare Episode Payment – Non-Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital	Magazira	Baseline		Since BPC	I Inception	BPCI -	Year 1	BPCI -	- PQ 5
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Col	hort								
BPCI	Mean	1,869	1,861	1,811***	1,804**	1,818***	1,805**	1,784***	1,802**
	95% CI	[1,856, 1,882]	[1,827, 1,895]	[1,793, 1,829]	[1,766, 1,842]	[1,798, 1,839]	[1,768, 1,842]	[1,750, 1,818]	[1,761, 1,842
	N	60,363		30,298		24,159		6,139	
Comparison	Mean	1,782	1,695	1,794**	1,686	1,795**	1,687	1,790	1,683
	95% CI	[1,775, 1,788]	[1,678, 1,712]	[1,785, 1,803]	[1,666, 1,705]	[1,785, 1,805]	[1,668, 1,705]	[1,771, 1,809]	[1,659, 1,707
	N	242,999		125,624		100,333		25,291	
Targeted Coho	ort								
BPCI	Mean	2,166	2,369	2,181**	2,338	2,193***	2,340	2,134**	2,330
	95% CI	[2,157, 2,175]	[2,336, 2,402]	[2,169, 2,193]	[2,304, 2,372]	[2,179, 2,207]	[2,306, 2,374]	[2,107, 2,160]	[2,294, 2,365
	N	210,623		112,710		89,663		23,047	
Comparison	Mean	1,861	1,677	1,888***	1,686	1,889***	1,688	1,886***	1,678
	95% CI	[1,856, 1,866]	[1,660, 1,694]	[1,882, 1,895]	[1,668, 1,704]	[1,882, 1,896]	[1,670, 1,706]	[1,872, 1,900]	[1,658, 1,698
	N	642,471		335,544		269,103		66,441	
PHC Cohort									
BPCI	Mean	2,153	2,311	2,181***	2,299	2,193***	2,300	2,137	2,295
	95% CI	[2,141, 2,165]	[2,277, 2,344]	[2,164, 2,199]	[2,262, 2,335]	[2,173, 2,213]	[2,263, 2,336]	[2,099, 2,174]	[2,258, 2,332
	N	92,083	-	47,831		38,093		9,738	
Comparison	Mean	1,777	1,617	1,814***	1,619	1,811***	1,620	1,823***	1,615
	95% CI	[1,771, 1,784]	[1,595, 1,639]	[1,804, 1,823]	[1,594, 1,644]	[1,801, 1,821]	[1,596, 1,644]	[1,803, 1,843]	[1,589, 1,641
	N	260,565		134,597		107,823		26,774	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



Table B.80: Unweighted, Unadjusted Medicare Episode Payment − Non-Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital Cohort	Measure	Baseline	Since BPCI Inception	BPCI – Year 1	BPCI – PQ 5
pansive Cohort					
BPCI	Mean	1,870	1,802***	1,812***	1,764***
	95% CI	[1,772, 1,968]	[1,700, 1,904]	[1,707, 1,917]	[1,674, 1,854]
	N	60,363	30,298	24,159	6,139
Comparison	Mean	1,776	1,783	1,785	1,778
	95% CI	[1,661, 1,891]	[1,679, 1,888]	[1,681, 1,888]	[1,671, 1,886]
	N	242,999	125,624	100,333	25,291
rgeted Cohort					
BPCI	Mean	2,108	2,112	2,123*	2,064***
	95% CI	[1,999, 2,217]	[1,999, 2,224]	[2,010, 2,237]	[1,957, 2,171]
	N	210,623	112,710	89,663	23,047
Comparison	Mean	1,816	1,847***	1,849***	1,840***
	95% CI	[1,710, 1,923]	[1,739, 1,955]	[1,739, 1,958]	[1,735, 1,945]
	N	642,471	335,544	269,103	66,441
IC Cohort					
BPCI	Mean	2,111	2,135**	2,146***	2,093
	95% CI	[2,019, 2,203]	[2,040, 2,230]	[2,049, 2,242]	[2,003, 2,182]
	N	92,083	47,831	38,093	9,738
Comparison	Mean	1,728	1,770***	1,770***	1,774***
	95% CI	[1,640, 1,815]	[1,679, 1,862]	[1,677, 1,862]	[1,686, 1,862]
	N	260,565	134,597	107,823	26,774

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Unlike weighted statistics, cohort-level statistics consider all hospitals as having <u>equal weight</u>.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.81: Since BPCI DiD Estimates for Medicare Episode Payment – Non-Hospital Only for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

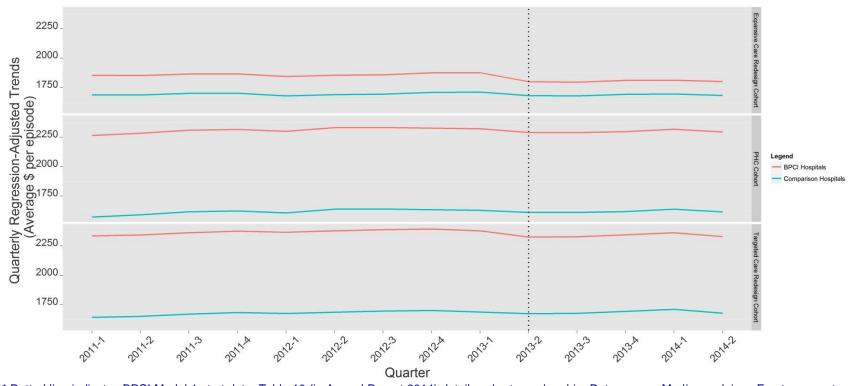
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (\$)	-13.79	-46.81***	-39.56***
95% CI	(-41.23, 13.64)	(-74.22, -19.39)	(-59.10, -20.02)
Sample Size	524,375	450,099	1,275,319

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



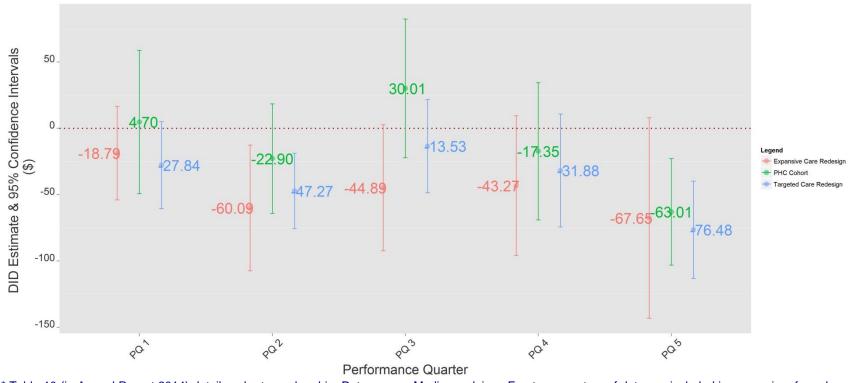
Figure B.53: Adjusted Quarterly Trends for Medicare Episode Payment – Non-Hospital Only for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.54: Performance Quarter DiD Estimates for Medicare Episode Payment – Non-Hospital Only for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.82: Episode Weighted, Unadjusted and Adjusted 30-Day Post-Episode Medicare Payments for Full, Active, and Exiting Cohorts<sup>+</sup>

Hospital	Magazira	Baseline		Since BPCI Inception		BPCI – Year 1		BPCI – PQ 5	
Cohort	Measure	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
ull Cohort									
BPCI	Mean	9,747	9,710	10,013***	9,974**	10,006***	9,978**	10,041***	9,958**
	95% CI	[9,697, 9,796]	[9,553, 9,867]	[9,945, 10,082]	[9,806, 10,142]	[9,929, 10,083]	[9,810, 10,146]	[9,888, 10,194]	[9,788, 10,128
	N	269,434		142,282		113,047		29,235	
Comparison	Mean	8,531	7,787	8,657***	7,956***	8,696***	7,960***	8,503	7,940**
	95% CI	[8,504, 8,557]	[7,708, 7,866]	[8,622, 8,693]	[7,876, 8,036]	[8,656, 8,736]	[7,882, 8,038]	[8,426, 8,579]	[7,851, 8,030]
	N	852,081		444,136		355,440		88,696	
Active Cohort									
BPCI	Mean	9,653	9,479	10,011***	9,874***	10,002***	9,889***	10,046***	9,813**
	95% CI	[9,583, 9,724]	[9,295, 9,664]	[9,911, 10,111]	[9,671, 10,077]	[9,891, 10,114]	[9,687, 10,092]	[9,816, 10,276]	[9,607, 10,019
	N	137,098		70,389		56,090		14,299	
Comparison	Mean	8,750	8,070	8,855***	8,217**	8,910***	8,233**	8,636**	8,156
	95% CI	[8,717, 8,783]	[7,977, 8,163]	[8,810, 8,901]	[8,121, 8,314]	[8,859, 8,962]	[8,140, 8,325]	[8,539, 8,733]	[8,043, 8,269]
	N	545,364		285,128		227,891		57,237	
xiting Cohort									
BPCI	Mean	9,843	9,754	10,015***	9,904	10,010***	9,894	10,036*	9,947
	95% CI	[9,774, 9,912]	[9,558, 9,949]	[9,921, 10,109]	[9,698, 10,110]	[9,904, 10,115]	[9,688, 10,099]	[9,832, 10,239]	[9,738, 10,155
	N	132,336		71,893		56,957		14,936	
Comparison	Mean	8,169	7,438	8,331***	7,634**	8,352***	7,623**	8,246	7,676***
	95% CI	[8,131, 8,207]	[7,331, 7,545]	[8,279, 8,384]	[7,525, 7,742]	[8,293, 8,412]	[7,517, 7,729]	[8,135, 8,357]	[7,559, 7,794
	N	385,388		199,829		160,323		39,506	

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.83: Since BPCI DiD Estimates for 30-Day Post-Episode Medicare Payments for Full, Active, and Exiting Cohort<sup>+</sup>

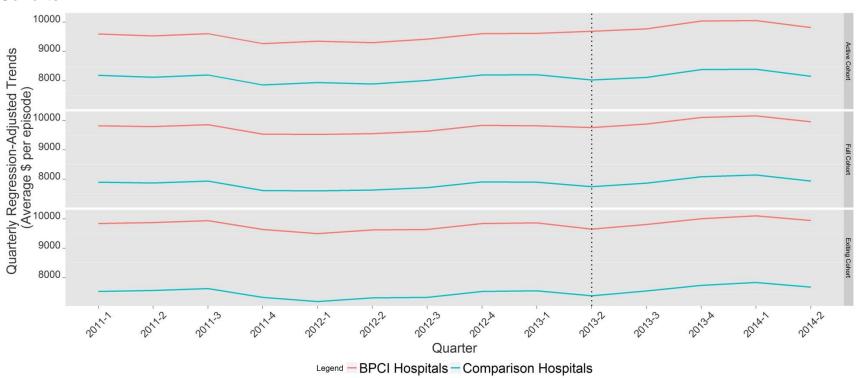
	Full Cohort	Active Cohort	Exiting Cohort
DiD (\$)	94.81**	247.63***	-45.00
95% CI	(5.04, 184.58)	(115.16, 380.10)	(-153.65, 63.65)
Sample Size	1,658,377	1,006,989	766,557

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



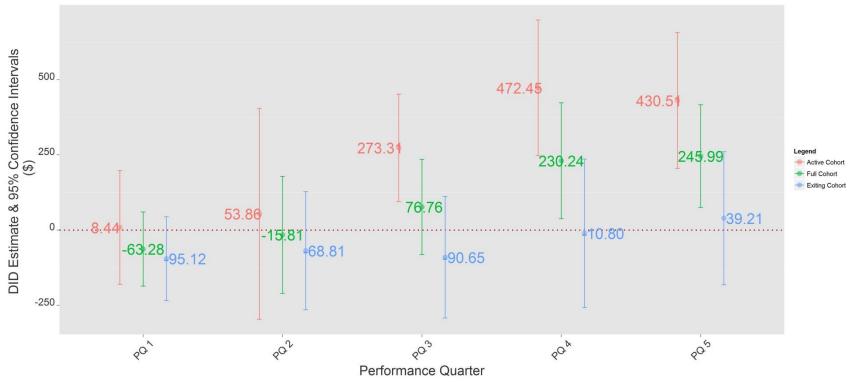
Figure B.55: Adjusted Quarterly Trends for 30-Day Post-Episode Medicare Payments for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.56: Performance Quarter DiD Estimates for 30-Day Post-Episode Medicare Payments for Full, Active, and Exiting Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.



Table B.84: Episode Weighted, Unadjusted and Adjusted 30-Day Post-Episode Medicare Payments for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

Hospital	Measure	Baseline		Since BPCI Inception		BPCI – Year 1		BPCI – PQ 5	
Cohort		Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Expansive Co	ohort								
BPCI	Mean	8,944	8,324	9,229***	8,552	9,211***	8,572	9,300*	8,474
	95% CI	[8,849, 9,039]	[8,110, 8,538]	[9,087, 9,371]	[8,306, 8,798]	[9,058, 9,364]	[8,330, 8,814]	[8,944, 9,657]	[8,211, 8,737
	N	60,007		30,124		23,983		6,141	
Comparison	Mean	8,414	7,906	8,524***	8,042	8,600***	8,062*	8,224**	7,964
	95% CI	[8,367, 8,461]	[7,785, 8,027]	[8,459, 8,588]	[7,915, 8,169]	[8,526, 8,674]	[7,937, 8,187]	[8,088, 8,361]	[7,828, 8,100
	N	241,140		124,831		99,435		25,396	
Targeted Col	ort								
BPCI	Mean	9,977	10,125	10,224***	10,399*	10,220***	10,398*	10,238***	10,401*
	95% CI	[9,919, 10,034]	[9,932, 10,318]	[10,145, 10,302]	[10,195, 10,603]	[10,132, 10,308]	[10,195, 10,602]	[10,068, 10,407]	[10,196, 10,60
	N	209,427		112,158		89,064		23,094	
Comparison	Mean	8,620	7,779	8,748***	7,960**	8,774***	7,959***	8,643	7,962**
	95% CI	[8,589, 8,651]	[7,682, 7,876]	[8,706, 8,790]	[7,862, 8,057]	[8,726, 8,821]	[7,864, 8,054]	[8,552, 8,733]	[7,855, 8,070]
	N	637,686		332,937		266,898		66,039	
PHC Cohort									
BPCI	Mean	9,924	9,550	10,029	9,623	10,044	9,618	9,971	9,644
	95% CI	[9,844, 10,003]	[9,359, 9,740]	[9,916, 10,141]	[9,422, 9,824]	[9,917, 10,170]	[9,420, 9,815]	[9,728, 10,214]	[9,431, 9,857
	N	91,710		47,693		37,906		9,787	
Comparison	Mean	7,765	7,196	7,904***	7,357*	7,915***	7,351*	7,858	7,377**
	95% CI	[7,723, 7,808]	[7,081, 7,311]	[7,845, 7,962]	[7,241, 7,472]	[7,849, 7,981]	[7,240, 7,462]	[7,732, 7,984]	[7,246, 7,509]
	N	258,944	-	133,415	_	107,114	-	26,301	

<sup>&</sup>lt;sup>†</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels when program periods (Since BPCI Inception, Year 1, and PQ 5) are each compared to Baseline for adjusted or unadjusted statistics.



## Table B.85: Since BPCI DiD Estimates for 30-Day Post-Episode Medicare Payments for Expansive, Targeted, and PHC Cohorts<sup>+</sup>

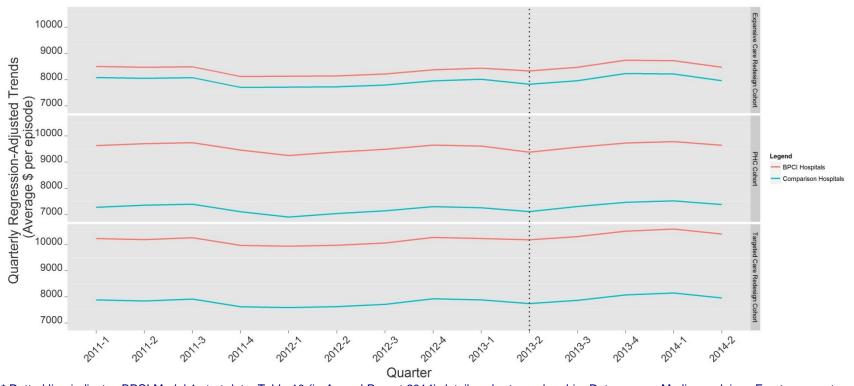
	PHC Cohort	Expansive Care Redesign	Targeted Care Redesign
DiD (\$)	-86.85	92.64	92.83*
95% CI	(-206.01, 32.32)	(-99.94, 285.22)	(-10.14, 195.80)
Sample Size	517,453	443,166	1,254,603

<sup>&</sup>lt;sup>+</sup> Table 6 (in Annual Report 2014) details Baseline, Since BPCI Inception, Year 1, and PQ5 timeframes. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims.

<sup>\*</sup> p<0.1, \*\* p<0.05, \*\*\* p<0.01 denote statistical significances levels.



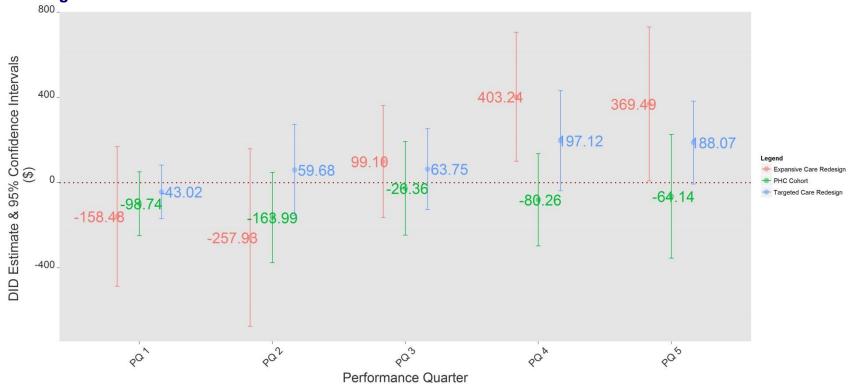
Figure B.57: Adjusted Quarterly Trends for 30-Day Post-Episode Medicare Payments for PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Dotted line indicates BPCI Model 1 start date. Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included, from January 1, 2011, through June 30, 2014.



Figure B.58: Performance Quarter DiD Estimates for 30-Day Post-Episode Medicare Payments PHC, Expansive, and Targeted Cohorts\*



<sup>\*</sup> Table 10 (in Annual Report 2014) details cohort membership. Data source: Medicare claims. Fourteen quarters of data are included in regression, from January 1, 2011, through June 30, 2014.