



**Examination of Health Care Cost  
Trends and Cost Drivers**  
Pursuant to G.L. c. 118G, § 6½(b)

**Report for Annual Public Hearing**

March 16, 2010

**OFFICE OF ATTORNEY GENERAL MARTHA COAKLEY**  
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**I. EXECUTIVE SUMMARY**

The Office of the Attorney General (AGO) is pleased to submit this report on its examination of health care cost trends and cost drivers in the Massachusetts health care market. In 2008, the Massachusetts Legislature passed *An Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care*, which authorized the Attorney General to review and analyze the reasons why health care costs continue to increase faster than general inflation. Rising health care costs are a serious concern, and the AGO worked diligently to meet its statutory charge to identify, understand, and explain the reasons behind escalation of costs. This report reflects that work.

This report is designed to advance the analysis reflected in the AGO's Preliminary Report on Health Care Cost Trends and Cost Drivers, issued on January 29, 2010. Since issuing that report, the AGO has continued to refine its analysis and discuss its preliminary findings and conclusions with health providers, insurers, and other stakeholders. Those discussions have confirmed our initial analysis. This report also discloses limited nonpublic information received by the AGO in the course of its examination, as authorized by Chapter 118G. We determined that transparency of the health care market information contained in this report was vital to providing policymakers, stakeholders, and the public with the information necessary to develop successful cost containment initiatives.<sup>1</sup> We are pleased that so many health insurers and providers also appreciate the value of market transparency, and have submitted detailed information into the record of this Annual Public Hearing. Together, this information and the work of the AGO and Division of Health Care Finance and Policy have resulted in a powerful record.

Indeed, the wealth of information submitted in this Annual Public Hearing concerning how health care is paid for is unprecedented in Massachusetts, and unique in the nation. It likewise presents a unique opportunity. Full transparency in how our health care market works will enable the government and all stakeholders to chart a course toward health care that is both high quality and affordable.

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<sup>1</sup> Pursuant to the requirements of G.L. c. 118G, § 6½(b), the Attorney General has determined that disclosure of nonpublic information contained in this report will further the health care cost containment goals of the Commonwealth and should be made in the public interest, and is not outweighed by any privacy, trade secret, or anti-competitive considerations.

This Executive Summary explains how the AGO approached its examination of health cost drivers, highlights the AGO’s principal findings that resulted from its review and analysis, and identifies the implications of those findings for policy efforts aimed at restraining costs while maintaining access to quality health services.

## **The Challenge of Rising Health Care Costs**

Whether measured by what employers and consumers pay in health insurance premiums, what insurers pay to doctors and hospitals for services, or society’s overall health care expenditures, the costs of health care have risen significantly. These cost increases consistently outpace growth in the economy, gross domestic production (GDP), and wages. Such increases, if unchecked, threaten the financial ability of employers and individuals to pay for health insurance, which could ultimately pose a risk to the Commonwealth’s historic gains in health care access.

Massachusetts is a national leader in health care. In the Commonwealth, we benefit from highly ranked health plans, physicians, and hospitals, and we have enacted market reforms that protect access to health care and are a national model. As a result of Chapter 58 of the Acts of 2006, *An Act Providing Access to Affordable, Quality, Accountable Health Care*, Massachusetts has expanded coverage to 97% of the population through the shared responsibility of individuals and employers. As we acknowledge the strengths of the Massachusetts health care system, however, we cannot afford to ignore the risks posed by unsustainable cost escalation.

## **Understanding How Health Care “Prices” Are Set**

The Legislature instructed the AGO to examine cost drivers in the Massachusetts health care market. As a starting point, it was essential to understand how prices are established for health services. In Massachusetts, where insurance coverage is mandated, the cost of health care to individuals (or their employers who provide or subsidize health insurance) is reflected in the cost of health insurance premiums paid to a health insurer. These premium costs have risen significantly, mainly because of increases in prices insurers have negotiated in numerous contracts with health care providers for services.<sup>2</sup>

Because prices result from many separate contract negotiations, the prices paid by insurers to providers vary. Historically, there has been little or no transparency with respect to prices paid by insurers to providers. Because prices are established by private contract, providers do not necessarily know how their prices compare to other providers, and insurers do not necessarily know how the prices they pay compare to other insurers. Perhaps more important to the market as a whole, the businesses and individuals who pay health insurance premiums have little or no information on the price paid to a provider for a given service, how those prices are

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<sup>2</sup> This describes the way prices are established in the private, or “commercial,” market for insurance. This report, and the AGO’s examination, concern only that commercial market, and do not concern prices paid by government payers, namely Medicare and Medicaid. The government payer market undeniably is an important part of the Massachusetts health care market. However, the central question examined in this report – identifying and seeking to explain wide price variations – is not posed with respect to government paid prices. Those government prices are established by regulators and, though interested persons debate the adequacy of those prices, the process for establishing government prices is public and transparent.

determined, how and why prices may vary among providers, or the effect of increased prices on their premium rates.

This report begins to bring transparency to the prices paid for health care in order to provide an informational baseline for the discussion of how to contain health care costs. We first examined how negotiations between insurers and providers have resulted in disparate prices for health care services, and then we examined the basis for disparate prices paid for the same type of services.

On the first point, the prices paid to providers are the result of many discrete negotiations. Each insurer negotiates a “price” with each hospital and large physician group in its network. The AGO reviewed scores of insurer-provider contracts and financial data to learn the prices paid and the bundle of contract rights that attach to those payments. Among other findings, this report describes the wide variation in prices paid by insurers to providers for the same or similar services.

The next, more challenging task was to learn what drove those negotiations, and what ultimately explained the variation in prices paid. This analysis was both qualitative and quantitative: we spoke to the parties who negotiated the contracts, and we analyzed data that might help explain disparate prices. Our overarching inquiry was to determine whether the differences in prices paid could be explained by a difference in measurable “value.” For instance, in a market that works well, one could expect that a higher price could be explained by some characteristic such as better quality, increased complexity of services provided, or some other rational explanation justifying a higher price. In this report, we refer to a “value-based” system as one where differences in price paid can be explained by something that consumers value (such as superior quality or high complexity), or perhaps that society values (such as serving a needy population or training new doctors). Especially in the health care market, where rising costs pose a risk to the Commonwealth’s mission of universal access, it is both reasonable and important to strive for a value-based system.

### **Summary of Findings**

Our examination identified several factors that we believe should be considered when analyzing cost drivers and pursuing cost containment. We found:

- A. Prices paid by health insurers to hospitals and physician groups vary significantly within the same geographic area and amongst providers offering similar levels of service.
- B. Price variations are not correlated to (1) quality of care, (2) the sickness of the population served or complexity of the services provided, (3) the extent to which a provider cares for a large portion of patients on Medicare or Medicaid, or (4) whether a provider is an academic teaching or research facility. Moreover, (5) price variations are not adequately explained by differences in hospital costs of delivering similar services at similar facilities.

- C. Price variations are correlated to market leverage as measured by the relative market position of the hospital or provider group compared with other hospitals or provider groups within a geographic region or within a group of academic medical centers.
- D. Variation in total medical expenses on a per member per month basis is not correlated to the methodology used to pay for health care, with total medical expenses sometimes higher for risk-sharing providers than for providers paid on a fee-for-service basis.
- E. Price increases, not increases in utilization, caused most of the increases in health care costs during the past few years in Massachusetts.
- F. Higher priced hospitals are gaining market share at the expense of lower priced hospitals, which are losing volume.
- G. The commercial health care marketplace has been distorted by contracting practices that reinforce and perpetuate disparities in pricing.

Each of these findings is detailed in the report.

### **Implications of These Findings for Cost Containment**

These findings have meaningful implications for efforts to control health care costs. One threshold question is whether we can expect the existing health care market in Massachusetts to successfully contain health care costs. To date, the answer is an unequivocal “no.” The market players – whether insurers, providers, or the businesses and consumers who pay for health insurance – have not effectively controlled costs in recent years. If we accept that our health care system can be improved by better aligning payment incentives and controlling cost growth, then we must begin to shift how we purchase health care to align payments with “value,” measured by those factors the health care market should justly reward, such as better quality.

Until now, only insurers have been privy to information on price differences and total medical expenses across their entire network. Insurers are in the best position to align price with quality, complexity, or other rational values.

Health care providers have much less information on a network-wide basis and naturally focus on their own delivery of health care services. Although hospitals in Massachusetts are predominantly not-for-profit, because they are mission-driven to provide high quality health care, they seek to increase their volume and prices to increase their resources to provide those services.

Those who purchase health insurance – the businesses and individuals subject to ever-increasing premiums – should care deeply about controlling costs. But the current market is not well aligned to promote cost containment. Insurance buyers have little information on prices paid and the reasons behind price disparities; nor do consumers generally have sufficient information, insurance product options, or incentives to make value-based health care decisions. The increased transparency about pricing and health care cost drivers reflected in this report is an

important starting point to empower consumers in cost containment efforts. Such informational tools can only make a difference, however, if health insurance buyers seriously engage in the process of cost containment. We as health care consumers cannot demand that costs stabilize without recognizing our role in the health care market. It is essential that businesses and consumers be engaged in efforts to promote a value-based health care market. Without the participation of all market players, the goal of cost containment is unlikely to be attained.

### **Moving Forward on Cost Containment**

The market dynamics and distortions reflected in this report should be considered as the Commonwealth and market participants pursue strategies to contain health care costs. Based on our review and analysis, we recommend:

1. Increasing transparency and standardization in both health care payment and health care quality to promote market effectiveness and value-based purchasing by employers and consumers, including:
  - Tracking and publishing total medical expenses (TME) for all providers;
  - Promoting uniform quality measurement and reporting; and
  - Promoting standardization of units of payment and other administrative processes;
2. Consideration of steps to improve market function, including:
  - Adopting payment reform measures that account for and do not exacerbate existing market dynamics and distortions;
  - Developing legislative or regulatory proposals to mitigate health care market dysfunction and price disparities;
3. Engaging all participants in the development of a value-based health care market by promoting creation of insurance products and decision-making tools that allow and encourage employers and consumers to make prudent health care decisions;
4. Prompt consideration of legislative or administrative action to discourage or prohibit insurer-provider contract provisions that perpetuate market disparities and inhibit product innovation.

The Office of the Attorney General looks forward to collaborating with the Legislature, policymakers, insurers, hospitals, all other health care providers, businesses, municipalities, and consumers in promoting a value-based health care market that controls future health care cost growth while maintaining quality and access. We will strive to illuminate facts about the Massachusetts health care market that should be considered as those efforts proceed.

## **II. OFFICE OF THE ATTORNEY GENERAL'S REVIEW UNDER § 6½(b)**

### **A. Statutory Authority**

The Legislature, through Section 24 of Chapter 305 of the Acts of 2008, *An Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care*, directed the Division of Health Care Finance and Policy (DHCFP) to hold annual public hearings “concerning health care provider and private and public health care payer costs and cost trends, with particular attention to factors that contribute to cost growth within the commonwealth’s health care system and to the relationship between provider costs and payer premium rates.” The statute authorizes the Attorney General to intervene in these hearings and, with specific authority to compel the production of information from payers and providers, to examine the factors that contribute to health care cost growth and the relationship between provider costs and payer premium rates.<sup>3</sup>

### **B. Goals of the AGO Review**

To fulfill her responsibility under the statute, the Attorney General directed her Health Care Division to conduct a thorough review of how health care is paid for in the Commonwealth, focusing in particular on commercial health plan payments to health care providers. Through our review, we sought to understand how commercial health insurance companies (referred to as “insurers,” “health plans,” or “payers”) and health care providers (e.g., hospitals, physician groups) contract, how insurers measure and evaluate the quality of providers, and how insurers and providers negotiate payment rates. In particular, we sought to determine whether the contracting process ultimately supports or impedes the delivery of quality health care at an affordable price.

### **C. Information Gathered and Reviewed**

Beginning in April of 2009, the AGO issued civil investigative demands (CIDs) pursuant to § 6½(b) to five major Massachusetts health plans as well as to fifteen providers representing a geographical cross-section of academic medical centers, community and disproportionate share hospitals,<sup>4</sup> physician groups, and an ancillary service provider. The information we gathered

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<sup>3</sup> G.L. c. 118G, §6½(b) provides:

The attorney general may review and analyze any information submitted to the division under section 6 and 6A. The attorney general may require that any provider or payer produce documents and testimony under oath related to health care costs and cost trends or documents that the attorney general deems necessary to evaluate factors that contribute to cost growth within the commonwealth’s health care system and to the relationship between provider costs and payer premium rates. The attorney general shall keep confidential all nonpublic information and documents obtained under this section and shall not disclose such information or documents to any person without the consent of the provider or payer that produced the information or documents except in a public hearing under this section, a rate hearing before the division of insurance, or in a case brought by the attorney general, if the attorney general believes that such disclosure will promote the health care cost containment goals of the commonwealth and that such disclosure should be made in the public interest after taking into account any privacy, trade secret or anti-competitive considerations. Such confidential information and documents shall not be public records and shall be exempt from disclosure under section 10 of chapter 66.

<sup>4</sup> The Division of Health Care Finance and Policy (DHCFP) defines “disproportionate share hospitals” (DSHs) as those hospitals with a large percentage (63% or more) of patient charges attributed to Medicare, Medicaid, other

pursuant to the CIDs includes contract documents, financial and operational strategy documents, as well as detailed cost and quality data discussed in this report.

In addition, we conducted more than three dozen interviews and meetings with providers, insurers, health care experts, consumer advocates, and other key stakeholders. To assist in its review, the AGO engaged consultants with extensive experience in the Massachusetts health care market, including an actuary and experts in the areas of health care quality measurement and evaluation, and insurer-provider contracting.

We focused on documents and information reflecting how Massachusetts health plans and providers assess cost and quality and, in particular, how they compare payment rates and evaluate quality performance. Our goal was not to independently assess whether a provider is “good quality” or “poor quality” (and we make no such judgments in this report), but to determine how the market participants themselves approach these questions. We sought to assess the current functioning of the health care marketplace and, specifically, whether insurers and providers are engaged in “value-based” contract negotiations that pay providers based on the quality and complexity of the services being delivered.

## **1. Health Care Pricing and Cost Data**

We obtained and analyzed detailed information from health plans and providers regarding: (a) price – the rate at which health plans pay providers for each health care service, (b) total medical expenses – the per member per month medical spending attributed to each member’s primary care provider or provider group, and (c) unit cost – the cost to a health care provider to deliver particular health care services.

### **a. Price**

Price is the contractually negotiated amount (or reimbursement rate) that an insurer agrees to pay a particular hospital or health care provider for health care services. This is the “price tag” that a given insurer has agreed it will pay each time one of its members incurs a covered expense.

We obtained detailed information from the major health plans on comparative pricing for the Massachusetts hospitals and affiliated physician groups in each plan’s network. While the comparison of prices for specific services or procedures may be useful for consumers,<sup>5</sup> analysis of the entire payment rate structure more accurately reflects the way health plans and providers negotiate and set prices.

Typically, major health plans and hospitals negotiate prices for inpatient health care services using a base case rate. The base case rate represents a severity-neutral base price that is then adjusted by a set of standard “weights” that reflect the complexity of each case and may be

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government payers, and free care. DHCFP defines “teaching hospitals” according to the Medicare Payment Advisory Commission’s (MedPAC) definition of a major teaching hospital: At least 25 fulltime equivalent medical school residents per one hundred inpatient beds.

<sup>5</sup> See the Health Care Quality and Cost Council’s website: <http://www.mass.gov/myhealthcareoptions>.

further modified if the case becomes atypical or an “outlier.” Additional prices are negotiated for a limited set of other inpatient services such as very high-cost or experimental procedures. For hospital outpatient services, health plans have established standard fee schedules (e.g., standard fees are set for radiology, laboratory work, observation, behavioral health). The plans and hospitals negotiate a specific multiplier to each of these standard fees; for example, a provider with a 1.2 multiplier for radiology services would be paid 120% of the standard fee schedule rate for covered radiology services. Similarly, physicians and plans typically negotiate a multiplier to be applied to each plan’s standard fee schedule for professional services.<sup>6</sup>

In response to our CIDs, health plans provided detailed information regarding the variation in prices in their networks. Two major health plans provided information on the variation in payments made to each hospital and physician group in their network, as compared to the network-wide average, with no additional calculation required on our part. These plans calculated a “payment relativity factor” taking into account volume, product mix, service mix, and other factors particular to a hospital or physician group’s payment history. Both plans adjusted their hospital inpatient payments to account for differences in the sickness of the patients served at that hospital and the complexity of the services provided. The information provided by these two health plans allowed us to measure the variation in hospital and physician payments in each health plan’s network.

Another major health plan provided us with detailed information on hospital inpatient and outpatient prices, rather than information on relative payments. Unlike payment information, price information does not reflect volume, product mix, service mix, or other factors particular to a provider’s payment history. With this price information, we were able to calculate the relative price paid to each hospital for the same basket of services by weighting each hospital’s inpatient and outpatient prices by the health plan’s network-wide average mix of inpatient and outpatient services. Since this approach controls for differentiating factors such as volume, product mix, and service mix, we were able to compare the “pure price” that insurers negotiate with different hospitals for all inpatient and outpatient services. This health plan also provided us with detailed information on relative prices for all primary and multispecialty care physician groups in its Massachusetts network, which allowed us to measure the variation in prices that this plan has negotiated with the physicians in its network.

## **b. Total Medical Expenses**

In addition to price and payment information, health plans track the total medical expenses (TME) incurred for each health plan member back to that member’s primary care provider or provider group. TME is expressed as a “per member per month” dollar figure based on allowed claims. TME accounts for *all* of the medical expenses associated with a member regardless of where those expenses are incurred (i.e., it includes physician visits as well as all hospital, laboratory, imaging, and other services, wherever those services occur). As such, TME reflects both the volume of services used by each member (utilization), as well as the price paid for each service (unit price).

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<sup>6</sup> Our analysis accounts for variations in units of payment, such as payments based on per diems or a percent of charges, where possible based on data received.

Two health plans provided us with data comparing the TME of different provider groups in their respective networks based on claims data for more than one million Massachusetts members.<sup>7</sup> As is industry practice, the health plans adjusted their TME data with standardized health status scores to account for the demographics and sickness of the populations cared for by each provider group. This enables an “apples-to-apples” comparison of relative spending per patient, and ensures that groups caring for a sicker population will not inaccurately appear as higher spending solely for that reason.

### **c. Unit Cost**

In addition to price, payment, and total medical expense information, we obtained detailed information from a number of hospitals regarding their internal costs for inpatient services as tracked through their own cost-accounting systems. Hospitals typically track their inpatient costs by 500 or more diagnostic related groups (DRGs), and break out the costs associated with each admission or discharge by the direct costs (such as the labor, equipment, and materials used directly in the patient’s medical care), and indirect costs (such as any teaching that the hospital engages in as part of its mission, or the salaries of its management staff that are not attributable to any one admission or discharge). We also obtained some providers’ internal analyses that compare certain hospital costs on a case mix adjusted discharge basis, and examined hospital unit cost information collected by DHCFP that is publicly available on the Executive Office of Health and Human Services’ website.<sup>8</sup>

## **2. Quality Data**

We reviewed numerous quality measures that assess the performance of hospitals and physician groups. First, we obtained data collected by health plans using their own aggregate measures of quality for both physicians and hospitals. While we found that each health plan takes a unique approach to evaluating provider quality, the major plans generally select quality measures from national government and non-profit organizations that are well-vetted and widely accepted, including: Centers for Medicare and Medicaid Services (CMS); Agency for Healthcare Research & Quality (AHRQ); National Committee for Quality Assurance’s Healthcare Effectiveness Data and Information Set (HEDIS); Massachusetts Health Quality Partners (MHQP); and the Leapfrog Group. Second, we examined publicly reported quality measures and results for Massachusetts hospitals and physicians, including Massachusetts Data Analysis Center (Mass-DAC) data and CMS measures of patient experience and hospital performance.

We have learned that different health plans and providers view different quality measures more or less favorably for a variety of reasons. We do not reach any conclusions regarding the

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<sup>7</sup> While TME can only be calculated for HMO and point of service (POS) members, whose expenses can be attributed to a particular primary care provider, the large numbers of patients insured under HMO and POS products in Massachusetts means that TME is a useful metric for comparing the varying levels of expenses incurred by different provider groups per patient.

<sup>8</sup> See HSD10, available at [http://www.mass.gov/?pageID=eohhs2terminal&L=6&L0=Home&L1=Researcher&L2=Physical+Health+and+Treatment&L3=Health+Care+Delivery+System&L4=DHCfp+Data+Resources&L5=Hospital+Summary+Utilization+Data&sid=Eeohhs2&b=terminalcontent&f=dhcfp\\_researcher\\_hsudf\\_hsudf\\_08&csid=Eeohhs2](http://www.mass.gov/?pageID=eohhs2terminal&L=6&L0=Home&L1=Researcher&L2=Physical+Health+and+Treatment&L3=Health+Care+Delivery+System&L4=DHCfp+Data+Resources&L5=Hospital+Summary+Utilization+Data&sid=Eeohhs2&b=terminalcontent&f=dhcfp_researcher_hsudf_hsudf_08&csid=Eeohhs2).

accuracy, statistical significance, or appropriateness of the quality measures we reviewed. Rather, our focus was to identify the quality measures that health plans use and to then determine whether those measures influence contract negotiations such that prices paid to health care providers correlate positively with quality as measured by those health plans. In other words, we sought to gauge whether health plans paid more to providers who provide higher quality care, as measured by the health plans themselves.

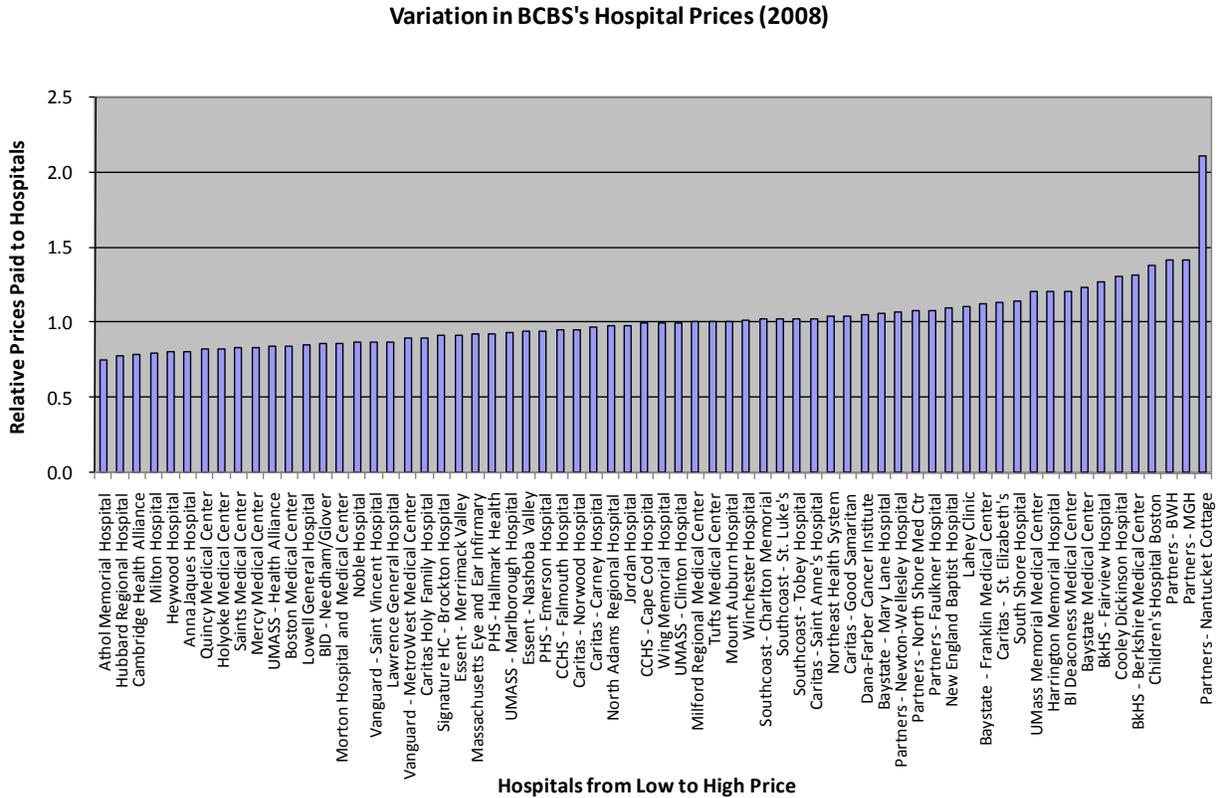
### III. FINDINGS

#### A. Prices paid by health insurance companies to hospitals and physician groups vary significantly within the same geographic area and amongst providers offering similar levels of service.

Health insurers in Massachusetts pay health care providers at significantly different levels. As shown below, the difference in prices paid to the lowest paid provider versus the highest paid provider can exceed 100% (i.e., the highest paid provider can be paid more than twice the rate of the lowest paid provider). We found wide disparities in both prices and payments.

##### 1. Variation in Hospital Prices

The following graph shows the variation in prices paid by one major insurer to Massachusetts hospitals for the same market basket of services.

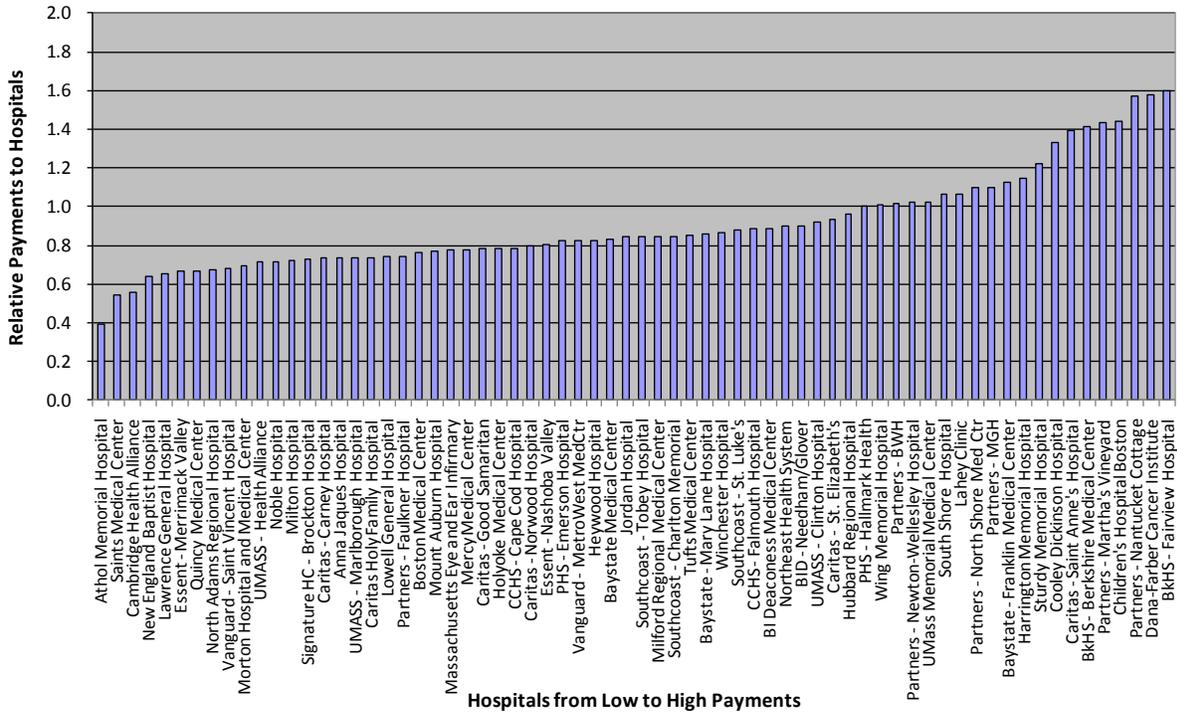


NOTE: Payments made to hospitals on a discount-off-of-charges basis are not reflected in this graph.

There is roughly a 90% difference in the price this insurer pays to the lowest paid hospital in its network and the price it pays to the *second* highest paid hospital (relative prices of about 0.75 v. 1.4).<sup>9</sup>

The next two graphs show the variation in payments made by two major insurers to hospitals in Massachusetts, taking into account volume, product mix, service mix, and other factors particular to each hospital's payment history.

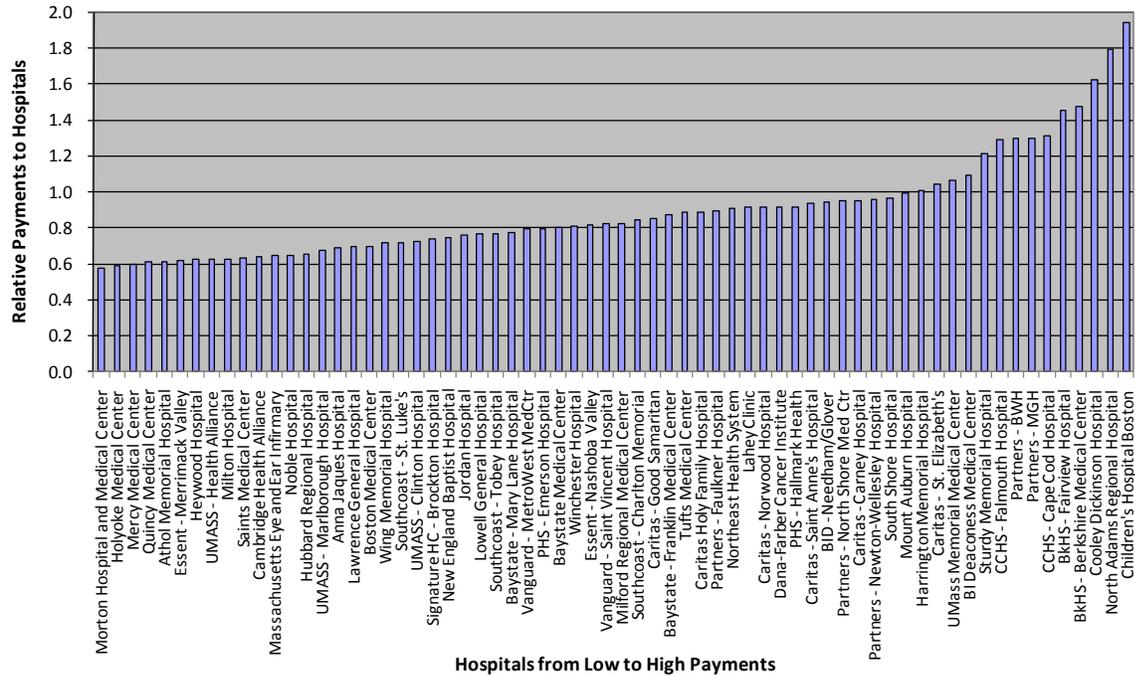
**Variation in HPHC's Hospital Payments (2008)**



The difference in payments made to the lowest paid versus highest paid hospital in this insurer's network exceeds 300% (relative payments ranging from just under 0.4 to 1.6).

<sup>9</sup> The price differential is about 180% between the lowest and very highest paid hospital, which is a community hospital with negotiated prices that appear to be significantly higher than all other hospitals.

Variation in THP's Hospital Payments (2008)

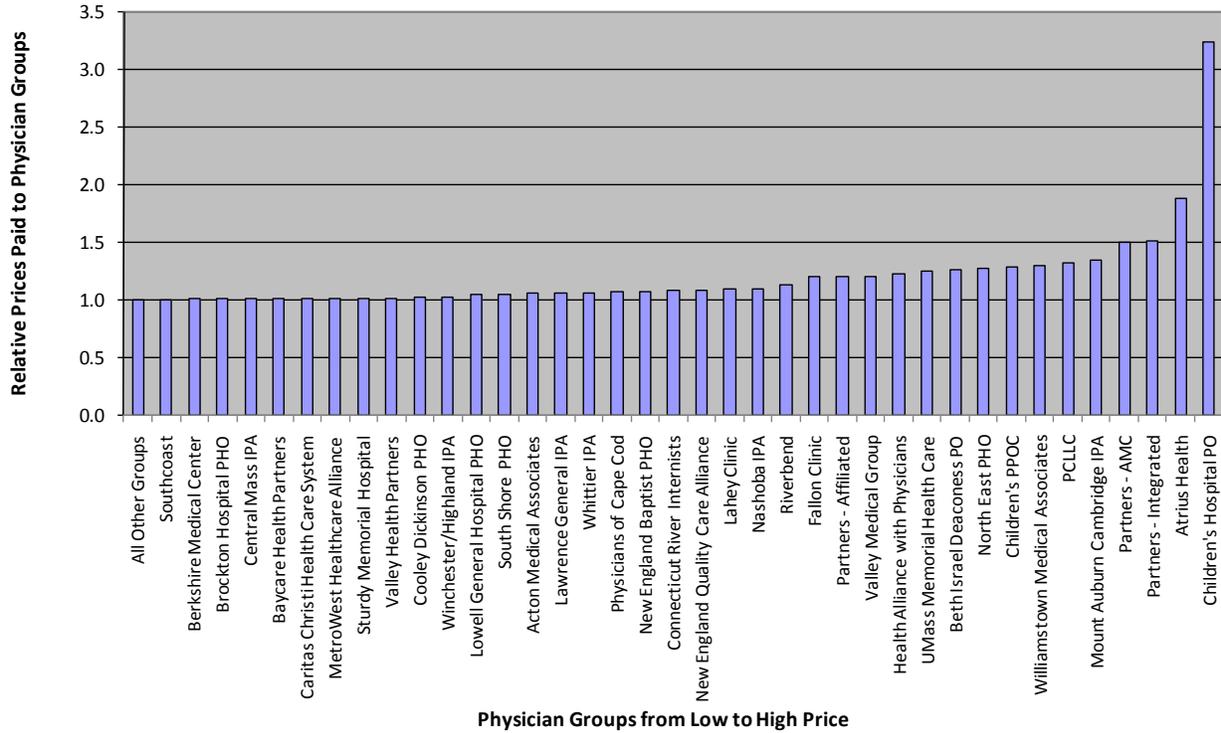


The difference in payments made to the lowest paid versus highest paid hospital in this insurer's network is about 240% (relative payments ranging from just under 0.6 to almost 2.0).

## 2. Variation in Physician Prices

This next graph shows the significant variation in prices paid by one major insurer to the physician groups in its network.

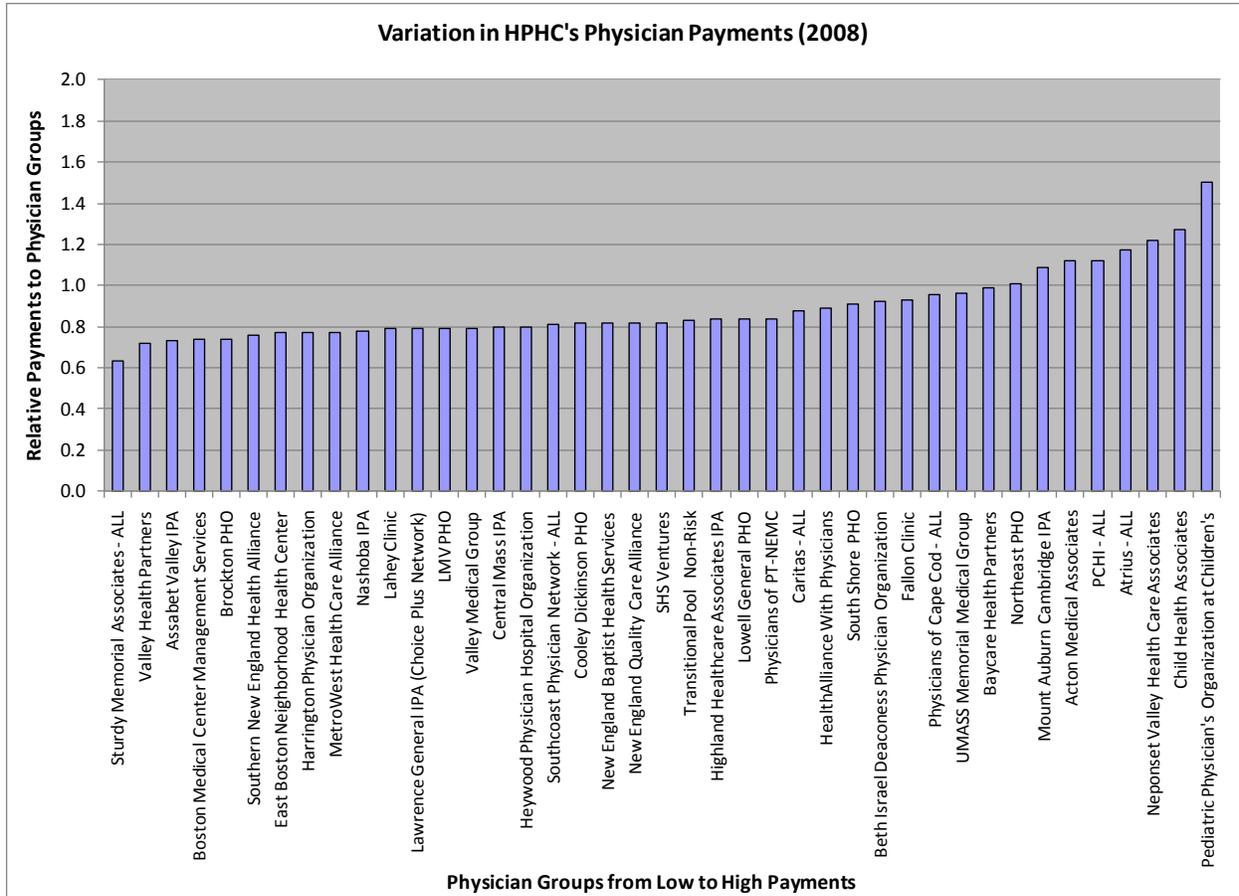
### Variation in BCBS's Physician Prices (2008)



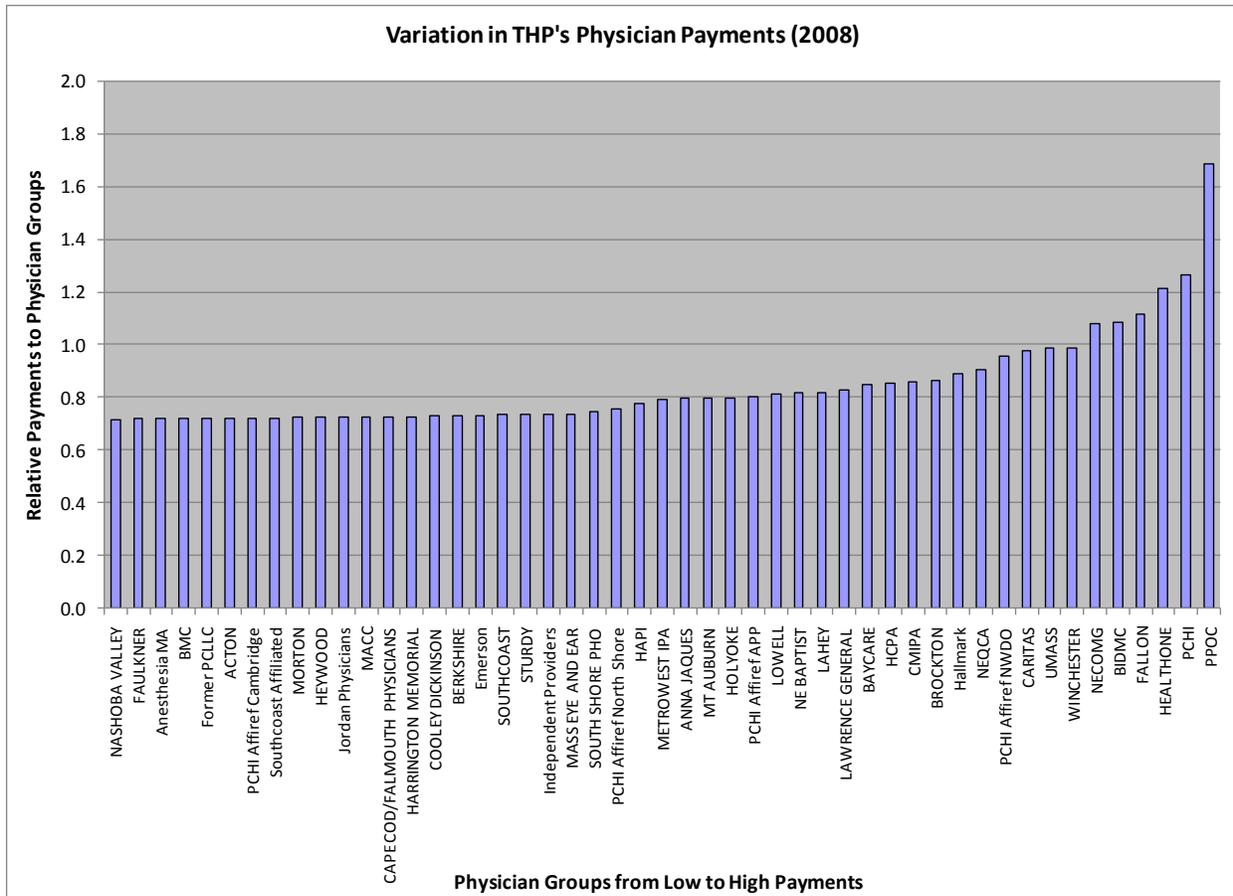
NOTE: Data from Blue Cross Blue Shield’s supplemental written testimony for the Annual Public Hearing, available at [http://www.mass.gov/Eeohhs2/docs/dhcfp/cost\\_trend\\_docs/testimony\\_bcbs\\_supplemental.pdf](http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/testimony_bcbs_supplemental.pdf) (p. 9).

The difference in prices this insurer pays its lowest paid groups (“All Other Groups” at far left of graph) and its second highest paid group is about 90% (1.0 v. 1.89). The price of the very highest paid group (3.24) is 224% higher than the price of the lowest paid groups (1.0).

The next two graphs show the significant variation in payments made by two major insurers to physician groups in Massachusetts, taking into account volume and other factors particular to each group’s payment history.



The difference in payments made to the lowest paid physician group versus the highest paid physician group in this insurer's network exceeds 130% (relative payments ranging from just over 0.6 to 1.5).



NOTE: Graph does not show groups with less than \$1 million in amounts allowed in 2008 (the contracted amount the provider receives for its services, which includes the portions paid by both the insurer and the consumer). The groups shown represent 95.8% of the allowed dollars in THP's network in 2008.

The difference in payments made to the lowest paid physician group versus the highest paid physician group in this insurer's network exceeds 130% (relative payments ranging from about 0.7 to 1.7).

This comparative price information and comparative payment information show the same results: Insurers are paying hospitals and physician groups in their networks at widely varying levels.

### 3. Continuing Variation in Prices

We found wide variation in hospital and physician prices that persist in our current health care market. The table below shows that the difference in prices paid by one major insurer to Massachusetts hospitals from 2004 to 2008 decreased modestly from 103% in 2004 to 80% in 2008.<sup>10</sup>

<sup>10</sup> This table, available at [http://www.mass.gov/Eeohhs2/docs/dhcfp/cost\\_trend\\_docs/testimony\\_BCBSMA\\_AG.pdf](http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/testimony_BCBSMA_AG.pdf) (p. 21), was calculated for hospitals that are paid through inpatient base case rates and outpatient fee schedules. It does not include hospital services that are paid for on a discount-off-of charges basis, or through some other method.

**Range of Payments for Acute Care Hospitals Paid on BCBSMA DRGs and Outpatient Fee Schedules**

	All Products Blended IP/OP*	
	Low	High
FY04	1.00	2.03
FY05	1.00	1.99
FY06	1.00	1.89
FY07	1.00	1.84
FY08	1.00	1.80

\*1.0 = Lowest rate in network for that service category and that product

\*2004 All Products category [reflects] inpatient only

From 2004 to 2008, the variation in prices paid to physician groups in this insurer’s network widened, with the difference in prices paid to the lowest paid versus highest paid group increasing from 102% in FY2004 to 230% in FY2008.

**Range of Payments for Large Physician Groups**

	All Products	
	Low	High
FY04	1.00	2.02
FY05	1.00	2.57
FY06	1.00	2.91
FY07	1.00	3.18
FY08	1.00	3.30

\*1.0 = Network Fee Schedule

As the above tables show, insurer and provider contract negotiations continue to produce prices for hospitals and physician groups that vary widely. Because of these existing wide variations, even if hospitals and physician groups were held to identical rate increases going forward, prices disparities would remain and, in fact, the price gap would grow over time.

**B. Price variations are not correlated to (1) quality of care, (2) the sickness of the population served or complexity of the services provided, (3) the extent to which a provider cares for a large portion of patients on Medicare or Medicaid, or (4) whether a provider is an academic teaching or research facility. Moreover, (5) price variations are not adequately explained by differences in hospital costs of delivering similar services at similar facilities.**

**1. Wide disparities in price are not explained by differences in quality of care**

Wide variations in price are unexplained by differences in quality of care as measured by the insurers themselves. We compared price and quality data using dozens of graphs and statistical calculations to determine whether there is a correlation between price paid and quality measured. These graphs include comparisons of physician and hospital prices to insurers’ own

overall quality and mortality scores for those providers, as well as to process and patient experience scores publicly available through the Center for Medicare and Medicaid Services (CMS).

Our results indicate that there is no correlation between price and quality, and certainly not the positive correlation between price and quality we would expect to see in a rational, value-based health care market. We interviewed numerous providers and insurers who confirm that there is no correlation between price paid to providers and the quality of the providers' services.

Our review also shows that providers in Massachusetts deliver excellent care with little material variation in the quality of care delivered. For example, the quality review undertaken at the Massachusetts Data Analysis Center (Mass-DAC) is considered to be among the most rigorous in its field, relying on individual medical record review and state-of-the-art risk adjustment. For the past four years, all 14 hospitals evaluated by Mass-DAC on coronary artery bypass surgery (CABG) have been statistically identical. In 2008, Mass-DAC results also show no statistical differences among hospitals for percutaneous coronary intervention (PCI). Other measures that we examined, such as CMS process measures and BCBS Healthcare Effectiveness Data and Information Set (HEDIS) scores,<sup>11</sup> show the same trend: little variation in the measured quality performance of providers, and high quality care from all providers. While there are nuanced differences in provider quality measures, and room for improvement in certain areas of performance, our review does not suggest that any provider is consistently better or worse quality than any other.

Insurers track price, relative payments, and total medical expenses (TME). They also measure the quality performance of providers in their networks. Yet they do not pay providers based on the differences in performance that they measure, and they are aware that providers they measure as high quality are often paid at a lower level than providers they measure as poor quality.<sup>12</sup>

## **2. Wide disparities in prices and total medical expenses are not explained by the relative sickness of the population being served or the complexity of the care provided**

### **a. Hospitals**

We have found that the prices paid to hospitals do not correlate to the acuity or complexity of the cases handled by the hospital as measured by the hospital case mix index (CMI), which is calculated for each hospital in Massachusetts by the Division of Health Care

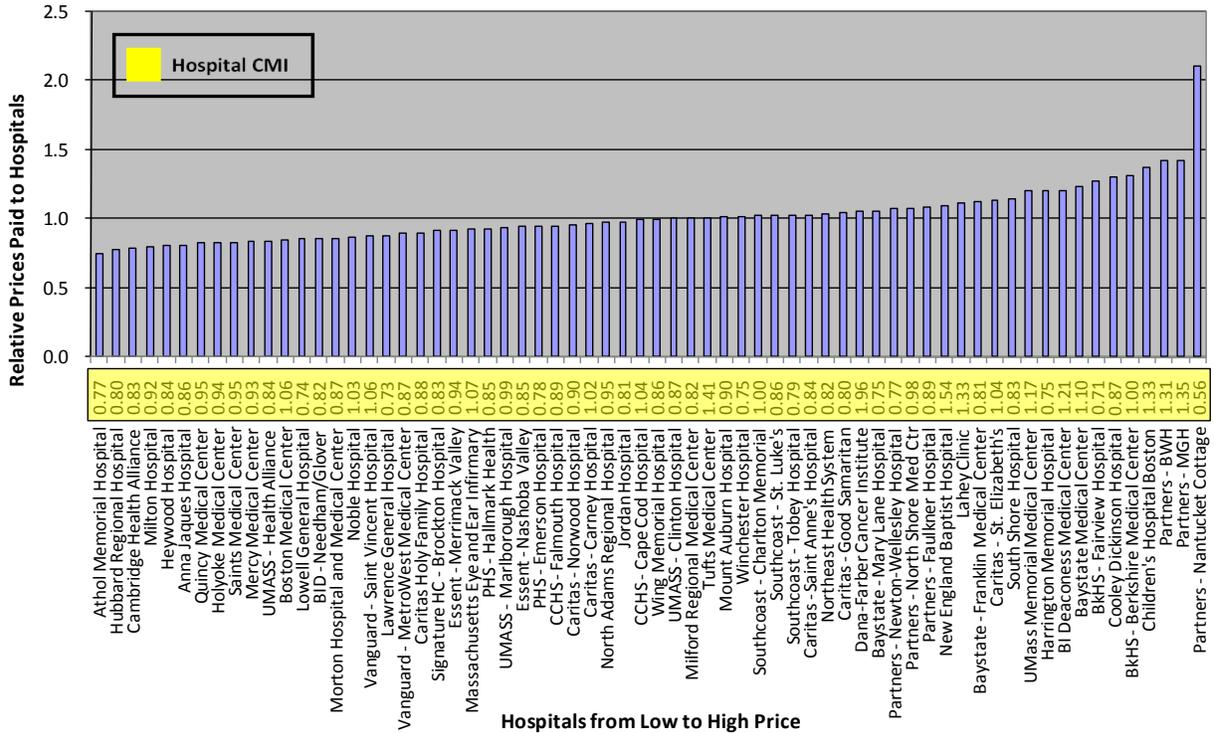
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<sup>11</sup> The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90 percent of health plans in the nation to measure performance on important dimensions of care and service.

<sup>12</sup> Our analysis suggests that the pay-for-performance (P4P) programs implemented by all major insurers have been inadequate to align payment with quality outcomes. First, the amount at risk in typical P4P programs is limited. Our review indicates the amount of payment at risk in typical P4P programs is never more than 10% of a provider's total reimbursement, with one major insurer's programs ranging from 1-5% of total reimbursement. The vast majority of reimbursement is therefore unrelated to quality performance. Second, because P4P measures, targets, and payouts are negotiated between insurers and providers, market leverage (see Section III.C below) factors into the design of these programs.

Finance and Policy and publicly available on the Executive Office of Health and Human Services' website.<sup>13</sup> A CMI of 1.0 is average and hospitals with a higher CMI (above 1.0) serve a more complex or sicker population on average. The next three graphs show hospitals in Massachusetts sorted from lowest to highest paid based on the prices or relative payments of three major health plans. The highest paid hospitals do not have the highest CMIs and some hospitals with a CMI above 1.0 are paid less than dozens of hospitals with CMIs below 1.0.

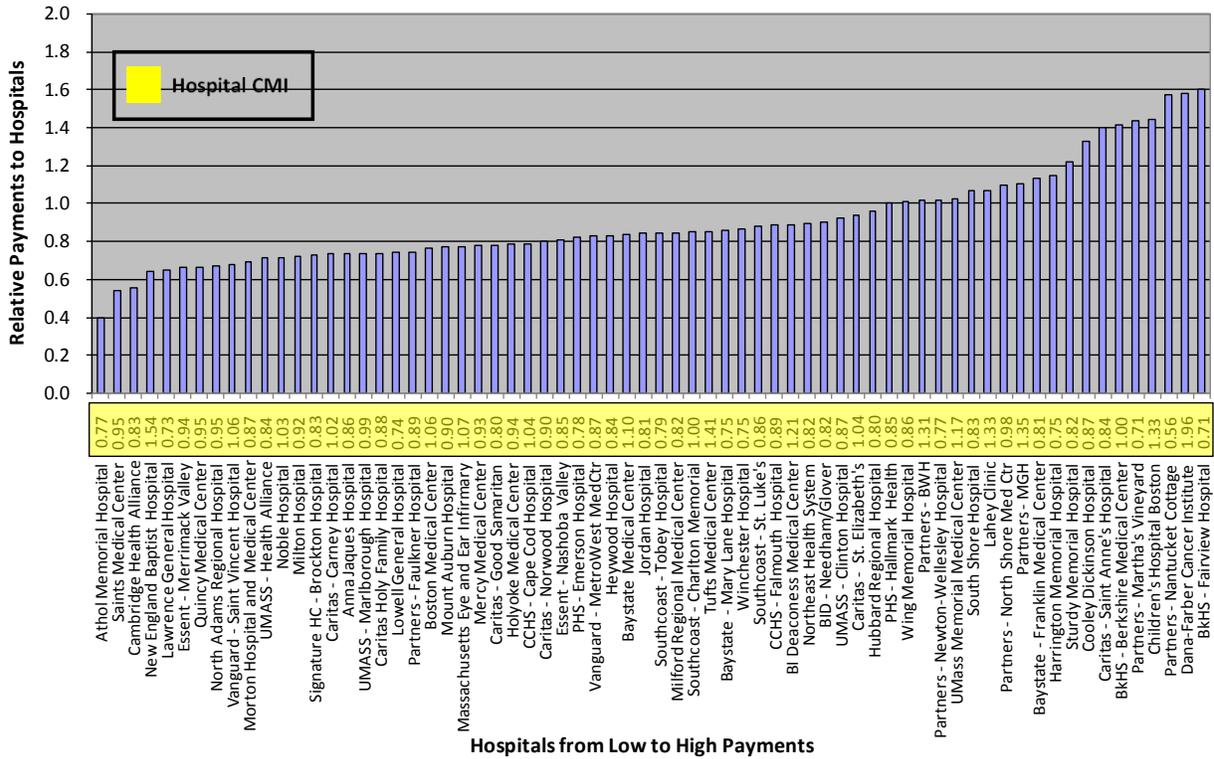
**Variation in BCBS's Hospital Prices with Hospital Case Mix Index Noted (2008)**



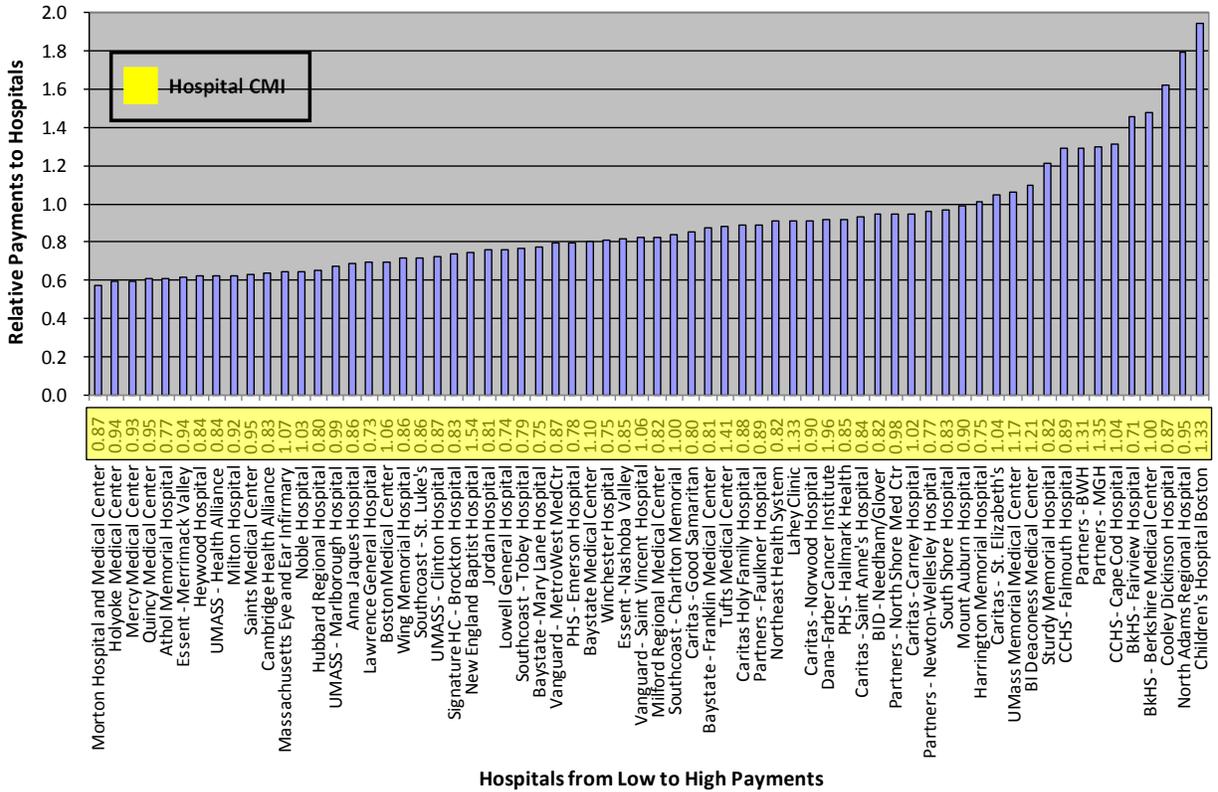
NOTE: Where DHCFP reported CMI separately for related hospitals or hospital campuses, we blended the CMIs of the hospital campuses on a weighted basis using the number of admissions at each campus.

<sup>13</sup> See HSD04, available at [http://www.mass.gov/?pageID=eohhs2terminal&L=6&L0=Home&L1=Researcher&L2=Physical+Health+and+Treatment&L3=Health+Care+Delivery+System&L4=DHCFP+Data+Resources&L5=Hospital+Summary+Utilization+Data&sid=Eeohhs2&b=terminalcontent&f=dhcfp\\_researcher\\_hsudf\\_hsudf\\_08&csid=Eeohhs2](http://www.mass.gov/?pageID=eohhs2terminal&L=6&L0=Home&L1=Researcher&L2=Physical+Health+and+Treatment&L3=Health+Care+Delivery+System&L4=DHCFP+Data+Resources&L5=Hospital+Summary+Utilization+Data&sid=Eeohhs2&b=terminalcontent&f=dhcfp_researcher_hsudf_hsudf_08&csid=Eeohhs2)

### Variation in HPHC's Hospital Payments with Hospital Case Mix Index Noted (2008)



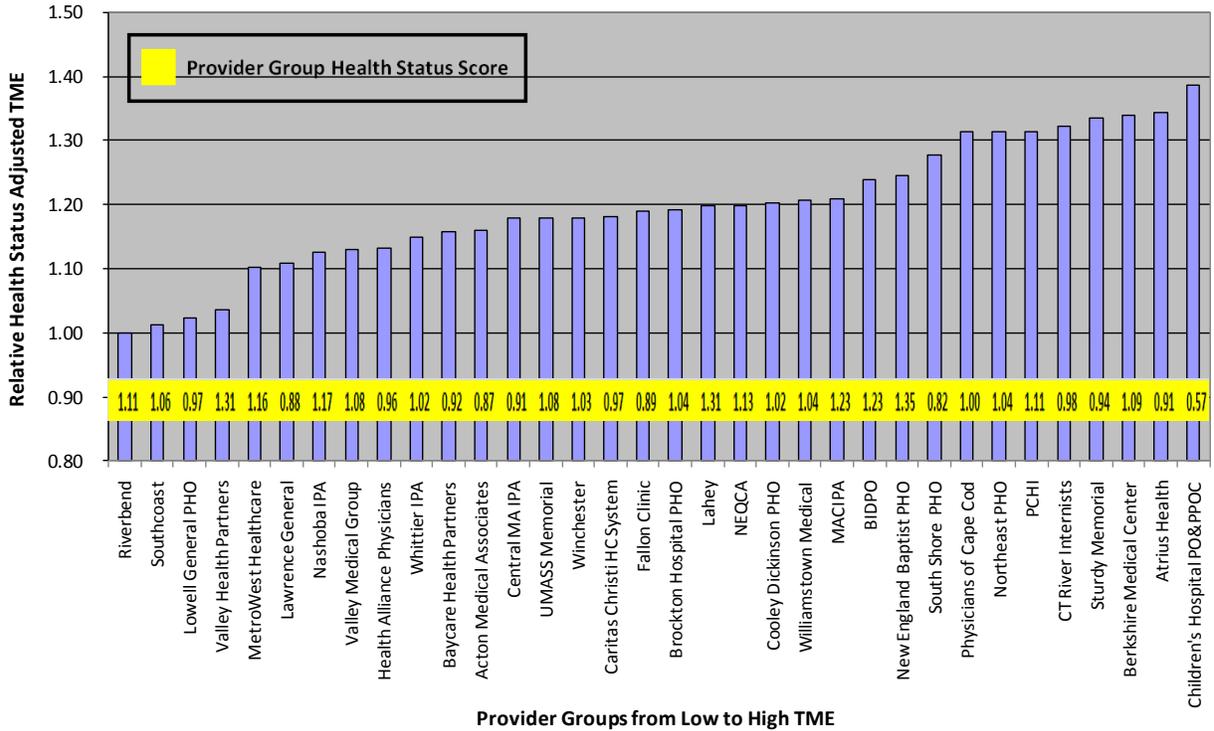
### Variation in THP's Hospital Payments with Hospital Case Mix Index Noted (2008)



**b. Provider Groups**

We also found that the total medical expenses (TME) associated with each provider group do not correlate to the acuity or complexity of the populations served as measured by the health status score provided to us by health plans. Plans use health status scores to adjust TME data to reflect differences in the acuity of the populations served by particular provider groups. We examined whether high-spending providers – those who have a higher TME per patient than their peers (whether due to higher prices, higher utilization, or a combination thereof) – tend to care for sicker (i.e., higher acuity) populations. We found no correlation between the per member amount paid to providers and the acuity of the populations that the providers serve. Providers caring for populations that are relatively healthy (i.e., health status score of less than 1.0) are sometimes high spenders and sometimes low spenders. It appears the higher expenses of some provider groups cannot reliably be explained by the fact that these groups care for sicker populations.

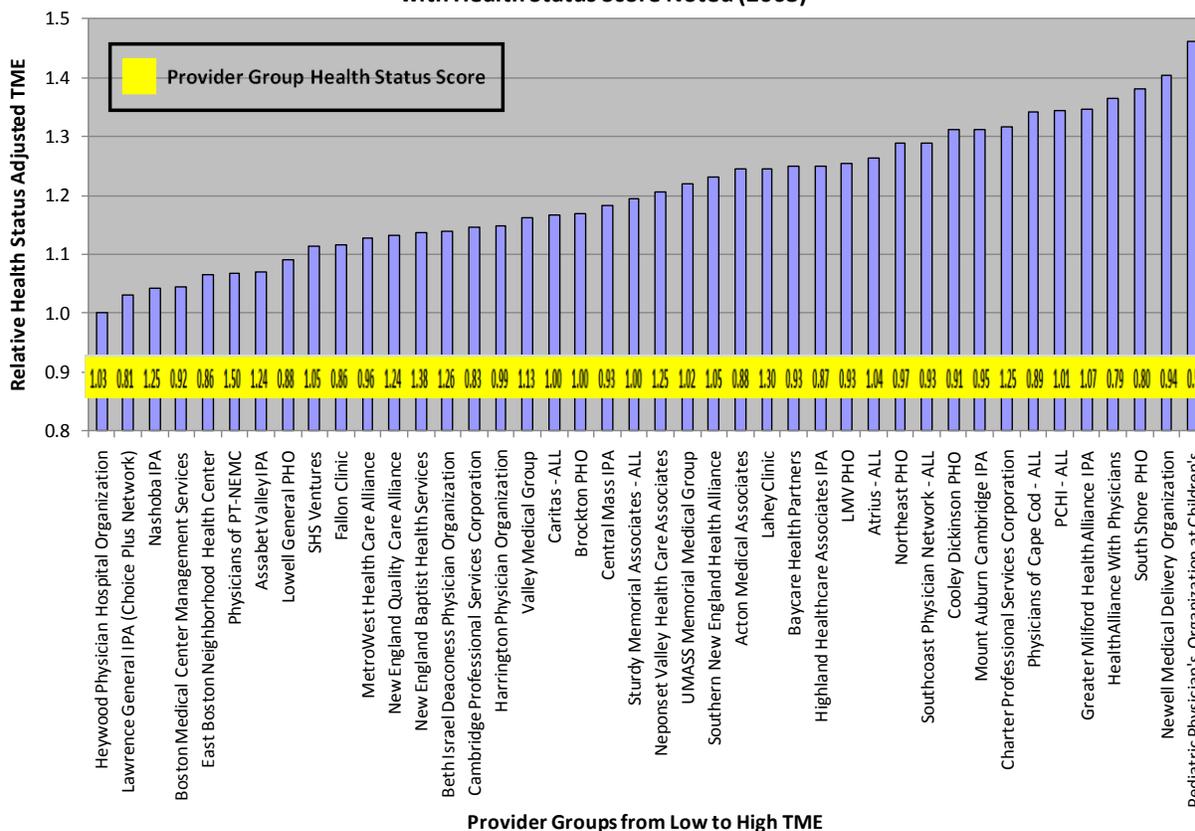
**Variation in BCBS's Provider Group Health Status Adjusted Total Medical Expenses with Health Status Score Noted (2008)**



**NOTES:**

- (1) Graph includes all provider groups with at least 18,000 BCBS HMO/POS member months (1,500 members).
- (2) We received separate TME for Children's PPOC and Children's Hospital PO, which we blended into a single TME figure for Children's by weighting by each group's membership. In general, pediatric providers have lower health status scores than adult providers since children, on average, have fewer health care needs than adults.

**Variation in HPHC's Provider Group Health Status Adjusted Total Medical Expenses with Health Status Score Noted (2008)**



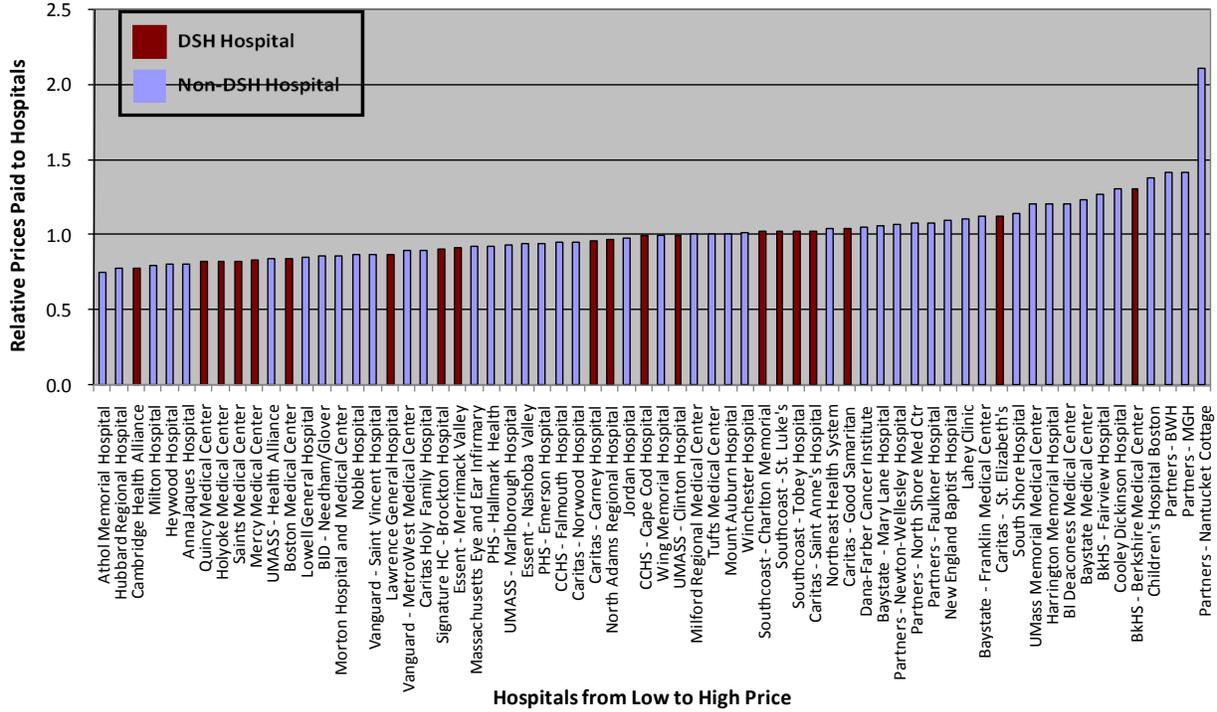
**NOTES:**

- (1) Graph includes all provider groups with at least 5,000 Harvard Pilgrim HMO/POS member months.
- (2) In limited instances where we received separate TME for subgroups comprising a provider group, we blended the subgroups' respective TME into a single TME figure for the entire provider group by weighting by each subgroup's membership.

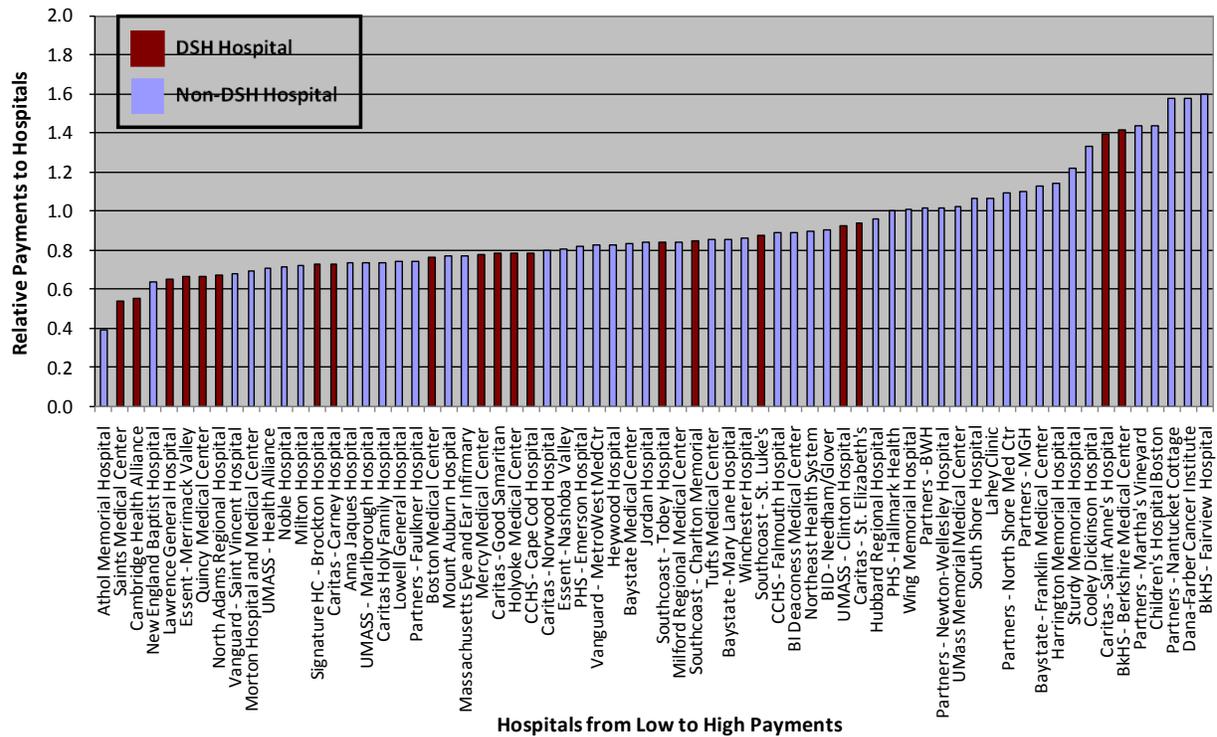
**3. Wide disparities in prices are not explained by the extent to which a provider cares for a large portion of patients on Medicare or Medicaid**

Commercial insurers generally pay lower prices to disproportionate share hospitals (DSHs), which have a large percentage (e.g., 63% or more) of patient charges attributed to Medicare, Medicaid, other government payers, and/or free care. The three graphs below show three major health plans' relative prices or payments to Massachusetts hospitals with hospitals identified by DHC FP as DSH (shown in red) generally on the lower end of the payment spectrum.

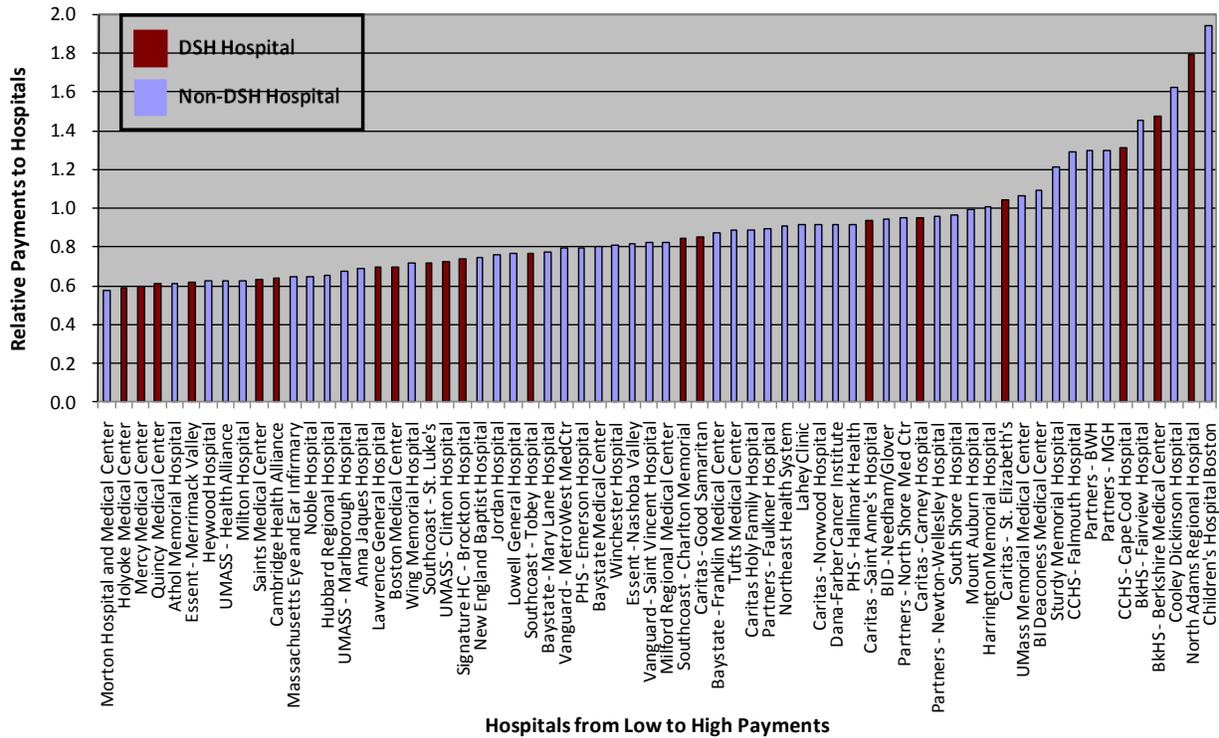
### Variation by DSH Status in BCBS's Hospital Prices (2008)



### Variation by DSH Status in HPHC's Hospital Payments (2008)



### Variation by DSH Status in THP's Hospital Payments (2008)



As shown in the table below, information from these three health plans shows that on average, these plans pay non-DSH hospitals prices or payments that are about 9 to 26% higher than those paid to DSH hospitals.

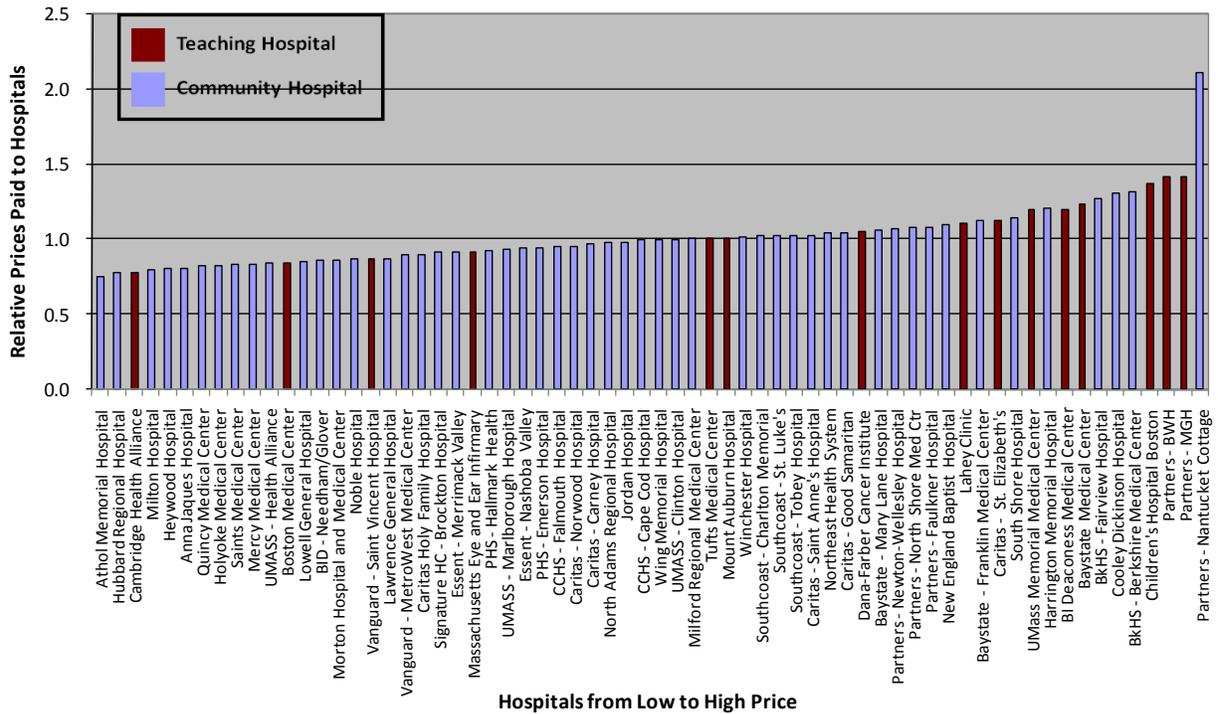
	Percent of Plan's Network-Wide Average Price/Payment		
	BCBS Price	HPHC Payment	THP Payment
DSH	95.7%	81.6%	90.3%
Non-DSH	104.2%	102.6%	101.5%
Percent Difference in Price/Payment	8.9%	25.7%	12.4%

NOTE: The calculation of average differences in payments made by HPHC and THP is weighted by hospital volume, since the payment information provided by HPHC and THP factors in volume. The calculation of average differences in prices paid by BCBS is not weighted, since price does not take hospital volume into account. If the BCBS calculation was weighted by hospital volume, the percent difference in prices paid by BCBS to DSH versus non-DSH hospitals would increase from 8.9% to 19.1% (with DSH paid at 85.9% of network average and non-DSH at 102.3%).

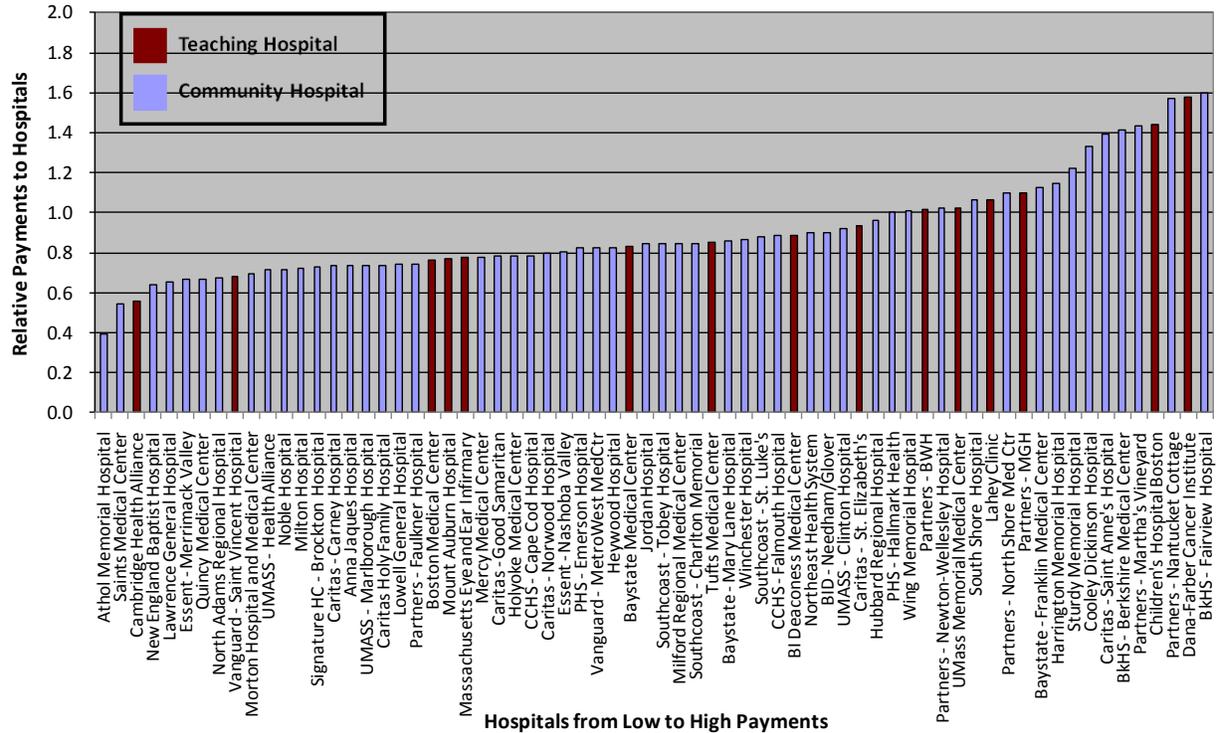
#### 4. Wide disparities in prices are not explained by whether a provider is an academic teaching or research facility

Insurers do not consistently pay higher prices to hospitals that provide academic teaching and research services. As shown in the three graphs below, which illustrate three major health plans' relative prices or payments to Massachusetts hospitals, those hospitals identified by DHCFP as teaching hospitals (shown in red) are paid at widely varying levels. While some teaching hospitals command above-average rates, others are paid significantly less than dozens of community hospitals that are not academic teaching or research facilities.

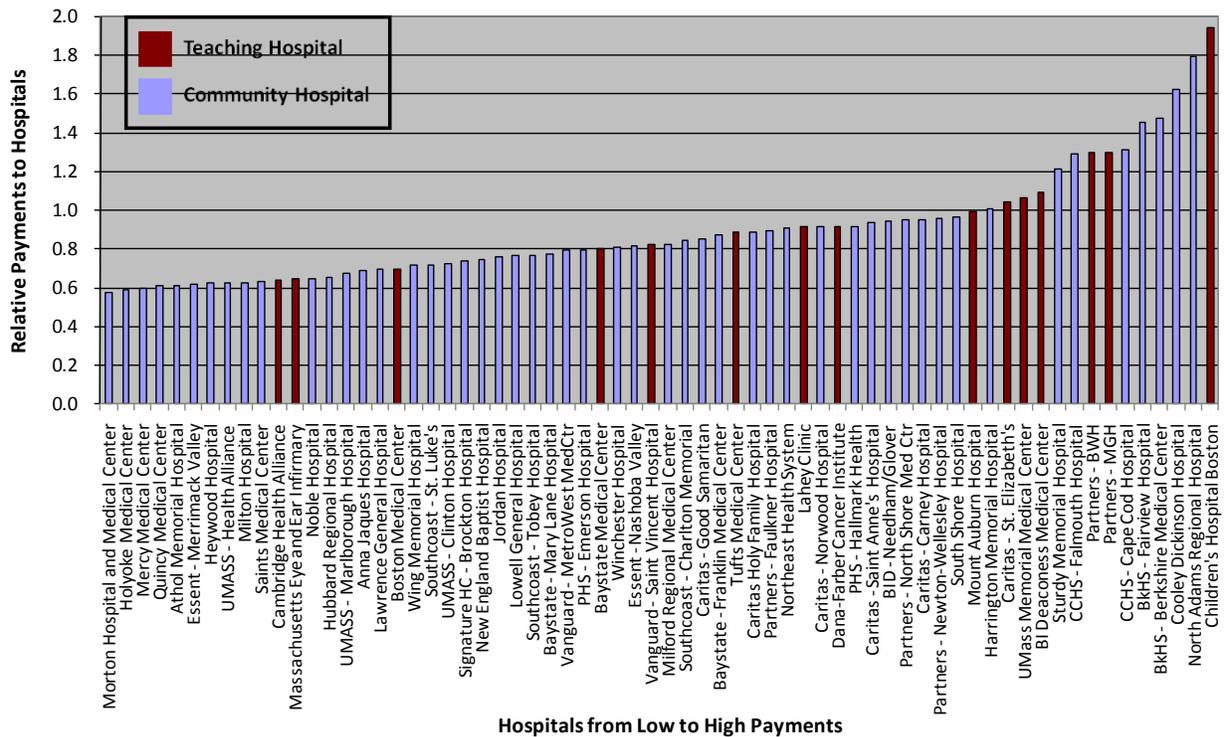
Variation by Teaching Status in BCBS's Hospital Prices (2008)



### Variation by Teaching Status in HPHC's Hospital Payments (2008)



### Variation by Teaching Status in THP's Hospital Payments (2008)



## **5. Wide disparities in prices are not explained by differences in hospital costs of delivering similar services at similar facilities**

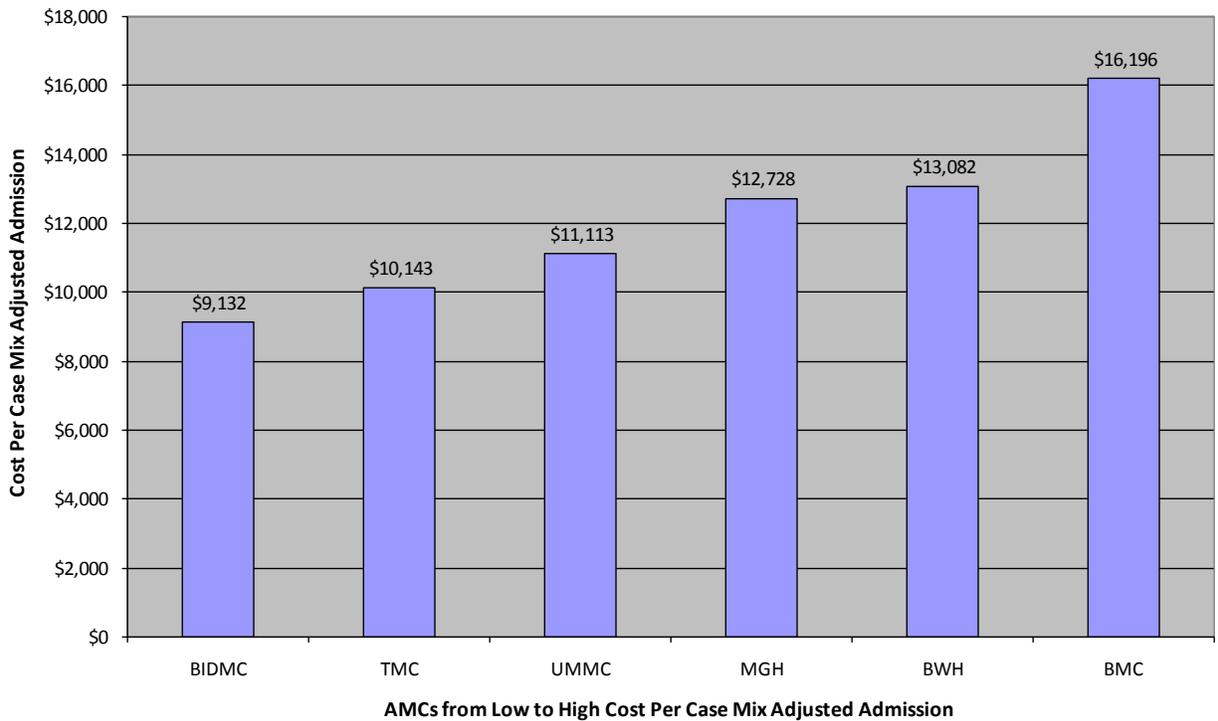
Disparities in hospital prices are not adequately explained by differences in hospital unit costs. Unit costs are the costs incurred by a hospital for the delivery of services, including direct and indirect expenses such as labor costs, supplies, overhead, costs associated with medical education, and capital expenditures. It appears that higher prices are reflected in higher cost structures, but are not *caused* by them. We reviewed information showing wide variations in hospital costs that appear to track the amount the hospitals are paid rather than the acuity, complexity, or quality of the hospital's services. Our analysis suggests that hospitals may manage costs, including capital expenditures, to budgets based on their anticipated revenue from insurers and any other sources of income. Over time, hospitals receiving greater revenue from higher prices expend more on direct and indirect costs and capital investment while hospitals receiving less revenue struggle to manage their cost structure to make ends meet.

One method of comparing hospital cost structures is to compare hospital unit costs on a per admission or per discharge basis. Using publicly available DHCFP 403 Cost Report data, we compared hospital inpatient costs per admission at six major adult academic medical centers (AMCs) that offer similar services at similar intensities: Beth Israel Deaconess Medical Center (BIDMC), Boston Medical Center (BMC), Brigham & Women's Hospital (BWH), Massachusetts General Hospital (MGH), Tufts Medical Center (TMC), and UMass Memorial Medical Center (UMMC). These major adult AMCs are characterized by (1) extensive research and teaching programs and (2) extensive resources for tertiary and quaternary care, and are (3) principal teaching hospitals for their respective medical schools and (4) full service hospitals with a case mix intensity greater than 5% above the statewide average.<sup>14</sup> We calculated a case mix adjusted cost per admission by dividing each hospital's total reported costs by its total reported admissions. Then, to account for acuity and complexity differences, we divided that number by the hospital's CMI. As the following graph shows, there is wide variation in the cost of providing services at these hospitals, with costs per admission ranging from a low of \$9,132 to a high of \$16,196, a 77% differential.

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<sup>14</sup> While we believe it is appropriate to compare these hospitals, note that no two hospitals provide the same set of services to the same patient population.

**Variation in Cost Per Case Mix Adjusted Admission Among  
Major Adult Academic Medical Centers (2008)**



Because the costs shown in this graph are case mix adjusted, differences in the costs cannot be explained by the fact that the costlier hospitals are caring for sicker patients or offering more complex services. This raises the important question of why it costs more for certain hospitals to provide the same types of services to similar populations at similar quality as those services provided by other hospitals at a lower cost.

One provider's own analyses using publicly available DHCFP 403 Cost Report data also show widely varying internal costs among hospitals that the provider viewed as competitors. For example, an analysis comparing severity adjusted inpatient costs for select academic medical centers showed that the highest cost hospital, at \$8,000 per case mix adjusted discharge (CMAD), was 100% higher in cost than the lowest cost hospital, at \$4,000 per CMAD.<sup>15</sup> Similarly, in a community hospital peer group, the highest cost hospital was 58% higher than the lowest cost hospital at \$6,050 and \$3,800 per CMAD, respectively.

Our review also suggests there is significant need for increased transparency and standardization in how hospital costs are tracked, allocated, and reported. We found that some hospitals maintain internal cost accounting systems, while others do not. For those that do not, it is difficult to track costs, and even more difficult to negotiate payments from insurers that are based on those costs. For hospitals that do maintain cost accounting systems, there is significant variation in the approach each hospital takes to tracking costs and attributing them to cost centers. Given this variation, we found it difficult to rely on this information to compare costs across providers and to meaningfully understand cost differences. In addition, we learned that

<sup>15</sup> Whether average costs are compared using admissions or discharges has no material effect on this analysis.

there are certain categories of hospital costs that are excluded from the DHCFP 403 Cost Report, such as bad debt and marketing costs. Therefore, while the 403 Report may provide a more consistent framework through which costs can be reported and compared, it does not appear to capture important cost information that would be useful to assist policymakers and stakeholders in understanding health care costs and in developing successful cost containment solutions.

**C. Price variations are correlated to market leverage – the relative market position of the hospital or provider group compared with other hospitals or provider groups within a geographic region or within a group of academic medical centers.**

Our review shows that there is a strong correlation between the price insurers pay to providers and providers' market leverage. We define "leverage" as a measure of the ability to influence the other side during negotiations. Both providers and insurers can bring leverage into contract negotiations. For providers, the source of leverage varies from provider to provider. Typically, leverage results from variables such as: size, geographic location, "brand name," and/or niche or specialty service lines offered. For insurers, leverage tends to result from size and penetration into a geographic area. For example, if an insurer has many members in a geographic area, a provider in that area is likely to have a strong incentive to be part of the insurer's network, providing leverage to the insurer. We focused on two measures of leverage: (1) provider size, and (2) the relative leverage between insurers and providers in a geographic region.

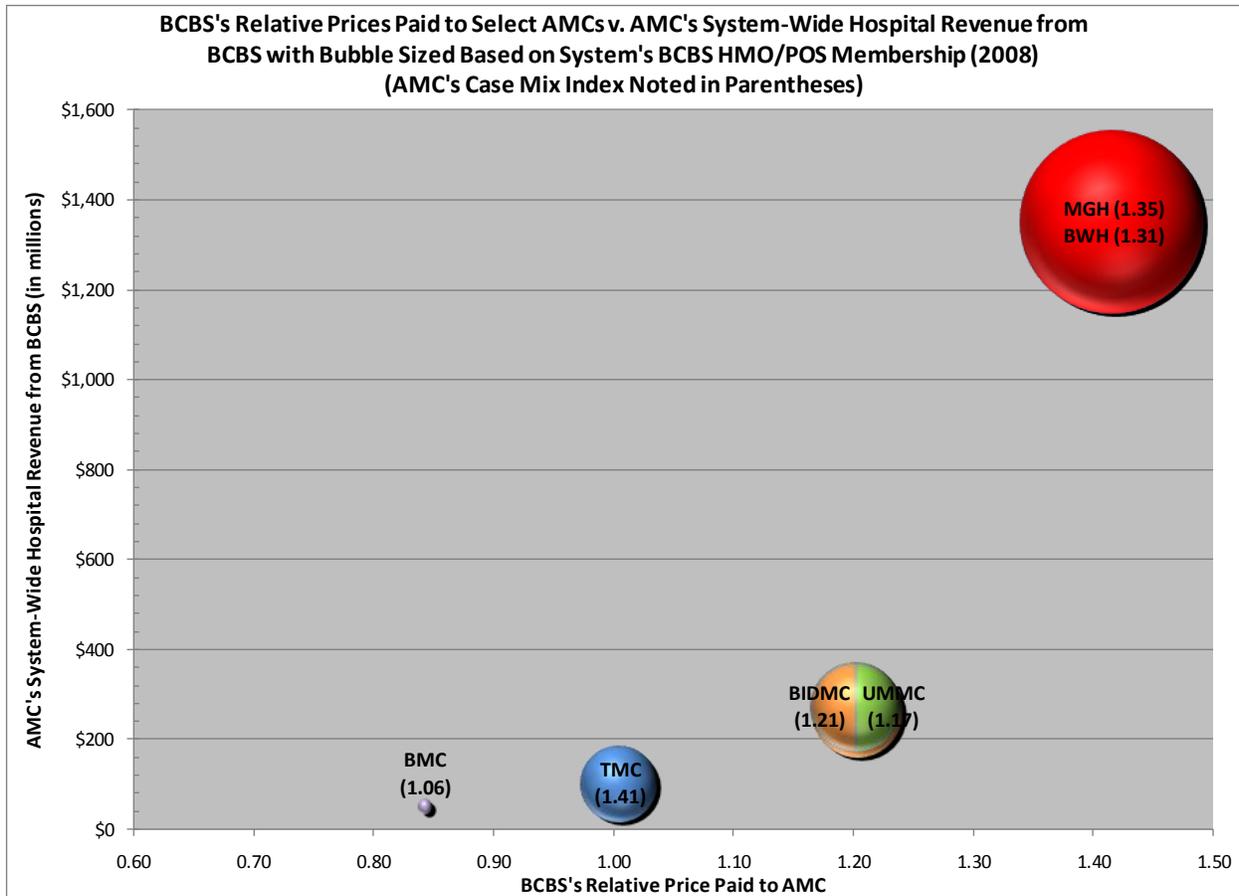
**1. Provider Size**

Large health care providers have a great deal of leverage in negotiations because insurers must maintain stable, broad provider networks. Insurers have explained to us that the failure to contract with a large provider organization would cause serious network disruption, not only because a large percentage of their members would be forced to seek care elsewhere, but because employers and others are less interested in purchasing products that do not include the largest providers.

Two ways to illustrate the size of a provider include measuring (1) the total revenue paid by an insurer to the provider system, and (2) the total number of the insurer's members who are associated with (have a primary care provider within) the provider system. Both figures are a proxy for the size or leverage of the provider system within a given insurer's network, and therefore the amount of disruption the insurer would face if the provider were not in its network.

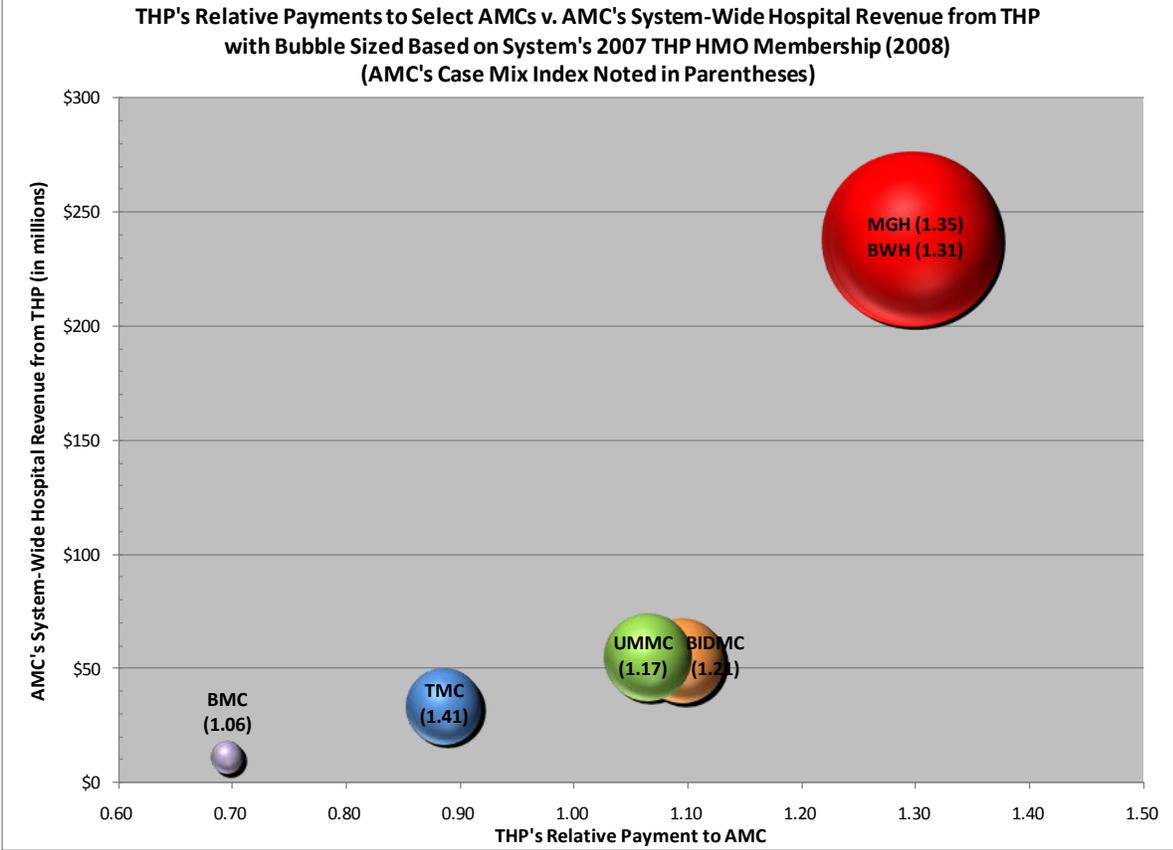
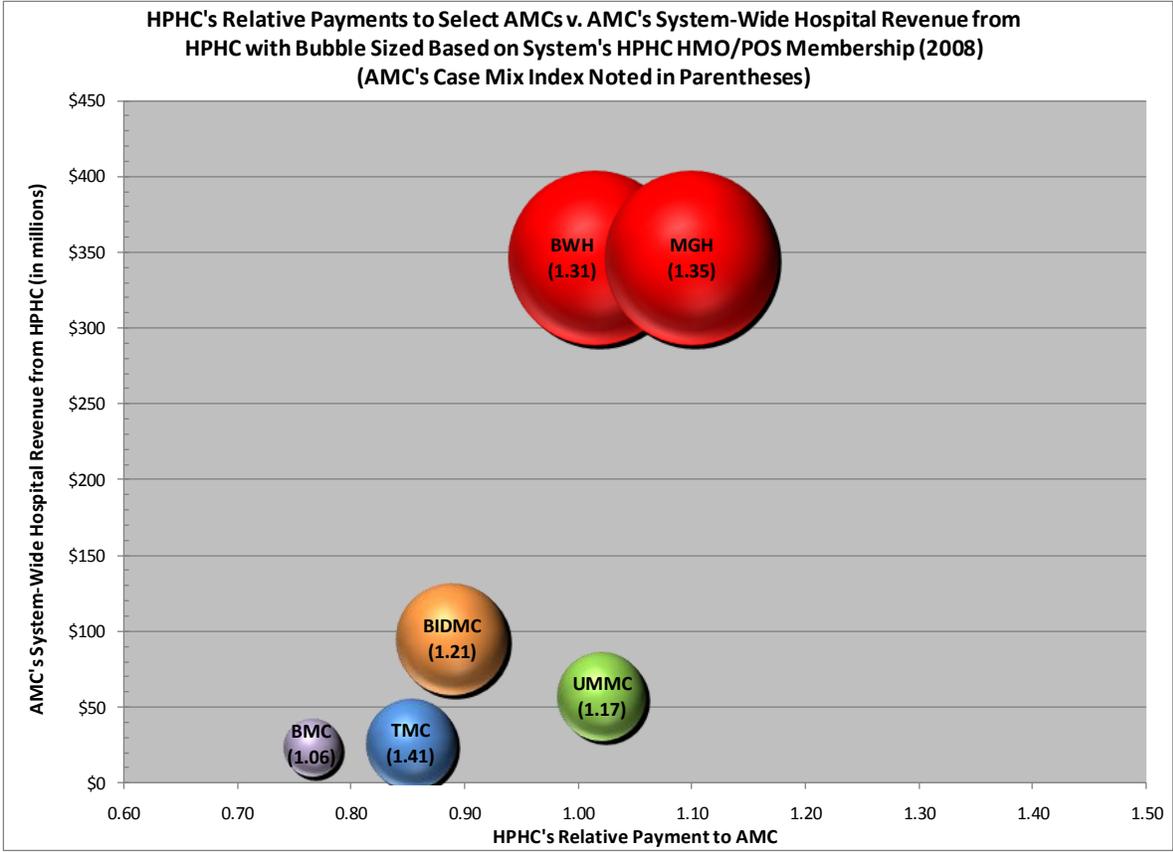
**a. Hospitals**

The following three graphs show that hospitals with greater leverage, as measured by system-wide hospital revenue and number of insurer members, are generally paid at a higher rate compared to similar hospitals with less revenue or members.



**NOTES:**

- (1) Beth Israel Deaconess Medical Center (BIDMC) and UMass Memorial Medical Center (UMMC) are very similar in size (as measured by revenue and BCBS membership) and in price received from BCBS. We therefore split the color of their bubble in half to show that two AMCs are plotted on that position in the graph.
- (2) BCBS did not produce separate membership data for the Boston Medical Center system, but instead indicated the system fell into an "All Other" category of providers with 1,500 or fewer BCBS members. We therefore conservatively sized the purple BMC bubble using a figure of 1,500 members, which makes the bubble as large as it could possibly be.



In the above graphs, the x-axis shows the variation in price or payment to the six major adult AMCs that we examined in the previous section of this report (on hospital unit costs). As noted earlier, these six major adult AMCs are characterized by (1) extensive research and teaching programs and (2) extensive resources for tertiary and quaternary care, and are (3) principal teaching hospitals for their respective medical schools and (4) full service hospitals with a case mix intensity greater than 5% above the statewide average.<sup>16</sup>

The y-axis shows the total revenue received by all hospitals in the AMC provider system, while the size of the bubble reflects the number of insurer members associated with the provider system. While some hospitals contract with insurers on their own, others contract jointly with hospitals and/or physicians on a system-wide basis. For these hospitals, showing the total revenue and total insurer members for *all* hospitals within the contracting system is a better proxy of the hospital's leverage since that hospital contracts as part of a system rather than as a single hospital. Note that the y-axis shows total revenue for the hospitals in a system, and does not include revenue for the physician groups in the same system.

### **b. Physician Groups**

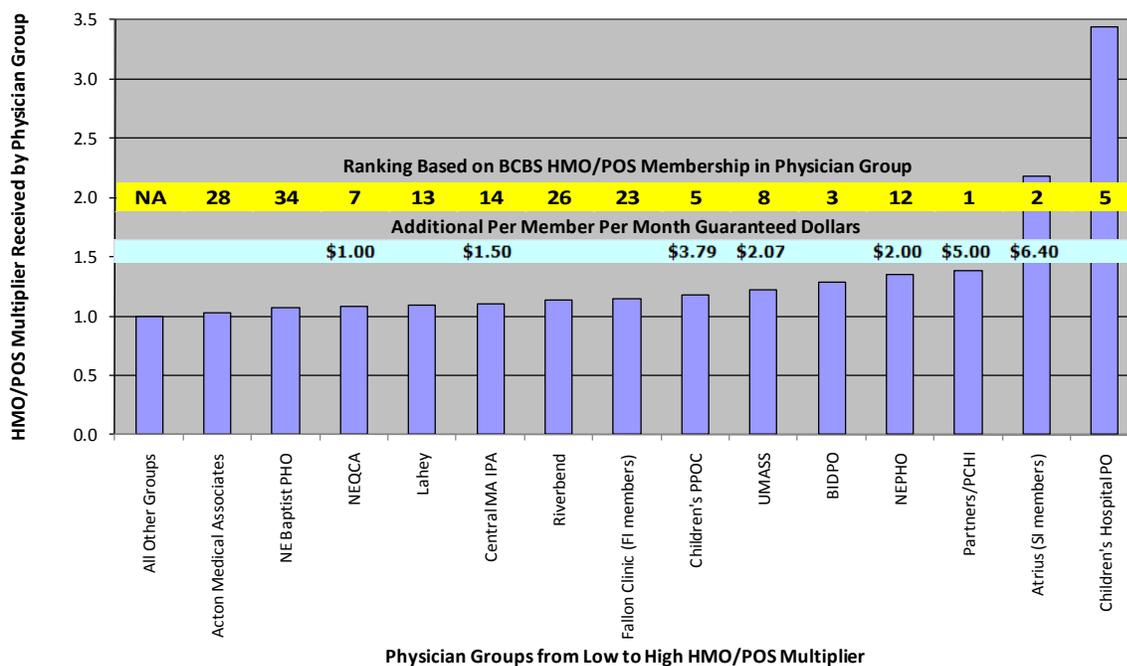
Our review suggests that physician groups who care for more members in an insurer's network, and therefore have greater leverage with respect to that insurer, are generally able to negotiate higher rates compared to physician groups who care for fewer of the insurer's members. As described on page 7 of this report, health plans and providers typically negotiate physician fees by starting with the standard fee schedule for physician services established by the health plan, and then negotiating a "multiplier" to that fee schedule. For example, a provider who negotiates a 1.2 multiplier for physician services would be paid 120% of the standard fee schedule rate for covered physician services.

We reviewed information for all of the primary and multispecialty care physician groups in one insurer's network and found, as shown in the graph below, that there were only 14 groups that received enhancements, or multipliers, to the insurer's standard physician fee schedule rates. The remaining groups in this insurer's network were all paid standard fee schedule rates (see "All Other Groups" on the far left of the graph showing a multiplier value of 1.0). Of the 14 groups who received multipliers, seven were among the insurer's top ten groups by membership size (see membership ranking on yellow tape across graph). The remaining seven groups each had market leverage based on other notable factors. For example, three of the groups are large providers in certain geographic locations, and therefore have important regional leverage. Another physician group provides specialty services.

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<sup>16</sup> As noted earlier, while we believe it is appropriate to compare these six major adult AMCs, no two AMCs provide the same set of services to the same patient population.

**Physician Groups Receiving Multiplier to BCBS Standard Fee Schedule Rates  
with Membership Ranking Noted (2008)**



**NOTES:**

- (1) Multipliers shown are for services to HMO/POS patients. Where a physician group had more than one multiplier or more than one guaranteed per member per month (PMPM) payment in effect in 2008, we calculated a blended multiplier or PMPM payment by weighting by the number of months in 2008 for which each multiplier or PMPM payment was in effect.
- (2) Multipliers shown for Children's Hospital PO and Atrius were in effect from 2008-09.
- (3) Harvard Vanguard Medical Associates (part of Atrius) received \$7.40 PMPM in guaranteed payments.
- (4) Fourteen of the 15 multipliers shown are benchmarked against BCBS's standard physician fee schedule. PCHI has negotiated its own fee schedule, which BCBS represented to us varies from the standard fee schedule for certain physician codes, such as lab codes and temporary codes.
- (5) The combined membership of Children's PPOC and Children's Hospital PO is used in ranking how "big" Children's is within BCBS's network (i.e., how many BCBS members receive care through Children's physicians).

The turquoise tape across the graph illustrates additional per member per month payments (PMPM) that the insurer made to certain physician groups, which are not captured in the multiplier the group received to the insurer's standard fee schedule, and are therefore not reflected in the height of the bar. These guaranteed PMPM dollars further enhance the total payments the insurer made to these physician groups as compared to the other groups in its network. Of the seven physician groups that received PMPM payments in 2008 in addition to a multiplier to the insurer's fee schedule, five were among the insurer's top ten groups by membership size.

**2. Relative Leverage of Insurers and Providers in a Geographic Region**

Providers and insurers both bring leverage into contract negotiations. The amount of leverage depends on a variety of factors, as discussed above. In order to understand how insurer

leverage and provider leverage can interact to affect payment rates, we examined the relative leverage of insurers and providers within certain illustrative geographic regions. Our premise was that hospitals tend to compete regionally, and that it would be illustrative to examine the relative leverage of hospitals and insurers in regions across the state (e.g., Berkshire, Hampden). This ratio of insurer to provider leverage by region is not a scientific equation; rather, it is one way we sought to examine how market forces may influence contract negotiations.

We defined “insurer’s leverage” as the proportion of a hospital’s total revenue (or, in the event the hospital belongs to a larger provider system, the total revenue received by all hospitals in that provider system) that came from an insurer.<sup>17</sup> This is a non-scientific proxy for how dependent a hospital is upon patients (and payments) from that insurer. We defined “provider’s leverage” as the proportion of an insurer’s payments to all hospitals within a region that were made to the hospital in question (or, in the event the hospital belongs to a larger provider system, to all hospitals in the provider system).<sup>18</sup> This is a non-scientific proxy for the market position of a hospital within its region, and how dependent that insurer is on that hospital when its members in that region need care. We then created a ratio of these two measures of leverage (insurer leverage to provider leverage, or a “relative leverage ratio”) to examine insurer and provider leverage within a region.<sup>19</sup>

For illustrative purposes, we grouped Massachusetts hospitals into regions and calculated the above “relative leverage ratio” for the hospitals in each region relative to one insurer.<sup>20</sup> We found that when that insurer has more leverage over a hospital (as compared to other hospitals in the region), the hospital tended to get lower prices compared to other hospitals in the region; and, when a hospital has more leverage over that insurer, it tended to get higher prices. Our review suggests that market leverage is affected by the relative leverage of insurers and providers within a geographic region.

We have found that the prices that insurers and providers negotiate for health care services tend to reflect market leverage. Although this report does not purport to explain all reasons for provider price disparities, our review shows that those disparities are not adequately explained by quality of care, patient severity, or the status of a hospital as a teaching or disproportionate share hospital.

**D. Variation in total medical expenses on a per member per month basis is not correlated to the methodology used to pay for health care, with total medical expenses sometimes higher for risk-sharing providers than for providers paid on a fee-for-service basis.**

Our examination did not uncover any relationship between payment methodology and the total medical expenses (TME) associated with a provider group. The following two graphs

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<sup>17</sup> Insurer’s Leverage = Provider System’s Revenue from Insurer ÷ Provider System’s Total Revenue

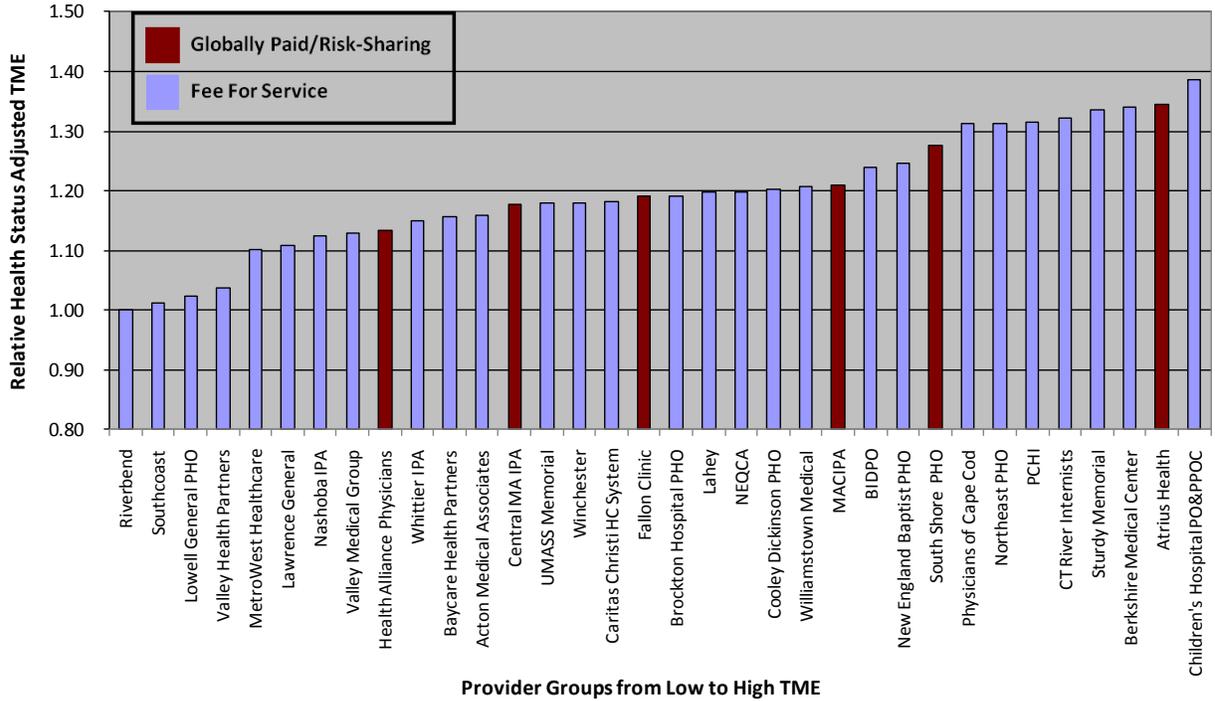
<sup>18</sup> Provider’s Leverage = Insurer’s Revenue to Provider System ÷ Insurer’s Total Revenue to Region

<sup>19</sup> Relative Leverage Ratio = Insurer’s Leverage ÷ Provider’s Leverage

<sup>20</sup> This discussion is for policy purposes; it should not be confused with a detailed analysis of “market definition” that might be undertaken in an inquiry under antitrust law.

illustrate the per member per month TME of major provider groups with those groups paid on a global budget or otherwise sharing risk shown in red.<sup>21</sup>

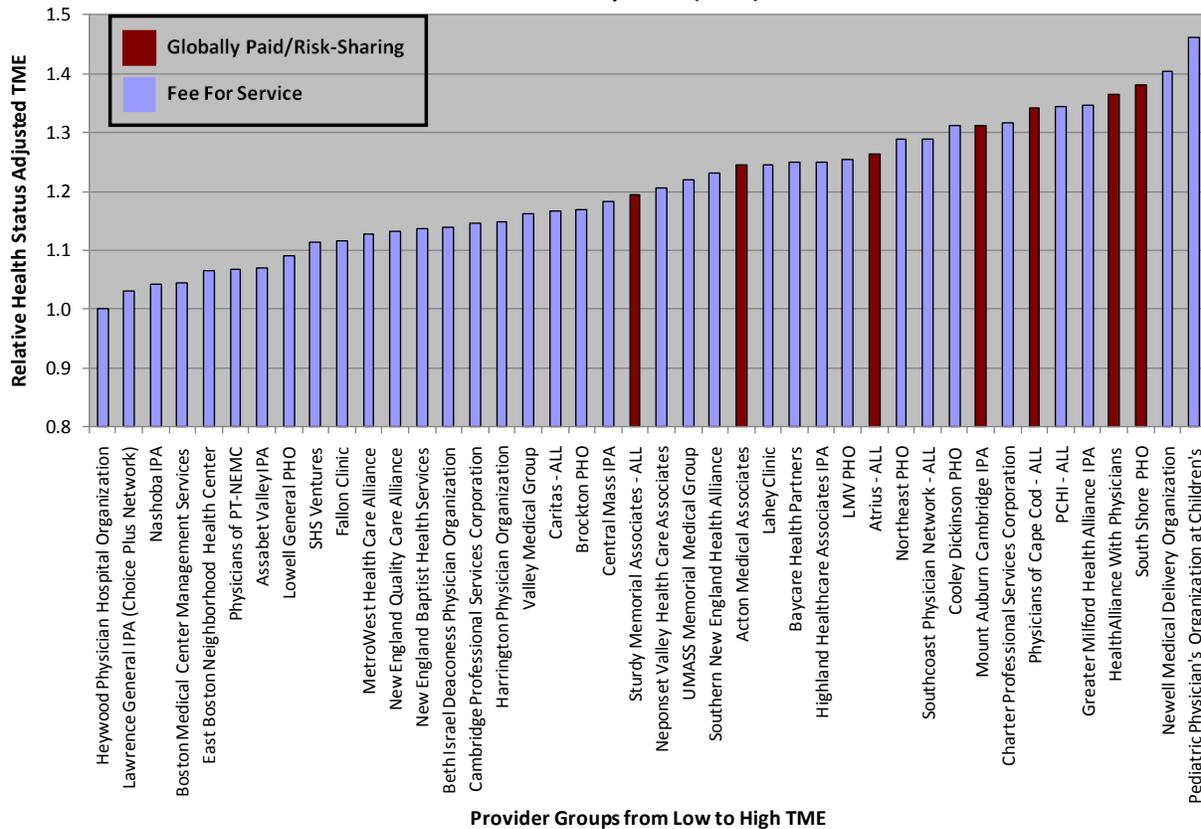
**Variation by Payment Method in BCBS's Provider Group Health Status Adjusted Total Medical Expenses (2008)**



NOTE: In 2008, New England Quality Care Alliance (NEQCA) had a risk-sharing contract for one-third of BCBS's members with primary care providers at NEQCA (those members with providers at Primary Care LLC, a subgroup of NEQCA).

<sup>21</sup> We reflect insurers' own identification of those providers paid on a fee-for-service basis versus those paid globally or otherwise sharing risk. While there are many types of risk-sharing contracts in the Commonwealth, in general, risk-sharing agreements create incentives for provider groups to reduce their total medical expenses because the amount the group earns is linked to the level of TME the group achieves for its patients. By contrast, fee-for-service arrangements do not provide any direct incentives for providers to reduce TME.

**Variation by Payment Method in HPHC's Provider Group Health Status Adjusted Total Medical Expenses (2008)**



Contrary to what one might expect in a risk-sharing contract, some risk-sharing provider groups are among the highest cost providers in the state.<sup>22</sup> The lack of correlation between payment methodology (e.g., fee-for-service versus risk-sharing payments) and TME has important implications for payment reform initiatives. Payment reform, such as the global payment methodology recommended by the Special Commission on the Health Care Payment System, should result in system benefits such as better integration of care. But, in order for a shift to global payments to help control costs, it should be coupled with steps to address the dynamics and distortions of the current marketplace.

**E. Price increases, not increases in utilization, caused most of the increases in health care costs during the past few years in Massachusetts.**

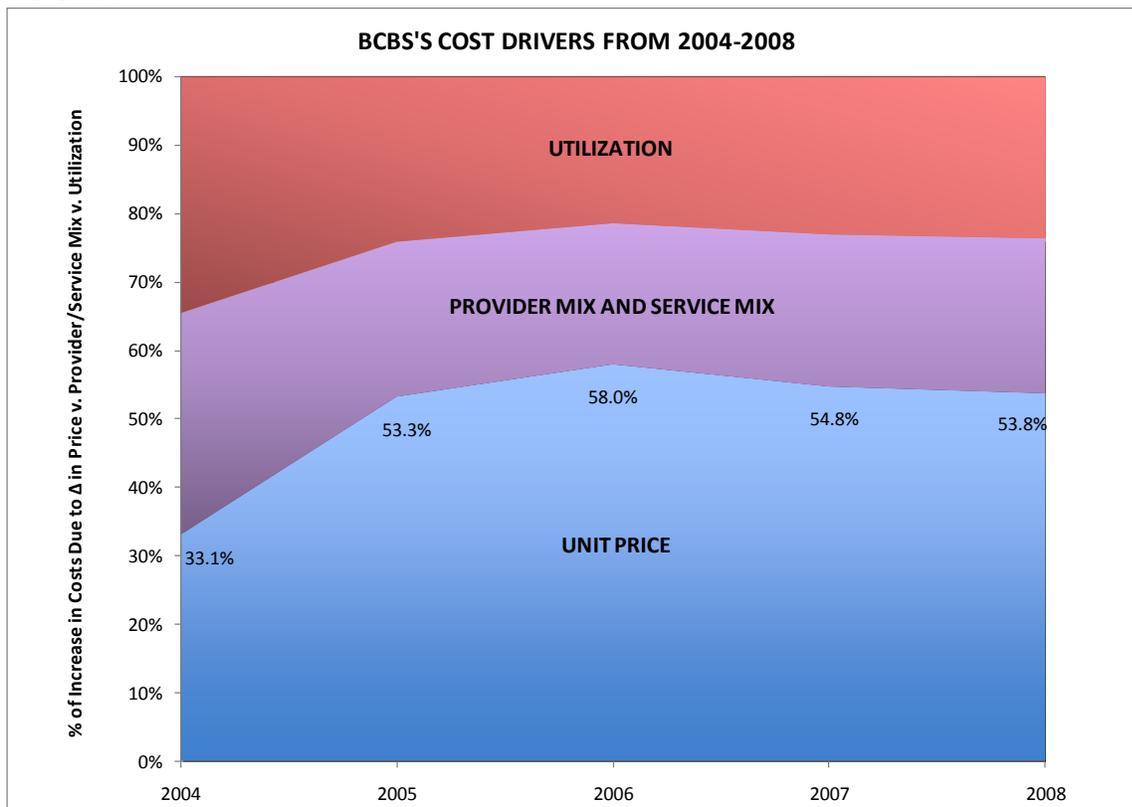
Data from the three largest health plans in Massachusetts show that increases in prices paid for medical services were primarily responsible for the overall increases in medical spending in the past few years.<sup>23</sup> The below graph, reflecting data submitted by Blue Cross Blue

<sup>22</sup> Note that all risk-sharing providers are reimbursed for some portion of their services on a fee-for-service basis, most notably the care they render to patients insured through PPO products.

<sup>23</sup> Health plans track the growth of allowed medical claims. From this, they can determine the amount of growth in spending that is attributable to increases in unit price as compared to other factors, including utilization, provider mix, service mix, demographics, and benefit design.

Shield of Massachusetts (BCBS) into this annual hearing process under G.L. c. 118G, § 6½,<sup>24</sup> shows that increases in unit price – defined by BCBS as the negotiated annual increases for specific services – have been the single biggest driver of increases in medical cost trend at BCBS from 2004-2008.

Two other significant components of medical cost trend at BCBS have been: (1) changes in provider mix (i.e., a shift in the location of care from less expensive to more expensive providers) and (2) changes in the intensity or complexity of services (i.e., substituting more expensive, intensive treatments for less expensive treatments). The impact of provider mix on overall health care costs can be understood to be a “price” issue: when patients obtain the same care at more expensive locations, costs go up because the price of the care increases – without any change in the number of services delivered, or the intensity of those services. In its written testimony, BCBS identified changes in provider mix as accounting for 20% of the increases in health care costs in recent years, increases in unit price accounting for another 50%, and the remainder attributable to increases in utilization and to a mix of costlier, or more intensive, services.

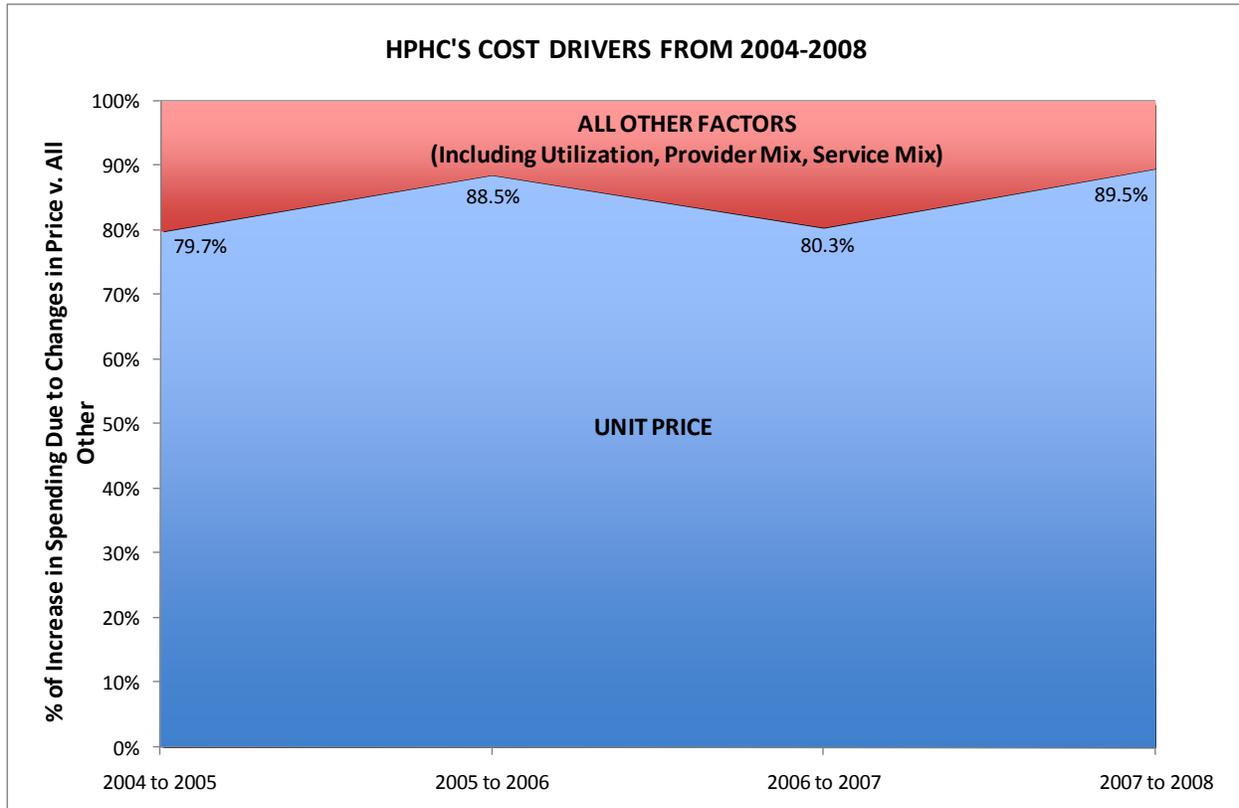


Notes:

- (1) Reflects fully-insured commercial trend.
- (2) “Unit price” reflects increases in provider rates. “Provider Mix and Service Mix” reflect changes in the location of care (shift to more expensive providers) and the intensity of services provided. “Utilization” reflects increases in the number or units of services provided.

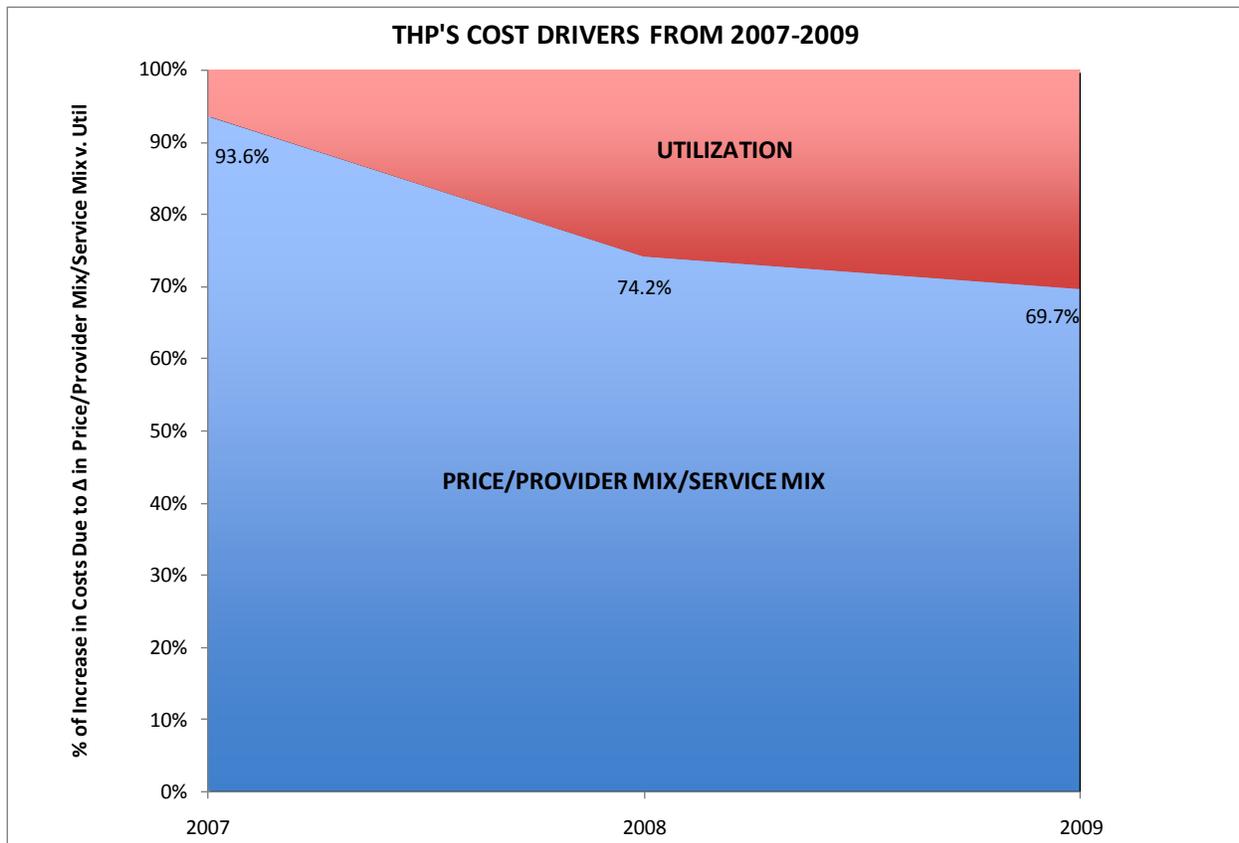
<sup>24</sup> See BCBS’s written testimony for the Annual Public Hearing, available at [http://www.mass.gov/Eeohhs2/docs/dhcfp/cost\\_trend\\_docs/testimony\\_BCBSMA\\_AG.pdf](http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/testimony_BCBSMA_AG.pdf) (p. 24). In the table on page 24, BCBS also produced trend information in an “all other” category, which contains some trend data that is part of medical trend, such as demographic trends. That information is not reflected in this graph.

The next two graphs show that unit price increases – rather than increases in utilization – were also the major drivers of medical cost trend at two other health plans. For example, changes in unit price alone, before factoring in changes in provider mix or intensity of care, were responsible for, on average, 80% of cost growth at Harvard Pilgrim Health Care (HPHC) from 2004-2008. At Tufts Health Plan (THP), changes in price, provider mix, and intensity of care accounted for more than 90% of growth in total medical spending in 2007.



**Notes:**

- (1) Reflects fully-insured HMO/POS trend.
- (2) "Unit price" reflects contractual increases in provider rates. "All Other" reflects all other factors that increased health care costs at HPHC, including greater utilization, shifts in location to more expensive sites of care, and changes in the intensity of services provided.



Note: Reflects HMO fee-for-service trend.

The Massachusetts Association of Health Plans also determined that approximately 75% of total health care cost increases are attributable to price rather than utilization.<sup>25</sup> The fact that price is such a significant cost driver in Massachusetts has direct implications for statewide cost containment efforts and policy development. While addressing the utilization component of the cost growth problem is essential, any successful cost containment initiative must take into account the significant role of unit price in driving costs. Bending the cost curve will require tackling the growth in price and the market dynamics that perpetuate price inflation and lead to irrational price disparities.

**F. Higher priced hospitals are gaining market share at the expense of lower priced hospitals, which are losing volume.**

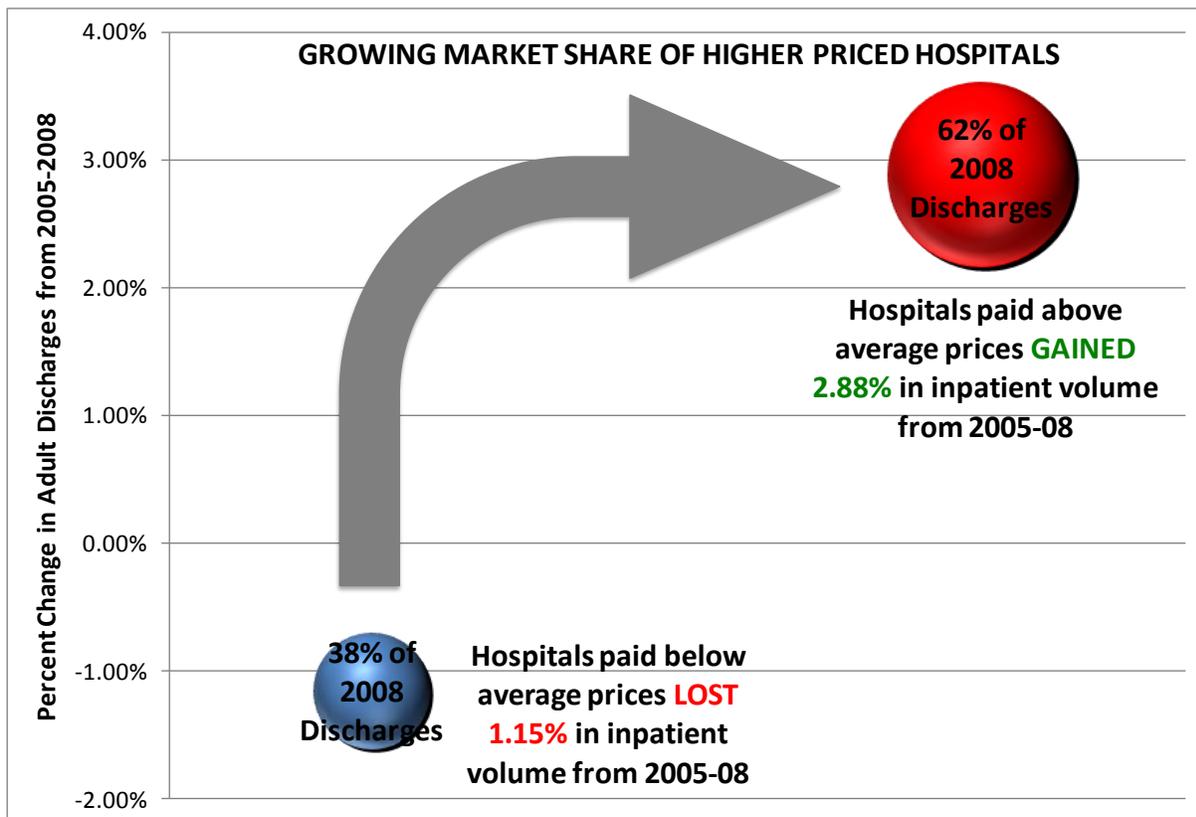
One telling measure of a provider's fiscal health and ability to compete in the market is its ability to obtain price increases and to build patient volume. A provider's ability to increase prices and volume in turn allow it to capitalize, improve its facilities, invest in new equipment, recruit physicians, and attract more patient volume.

A review of hospital capital ratios over the past five years suggests that, while ratios can vary year to year, more highly paid providers are able to fund depreciation consistently at or

<sup>25</sup> Testimony at Division of Insurance Special Session on Small Business, Docket No. G2009-07, November 4, 2009.

above industry standard. These hospitals are able to build new buildings, purchase new equipment and technology, and add to their cost structure. In contrast, hospitals with lower prices are unable to put comparable resources toward building maintenance or equipment acquisition, and in turn are disadvantaged in their endeavors to gain leverage, attract more patients, and preserve market share and revenue. This results in a loss of volume to better capitalized, more expensive hospitals.

The following graph shows the growing market share of more expensive providers from 2005-2008. We obtained data from the Massachusetts Health Data Consortium on the total number of adult discharges at each Massachusetts hospital for each year 2005 through 2008. Tracking the increase or decrease in discharges at a hospital tells us whether that hospital is gaining or losing volume. Then, using BCBS's 2008 hospital prices, we grouped the hospitals into two categories: (1) hospitals which were paid more than the statewide average price (32 hospitals), and (2) those which were paid at or below the statewide average price (37 hospitals). We compared the total number of discharges received by the lower-priced hospitals in 2005 to the total number of discharges they received in 2008, and found that these lower-priced hospitals lost discharges, for a total percent decrease in volume of 1.15% (a loss of more than 3,100 discharges). We then examined the percent change in discharges for the group of hospitals that was paid above average prices, and found that volume at these hospitals grew by 2.88% over this four year period (a gain in more than 12,200 discharges).



NOTES:

- (1) Data from Massachusetts Health Data Consortium; excludes normal newborn discharges (which double count normal obstetrical deliveries since the mother is already counted in the discharge data).
- (2) Statewide, total discharges for all hospitals increased by 1.3% from 2005 to 2008.

Statewide, total discharges for all hospitals increased 1.3% from 2005 to 2008. Therefore, while some of the increase in volume at the higher-priced hospitals resulted from overall growth in discharges since 2008, the balance came from a shift in volume from lower-priced hospitals to higher-priced hospitals. Overall, between 2005 and 2008, the 37 lower-priced hospitals lost 0.9% of their market share of total discharges, while the 32 higher-priced hospitals gained 0.9% in total market share. In 2008, the 37 lower-priced hospitals accounted for 38% of all discharges in Massachusetts, while the 32 higher-priced hospitals accounted for 62%.

As patient volume shifts from lower-priced to higher-priced hospitals, overall health care costs increase because those patients are now receiving their care in the higher-priced setting. The relationship between higher prices and more volume makes it difficult for providers with lower prices to compensate for those low prices with increased volume. Instead, these providers continue to lose volume to higher-priced hospitals, making it increasingly difficult for them to remain competitive, or sometimes even viable. Even if hospitals were held to identical rate increases going forward, prices disparities would continue to increase over time, and we would continue to see an increase in overall costs due to volume shifting to more expensive sites.

**G. The commercial health care marketplace has been distorted by contracting practices that reinforce and perpetuate disparities in pricing.<sup>26</sup>**

In our review of thousands of contract documents from insurers and providers, we have identified a number of contracting practices in effect during the period 2004 to 2008 that reflect and perpetuate the market dynamics and pricing disparities described in this report. While these provisions vary by contract and may or may not still be in effect, they do exemplify a contracting dynamic that obscures transparency, perpetuates market leverage, and prioritizes competitive position (parity) over consumer value.

**1. Payment Parity Agreements**

Payment parity agreements are agreements in which a provider agrees not to charge an insurer more than the price that it charges that insurer's competitors. Our review has shown that parity agreements are pervasive in the industry, and have been used by several major health plans in Massachusetts. The following is an example of one such provision:

[Provider] shall represent and warrant that as of the effective date of this amendment and for the term of this Agreement, the terms of compensation paid by [Insurer] to [Provider] will not be any more than the compensation paid by the above described health plan competitors after adjusting for differences in the size of such competitor's membership.... [Insurer] reserves the right to engage an independent third party auditor, to be mutually agreed upon by the Parties, to verify the representation and warranty made by [Provider] with regard to this section.

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<sup>26</sup> Through our examination of how insurers and providers contract and negotiate payment rates, we have identified numerous administrative inefficiencies that contribute to overall health care costs. There is a startling level of variation that can only contribute to administrative expenses for both health plans and providers. The tremendous variation in methods (or units) of payment creates unwarranted administrative complexity. While most major health plans pay on a DRG basis, one major health plan pays per diem rates. Some providers are paid on a discount-off-of charges basis, while others are paid on a fee schedule with inflators and still others are paid on a percent of premium basis. Likewise, there is no standardization in quality measures. Each plan uses and requires reporting on different quality metrics, especially for the specific measures and targets selected for P4P programs.

While insurance companies seek payment parity to remain competitive and gain market share, such agreements may lock in payment levels and prevent innovation and competition based on pricing. Parity clauses may decrease competition among providers by reducing their incentive to offer lower prices to insurers. Likewise, parity clauses may reduce insurers' incentive to bargain with providers, since rival insurance companies with parity provisions would obtain any price savings. Parity clauses may also deter entry to the marketplace since any discount would have to be passed on to insurers already in the market.

Parity agreements can be used by insurers to guarantee that they will not be competitively disadvantaged by giving rate increases to providers. For example, if Insurer A agrees to give a provider a rate increase – presumably resulting in a corresponding increase in Insurer A's premium rates – Insurer A wants to make sure that the provider will require its competitors to pay the same rate increase, so that all premiums will rise together and Insurer A will not be at a competitive disadvantage. Therefore, these agreements may have the net effect of allowing insurers to increase payment to providers without concern that they will be at a competitive disadvantage to other insurers.

## **2. Product Participation Provisions**

Product participation clauses are used to dictate the terms under which a provider may (or must) participate in an insurer's new product offerings. We have found a significant number of these provisions, such as “anti-steering,” “guaranteed inclusion,” and “product participation parity” clauses, which inhibit the innovation in product design that could lead to better value for consumers.<sup>27</sup>

For example, providers with market leverage are able to obtain contractual provisions that prohibit or inhibit insurers from creating limited network products and/or tiered products that might steer patients away from them. Even clauses that guarantee participation in a limited network so long as the provider meets certain criteria may inhibit the creation of limited network products. Product participation provisions may discourage insurers from seeking to create innovative new products if they believe that their competitors will automatically be able to market the very same product. They may likewise discourage providers from participating in new products if the provider would be willing to participate with one insurer, but not with all insurers.

Here are three examples of product participation clauses:

[Physician hospital organization (PHO)] acknowledges that the Plan may design and offer products that involve Limited Networks.... [T]he Plan agrees to provide [PHO] sixty (60) days prior to written notice of the establishment of any Limited Network, including the details of the products to which the Limited Network will be applicable, and to invite participation by [PHO] in all Limited Network products for which they qualify on the basis of service array, quality, cost or

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<sup>27</sup> “Anti-steering” provisions prohibit insurers, in whole or in part, from creating products that might steer patients away from certain providers. “Guaranteed inclusion” provisions guarantee the participation of certain providers in certain products – for example, an insurer's limited network product – so long as the provider meets certain criteria. “Product participation parity” provisions require a provider to participate in an insurer's product if that provider agrees to participate in a similar product offered by a competing insurer.

other criteria. The Plan agrees not to discriminate against [PHO] in determining the applicable service, quality, cost or other criteria for participation in any Limited Network product. If [Insurer] invites [PHO] to participate, [Insurer] must include all of [PHO] Participating Providers and [PHO] shall, at its election to do so, be included in any such Limited Network products or benefit designs on the terms and conditions set forth in the Existing Agreement....

In no event will [hospital] providers be singled out in a tier, limited network, or other product design arrangement that might provide incentives to steer patients away from [hospital] providers solely by reason of their being a [hospital] provider.

The Parties acknowledge that, from time to time, [Insurer] may offer products or benefit design changes that have the effect of redirecting Members from one or more specific hospital or provider organizations to others in the [Insurer] network. Provider Organization and Hospital agree that they will participate in all such products or benefit design changes that redirect Members as just described provided that the new product or benefit design change is applied uniformly to other tertiary medical centers within [Insurer's] network.

### **3. Supplemental Payments**

We have found a widespread practice of major insurers making supplemental payments to providers. These are payments that are in addition to contracted or scheduled prices. These payments, which do not include pay-for-performance quality or utilization bonuses, take the form of lump sum cash payments, signing bonuses, infrastructure payments, as well as bad debt or government payer shortfall payments.

As is the case with payment rates, it appears that market leverage dictates the amount and type of supplemental payments paid to providers. Although the total amount of supplemental payments has declined overall since 2004, certain providers – notably those with the strongest market leverage – continue to receive substantial amounts of money through supplemental payments.

Use of supplemental payments contributes to the lack of transparency in payment rates. Because supplemental payments are not “loaded” into unit prices and can obscure price outliers, it makes it difficult for regulators, market entities, or others to make valid comparisons of provider rates, and further complicates the ability of providers to contract for value-based, market appropriate prices. The indefinite and flexible nature of supplemental payments also raises questions regarding how such payments affect insurers’ margins from year to year.

### **4. Growth Caps**

Growth caps are contractual provisions that limit provider growth. These clauses, which we found in contracts of a limited number of provider groups with high physician payment rates, set a limit or “cap” on the number of newly added physicians who can be paid at the higher rate. The caps, which can be expressed as numbers of physicians or a percentage of the total or net number of physicians, target either overall physician growth or growth in specific areas, such as growth of specialty services or acquisition of practices over a certain size. For example:

The performance multiplier applies to [physician organization] PO PCPs up to a maximum number of physicians “growth cap”) which shall equal (1) Base Number of PO PCPs...plus (2) an increase of 6% per Physician Contract Year....

The “Permitted Number of Network PCPs” shall mean...for the Contract Year beginning January 1, 2007, the Permitted Number of Network PCPs for the prior Contract Year plus an increase of two percent (2%).

While growth caps can be seen as a reasonable attempt by insurers to save costs by limiting the growth of their most highly-paid provider groups, given the market dynamics and price disparities we have documented, we are concerned that growth caps may have the deleterious effect of freezing disparities in the market place. In practice, the growth caps can prevent smaller physician groups from meaningfully competing with the largest provider organizations.

#### **IV. CONCLUSION AND RECOMMENDATIONS**

Our findings show that the current system of health care payment is not value-based – that is, wide disparities in prices are not explained by differences in quality, complexity of services, or other characteristics that justify a different price. These findings have powerful implications for ongoing policy discussions about ways to contain health care costs, reform payment methodologies, and control health insurance premiums. If we accept that our health care system can be improved by better aligning payment incentives and controlling cost growth, then we must begin to shift how we purchase health care to align payments with “value,” measured by those factors the health care market should justly reward, such as better quality.

Prices paid for health care services reflect market leverage. As a greater portion of the commercial health care dollar shifts, for reasons other than quality or complexity, to those systems with higher payment rates and leverage, costs to the overall system will increase and hospitals with lower payment rates and leverage will continue to be disadvantaged. If left unchecked, there is a risk that these systemic disparities will, over time, create a provider marketplace dominated by very expensive “haves” as the lower and more moderately priced “have nots” are forced to close or consolidate with higher paid systems.

The present health care market does not allow employers and consumers to make value-based purchasing decisions. The market currently lacks transparency in both price and quality information, and other tools that allow employers and consumers to be prudent purchasers. We should expect employers and consumers to be seriously engaged in cost containment, and making the health care market more transparent is a critical step to enlist their participation.

These market dynamics and distortions must be addressed in any successful cost containment strategy. Payment reform, such as the global payment methodology recommended by the Special Commission on the Health Care Payment System, should result in system benefits such as better integration of care and better alignment of system incentives. In order for a shift to global payments to help control costs, it should be coupled with steps to address the dynamics and distortions of the current marketplace.

This report does not point to any simple solutions, and comprehensive and sustainable system improvements will require significant collective effort. The Office of the Attorney General is committed to working with the Legislature, the Patrick administration, health insurers, hospitals, all other health care providers, the business community, municipalities, and consumer

groups to develop cost containment strategies that promote value-based purchasing and ensure consumer access to high quality, affordable health care. We stand ready to assist the Legislature, the Administration, and other policymakers as the Commonwealth develops cost containment solutions that account for current system dynamics and refocus the system towards value.

Based on our examination, we make the following recommendations to advance the goal of improving our health care system to provide universal access to affordable, quality health care services:

1. Increasing transparency and standardization in both health care payment and health care quality measures to promote market effectiveness and value-based purchasing by employers and consumers, including:
  - Tracking and publishing total medical expenses for all providers;
  - Promoting uniform quality measurement and reporting; and
  - Promoting standardization of units of payment and other administrative processes;
2. Consideration of steps to improve market function, including:
  - Adopting payment reform measures that account for and do not exacerbate existing market dynamics and distortions;
  - Developing legislative or regulatory proposals to mitigate health care market dysfunction and price disparities. These proposals would be designed to promote convergence of prices where there are no differences in quality or other value-based factors;
3. Engaging all participants in the development of a value-based health care market by promoting creation of insurance products and decision-making tools that allow and encourage employers and consumers to make prudent health care decisions;
4. Prompt consideration of legislative and administrative action to discourage or prohibit insurer-provider contract provisions that perpetuate market disparities and inhibit product innovation.

Massachusetts is a national leader in providing access to health care. We can also be a leader in keeping health care affordable while maintaining high quality. Working together, policymakers, health plans, all health care providers, businesses, municipalities, and consumers will be able to deliver the health care quality and value that the people of Massachusetts deserve.