BATES WHITE
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Market concentration of hospitals

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The analysis contained herein was performed at the request of America's Health Insurance Plans

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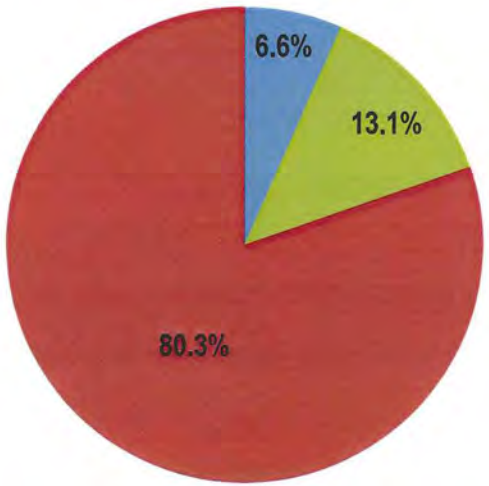
Summary of findings

- Based on DOJ and FTC thresholds, hospital ownership in 2009 is highly concentrated in 80% of metropolitan statistical areas (MSAs)
  - DOJ and FTC, *Horizontal Merger Guidelines* (August 19, 2010)
- This reflects a continuing trend that dates back to the 1990s
  - Over the last 20 years, hospital capacity in the United States has steadily shifted away from independent hospitals and towards multi-hospital systems
  - The Herfindahl-Hirschman Index (HHI) is a commonly used measure of concentration
    - 1997: Average of MSA-level HHIs of roughly 4200
    - 2006: Average of MSA-level HHIs of roughly 4650
    - 2009: Average of MSA-level HHIs of roughly 4700
  - DOJ and FTC guidelines define a market as "highly concentrated" if the HHI exceeds 2500
- Highly concentrated hospital markets remain an important policy issue
  - In an important survey article sponsored by the Robert Wood Johnson Foundation, Vogt and Town (2006) concluded that "research suggests that hospital consolidation in the 1990s raised prices by at least five percent and likely by significantly more."

1. The concentration of hospital ownership in 2009

In 2009, hospital ownership was "highly concentrated" in over 80% of the 335 MSAs in the AHA data

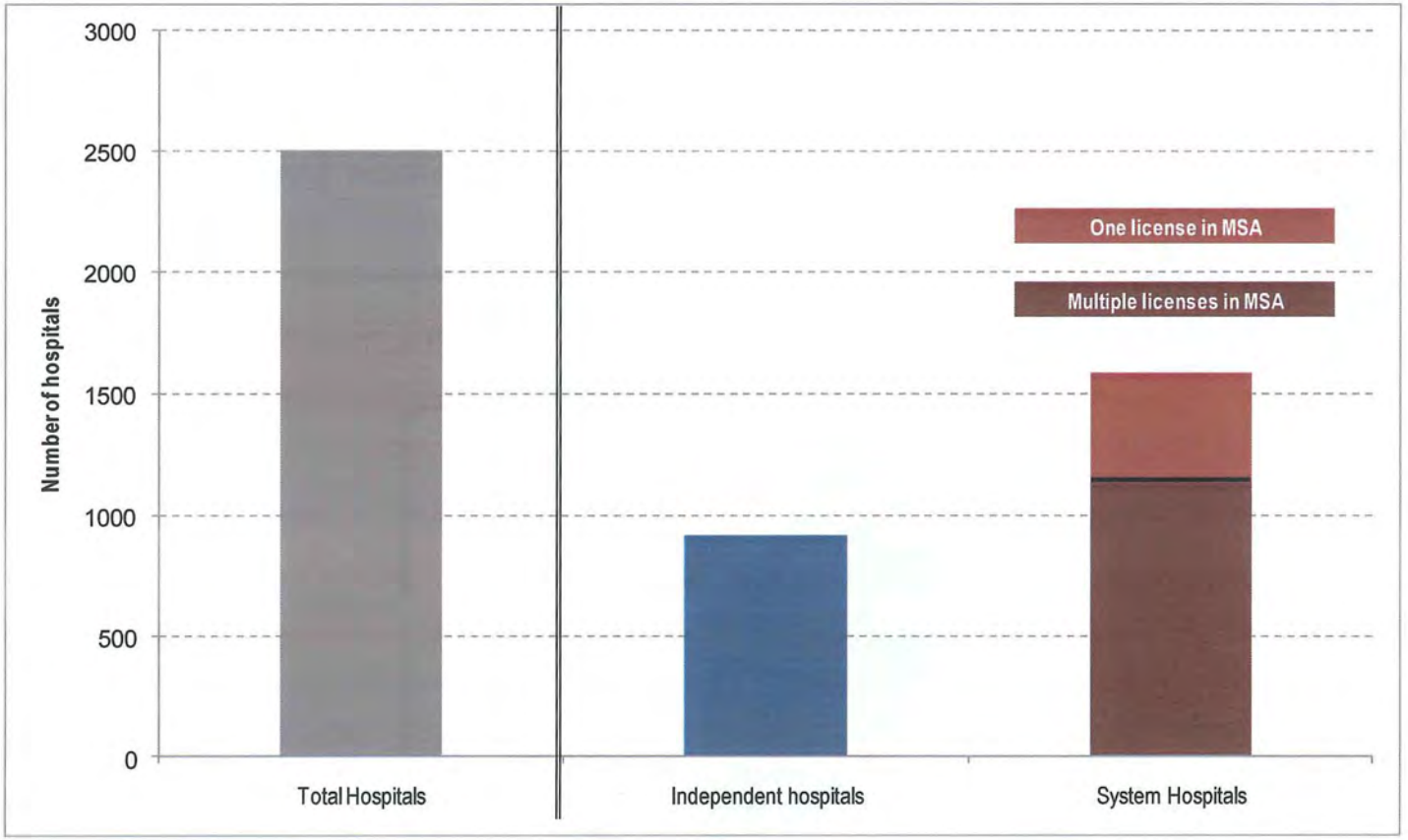
Degree of hospital ownership concentration in MSAs



Source: 2009 AHA Annual Survey

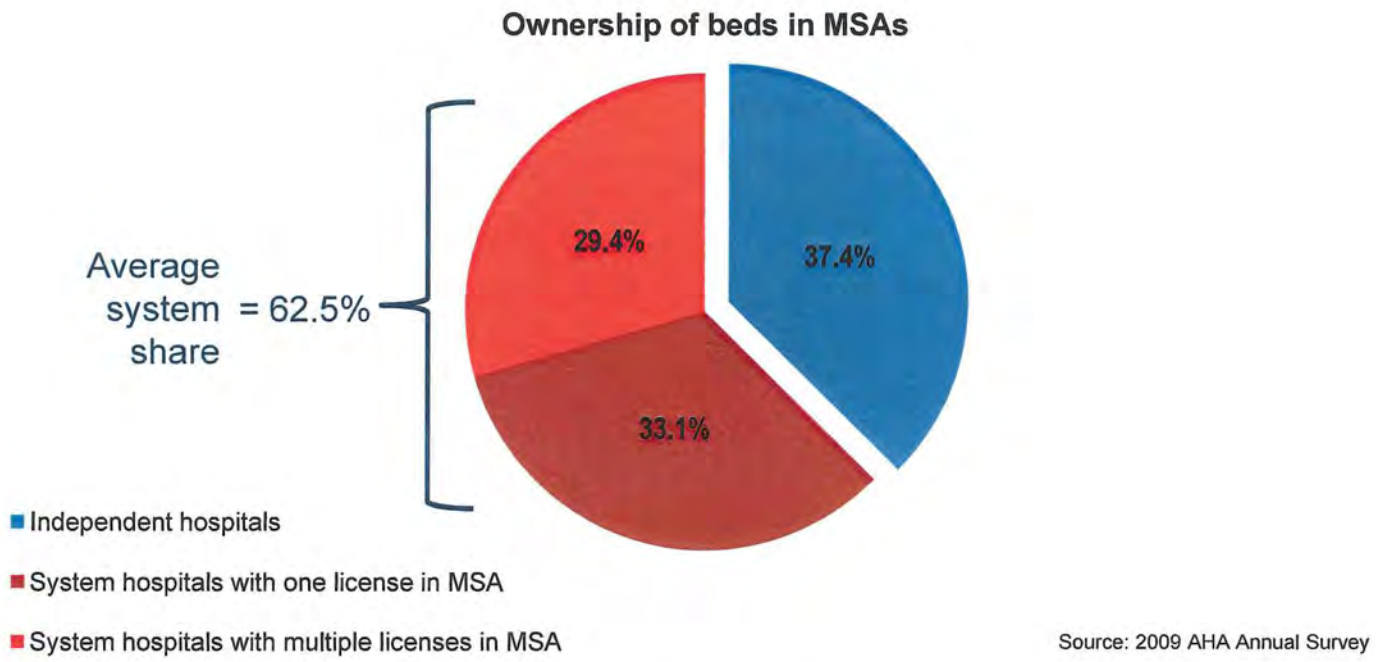
- Categorization is based on revised thresholds issued by the DOJ and FTC in August 2010
  - Low concentration: HHI < 1500
  - Moderate concentration: HHI between 1,500 and 2,500
  - High concentration: HHI > 2500

In 2009, 63% of hospitals in MSAs were members of systems



Source: 2009 AHA Annual Survey (numbers reflect only hospitals located in MSAs)

2009 Ownership of bed capacity, by system status



Source: 2009 AHA Annual Survey

- In the average MSA, systems own over 60% of beds, nearly half of which is attributable to systems with multiple hospitals in an MSA
- Weighting by MSA admissions (giving more weight to larger MSAs) shows that the typical patient resides in an MSA in which systems control over 60% of beds, over two-thirds of which is attributable to systems with multiple hospitals in the MSA

DOJ and FTC concentration thresholds

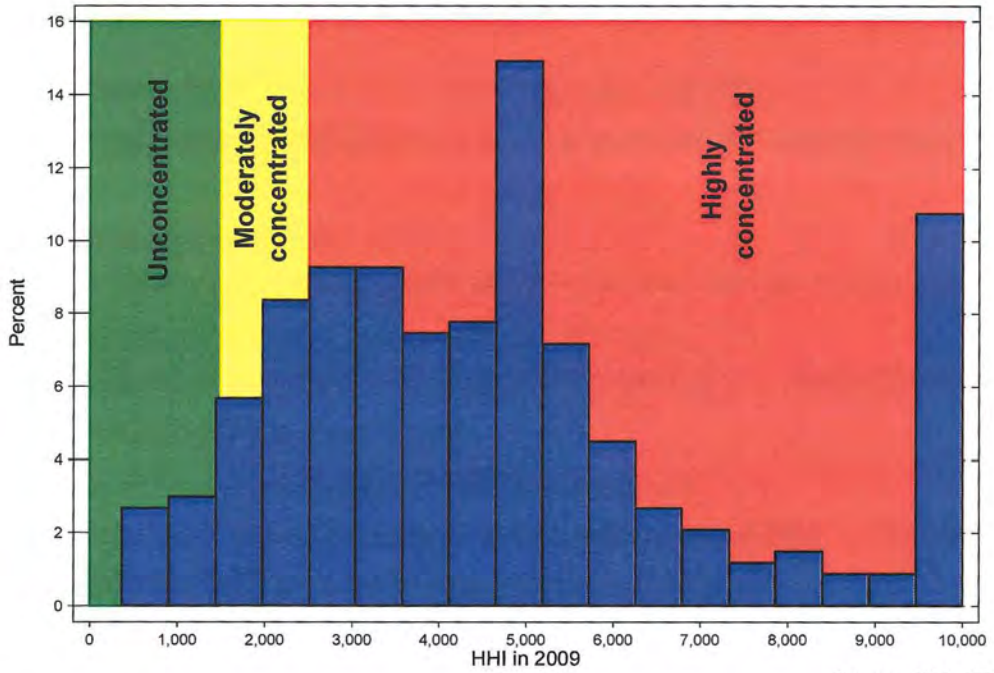
- The DOJ and FTC use the Herfindahl-Hirschman Index (HHI) to classify the degree of concentration in markets:
  - Unconcentrated: HHI below 1,500
    - "Mergers resulting in unconcentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis"
  - Moderately concentrated: HHI between 1,500 and 2,500
    - "Mergers resulting in moderately concentrated markets . . . potentially raise significant competitive concerns and often warrant scrutiny"
  - Highly concentrated: HHI above 2,500
    - "Mergers resulting in highly concentrated markets . . . potentially raise significant competitive concerns and often warrant scrutiny"
  - Note: The DOJ and FTC issued these revised thresholds in an August 2010 update of the *Horizontal Merger Guidelines*
- The Herfindahl-Hirschman Index (HHI) is the sum of squared market shares
  - 4 firms with 25% share each: HHI = $25^2 + 25^2 + 25^2 + 25^2 = 2{,}500$

Note: MSAs are useful for summarizing national trends but may not correspond to relevant antitrust geographic markets

- Antitrust geographic hospital markets are often smaller than MSAs
- Relevant antitrust markets may be more concentrated than MSA-level statistics indicate

The distribution of MSA-level hospital ownership concentration in 2009 (as measured by the HHI)

The concentration of hospital ownership in MSAs



Source: 2009 AHA Annual Survey

- A more granular look at year 2009 MSA-level HHIs shows
  - Slightly more than 10% of MSAs have only one hospital owner
  - The majority of the highly concentrated MSAs have HHIs between 2,500 and 5,000
    - 2,500 ≡ four equal-size firms
    - 5,000 ≡ two equal-size firms (duopoly)

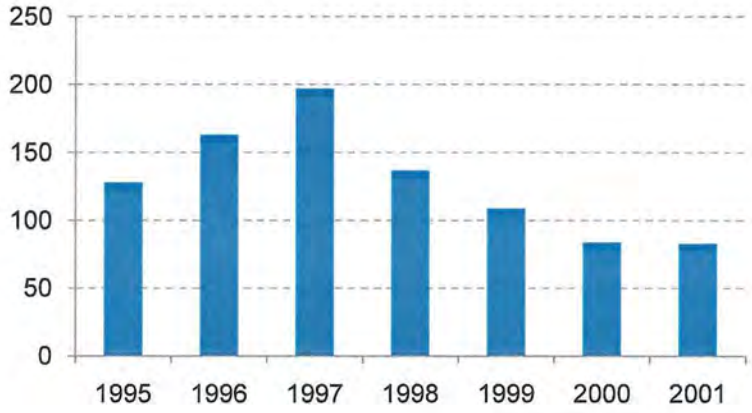
2. How hospital ownership became highly concentrated

The hospital merger wave of the 1990s

- Economists Robert Town and Bill Vogt published a survey, commissioned by the Robert Wood Johnson Foundation, of the literature on the effects of hospital consolidation
  - Vogt, W., and R. Town. "How Has Hospital Consolidation Affected the Price and Quality of Hospital Care?" RWJF Research Synthesis Report No. 9, February 2006

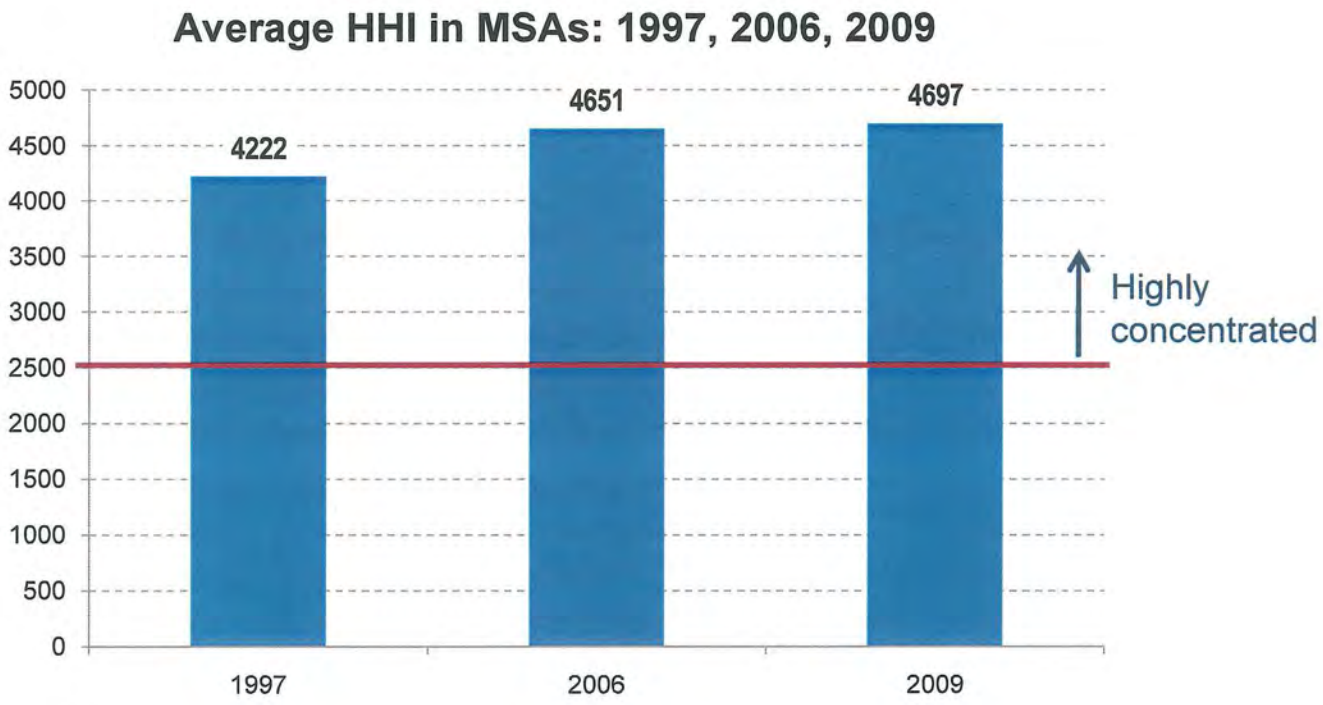
Over the 1990s the hospital industry underwent a wave of consolidation that transformed the inpatient hospital market place. By the mid-1990s, hospital merger and acquisition activity was nine times its level at the start of the decade. The wave of mergers dramatically increased market concentration for inpatient hospital services as measured by the Herfindahl Hirschman Index.

Annual hospital M&A announcements



Source: Irving Levin Associates Hospital M&A reports

By 1997, most MSAs were highly concentrated and concentration has increased steadily since then



- From 1997 to 2009, the average HHI increased from 4222 to 4697, an increase of 11%.

Sources: (1) Cory Capps, "Price implications of hospital consolidation," *The Healthcare Imperative: Lowering Costs and Improving Outcomes*, Ch. 5, Institute of Medicine of the National Academies (2010): 177–187; (2) 2006 AHA Annual Survey; (3) 2009 AHA Annual Survey

The 2010 Massachusetts study of Health Care Cost Trends*

- The Massachusetts Division of Health Care Finance and Policy and the Attorney General gathered data on healthcare costs
- With respect to hospital costs and pricing, the report concludes that:
  - *Increased prices were found to be the most important factor driving rising health care spending*
  - *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 (5) . . . differences in hospital costs of delivering similar services at similar facilities*
  - *Price variations are correlated to market leverage as measured by the relative market position of the hospital or provider group compared . . . .*
  - *Price increases, not increases in utilization, caused most of the increases in health care costs during the past few years in Massachusetts*
  - *Higher priced hospitals are gaining market share at the expense of lower priced hospitals, which are losing volume*

* Notes:

- Massachusetts Health Care Cost Trends, 2010 Final Report, http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/final_report_docs/health_care_cost_trends_2010_final_report.pdf
- See also, Office of Attorney General Martha Coakley, "Examination of Health Care Cost Trends and Cost Drivers," March 16, 2010 at http://www.mass.gov/Cago/docs/healthcare/final_report_w_cover_appendices_glossary.pdf

3. Recent trends: 2006–2009

Recent trends

1. Hospital consolidation continues at a steady, albeit reduced, pace
   - Most MSAs were already highly concentrated by 1997
   - From 2006 to 2009, both the unweighted and weighted average HHIs across MSAs increased by more than 50 points
2. Federal hospital merger enforcement has reappeared
   - 2002: FTC launches hospital merger retrospective "to determine whether there is evidence of anticompetitive effects [from particular hospital mergers]"
     - http://www.ftc.gov/opa/2002/08/mergerlitigation.shtm
   - 2004: FTC sues to unwind a 2000 merger in Evanston, IL
     - Prevailed on the substance, but no divestiture
     - http://www.ftc.gov/os/adjpro/d9315/index.shtm
   - 2008: FTC sues to block a proposed merger in Northern Virginia
     - Acquirer abandoned the deal after the FTC sued
     - http://www.ftc.gov/os/adjpro/d9326/index.shtm
   - 2011: FTC sues to unwind a consummated merger and to prospectively block another
     - Outcomes as yet unknown
     - Ohio: http://www.ftc.gov/os/adjpro/d9346/index.shtm
     - Georgia: http://www.ftc.gov/os/adjpro/d9348/index.shtm

From 2006 to 2009, the HHI increased by 500 or more points in 30 MSAs

Change in HHI from 2006–2009	Number of MSAs	Degree of change in HHI
-10,000 to -2,000	1	Large decrease
-2,000 to -1,500	3	
-1,500 to -1,000	2	
-1,000 to -500	9	
-500 to 0	116	Modest change
0	40	
0 to 500	134	
500 to 1,000	19	Large increase
1,000 to 1,500	6	
1,500 to 2,000	3	
2,000 to 10,000	2	

Source: 2006, 2009 AHA Annual Survey

- Over the 3 years from 2006 to 2009:
  - Most MSAs saw modest changes in the HHI
  - The average HHI across MSAs increased by 61 points
  - 30 MSAs saw increases in the HHI of more than 500 points
  - Large increases in the HHI outnumbered large decreases by a 2-to-1 margin

4. Hospital ownership concentration in selected areas

Selected areas

- Examine ownership concentration in selected areas in which hospital systems have been alleged to possess market power
- We do not independently review evidence on or reach conclusions regarding pricing or market power

Markets selected for examination

Area	Basis for market power concern
San Francisco Bay Area	▪ 2001 *State of California v. Sutter* hospital merger case ▪ 2011 study of price increases following Sutter's acquisition of Summit Alta Bates
Northern Virginia	▪ 2008 *FTC v. Inova* hospital merger case
Boston Area	▪ 2010 Massachusetts AG and DHCFP Reports
Toledo Area	▪ 2011 *FTC vs. ProMedica* federal district court hospital merger decision

Hospital ownership concentration in the San Francisco Bay Area

- 2000: The California Attorney General loses its attempt to block Sutter Health's acquisition of Summit Medical Center
  - Sutter also owned Alta Bates Medical Center, located 2.5 miles away
- 2011: Steven Tenn's study of the price effects of Sutter's acquisition of Summit
  - "Summit and Alta Bates were located in a large urban area with many other hospitals that offered a similar range of services . . . A central issue raised by the Sutter–Summit transaction was whether . . . travel costs were sufficiently low that the presence of other hospitals would prevent an anticompetitive price increase. Our results suggest they were an insufficient constraint."
  - "Although Alta Bates' post-merger price change is similar to the price change for other hospitals, **Summit's price increase is one of the largest of any comparable hospital in California**. The empirical evidence indicates that, for this transaction, the merger of a higher-priced hospital with a lower-priced competitor produced two higher-priced hospitals"
  - Based on an analysis of pre- and post-merger claims data obtained by the FTC

Sutter Health's share in the Bay Area (2009)

- Shares are in a 30-minute drive time radius around downtown San Francisco (San Francisco County and parts of Marin, Alameda, Contra Costa, and San Mateo)

System	Hospital	Beds	Shares[1]		
			Beds	Non-government admissions	Non-government inpatient days
Sutter	Alta Bates Summit Medical Center	355	6.6%	9.7%	9.1%
	Alta Bates Summit Medical Center - Summit Campus	408	7.5%	5.2%	5.9%
	California Pacific Medical Center	798	14.7%	15.9%	13.1%
	Mills-Peninsula Health Services	389	7.2%	9.3%	5.4%
	St. Luke's Hospital	229	4.2%	2.5%	3.0%
	SUBTOTAL	**2,179**	**40.2%**	**42.7%**	**36.5%**
Catholic Healthcare West	Saint Francis Memorial Hospital	239	4.4%	3.1%	2.8%
	Sequoia Hospital	173	3.2%	6.3%	3.4%
	St. Mary's Medical Center	232	4.3%	3.0%	2.2%
	SUBTOTAL	644	11.9%	12.4%	8.5%
Independent / System hospitals with one license in the area	Alameda Hospital	131	2.4%	1.1%	1.5%
	Chinese Hospital	54	1.0%	0.3%	0.2%
	Doctors Medical Center-San Pablo Campus	140	2.6%	2.1%	1.4%
	Marin General Hospital[2]	235	4.3%	5.8%	3.5%
	San Francisco General Hospital Medical Center	501	9.3%	9.0%	11.0%
	San Mateo Medical Center	446	8.2%	2.5%	9.8%
	Seton Medical Center (Daughters of Charity Health)	429	7.9%	5.5%	9.4%
	UCSF Medical Center	660	12.2%	18.7%	18.4%
	SUBTOTAL	2,596	47.9%	44.9%	55.0%

[1] Excludes Kaiser hospitals and Children's Hospital and Research Center at Oakland
[2] Marin hospital left Sutter in June 2010

Hospital ownership concentration in Northern Virginia

- In May of 2008, the FTC and the Virginia Attorney General sued to block Inova Health System's proposed acquisition of Prince William Hospital
- The FTC's complaint alleged the following:
  - "**Competition between Inova and PWHS currently constrains the rates that the merging parties, particularly PWHS, are able to negotiate with health plans.**"
  - The relevant geographic market in which to analyze the Merger is an area no larger than the counties of Arlington, Fairfax, Fauquier, Loudoun, and Prince William, as well as the independent cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.
  - "As a result of the Merger, there would be only five firms left in the relevant market . . . **Inova would control over 73 percent of the licensed hospital beds in Northern Virginia.**"
  - "Because one of the key factors influencing bargaining leverage for a health plan is the availability of independent substitutes for the negotiating hospital, a merger of close substitutes eliminates this competitive discipline. **After the Merger, health plans will no longer have the threat of excluding PWHS because it will be part of the Inova system, which is currently PWHS' closest substitute**. Without this competitive discipline, Inova . . . will force health plans to pay higher prices for services from PWHS."
- Inova abandoned the acquisition after the FTC sued

Inova Health System's share in Northern Virginia (2009)

System	Hospital	Beds	Shares		
			Beds	Non-government admissions	Non-government inpatient days
Inova	Inova Alexandria Hospital	334	11.9%	8.2%	9.2%
	Inova Fair Oaks Hospital	196	7.0%	9.6%	7.4%
	Inova Fairfax Hospital	927	33.0%	37.7%	41.3%
	Inova Loudoun Hospital	183	6.5%	7.2%	6.0%
	Inova Mount Vernon Hospital	237	8.4%	4.4%	6.6%
	SUBTOTAL	**1,877**	**66.9%**	**67.1%**	**70.5%**
HCA	Reston Hospital Center	147	5.2%	8.7%	7.3%
Sentara	Sentara Potomac Hospital	176	6.3%	7.4%	6.2%
Novant	Prince William Hospital	168	6.0%	4.2%	3.5%
Independent / System hospitals with one license in the area	Fauquier Hospital	97	3.5%	2.5%	2.1%
	Virginia Hospital Center - Arlington	342	12.2%	10.2%	10.4%
	SUBTOTAL	439	15.6%	12.7%	12.5%

Hospital ownership concentration in the Boston Area

- The Massachusetts Attorney General and Division of Health Care Finance and Policy conducted a detailed study of healthcare cost growth drivers and concluded:
  - "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."
  - "**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."
  - Office of Attorney General Martha Coakley, "Examination of Health Care Cost Trends and Cost Drivers," March 16, 2010, p. 4 ["*Coakley Report*"]
- The Attorney General's report shows that Partners HealthCare's hospital prices for a common basket of services are among the highest in the state
  - *Coakley Report*, pp. 10-12, 28-31
  - See also, Massachusetts Health Care Cost Trends, 2010 Final Report

Partners HealthCare's share in the Boston Area (2009)

- The "Boston Area" is defined as a 30-minute drive time radius around downtown Boston
- Includes Suffolk County and parts of Essex, Norfolk, Middlesex, and Plymouth

System	Hospital	Beds	Shares		
			Beds	Non-government admissions	Non-government inpatient days
Partners	Brigham and Women's Hospital	773	11.8%	14.1%	17.7%
	Faulkner Hospital	115	1.8%	2.0%	1.8%
	Massachusetts General Hospital	907	13.8%	13.0%	15.0%
	Newton-Wellesley Hospital	205	3.1%	7.2%	5.4%
	SUBTOTAL	**2,000**	**30.5%**	**36.3%**	**39.9%**
Caritas	Caritas Good Samaritan Medical Center	190	2.9%	3.3%	2.6%
	Caritas Norwood Hospital	205	3.1%	2.7%	2.4%
	Caritas St. Elizabeth's Medical Center	338	5.2%	3.2%	3.2%
	Carney Hospital	133	2.0%	1.4%	1.5%
	SUBTOTAL	866	13.2%	10.6%	9.9%
CareGroup	Beth Israel Deaconess Medical Center	621	9.5%	10.4%	11.0%
	Mount Auburn Hospital	207	3.2%	2.8%	2.3%
	New England Baptist Hospital	93	1.4%	2.3%	2.2%
	SUBTOTAL	921	14.0%	15.5%	15.5%
Independent / System hospitals with one license in the area	Boston Medical Center, Cambridge Health Alliance, Cape Cod Hospital (Cape Cod Healthcare System), Hallmark Health System, Lahey Clinic Hospital, MetroWest Medical Center, Milton Hospital, Quincy Medical Center, South Shore Hospital, Tufts Medical Center, Winchester Hospital	2,773	42.3%	37.6%	34.8%

Note: Excludes Children's Hospital Boston

Hospital ownership concentration in the Toledo, Ohio Area

- In May of 2010, ProMedica Health System in Lucas County, Ohio entered into an agreement to acquire St. Luke's Hospital, also in Lucas County
- The merger consummated in September 2010, subject to a "Hold Separate Agreement" during the FTC's review of the competitive implications of the merger
- In January of 2011, the FTC filed a complaint alleging that the merger would reduce hospital competition in and around Lucas County, OH
- In March of 2011, a federal District Court judge extended the Hold Separate Agreement pending trial, holding:
  - "The Acquisition significantly increases concentration in the already highly-concentrated Lucas County markets for [general acute care] and [obstetric] services."
  - "SLH's own ordinary-course documents show that **St. Luke's was fully aware that its acquisition by ProMedica would increase SLH's bargaining leverage and result in higher healthcare prices to health plans, employers, and patients**."
  - "The Acquisition increases ProMedica's market shares for inpatient general acute-care services and obstetrics and its bargaining leverage with health plans."
  - This decision extends the Hold Separate Agreement pending a full trial, which is scheduled to begin on May 31, 2001.
- *FTC v. ProMedica*, Case No. 3:11 CV 47, at http://www.ftc.gov/os/caselist/1010167/110329promedicafindings.pdf

ProMedica's share in Lucas County, OH (2009)

System	Hospital	Beds	Shares		
			Beds	Non-government admissions	Non-government inpatient days
ProMedica	Bay Park Community Hospital	72	3.4%	1.3%	1.7%
	Flower Hospital	223	10.4%	10.8%	11.7%
	The Toledo Hospital	619	28.8%	34.5%	36.7%
	SUBTOTAL	**914**	**42.5%**	**46.7%**	**50.2%**
Catholic Healthcare Partners	Mercy St. Anne Hospital	100	4.7%	5.4%	4.9%
	Mercy St. Charles Hospital	264	12.3%	7.8%	5.5%
	St. Vincent Mercy Medical Center	445	20.7%	18.7%	18.5%
	SUBTOTAL	809	37.6%	31.9%	28.9%
Independent / System hospitals with one license in the area	St. Luke's Hospital*	198	9.2%	9.9%	10.1%
	University of Toledo Medical Center	228	10.6%	11.6%	10.8%
	SUBTOTAL	426	19.8%	21.4%	20.9%

* St. Luke's is currently owned by ProMedica, but is operating under a Hold Separate Agreement pending resolution of the FTC litigation

Takeaways

- Hospital market power can be a concern even in large metropolitan areas
- The FTC, DOJ, courts, and state Attorneys General have concluded in various instances that hospital market power can be problematic
- Hospital market power can exist even when shares within the broader metropolitan area are below the range commonly associated with antitrust concerns
  1. In some cases, metropolitan area shares below 30% can signify market power
  2. Relevant antitrust markets can be smaller than metropolitan areas
     - Metropolitan area shares may understate market power
     - ENH had a very high share in Chicago's northern suburbs, but a low share in Cook County
     - Similarly, in the Summit-Alta Bates merger, the postmerger share in the broader Bay Area was much lower than in the Inner East Bay
- Systems can gain market power one acquisition at a time
  - Through actions in Virginia, the FTC has shown a willingness to oppose this "roll up" strategy
- It may be difficult for the agencies to undo consummated mergers
  - Divestitures can be disruptive to patients and providers
  - Places a premium on premerger enforcement

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« The President's Deficit Reduction Plan: Implications for Health Care
HA Blog ACO Post Leads New Wonk Review »

The Proposed Accountable Care Organization Antitrust Guidance: A First Look

April 14th, 2011

by Joe Miller

Editor's note: *This post, by Joe Miller, is part of a series of* Health Affairs *Blog posts examining the proposed rules and guidelines implementing the Medicare Shared Savings Program, issued March 31 by the Centers for Medicare and Medicaid Services and other agencies. You can read other posts in the series by Mark McClellan and Elliott Fisher, Steven Lieberman, Douglas Hastings, and Ron Klar.*

The Federal Trade Commission and Department of Justice ("the Agencies") released a *Proposed Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program* ("*Statement*") at the same time the Notice of Proposed Rulemaking on Medicare Accountable Care Organizations (ACOs) was published by the Centers for Medicare and Medicaid Services (CMS). The Affordable Care Act provides no waiver authority to the HHS Secretary for the antitrust laws, and those who might consider forming ACOs were asking for regulatory clarity regarding their potential for antitrust risk.

Antitrust is a nuanced and complicated area of law, and CMS wisely delegated the antitrust function to the expert Agencies instead of doing the work itself or ignoring the subject completely. The resulting *Statement* sets up a useful framework for review that confirms that the ACO program will rely on competition to hold down costs and implicitly rejects the argument that market power and quality go hand-in-hand. However, as with all large programmatic undertakings, getting the objectives and framework right is only the first step. The *Statement* is essentially a screening mechanism to allow all parties to quickly discern whether a particular ACO requires closer antitrust scrutiny, and if the screens are set at a level that lets too much consolidation slip through, both consumers and the Shared Savings Program will be worse off.

The *Statement* attempts to balance the need for administrability, accuracy and speed for antitrust reviews, which is a challenging task in light of the inherent difficulty and complexity of the underlying legal and economic concepts. Does the *Statement* get the balance right? As I explain below, there is reason to worry that the *Statement* tilts too much toward allowing consolidation. Because of the vast size of health care markets, the anticompetitive effects of even a few ACOs with excessive market power could swamp any savings from the Shared Savings Program. Moreover, the screens laid out in the Statement do not address the potential market power of ACOs formed through mergers and acquisitions, the danger of anticompetitive effects from participation in the Shared Savings Program by providers who already have substantial market power, or the potential for cost shifting from Medicare to commercial markets. In addition, analyses that depend on Medicare data may not reveal the market power wielded by all providers that might participate in ACOs under the Shared Savings Program.

Summary of *Proposed Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program*

The Agencies promulgated a proposed enforcement policy regarding the application of the antitrust laws

to health care collaborations among otherwise independent providers and provider groups formed after March 23, 2010, the date the Affordable Care Act was signed into law. The Agencies are seeking public comments, which are due by May 31, 2011. The Statement recognizes that the perverse incentives of the Medicare fee-for-service payment system could be mitigated in part by providers forming ACOs under the Shared Savings Program, and further acknowledges that providers are more likely to coordinate patient care if they can use the ACO to serve commercially insured patients as well. At the same time, the Agencies recognize that ACOs have the potential to reduce competition and harm consumers through higher prices and lower quality of care, and the antitrust harm extends to both the Medicare and the commercial market.

The *Statement* asserts that ACOs that meet CMS's eligibility requirements are reasonably likely to lead to provider collaborations intended to improve quality and reduce costs, and therefore will meet established clinical integration standards and avoid *per se* condemnation under the antitrust laws. Further, CMS will collect and evaluate cost, utilization and quality metrics over the three year agreement period, which will allow the Agencies to determine if in fact the CMS eligibility criteria lead to competitive benefits contemplated by the clinical integration metrics.

Accordingly, the Agencies will apply the rule of reason to an ACO if the ACO uses the same governance and leadership structure for the commercial and Medicare markets. The Agencies will undertake a streamlined analysis that calculates an ACO's share of services in each ACO participant's Primary Service Area, or PSA.(note 1) The higher the PSA share the greater the risk the ACO will be anticompetitive by reducing quality, innovation and choice for Medicare and commercial patients, in part by reducing the ability of competing ACOs to form. High PSA shares may also allow ACOs to exercise anticompetitive effects against commercial health plans. The Agencies are careful to explain that PSAs are not necessarily relevant antitrust geographic markets.

The Statement articulates three levels of antitrust scrutiny indicated by an ACO's PSA share: ACOs with PSA shares of 30 percent or less fall into a "safety zone"; those with over 50 percent shares require formal antitrust review by the Agencies; and ACOs with PSA service shares of between 30 percent and 50 percent may voluntarily seek Agency review as they apply to become ACOs under the Shared Savings Program.

A. Safety Zone

If a proposed ACO's PSA share is 30 percent or less it falls into an antitrust safety zone, meaning it is highly unlikely to raise significant antitrust concerns, and no initial competitive Agency review is necessary. The safety zone also includes a "Rural Exception" for providers that serve sparsely populated areas, and also has a "Dominant Provider Limitation," meaning the ACO may include a provider in the group with over a 50 percent PSA share, if (1) no other ACO participant provides that service in the PSA, and (2) the provider participates in the ACO on a non-exclusive basis.

B. Mandatory Review

If the ACO's PSA share exceeds 50 percent it will be subject to mandatory Agency review. The review will be based on several categories of information the ACO must provide to the Agency, including internal strategies and plans, documents that relate to competitors' ability to compete with the ACO, and contact information for commercial health plans or other payers. The review is promised to be completed within 90 days, and will culminate in a letter from the Agency saying it either has no present intent to challenge or recommend challenging the ACO, or it is likely to challenge or recommend challenging the ACO if it proceeds. CMS will not approve the ACO for participation in the Shared Savings Program if it receives a challenge letter from the Agency.

C. PSA shares between 30 percent and 50 percent

If an ACO is below the 50 percent mandatory review PSA share, but above the 30 percent PSA safety zone, it may apply to become an ACO but will remain subject to investigation and potential challenge if it appears its formation or conduct may be anticompetitive. To provide additional guidance to potential ACOs in this middle category, the Statement lists categories of conduct to avoid to reduce the risk of an antitrust investigation. The categories to avoid include: preventing or discouraging commercial payers from steering patients to choose certain providers; tying sales of the ACO's services to the commercial payer's purchase of other services outside the ACO; contracting with other ACO providers on an exclusive basis; and restricting a commercial payer's ability to make available the provider's cost and quality information to the payer's enrollees if similar information is used in the Shared Savings Program.

If an ACO desires further certainty as to its antitrust risk it may request expedited antitrust review from the Agencies.

Initial Thoughts on the *Statement*

1. A Screening Mechanism

The Agencies have articulated *when* an ACO will be subject to an antitrust review; the Statement does not state the standards or norms of an antitrust analysis. It appears to be designed to encourage ACOs to get private antitrust advice as they form, and thereby deter plainly problematic collaborations.(note 2) The *Statement* itself makes the point well: "This Policy Statement provides guidance to allow ACOs to determine whether they are likely to present competitive concerns. It does not reflect the full analysis that the Agencies may use in evaluating ACOs . . ." (Statement, footnote 9)

Likewise, the Primary Service Area is not intended to identify an antitrust relevant geographic market. (Statement, footnote 22) Defining relevant geographic antitrust markets is a fact intensive inquiry requiring data and information that an ACO will find difficult to obtain in the public domain. Instead, the PSA test looks to patient draw statistics, a test that closely resembles the "Elzinga-Hogarty" test that has been repudiated by the FTC itself as a test for geographic markets, but may suffice as a "good enough" solution to identify those ACOs in need of further review. The PSA test favors administrability over precision; a potential ACO can determine, at relatively low cost and with tools and resources available to the general public, whether it is likely to get a closer look by the Agencies. The PSA test is not designed, however, to predict the outcome of the more intensive antitrust review. It is too simple and crude a tool for understanding the competitive dynamics of a provider market. The question for the Agencies is what, if anything is better suited to achieve the multiple goals of speedy review, ease of administration and protecting consumers from market power.

2. How Should the Screen Work?

Any screening mechanism should work to minimize the sum of false positives (in this case, scrutinizing ACOs that are competitively benign) and false negatives (not catching ACOs that deserve meaningful antitrust review), or what social scientists call Type I and Type II error. To set this screen appropriately however, the Agencies should recognize that the two types of error do not carry equal weight. A false positive imposes a minimal burden of a mild antitrust review(note 3), while a false negative imposes significant and lasting consumer harm by ignoring an antitrust violation, with its attendant price and quality effects. Accordingly, the screen should be set to err on the side reviewing more ACOs, particularly at the outset of the program. This approach is consistent with the policies of allowing competition to bring consumer benefits to health care markets.

To put some context and metrics around the benefit/burden calculus, consider that CMS predicts on page 349 of its proposed rule (page 19366 in the April 7 Federal Register) that the Shared Savings Program will generate about $510 million in savings over three years. Compare that number with the total annual operating revenues for hospitals in *one* medium sized city of over $7 billion. Multiply a small price increase on $7 billion by scores of jurisdictions and it's easy to see the concern. If ACO policy encourages the formation of entities with market power, the resulting anticompetitive effects will likely far outweigh the financial benefit to the Medicare Trust Fund. Put another way, even the negative effects from a few ACOs with market power can call into question the premise of the Program.

Whether the *Statement* sets the screens at the right levels is an empirical question, but there is reason to question if they are too permissive. I would encourage the Agencies to articulate the rationale for the 30 percent safe harbor, and when the Shared Savings Program starts, for the FTC to use its subpoena power (note 4) to gather the necessary information to test that rationale and publish the results in a peer review economics journal. Until we have a better understanding for how the PSA test works in practice it is consistent with law and policy to err on the side of preventing consumer harm. Even shares of a single specialty group in the 20 percent to 30 percent market share range can create enough market power to warrant a closer look; a well-intentioned program does not justify ignoring the potential for harm in the name of expediency. This is the real danger of the Agencies' approach; it has the right objective but the test may not be set accurately to achieve the right results.

Aside from setting the right PSA levels, the test itself contains one potentially problematic data bias. Due to the general difficulty in obtaining publically available commercial payment data, potential ACOs will likely rely on Medicare fee for service payment data. Those data, however, will not identify providers who choose not to accept Medicare patients because the reimbursement levels are too low. Similarly,

those data may identify as appropriate for further review providers who have practices heavily weighted towards Medicare patients, even though—if all patients were considered—they would not cross the fifty percent threshold. This may be an unavoidable problem due to the lack of available data on the combination of private and public markets, but the Agencies should acknowledge the problem and attempt to correct for the biases.

3. Antitrust Problems are Best Avoided, not Fixed

Antitrust policy generally acknowledges that market power can be effectively deterred and avoided, but it is very difficult to remedy once entrenched. For this reason, mergers that violate the antitrust laws are blocked in court, and the Hart Scott Rodino Act sets up a screening mechanism similar to the *Statement* to identify potentially problematic deals before it's too late. Transactions for which antitrust issues are capable of being remedied by selling off assets are allowed to proceed with such a "structural" remedy, but the Agencies generally disfavor remedying antitrust violations through after-the-fact restrictions on behavior. Regulating parties through the crude tool of antitrust is rarely effective, so behavioral restrictions are generally reserved for those violations where there is no other good option. The Agencies deserve recognition for drafting the *Statement* consistent with long-standing principles of prevention, and in applying those principles should maintain the traditional approach of prevention (either outright or through structural remedies) over regulation (through behavioral remedies)..

4. What the *Statement* does not Address

The Statement only applies to collaborations among "otherwise independent providers," so by its terms offers no guidance to extant provider groups that may have market power but do not *further* consolidate the market to form an ACO. For example, the Massachusetts Attorney General issued a lengthy report identifying "market leverage" as a primary driver of high health care costs in that state, and further noting that price variations among providers are not explained by quality of care, illness burden of the patient population, complexity of the cases, or cost differences. A hospital in that market that wishes to contract with Medicare as an ACO is left without guidance by the *Statement*. The Agencies should consider clarifying the antitrust issues associated with allowing a provider with significant market power to participate in the Shared Savings Program. Moreover, CMS should carefully consider favoring ACO applications from provider groups without market power while it calibrates and refines the program so as to avoid potential consumer harm.

The Statement is also silent on how to address the issue of cost shifting between the Medicare program and the private sector. If an ACO aggregates market power, even though it is not subject to, or falls within the limits set forth in, the *Statement*, it has the potential to satisfy the metrics of the Shared Savings Program, reap the extra revenue from the Trust Fund, and simultaneously reduce quality in the private market. This is not the intent of the Program and should be addressed. CMS will gather cost, quality and utilization data to test whether the Program's eligibility criteria in fact further Program goals; those data should be sufficient to identify and deter the potential for cost shifting. The *Statement* should clarify that the data gathering tools in the ACO Rule can and should be shared with the Agencies for antitrust enforcement purposes.

Finally, the Statement does not address the antitrust treatment of mergers and acquisitions, presumably because those transactions will be discovered by the normal Hart-Scott-Rodino reporting process and investigated under the Clayton Act. That assumption is fine as far as it goes, but many ACOs formed by merger or acquisition will be below the HSR reporting thresholds and slip through without review. The Agencies should make clear that the *Statement* applies to mergers and acquisitions that fall below the HSR reporting limits.

Conclusion

The Agencies have attempted to balance the need for administrability and quick review with traditional and time-tested antitrust processes. The system is based on the same deterrence paradigm that works for other industries in the normal course of business – almost all of the influence exerted by the antitrust laws is done through private counseling. The Agencies bring only a handful of cases each year, and private plaintiffs tend to bring cases on a *per se* theory of harm. Almost all antitrust "enforcement" is done privately between private business and their counsel. The *Statement* is a good start to the discussion, but the Agencies should carefully consider potential refinements, improvements or alternatives that hold the potential to improve the process and its outcomes for consumers, rather than the pecuniary interests of various interested parties.

Notes

Footnote 1.The PSA calculations are explained in an appendix to the Statement. The PSA is the lowest number of contiguous postal zip codes from which the health care provider draws at least 75 percent of its patients for service. The PSA shares are calculated by a physician's primary specialty using Medicare Specialty Codes, or if for hospitals, Medicare MDCs, and for outpatient facilities, by outpatient category. The shares may be calculated using an all claims database if available or Medicare Fee for Service data.

Footnote 2. Antitrust practitioners will find the screening mechanism to be familiar; the Hart-Scott-Rodino ("HSR") Act requires all acquisitions of stock or assets above certain minimum thresholds to face antitrust scrutiny. The Agencies routinely evaluate transactions under the HSR Act and fewer than 5 percent of transactions typically require extensive investigation. The vast majority of business deals pose no competitive threats to consumers and the Agencies clear them quickly.

Footnote 3. A 90 day review is relatively light by antitrust standards. A full merger investigation typically takes 6 -12 months, requires the production of millions of documents, all relevant electronic information in the company, depositions of senior executives, and so on.

Footnote 4. The Antitrust Division can only issue civil investigative demands for law enforcement purposes but the FTC can compel information for the purposes of studying an industry.

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May 31, 2011

Federal Trade Commission
Office of the Secretary
Room H-113 (Annex W)
600 Pennsylvania Avenue, NW
Washington, DC 20580

United States Department of Justice
Antitrust Division
Office of the Assistant Attorney General
950 Pennsylvania Avenue, NW
Washington, DC 20530

RE: Proposed Statement of Antitrust Enforcement Policy Regarding ACOs Participating In the Medicare Shared Savings Program, Matter V1000017

Submitted via https:///ftcpublic.commentworks.com/ftc/acoenforcementpolicy.

Dear Sir or Madam:

We are writing on behalf of America's Health Insurance Plans (AHIP) in response to the Request for Comments by the Federal Trade Commission and the Department of Justice (the "Agencies") with respect to their *Proposed Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program* ("Policy Statement"). The Policy Statement reflects the Agencies' proposed enforcement policy with respect to entities that seek to participate, or have otherwise been approved to participate, as accountable care organizations (ACOs) under the Medicare Shared Savings Program ("Shared Savings Program" or "Program"), Section 3022 of the Patient Protection and Affordable Care Act (PPACA), which was signed into law on March 23, 2010.[1]

[1] Pub. L. No. 111-148, as amended by Pub. L. No. 111-152.

AHIP is the national association representing approximately 1,300 health insurance plans that provide coverage to more than 200 million Americans. Our members offer a broad range of health insurance products in the commercial marketplace and have demonstrated a strong commitment to participation in public programs. AHIP's members also have been leaders in collaborations and other efforts to transform the health care system to one that rewards value instead of volume, improves quality and efficiency, and uses information as a tool, rather than a barrier, to better care.

We appreciate the opportunity to comment on the Policy Statement. The Agencies, the Department of Health and Human Services (HHS), and its Centers for Medicare and Medicaid Services (CMS) recognize that successful efforts to move the health care delivery system to one that delivers higher quality, more efficient care, must rely upon, rather than displace, the key principles of competition policy as articulated and enforced by the Agencies. Attempting to improve the care provided to Medicare beneficiaries by allowing providers to acquire, enhance, or inappropriately exercise market power will not only lead to higher prices and lower quality in commercial markets, but will undermine the very goals that CMS is pursuing for Medicare beneficiaries. Therefore, we appreciate that the agencies are pursuing two vital aspects of positive delivery system change: (1) seeking to ultimately move from entities that deliver care in a fragmented fashion to entities that deliver more coordinated care; and (2) preserving an environment in which those entities compete, to the benefit of consumers, to deliver the highest quality and most efficient care.

The Agencies have set forth a framework that, we believe, attempts to balance the goals of providing sufficient guidance and an efficient process to entities seeking to participate in the program ("Program Applicants"), while ensuring that there is sufficient review of such entities that could potentially harm consumers from the aggregation or inappropriate exercise of market power. The Policy Statement pursues this balance through a screening mechanism that helps the Agencies determine the level of review appropriate for various categories of Program Applicants. We do not understand the Agencies to propose, and we certainly do not advocate, any change to the substantive law and principles that guide substantive antitrust analysis of Program Participants and other entities.

We do believe that some *modification* of the balance set forth by the Agencies is advisable in light of two key considerations:

- First, the Shared Savings Program and everything that accompanies it, including the review process in the Policy Statement, is new. This suggests that the Agencies should make choices that lead to more, rather than less, review, while the Shared Savings Program, the Policy Statement, and the entities participating in the Shared Savings Program ("Program Participants") are tested by implementation.

- Second, as explained in more detail below, the potentially significant cost to consumers of not reviewing Program Participants that could exercise market power dwarfs the modest cost of reviewing additional Program Participants that would be subject to review.

Following these guiding considerations, in the third section of this letter we have specific recommendations for revisions to the Policy Statement. As a preliminary matter, however, we think it useful to discuss: (1) two developments in commercial healthcare markets that form important context for the Policy Statement and (2) what the Policy Statement should be designed to achieve in light of that context and the goals of the Shared Savings Program.

I. *The Policy Statement Should be Viewed in the Context of Two Important Developments in Commercial Healthcare Markets*

As recognized by the Agencies and others, the Shared Savings Program will not occur in a vacuum. Rather, the Program will impact, and be impacted by, commercial health care markets. Thus, as a preliminary matter, it is important to understand two developments in those markets that are likely to impact, and may be impacted by, the Shared Savings Program. First, provider markets have become very concentrated, largely through consolidation, and this trend is expected to continue. Second, prior to the Program, and in the absence of any antitrust "relief," private plans and providers have established a wide range of ACOs and other innovative structures to provide patients with more coordinated, higher quality, and more efficient care. In combination, these factors suggest that ACOs can deliver coordination and improvements in quality and efficiency without sacrificing antitrust goals.

A. *The Policy Statement Should be Viewed Against a Backdrop of Concentrated Provider Markets that Have Led to Higher Prices and Other Consumer Harms*

An analysis of the antitrust treatment of the Shared Savings Program, which contemplates changes to the health care delivery system, should begin with an understanding of the current state of competition in that system. Among those who have examined this issue, there is general consensus that provider markets have become more concentrated over time and that hospital markets, in particular, are highly concentrated. In fact, a recent analysis performed by Cory Capps, PhD, of Bates White and Professor David Dranove of Northwestern University, on behalf of AHIP, concluded that hospital ownership is "highly concentrated" in just over 80% of metropolitan statistical areas (MSAs).

This reflects a trend that dates back to the 1990s of hospital capacity shifting from independent hospitals towards multi-hospital systems. By 2009, the average of MSA-level concentration, as measured by the Herfindahl-Hirshman Index (HHI), had reached roughly 4,700, over 2,000 above the Agencies' threshold for a "highly concentrated" market. This context is important because the Program may lead to an increase in provider market concentration through consolidation, and those who have examined previous provider consolidation concluded that it harmed consumers through higher prices and lower incentives to improve quality.

Thus, consumers have reason to worry if the Program will lead to a further consolidation similar to the wave of hospital consolidation in the 1990s that "raised prices by at least five percent and likely by significantly more."[2] The continuing cost to consumers of provider market power was demonstrated by a 2010 a Massachusetts' government study on Health Care Cost Trends. The Study concluded that provider price increases were the most important factor driving rising health care spending and that price variations among hospitals were not correlated to the quality of care.[3]

Of course, not all consolidation is anticompetitive. The existence of highly consolidated provider markets, however, suggests reason for caution with respect to the consolidation likely to follow from the Shared Savings Program. It is important that, as the Program attempts to

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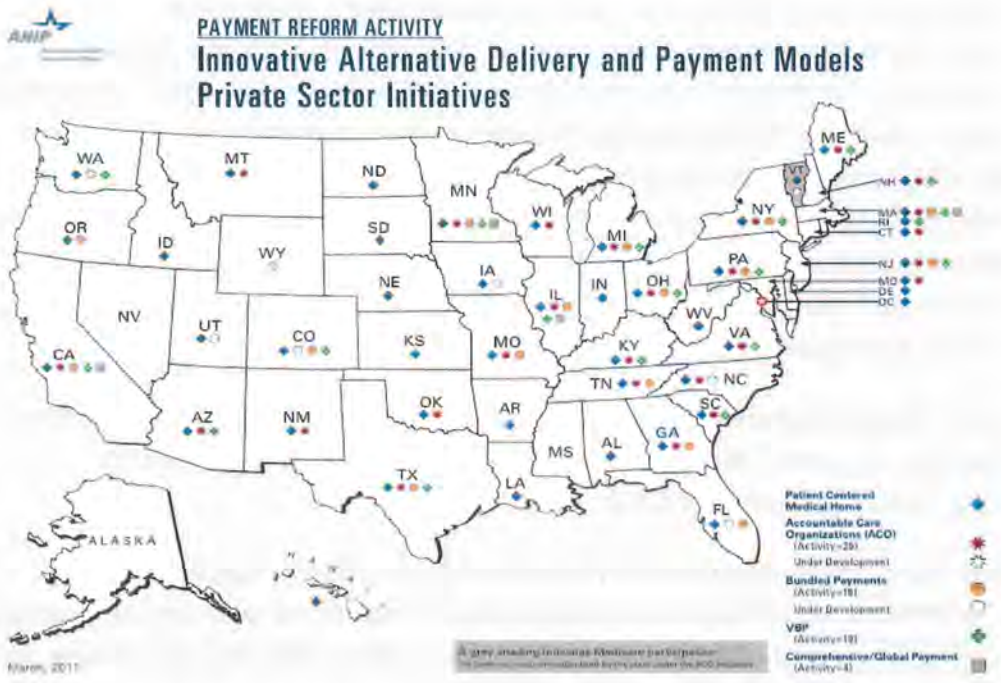
[2] Vogt, W. and R. Town. *How Has Hospital Consolidation Affected the Price and Quality of Hospital Care?*, RWJF RESEARCH SYNTHESIS REPORT No. 9, Feb. 2006.

[3] Massachusetts Health Care Cost Trends, 2010 Final Report, *available at:* http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/final_report_docs/health_care_cost_trends_2010_final_report.pdf.

encourage collaborations among providers that will benefit consumers, it not allow collaborations that will harm them through market power. The antitrust laws and Agency practice provide a well-tested approach for distinguishing collaborations that are pro-competitive from those that are not. While the Shared Savings Program contains a number of evaluative measures, the most critical measure generated by the Program will be an outcome measure: whether the Program will lead to higher prices and other consumer harm by leading to even more provider entities with market power (or to provider entities with even more market power), or whether it will lead to higher quality more efficient care, by encouraging provider collaborations that are not based on the aggregation of market power.

B. *Private Health Insurance Plans and Providers Have Created ACOs and Other Innovative Structures that Benefitted Consumers Without any Need for "Relief" from the Antitrust Laws*

Over the past several years, health insurers have partnered with providers – hospitals and physician groups – to promote accountable care models that are transforming the delivery system by offering better care at lower cost. These partnerships offer multiple dimensions of health plan support – the provision of tools and data to support population based care, programs and staff to better coordinate care, and the redesign of provider contracts to reward the achievement of high quality performance and cost reduction goals. The number of accountable care models continue to evolve at a rapid pace, as health insurers renegotiate provider contracts to focus on population-based care and better address gaps in care and reward quality and efficiency through shared savings, shared risk, and other payment models. The attached map illustrates a snapshot of such activity currently under way and growing rapidly.



These partnerships have been developed under existing antitrust guidance and are benefiting consumers with better care while constraining health care cost. The Shared Savings Program should reinforce these efforts, not undermine them. Consumers will be well served by robust and varied initiatives to design the best approaches to improving quality and efficiency, including efforts involving partnerships between plans and providers. They will be best served if these collaborations and other efforts compete vigorously against a range of other approaches, entities, and collaborations to create the most innovative, effective, and accountable approaches. If the Program leads to provider market power that reduces provider incentives to participate in these activities, or otherwise undermines such activities, it will have failed another key *outcome* measure of the Program's success.

II. *The Policy Statement Reflects a Rare, and Important, Opportunity to Systematically Address Important Competition Concerns*

Before discussing the Policy Statement itself, it also is important to discuss several aspects of the Shared Savings Program. The Shared Savings Program is a program for Medicare beneficiaries, but it will have a significant impact on commercially-insured patients as well. Thus, the Agencies noted recent commentary suggesting that "health care providers are more likely to integrate their care delivery for Medicare beneficiaries through ACOs if they can also use the

ACOs for commercially insured patients."[4] Entities formed for the Shared Savings Program are unlikely to deconstruct themselves for commercially-insured patients and, if such entities possess market power, they are likely to exercise it by charging higher prices to, and engaging in other activities to the detriment of, such patients.

The Shared Savings Program is both ambitious and modest in its goals. It is ambitious in the sense that it is part of a larger effort to transition the delivery system to one focused on coordinated care that improves both quality and efficiency. It is modest both in its limited scope (i.e., only to a subset of Medicare beneficiaries) and in its limited tools (i.e., it builds upon, rather than replaces, fee-for-service payment model).[5] While a series of modest steps may well be the best means of reaching an ambitious goal, policymakers must always remain vigilant that the steps are likely to achieve the goal.

In this context, the Shared Savings Program will not be a step towards an improved delivery system that provides better and more efficient care if it leads to modified fee-for-service care delivered by providers with newly acquired or enhanced market power. Such a result would harm both those with commercial insurance and Medicare beneficiaries. The most obvious harm would be higher prices for the commercially-insured, as providers exercised their market power through charging higher rates. Commercial patients would suffer a range of other potential harms, as market power would diminish incentives for various forms of non-price competition, from participation in innovative arrangements, to the sharing of cost and quality information, to engaging in efforts to improve the quality of care. While the nature of Medicare reimbursement means that its beneficiaries would not be impacted by the higher prices, at least directly, Medicare beneficiaries would suffer from reduced incentives for providers to engage in quality initiatives and other non-price competition and would suffer from diminished choice.

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[4] 76 Fed. Reg. 21895.

[5] The Innovation Center within CMS may engage in programs that are more ambitious in the tools utilized. The Policy Statement does indicate that "[t]he analytical principles underlying this Policy Statement would also apply to various ACO initiatives undertaken by the Innovation Center . . . so long as those ACOs are substantially clinically or financially integrated." *Id.*, n. 8. While the potential benefits from more transformative activities may be greater, the potential for harm from enhanced market power remains very much the same. Therefore, the same concerns, analysis, and recommendations reflected in these comments would apply to ACOs participating in Innovation Center initiatives.

Most directly for the Shared Savings Program, the accumulation or inappropriate exercise of market power by Program Participants would subvert the very goals of the Program itself, as well as broader transformative goals of which it is a component. From the perspective of the Medicare program and its beneficiaries, the Program is a means of achieving better quality and efficiency through provider collaborations that coordinate care, manage population health, and otherwise address problems associated with provider fragmentation. If the improved "results" achieved by the Shared Savings Program are simply innovations in accounting, resulting from increased cost shifting from Medicare to commercial patients, rather than innovations in care delivery, the Program will not achieve its goals.

The costs created by these impacts would be compounded by the likely duration of the competitive harm. Market power tends to endure in a manner that is not constrained by the end of the program, changes to funding, or redirection of agency priorities. Indeed, market power is likely to outlast a succession of programs. Therefore, it is critical that HHS do exactly what it has done: draw upon the expertise of the Agencies in addressing competition issues. Further, it is important that the Agencies do what they have done: set forth a process that is efficiently aligned with the Program, while minimizing the risks that the Program will lead to consumer harm through the creation or inappropriate exercise of market power. The question, appropriately raised by the Agencies, is "whether . . . the guidance in the proposed Policy Statement should be changed in any respect?"[6]

The answer to this question is that the Policy Statement should be modified in several respects to more fully protect consumers and ensure the Program fulfills its goals. The Policy Statement creates a good framework, but does not yet strike the appropriate *balance* necessary to ensure that the program realizes its *potential benefits for Medicare beneficiaries*, while reducing its *risk of harm to such beneficiaries and to commercial patients*. We offer specific suggestions for modification of the Policy Statement below.

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[6] 76 Fed. Reg. 21900. The Agencies also ask "why" the guidance should be changed. *Id.* Below we explain both what we believe should be changed and why it is important for consumers and for the goals of the Shared Savings Program that these changes be made.

III. *Modifying the Policy Statement in Several Areas Will Help it Achieve the Right Balance Between Providing Guidance and Efficient Process for the Shared Savings Program while Preventing Harm to Consumers*

The Policy Statement is, itself, untested. As indicated above, it creates a good framework, based on appropriate considerations, but the tools that it uses—most notably Primary Service Areas (PSAs)—are new to antitrust analysis and thus there is not a record to judge their effectiveness as part of a screening process. At AHIP's request, Cory Capps, Ph.D. of Bates White attempted to apply the process set forth in the Policy Statement and concluded that the proposed calculations are feasible, given appropriate data. His analysis did reveal several potential issues, which are flagged below in our recommendations for modification of the Policy Statement. In addition, his analysis was limited to hospital inpatient services, because data for the other services are not currently available.[7] This limitation is one reason for our final recommendation that the Policy Statement be subject to evaluation and review over time, to ensure that it is protecting consumers from the harms that accompany provider market power, while providing guidance and efficient process for review.

Thus, informed by this study and other considerations, we suggest that the efforts embodied in the Policy Statement to prevent consumer harm from provider market power, while facilitating potential benefits from the Shared Savings Program through guidance and efficient process, would be enhanced by modification of the Policy Statement in the following areas:

- The Policy Statement should be made more complete in its application to account for some transactions that may otherwise not be reviewed and for material changes in Program Participants;

- The thresholds utilized in the Policy Statement for safety zone treatment and mandatory review should be lowered to more accurately reflect and address the likely harm that will follow from insufficient review;

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[7] *See* 76 Fed. Reg. 21899 ("For physician services, the ACO applicant should calculate its shares of Medicare fee-for-service allowed charges (i.e., the amount that a provider is entitled to receive for the service provided) during the most recent calendar year for which data are available. For outpatient services, the ACO applicant should calculate its shares of Medicare fee-for-service payments during the most recent calendar year for which data are available. CMS will make public the data necessary to identify the full range of services and the aggregate fee-for service allowed charges or payments for each service, by zip code.")

- The Policy Statement should indicate explicitly that when a Program Participant is a member of a provider system, PSA calculations should reflect the share of the provider system in the PSA, rather than the share of the individual provider;

- The Policy Statement should give Program Applicants the option of moving directly to the review contemplated by the mandatory review process, rather than first using the PSA-based screening process;

- The Policy Statement should give program participants wishing to demonstrate their desire to avoid market harm a fuller chance to evidence their intentions by adding to and clarifying the list of conduct to avoid;

- The Policy Statement should provide for the Agencies to obtain aggregated information about the impact of the Shared Savings Program on cost shifting from Medicare to commercial patients; and

- The Policy Statement should build in a process of evaluation and review to allow for improvement of the analysis, as well as the data utilized, over time.

Below is more detail on each type of modification suggested.

A. The Policy Statement Should be More Complete in its Application

i. *Program Applicants Should be Subject to the Policy Statement, or Some Other Antitrust Review, Regardless of the Type of Transaction by Which They Were Formed*

As discussed above, the Policy Statement utilizes a "screening" mechanism to determine which Program Applicants will receive fuller antitrust review and which seem unlikely enough to raise anticompetitive issues to make such review unnecessary. The decision to utilize such a mechanism reflects a determination as to the role that the Agencies will play with respect to the Shared Savings Program. The Agencies could have opted from a spectrum of possible approaches, with one end of the spectrum reflecting a statement by the Agencies that they will continue to enforce the antitrust laws in the manner that they generally do. This process works

well in a variety of industries, in a variety of contexts, *including with respect to ACOs that have formed, or are forming, to serve commercially insured populations.*[8] At the other end of the spectrum, the Agencies could indicate that they will perform a detailed review of each Program Applicant, ultimately indicating to the Program Applicant, and to CMS, the outcome of its review. This would involve gathering enough information to define relevant antitrust markets, identify and test theories of harm, and make a judgment on the litigation prospects of bringing an enforcement action.[9]

Between the two ends of the spectrum is the screening process selected by the Agencies. This process does not, however, apply to all Program Applicants.[10] Specifically, it does not appear to apply to two categories of Program Applicants:

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[8] Under this approach, entities forming for purposes of participating in the Shared Savings Program have no obligation to notify the Agencies (unless the transaction is reportable for some other reason, such as Hart-Scott-Rodino reporting requirements for mergers), and the Agencies will investigate and enforce the antitrust laws as they normally do. In such a situation, an entity will typically receive its "guidance" from private legal counsel, informed in part by Agency actions and statements, of the antitrust risks associated with any particular venture. Entities also can seek Agency guidance with respect to prospective activities by requesting an advisory opinion from the Federal Trade Commission or a business review letter from the Department of Justice.

[9] Each end-of-the-spectrum approach has attributes and drawbacks. The first approach does not provide much agency guidance and information, but does not slow the application process and relies upon time-tested agency approaches. The second approach provides much more guidance, but is likely to be time-consuming for applicants, and highly-resource consuming for the Agencies. We recognize that, given the nature of the Shared Savings Program and its likely impact on commercial markets, the first option may prove unpalatable to some stakeholders. We similarly recognize that the second option likely is not realistic, given the anticipated number of program applicants, the requirements of review, and the timing of the Program.

[10] The selected approach has more to commend it than simply not being the first two. It offers guidance to potential Program Applicants, as some have requested. In addition, it simplifies their task of analysis, by using a generalized methodology and information that is or will be available, so that entities can more easily perform their own antitrust analysis. The approach also provides the Shared Savings Program with a quick and efficient process of antitrust review. Even the most intensive level of review will be completed within ninety days of the submission of information, which is much faster than comparable antitrust reviews. Most importantly, it can—with the modifications recommended—protect consumers from creation, enhancement, or inappropriate exercise of market power through the Program, including through a framework for the Agencies to prevent certain entities from participating in the Program based on the likelihood of harm to consumers.

- First, it does not apply to merger transactions, which will continue to "be evaluated under the Agencies' *Horizontal Merger Guidelines*" and many of which will be subject to the notification requirements of the Hart-Scott-Rodino (HSR) Act.[11]

- Second, it does not appear to apply to Program Applicants that are formed through a means other than "collaboration."

With respect to Program Applicants formed through merger, it is logical that the Policy Statement not reach entities already subjected to review under the HSR Act, which provides for data submission and review within a designated timeframe. Not all mergers are subject to review under the Act, however (e.g., mergers that do not meet the size of person or size of transaction tests). Therefore, we recommend that the Policy Statement explicitly apply, in addition to its current scope, to merger transactions that are not reportable under the HSR Act. This will avoid the unintended consequence of having potentially anticompetitive transactions through which Program Applicants are formed not "screened" under the HSR process or the Policy Statement process.[12]

It is unclear whether there could be Program Applicants formed through means other than collaboration or merger agreement. The Policy Statement indicates that "a 'collaboration' comprises a set of agreements, other than merger agreements, among otherwise independent entities jointly to engage in economic activity, and the resulting economic activity."[13] Program Participants may be the ultimate result of a variety of types of arrangements (e.g., mergers, joint ventures, employment), and the Program and consumers will be ill-served if certain types of transactions are viewed as a means of avoiding review. Thus, we recommend that the Policy Statement avoid any potential unintended loopholes by explicitly applying to Program Applicants regardless of the type of transaction through which they were formed, unless the transaction was subject to review under the Hart-Scott-Rodino Act.

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[11] 76 Fed. Reg. 21895.

[12] While we do not propose to set forth the specific means through the Agencies will determine what mergers, not reportable under the HSR Act, should be reported under the Policy Statement, we believe that the Agencies can draw from existing frameworks, such as the transaction aggregation process used under the HSR rules.

[13] *Id.*, n. 10. *(quoting* U.S. Dep't of Justice & Fed. Trade Comm'n, *Antitrust Guidelines for Collaborations Among Competitors* § 1.1 (2000), *available* at http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf).

ii. *All Program Applicants Should be Subject to Renewed Policy Statement Analysis and Potential Antitrust Review Based on Any Changes to their Composition During the Program*

Program Participants are prohibited from adding ACO "participants" during their three year agreement to participate in the Program, but the Program Participants are allowed to remove *or add* ACO "providers/suppliers."[14] This appears to reflect a desire to keep the ACO itself (as defined by its participants) essentially the same during its time in the Program, while recognizing that the ACO's participants (e.g., physician groups, hospitals) may themselves have turnover (e.g., physicians leaving and joining a group physician practice). In a number of possible situations, however, the application of this rule could raise antitrust concerns, essentially allowing a Program Participant to add, either at once or over time, physicians, hospitals, or others to a degree that creates market power and undermines the review process.[15]

Therefore, it is crucial that the Agencies have the ability to conduct a new analysis and review of Program Participants at any time during their participation in the Program. Both CMS's proposed rule related to the Program and the Policy Statement contemplate re-review by the Agencies in some circumstances, but the re-review also appears to be limited to certain situations.[16] In addition to its current statements related to changes to the Program Participants, the Policy Statement should explicitly indicate the following:

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[14] *See* proposed 42 CFR § 425.21(a)(1). We note that this provision of the proposed rule may have unintended consequences as written, potentially advantaging certain ACO structures over others. Because this may have competition-related implications, we suggest that the Agencies discuss this provision with CMS.

[15] The concerns are similar to those that underlie the transaction aggregation process used under the HSR rules.

[16] Thus, proposed 42 CFR § 425.5(d)(2) requires an ACO to provide CMS with 30 days prior notice of "***any material change***" to a Program Participant's ACO participants or ACO provider/suppliers and submission of recalculated PSA shares for common services. If any revised PSA share is calculated to be greater than 50% [40% if the recommendation in this letter is accepted], the ACO will be subject to review or re-review by the Agency. If the reviewing Agency gives the Program Participant a letter stating that the Agency will likely challenge or recommend challenging the Program Participant, the Program Participant will be *ineligible to participate* in the Program. 42 CFR § 425.5(d)(2). (emphasis added).

The Policy Statement indicates that "[t]he safety zone will remain in effect . . . unless there is a ***significant change*** to the ACO's provider composition." 76 Fed. Reg. at 21897 (emphasis added). It also indicates that an ACO must seek antitrust review if there is a "***significant change*** to the ACO's provider composition such that the ACO

- the Agencies may conduct a re-review of the eligibility Program Participants; and

- Program Participants should notify CMS and the Agencies of any changes—whether through contract, acquisition, employment, or otherwise—that would materially increase their PSA shares, including but not limited to, changes to physicians, other health care professionals, hospitals, other facilities, and physician groups.

B. The Thresholds Utilized in the Policy Statement Should be Lowered to More Accurately Reflect and Minimize the Total Likely Costs to Consumers from Screening Error

The use of a threshold-based screening process seems an appropriate way to meet the dual goals of "ensuring that providers have the antitrust clarity and guidance needed to form procompetitive ACOs," while utilizing an analytical framework that is "sufficiently rigorous to protect both Medicare beneficiaries and commercially insured patients from potential anticompetitive harm."[17] Further, the use of a screening process both has precedent (in the HSR context) and is consistent with the concept that underlying antitrust law and principles are unchanged by PPACA, in general, and the Shared Savings Program, in particular. Because the thresholds determine the rigor of review, however, it is important that they be set at levels that minimize the likely harm from "screening error."

Errors from the threshold-based screening process can be divided into two categories. First, there is the error of overinclusiveness, meaning that there will be review (or the option of review) of some entities that do not merit such review because they are unlikely to lead to competitive harm. Second, there is the error of underinclusiveness, meaning that there will be no review (or no mandatory review) of some entities that do merit such review because they have the potential to lead to competitive harm. Because the approach of analyzing entities based on PSAs is a new endeavor, it is hard to know whether the Policy Statement's tiers of 0-30%, 30-50%, and 50-100% are more likely to be, in total, more overinclusive or underinclusive.

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exceeds the 50 percent threshold or is ***materially different*** from what was initially reviewed." *Id.* at 21898, n.36 (emphasis added).

[17] 76 Fed. Reg. at 21896.

There is some reason, however, to be concerned that the framework set forth in the Policy Statement may—in certain circumstances—under-reflect the potential market power of a type of entity. Specifically, the analysis performed by Dr. Capps suggests that an entity with a strong reputation, for example based on academic medical center status, may be more likely to have a larger PSA, resulting in smaller shares within the PSA, even thought an area smaller than the PSA may be a more realistic area within which market power could be exercised. Because such entities may well be the very types of "must have" providers that raise significant market power concerns, a screen that did not lead to review of Program Applicants including such providers would be underinclusive in a way likely to be harmful to consumers.

More generally, the scope of likely harm to consumers from an instance of underinclusiveness is likely to be much more significant than the scope of likely cost from an instance of overinclusiveness. Each time the operation of the Policy Statement is underinclusive, i.e., it allows the formation of an entity with market power without sufficient review, it creates the risk of market harm. The newly formed entity will, in all likelihood, operate in commercial and Medicare markets and thus can exercise its market power directly in a variety of ways, including in the form of higher prices for commercially-insured patients. In contrast, each time the operation of the Policy Statement is overinclusive, it simply subjects an entity to some additional level of review, conducted within ninety days. Thus, the potentially significant harm to consumers from even a small amount of underinclusiveness is likely to dwarf the modest cost from a good deal of overinclusiveness.[18]

This, combined with the new and untested nature of the screening analysis to be utilized, suggests that the Agencies should use lower thresholds, subjecting relatively more entities to more rigorous, but still relatively quick, review. Again, the approach proposed by the Agencies, and the revisions suggested here, apply only to the screening process used by the Agencies in the unique context and needs of the Shared Savings Program. Not only is substantive antitrust law necessarily unchanged, but the screening process does not, and should not, replace the Agencies' typical approach to antitrust review in other contexts.

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[18] CMS estimates that the Shared Savings Program will generate about $510 million in savings for the federal government over three years. This stands in contrast with the total operating revenues for hospitals in one medium sized city of over $7 billion. When a price increase with respect to such services is multiplied over many jurisdictions over those three years, the savings could assume the level of noise when compared with the harm. *See* Miller, Joe, *The Proposed Accountable Care Organization Antitrust Guidance: A First Look*, HEALTH AFFAIRS BLOG (2011), *available at:* http://healthaffairs.org/blog/2011/04/14/the-proposed-accountable-care-organization-antitrust-guidance-a-first-look/.

The specific context of the Shared Savings Program leads to two specific recommendations:

i. The Safety Zone Should Utilize a Threshold that Minimizes Screening Error and is Consistent with Past Agency Differentiation Between Exclusive and Non-Exclusive Arrangements

First, the risk of harm is greatest with respect to the application of a "safety zone." The Agencies will not, absent extraordinary circumstances, challenge Program Applicants that fall within the safety zone, and such entities "have no obligation to contact the Agencies."[19] While not stated, it appears that the 30% level may have been chosen in relation to the safety zone for *non-exclusive* financially integrated physician network joint ventures that the Agencies set forth in Statement 8 of the 1996 Statements of Antitrust Enforcement Policy in Health Care ("1996 Guidelines ").[20] The same statement, however, includes a threshold of 20% for *exclusive* financially integrated physician network joint ventures, reflecting a decision to subject a greater percentage of exclusive, rather than non-exclusive, physician network joint ventures to more careful scrutiny.[21]

It is important that the differentiation made between exclusive and non-exclusive arrangements in the 1996 Guidelines also be considered here. In particular, the Shared Savings Program as outlined in the NPRM requires primary care providers to participate in an ACO for Program purposes on an exclusive basis.[22] However, as currently drafted, the Policy Statement's safety

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[19] 76 Fed. Reg. 21897.

[20] U.S. Dep't of Justice & Fed. Trade Comm'n, *Statements of Antitrust Enforcement Policy in Health Care* (1996) *available at:* http://www.justice.gov/atr/public/guidelines/0000.pdf.

[21] Indeed CMS has recognized the potential additional concerns that can arise with respect to exclusive arrangements in the Shared Savings Program, noting that "reducing the number of specialists that can participate in one ACO" could "undermine our goal of ensuring competition among ACOs." CMS, *Notice of Proposed Rulemaking, Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations* (2011), 76 Fed. Reg. 19528, 19565 ("CMS Rule").

[22] *See, e.g.,* CMS Rule at 19563 ("We also propose that ACO professionals within the respective TIN on which beneficiary assignment is based, will be exclusive to one ACO agreement in the Shared Savings Program. This exclusivity will only apply to the primary care physicians (defined as physicians with a designation of internal medicine, geriatric medicine, family practice, and general practice, as discussed in this rule) by whom beneficiary assignment is established.") While this requirement of exclusivity may be necessary for the Program, based on the Program's approach to beneficiary assignment, it is not necessary in commercial markets. It may well have competitive implications in commercial markets, however, similar to those described by CMS with respect to specialists, and these implications are a necessary and important part of Agency analysis.

zone applies to entities regardless of whether participating physicians are exclusive or non-exclusive to the ACO. Given that the NPRM requires primary care physicians to participate in ACOs operating under the Program on an exclusive basis, past Agency practice suggests that 20% would be a more appropriate and consistent threshold for screening purposes. Moreover, building on the logic of the screening process, its precedent, and the new and untested nature both of the Shared Savings Program and the process embodied in the Policy Statement, utilizing a 20% screening threshold rather than 30% will reduce the likelihood that the safety zone will generate significant consumer harm by not submitting enough entities to any review.

ii. Mandatory Antitrust Agency Review Should Similarly Utilize a Threshold that Minimizes Screening Error

A similar logic applies with respect to the threshold for mandatory Agency review. Entities subject to such review may be able to participate in the Shared Savings Program, but an appropriate understanding of their likely competitive impact requires a more careful look than allowed under the first step of the screening process. Including entities in the range of 40-50% in the mandatory category reduces the possibility that the Policy Statement will enable the establishment of entities with the market power to the detriment of consumers.

C. The Shares Utilized in the Policy Statement Should Account for System Membership of Program Participants

A significant portion of the provider consolidation referenced at the beginning of this letter has resulted in the creation of systems of multiple hospitals and other providers with market power. This has resulted in harm to consumers through higher prices, lower quality, and reduced innovation. Antitrust analyses typically, and correctly, treat such systems as one entity for purposes of calculating shares. The Policy Statement, however, does not explicitly indicate how to treat other locations owning, owned by, under common ownership with, or in a system with a Program Participant. The Policy Statement may address this point in its discussion of "participants" as "independent" entities, but—given the significance of the issue—the point should be made more explicit. The approach should be consistent with that typically utilized by the Agencies, and thus the "shares" should reflect the share of the entire system.

D. The Policy Statement Should Give Program Applicants the Option of Moving Directly to the Review Contemplated by the Mandatory Review Process

Some potential Program Applicants have raised concern about the cost of providing PSA-related information when they know that they are highly likely to have to undergo the mandatory review

process. Since the PSA process operates as a screen to help the Agencies determine when a fuller review is warranted, it does not seem necessary to engage in this process when entities inform the Agencies that they believe they would fall into a category in which review would be mandatory, or optional, and would prefer to proceed directly to the fuller analysis contemplated by mandatory review. This will serve the interests of all involved by relieving applicants of some burden and allowing the Agencies to receive, and review, the information most relevant to their analysis earlier in the process, and therefore to provide earlier guidance to the potential Program Applicants and CMS.

E. The Policy Statement Should Give Program Participants Wishing to Demonstrate their Desire to Avoid Market Harm a Fuller Chance to Evidence their Intentions

The Policy Statement gives entities that fall between the safety zone and mandatory review the ability to "reduce significantly the likelihood of an antitrust investigation" by avoiding five categories of conduct.[23] The Policy Statement indicates that "avoiding the first four categories of conduct is important to facilitate payers' ability to offer insurance products that differentiate among providers based on cost and quality."[24] Avoiding the fifth type of conduct "ensures that the ACO does not facilitate collusion involving ACO participants that contract with payers outside of the ACO."[25] As a preliminary matter, we believe that the Policy Statement should indicate that the list is being offered for illustrative purposes, rather than to create a checklist-driven "safety zone." Innovations in anticompetitive practices are no less likely than innovations in procompetitive practices, and the Agencies and consumers will be ill-served if the Agencies are hamstrung in their ability to remedy newly developed or recognized approaches to the exercise of market power.

We do believe, however, that this guidance reflects an important recognition of the many ways in which market power can lead to harm to consumers beyond price increases. Indeed, as health insurance plans continue to engage in various initiatives to offer consumers quality and cost information to help them make decisions related to their care, the conduct that the guidance seeks to deter could substantially undermine such efforts. Therefore, we support the list included in the Policy Statement, with some modifications to the items. In addition, we offer two additional

[23] 76 Fed. Reg. 28198.

[24] *Id.*

[25] *Id.*

items for inclusion in the list: one of which similarly seeks to deter conduct that could harm consumers and one of which ensures that the Agencies are able to obtain the information necessary for assessing the impact of the Shared Savings Program.

Specifically, we suggest the following changes to items on the list.

- **With respect to the first item (*relating to "anti-steering" and related restrictions*) and the third item (*related to exclusivity*), making it clear that exclusivity and other restraints may be present explicitly or implicitly, formally or informally, through written agreement or in a *de facto* manner.** Because of the reference to "contractual clauses or provisions" and "contracting" (in contrast with the second item, which references "explicitly or implicitly"), we are concerned that some could misconstrue the Agencies' likely intent as extending only to formal, written provisions. We believe that clarifying these provisions will help prevent such misunderstandings and preserve the underlying intent of addressing the conduct, regardless of its form.

- **With respect to the fourth item (*relating to restrictions on plan efforts to make information available to enrollees on cost, quality, efficiency, and performance*), remove the clause "if that information is similar to the cost, quality, efficiency, and performance measures used in the Shared Savings Program."** Consumers are harmed when they are unable to get information on provider cost, quality, efficiency, and performance, whether or not the measures are those used in the Shared Savings Program, and all such restrictions should be disfavored.

- **With respect to the fifth item (*relating to sharing among the ACO's provider participants competitively sensitive pricing or other data that they could use to set prices or other terms for services they provide outside the ACO*), broadening the provision to also prohibit such sharing to the extent the ACO participants are not sufficiently clinically or financially integrated outside of the Program.** Although there is good reason to believe that Program Participants will use the same structures for commercial patients that they use with respect to the Program, the requirement of clinical or financial integration should not be obviated by Program participation itself.[26]

[26] On a related note, we suggest that those who have indicated that the clinical integration "requirements" of the Program be reduced, or that financial integration analysis be used instead, are letting the "tail wag the dog." The Shared Savings Program has established requirements that CMS has determined to be necessary for the delivery of

We also suggest the addition of the following items to the list:

- **A prohibition on explicitly or implicitly using hospital admitting privileges in a manner harmful to competition.**

- **An affirmative commitment to provide the Agencies with all information they request to allow them to assess the market impacts of the Program Participant's creation, operation, and participation in the Program**. Specifically, the commitment would be to "Provide the Agencies with all information that the Agencies determine is necessary to allow them to assess the impact of the entity and/or its participation in the Shared Savings Program on competition issues."

F. The Policy Statement Should Provide for the Agencies to Obtain Aggregated Information about the Impact of the Shared Savings Program on Cost Shifting from Medicare to Commercial Patients

The Shared Savings Program should not allow Program Participants to obtain shared savings payments by reducing Medicare expenditures and compensating for the reduced revenue by exercising market power in the commercial market. CMS's rules governing the Shared Savings Program should allow it to gather information to determine whether such cost shifting is occurring and terminate the participation of Program Participants that are engaging in cost shifting.

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higher quality, more efficient care to beneficiaries. The Agencies then determined that these were "broadly consistent with the indicia of clinical integration that the Agencies previously set forth in the Health Care Statements and identified in the context of specific proposals for clinical integration from health care providers." 76 Fed. Reg. 21896.

Over time, the Agencies have appropriately resisted calls to define in a detailed fashion (and therefore channel, chill, or limit) the activities that constitute clinical or financial integration. Rather, they have provided principles of general application and used them to determine the antitrust implications of specific activities in specific contexts. This is what they have done here with respect to clinical integration and this approach should not be modified. Nor should some notion of the "bare minimum" for clinical (or financial) integration under antitrust analysis be used to abrade the specific goals and requirements of the Program.

The Agencies should have a role in this Process, and the Policy Statement should be modified to reflect this. CMS is gathering cost, quality, and utilization data to test whether the Program's eligibility criteria in fact further program goals. CMS should share with the Agencies aggregated cost and utilization information related to possible cost-shifting by Program Participants. This aggregated information should include, for each Program Participant: (1) Medicare total costs for assigned beneficiaries and (2) total costs for all populations receiving care in the ACO.

G. The Policy Statement Should Build in a Process of Review and Analysis to Allow for Improvement Over Time

The Policy Statement has certain limitations because of the newness of not only the Statement itself, but of the Shared Savings Program to which it relates. At least some of these limitations, however, may not persist over time. For example, as noted above, the analysis performed by Dr. Capps was limited to inpatient hospital services, in part because the Medicare data that will be used to perform the physician services analysis is not yet available. One question that cannot be answered until that data becomes available is how well the Medicare-only data serves as a proxy for market power issues faced by commercial patients. This issue may be particularly acute with respect to physician services, given the greater likelihood of physician practices with very high percentages of commercial patients and low percentages of Medicare patients.

To assess whether the Policy Statement can be improved, the Agencies should develop a framework for reviewing and analyzing the effectiveness and impact of the Policy Statement during the operation of the Shared Savings Program. This could include the following three categories of activities:

- **Assessing the Test:** The Agencies should examine how the screens are working, including the critical question of whether they are leading to insufficient review of entities that are likely to have market power.

- **Assessing the Data:** The Agencies also should evaluate how well the data used reflect actual market dynamics, and what impact this has on whether entities likely to have market power are subject to sufficient review (e.g., because Medicare-only data may not adequately reflect the market power of entities more focused on commercial markets). In addition, the Agencies should consider, over time, whether new sources

of data can be used to supplement or replace the data sources set forth in the Policy Statement.

- **Assessing the Participants:** Of course, the most direct evidence of *market impact* will come from examining the *impact on markets*. In engaging in this examination, the Agencies should examine the data provided to them by CMS, Program Applicants, and Program Participants to understand whether and how much Program Participants have increased prices in commercial markets or taken other actions that harm or benefit commercial patients.

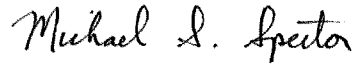
The Agencies should use the results of their analysis not only to refine the Policy Statement, but to inform themselves, other agencies, and stakeholders as they consider other efforts that fall at the intersection of health care and antitrust. In particular, the market analysis reflected in the third bullet may help stakeholders better understand ways in which efforts to transform the health care delivery system can benefit consumers, ways in which such efforts can harm consumers, and ways to better assess, in advance, which efforts are most likely to lead to which outcomes.

Conclusion

Thank you for your consideration of our comments on these important issues. Please feel free to contact us with any questions you may have about our comments and recommendations. We stand ready to work with the Agencies to help ensure that the natural alliance between the goals of the Shared Savings Program and those underlying the antitrust laws is most fully, and effectively, realized to the benefit of consumers.

Sincerely,

Joseph M. Miller
General Counsel



Michael Spector
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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

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

REPORT FOR ANNUAL PUBLIC HEARING UNDER G.L. c. 118G, § 6½

March 16, 2010

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.[1] 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.

[1] 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.[2]

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

[2] 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 <u>are not correlated</u> 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.[3]

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,[4] physician groups, and an ancillary service provider. The information we gathered

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[3] 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.

[4] 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,[5] 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.

[5] 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.[6]

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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[6] 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.[7] 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.[8]

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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[7] 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.

[8] 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.

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.

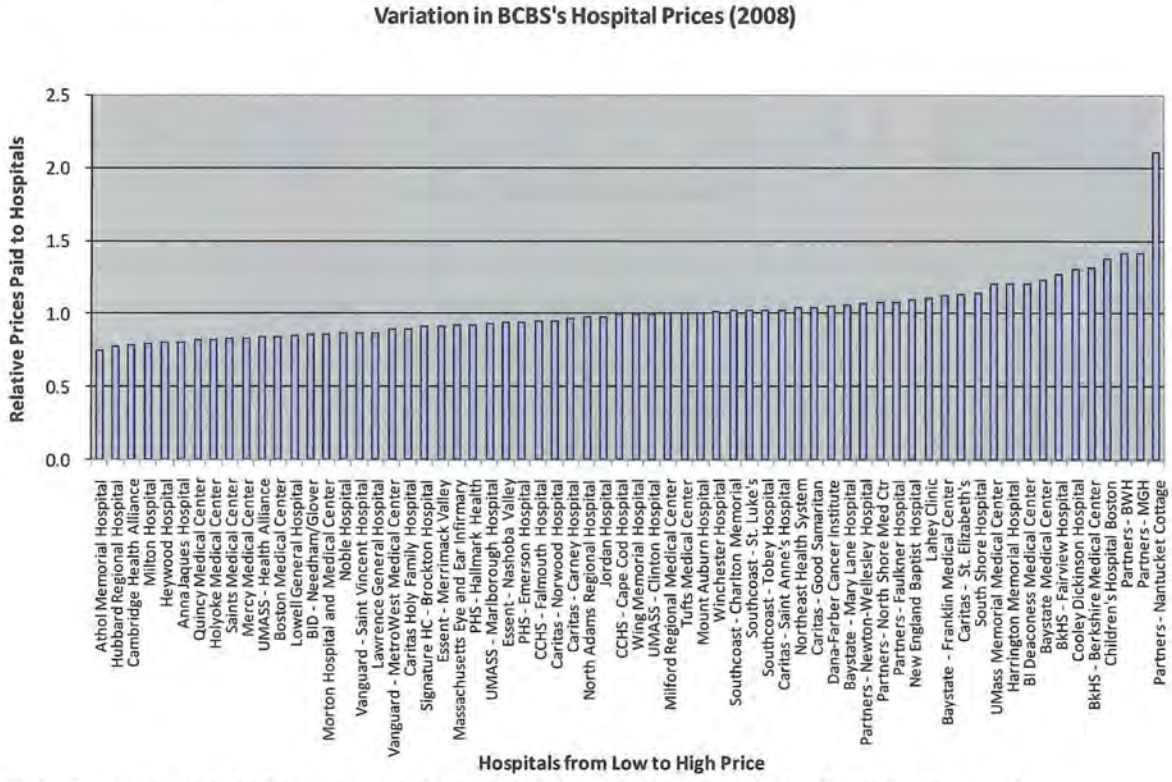
III. FINDINGS

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

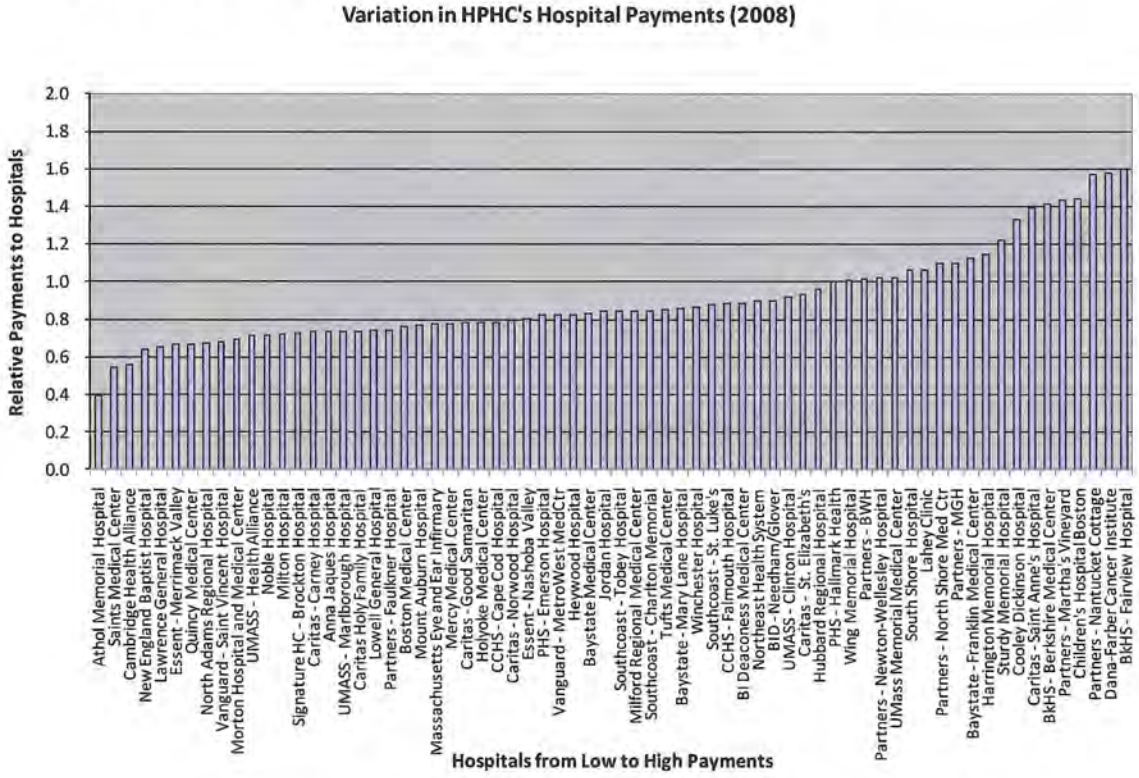
The following graph shows the variation in prices paid by one major insurer to Massachusetts hospitals for the same market basket of services.



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

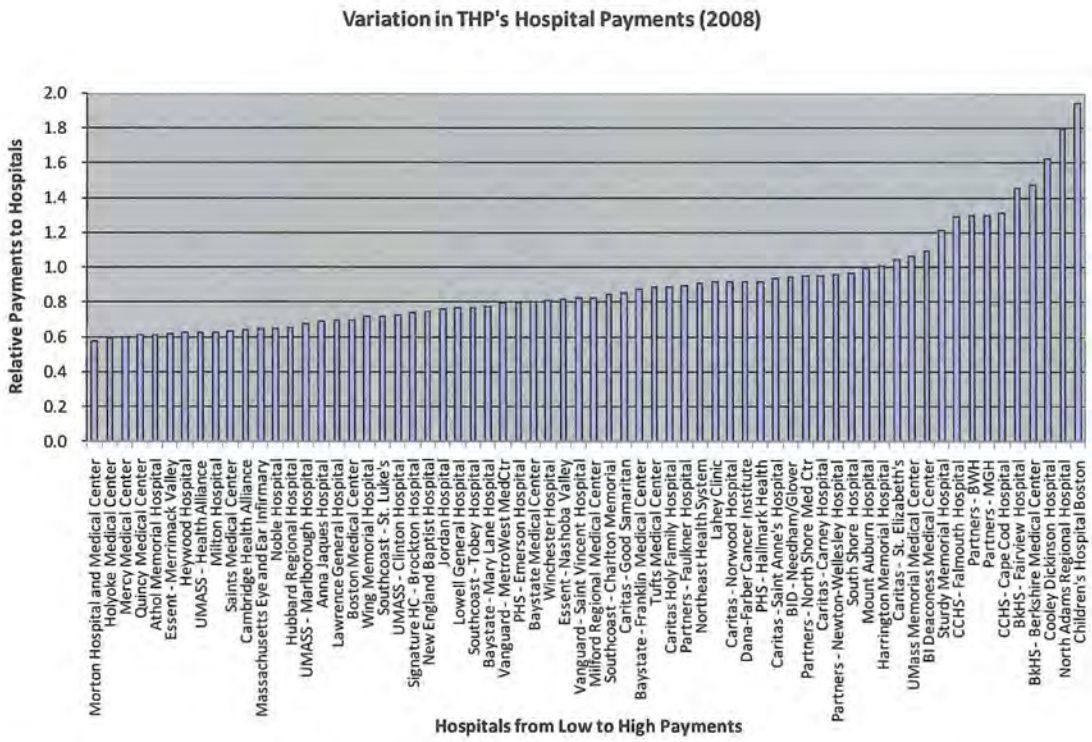
There is roughly a 90% difference in the price this insurer pays to the lowest paid hospital in its network and the price it pays to the *second* highest paid hospital (relative prices of about 0.75 v. 1.4).[9]

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.



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).

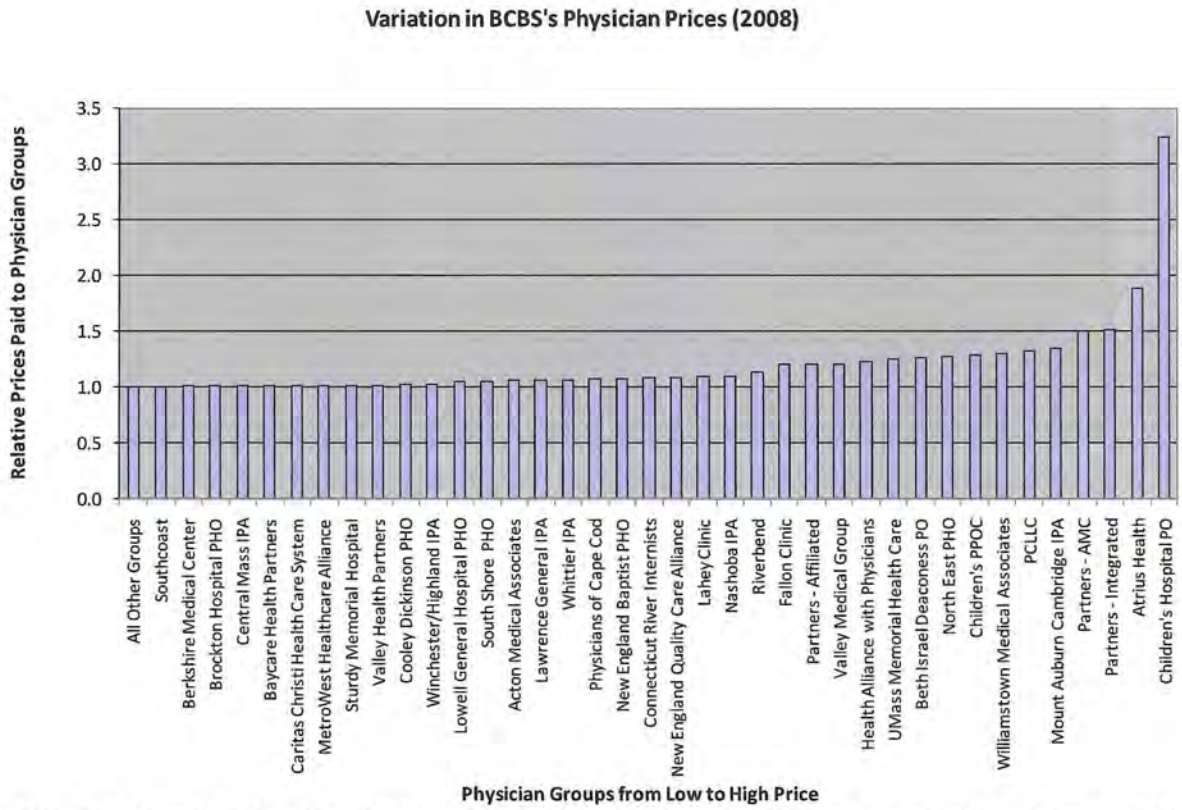
[9] The price differential is about 180% between the lowest and very highest paid hospital, which is a community hospital with negotiated prices that appear to be significantly higher than all other hospitals.



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

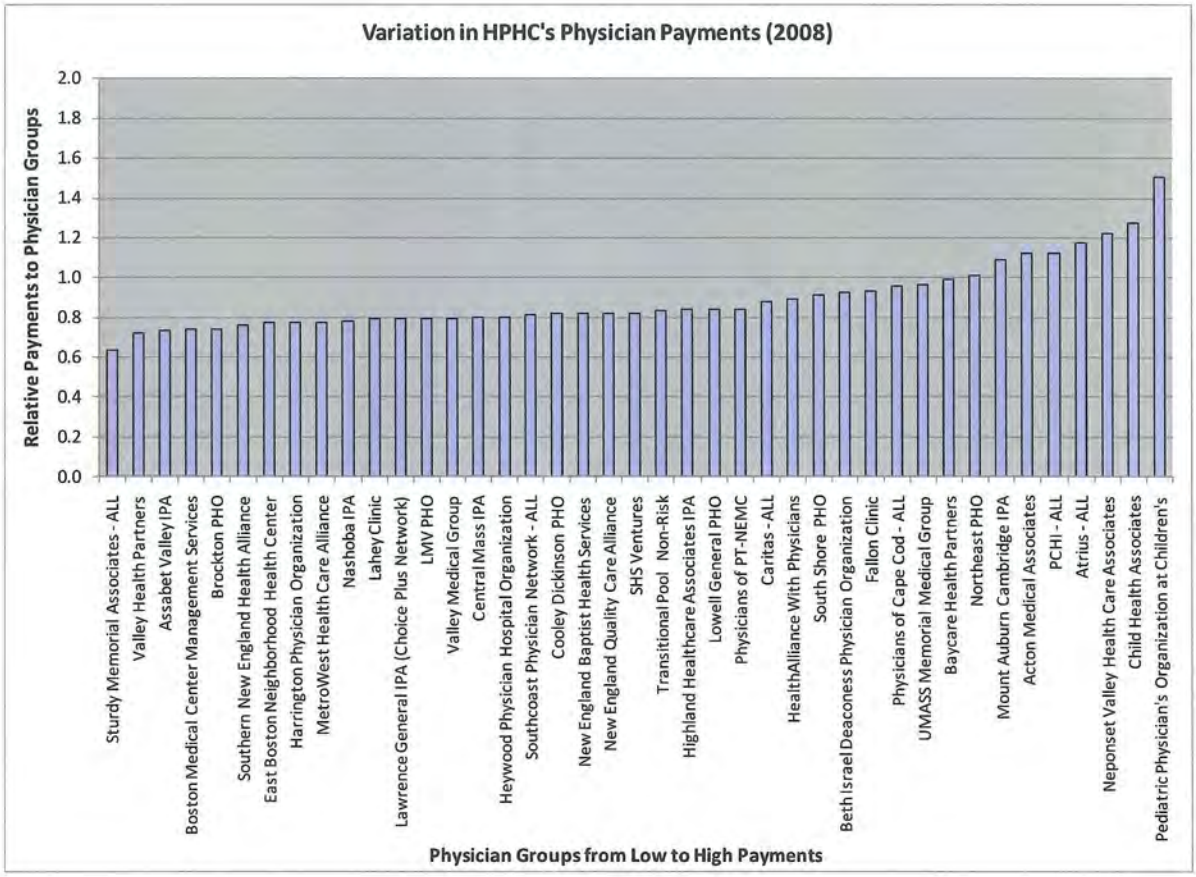
This next graph shows the significant variation in prices paid by one major insurer to the physician groups in its network.



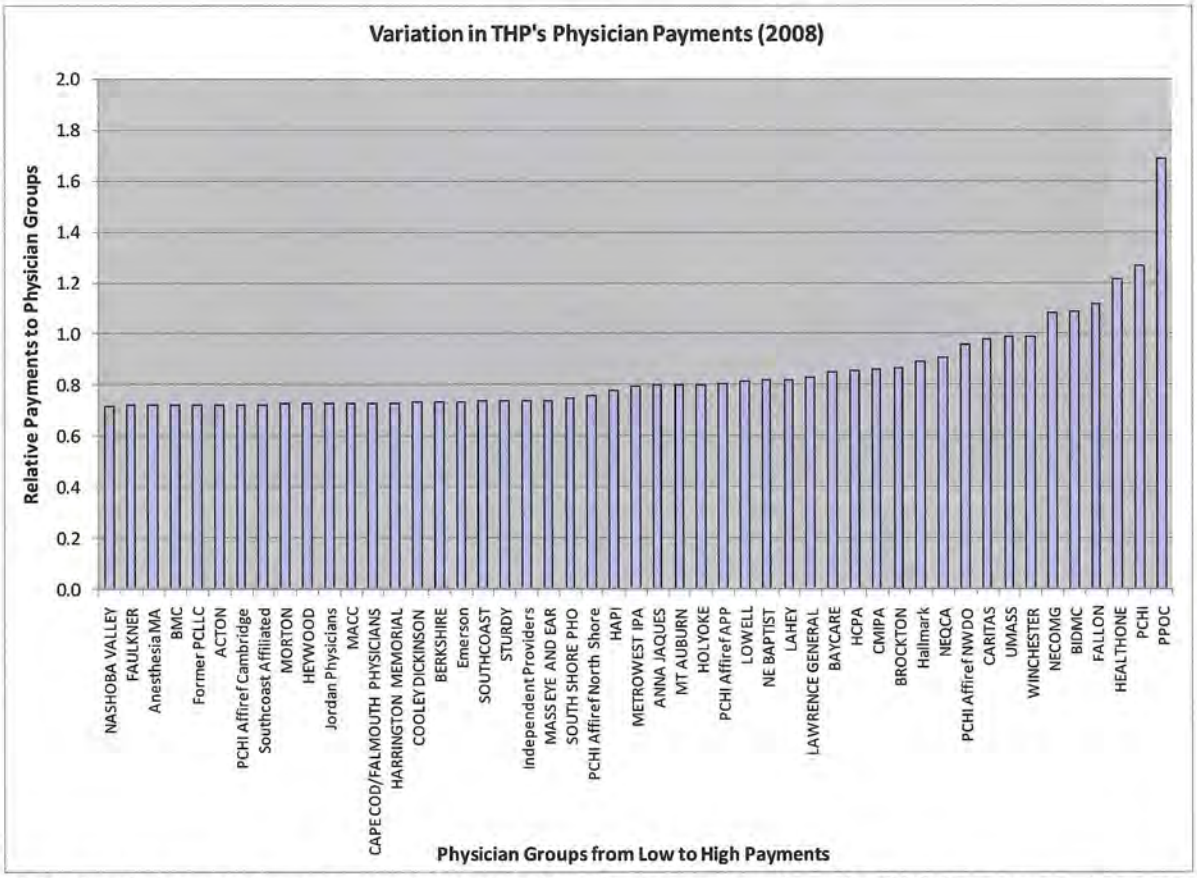
NOTE: Data from Blue Cross Blue Shield's supplemental written testimony for the Annual Public Hearing, available at http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/testimony_bcbs_supplemental.pdf (p. 9).

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.[10]

[10] This table, available at 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 <u>not</u> 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,[11] 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.[12]

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

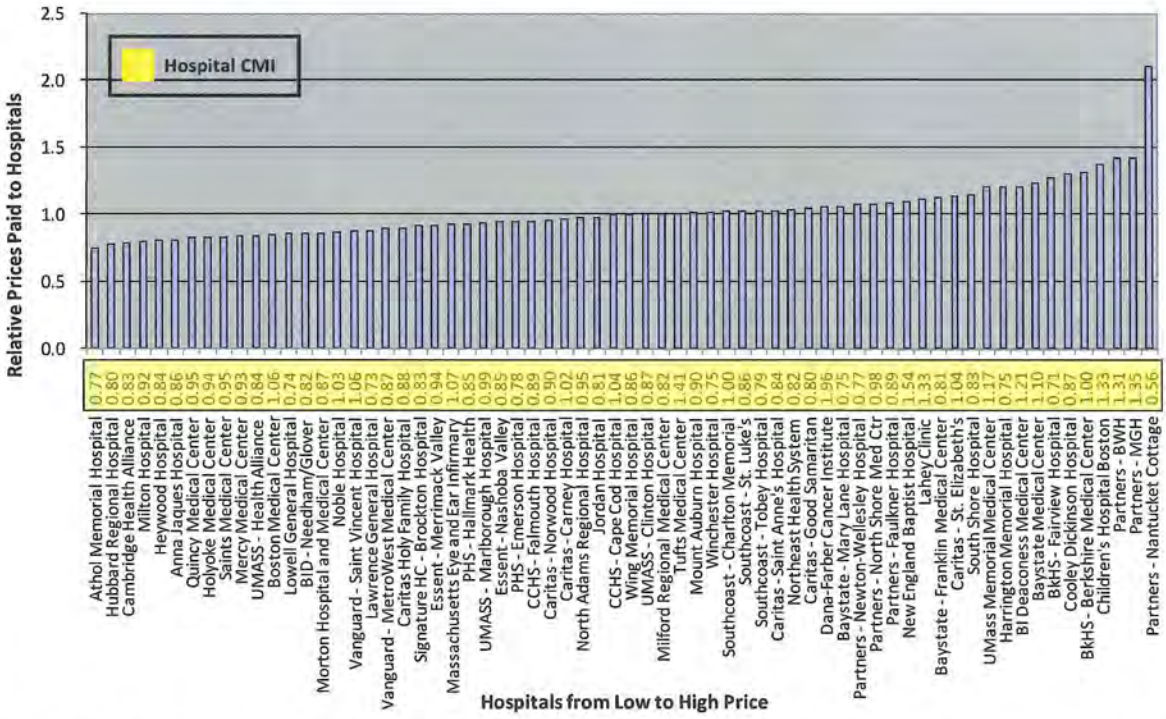
We have found that the prices paid to hospitals do not correlate to the acuity or complexity of the cases handled by the hospital as measured by the hospital case mix index (CMI), which is calculated for each hospital in Massachusetts by the Division of Health Care

[11] 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.

[12] 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.[13] 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.

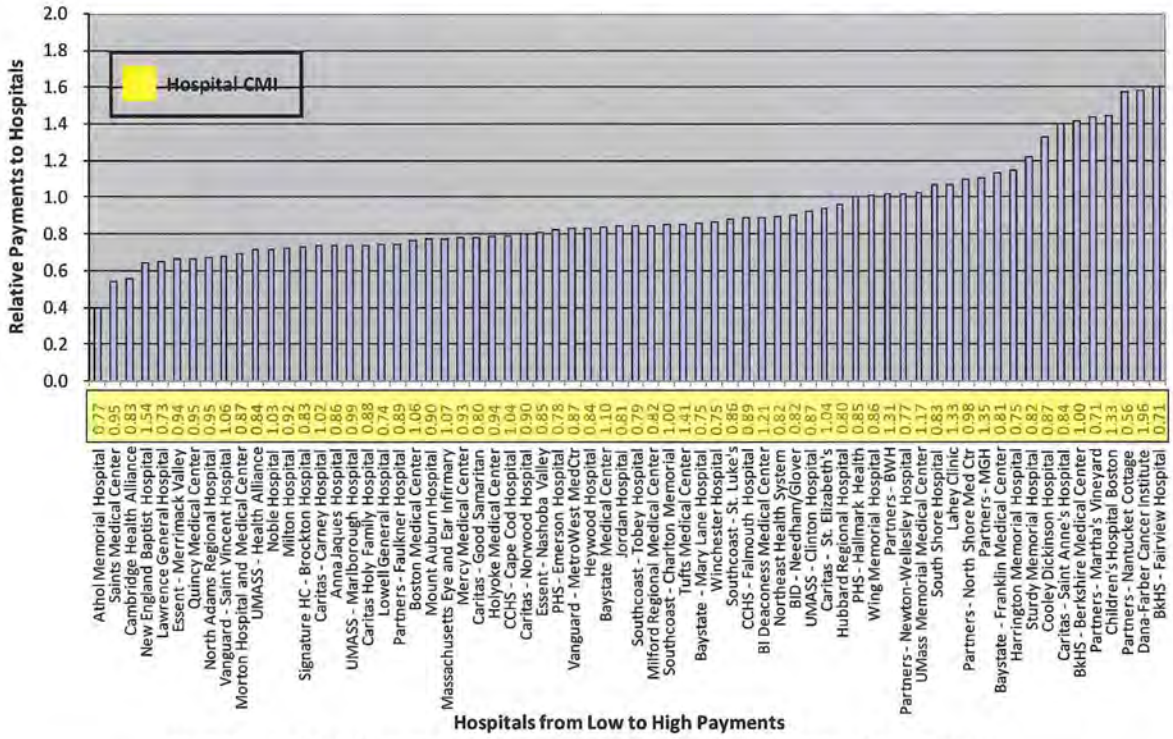
Variation in BCBS's Hospital Prices with Hospital Case Mix Index Noted (2008)



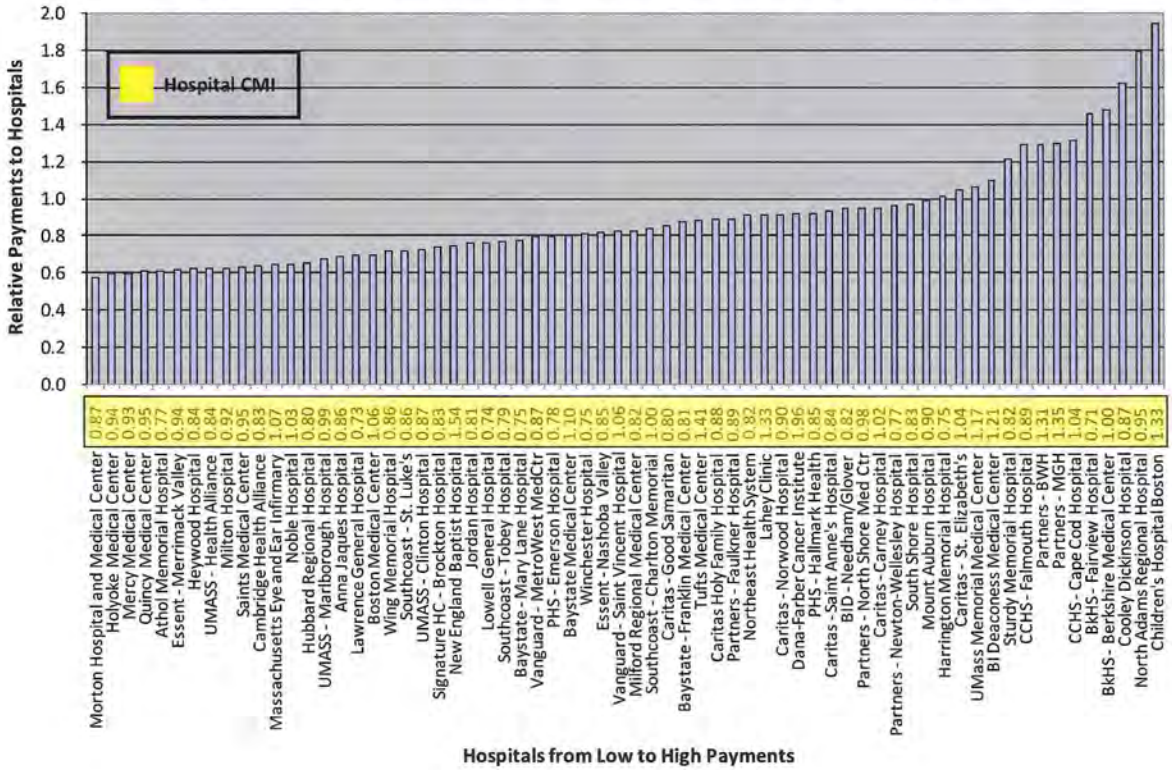
NOTE: Where DHCFP reported CMI separately for related hospitals or hospital campuses, we blended the CMIs of the hospital campuses on a weighted basis using the number of admissions at each campus.

[13] 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

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



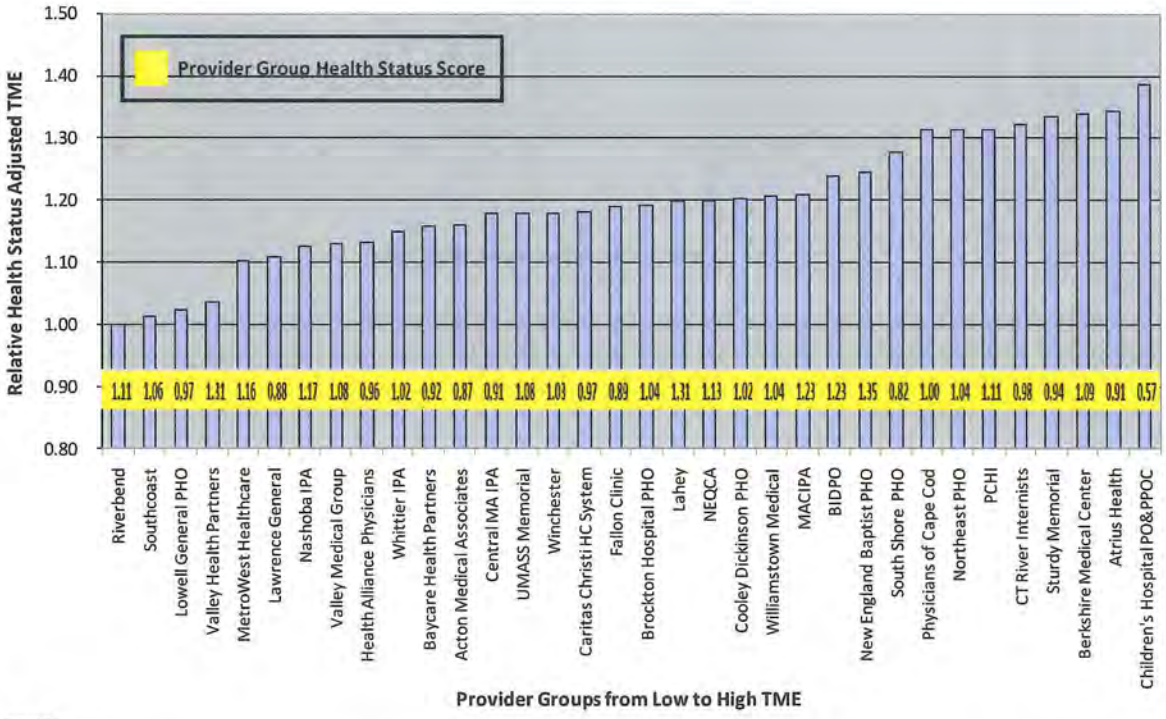
Variation in THP's Hospital Payments with Hospital Case Mix Index Noted (2008)



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.

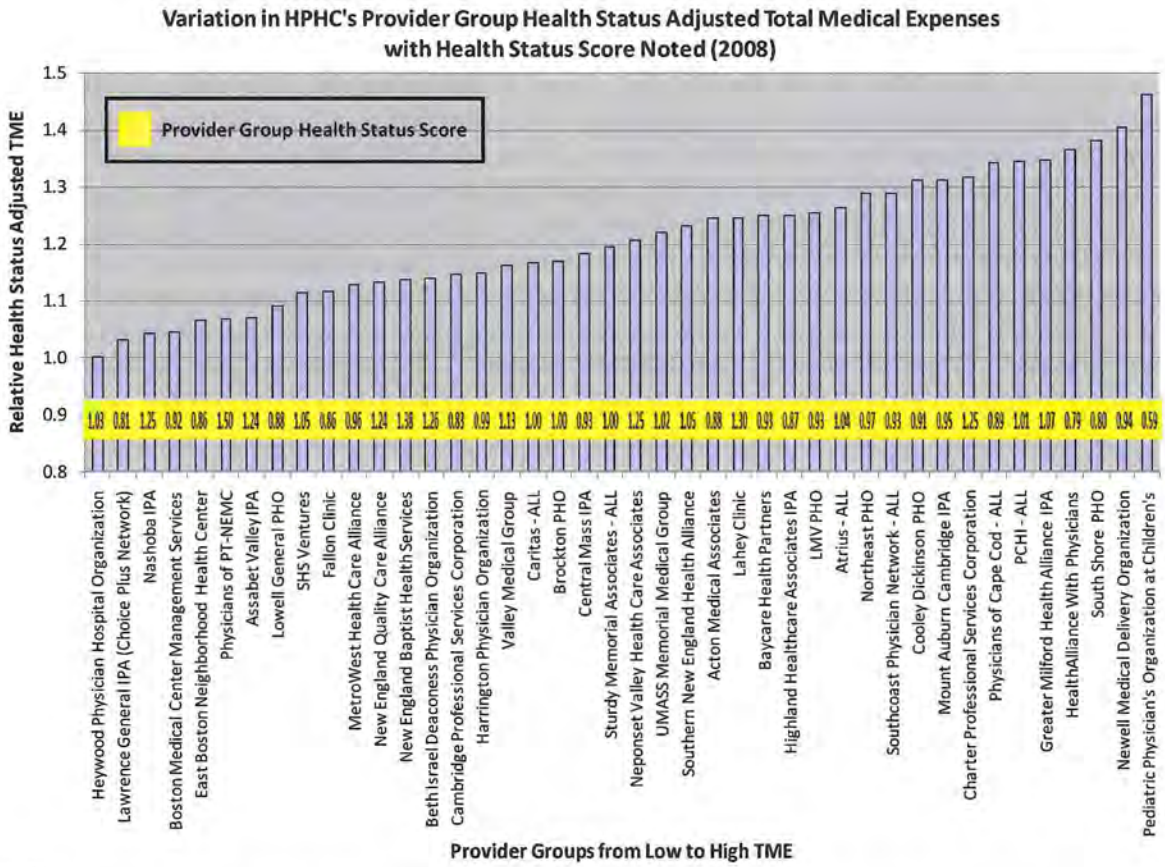
Variation in BCBS's Provider Group Health Status Adjusted Total Medical Expenses with Health Status Score Noted (2008)



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.



NOTES:

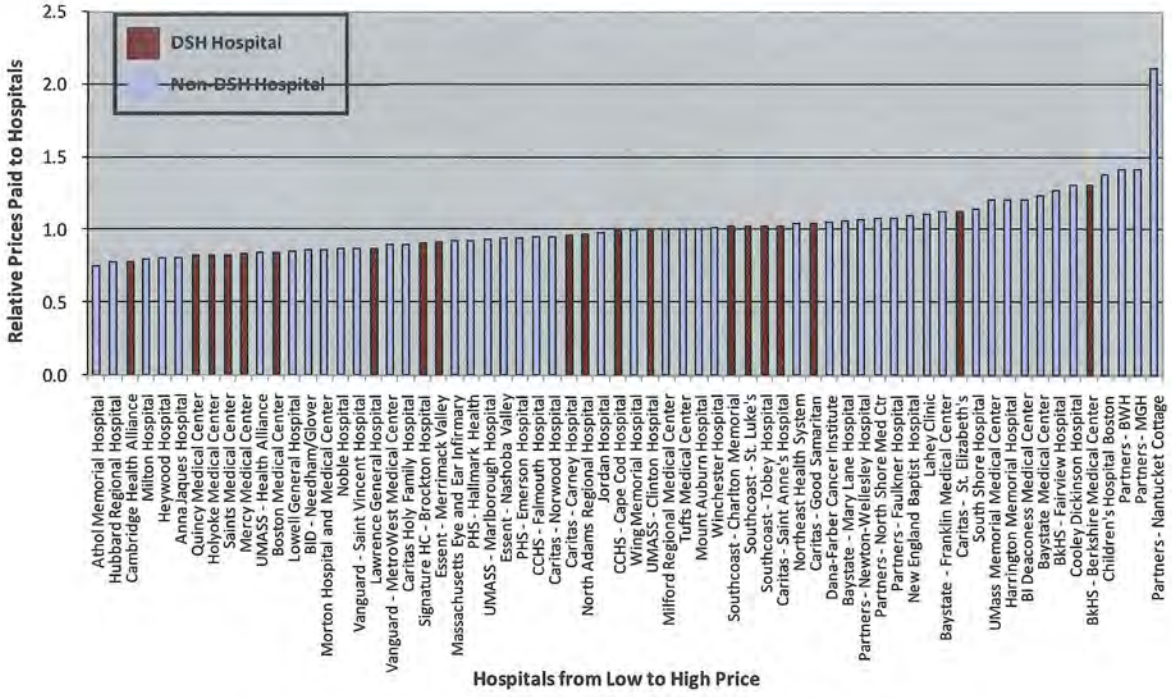
(1) Graph includes all provider groups with at least 5,000 Harvard Pilgrim HMO/POS member months.

(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.

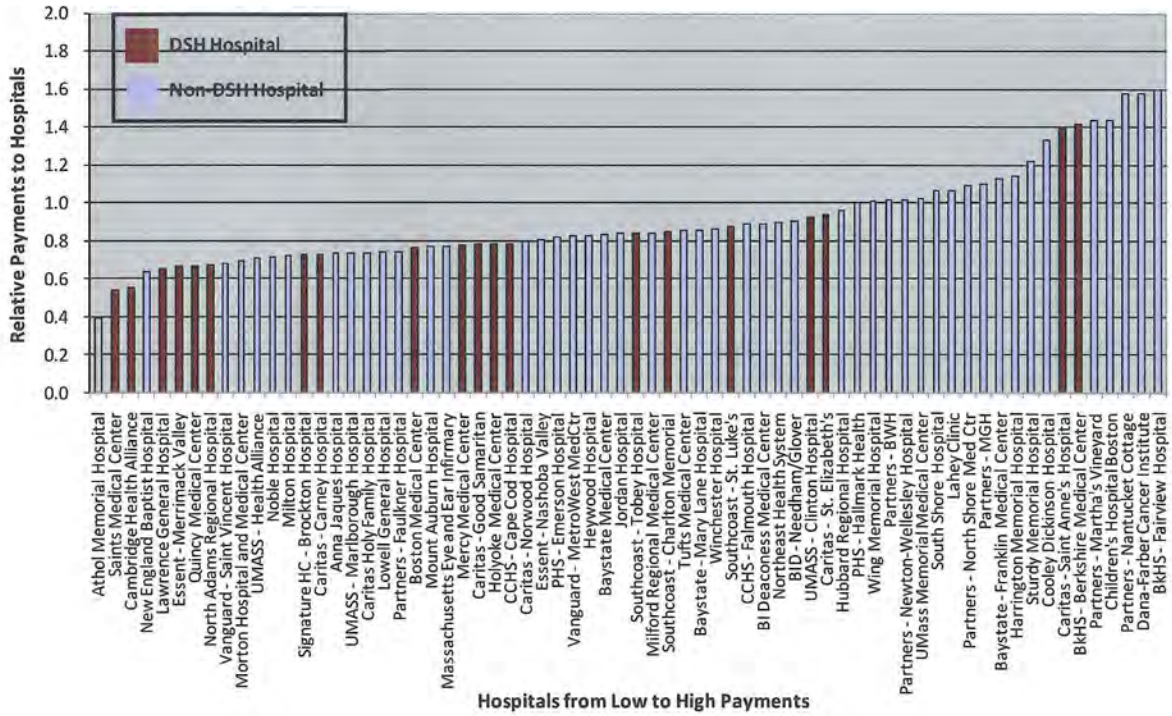
3. Wide disparities in prices are not explained by the extent to which a provider cares for a large portion of patients on Medicare or Medicaid

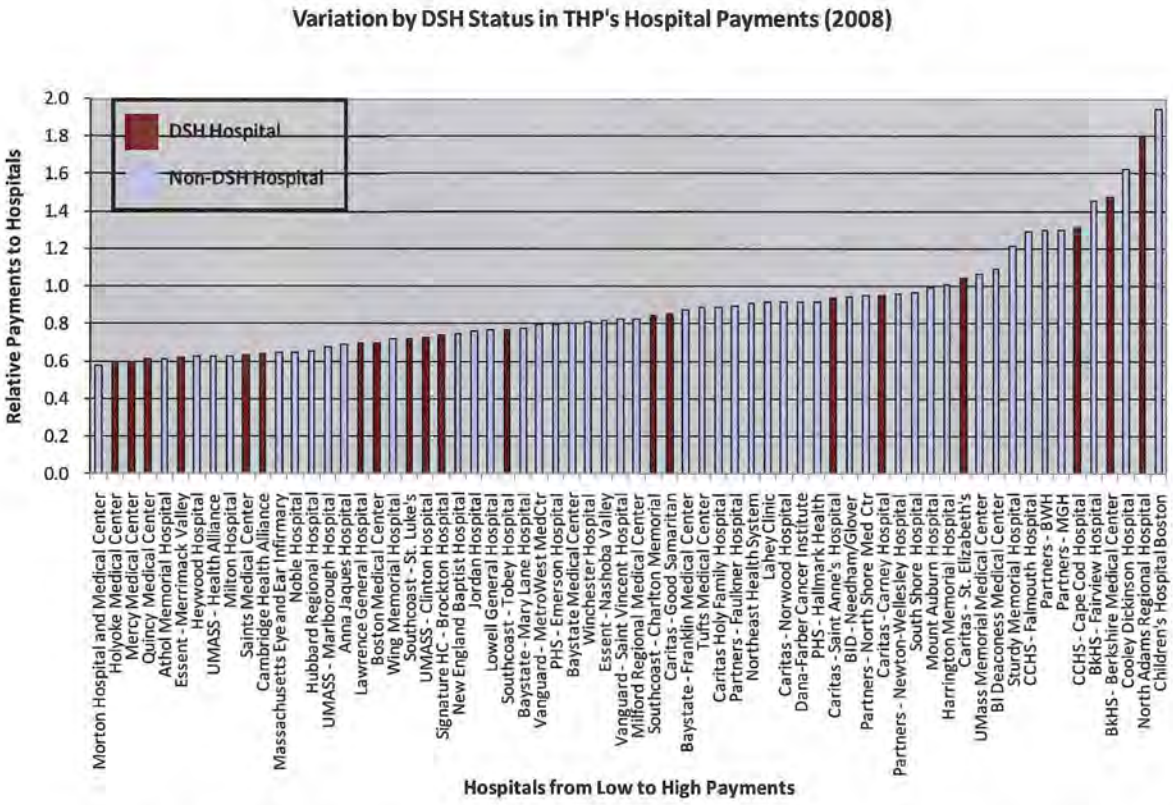
Commercial insurers generally pay lower prices to disproportionate share hospitals (DSHs), which have a large percentage (e.g., 63% or more) of patient charges attributed to Medicare, Medicaid, other government payers, and/or free care. The three graphs below show three major health plans' relative prices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





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.

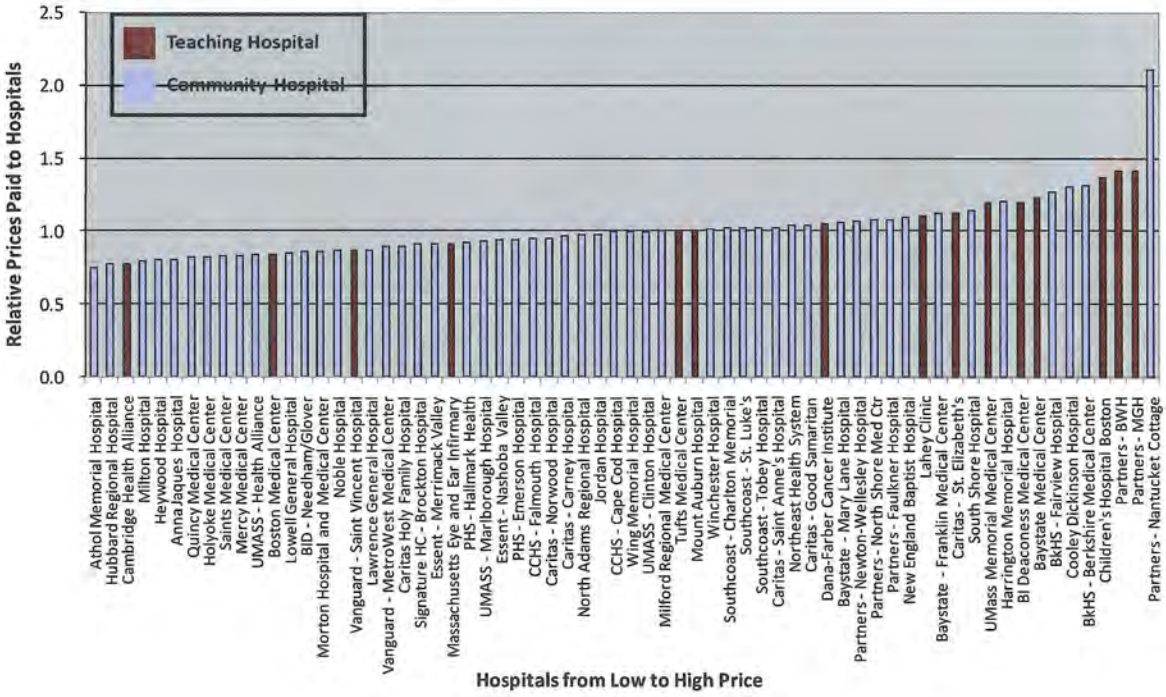
	Percent of Plan's Network-Wide Average Price/Payment		
	BCBS Price	HPHC Payment	THP Payment
DSH	95.7%	81.6%	90.3%
Non-DSH	104.2%	102.6%	101.5%
Percent Difference in Price/ Payment	8.9%	25.7%	12.4%

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%).

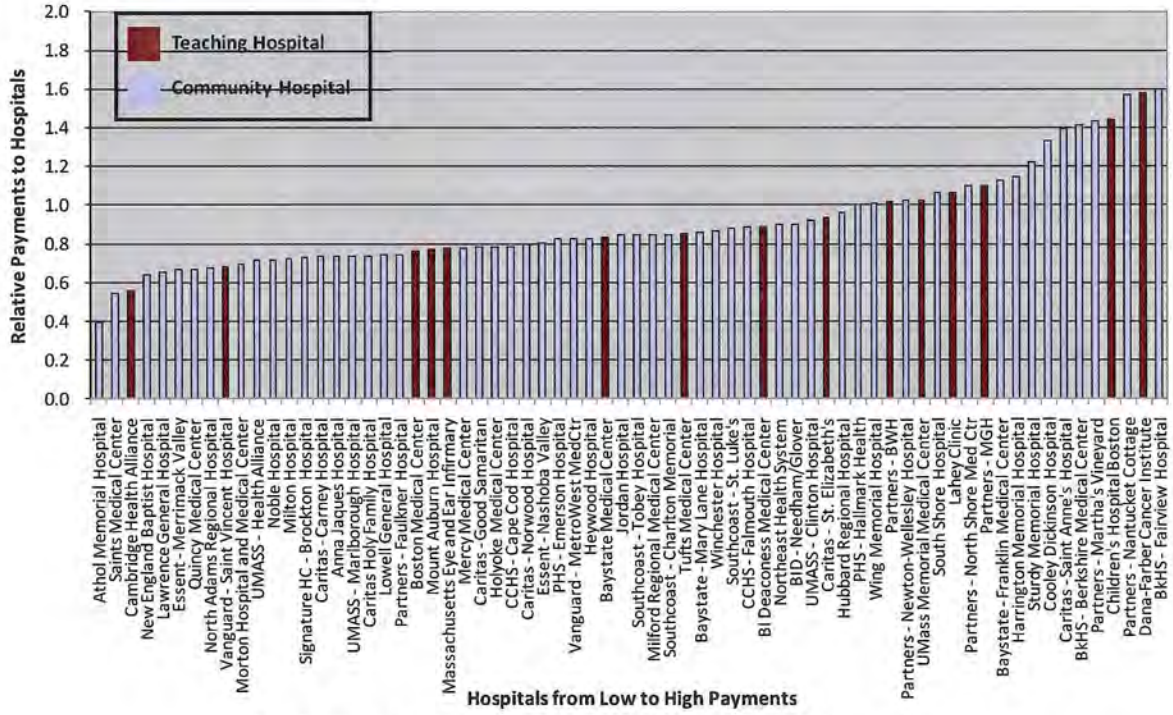
4. Wide disparities in prices are not explained by whether a provider is an academic teaching or research facility

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.

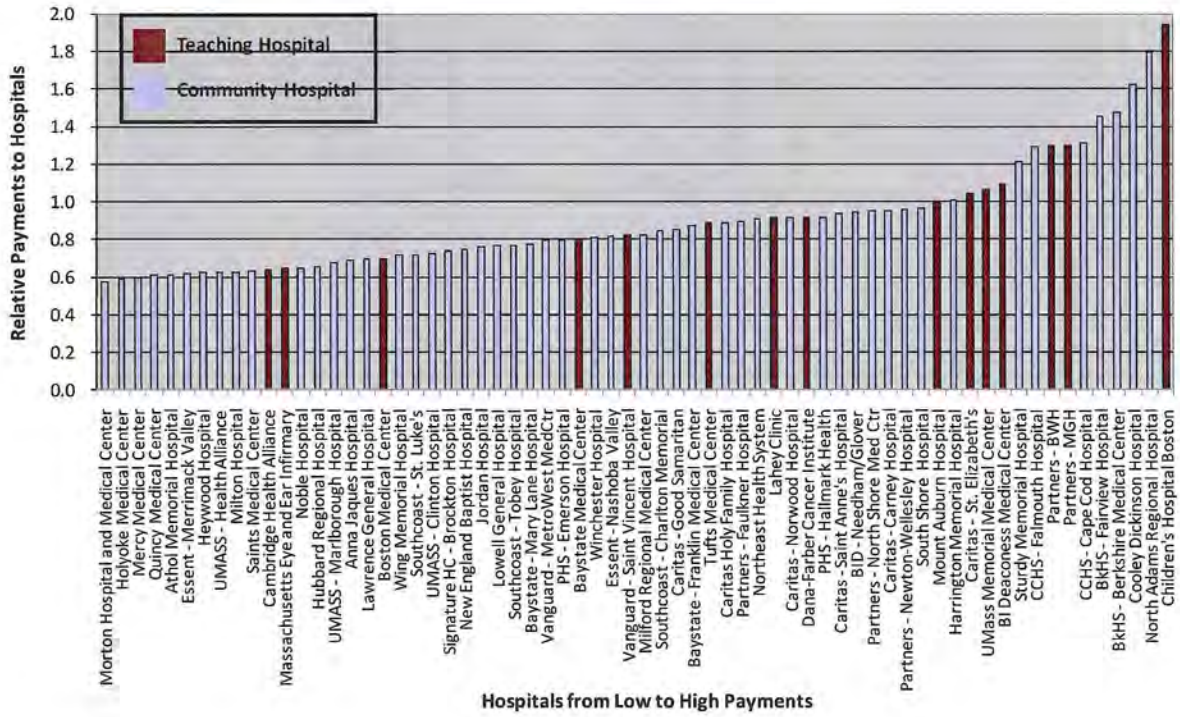
Variation by Teaching Status in BCBS's Hospital Prices (2008)



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



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

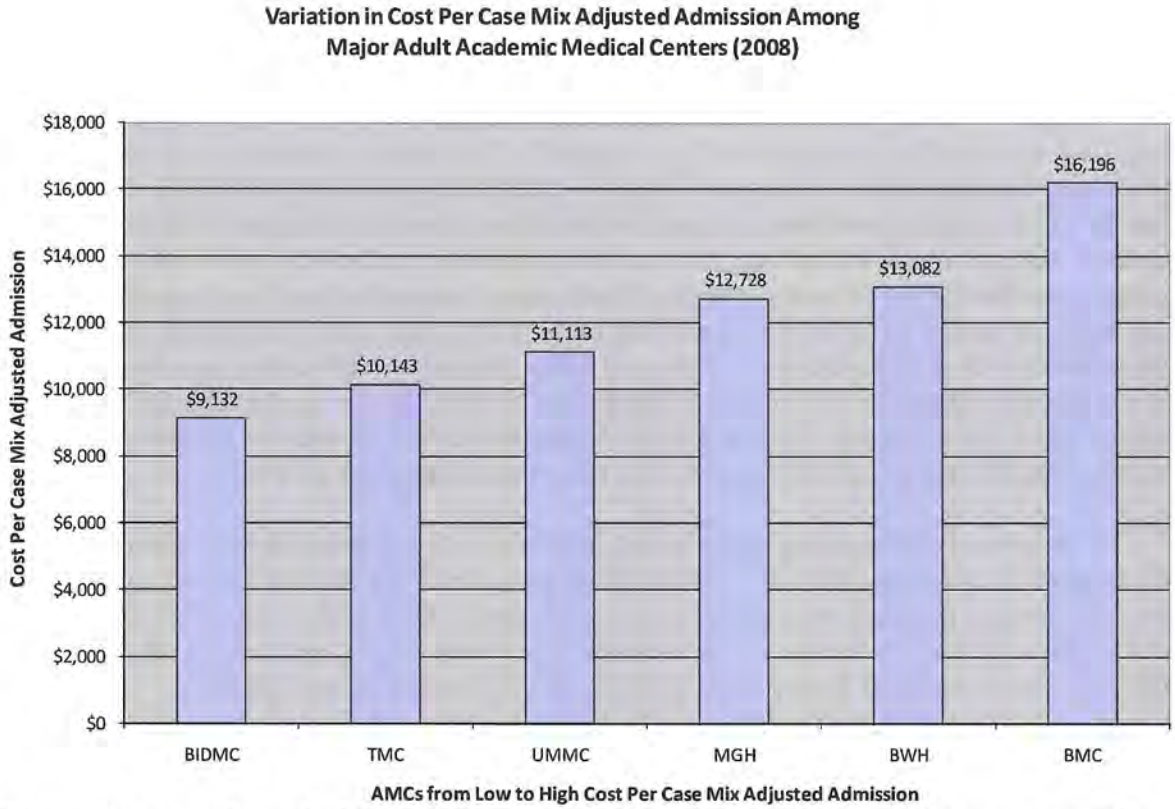


5. Wide disparities in prices are not explained by differences in hospital costs of delivering similar services at similar facilities

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.[14] 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.

[14] 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.



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.[15] 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

[15] 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.

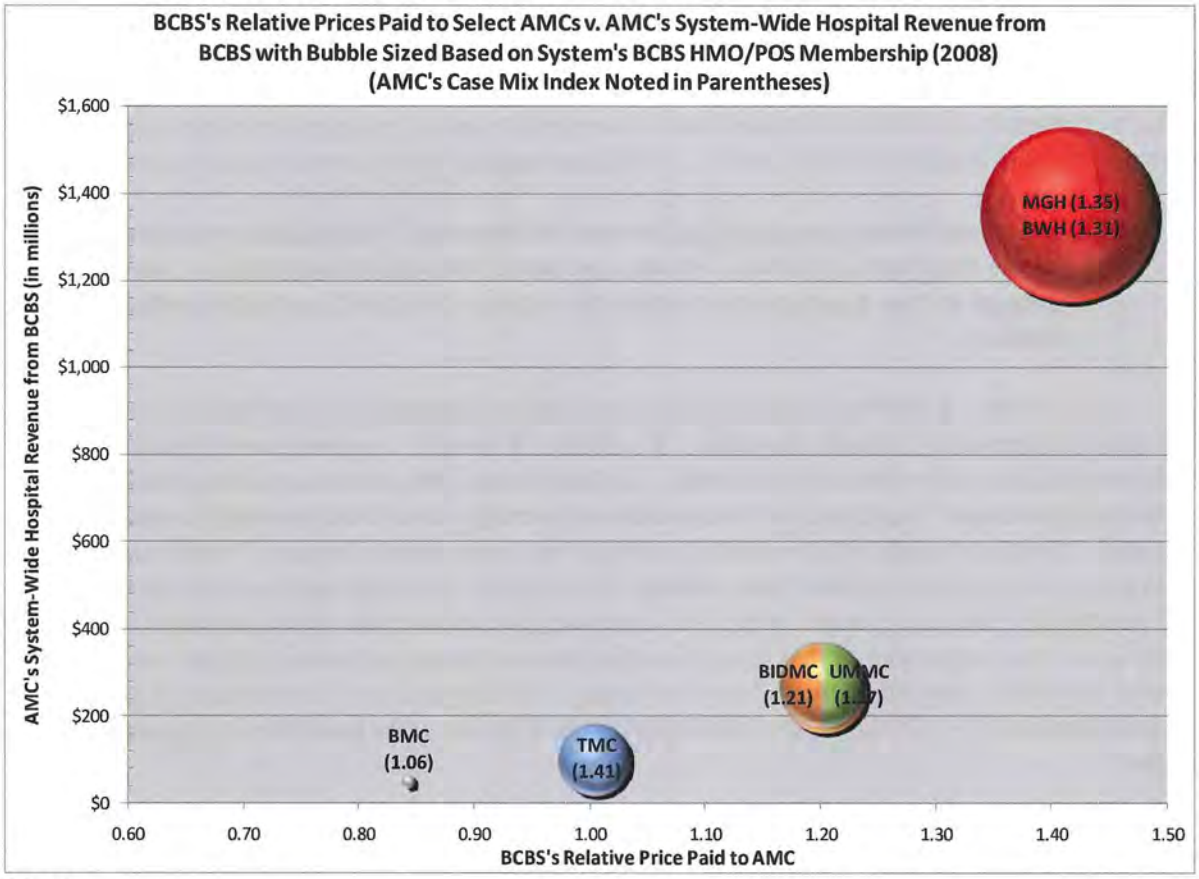
1. Provider Size

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

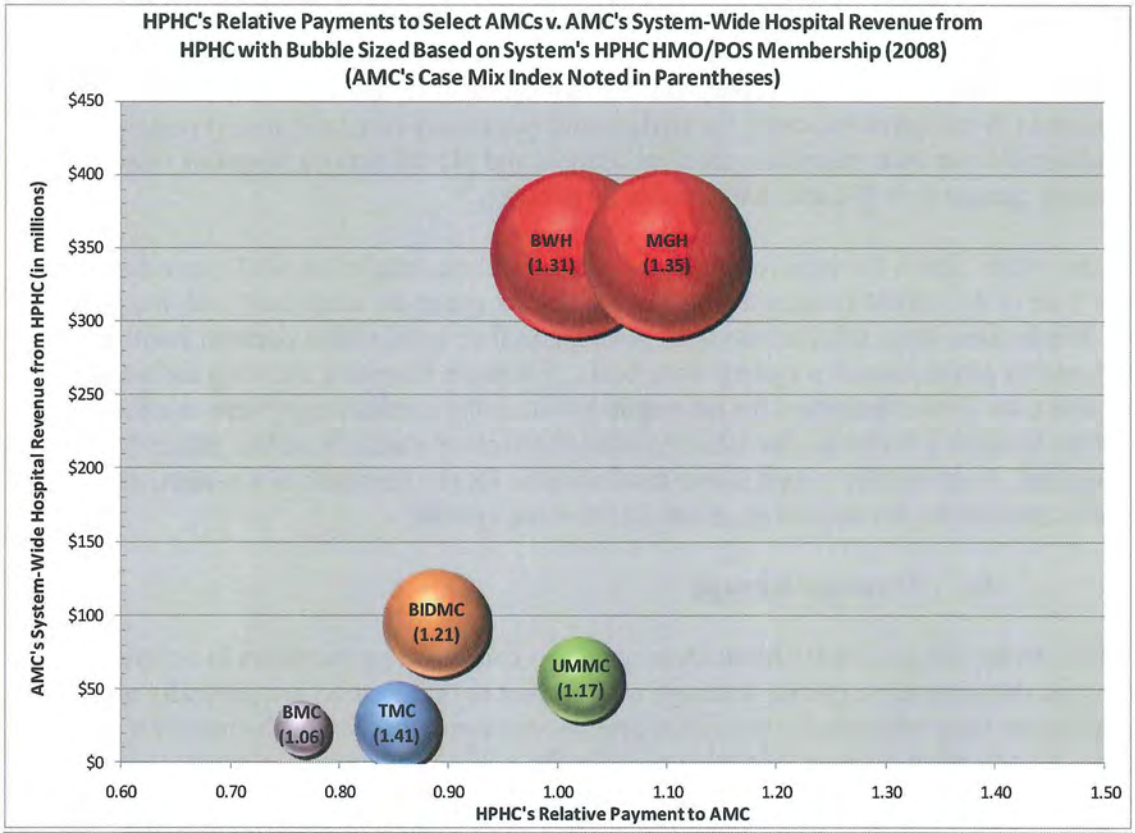
The following three graphs show that hospitals with greater leverage, as measured by system-wide hospital revenue and number of insurer members, are generally paid at a higher rate compared to similar hospitals with less revenue or members.

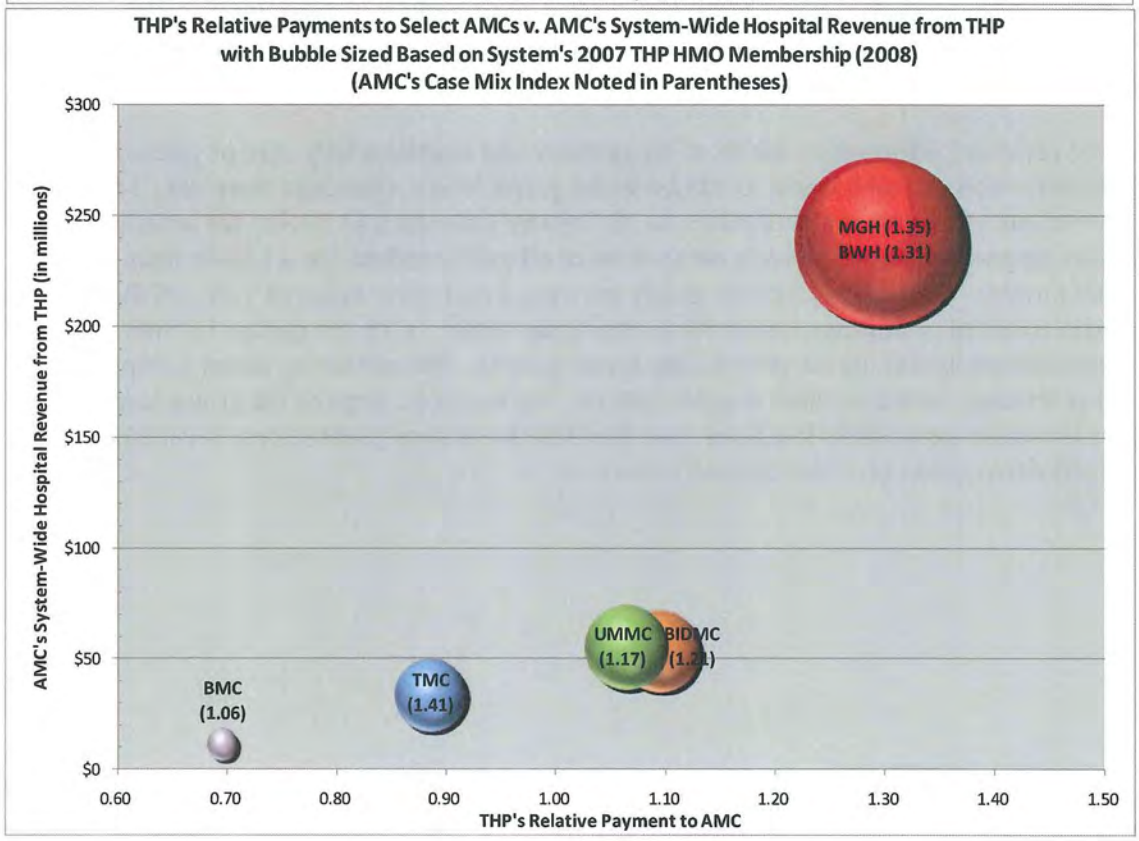


NOTES:

(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 <u>two</u> 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.


HPHC's Relative Payments to Select AMCs v. AMC's System-Wide Hospital Revenue from HPHC with Bubble Sized Based on System's HPHC HMO/POS Membership (2008)
(AMC's Case Mix Index Noted in Parentheses)
AMC's System-Wide Hospital Revenue from HPHC (in millions)
$450
$400
$350
$300
$250
$200
$150
$100
$50
$0
BWH (1.31)
MGH (1.35)
BIDMC (1.21)
UMMC (1.17)
BMC (1.06)
TMC (1.41)
0.60
0.70
0.80
0.90
1.00
1.10
1.20
1.30
1.40
1.50
HPHC's Relative Payment to AMC


THP's Relative Payments to Select AMCs v. AMC's System-Wide Hospital Revenue from THP with Bubble Sized Based on System's 2007 THP HMO Membership (2008)
(AMC's Case Mix Index Noted in Parentheses)
AMC's System-Wide Hospital Revenue from THP (in millions)
$300
$250
$200
$150
$100
$50
$0
MGH (1.35)
BWH (1.31)
UMMC (1.17)
BIDMC
BMC (1.06)
TMC (1.41)
0.60
0.70
0.80
0.90
1.00
1.10
1.20
1.30
1.40
1.50
THP's Relative Payment to AMC

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.[16]

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.

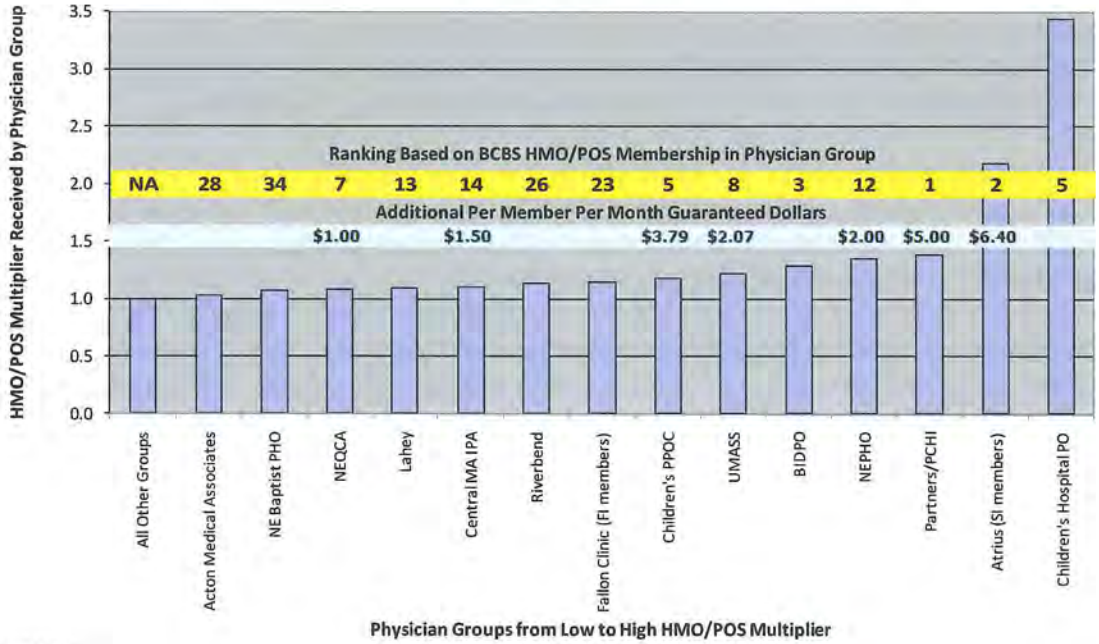
b. Physician Groups

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.

[16] 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.[17] 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).[18] 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.[19]

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.[20] 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.

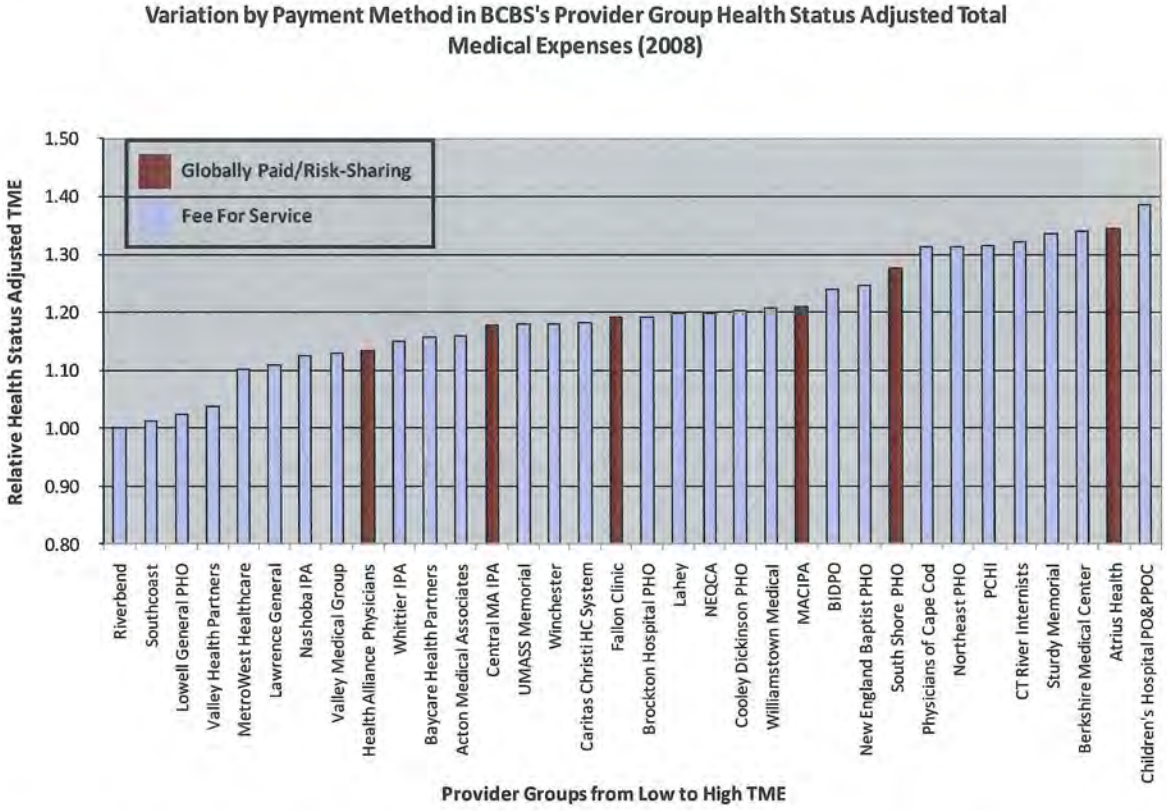
We have found that the prices that insurers and providers negotiate for health care services tend to reflect market leverage. Although this report does not purport to explain all reasons for provider price disparities, our review shows that those disparities are not adequately explained by quality of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

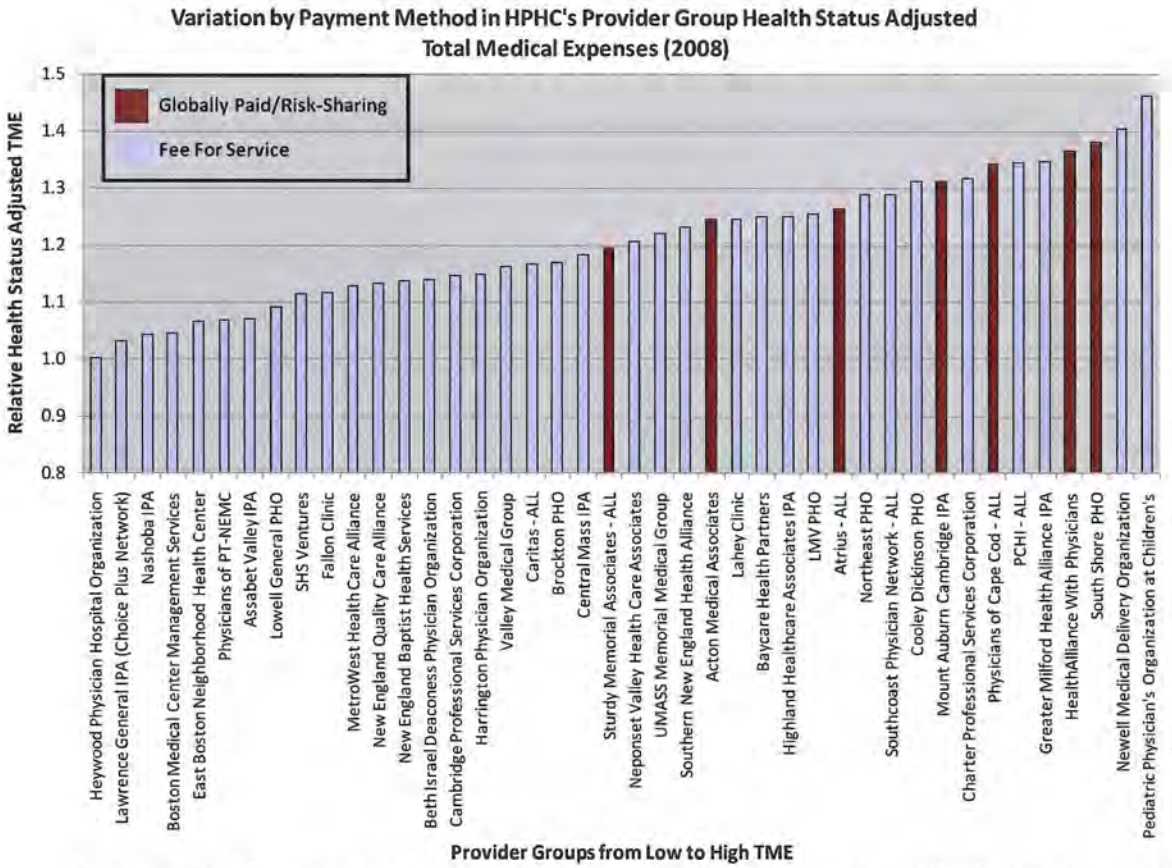
[17] Insurer's Leverage = Provider System's Revenue from Insurer ÷ Provider System's Total Revenue
[18] Provider's Leverage = Insurer's Revenue to Provider System ÷ Insurer's Total Revenue to Region
[19] Relative Leverage Ratio = Insurer's Leverage ÷ Provider's Leverage
[20] This discussion is for policy 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.[21]



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).

[21] 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.



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.[22] 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.

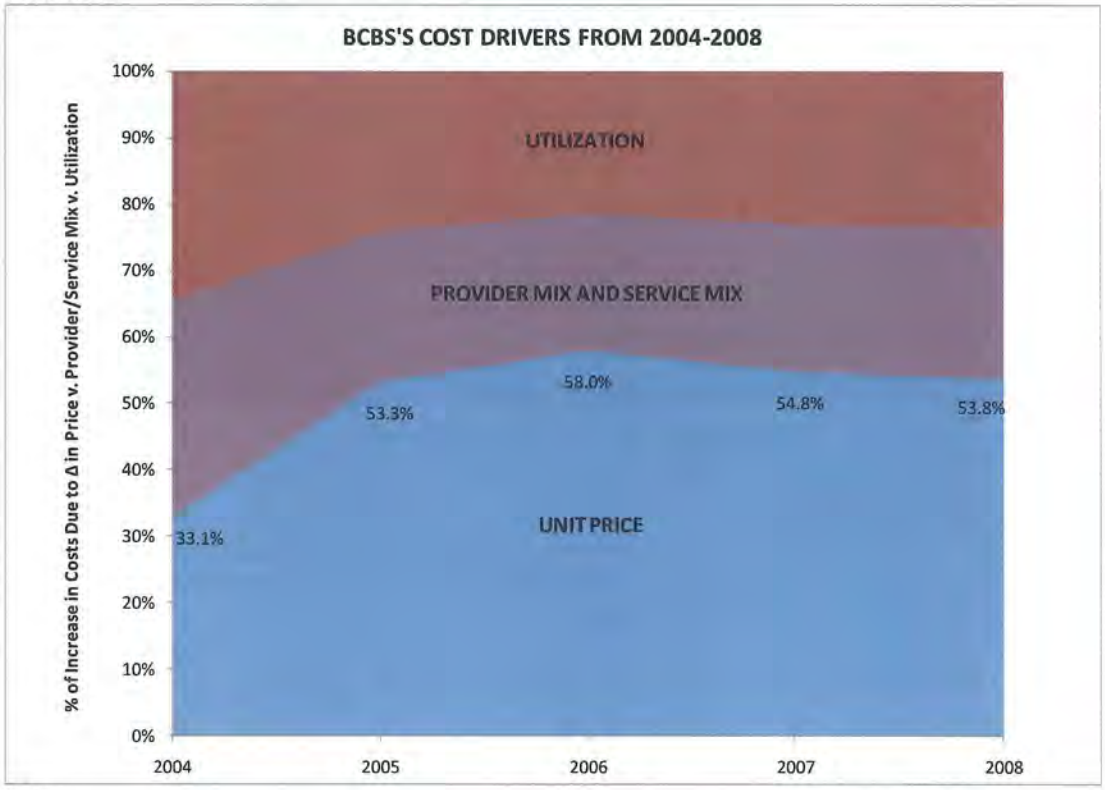
Data from the three largest health plans in Massachusetts show that increases in prices paid for medical services were primarily responsible for the overall increases in medical spending in the past few years.[23] The below graph, reflecting data submitted by Blue Cross Blue

[22] 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.

[23] 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,[24] 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.



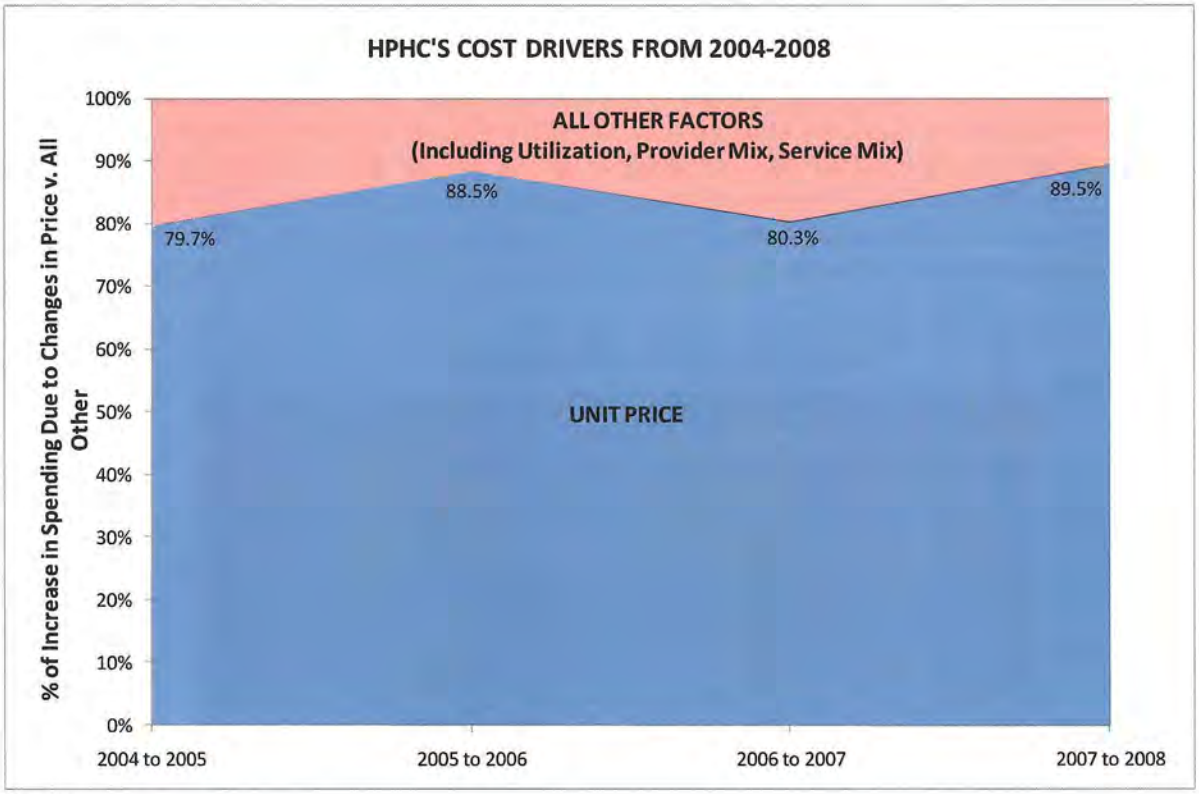
Notes:

(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.

[24] 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 (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.

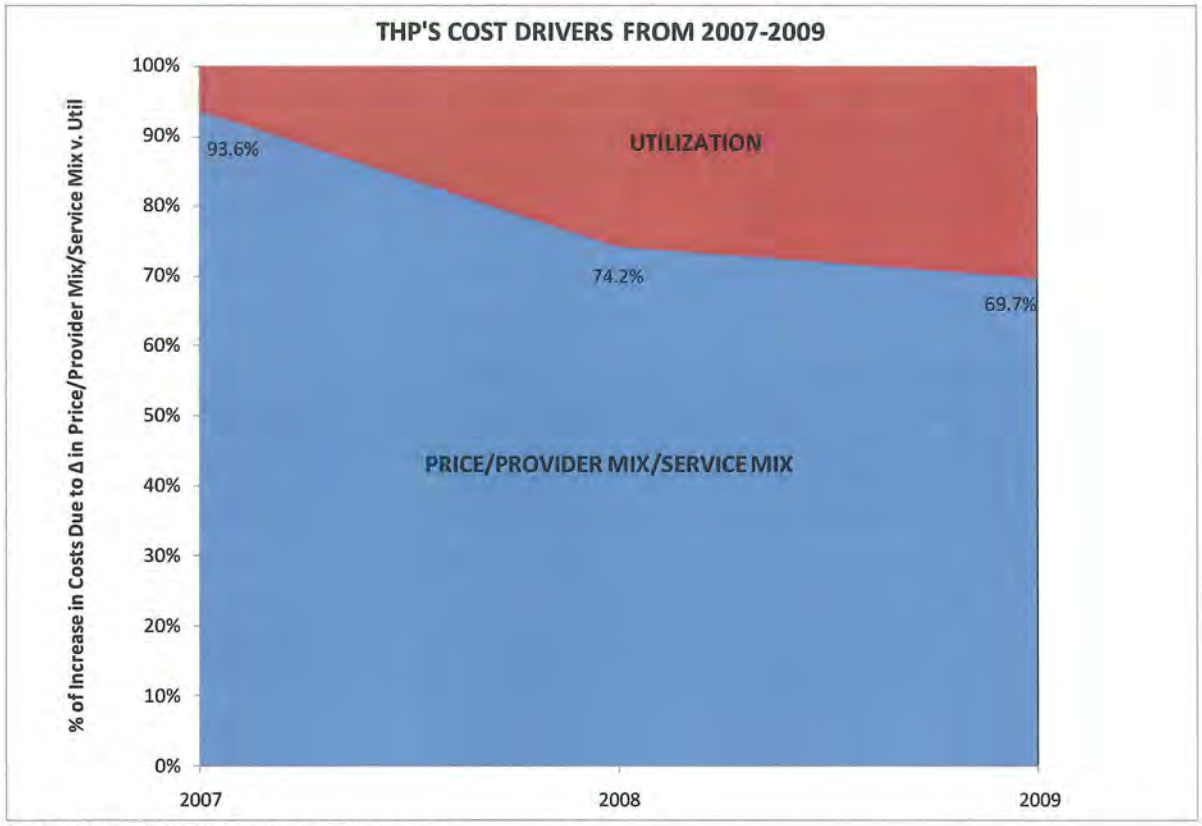
The next two graphs show that unit price increases – rather than increases in utilization – were also the major drivers of medical cost trend at two other health plans. For example, changes in unit price alone, before factoring in changes in provider mix or intensity of care, were responsible for, on 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.[25] 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.

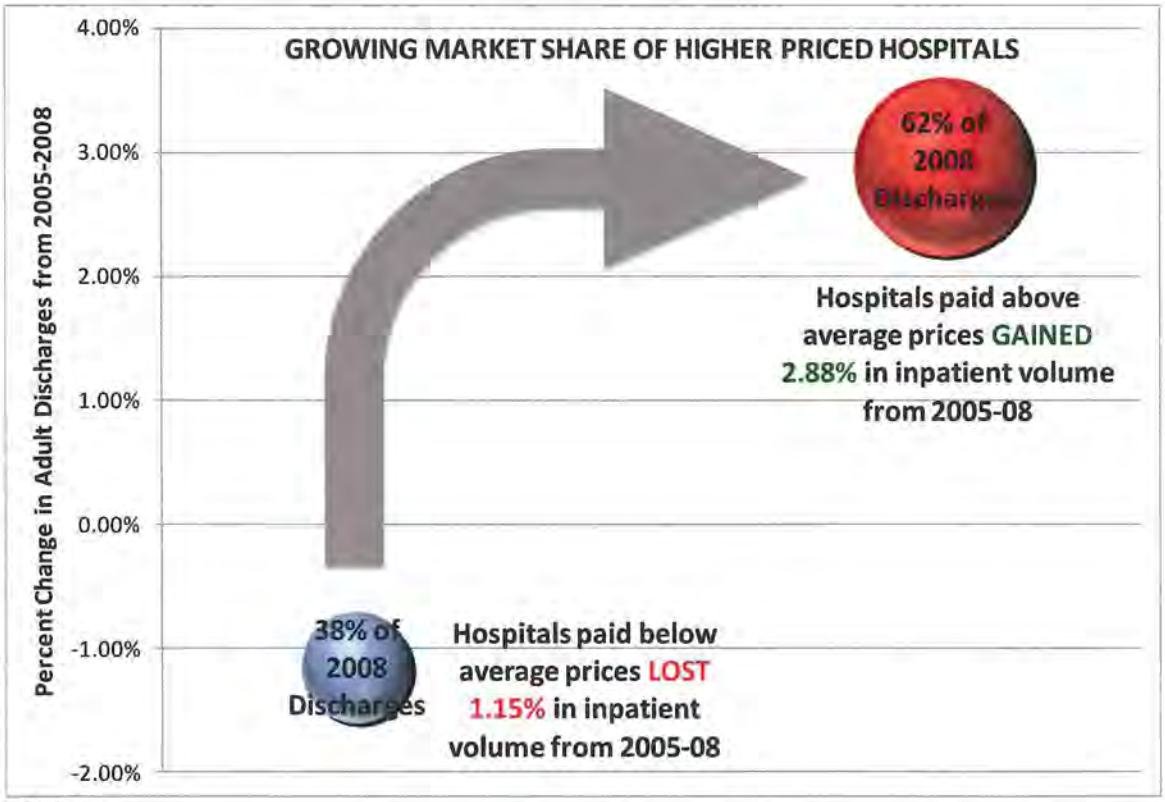
One telling measure of a provider's fiscal health and ability to compete in the market is its ability to obtain price increases and to build patient volume. A provider's ability to increase prices and volume in turn allow it to capitalize, improve its facilities, invest in new equipment, recruit physicians,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

[25] 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.[26]

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.

[26] Through our examination of how insurers and providers contract and negotiate payment rates, we have indentified 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.[27]

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

[27] "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.

OFFICE OF ATTORNEY GENERAL MARTHA COAKLEY

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

General Appendix

I. PRICE DATA

In our examination of how health insurers pay health care providers, we considered the same financial data that the insurers maintain in the normal course of their business to track the relative prices they pay to providers. There are two metrics that the major insurers in Massachusetts use to track the relative prices that they pay to providers: "relative price" and/or "relative payment." We asked the insurers to produce the relative prices paid to providers in their network so that we could analyze the variation in provider prices. Based on the data produced by each insurer, we were able to review "price" relativities for BCBS and "payment" relativities for HPHC and THP.[1] BCBS, HPHC, and THP have recently filed this important financial information with the DHCFP in response to a request for written testimony made by the AGO. Some of the written filings are different, in approach and/or content, from the information produced to the AGO during our examination. As a result, some of the price relativities in the written filings are slightly different than those presented in this report, although the written filings are directionally consistent with and supportive of the results of the AGO examination. We used information from the written filings where noted.

"Price relativity" is a metric for comparing how much higher or lower a provider's price is than the average price paid to other providers in an insurer's network for the same set of services. Price relativities are calculated based on a standard set of services that are not specific to any provider, and as such do not reflect the insurance product mix, service mix, or other factors that are particular to an individual hospital's payment history. Since this approach controls for those differentiating factors, we were able to compare the pure "price" that insurers negotiate with different hospitals.

"Payment relativity" is a metric for comparing the payment to a provider to the network-wide average payment made all providers in an insurer's network. Unlike "price relativity," payment relativities for hospitals reflect provider-specific differences in insurance product mix, service mix, and other factors particular to a hospital's payment experience rather than a standard market basket of services. Payment relativities for inpatient services are adjusted for acuity and complexity. However, the adjustment may not fully account for differences in product and service mix.

Payment and price relativities both represent the *aggregate* amount paid to hospitals and physicians. While the comparison of individual service or procedure pricing may be useful for consumer comparison, as provided by the Health Care Quality and Cost Council's website http://www.mass.gov/myhealthcareoptions, analysis of the entire payment rate structure more

[1] Because of the differences in methodologies used by the insurers, we did not think that it was appropriate to compare price and payment relativities across insurers.

accurately reflects the way health plans and providers negotiate and set prices. Our review indicates that prices of specific services do not reflect the actual costs of those services, but rather reflect the need for providers and payers to arrive at a rate structure that will cover the overall costs of the provider entity. Therefore, in response to our CIDs, health plans provided detailed information regarding the variation in *aggregate* prices and payments in their networks.

A. Hospital Price/Payment Data

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 price that is then adjusted by a set of standard "weights" that reflect the complexity of each case and may be 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 insurers 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.

1. BCBS Hospital Price Relativity

BCBS provided us with its 2008 (1) standard inpatient base DRG rates and (2) outpatient fee schedule multipliers for 13 categories of services for 74 hospitals, for HMO, PPO, and indemnity products. BCBS also provided us with inpatient revenue and outpatient revenue – by service line and in total – for all hospitals, for HMO, PPO, and indemnity products. We aggregated BCBS's inpatient and outpatient pricing data, using the revenue information to appropriately weight the data, in order to compare the prices that BCBS paid to hospitals based on a network-wide average mix of business.

First, we created an inpatient pricing index for each hospital. Using the standard 2008 base DRG rate paid to each hospital in Massachusetts for indemnity, PPO, and HMO products, we calculated a network average base DRG rate for each product. The data submitted by BCBS took into account adjustments to the DRG rates to reflect payments made to providers outside of the standard base DRG rate (i.e., short term inpatient rate multipliers). Using network-wide HMO, PPO, and indemnity revenue mix, we calculated network-wide inpatient product revenue mix. We then calculated a product-blended DRG rate that is weighted using calculated network-wide product revenue weights. Finally, we created an inpatient "index" for each hospital by dividing each individual hospital's "product-blended" DRG rate by the statewide hospital base DRG average. Because this is a base DRG rate, it is case mix neutral because all base rates are adjusted by a standard case weight for each admission.[2,3,4]

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[2] Note that for hospitals that had two sets of base DRG rates indicated for the HMO product – one for their in-system business and one for their out-of-system business – we calculated a 50/50 blend of the HMO base rates and used that figure in the product-blended rate index. We believe this weighting likely understates the relative pricing of the HMO pricing since more business is likely in-system and the in-system pricing is higher than the out-of-system pricing. Affected hospitals include: Emerson Hospital, Hallmark Health System, and South Shore Hospital.

[3] The Massachusetts Eye and Ear Institute and Morton Hospital both had two sets of base DRG rates for unspecified reasons. As a result, those rates were averaged and used to calculate the product-blended DRG-Rate.

Next, we created a hospital outpatient fee schedule pricing index. For HMO, PPO, and indemnity products, using 10 major outpatient fee schedule categories, we calculated BCBS network-wide revenue mix percentages. The 10 categories include: 1) Ambulatory Surgery, 2) Outpatient Laboratory, 3) Radiology, 4) Other Diagnostic, 5) Therapies, 6) Outpatient Mental Health, 7) Clinic-technical, 8) ER – technical, 9) Clinic & ER – professional and 10) Certain Pharmacy. Those 10 categories account for 84% of all hospital outpatient revenue. Then we created a single blended hospital outpatient multiplier for each product by weighting the fee schedule multiplier for each of the 10 categories by the category weights. We calculated the network-wide hospital outpatient revenue mix by product based on product outpatient totals for those categories, and calculated a product-blended outpatient multiplier for each hospital based on network-wide outpatient product mix percentages. Finally, we calculated an outpatient "index" for each hospital as a percent of the state-wide hospital outpatient multiplier average. The blended outpatient multiplier is an outpatient snapshot taken during 2008. Because the multiplier is for all fee-scheduled services, it is case mix neutral for intensity of services.[5,6,7,8]

We then created an observation price (bedded outpatient) index. First, for HMO, PPO and indemnity products, we calculated the network-wide revenue mix for observation services using revenues. Then we calculated a product-blended observation rate average, using network-wide revenue weights. Finally, we calculated an observation index for each hospital as a percent of the state-wide blended observation rate average.[9]

Finally, we created a blended (inpatient, outpatient, and observation) hospital price index. We first calculated the percent of revenue from all products that goes to inpatient, outpatient fee schedule, and observation. We then weighted the inpatient index, outpatient index, and

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[4] Outlier payments and transfer pricing are not included in this inpatient pricing snapshot.

[5] Massachusetts General Hospital, Brigham & Women's Hospital, and South Shore Hospital were paid on a discount-off-of charges arrangement for indemnity product hospital outpatient services. As a result, their blended hospital outpatient multipliers are based on only their HMO and PPO rates. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that excluding the indemnity pricing likely understates the overall outpatient relative pricing.

[6] The following hospitals were paid on a discount-of-off-charges arrangement for "Certain Pharmacy" for PPO and indemnity business: Faulkner, Newton Wellesley, North Shore Medical Center, and Massachusetts Eye & Ear Infirmary. As a result, the "Certain Pharmacy" category was excluded from their PPO and indemnity outpatient index calculations. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that excluding the pricing from this category likely results in somewhat understating the overall outpatient relative pricing.

[7] Massachusetts General Hospital, Brigham & Women's Hospital, Newton Wellesley Hospital, and North Shore Medical Center were paid on a discount-of-off-charges arrangement for outpatient mental health for all products. As a result, their outpatient pricing index excludes this category. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that excluding the pricing from this category likely results in somewhat understating the overall outpatient relative pricing.

[8] The Massachusetts Eye and Ear Institute and Morton Hospital both had two sets of hospital outpatient multipliers indicated for unspecified reasons. As a result, those rates were averaged and used to calculate the product-blended outpatient multiplier rate.

[9] Massachusetts General Hospital, Brigham & Women's Hospital, and South Shore Hospital are paid for observation services on discount-of-off-charges arrangement for their indemnity business. As a result, their observation index is based on HMO and PPO only. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that excluding the pricing from this category likely results in somewhat understating their observation relative pricing.

observation index for each hospital by the network-wide percent of revenue that comes from each of those three categories.[10,11,12] The resultant blended hospital price index reflects a product-adjusted, case-mix neutral marker for approximately 90% of the services delivered by hospitals. The remaining 10% of services are paid on a discount-off-of-charges basis and cannot be compared or indexed with the information that we received.[13]

2. HPHC and THP Hospital Payment Relativities

HPHC and THP maintain hospital payment relativities. Both insurers provided information on the variation in payments made to each hospital in its network, as compared to the network-wide average. HPHC and THP calculated a "payment relativity factor" for hospitals taking into account volume, product mix, service mix, and other factors particular to a hospital's payment history. They both case mix adjusted their hospital inpatient payments for the acuity of the patients served at that hospital. In response to a request from the AGO, HPHC and THP submitted pre-filed testimony containing hospital payment relativity information. We used that information in our report.[14]

B. Physician Price/Payment Data

Health plans set standard fee schedules for physician groups. The physician groups and hospitals sometimes negotiate a specific multiplier to each of these standard fees; for example, a physician group with a 1.2 multiplier for professional services would be paid 120% of the standard fee schedule rate.

1. BCBS Physician Price Relativity

BCBS negotiates fee schedule multipliers for 14 primary or multispecialty care provider groups that have enhanced fee arrangements. All other BCBS primary or multispecialty care provider groups are paid at the "standard" or "base" fee schedule. In addition, BCBS negotiates additional supplemental payments with certain physician groups. In response to a request from the AGO, BCBS submitted pre-filed testimony containing physician price relativity information. We used that information in our report.[15]

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[10] The following hospitals are paid on a discount-of-off-charges basis for their hospital outpatient services for all products: Cape Cod Hospital, Falmouth Hospital, Berkshire Hospital, Fairview Hospital, Dana Farber Cancer Institute, and Children's Hospital. As a result, the overall price relativities for these hospitals were based only on inpatient pricing. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that the inpatient pricing likely understates the overall relative pricing.

[11] Nantucket Cottage Hospital is paid on a discount-of-off-charges basis for its hospital inpatient services for all products. As a result, the overall relative pricing is based on outpatient pricing. Because discount-of-off-charges arrangements generally reflect higher-end pricing, it is our belief that the outpatient pricing likely understates the overall relative pricing.

[12] Sturdy Memorial Hospital and Martha's Vineyard Hospital are paid entirely on a discount-of-off-charges basis and are not included in our analysis.

[13] Insurers pay providers on a discount-off-of-charges basis by paying the provider a percentage off of its charge master. Because provider charge masters generally contain extremely high prices, discount-of-off-charges arrangements generally reflect higher-end pricing than either standard fee schedules or multipliers on fee schedules.

[14] Pre-filed testimony is available on DHCFP's website.

[15] Pre-filed testimony is available on DHCFP's website.

2. HPHC and THP Physician Payment Relativities

HPHC and THP both maintain calculated physician payment relativities for physician groups in their networks. Based on the data that they provided to us, we believe that HPHC and THP calculated their physician relativities by comparing what services would have cost using a network-wide average fee schedule to actual paid dollars. The average payment of each physician group reflects its volume, product mix, service mix, and other factors particular to a physician group's payment history. Neither HPHC nor THP physician relativity factors are adjusted for acuity.

HPHC maintains its payment relativity information by physician group.[16] HPHC provided us with "mapping" information that attributed certain physician groups to larger provider systems. For example, Dedham Medical Associates, Granite Medical, Harvard Vanguard Medical Associates, South Shore Medical Center, and Southboro Medical Group can all be rolled up to represent the Atrius system. Using HPHC's mapping information, we rolled-up and calculated relativity factors for the following provider systems:

- Atrius Health
- Caritas Christi Network Services
- Partners HealthCare System, Inc. ("Partners") and Partners Community HealthCare, Inc. ("PCHI")
- Physicians of Cape Cod
- Southcoast Physician Network

In order to calculate relativity factors for those provider systems, we summed total paid dollars to the provider system and compared it to what total paid dollars would be under HPHC's standard fee schedule. We then compared the resultant fee schedule multiplier (or enhancement) to HPHC's average multiplier to calculate a payment relativity factor.

THP maintains physician relativity factors for a large number of physician groups. For purposes of presenting the information in a chart, we reduced THP's list by excluding those groups with less than $1 million amount allowed claims (which includes both THP payments to providers as well as member cost sharing, or patient payments to providers). The resulting 49 provider systems that appear on the bar chart account for 95.8% of THP's allowed network dollars.

II. TOTAL MEDICAL EXPENSES

Insurers track the total medical expenses (TME) incurred for each of its members back to that member's primary care provider and/or physician group.[17] TME accounts for *all* of the medical expenses associated with an insurer's member, regardless of where those expenses are incurred (i.e., it includes physician visits as well as all hospital, laboratory, imaging, physician

[16] We excluded Harvard Pilgrim No Risk, Individual Harvard Pilgrim Non Risk and RI CONTRACTED PCP entities from our graph since they are either not physician groups or are outside of Massachusetts.
[17] TME is expressed as a per member per month dollar figure based on allowed claims.

therapy and other medical expenses, wherever those services occur).[18,19] 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). TME can be adjusted for acuity to enable an "apples-to-apples" comparison across provider groups. Insurers maintain this information to monitor and compare the total medical expenses of provider organizations in their networks. Some insurers consider TME to be the best available measure of a provider's overall cost efficiency. BCBS, THP and HPHC have publicly filed this important financial information with the DHCFP in response to a pre-file testimony request made by the AGO. These public filings demonstrate the validity of the data and approach used by the AGO.

TME is the most comprehensive available measure of cost of health care. Unlike other measures, such as inpatient days per 1000 members, radiology units per 1000, or pharmacy per member per month, TME captures both the price *and* utilization components of cost and encompasses *all* categories of service.[20]

We received TME data held by BCBS and HPHC. HPHC provided us with TME for individual physician groups. For nearly all of the groups we simply used the reported health status adjusted TME value. As with the HPHC payment relativity data, above, HPHC provided us with "mapping" information that attributed certain physician groups to larger provider systems. Using that information, we rolled up physician groups into provider systems and aggregated the TMEs of those physician groups into a single provider system TME. Acuity adjusted TMEs were calculated for the following rolled-up systems:

- Atrius Health, Inc.
- Caritas Christi Network Services, Inc.
- Northeast Health Systems Physician Hospital Organization, Inc.
- Partners HealthCare System, Inc. ("Partners") and Partners Community HealthCare, Inc. ("PCHI")
- Physicians of Cape Cod, Inc.
- Southcoast Physician Network, Inc.
- Sturdy Memorial Associates

For these select systems, the health status adjusted TME was calculated by taking a weighted average of the physician group's acuity adjusted TME, based on member month data provided by HPHC. For the purposes of presenting the information in a bar chart, acuity adjusted TME

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[18] 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 mean that TME is a useful metric for comparing the varying levels of expenses incurred by different provider systems per patient.

[19] Some components of TME are beyond a PCP's ability to control, such as pharmacy unit pricing, benefit design differences, and patient utilization of health services outside of the recommendation of the PCP.

[20] Some health care entities consider provider medical loss ratio, or provider MLR, as another measure of cost efficiency. Provider MLR is equal to an insurer's payments to a provider divided by the premiums collected by that insurer from that provider's patient population. Because patient premiums vary by employer, and therefore also vary by provider, provider MLR is a less useful tool for comparing the cost efficiency of various providers. For example, one provider's MLR could be 100/120, while another's could be 100/110. In this example, the insurer pays both providers the same amount of money for the same services, yet one provider appears less efficient because premiums in its area are lower. In addition, provider MLR tracks providers' costs as a function of insurer revenue, while TME focuses solely on price and utilization.

values for physician groups with less than 5,000 member months were excluded.[21] We then converted TME to relativities by dividing all TME data by the lowest TME (which then equaled "1" on our graph). HPHC includes supplemental payments in its TME, and reports TME based on claims paid to providers (which only reflects HPHC payments, not patient payments).

BCBS provided us with TME for individual physician groups. We used the reported health status adjusted TME value as maintained by BCBS with a single modification: we calculated a weighted average TME based on membership for Children's PPOC and Children's Hospital PO. As with HPHC data, we then converted TMEs to relativities by dividing all TME data by the lowest TME (which then equaled "1" on our graph). BCBS produced TME information for all provider groups with more than 18,000 member months, which resulted in 35 groups. BCBS includes supplemental payments in its TME and calculates its TME based on allowed claims (which include both BCBS payments to providers as well as member cost sharing, or patient payments to providers).

III. MARKET LEVERAGE

We define "leverage" as a measure of the ability of insurers and providers to influence each other during contract negotiations. As discussed in our report, both providers and insurers can bring leverage into contract negotiations.

In our provider leverage analysis, we examined (1) the total revenue paid by an insurer to an entire provider system, and/or (2) the total number of an insurer's HMO or POS members cared for by a provider system. Both figures create a proxy for the size of a provider system within a given insurer's network, and therefore the amount of disruption that the insurer would face if the provider were not in its network.

A. AMC Leverage Analysis

We compared the variation in payment rates to select academic medical centers (AMCs) to (1) the total revenue received by all hospitals in a given system and (2) the total number of covered lives associated with a given system. For the purpose of this analysis, we chose to compare six AMCs.[22]

HPHC and THP provided total hospital revenue amount for each hospital. BCBS provided total revenue for each hospital for HMO, PPO, and indemnity products, which we summed to total revenue for each hospital. Some hospitals contract individually with insurers, while other hospitals contract jointly as a provider system. To compare the relative leverage of hospitals' systems, we aggregated the total revenue for *all* hospitals within a contracting system to reflect how those hospitals contract as a multi-provider system rather than as a single

[21] Also excluded are Harvard Pilgrim No Risk, Individual Harvard Pilgrim Non Risk, RI Contracted Specialist Groups, RI Contracted Specialists, since these entities are either not physician groups or are outside of Massachusetts.

[22] Using expert input, we chose six major adult hospitals that: 1) have extensive research and teaching programs; 2) are principal teaching hospitals for a medical school; 3) allocate extensive resources for tertiary and quaternary care; and 4) are full service hospitals with a CMI intensity that is more than 5% above the state average.

hospital.[23] To sum the total revenue paid by each insurer to each hospitals' provider system, we attributed hospitals to provider systems and then totaled the hospital revenue in each system.[24] If a hospital was not assigned to a provider system, then that hospital's own revenue was also used for system revenue.

We relied on the physician group member month data that BCBS, HPHC, and THP produced in relation to their TME data to determine the member lives associated with each AMC's provider system.[25] To sum the total number of insurer members in each provider system, we attributed physician groups to provider systems or their affiliated AMC, and then totaled the members in each system.[26,27,28]

B. Physician Leverage Analysis

We compared the physician groups that received enhancements, or multipliers, to BCBS's standard physician fee schedule to the total number of covered lives associated with each physician system. BCBS produced multiplier information for the 14 primary or multispecialty care provider groups that receive enhancements to BCBS's standard physician fee schedule.[29,30,31] BCBS pays all other primary or multispecialty care provider groups at the

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[23] Based on the data that we collected, we could not include revenue for any physician groups that might also be included in the same system.

[24] Using expert input, we attributed hospitals to provider systems as follows: Nantucket Cottage Hospital, Martha's Vineyard Hospital, Faulkner Hospital, Emerson Hospital, North Shore Medical Center, Newton-Wellesley Hospital, Hallmark Health Systems, Massachusetts General Hospital and Brigham and Women's Hospital were all attributed to the Partners provider system; Beth Israel Deaconess Medical Center and Beth Israel Deaconess Needham were attributed to the Beth Israel provider system; and Marlborough Hospital, Clinton Hospital, Health Alliance Hospitals, Inc., Wing Memorial Hospital, and University of Massachusetts Memorial Center were attributed to the UMass provider system. Tufts Medical Center and Boston Medical Center are not members of a provider system with any other hospital.

[25] For the sake of presentation, we divided member months by 12 to arrive at total members.

[26] Using expert input, we attributed physician groups to provider systems as follows: PCHI physicians were associated with the Partners provider system; the Beth Israel Deaconess Physician Organization physician were associated with the Beth Israel provider system; the University of Massachusetts Memorial Group and Health Alliance Physicians Inc. were associated with the UMass provider system; NEQCA & the Physicians Organization of Tufts New England Medical Center was associated with Tufts Medical Center; and Boston Medical Center Management Services was associated with Boston Medical Center.

[27] Note that BCBS did not produce member month data for BMC, so we made a conservative estimate of 18000 member months (1500 members), which is the largest size group for which BCBS produced member month data; smaller group data was produced as a consolidated "all other" category.

[28] BCBS and HPHC member month data is from 2008, while THP member month data is from 2007. BCBS and HPHC data reflects both HMO and POS membership information, while THP data reflects only HMO members.

[29] Of the 14 groups that receive a multiplier off of the standard fee schedule, 13 have the same fee schedule. BCBS and PCHI negotiated a separate fee schedule for PCHI, which we understand varies from the standard network fee schedule for certain physician codes, such as lab codes and temporary codes. In addition, both Children's and PCHI are paid on a discount-of-off-charges basis for "Not Otherwise Classified" (NOC) codes. BCBS does not pay any other physician group for service that physicians classify as NOC codes. The fact that PCHI and Children's are paid for NOC codes increases their price in a way we cannot capture with this analysis.

[30] We used BCBS's CY2008 multiplier information for 12 of the 14 physician groups. For Atrius and Children's PO, we used information from 2008 and 2009 because physician groups within Atrius (5 groups) and Children's PO (20 groups) each received different multiplier in CY2008 that we could not blend. UMass, PCHI, Lahey, and Children's PPOC had more than one multiplier in effect throughout CY2008. We blended their multipliers to arrive at one multiplier for each of those providers in the CY2008 time period.

"standard" or "base" fee schedule.[32] BCBS also produced information regarding the per member per month payments that BCBS pays to the physician groups that also receive multipliers and the number of BCBS member lives associated with each of those groups. We included that information with no additional calculations required.

IV. HOSPITAL VARIABLES

Case Mix Index

DHCFP calculates a case mix index (CMI) for each hospital in Massachusetts and publishes it publicly on the Executive Office of Health and Human Services' website.[33] CMI is used to assess and adjust for the complexity and/or sickness of a hospital's patient population. A CMI of 1.0 is average and hospitals with a higher CMI (above 1.0) serve a more complex and/or sicker population on average. We used DHCFP's CMIs to compare the prices paid to hospitals to the acuity or complexity of the cases handled by the hospital as measured by the hospital's CMI. 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.[34] Note that CMI is based on information from all insurers, not just commercial insurers. [35]

Disproportionate Share Hospitals

DHCFP identifies Massachusetts hospitals that receive a disproportionate share of their revenue from government payers. DHCFP defines disproportionate share hospitals (DSH) "as those hospitals with a large percentage (63% or more) of patient charges attributed to Medicare, Medicaid, other government payers, and free care." DHCFP's DSH designations can be found on slide 24 of its report, "Massachusetts Acute Hospital Financial Performance: Fiscal Year 2008," which is located on its website. Using DHCFP's DSH designations, we compared DSH hospital status to hospitals' price or payment relativity. We also sought to determine whether, on average, insurers pay DSH hospitals more or less than non-DSH hospitals. For HPHC and THP,

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[31] Atrius obtains the same price for its commercial negotiated fee-for-service business as it does for its commercial HMO capitated business.

[32] BCBS negotiates a multiplier on the base fee schedule with only 14 physician groups. In addition, BCBS may negotiate supplemental payments to providers that are not reflected in their base fee schedule rates, meaning that those physician groups are also paid above the network average although they do not receive any multipliers to the standard fee schedule. Those groups are not reflected in this analysis, but are reflected in the graph illustrating the relative prices paid to BCBS physician groups.

[33] See 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

[34] We blended the CMIs of the hospital campuses: Berkshire Medical Center / Berkshire and Hillcrest; Boston Medical Center's East Newton and Harrison Avenue sites; Good Samaritan Brockton and NORCAP Lodge sites; Cambridge Health Alliance's Cambridge, Somerville and Whidden sites; UMASS Health Alliance Burbank and Leominster sites; Hallmark Health's Lawrence Memorial Hospital and Melrose-Wakefield Hospital; Lahey Clinic's Burlington and North Shore sites; Mercy Medical Center's Providence and Springfield sites; North Shore Medical Center's Salem Hospital and Union Hospital; and UMass Memorial's University and Memorial sites. Metrowest Medical Center's Framingham and Leonard Morse sites

[35] CMI calculated using commercial population only is not available.

we calculated a weighted average of payment rates for DSH and non-DSH hospitals. For BCBS, we calculated a straight-line average of price for BCBS DSH and non-DSH hospitals.[36]

Teaching Hospitals

DHCFP identifies certain Massachusetts hospitals as "teaching" hospitals. DHCFP defines teaching hospitals using the Medicare Payment Advisory Commission's (MedPAC) definition of a major teaching hospital as having "at least 25 full-time equivalent medical school residents per one hundred inpatient beds." DHCFP's teaching hospital designations can be found on slide 11 of its report, "Massachusetts Acute Hospital Financial Performance: Fiscal Year 2008," which is located on its website. Using DHCFP's teaching designations, we compared teaching hospital status to hospitals' price or payment relativity.

Internal Unit Costs

DHCFP publishes hospital unit cost data in its 403 Cost Report (HSD10).[37] DHCFP's report contains inpatient patient expense (including capital expenses) and total admissions for each hospital in Massachusetts. Using DHCFP's published CMI for each hospital (discussed above), we calculated a Case Mix Adjusted Cost Per Admission for a select group of six academic medical centers (AMCs) by dividing the reported total inpatient costs (including capital expenses) by the number of admissions to get an average cost per admission and then dividing by the hospital CMI.[38]

Risk-Sharing Contracts

BCBS, HPHC, and THP all pay certain providers in their network under some type of risk-sharing contract.[39] There are a wide number of payment methodologies in place in the Massachusetts health care market, ranging from straight fee-for-service payments and various "pay-for-performance" structures to 100% global capitation.[40] We used TME to comprehensively compare the efficiency of providers that are paid under these different payment

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[36] Note that, as discussed above in the price relativities section, BCBS provided us with price information for hospitals, while THP and HPHC provided payment information. Payment information includes volume, while price information does not. When volume is introduced to the BCBS data, the average DSH payment goes down from 96% to only 86% and the average non-DSH payment goes from 104% to 102%. Therefore, when volume is factored in, BCBS pays non-DSH hospitals *19% more* than non-DSH hospitals.

[37] DHCFP's 403 Cost Report (HSD10) is 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

[38] Using expert input, we chose to compare unit costs for the major adult hospitals that: 1) have extensive research and teaching programs; 2) are principal teaching hospitals for a medical school; 3) allocate extensive resources for tertiary and quaternary care; and 4) are full service hospitals with a CMI intensity that is more than 5% above the state average.

[39] No provider group is reimbursed exclusively through a risk-sharing contract; all have some component of fee-for-service reimbursement. In addition, based upon information produced by the insurers, our examination has shown that there are many different types of risk-sharing contracts in the Commonwealth.

[40] Risk-sharing contracts vary within the market place. For example, some have withhold structures, others do not. Some arrangements have a virtually unlimited amount of "surplus" or "upside" potential, while others limit that amount to approximately 5-10% of total earnings. The target health status adjusted level of TME varies dramatically between provider groups, which further impact the effective level of "risk" each group faces. Various other differences in risk structure exist in the current market.

methodologies because TME is health status adjusted and reflects both the use patterns (utilization) and price of the services rendered.

For our analysis, we identified two groups of providers: those who are paid strictly on a fee-for-service basis and those who are paid under some form of risk-sharing contract where the amount the provider group ultimately earns depends on achieving a certain level of TME for the group of patients they serve. Insurers issue "settlement reports" to providers with risk-sharing contracts that reflect the end-of-year reconciliation between the amount under which the provider was capitated and the amount that the provider actually spent on care. We reviewed BCBS's settlement reports to determine which provider organizations in its network operated under a risk-sharing contract. HPHC provided us with a list of providers that it considers to be operating under risk-sharing contracts.[41] Using the insurer's designations of providers with risk-sharing contracts, we compared contract type to the TME for each provider group.[42]

[41] HPHC identified 8 providers, including Harbor Medical Associates, Inc, who operate under some type of risk-sharing contract. HPHC did not produce separate TME information for Harbor Medical Associates, which is a member of South Shore PHO (for which HPHC did produce TME information). Therefore, we did not include Harbor Medical on our graph.

[42] We could not perform this analysis for THP providers because we do not have THP TME data.

OFFICE OF ATTORNEY GENERAL MARTHA COAKLEY

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

Quality Appendix

I. Overview

There are a wide variety of physician and hospital quality metrics in the current health care marketplace. We retained Dr. John Freedman, Principal at Freedman Healthcare, LLC, who has 18 years' experience in quality measurement and quality improvement, to advise us on how to conduct our quality analysis. With Dr. Freedman's guidance, we identified both publicly available and confidentially held quality metrics to review in our examination. First, we obtained insurers' own aggregate measures of quality for physicians and hospitals. While we found that each insurer 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 metrics and results for Massachusetts hospitals and physicians, including CMS measures of patient experience and hospital performance and Massachusetts Data Analysis Center (Mass-DAC) cardiac care quality data. These measures provide a broad look at various quality measures available in the market place.[1]

II. Data Reviewed

A. BCBS Hospital AHRQ Measures

BCBS created Hospital Outcome Indicator Reports for FY 2005, FY 2006 and FY 2007. These reports include hospital performance data on measures of clinical quality.[2] Dr. Freedman reviewed the Reports and found that the measures appear to be taken from AHRQ quality measure sets, and are individually valid and statistically tested.

Using data exactly as presented in the reports, we tallied the performance of each hospital. First, we counted the number of times a hospital was rated above average or below average at the 95% confidence interval (as indicated on the report). Then, using that

[1] We have learned through our examination that 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 accuracy, statistical significance, or appropriateness of the quality measures reviewed. Rather, our focus was to identify the quality measures that health plans use and to then determine whether those measures influenced contract negotiations such that prices paid to health care providers correlated positively with quality as measured by those health plans (i.e., are health plans paying more to providers who provide higher quality care as measured by the health plans themselves).
[2] The reports included 14 measures of clinical quality in FY05, 13 in FY06 and 14 in FY07.

information, we calculated the net number of times a hospital was rated above average as the number of times above average minus the number of times below average. To increase the stability of the results, we combined the data for three fiscal years. Following BCBS's format, we divided hospitals into 4 groups: twelve academic medical centers, 18 large community hospitals, 20 mid-size community hospitals, and 19 small community hospitals, as follows:

Academic Medical Centers	Large Community Hospitals	Mid Size Community Hospitals	Small Community Hospitals
Baystate Medical Center	Brockton	Anna Jaques	Athol
Berkshire Med. Center	Cape Cod	Caritas-Carney	BIDMC-Needham
BIDMC	Caritas-Good Samaritan	Caritas-St. Anne's	Clinton
Boston Medical Center	Caritas-Holy Family	Cooley Dickinson	Fairview
Caritas - St Elizabeth	Caritas-Norwood	Emerson	Franklin
Lahey Clinic	Cambridge Health Alliance	Falmouth	Harrington
Mount Auburn	Hallmark-Melrose	Faulkner	Hubbard
Partners - BWH	Lawrence General	Hallmark-Lawrence	Marlborough
Partners - MGH	Lowell	Heywood	Martha's Vineyard
Tufts Medical Center	Mercy-Springfield	Health Alliance	Mary Lane
UMass Memorial	MetroWest/Framingham	Holyoke	Merrimack Valley
Vanguard - St. Vincent's	NorthEast-Beverly	Jordan	Milton
	North Shore Salem	MetroWest/LM	Nantucket
	NWH	Milford	Nashoba Valley
	SouthCoast-Charlton	Morton	NorthEast-Addison
	SouthCoast-St. Luke's	New England Baptist	Noble
	South Shore	North Shore Union	North Adams
	Winchester	Quincy	SouthCoast-Tobey
		Saints Memorial	Wing
		Sturdy	

Measures used by BCBS in its Hospital Outcome Indicator Reports include:

Measures	Fiscal Year
Pneumonia after major surgery	2005, 2007
Diabetes short term complications	2005, 2006
Failure to rescue	2005, 2006
Infection due to medical care*	2005, 2006, 2007
Postoperative pulmonary embolism or deep vein thrombosis (clot)*	2005, 2006, 2007
Postoperative sepsis	2005, 2006
Obstetrics trauma – vaginal delivery w/instrument	2005, 2006, 2007
Obstetrics trauma – vaginal delivery w/o instrument*	2005, 2006, 2007
Mortality following acute myocardial infarction (heart attack)	2005, 2006, 2007
Mortality following congestive heart failure	2005, 2006, 2007
Mortality following acute stroke	2005, 2006, 2007
Mortality following pneumonia	2005, 2006, 2007
Pediatric asthma admission excl newborn	2005, 2006
Mortality following coronary artery bypass graft (heart bypass)	2005, 2006, 2007
Birth trauma – injury to neonate*	2007

Overall mortality*	2007
Acute myocardial infarction (heart attack) after major surgery*	2007
Wound infection*	2007

Note: Seven observations (3 measures for 3, 3, and 1 years each) are related to obstetrics, two observations (1 measure for 2 years) are related to pediatrics, and three observations (1 measures for 3 years) are related to cardiac bypass surgery. These measures therefore do not apply to hospitals that do not offer these services.
*Fifteen observations relate to the eight of these measures which are included in BCBS's AQC quality financial incentives.

B. BCBS Hospital Mortality Rate

One of the AHRQ measures that BCBS measures in its Hospital Outcome Indicator Reports is mortality. We used the mortality data exactly as presented in the FY07 BCBS Hospital Outcome Indicator Reports, using the APO rate on measure "QI1 Overall Mortality" for all MA hospitals. This measure appears only in the reports for FY 2007, limiting our analysis to that year.

C. BCBS Physician Quality Metrics

BCBS collected quality data for 27 "integrated medical groups" in 2007. The 27 groups are: Acton, Atrius, Baycare, Berkshire, BIDPO, Caritas, CMIPA, Fallon, Hampden, HAPI, Lahey, Lawrence, Lowell, MACIPA, Metrowest, Nashoba, NEPHO, NEQCA, PCHI, POCC, Riverbend, Signature, SSPHO, UMass, Valley Health, Williamstown and Winchester. BCBS used 33 HEDIS measures, including both adult and pediatric measures and 9 patient experience measures.

Using BCBS's data, we calculated the case mix adjusted average of the HEDIS measures for each physician group. To do this, we first calculated network average performance for each of the 29 non-redundant measures. We then calculated each group's expected performance as the network average times the group's denominator, for each measure. Next, we summed up each group's total numerator (sum of its actual numerator for each measure) and divided that by the total of the expected performance (sum of the expected performance for each measure), which resulted in the observed-to-expected (O:E) ratio. The O:E ratio is 1.0 for the network as a whole. Better than average performance results in an O:E ratio >1.0. Worse than average performance results in an O:E ratio <1.0. Finally, we multiplied the O:E ratios times the overall network average performance on all the measures to get each group's case-mix adjusted HEDIS performance. Both the O:E ratio and the adjusted average are equivalent for the purposes of showing performance, but the case mix adjusted performance gives a percentage value that is more easily understood in comparison to reported HEDIS rates.

BCBS HEDIS measures included:

- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
- Follow-Up of Care of Children Prescribed ADHD Medications - Continuation and Maintenance Phase
- Follow-Up of Care of Children Prescribed ADHD Medications - Initiation Phase
- Antidepressant Medication Management - Effective Acute Phase Treatment

- Antidepressant Medication Management - Effective Continuation Phase Treatment
- Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis
- Use of Appropriate Medications for People with Asthma: Adults Ages 18 to 56
- Use of Appropriate Medications for People with Asthma: Children Ages 5 to 17
- Breast Cancer Screening
- Controlling High Blood Pressure (<140/90)
- Cervical Cancer Screening
- Comprehensive Diabetes Care - HbA1c Control
- Comprehensive Diabetes Care - HbA1c Testing
- Comprehensive Diabetes Care - Medical Attention for Nephropathy
- Comprehensive Diabetes Care - Blood Pressure Control <140/90 mm Hg
- Comprehensive Diabetes Care - Blood Pressure Control <130/80 mm Hg
- Chlamydia Screening in Women Ages 16 to 20
- Chlamydia Screening in Women Ages 21 to 24 (new upper age limit)
- Colorectal Cancer Screening (eligible for rotation)
- Appropriate Testing for Children with Pharyngitis
- Use of Imaging Studies for Low Back Pain
- *Annual Monitoring for Patients on Persistent Medications - ACE inhibitors or ARBs
- *Annual Monitoring for Patients on Persistent Medications - Anticonvulsants
- *Annual Monitoring for Patients on Persistent Medications - Digoxin
- *Annual Monitoring for Patients on Persistent Medications - Diuretics
- Annual Monitoring for Patients on Persistent Medications - Total rate
- Persistent Beta Blocker Treatment After Heart Attack
- Pharmacotherapy of COPD Exacerbation - Dispensed a bronchodilator within 30 days of the event
- Pharmacotherapy of COPD Exacerbation - Dispensed a systemic corticosteroid within 14 days of the event
- Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- Appropriate Treatment for Children with URI
- Well-Child Visits first 15 Months of Life (eligible for rotation)
- Well-Child Visits Ages 3 to 6 (eligible for rotation)

*Note: 4 of the 33 are redundant (Annual Monitoring of Persistent Meds for 4 specific classes), so we used the Total Rate to avoid double counting. Thus, we used scores from 29 measures (the 4 that were excluded still have their results included within the Total Rate measure).

BCBS provided separate patient experience scores for adults and pediatrics in nine categories (communication, integration of care, knowledge of patient, health promotion, organizational access, visit-based continuity, clinical team, office staff, and willingness to recommend). We created an adult score for each physician group by averaging each physician group's scores in the nine categories for adult patients. Similarly, we created a pediatric score from the pediatric categories.

D. HPHC Hospital Honor Roll and Quality Rankings

HPHC maintains a hospital "Honor Roll" and also creates a hospital Quality Report. HPHC provided us with data that it used to compile hospital performance reports on six measures, which HPHC counts up to determine if a hospital earns HPHC's "Honor Roll" status. The Honor Roll measures include both CMS and Leapfrog Group data. In order to achieve a position on the HPHC Honor Roll, a hospital must be in the top 25% in at least 3 of 4 process measure sets (heart attack, heart failure, pneumonia, and surgical care improvement) and must either score above the national average on patient experience HCAHPS scores, or must be in the top 25% in four New England states across four Leapfrog Group "leaps." HPHC also creates a Hospital Quality Report based on the 6 measures, which include:

- National top 25% in the CMS process measure for heart attack
- National top 25% in the CMS process measure for heart failure
- National top 25% in the CMS process measure for pneumonia
- National top 25% in the CMS process measure for surgical care improvement
- HCAHPS scores above the national average on 6 of 8 questions and the "highest rating" question.
- Regional Top 25% (4 NE states) across 4 "Leaps," which is achieving at least 11 of 16 quadrants.

A hospital is not eligible for credit from HPHC if they do not report these measures or if they have too few patients to measure.[3] Using the HPHC Hospital Quality Report, we added up the number of credits earned by each hospital, with the lowest score being 0 and the highest being 6.

E. HPHC Physician Group Honor Roll

HPHC awards Honor Roll status to about half of their physician groups (46% on Adult Honor Roll and 54% on Pediatric Honor Roll in MA in 2008) based on a physician group's HEDIS performance in comparison to national benchmarks. HPHC provided us with Honor Roll status information by physician group. HPHC provided us with a map that allowed us to attribute those physician groups to provider systems. Using that map, we added the number of groups for each provider system (denominator) and the number of those groups that were awarded Honor Roll status (numerator). This result is not weighted for membership or other measure of volume, so it is a rough index of the performance of the provider system.

F. THP Hospital Navigator Score and Adult Mortality Rate

THP uses a detailed mathematical formula that it uses to measure hospital quality for its Navigator product, a tiered network product. THP calculates an adult Navigator score for hospitals based on mortality rate, CMS process measures, and Leapfrog Group score.[4,5] For our

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[3] We believe CMS has a minimum number to report performance on the 4 process measures. Not reporting or having too small a volume works against the hospital, counting as if it failed on that measure. This would have a negative effect on smaller hospitals, but we could not estimate the size of the effect. Similarly, the scoring works against hospitals that decline to complete the Leapfrog survey.

[4] For details of the THP Navigator methodology, see their website: http://www.tuftshealthplan.com/providers/pdf/hospital_methodology_2009.pdf .

[5] To briefly summarize the method, THP calculates inpatient mortality using the MA DHCFP hospital discharge dataset, limited to adult patients, and excluding certain types of cases (eg, obstetrics, organ transplants). They risk

analysis, we used two THP scores applied to adult inpatients: overall quality z-score and mortality rate. We chose the mortality rate because it is a critically important outcome measure and is a continuous variable. We used the overall adult quality score because it is the score that THP uses as the quality measure of the hospital for purposes of assigning the tier placement in its Navigator product. Further, the z-score itself represents the degree of statistical significance of the hospital's performance.

G. THP Medical Group Blue Ribbon Scores

THP calculates Blue Ribbon quality ratings for 157 medical groups based on MHQP data and medical group designations. The Blue Ribbon quality score is based on a weighted average of 15 HEDIS measures.[6] THP provided us with a map of MHQP group designations that enabled us to roll up the individual medical group scores into scores for larger provider systems. THP did not provide us with membership or revenue data for the individual medical groups. Therefore, we performed a simple average of the scores for the groups within each integrated delivery network. This result is not weighted for membership or other measure of volume, so it is a rough index of the performance of the contracting group.

H. CMS Hospital Quality Measures

CMS collects and publicly reports various quality measures. We obtained CMS measures from the CMS Hospital Compare website on August 10, 2009. We calculated the simple average of the patient experience measures and process measures reported by CMS for each hospital. Any scores for a hospital that were not reported on Hospital Compare (whether due to low volume, not being applicable, or other reasons) were excluded. We also examined CMS readmission rate and mortality rate data. Hospital Compare does not report the actual rates for either measure, but does report whether a hospital is above or below average on each. Since few hospitals are identified as different from average on these measures, they are of limited usefulness and were not used in further analysis. The data reflect hospital performance from January through December 2008.

The CMS patient experience measures included in the calculation are:

- Percent of patients who reported that their nurses "Always" communicated well.
- Percent of patients who reported that their doctors "Always" communicated well.
- Percent of patients who reported that they "Always" received help as soon as they wanted.
- Percent of patients who reported that their pain was "Always" well controlled.
- Percent of patients who reported that staff "Always" explained about medicines before giving it to them.
- Percent of patients who reported that their room and bathroom were "Always" clean.

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adjust using APR-DRGs. We used the calculated mortality rates. THP also calculates an overall adult hospital quality rating by combining, equally weighted, each hospital's score on mortality, Leapfrog Group rating, and CMS process of care measures.

[6] See http://www.tuftshealthplan.com/providers/pdf/2009%20blue%20ribbon%20methodology.pdf for details of THP's method.

- Percent of patients who reported that the area around their room was "Always" quiet at night.
- Percent of patients at each hospital who reported that YES, they were given information about what to do during their recovery at home.
- Percent of patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest).
- Percent of patients who reported YES, they would definitely recommend the hospital.

The CMS process measures included in the calculation are:

- Percent of surgery patients who were given an antibiotic at the right time (within one hour before surgery) to help prevent infection
- Percent of surgery patients who were given the right kind of antibiotic to help prevent infection
- Percent of surgery patients whose preventive antibiotics were stopped at the right time (within 24 hours after surgery)
- Percent of all heart surgery patients whose blood sugar (blood glucose) is kept under good control in the days right after surgery
- Percent of surgery patients needing hair removed from the surgical area before surgery, who had hair removed using a safer method (electric clippers or hair removal cream – not a razor)
- Percent of surgery patients whose doctors ordered treatments to prevent blood clots after certain types of surgeries
- Percent of patients who got treatment at the right time (within 24 hours before or after their surgery) to help prevent blood clots after certain types of surgery
- Percent of Heart Attack Patients Given Aspirin at Arrival
- Percent of Heart Attack Patients Given Aspirin at Discharge
- Percent of Heart Attack Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD)
- Percent of Heart Attack Patients Given Smoking Cessation Advice/Counseling
- Percent of Heart Attack Patients Given Beta Blocker at Discharge
- Percent of Heart Attack Patients Given Fibrinolytic Medication Within 30 Minutes Of Arrival
- Percent of Heart Attack Patients Given PCI Within 90 Minutes Of Arrival
- Percent of Pneumonia Patients Given Oxygenation Assessment
- Percent of Pneumonia Patients Assessed and Given Pneumococcal Vaccination
- Percent of Pneumonia Patients Whose Initial Emergency Room Blood Culture Was Performed Prior To The Administration Of The First Hospital Dose Of Antibiotics
- Percent of Pneumonia Patients Given Smoking Cessation Advice/Counseling
- Percent of Pneumonia Patients Given Initial Antibiotic(s) within 6 Hours After Arrival
- Percent of Pneumonia Patients Given the Most Appropriate Initial Antibiotic(s)
- Percent of Pneumonia Patients Assessed and Given Influenza Vaccination
- Percent of Heart Failure Patients Given Discharge Instructions

- Percent of Heart Failure Patients Given an Evaluation of Left Ventricular Systolic (LVS) Function
- Percent of Heart Failure Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD)
- Percent of Heart Failure Patients Given Smoking Cessation Advice/Counseling

I. Mass-DAC CABG and Mass-DAC PCI

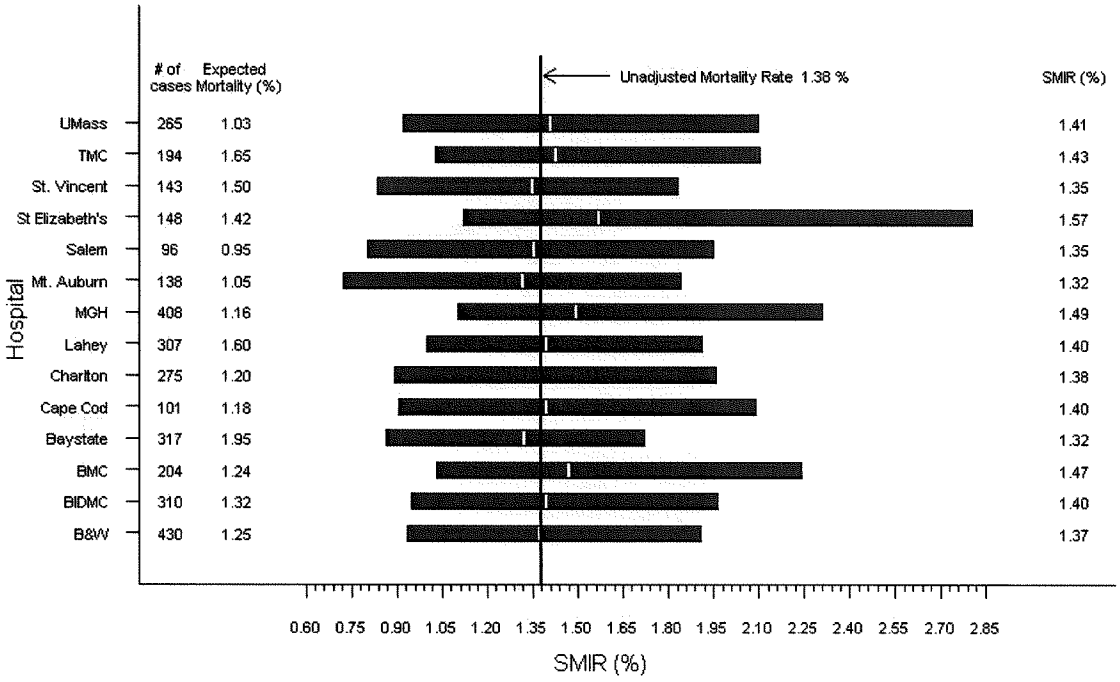
Mass-DAC was established under Massachusetts law to collect and analyze data on cardiac procedures (CABG and PCI). Their data collection and risk-adjustment methods are considered among the most thorough and rigorous available. We obtained Mass-DAC data for multiple years from the Mass-DAC website, www.massdac.org. We used Mass-DAC's standardized mortality incidence rates (SMIRs) for bypass surgery (CABG) and percutaneous coronary intervention (PCI) with no alteration.

III. Providers in Massachusetts Offer Similar High Quality of Care

Our review of quality data shows that providers in Massachusetts generally deliver high quality care with little material variation in measured quality. While there are nuanced differences in provider quality measures, and room for improvement in certain areas of performance, no provider is uniformly better or worse than the others. Various health care entities that we spoke with agree that there is little difference in quality between providers.

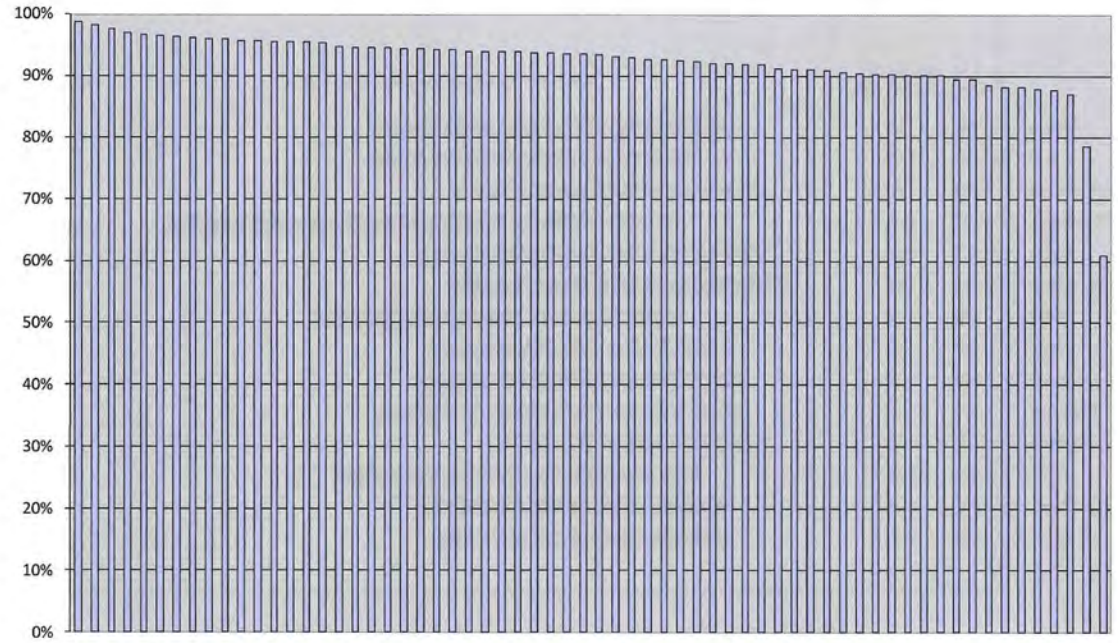
Mass-DAC has reported cardiac outcomes from 2003 to 2008. While the state average mortality rate has declined nearly 40% over the six years of reports for CABG (heart bypass surgery), only two 2 hospitals were ever noted to have above average mortality. None have been below average. Mass-DAC PCI (percutaneous coronary intervention) data for 2008 (the most recent year available) no hospital is better or worse than average for either elective (14 hospitals) or emergency (22 hospitals) PCI. Over the six years of reporting, the average mortality rates for PCI have also declined. For elective (non-emergency) PCI over the past six years, only once has a hospital been different than average. This suggests remarkably consistent performance across hospitals over time. Although more variability is seen in the mortality rates for emergency PCI (5 outliers over 6 years), this still suggests that the vast majority of hospitals are indistinguishable from average, year after year. Further, each hospital that was an outlier for any of these three procedures was only an outlier for that procedure once. Only two hospitals were outliers for more than one procedure (one high for CABG in 2003 and emergency PCI in 2005; another high for emergency PCI, elective PCI and CABG in 2007). Over time, based on the Mass-DAC data, no hospital has been consistently above or below average for CABG or PCI. Below is one publicly available Mass-DAC graph showing (1) that the mortality rate for all MA hospitals (indicated by the white line within the green bars) are closely clustered and (2) that the likely range of performance (as indicted by the green bars) all show considerable overlap, suggesting that any real differences in mortality rate between hospitals is unlikely.

Mass-DAC CABG Mortality Rates with 95% Confidence Intervals, FY 2008



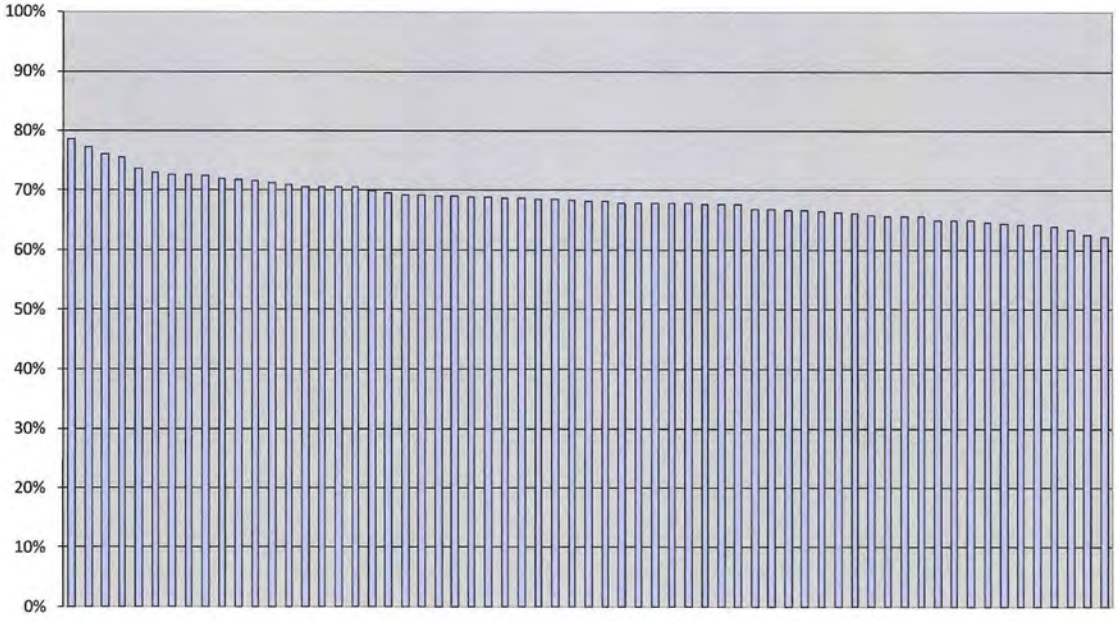
For CMS process of care measures, we compared hospitals by averaging together their rates for each measure. The process measures, with the exception of two low performing outliers, demonstrated strong performance across hospitals.

CMS Process Measures (%), Average of AMI, CHF, PN, SCIP Scores by Hospital



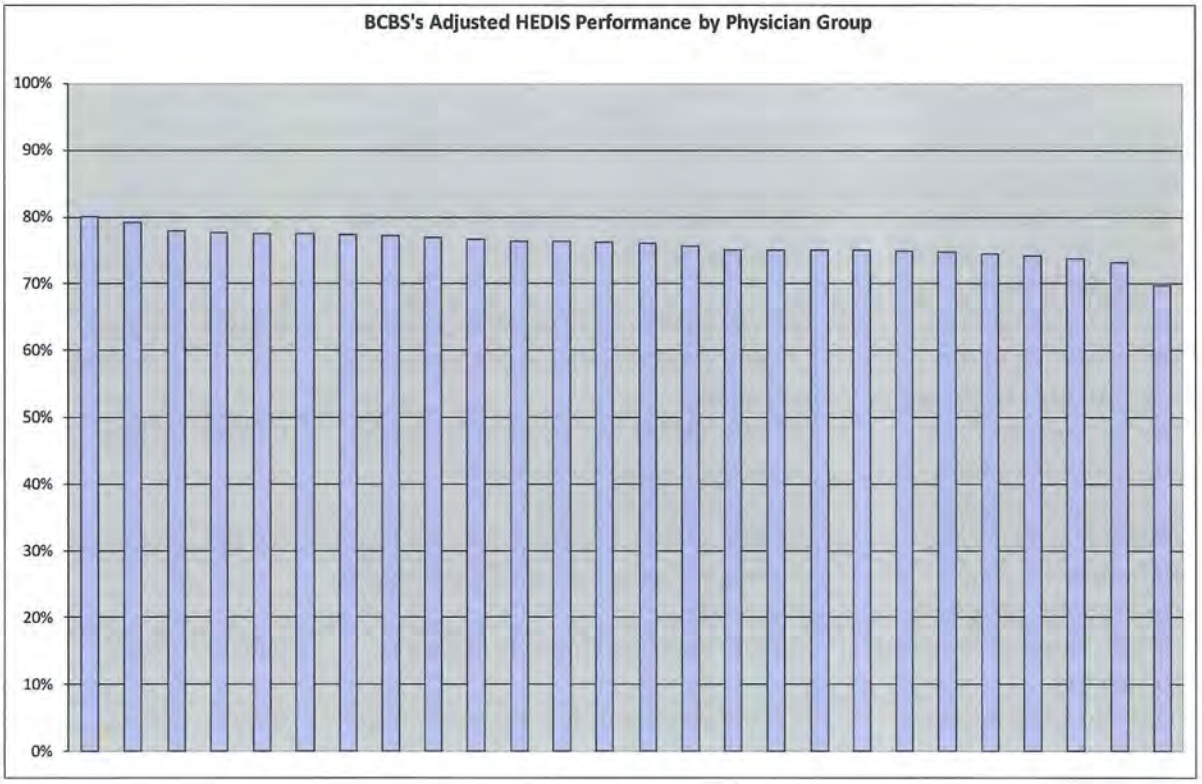
Performance on CMS patient experience did not have any clear outliers. This metric shows consistent performance, with patients responding that patient experience standards were met at the highest levels 62% to 79% of the time.

CMS Patient Experience (%), Average of Scores, by Hospital



THP hospital quality scores show similar lack of variation. The THP formula is designed to give each hospital a numerical score (z score) that can be used both for rating and for determining statistical significance. Z scores above +2.0 are significantly better than average, and z scores below -2.0 are significantly below average. Only two of the 124 z scores (62 for adult mortality and 62 for overall adult quality) were significantly different than normal. All other measurements, according to THP Navigator's methodology, were not different than average.

Looking at physician group quality, BCBS's adjusted HEDIS scores show similar results. All physician groups scored between 70 and 80% compliance with HEDIS standards.



IV. Wide Disparities in Price are Not Explained by Differences in Quality of Care

While quality of care appears to vary modestly, price differences are considerable. We sought to determine whether price disparities between hospitals and physician groups could be explained by the fact that providers who receive higher commercial payments offer higher quality of care.

Our analysis shows that wide variations in price are unexplained by differences in quality of care as measured by the insurers or CMS. We compared price and quality data through 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 and payment rates to insurers' quality ratings for those providers, as well as to publicly available CMS process and patient experience scores for those providers.

Using the various price markers described in our report and quality measures described above, we created many different types of comparisons, outlined in the table below. In some instances there is some slight correlation between price and quality, both positive and negative. Nonetheless, our results in aggregate show that there is no relationship between the price paid to providers and quality of provider services. Further, our results show that there is no positive correlation between price and quality, as we would hope to see in a rationale, value-based health care market.

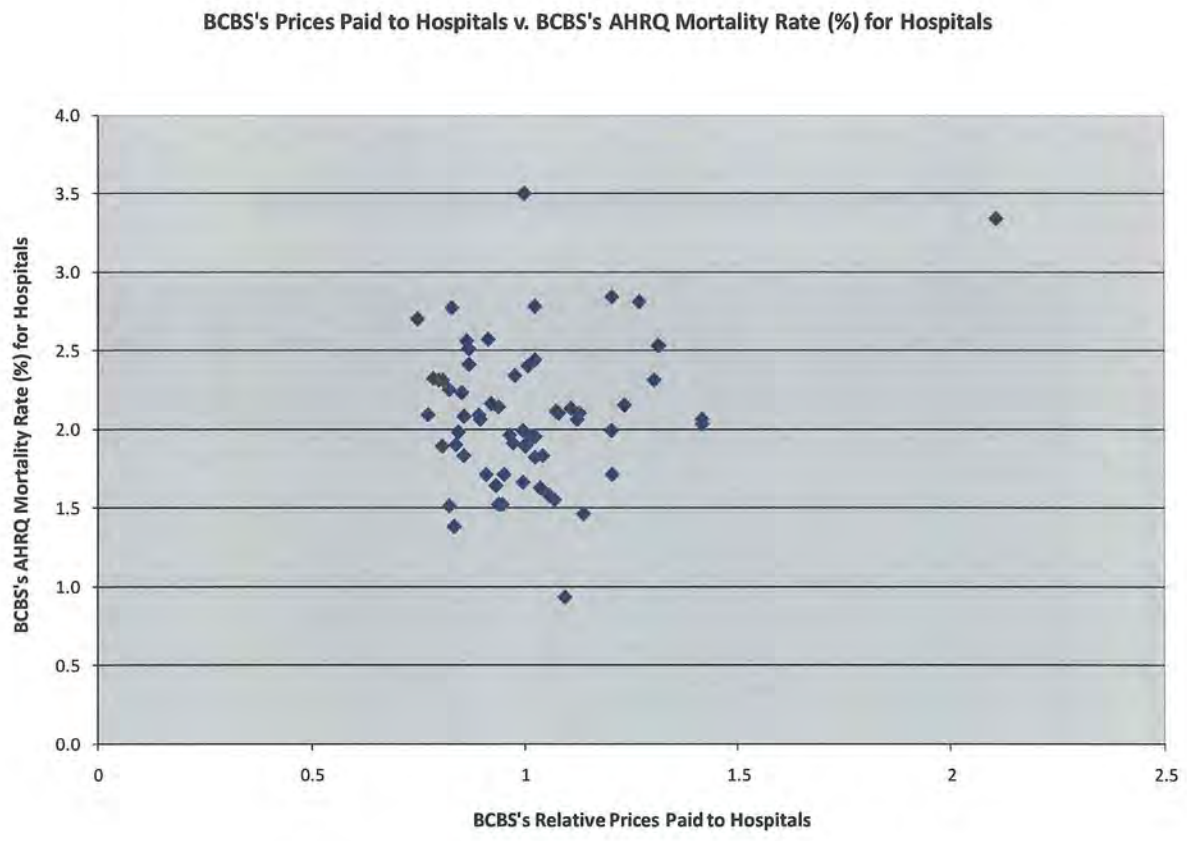
Price and quality comparisons that we performed include:

Price Metric	Quality Metric	R^2	Correlation
BCBS Hospital Price Relativity for All Hospitals	BCBS AHRQ 2007 Mortality Rate	0.0546	None
BCBS Hospital Price Relativity for Academic Medical Centers	BCBS AHRQ Net Better/Worse than Average Scores for AMCs	0.1043	Slight, negative
BCBS Hospital Price Relativity for Large Community Hospitals	BCBS AHRQ Net Better/Worse than Average Scores for Large Community Hospitals	0.2085	Slight, positive
BCBS Hospital Price Relativity for Mid-Size Community Hospitals	BCBS AHRQ Net Better/Worse than Average Scores for Mid-Size Community Hospitals	0.0002	None
BCBS Hospital Price Relativity for Small Community Hospitals	BCBS AHRQ Net Better/Worse than Average Scores for Small Community Hospitals	0.0388	None
HPHC Hospital Payment Relativity	HPHC Hospital Honor Roll Score	0.0013	None
THP Hospital Payment Relativity	THP Navigator Adult Mortality Rate	0.0045	None
THP Hospital Payment Relativity	THP Navigator Adult Quality Score	0.0756	None
BCBS Hospital Price Relativity	CMS Patient Experience Average Scores	0.0774	None
HPHC Hospital Payment Relativity	CMS Patient Experience Average Scores	0.0279	None
THP Hospital Payment Relativity	CMS Patient Experience Average Scores	0.0430	None
BCBS Hospital Price Relativity	CMS Process Measures Average Scores	0.1992	Slight, negative
HPHC Hospital Payment Relativity	CMS Process Measures Average Scores	0.1123	Slight, negative

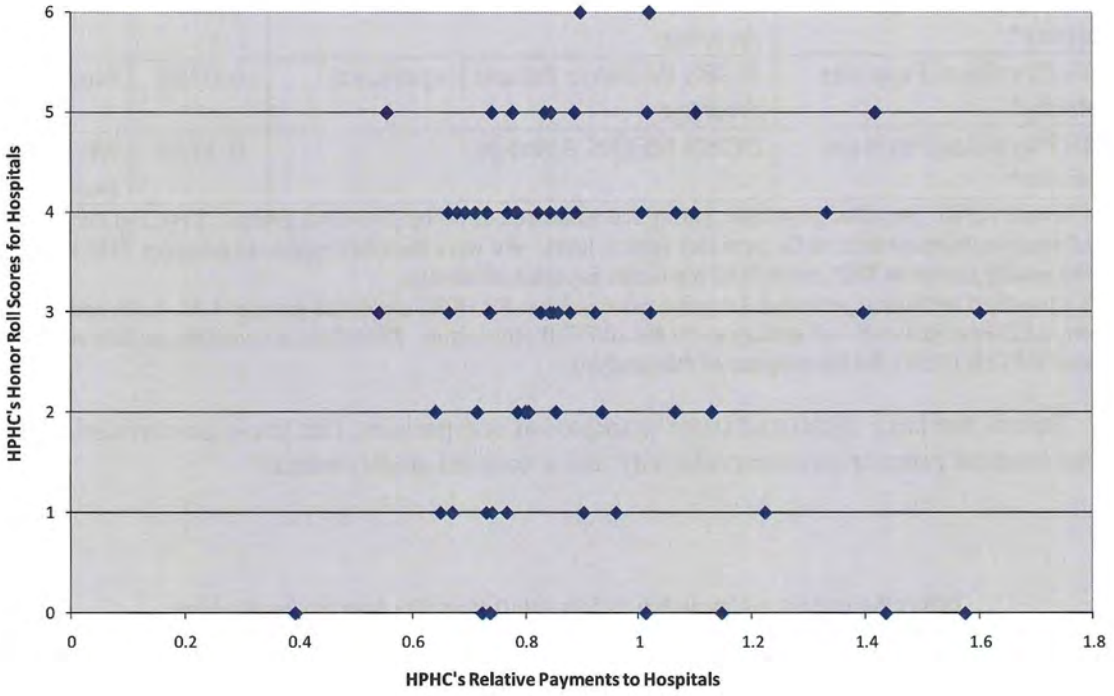
THP Hospital Payment Relativity	CMS Process Measures Average Scores	0.0030	None
BCBS Physician Payment Relativity*	BCBS Adult Patient Experience Average	0.0114	None
BCBS Physician Payment Relativity*	BCBS Pediatric Patient Experience Average	0.0424	None
BCBS Physician Payment Relativity*	BCBS HEDIS Average	0.3753	Moderate, positive

Note: THP and HPHC provided physician quality scores broken down by physician groups. THP and HPHC provided relative payment rates at the provider system level. We were therefore unable to compare THP and HPHC physician quality scores to THP and HPHC physician payment relativities.
*BCBS's pre-filed testimony provided 3 relative price indexes for PCHI physician groups: 1.52, 1.50, and 1.20. However, BCBS assigns only one quality score for all PCHI physicians. Therefore, we used the middle relative price paid to PCHI (1.50), for the purpose of this analysis.

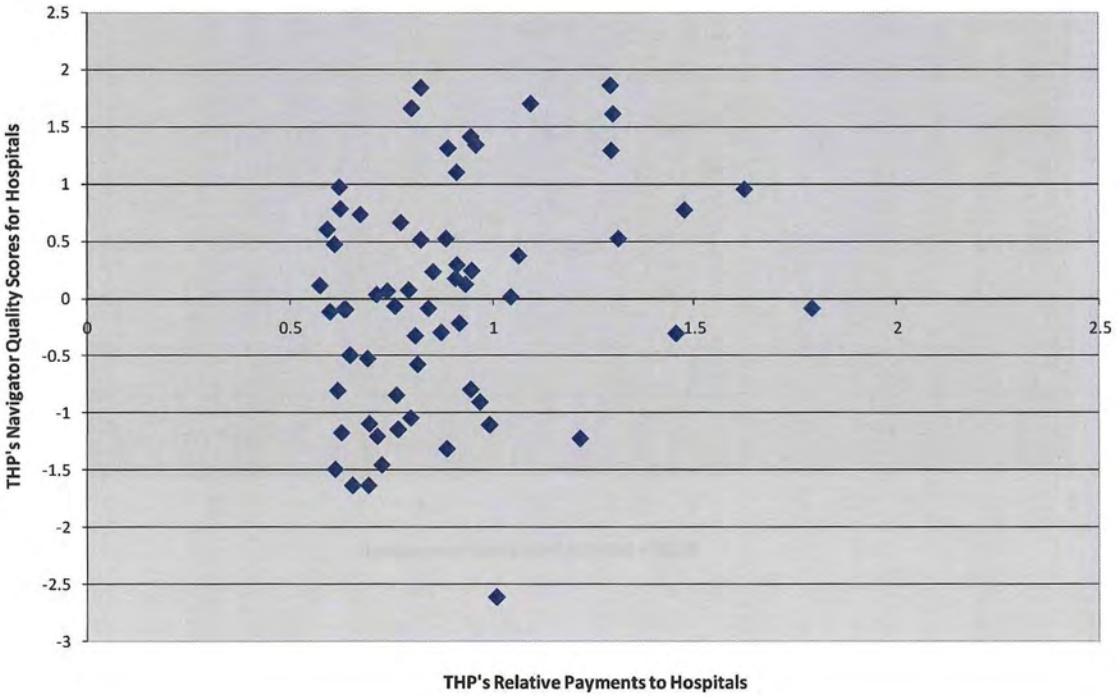
Below, we have illustrated three examples of comparisons that show no correlation between hospital price or payment relativity and a hospital quality metric:



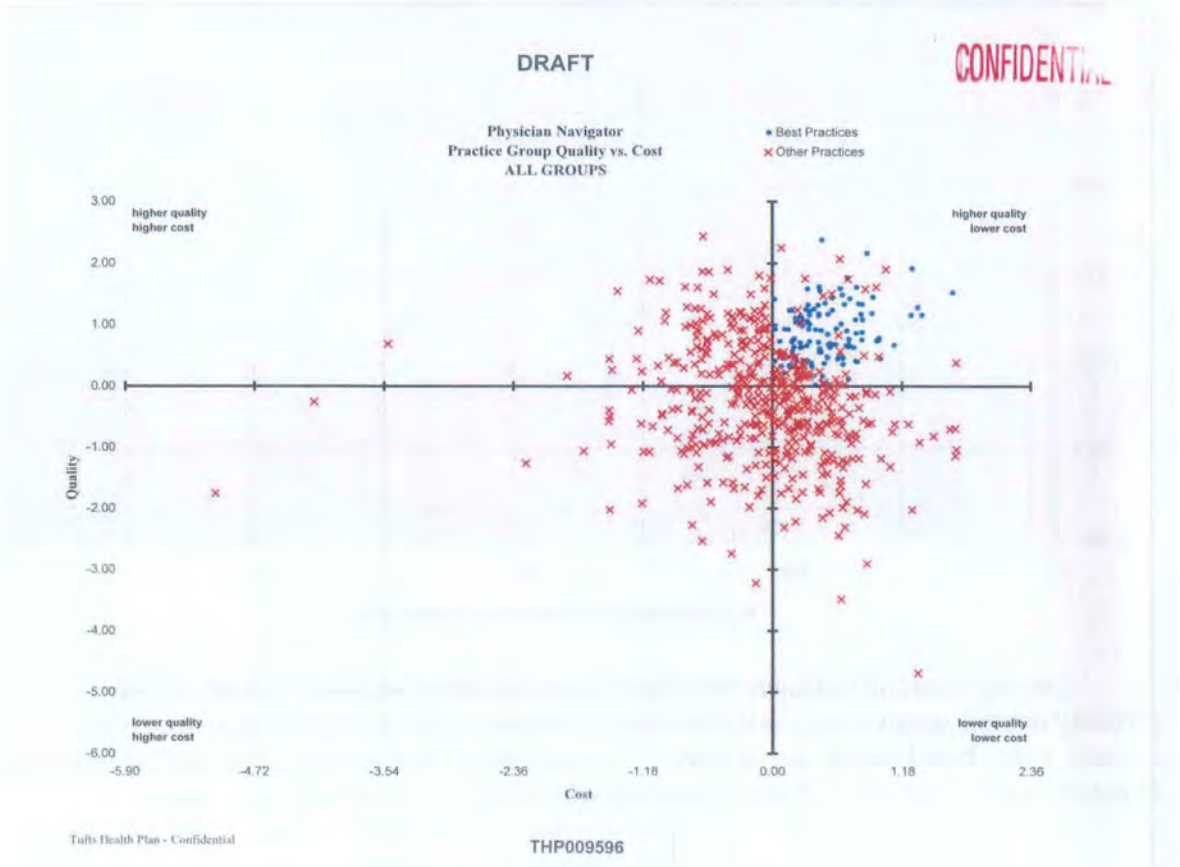
HPHC's Payments to Hospitals v. HPHC's Honor Roll Scores for Hospitals



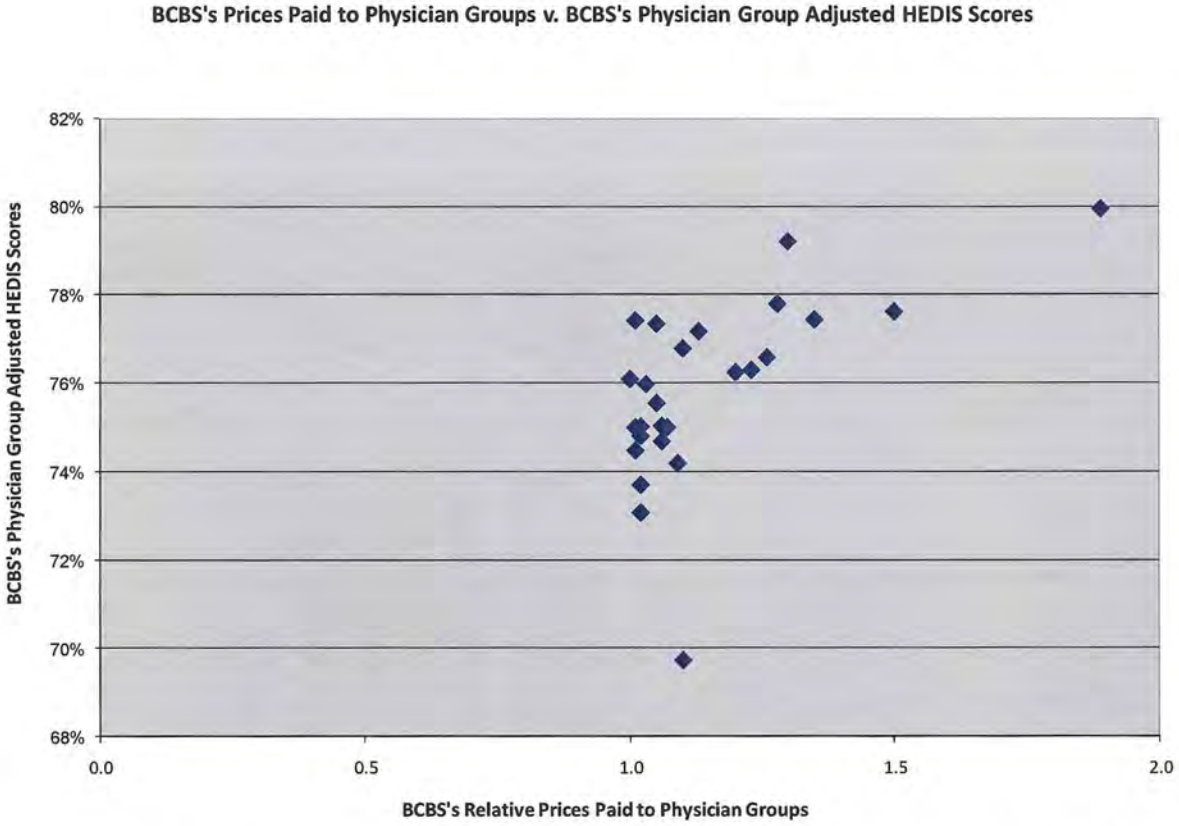
THP's Payments to Hospitals v. THP's Navigator Quality Scores for Hospitals



We found a similar lack of correlation between price and quality when we examined physician groups. The next graph was produced by THP and compares physician group cost to the THP quality score for all Massachusetts physician groups.



Similarly, our review of BCBS physician HEDIS quality measures and BCBS price relativities revealed only moderate correlation.



Our examination indicates that there is no correlation between price and quality, and certainly not the positive correlation between price and quality we would hope to see in a rational, value-based health care market. This conclusion is consistent with pre-filed testimony of payers and conversations that we have had with health care entities in the market.

OFFICE OF ATTORNEY GENERAL MARTHA COAKLEY

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

Glossary

Academic Medical Center (AMC) – For the purposes of our report, unless otherwise noted, we define an AMC as a major adult hospital that 1) has extensive research and teaching programs; 2) is a principal teaching hospitals for a medical school; 3) allocates extensive resources for tertiary and quaternary care; and 4) is a full service hospital with a CMI intensity that is more than 5% above the state average.

Acuity – A measurement that characterizes the health status or relative sickness of a patient population.

Agency for Healthcare Research & Quality (AHRQ) – The lead federal agency charged with improving the quality, safety, efficiency, and effectiveness of health care for all Americans. Among other roles, AHRQ develops and supports the use of measures of quality and safety.

Amount Allowed or **Allowed Amount** – The total contractually negotiated amount a provider receives for a given health care service delivered to an insured patient, reflecting the sum of the amount paid by the insurer, and the amount paid by the patient directly to the provider (the "member cost sharing" portion of the total amount allowed).

BCBS – Blue Cross Blue Shield of Massachusetts

Case Mix Adjusted Cost Per Admission – A measure of a hospital's average cost per admission, adjusted for complexity, equal to a hospital's total reported costs divided by its total reported admissions divided by the hospital's CMI.

Case Mix Adjusted Cost Per Discharge (CMAD) – A measure of a hospital's average cost per discharge, adjusted for complexity. CMAD is equal to a hospital's total reported costs divided by its total reported discharges divided by the hospital's CMI.

Case Mix Index (CMI) – The average of the DRG relative case weights for all of a hospital's volume.

Case Weight or **Relative Case Weight** – A figure assigned to each DRG code which represents the expected resource utilization for that patient group compared to the average resource utilization for all patients. For instance, a relatively uncomplicated hospital admission such as Pulmonary Embolism would have a weighting of approximately 1 while a more complex admission such as Respiratory Neoplasm, would have a case weight of over 2.0.

Centers for Medicare and Medicaid Services (CMS) – The federal government agency responsible for administering the Medicare and Medicaid programs, including payment and quality assurance. CMS publishes Hospital Compare, which rates hospitals on their clinical processes and patient experience.

Commercial Insurer – A non-government health insurance company.

Complexity and/or **Service mix** – A measurement that characterizes the intensity of resources required to care for a hospital's cases.

Department of Health Care Finance and Policy (DHCFP) – The state agency whose mission is to improve health care quality and contain health care costs by critically examining the Massachusetts health care delivery system and providing objective information, developing and recommending policies, and implementing strategies that benefit the people of the Commonwealth.

Diagnosis Related Group (DRG) – A method used to pay hospital inpatient cases by classifying different types of admissions into one of approximately 500 codes (DRGs). Providers typically bill insurers based on DRG codes.

Disproportionate Share Hospital (DSH) – A hospital that receives a disproportionate share of its revenue from government payers. As defined by DHCFP, DSH hospitals are those hospitals with a large percentage (63% or more) of patient charges attributed to Medicare, Medicaid, other government payers, and/or free care.

Fee Schedule – An insurer's list of prices for hospital outpatient services (e.g., fees are set for radiology, laboratory work, observation, behavioral health, etc.) and/or physician professional and technical services. Most insurers have a "base" or "standard" fee schedule. Insurers and providers negotiate "multipliers" or "enhancements" to the base fee schedule; 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.

Health Plan – A payer or insurer that provides some form of health care coverage to patients.

HMO – For the purposes of this report, HMO refers to a type of health insurance product offered by insurers in Massachusetts that requires consumers to select a primary care physician and obtain referrals to other participating health care providers through that primary care physician. "HMO" can also refer to a health maintenance organization, a type of managed care organization that provides health care coverage, but we do not use the term for that purpose in our report.

Hospital Admission – An inpatient case at an acute care hospital.

HPHC – Harvard Pilgrim Health Care

Indemnity – An insurance product that provides benefit coverage to members regardless of whether the servicing provider is contracted with the insurer.

Inpatient Services – Care provided to patients at a hospital who are admitted to stay overnight.

Insurer – A payer or health plan that contracts with providers to deliver health care coverage to its members. Insurers may also be referred to as "payers" or "health plans."

Leapfrog Group – A national consortium of large employers working to improve patient safety in hospitals. The Leapfrog Group rates hospitals on quality and safety and publishes the results online.

Massachusetts Data Analysis Center (Mass-DAC) – A cardiac care quality measurement and reporting organization based at Harvard Medical School. Massachusetts hospitals performing cardiac interventions (PCI and CABG) are required to submit data for Mass-DAC analysis. Mass-DAC annually publishes reports on hospital and surgeon outcomes.

Massachusetts Health Quality Partners (MHQP) – A Massachusetts coalition that promotes health care quality improvement. MHQP collects and reports quality measures of clinical care and patient experience for medical groups in the state.

Medical Loss Ratio (MLR) – The ratio of medical claims expenses paid out by an insurer divided by the total premiums earned by the insurer. This ratio can be calculated for the entire patient population insured by the insurer, or for a subpopulation.

Medical Trend – Changes in the cost of medical services. Medical trend is impacted by such factors as unit price (sometimes also referred to as unit cost), resource utilization, and severity.

Member Months – The number of lives that a health insurer covers, expressed in months. If an insurer covers 1,000 members for a year (12 months), then it covers 12,000 member months per year.

Multispecialty Care Group – A group of physicians that includes a variety of specialties and subspecialty types.

National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS) – A standardized set of quality measures to evaluate of health plans and medical groups.

Network – The universe of providers, including acute hospitals and subacute facilities, physicians, and ancillary providers, that an insurer contracts with to provide medical services to its members.

Payer – An insurer or health plan that provides some form of health care coverage to patients.

Payment Method – The structure than an insurer uses to reimburse health care providers. A variety of payment methodologies exists, such as fee-for-service, per-diem, and capitation.

Payment Relativity – The relative variation in unit payments from an insurer to hospitals or physicians as compared to the network-wide average. Unlike "price relativity," payment relativity reflects provider-specific differences in insurance product mix, service mix, or other factors particular to a provider's payment experience rather than a standard market basket of services.

PMPM – Per member per month.

Point-of-Service (POS) – For the purposes of this report, POS refers to a type of health insurance product offered by insurers in Massachusetts that requires consumers to select a primary care physician and, in order to obtain the maximum financial insurance benefit, obtain referrals to other participating health care providers through that primary care physician.

Price Relativity – A metric for comparing how much higher or lower a provider's price is than the average price paid to other providers in an insurer's network for the same set of services. Price relativity is calculated based on a standard set of services that is not specific to any provider, and as such does not reflect the insurance product mix, service mix, or other factors that are particular to an individual provider's payment history.

Primary Care Provider (PCP) – A primary care provider provides primary health care services. In some insurance products, patients are required to obtain a referral from a PCP in order to obtain care from a specialist or other health care providers.

Product Mix – The distribution of insurer members among the insurer's products, such as HMO, Point-of-Service, Preferred Provider Organization, and Indemnity products, through which the population served by a particular Insurer has insurance coverage. Products may vary in their prices, co-payment and deductible levels, coverage, and medical management requirements.

Provider – For the purposes of our report, "provider" refers to physicians or hospitals that provide medical services to patients.

Provider Mix - The distribution of insurer members among the providers within an insurer's network.

Provider MLR – The ratio of claims paid out by an insurer to a specific provider divided by the premiums collected by that insurer from that provider's patient population.

Provider System – A group of physicians and/or hospitals that jointly contract with health insurers.

RBRVS (Resource-Based Relative Value Scale) – A method for paying physicians developed by Medicare based on the intensity of cognitive, technical, and other resources or 'work units' required to care for a particular patient visit type.

Risk-Sharing Contract – A contract between a health insurer and a provider that puts the provider at risk for some or all of the costs of care associated with the provision of medical care for a particular population. There are various types of risk-based contracts, such as capitated or globally paid contracts and withhold arrangements where return of withheld amounts depends on keeping TME below a certain level. For the purposes of our report, we do not consider pay-for-performance programs as risk-sharing contracts.

Service Mix – The range, intensity, and types of medical care offered by a hospital or physician group.

Teaching Hospital – As defined by DHCFP, a teaching hospital has at least 25 full time equivalent medical school residents per one hundred inpatient beds.

THP– Tufts Health Plan

Total Medical Expenses (TME) – The total cost of care for the patient population that is associated with a group of primary care providers, usually expressed as a dollar amount per patient (or member) per month. TME includes all of the medical expenses incurred by those member patients, regardless of where they are incurred (i.e., it includes physician visits as well as all hospital, laboratory, imaging, pharmacy costs, and other services, wherever those services occur). TME reflects both the price of those service and their frequency (i.e., "utilization").

Unit Cost – For the purpose of our report, we use "unit cost" to mean the amount of money that it costs a health care provider to deliver a unit of service. Wherever possible, we use the terms "price," "unit price," or "payment" to refer to the rate, or amount, that an insurer pays a provider for medical services, and reserve the term "unit cost" for a hospital's own internal cost of delivering medical services.

Unit Price or Price – The contractually negotiated amount (or reimbursement rate) that an insurer agrees to pay a particular hospital, physician, or other health care provider for a given health care service. This is the "price tag" that the insurer agrees it will pay each time one of its members incurs a covered expense.

Utilization – The amount or number of medical services or units of service used by a given population over a period of time.