Provider Price Variation and Health Costs in MA—an Analysis of State and National Data

Presentation to Provider Price Variation Commission

January 17, 2017

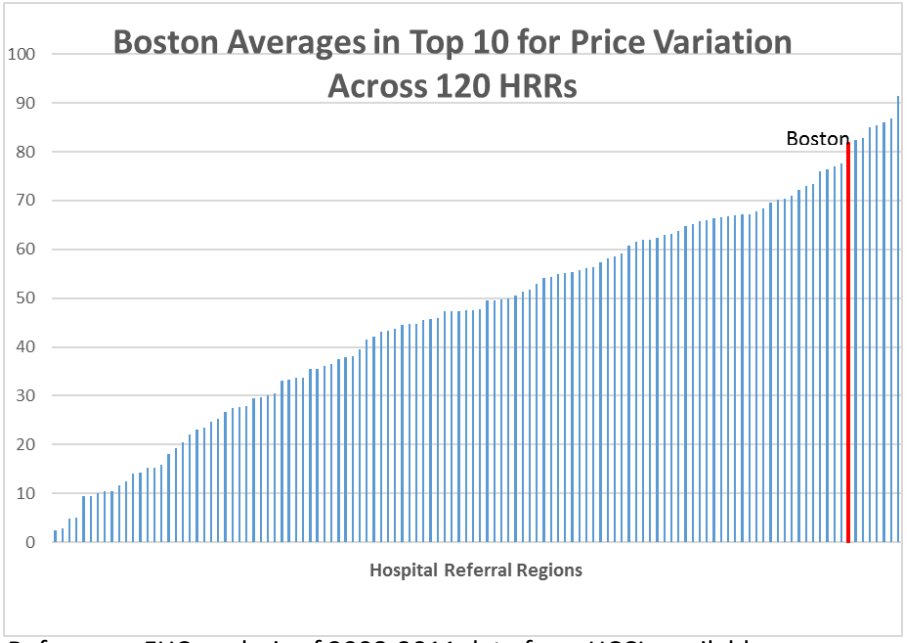
Freedman HealthCare on behalf of the Associated Industries of Massachusetts, the Massachusetts Association of Health Plans, the National Federation of Independent Business, and the Retailers Association of Massachusetts

Contents

- Background on provider price variation in Massachusetts
- Regional and national perspectives on health care spending, utilization, and price variation
- Harmful effects of provider price variation in Massachusetts
- Existing and potential market-based interventions in Massachusetts
- Challenges of health care as a market
- Options for short-term regulatory action

Executive Summary

- Provider price variation in MA is more extreme than nearly all other U.S. markets
- Disparities grow as providers consolidate and volume shifts to higher cost providers
  - This results in higher health care costs and significantly impacts individuals and employers
- Policy action and short-term intervention would help to address this issue
  - Market-based interventions have not solved this problem to date



Reference: FHC analysis of 2008-2011 data from HCCI, available through the Health Care Pricing Project[15]

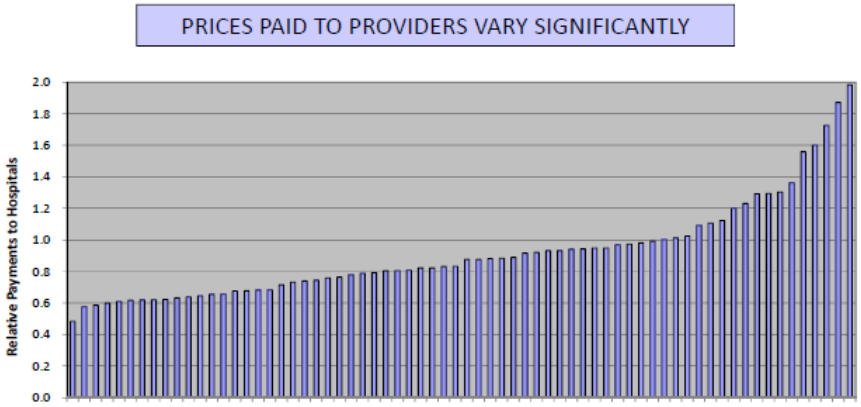
Understanding provider price variation in Massachusetts

OVERVIEW

Understanding Provider Price Variation in MA

- The MA Attorney General's Office (AGO) first identified provider price variation in the health care market in 2010[1]
  - Higher-priced hospitals received payments up to 3 to 4 times higher than those received by lower-priced hospitals in 2008[1]

- Provider price variation
  - Not due to differences in quality[2,3] or patient severity[1]
  - Seen in both fee-for-service and global payment arrangements[2,3]
  - Seen among both hospitals and physician groups[2,4]
  - Driven by market share (both providers' and payers')[4,5]
  - Hospitals persist as higher- or lower-priced year after year[2,3]



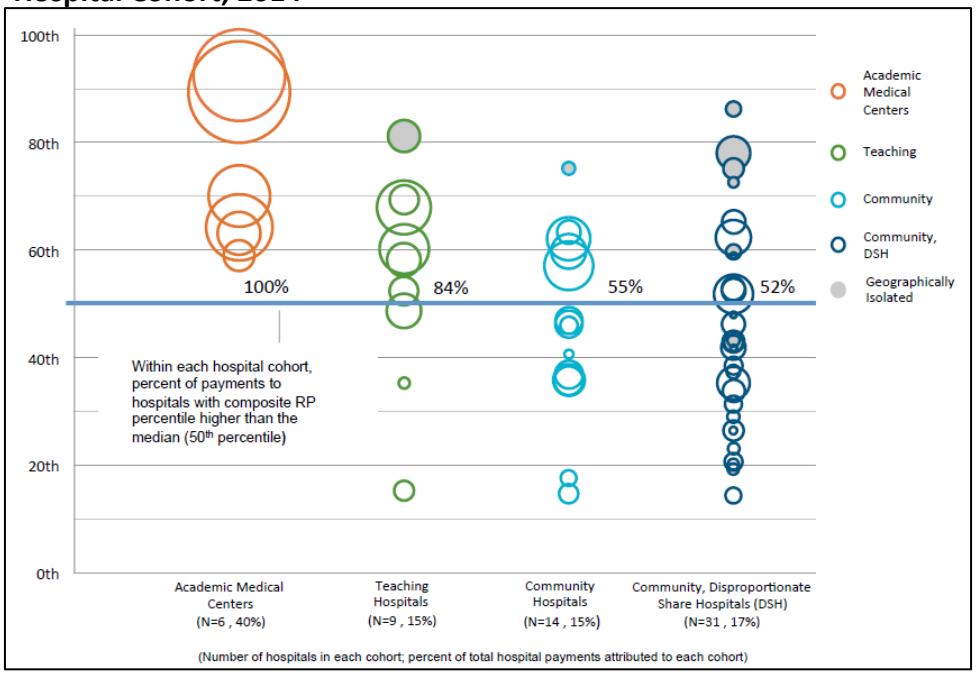
Reference: AGO Presentation at MAHP 2011 Annual Conference. Adapted from AGO's *Examination of Health Care Cost Trends and Cost Drivers – Report for Annual Public Hearing* (June 2011).

Understanding Provider Price Variation in MA

Among acute hospitals in 2014[5]:

- Price variation appears among all hospital cohorts
- Academic medical centers (AMCs) were consistently priced above the network average
- AMCs had the largest share of total hospital payments

Acute Hospital Composite Blended Relative Price Percentile, by Hospital Cohort, 2014

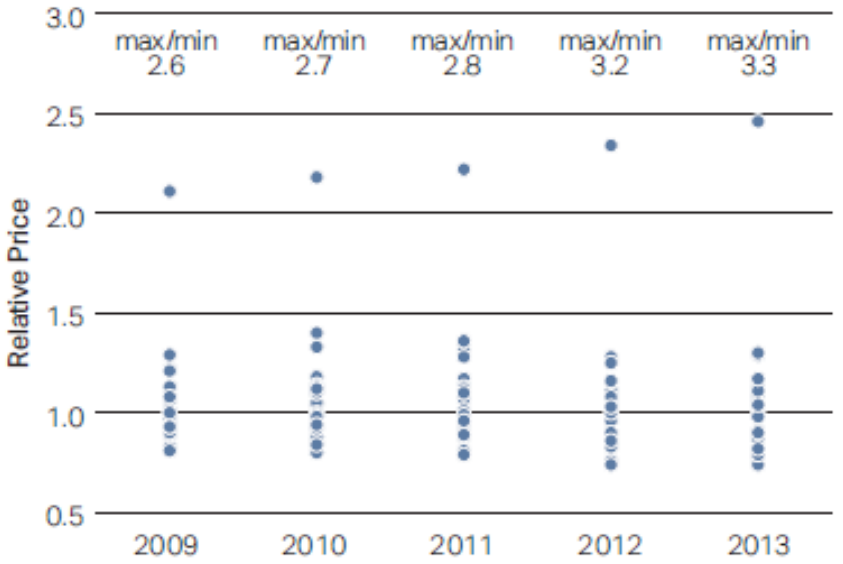


Reference: CHIA Annual Report Series. Relative Price: Health Care Provider Price Variation in the Massachusetts Commercial Market. February 2016. Available at: http://www.chiamass.gov/assets/docs/r/pubs/16/relative-price-chartbook-2014.pdf.

Understanding Provider Price Variation in MA

- Since 2010, price variation has not improved, and evidence suggests that the price gap is growing wider[2,3,6]
  - From 2010-2014, highest-priced hospitals have consistently been 2.5 to 3.4 times more expensive than lowest-priced hospitals[2]
  - Price variation worsened among physician groups from 2009-2013[2]
- HPC and AGO have called for regulatory action to address price disparities[2,3,6]

Distribution of Physician Group Relative Prices, 2009-2013

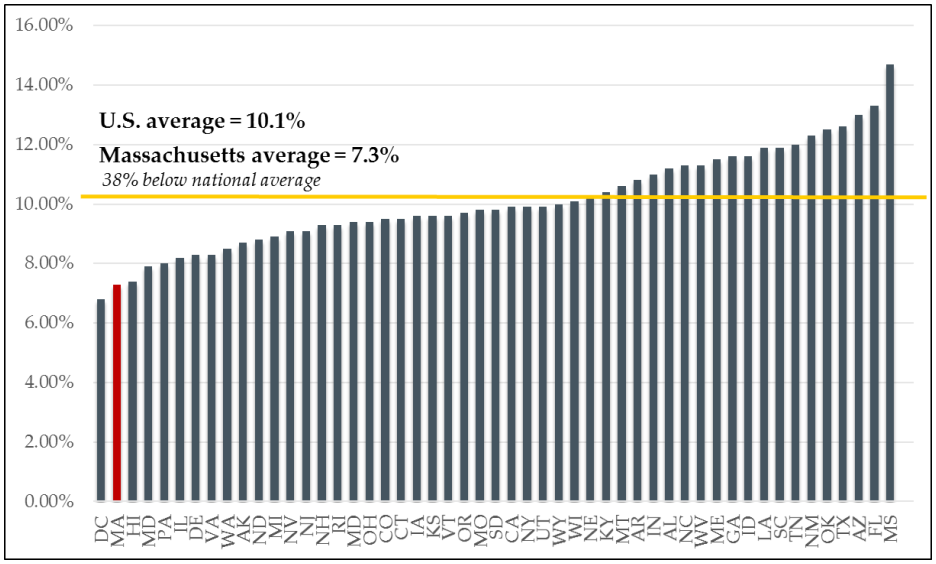


Reference: Health Policy Commission. *2015 Cost Trends Report: Provider Price Variation.* Exhibit 9. Available at: http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/publications/2015-ctr-ppv.pdf. Data Source: CHIA Relative Price Databooks (2012-2015).

Understanding Provider Price Variation in MA

- Some argue that Massachusetts' high health care costs are affordable
  - Employee health care costs as a percentage of median household income are the second lowest in the nation[7]
  - Hospital prices, adjusted for wages, are low (bottom 20%)[8]
  - MA ranks highly in terms of overall quality and health system performance[9]
  - High-priced providers, such as AMCs, are driving the local economy through medical research and innovations
  - High commercial payments offset low public reimbursement rates

Average employee health care costs (premium and deductible) as a percentage of median household income, 2015

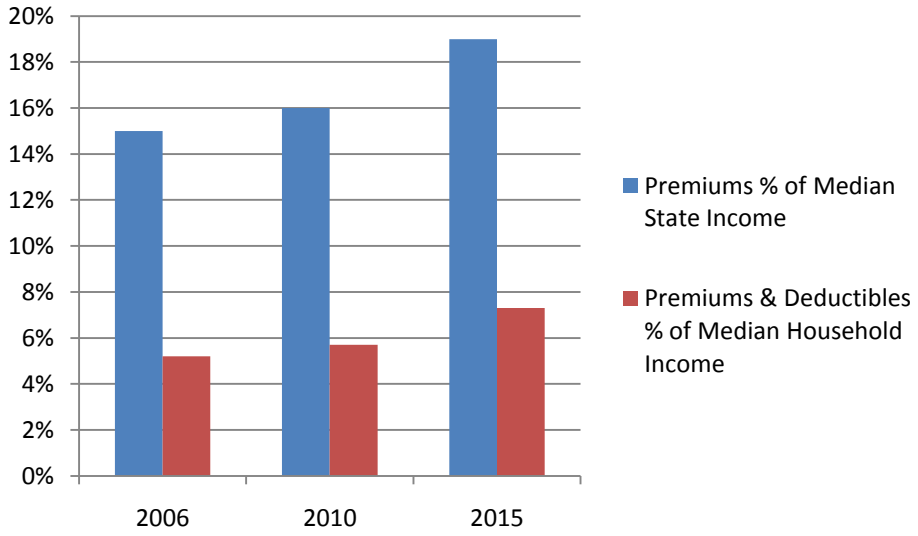


Reference: Meeting materials for Special Commission on Provider Price Variation Market Forces Subcommittee (December 6, 2016). Adapted from: S. R. Collins, D. C. Radley, M. Z. Gunja, and S. Beutel. *The Slowdown in Employer Insurance Cost Growth: Why Many Workers Still Feel the Pinch.* The Commonwealth Fund (October 2016). Available at: http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2016/oct/1910_collins_slowdown_employer_ins_cost_growth_ib.pdf.

Understanding Provider Price Variation in MA

- Yet Massachusetts' high health care costs are harmful to residents and businesses
  - Employee health care costs as a percentage of income keep growing[7]
  - MA employee premiums are 3rd most expensive (for both family and individual plans) in U.S.[10]
  - MA businesses competing nationally are disadvantaged by MA's higher premiums
  - MA failed to meet cost benchmark for 2014 & 2015
- Price level arguments ignore the problems of large, persistent provider price variation

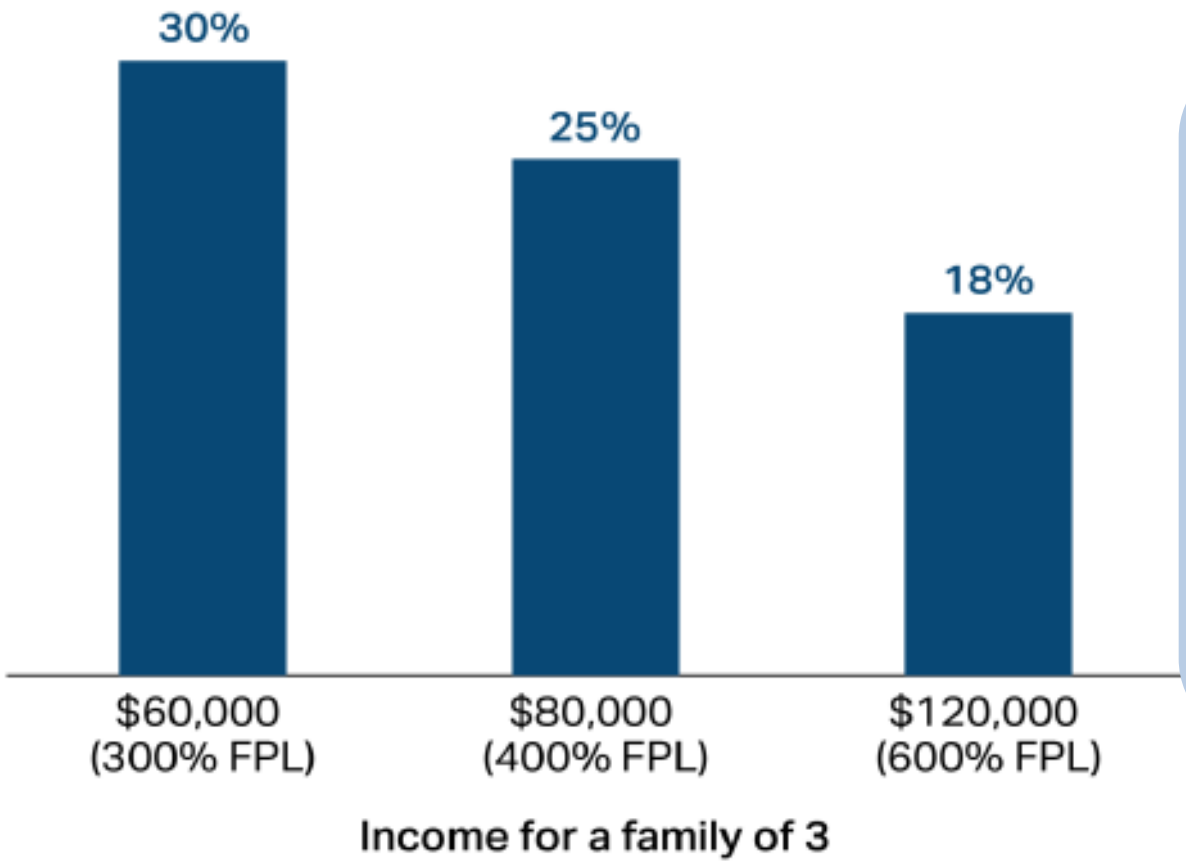
MA employee health costs as a percentage of income keep growing



Reference: Adapted from: S. R. Collins, D. C. Radley, M. Z. Gunja, and S. Beutel. *The Slowdown in Employer Insurance Cost Growth: Why Many Workers Still Feel the Pinch*. The Commonwealth Fund (October 2016). Available at: http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2016/oct/1910_collins_slowdown_employer_ins_cost_growth_ib.pdf.

Health care costs have a higher impact on individuals of low to middle incomes

Total healthcare spending relative to income for a family with employer-based coverage, 2015



"What these slides show is that for a significant amount of our population, it is a real problem and we can't mask it over by the fact that some of us earn significantly above the national average and can afford it."

Stuart Altman, Chairman
Health Policy Commission
Commonwealth Magazine
January 11, 2017

Reference: Health Policy Commission. "Select Findings: 2016 Cost Trends Report." Presentation for January 11, 2017 HPC Board Meeting. Data sources: Agency for Healthcare Research and Quality, 2015 Medical Expenditure Panel Survey (MEPS); 2015 Executive Office of Labor and Workforce Development, Massachusetts Workforce and Labor Area Review. Available at http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/public-meetings/board-meetings/20170111-commission-document-ctr-presentation.pdf.

Comparing Massachusetts to other health care markets

PROVIDER PRICE VARIATION: WORSE IN MASSACHUSETTS THAN ELSEWHERE

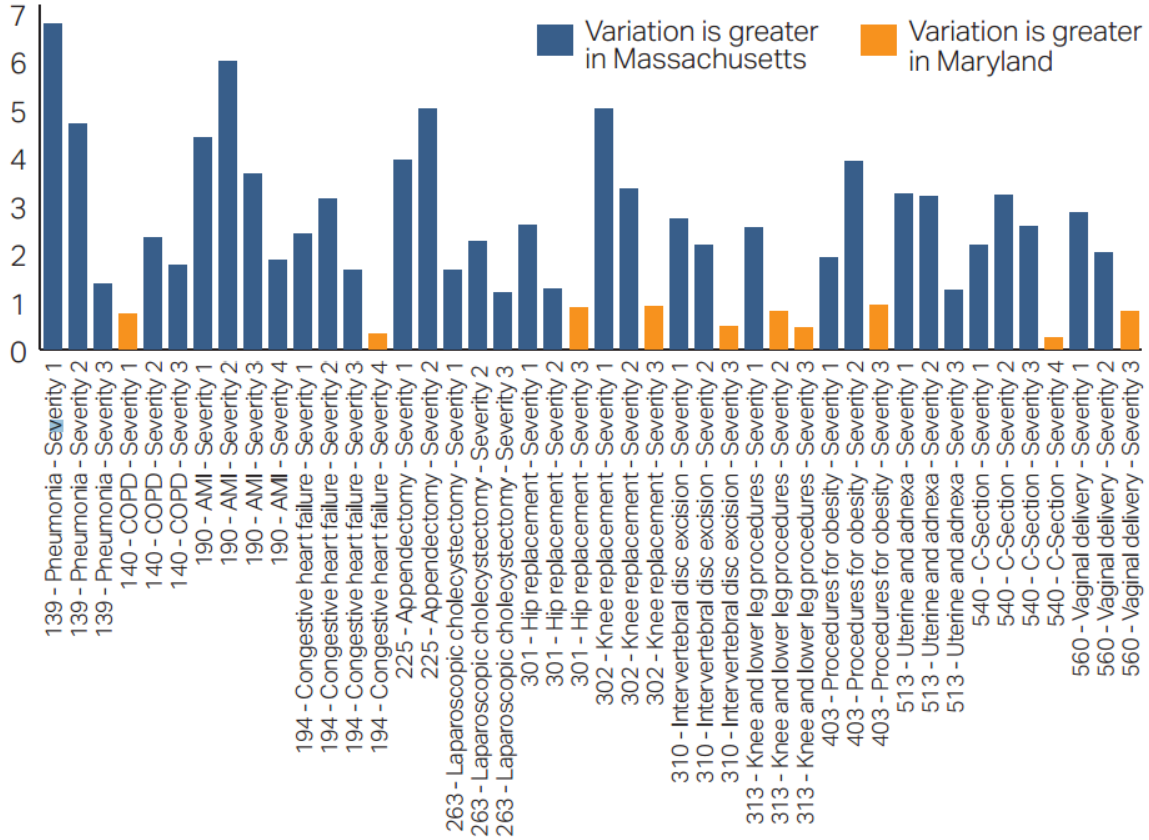
High Provider Price Variation in MA

- The highest-priced hospitals in MA have been **2.5-3.4x** more expensive than the lowest-priced hospitals from 2010-2014[2]

- This price variation is wider than that in neighboring states
  - New York: Commercial prices were 1.5-2.7x higher in some hospitals than in others within the same region (CY 2014 data)[11]
  - Rhode Island: Commercial payments to hospitals are up to 2x more in some hospitals than in others (CY 2010 data)[12]
  - Vermont: Commercial price for most expensive hospital was 1.8x higher than for least expensive hospital (CY 2012 data)[13]

High Provider Price Variation in MA

- For 77% of services, Massachusetts had greater variation in price than Maryland

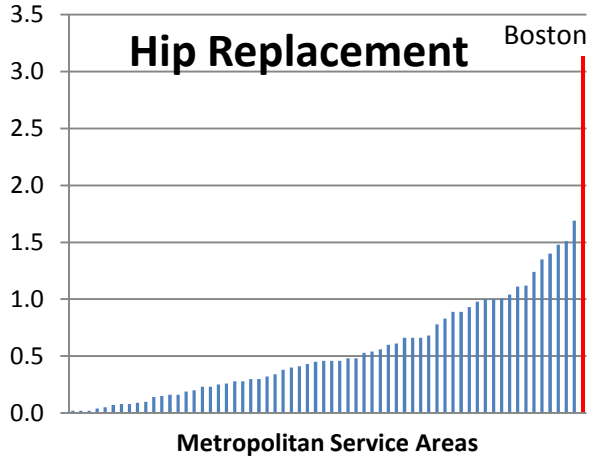


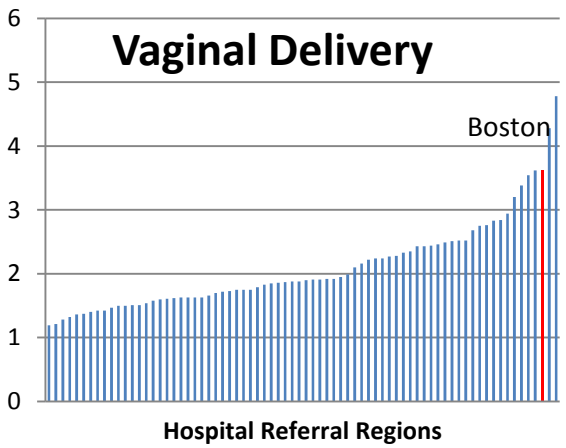
Reference: Health Policy Commission. 2015 Cost Trends Report: Provider Price Variation. Exhibit 12: Ratio of Massachusetts Variation to Maryland Variation. Data sources: DHCFP 2011 Report; Maryland Health Services Cost Review Commission.

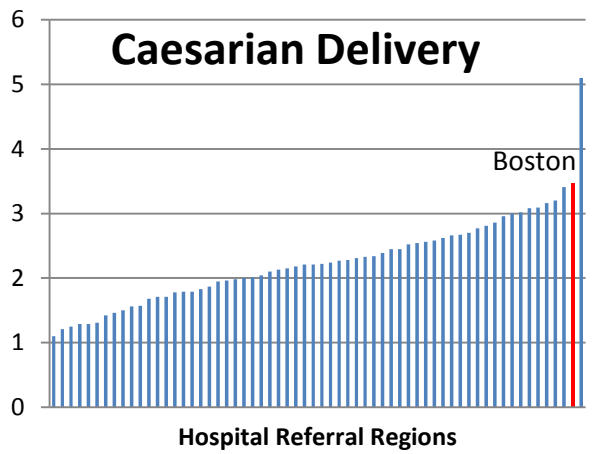
High Provider Price Variation in MA

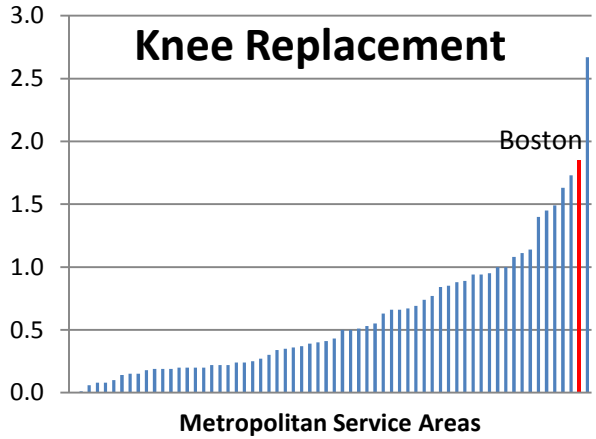
- MA has more price variation than other US markets
  - BCBS study on hip and knee replacements[14]
    - Among 64 Metropolitan Service Areas (MSAs), examined 2010-2013 payments by BCBSA plans for hip and knee replacement procedures.
  - Yale study on various common procedures[15]
    - Compared between 56 and 105 Hospital Referral Regions (HRRs), examining 2008-2011 payments by Health Care Cost Institute payers for caesarean and vaginal deliveries, lower limb MRI, colonoscopy, and knee replacement.

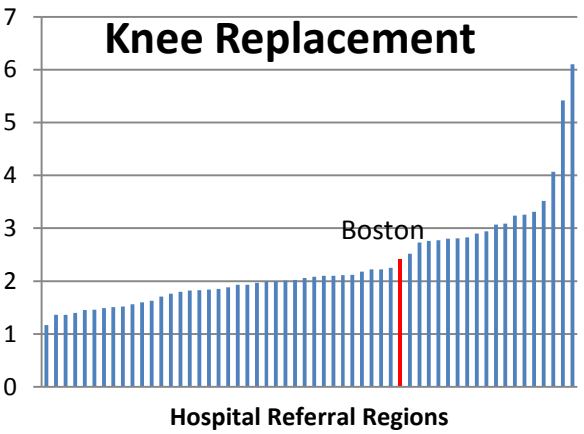
Extreme Variation – Boston Averages the 83rd Percentile Nationwide

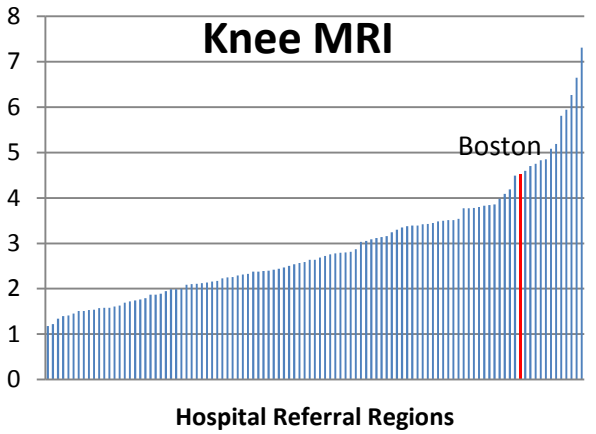












Hip & knee replacement by MSA. Adapted from Blue Cross Blue Shield (January 2015) study using 2010-2013 data from Blue Health Intelligence.[14]

Vaginal & caesarian deliveries, knee replacement, knee MRI & colonoscopy (not shown) by HRR. Adapted from Health Care Pricing Project using 2008-2011 data from HCCI.[15]

High Provider Price Variation in MA

- In addition to high health care costs, provider price variation in MA is more extreme than nearly all other markets across the US
- Disparities grow as providers consolidate and volume shifts to higher cost providers

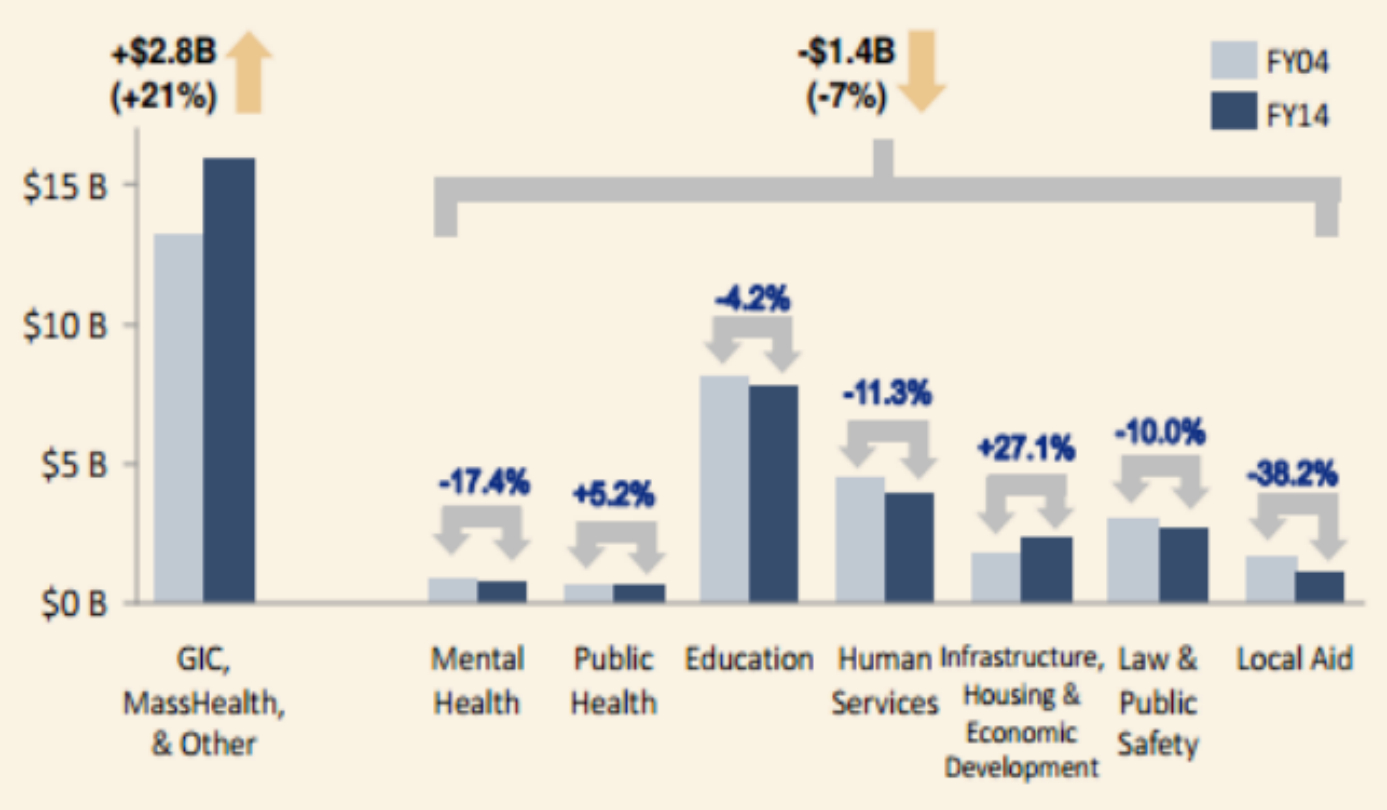
Comparing Massachusetts to other health care markets

HEALTH CARE SPENDING: REGIONAL AND NATIONAL PERSPECTIVES

Health Care Spending in MA is High

- Health care costs crowd out other priorities

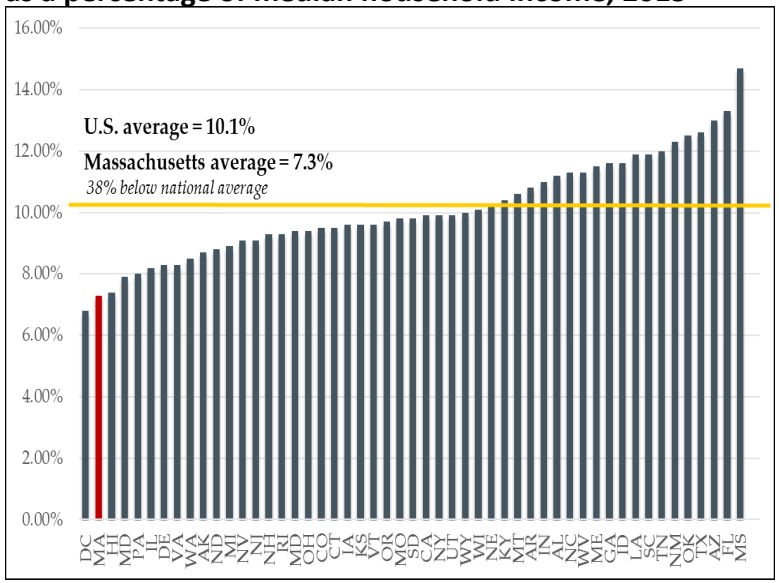
State Budgets for Health Care Coverage and Other Priorities, FY2004-FY2014[16]
Total budget (dollars in billions) and total real growth percentage, FY2004 – FY2014)



Reference: L.A. Taylor. "Social Determinants of Health: Opportunities and Challenges." Presentation to MA Annual Cost Trends Hearing, October 18, 2016. Data source: Massachusetts Budget and Policy Center. Note: Figures adjusted for GDP growth.

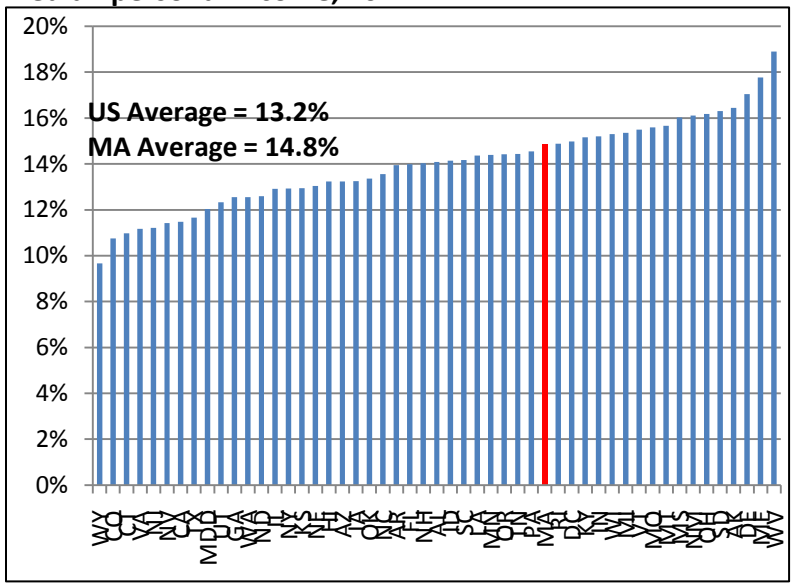
Health Care Spending

Average employee health care costs (premium and deductible) as a percentage of median household income, 2015



Data source: Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey – Insurance Component, 2015. Health care costs include premiums and deductibles. Reference: Meeting materials for Special Commission on Provider Price Variation Market Forces Subcommittee (December 6, 2016). Adapted from The Commonwealth Fund (October 2016).[7]

Personal Health Care Expenditures as a percentage of median personal income, 2014



Data source: FHC analysis of Per capita personal consumption expenditures by state for selected categories, 2014. Bureau of Economic Analysis, US Department of Commerce.[17] Personal health care expenditures include spending on outpatient services and hospital and nursing home services. Outpatient services consist of physician services, dental services, and paramedical services. Adjusted for 2014 median personal income using data from the Bureau of Economic Analysis, US Department of Commerce.[18]

- Adjusted spending in MA is relatively lower than gross spending, though it appears above US average
- Rising health care costs force crowding out of household and government spending

Health Care Spending

- MA is a wealthy state, and its income-adjusted spending is comparatively lower across *many* spending categories – not just health. Yet personal spending on health is among the highest in MA

Public Expenses*	MA Rank
Public health	50
Transportation	50
Government administration	46
Education	44
Public safety	40
Social service & income maintenance	33
Environment & housing	27
Utilities	21
Interest on debt	11
Total Expenditures	36

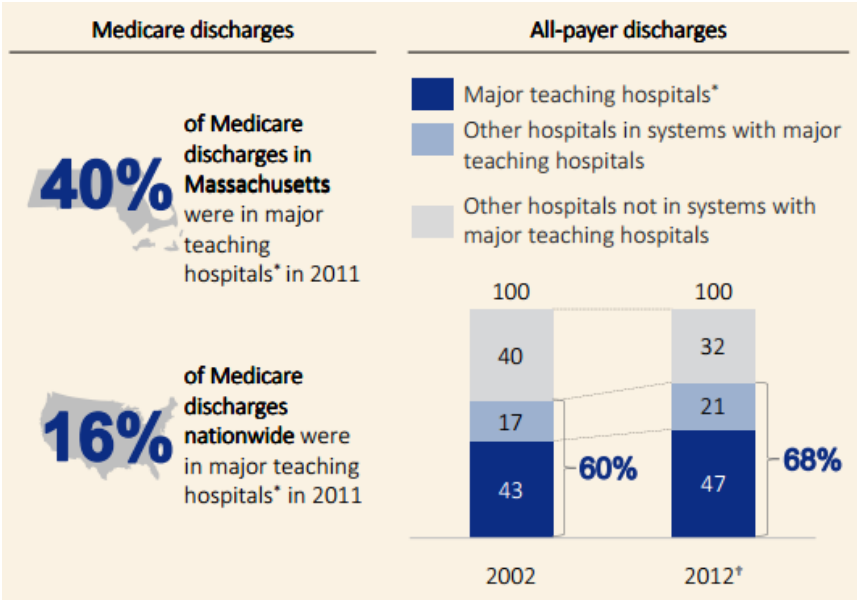
Private Expenses*	MA Rank
Motor vehicles	46
Durable household equipment	44
Gasoline & energy	44
Groceries	40
Restaurants	28
Housing & utilities	23
Health care	**18**
Recreation services	18
Transportation services	15
Total Personal Consumption	29

*MA ranked out of 50 states plus District of Columbia. Adjusted for per capita income. Data sources: FHC analysis of 2014 public expenditures data from the US Census Bureau, [19] adjusted for population and median income using data from the Bureau of Economic Analysis. [18] FHC analysis of 2014 per capita personal consumption expenditures data from the Bureau of Economic Analysis,[17] adjusted for median income using data from the Bureau of Economic Analysis.[18]

Health Care Utilization

- MA AMCs have higher prices, higher payments, and higher volume than other hospitals.[5,20,21,22]
- MA residents use AMCs more than the national average
  - MA major teaching hospitals (including AMCs) represented 40% of Medicare discharges, compared to national average of 16% [23]
  - In just 2 years, MA's 5 largest health systems (3 of which have AMCs) increased commercial inpatient share from 51% to 56% [24]
- MA has 4x more major teaching hospitals than average
  - In 2011, major teaching hospitals (including AMCs) represented 23% of acute hospitals in MA, compared to 5% of acute hospitals nationwide[23]

Discharges in Massachusetts hospital systems, 2002-2012
Percent of discharges



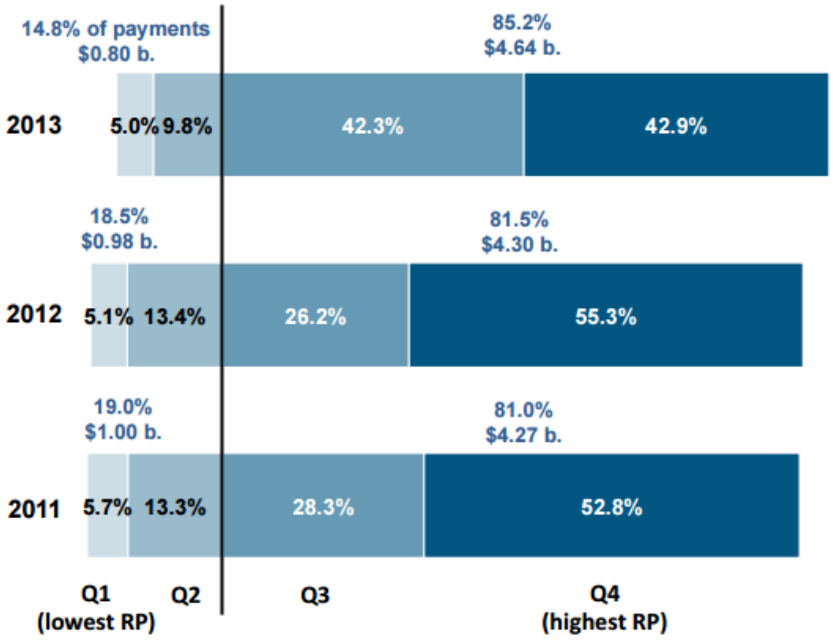
Reference: Health Policy Commission, 2013 Cost Trends Report. Figure 1.7. Available at: http://www.mass.gov/anf/docs/hpc/2013-cost-trends-report-full-report.pdf. Data source: CHIA; Medicare Payment Advisory Commission; HPC analysis. Major teaching hospitals are defined as those with at least 25 residents per 100 beds.

HARMFUL EFFECTS OF PROVIDER PRICE VARIATION IN MASSACHUSETTS

Harmful Effects of Provider Price Variation in MA

- Volume shifts to higher-priced providers
  - Higher-priced hospitals have high and growing shares of inpatient stays, outpatient visits, and revenue[2]
  - In 2014, 80.3% of commercial payments for acute hospitals went to higher-priced hospitals[5]
  - Higher-priced AMCs consistently hold the major share of total hospital payments (2010-2014)[4,5,21]
  - From 2011-2013, more than 80% of total physician group payments went to physician groups above the average relative price[5]
  - Since 2009, three acute hospitals have closed or converted to other health care uses due to financial strain[25,26,27,28]

Distribution of Physician Group Commercial Payments by Relative Price Quartile (2011-2013)



Reference: CHIA. Annual Report Series. Relative Price: Health Care Provider Price Variation in the Massachusetts Commercial Market (February 2016). Available at: http://www.chiamass.gov/assets/docs/r/pubs/16/relative-price-chartbook-2014.pdf.

Harmful Effects of Provider Price Variation in MA

- Price variation has contributed to increased health care spending[2]
- The recent proposed expansion of a major AMC (one of the highest-priced hospitals in the state) is likely to result in increased health care spending, due to predicted shifts in utilization away from lower-priced facilities and reduced market competition, according to the HPC[29]
- Low-income neighborhoods pay for people's health care in high-income neighborhoods[30]
- Premiums are not adjusted to reflect whether a consumer chooses between high- or low-priced providers – which may reduce consumers' incentives to make value-based health care decisions[30]
- Price variation has persisted despite years of reform efforts
- If current conditions remain as they are, provider price variation will most likely continue in the future[2,3,6]

Payment Disparities Expected to Persist

Effect of Increased Pharmacy Trend and Illustrative Provider Contractual Increases on "Allowed" Commercial Unit Price Trend for All Other Providers and Services under State Cost Growth Benchmark

Unit Price Increase Negotiated for Providers Comprising One Third of Non-Pharmacy TME	Unit Price Increase Remaining Under Benchmark for All Other Non-Pharmacy Providers and Services
1.0%	0.7%
2.0%	0.2%
3.0%	-0.3%

	Estimated % Commercial TME in 2014	Estimated Commercial Expenses in 2014	Total Assumptions for 2015		Benchmarked Commercial Expenses in 2015
			Utilization	Unit Price	
Prescription Drug Expenses	16.7%	$3.2 billion	12.5%		$3.6 billion
All Other Expenses	83.3%	$15.8 billion	1.0%	0.8%	$16.1 billion
Total Medical Expenses	100.0%	$18.9 billion	3.6% Benchmark		$19.6 billion

Source: MA AGO, *Examination of Health Care Cost Trends and Cost Drivers,* September 2015.

"In its current form the benchmark is being used as a tool to further entrench the current healthcare pricing disparities."

Tufts Medical Center pre-filed testimony for HPC's 2016 Cost Trends Hearing[31]

Payment Disparities Expected to Persist

- The cost growth benchmark may inadvertently widen the provider price gap
  - In order to maintain moderate price increases for higher-priced providers and still meet the benchmark, commercial payers must reduce their reimbursement rates to already low-priced providers.
- Updated for 2016's projected national pharmacy growth of 6.7%,[32] the effect is smaller than in 2015, but still the same: the gap between the higher- and lower-paid providers will worsen
- If higher-paid providers representing one-third of the market get price increases of as little as 2%, then lower-priced providers must fall further behind

Overall, Hospitals are Faring Better Financially than Health Plans

- On the whole, MA hospitals were profitable in 2015, with 80% reporting positive total margins[33]
  - Statewide median total margin across 65 hospitals in 2015 was 3.7%
  - Five out of six AMCs had positive margins
  - DSH hospitals had the highest median margins of any hospital cohort in 2015

Financial Performance of Acute Hospitals: Median Total Margin Trend by Cohort, FY2013 – FY2015

	FY13	FY14	FY15
Statewide Median	**4.1%**	**4.2%**	**3.7%**
AMC	4.6%	4.7%	2.4%
Teaching	7.6%	8.2%	4.2%
Community	3.6%	2.9%	3.0%
Community-DSH	3.7%	5.3%	5.4%

Reference: Adapted from Center for Health Information and Analysis. *Massachusetts Acute Hospital Financial Performance, Fiscal Year 2015* (August 2016). Available at: http://www.chiamass.gov/assets/Uploads/mass-hospital-financials/HFY15-Acute-Financial-Report.pdf.

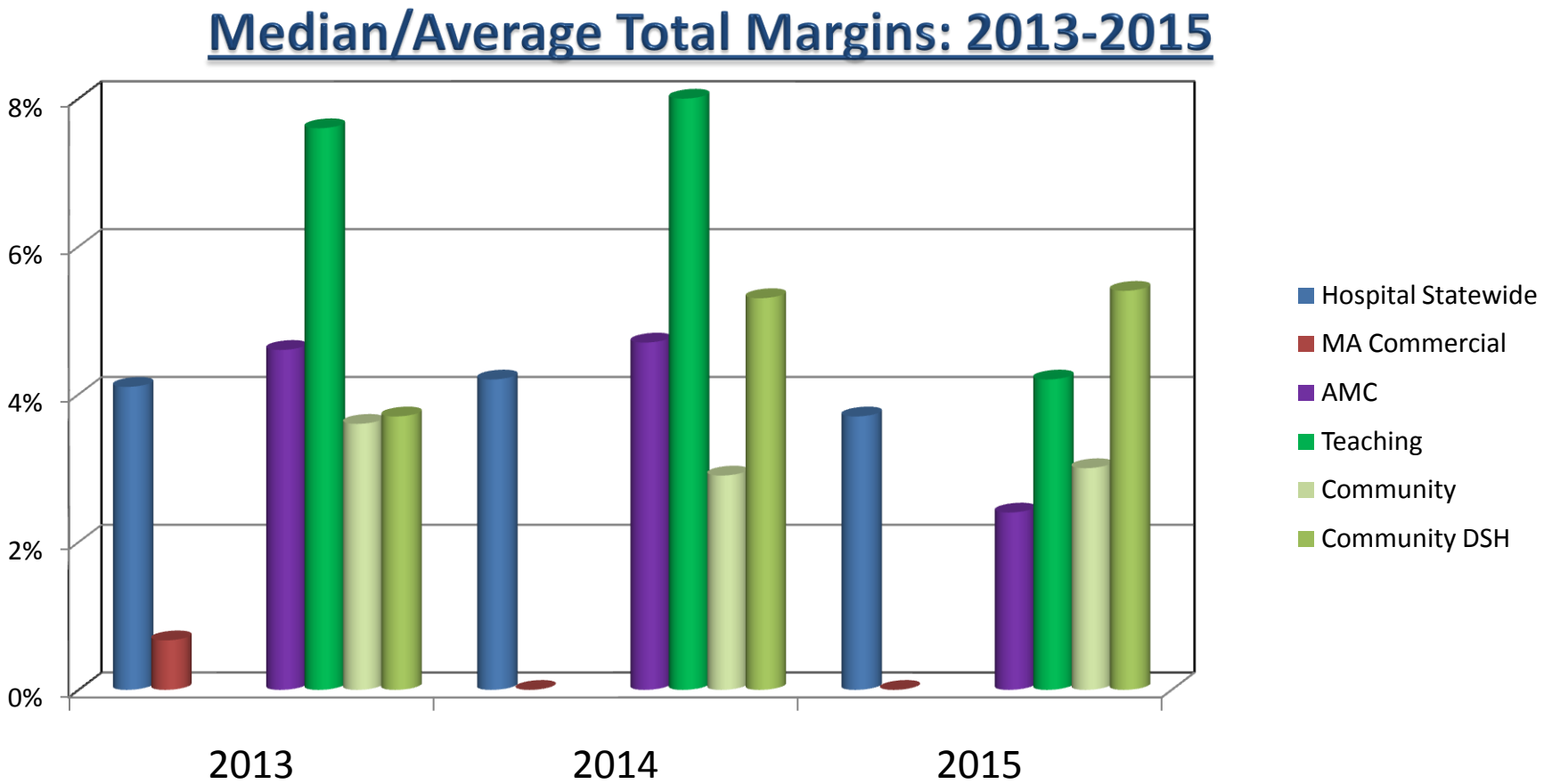
- Conversely, many MA health plans are struggling financially
  - Median total margin across 10 health plans in 2015 was -0.05%, down from 0.67% in 2013

Financial Performance of MA Commercial Health Plans: Median Total Margin Trend, FY2013 – FY2015

	FY13	FY14	FY15
Median Total Margin for MA Health Plans	**0.67%**	**-0.11%**	**-0.05%**

Reference: FHC analysis of statements filed with the MA Division of Insurance for MA commercial plans.

Overall, Hospitals are Faring Better Financially than Health Plans



Hospital Reference: Adapted from Center for Health Information and Analysis. *Massachusetts Acute Hospital Financial Performance, Fiscal Year 2015* (August 2016). Available at: http://www.chiamass.gov/assets/Uploads/mass-hospital-financials/HFY15-Acute-Financial-Report.pdf.
Health Plan Reference: FHC analysis of statements filed with the MA Division of Insurance for MA commercial plans.

Summary of Analysis

- Health care costs continue to exceed state benchmark, and to consume larger shares of public and personal spending
- Massachusetts has extremely high price variation compared to other states and markets
- Health care utilization and spending is concentrated among high-priced providers such as AMCs and dominant, high-paid community hospitals
- Price variation has not improved for hospitals and has worsened for physicians
- Projected pharmacy spending and moderate price increases for high-priced providers virtually ensures price variation will persist or worsen under the cost growth benchmark

Existing and potential approaches for addressing provider price variation in Massachusetts

INTERVENTION OPTIONS TO ADDRESS COSTS AND PRICE VARIATION

Interventions Implemented in MA Since the 2000s

- Demand-side interventions implemented over past decade
  - High-deductible health plans
  - Tiered networks
  - Narrow networks
- Supply-side interventions
  - Accountable Care Organizations (ACOs)
  - Alternative payment methodologies (APMs)

APM growth has stalled

Reference: Adapted from Center for Health Information and Analysis. *Performance of the Massachusetts Health Care System: Annual Report* (September 2016). Figure 5. Available at: http://www.chiamass.gov/assets/2016-annual-report/2016-Annual-Report.pdf.

Ineffectiveness of Market-Based Interventions in MA

- Four MA health care reform laws between 2006-2012
- MA recognized as national leader in both supply- and demand-side efforts
- Supply- and demand-side reforms have not managed to meet the cost benchmark, reduce provider price variation, or support lower-priced providers
- Residents across income spectrum continue to struggle with health costs[34]

Why Have Our Market-Based Efforts Failed?

- Attempted interventions assume that we are in a neo-classical economic market[35]
- Health care is a market like no other
  - Few services are truly "shoppable"
  - Majority of cost paid for persons who have exceeded their out of pocket maxima
  - Buyers usually have incomplete information to make informed purchasing decisions
  - Decisions about health care are often emotional and often urgent
- Supplementing market-based solutions with targeted regulatory action may be a needed catalyst for curbing health care costs and disparities

Potential Regulatory Solutions

- Short-term regulatory action could be successful in addressing health care spending in a way that market-based solutions have not
- Potential solutions include:
  - Expanded Performance Improvement Plan (PIP) authority
  - Pricing "guardrails" to bring rate convergence
  - Capping commercial payments at percentage of Medicare
  - Preventing inflationary behaviors, such as surprise billing by capping rates for out-of-network providers at network facilities
- These options are moderate alternatives to further regulation such as Maryland-type rate setting

Conclusion

- Despite years of effort, 4 reform laws, and more than 20 state reports, we have made limited progress in addressing high health care costs, no improvement of price variation, and have largely failed to remedy the market dynamics observed in Massachusetts
- We have missed the cost benchmark in 2014 and 2015, and anticipate missing the 2016 benchmark as well
- Market-driven solutions have limited ability to address prices, price variation and the volume shift to higher priced providers
- Short-term regulatory solutions would help catalyze improvements

References

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