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

Presentation to Provider Price Variation Commission
January 17, 2017
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\(^\text{15}\)
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\(^2,3\)

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

Since 2010, price variation has not improved, and evidence suggests that the price gap is growing wider\textsuperscript{2,3,6}

- From 2010-2014, highest-priced hospitals have consistently been 2.5 to 3.4 times more expensive than lowest-priced hospitals\textsuperscript{2}
- Price variation worsened among physician groups from 2009-2013\textsuperscript{2}

HPC and AGO have called for regulatory action to address price disparities\textsuperscript{2,3,6}

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

Yet Massachusetts’ high health care costs are harmful to residents and businesses

• Employee health care costs as a percentage of income keep growing

• MA employee premiums are 3rd most expensive (for both family and individual plans) in U.S.

• 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

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

“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

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.

High Provider Price Variation in MA

- MA has more price variation than other US markets
  - BCBS study on hip and knee replacements\textsuperscript{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\textsuperscript{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. Vaginal & caesarian deliveries, knee replacement, knee MRI & colonoscopy (not shown) by HRR. Adapted from Health Care Pricing Project using 2008-2011 data from HCCI.
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
Total budget (dollars in billions) and total real growth percentage, FY2004 – FY2014

Health Care Spending

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

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

- U.S. average = 10.1%
- Massachusetts average = 7.3%
- 38% below national average

Data source: Agency for Healthcare Research and Quality (AHRQ)

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

- US Average = 13.2%
- MA Average = 14.8%

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
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.

<table>
<thead>
<tr>
<th>Public Expenses*</th>
<th>MA Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health</td>
<td>50</td>
</tr>
<tr>
<td>Transportation</td>
<td>50</td>
</tr>
<tr>
<td>Government administration</td>
<td>46</td>
</tr>
<tr>
<td>Education</td>
<td>44</td>
</tr>
<tr>
<td>Public safety</td>
<td>40</td>
</tr>
<tr>
<td>Social service &amp; income maintenance</td>
<td>33</td>
</tr>
<tr>
<td>Environment &amp; housing</td>
<td>27</td>
</tr>
<tr>
<td>Utilities</td>
<td>21</td>
</tr>
<tr>
<td>Interest on debt</td>
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<tr>
<td>Total Expenditures</td>
<td>36</td>
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<table>
<thead>
<tr>
<th>Private Expenses*</th>
<th>MA Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicles</td>
<td>46</td>
</tr>
<tr>
<td>Durable household equipment</td>
<td>44</td>
</tr>
<tr>
<td>Gasoline &amp; energy</td>
<td>44</td>
</tr>
<tr>
<td>Groceries</td>
<td>40</td>
</tr>
<tr>
<td>Restaurants</td>
<td>28</td>
</tr>
<tr>
<td>Housing &amp; utilities</td>
<td>23</td>
</tr>
<tr>
<td>Health care</td>
<td>18</td>
</tr>
<tr>
<td>Recreation services</td>
<td>18</td>
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<tr>
<td>Transportation services</td>
<td>15</td>
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<tr>
<td>Total Personal Consumption</td>
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</table>

*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,\(^1\) adjusted for population and median income using data from the Bureau of Economic Analysis.\(^2\) FHC analysis of 2014 per capita personal consumption expenditures data from the Bureau of Economic Analysis,\(^3\) adjusted for median income using data from the Bureau of Economic Analysis.
Health Care Utilization

- MA AMCs have higher prices, higher payments, and higher volume than other hospitals.\textsuperscript{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% \textsuperscript{23}
  - In just 2 years, MA’s 5 largest health systems (3 of which have AMCs) increased commercial inpatient share from 51% to 56% \textsuperscript{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\textsuperscript{23}

**Discharges in Massachusetts hospital systems, 2002-2012**

Percent of discharges

<table>
<thead>
<tr>
<th>Medicare discharges</th>
<th>All-payer discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textsuperscript{40%} of Medicare discharges in Massachusetts were in major teaching hospitals\textsuperscript{*} in 2011</td>
<td>\textsuperscript{68%} of Medicare discharges nationwide were in major teaching hospitals\textsuperscript{*} in 2011</td>
</tr>
<tr>
<td>\textsuperscript{40%} of Medicare discharges in Massachusetts were in major teaching hospitals\textsuperscript{*} in 2011</td>
<td>\textsuperscript{60%} of Medicare discharges nationwide were in major teaching hospitals\textsuperscript{*} in 2011</td>
</tr>
</tbody>
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HARMFUL EFFECTS OF PROVIDER PRICE VARIATION IN MASSACHUSETTTS
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\(^25,26,27,28\)

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

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

### Table: 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

<table>
<thead>
<tr>
<th>Unit Price Increase Negotiated for Providers Comprising One Third of Non-Pharmacy TME</th>
<th>Unit Price Increase Remaining Under Benchmark for All Other Non-Pharmacy Providers and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>2.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>3.0%</td>
<td>-0.3%</td>
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### Table: Total Assumptions for 2015 and Benchmarked Commercial Expenses in 2015

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<tbody>
<tr>
<td>16.7%</td>
<td>$3.2 billion</td>
<td>12.5%</td>
<td>$3.6 billion</td>
<td></td>
</tr>
</tbody>
</table>

| All Other Expenses | 83.3% | $15.8 billion | 0.9% | $16.1 billion |

| Total Medical Expenses | 100.0% | $18.9 billion | 3.6% Benchmark | $19.6 billion |

“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
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%, 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

- 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

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

<table>
<thead>
<tr>
<th></th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide Median</td>
<td>4.1%</td>
<td>4.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>AMC</td>
<td>4.6%</td>
<td>4.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Teaching</td>
<td>7.6%</td>
<td>8.2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Community</td>
<td>3.6%</td>
<td>2.9%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Community-DSH</td>
<td>3.7%</td>
<td>5.3%</td>
<td>5.4%</td>
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<table>
<thead>
<tr>
<th></th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Total Margin for MA Health Plans</td>
<td>0.67%</td>
<td>-0.11%</td>
<td>-0.05%</td>
</tr>
</tbody>
</table>

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

Median/Average Total Margins: 2013-2015


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.
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)

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\(^3\)
Why Have Our Market-Based Efforts Failed?

- Attempted interventions assume that we are in a neo-classical economic market\textsuperscript{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


References


