MA Center for Health Information & Analysis

MA APCD User Workgroup

April 26, 2016

Agenda

- Announcements:
  - Changes to the APCD User Workgroup
  - MA APCD Release 5.0
  - New Forms Posted
- Presentation: CHIA Enrollment Trends Report
- Guest Presentation: Aaron Pervin, Health Policy Commission, “Prices for Pregnancies in Massachusetts Vary Two Fold”
- Q&A

Reminder
2016 User Workgroup Changes

- Case Mix and APCD User Groups separated
  - Every other month
  - More presentations from CHIA's users and external users
- Content from presentations will be categorized by topic and posted to the CHIA website
  - Easier to find information
  - Changes to the APCD website will be going live when new application forms / documentation for Release 5.0 are posted

User Group Slides Posted Soon

[http://www.chiamass.gov/ma-apcd-and-case-mix-user-workgroup-information/]

- Based on feedback, grouped by topic and not date of meeting
- Three categories:
  - ✓ Application Questions ("When do fees need to be paid?")
  - ✓ Questions from Users – one PDF containing multiple questions (mostly short questions/answers with 1 or 2 slides each)
    - These two sections will be tagged with keywords. The list of keywords will be on the website and those keywords will be footnoted to each slide so people can Ctrl-F in the PDF
  - ✓ Tutorials – PDFs for each tutorial – hyperlink on the website will say what each tutorial is (Example: "What APCD Fields Can be Used to Filter for Medicaid Managed Care Beneficiaries?")

MA APCD Release 5.0

Important Announcement: MA APCD Release 5.0 will be delayed as we work with carriers on the implications of the recent Supreme Court decision in Gobeille v. Liberty Mutual.

- Original release date was June 30th
- A new release date has not yet been finalized

New Forms

- Posted Now:
  - Fee Remittance Form / Fee Waiver Request Form: http://www.chiamass.gov/assets/Uploads/data-apps/Fee-Remittance-and-Waiver-Form.docx
  - Revised Data Management Plan: http://www.chiamass.gov/assets/Uploads/data-apps/Data-Managment-Plan-for-Non-Government-Entities.docx
  - Government Data Use Agreement Template: http://www.chiamass.gov/assets/Uploads/data-apps/Government-Data-Use-Agreement.docx
  - Non-Government Data Use Agreement Template: http://www.chiamass.gov/assets/Uploads/data-apps/Non-Government-Data-Use-Agreement.pdf

All forms are also available in the IRBNet “Documents for Researchers” Library.

Application Reminders

- We need CVs of the PI(s) and at least the Lead Programmer/Analysts
- Please make sure you are **authorized** to sign the Data Use Agreement on behalf of your organization.
  - If you're not sure if you're an authorized signatory, there's a good chance you aren't.
  - The *organization* housing the data is the entity being bound in the DUA, not the researcher.
  - Many institutions (especially universities) have a Research Coordinator that is an authorized signatory and can sign agreements binding the organization.

QUESTIONS?

CHIA Enrollment Trends

Verifying Enrollment Counts from the MA APCD Member Eligibility File

Presented by:

Ashley Storms, *Senior Health System Policy Analyst*

Amy Wyeth, *Senior Health System Policy Analyst*

Agenda

I. Enrollment Trends Overview

II. Verification Process: Private Commercial

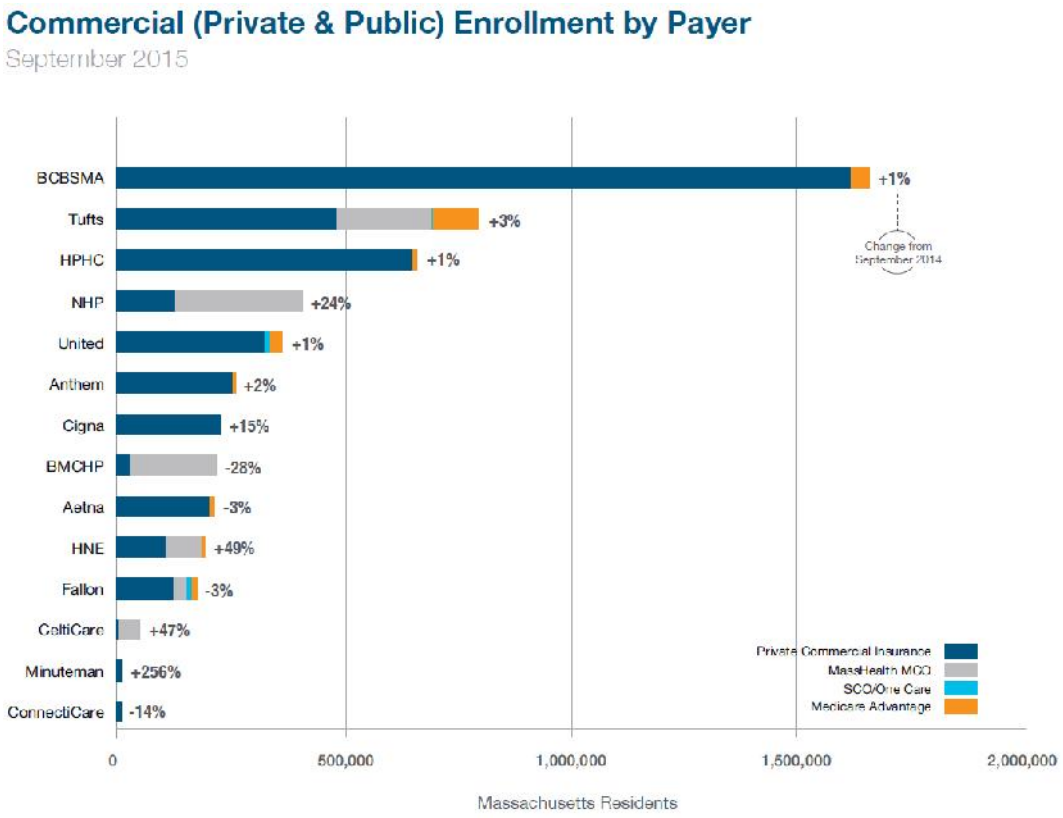
III. Verification Process: Medicare Advantage

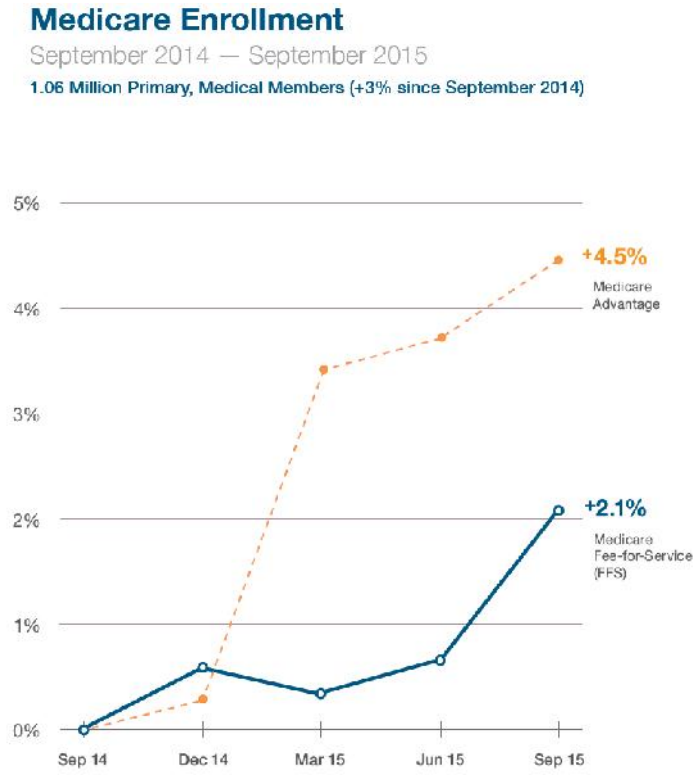
IV. Questions

Enrollment Trends Overview

- Massachusetts residents with primary, medical insurance from the top 14 commercial payers, MassHealth, and Medicare
- Analysis based on MA APCD Member Eligibility data, supplemented as needed
- Quarterly enrollment counts (most recently March 2014 – Sept. 2015)
  - Private commercial enrollment broken out by:
    - Market sector (employer group size)
    - Funding type (fully- or self-insured)
    - Product type (e.g. HMO, PPO, Indemnity)
  - Public commercial enrollment broken out by program
    - Commonwealth Care, Medical Security Program (MSP), MassHealth Managed Care Organization (MCO), One Care, Senior Care Options, Medicare Advantage
- Released semi-annually, most recently in February 2016

Enrollment Trends Overview





Full report, databook, technical appendix, and programming code available online: http://www.chiamass.gov/enrollment-in-health-insurance/

Complete overview slides, previously presented at July 2015 User Workgroup, available on CHIA's website: http://www.chiamass.gov/assets/docs/p/apcd/workgroup-meetings/User-Workgroup-July-2015-Final.pdf

Verification Process: Private Commercial

1. Data Assessment
   - Payers submitted aggregate membership totals to CHIA (“ACA Reports”); these served as both control totals and an early data source
   - Direct payer totals were compared with enrollment counts sourced from the MA APCD

Verification Process: Private Commercial

Stage 1: Data Assessment	"ACA Report"	Enrollment Trends	Difference		Reporting Readiness	Notes/ Resolution
	Direct Payer Totals	*MA APCD Totals*	#	%		
MA PAYER 1	1,250,000	800,000	450,000	36%	☐	
MA PAYER 2	225,000	275,000	-50,000	-22%	☐	
MA PAYER 3	400,000	300,000	100,000	25%	☐	
MA PAYER 4	380,000	385,000	-5,000	-1%	☐	Ready for Payer Confirmation

Example for discussion purposes only.

Verification Process: Private Commercial

1. Data Assessment
   - Payers submitted aggregate membership totals to CHIA ("ACA Reports"); these served as both control totals and an early data source
   - Direct payer totals were compared with enrollment counts sourced from the MA APCD
2. Reconciliation
   - Where data sources diverged, CHIA worked with payers to identify where specifications for the two submissions differed

Verification Process: Private Commercial

Stage 2: Reconciliation	"ACA Report"	Enrollment Trends	Difference		Reporting Readiness	Notes/ Resolution
	Direct Payer Totals	*MA APCD Totals*	#	%		
MA PAYER 1	1,250,000	800,000	450,000	36%	☐	Identified missing host membership
MA PAYER 2	225,000	275,000	-50,000	-22%	☐	ME file has SP products flagged as primary
MA PAYER 3	400,000	300,000	100,000	25%	☐	Payer accidentally included dental in ACA
MA PAYER 4	380,000	385,000	-5,000	-1%	☐	Ready for Payer Confirmation

Example for discussion purposes only.

Verification Process: Private Commercial

1. Data Assessment
   - Payers submitted aggregate membership totals to CHIA ("ACA Reports"); these served as both control totals and an early data source
   - Direct payer totals were compared with enrollment counts sourced from the MA APCD
2. Reconciliation
   - Where data sources diverged, CHIA worked with payers to identify where specifications for the two submissions differed
3. Resolution Development
   - A decision was made in conjunction with payers about how to obtain accurate data for reporting
   - This could include payer-submitted supplemental data, changes to payers' MA APCD submissions, or alternative logic implemented by Enrollment Trends team

Verification Process: Private Commercial

Stage 3: Resolution Development	"ACA Report"	Enrollment Trends	Difference		Reporting Readiness	Notes/ Resolution
	Direct Payer Totals	*MA APCD Totals*	#	%		
MA PAYER 1	1,250,000	800,000	450,000	36%	▯	Payer to submit Supplemental Report
MA PAYER 2	225,000	275,000	-50,000	-22%	▯	CHIA workaround; payer resubmission
MA PAYER 3	400,000	300,000	100,000	25%	▯	Payer to resubmit ACA
MA PAYER 4	380,000	385,000	-5,000	-1%	▯	Ready for Payer Confirmation

Example for discussion purposes only.

Verification Process: Private Commercial

1. Data Assessment
   - Payers submitted aggregate membership totals to CHIA ("ACA Reports"); these served as both control totals and an early data source
   - Direct payer totals were compared with enrollment counts sourced from the MA APCD
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   - A decision was made in conjunction with payers about how to obtain accurate data for reporting
   - This could include payer-submitted supplemental data, changes to payers' MA APCD submissions, or alternative logic implemented by Enrollment Trends team

Verification Process: Private Commercial

Stage 1 (or 4): Data Assessment	"ACA Report"	Enrollment Trends	Difference		Reporting Readiness	Notes/ Resolution
	Direct Payer Totals	*MA APCD Totals*	#	%		
MA PAYER 1	1,250,000	*1,180,000*	70,000	6%	☐	Payer submitted Supplemental Report
MA PAYER 2	225,000	*222,000*	3,000	1%	☐	CHIA workaround; Payer resubmission
MA PAYER 3	*307,000*	300,000	7,000	2%	☐	Payer resubmitted ACA
MA PAYER 4	380,000	385,000	-5,000	-1%	☐	Ready for Payer Confirmation

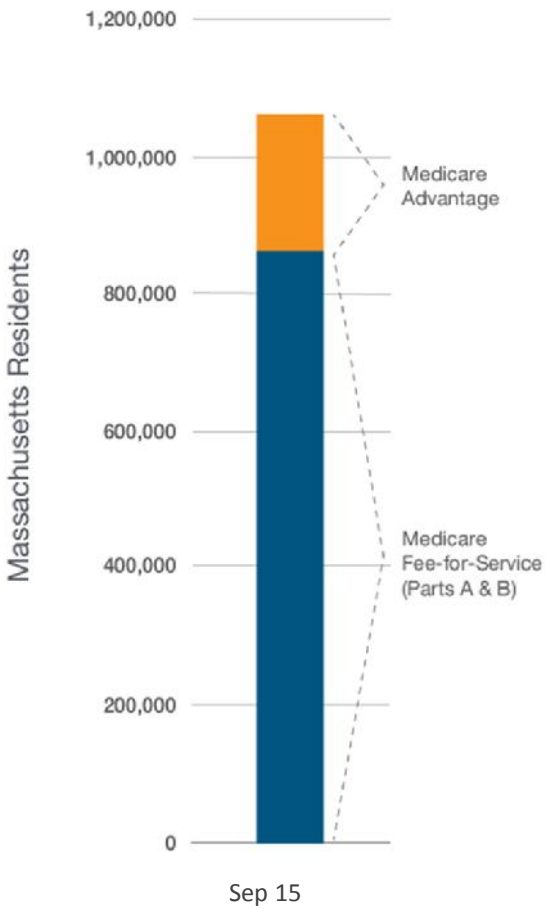
Example for discussion purposes only.

All MA APCD-sourced enrollment counts are shared with payers for confirmation prior to publication. MA APCD counts are reassessed each reporting cycle as new Member Eligibility submissions become available.

Medicare

Medicare data in Enrollment Trends includes Fee for Service (reported to CHIA directly by CMS) and Medicare Advantage (reported to MA APCD by commercial payers using figures CMS reports to them; separately posted online by CMS);

- Of 6 million + unique residents insured, Massachusetts has approximately 1.1 million with primary coverage from Medicare:
  - *197,000 Medicare Advantage*
  - *861,000 Medicare FFS*
  - *60,000 dual-eligible (Medicare-Medicaid/OneCare, Senior Care Options plans, or PACE)*
- This presentation focuses on CHIA's Medicare Advantage data verification



Goal: Source all Medicare Advantage enrollment data from APCD

Why it's important: The APCD has several hundred data fields in seven file types. Enrollment numbers are the starting point for most analyses. If we know they are accurate, using data in associated files will be very rich.

Verification process:

Assessment

- CMS online enrollment data* is "gold standard" – our control
- How well do APCD enrollments submitted match CMS? If not close…

Reconciliation

- Do the sources have the same data specifications?
- Does the payer submit the same data to CHIA that it receives from CMS?
- What else could account for differences?

Resolution Development

- CHIA works with payers to produce enrollment counts that match CMS' as closely as possible
- So far, resolutions have included supplemental data, requests to payers to adjust their submission processes, and payers newly submitting to the MA APCD

* http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract-Plan-State-County.html

Verification Process: Medicare

Case Study: Payer A Assessment

Payer A: Medicare Advantage Enrollment Comparison APCD vs. CMS				
Aggregate, 2014-2015		APCD Enrollment excluding PACE, incl. SCO	CMS Enrollment excluding PACE, incl. SNP/SCO	Difference APCD vs. CMS
	Sep-15	53,978	41,944	12,034
	Jun-15	52,288	41,307	10,981
	Mar-15	50,712	40,935	9,777
	Dec-14	44,628	38,142	6,486
	Sep-14	43,161	37,760	5,401
	Jun-14	41,536	37,234	4,302
	Mar-14	39,760	36,519	3,241

- Note APCD enrollments are higher, and difference is increasing

Verification Process: Medicare

Case Study: Payer A Reconciliation

Below questions investigated:

Do the sources have the same data specifications?

- CHIA ET specifies unique member, primary coverage, medical coverage
- CMS data adjusted to remove PDP-only, dual-eligible

Does the payer submit the same data to CHIA that it receives from CMS?

- Enrollment numbers compared at plan name level; both sources had submitted virtually all the same plans, but with different enrollments
- We considered the possibility that the discrepancy might tie back to CHIA's "24-month lookback" request. We request payers to refresh each monthly data submission to include the most recent data for the past month as well as the 23 previous months. If a refresh does not occur, members who disenroll remain in its data as an enrollee, artificially inflating the count.

Verification Process: Medicare

Case Study: Payer A Resolution

CHIA Enrollment Trends staff and an agency Payer Liaison conferred with this payer during a biweekly conference call about the possibility that data was not fully refreshed with each monthly submission. It turned out that this was the case.

This payer has agreed to resubmit several months of data to reflect the full 24-month lookback.

Medicare Advantage enrollments: current status

Parent Company	CMS Enrollment without PACE, OneCare or SNPs	APCD M.A. enrollment + Supplemental (no PACE, OneCare, SCO)
HNE	8,547	8,494
BCBSMA	40,188	40,377
Fallon	13,263	13,344
Tufts Associated HMO, Inc.	103,473	102,992

The chart above shows CHIA's September 2015 comparison of CMS online and APCD-submitted Medicare Advantage enrollments, not counting dual eligible enrollees, for the four payers successfully transitioned as of that date. This data represents approximately 82 percent of Massachusetts Medicare Advantage enrollees. We are optimistic that data from three additional large payers will transition later this year.

Questions?

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CHIA Health System Performance Analytic Team

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http://www.chiamass.gov/enrollment-in-health-insurance/

MASSACHUSETTS
HEALTH POLICY COMMISSION

Price Variation for a Delivery Varies Two Fold in Massachusetts

April 25, 2016

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Price Variation is Extensive in Massachusetts

- Academic research and HPC's Cost and Market Impact Reviews have shown that price variation is typically not related to indicators of higher value, such as quality of care or patient acuity.
- Yearly relative price analyses have found that price variation has persisted in the Commonwealth since 2010.
- Last year's Cost Trends Report found that there is large variation in episode-level spending by hospital for both hip and knee replacements and percutaneous coronary intervention.
- Maternity care represents 1 in 6 commercial inpatient discharges and is 3.5% of all commercial spending.
- This presentation examines hospital-level variation in spending for an episode of maternal care.

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Research Questions

1. What is the degree of price variation for low risk births in the Commonwealth?

2. What is the relationship between price variation and measurable quality in the Commonwealth?

Method of Price Analysis

We used the Optum Symmetry Episode Treatment Grouper to group claims into unique episodes of care. Episode Treatment Groups (ETGs) are medically meaningful statistical units representing complete episodes of care. These episodes describe a recipient's observed mix of diseases and conditions, and any underlying co-morbidities and complications.

The following ETGs were used in our study:
Episode Treatment Group 601100: Pregnancy, with delivery

Patient population and risk adjustments
The study sample was defined according to the following criteria:

- Only patients within BCBS, HPHP, THP
- Only complete episodes between 2011-2012
- Only patients who are between 18 and 35
- Only patients who are classified as low severity by the Optum ETG grouper
- Only patients whose delivery was during their first hospital stay for the episode
- Excludes outliers (all episodes in the top and bottom 2.5% of payments were cut out of the sample)
- We calculated an episode price for C-sections, vaginal deliveries, and all deliveries.

Calculation of Quality and Volume Measures

Birth Trauma Rate: Calculated using CHIA's 2012 case mix data. The measure was calculated according to AHRQ's technical specifications for PSI # 17, Birth Trauma Rate-Injury to Neonates.

Obstetric Trauma Rate: Calculated using CHIA's 2012 case mix data. The measure was calculated according to AHRQ's technical specifications for PSI # 19, Obstetric Trauma Rate – Vaginal Delivery without instrument.

C-Section Rate: We used Leapfrog Group's most recent NTSV C-Section rate for 2015.
http://www.leapfroggroup.org/compare-hospitals

Volume of Discharges: We calculated the total number of discharges for uncomplicated vaginal delivery (DRG 775) and uncomplicated C-sections (DRG 766) for commercial payers from the CHIA's case mix data for 2012 and 2014

Notes:

- Both the birth trauma rate and obstetric trauma rate use the case mix data because the measures were defined for discharge data
- C-Section rates were used for 2015 because we wanted to use the most recent data available.
- We looked at two years worth of discharges to determine if the share of discharges attributable to each hospital changed significantly. IT did not.

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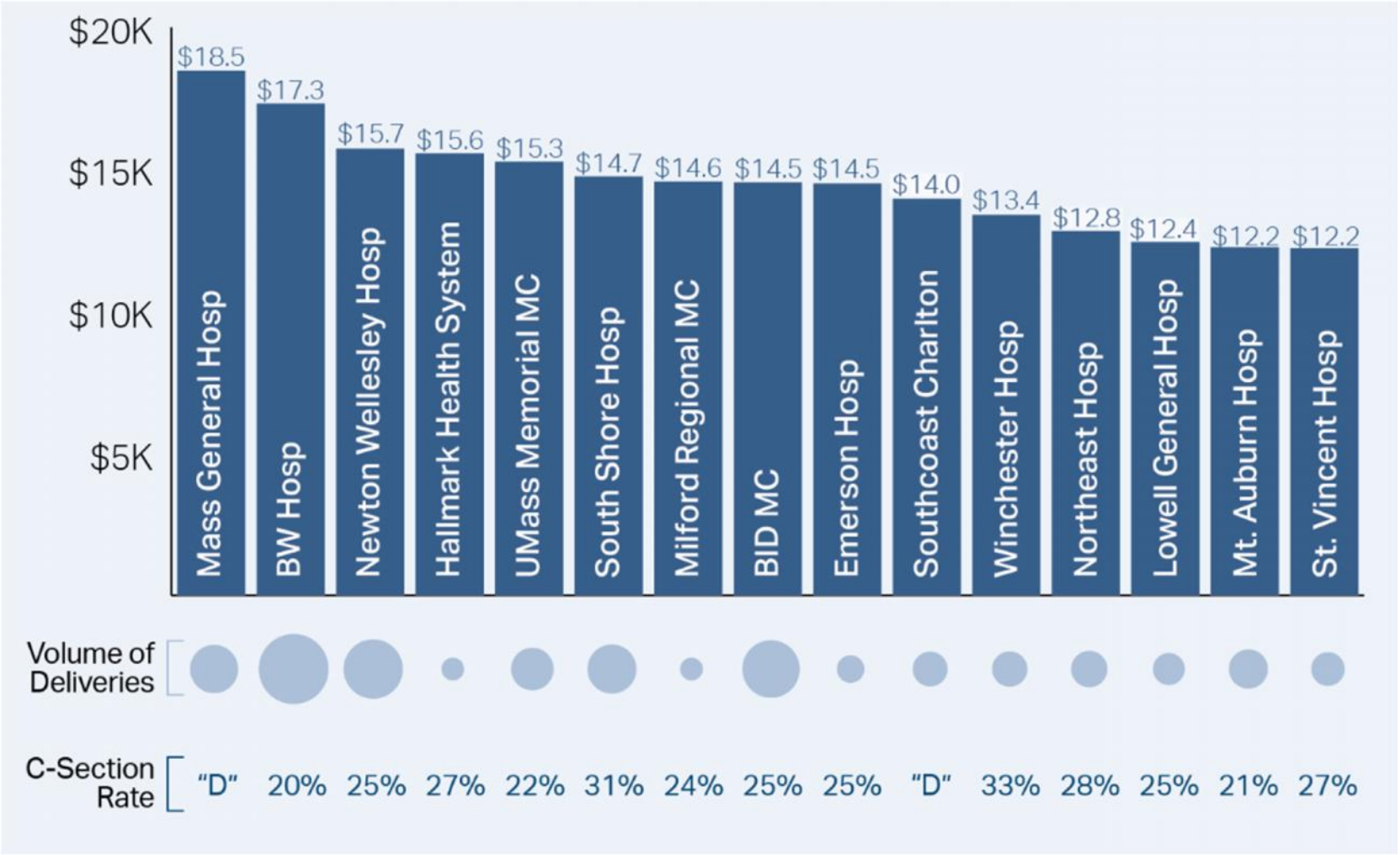
Price varies extensively without any associated variation in quality



Source: HPC Analysis—CHIA, All Payer Claims Database, 2011-2012, CHIA, Hospital Inpatient Discharge Database, 2014, Leapfrog Group, 2015

Notes: C-Section Rate is the NTSV C-Section Rate calculated from the Leapfrog Group, 2015, "D" means the hospital declined to provide the data

Volume of deliveries is all commercial deliveries for 2014

Price is the main driver of episode spending, not differences in quality or C-sections

- We found that price was uncorrelated with our quality measures
  - Patient Safety Indicator 17: Birth Trauma Rate-Injury to Neonates, r=.03, p= .86
  - Patient Safety Indicator 19: Obstetric Trauma-Vaginal Delivery without instrument, r= -.10, p=.53
- ~85% of the variation in episode spending was due to the variation in the procedure price of the delivery,* as apposed to the variation in the C section rate.

Source: HPC Analysis—CHIA, All Payer Claims Database, 2011-2012, CHIA, Hospital Inpatient Discharge Database, 20124 Leapfrog Group, 2015

Notes: * this number was produced by looking at the price and quantity of C sections and vaginal deliveries at the hospital level within the APCD

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Businesses in California have experimented with blended payments for maternal care

- The Pacific Business Group on Health's members are experimenting with combining a C-section and vaginal delivery payment into a single blended payment
- Preliminary results show that the NTSV C-Section rate has dropped since they implemented the program

Figure 1. Graph of changes in NTSV C-section rates at each participating hospital

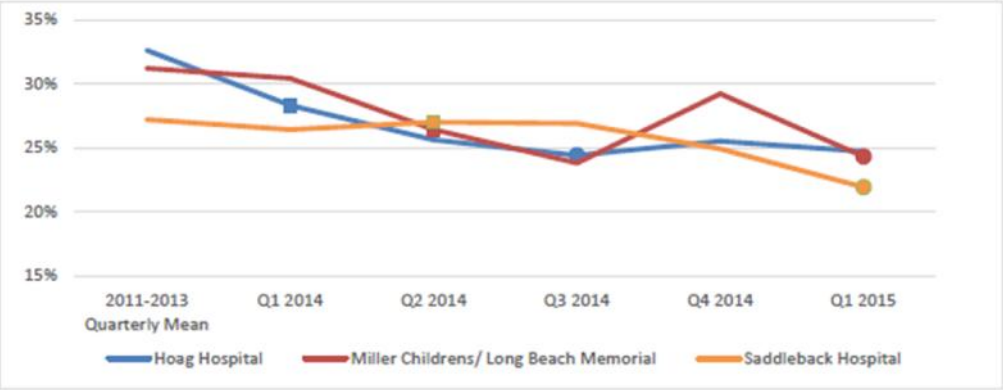
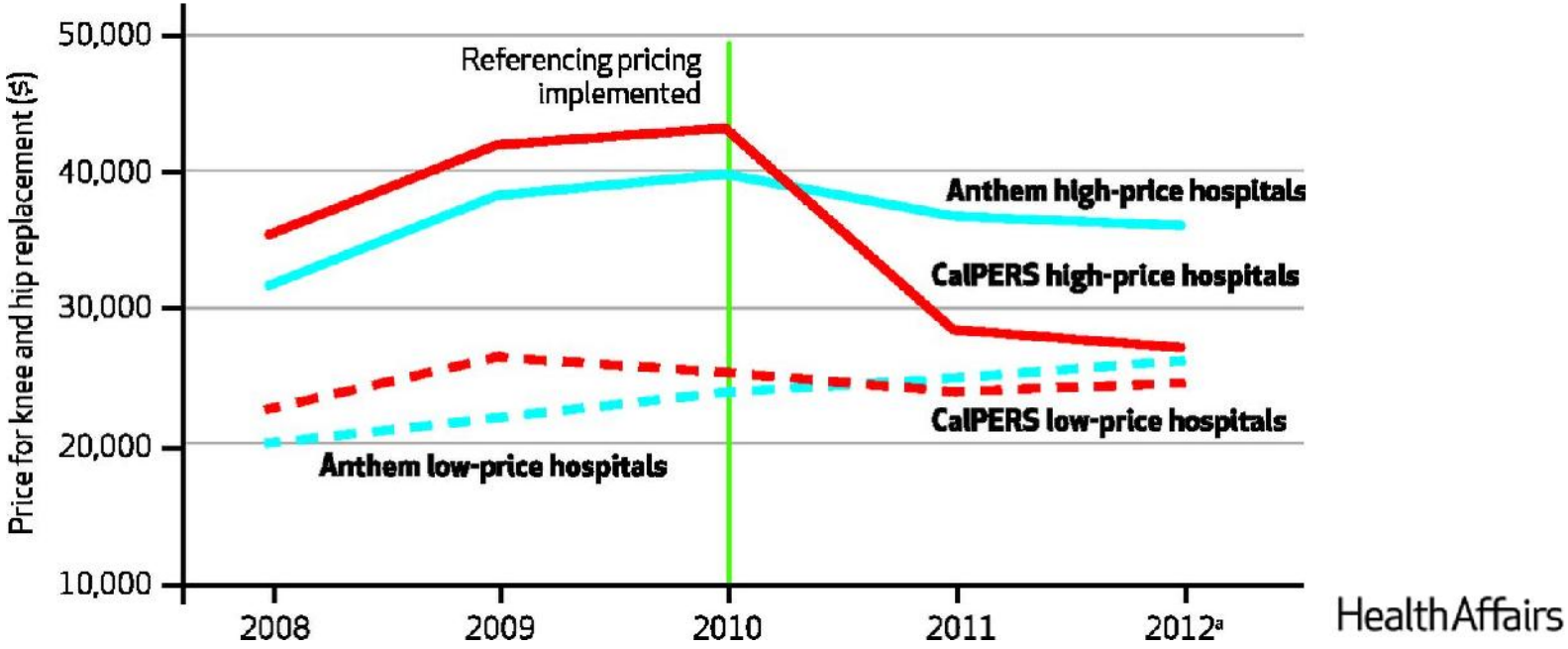


Figure 2. Table of changes in mean quarterly NTSV C-section rates at participating hospitals

	Hospital 1	Hospital 2	Hospital 3
Baseline NTSV C-section Rate (Qrtly Mean 2011-13)	32.6%	31.2%	27.2%
Intervention Start Date	1/15/14	3/20/14	4/15/14
Last Qtr Post Intervention Rate Mean (Qrtly Mean)	24.1%	24.3%	21.9%
Percent Reduction	24.2%	22.1%	19.5%

Reference pricing has been shown to lower prices at high priced hospitals

- California's public employee retirement system (CalPERS) initially saw 5-fold variation in prices paid for knee and hip replacements
- They identified 41 preferred hospitals and set a maximum price paid ($30,000); enrollees paid full cost above that set price



Reference Price Outcomes:

- CA patients chose care in lower cost facilities: ~30% switched to lower-priced facilities
- Prices declined ~34% at higher-priced facilities in California
- **A similar program in MA for maternity might save the payer/purchaser approximately 17% total medical expenditures if Mount Auburn's price were set as the reference price.**

HPC

James C. Robinson, and Timothy T. Brown Health Aff 2013;32:1392-1397 ©2013 by Project HOPE - The People-to-People Health Foundation, Inc.
Notes: Mt. Auburn was chosen because it is a low cost and high volume provider.

Questions?

Questions?

- Questions related to APCD : (apcd.data@state.ma.us)
- Questions related to Case Mix: (casemix.data@state.ma.us)

REMINDER: Please include your **IRBNet ID#**, if you currently have a project using CHIA data

Call for Topics and Presenters

If there is a **TOPIC** that you would like to see discussed at an MA APCD or Case Mix workgroup, contact Adam Tapply [adam.tapply@state.ma.us]

If you are interested in **PRESENTING** at an MA APCD or Case Mix workgroup, contact Adam Tapply [adam.tapply@state.ma.us]

- You can present remotely from your own office, or in-person at CHIA.