
# Examination of Health Care Cost Trends and Cost Drivers

## Pursuant to G.L. c. 118G, § 6½(b)

# Report for Annual Public Hearing

**March 16, 2010**

**OFFICE OF ATTORNEY GENERAL MARTHA COAKLEY**
ONE ASHBURTON PLACE o BOSTON, MA 02108

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.

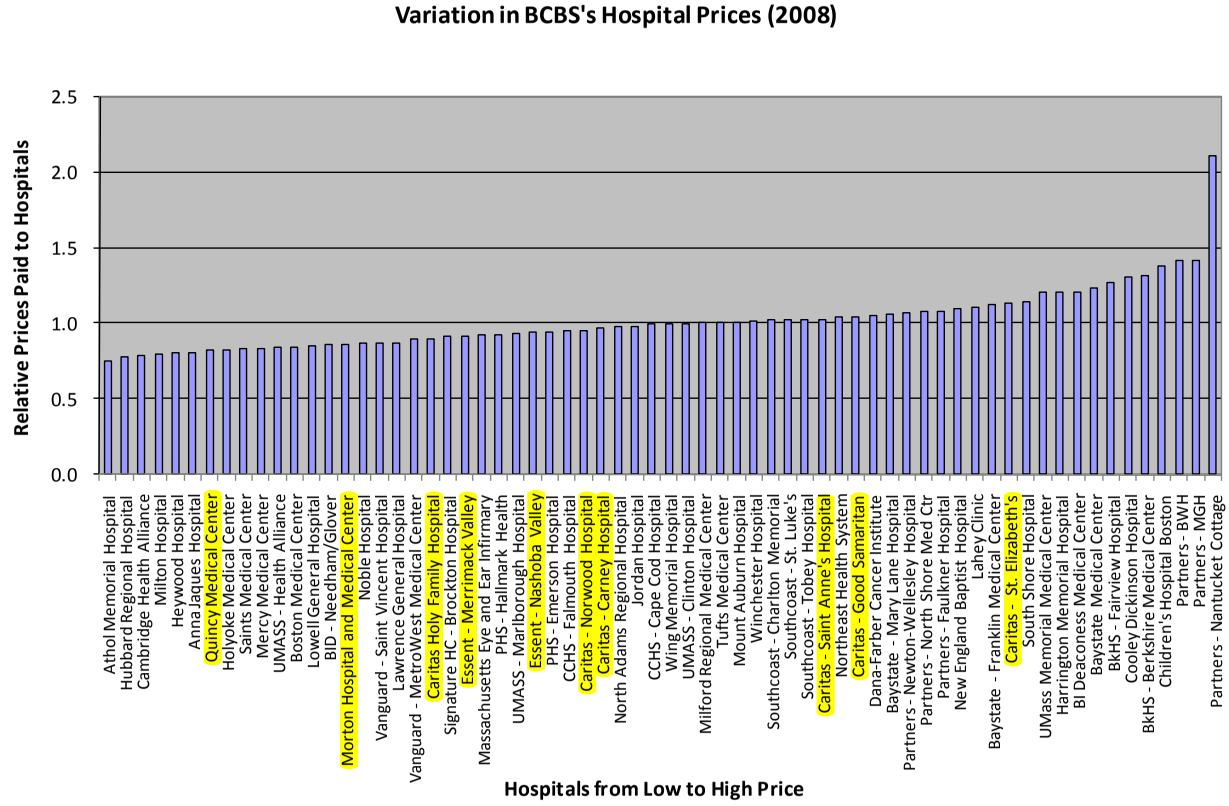
## III. FINDINGS

### 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

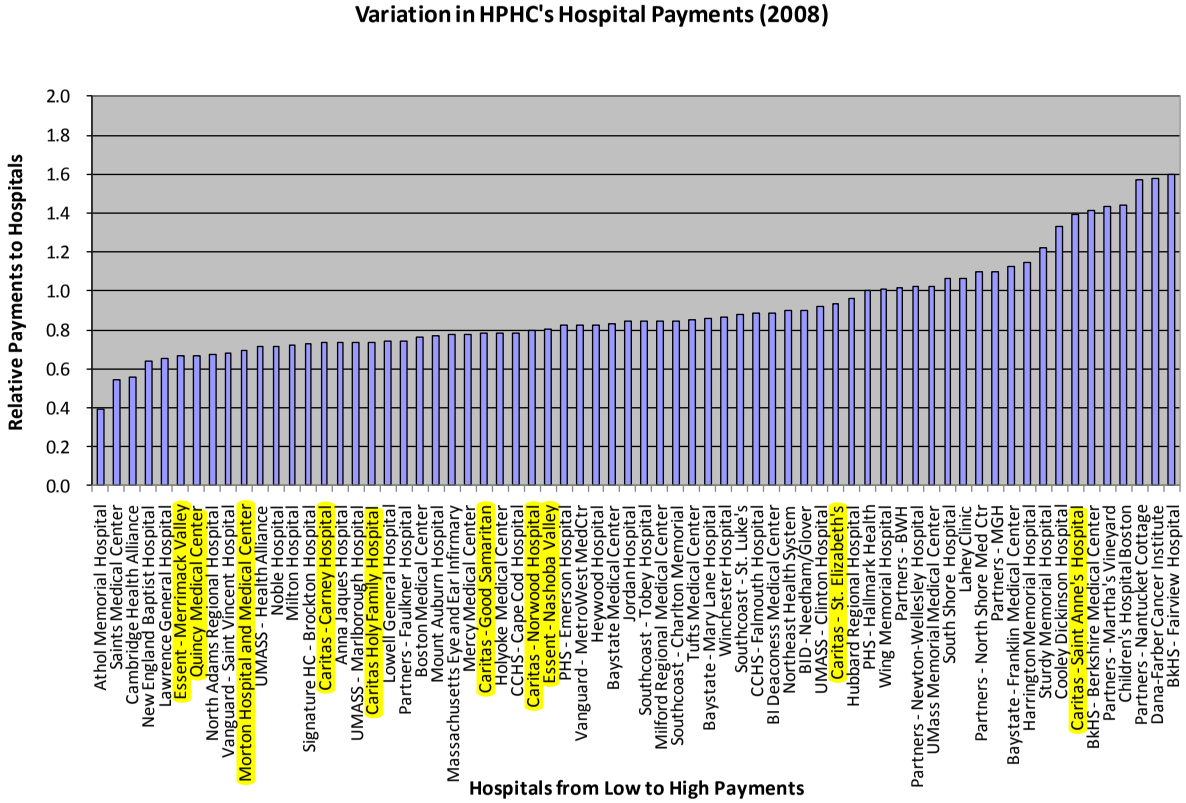
The following graph shows the variation in prices paid by one major insurer to Massachusetts hospitals for the same market basket of services.




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

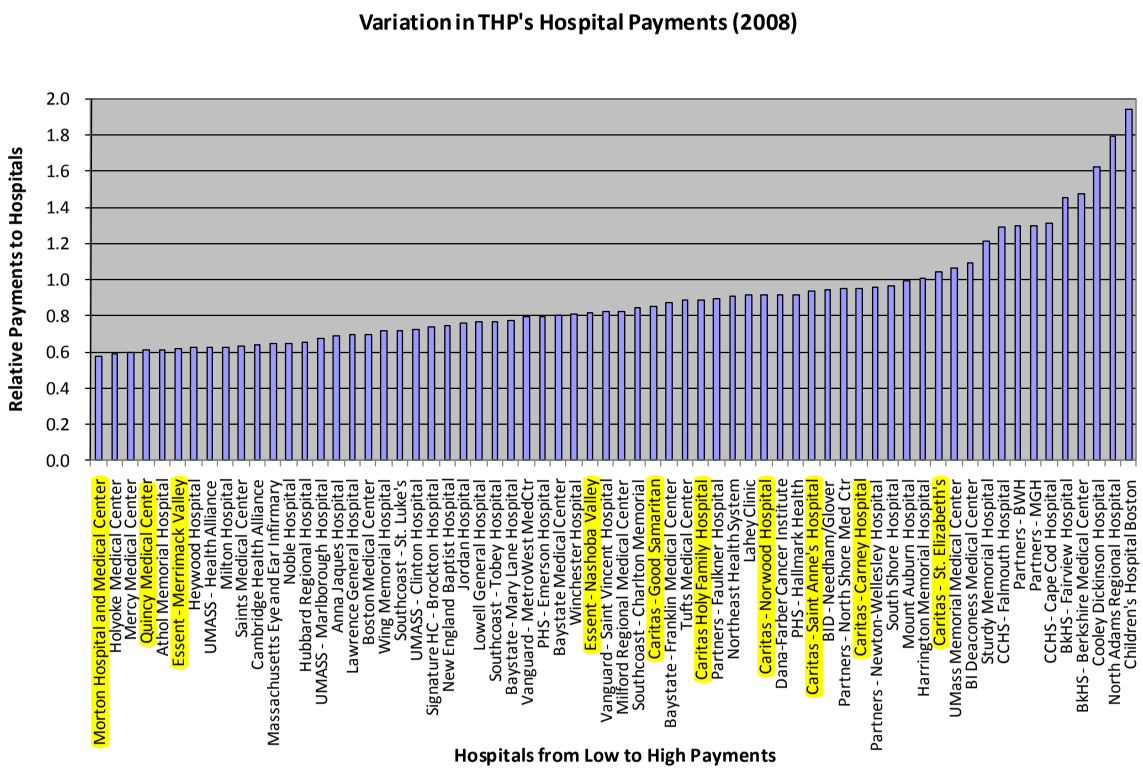
There is roughly a 90% difference in the price this insurer pays to the lowest paid hospital in its network and the price it pays to the *second* highest paid hospital (relative prices of about 0.75 v. 1.4).[9]

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).

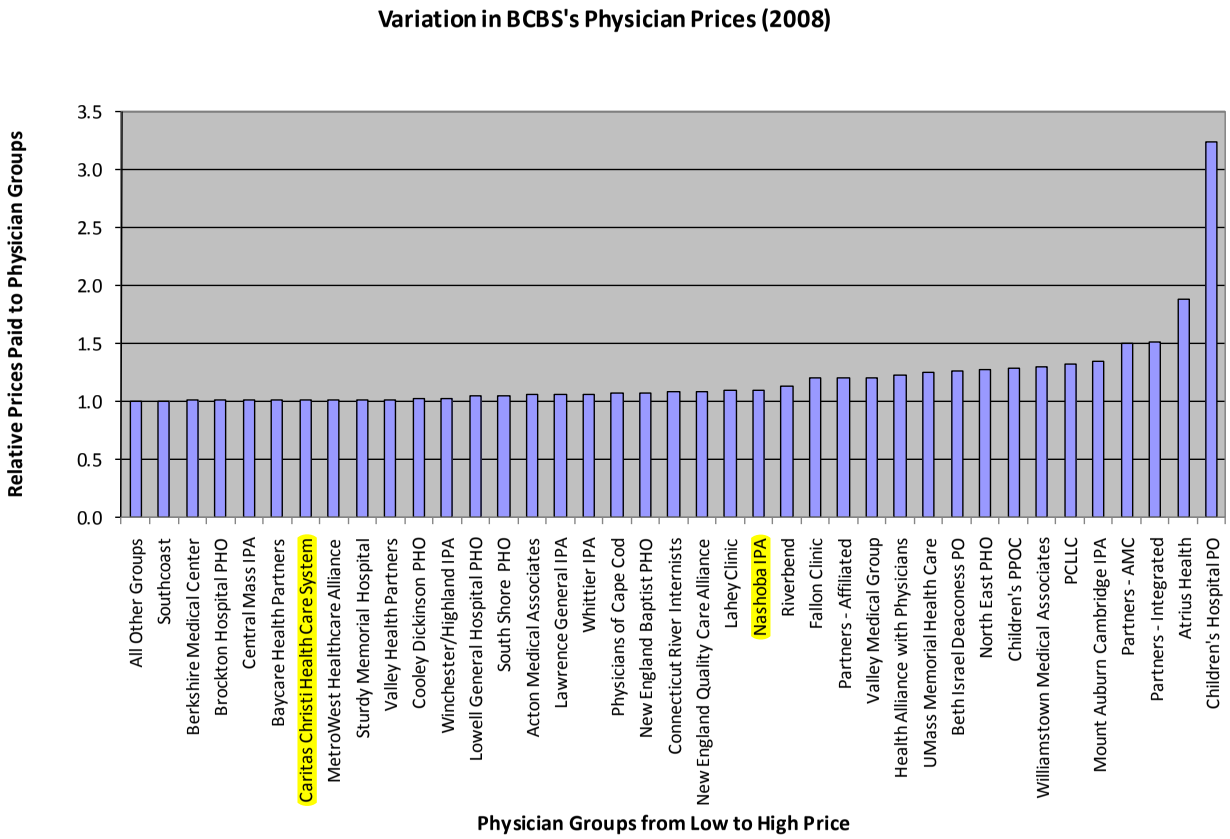
[9] The price differential is about 180% between the lowest and very highest paid hospital, which is a community hospital with negotiated prices that appear to be significantly higher than all other hospitals.




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

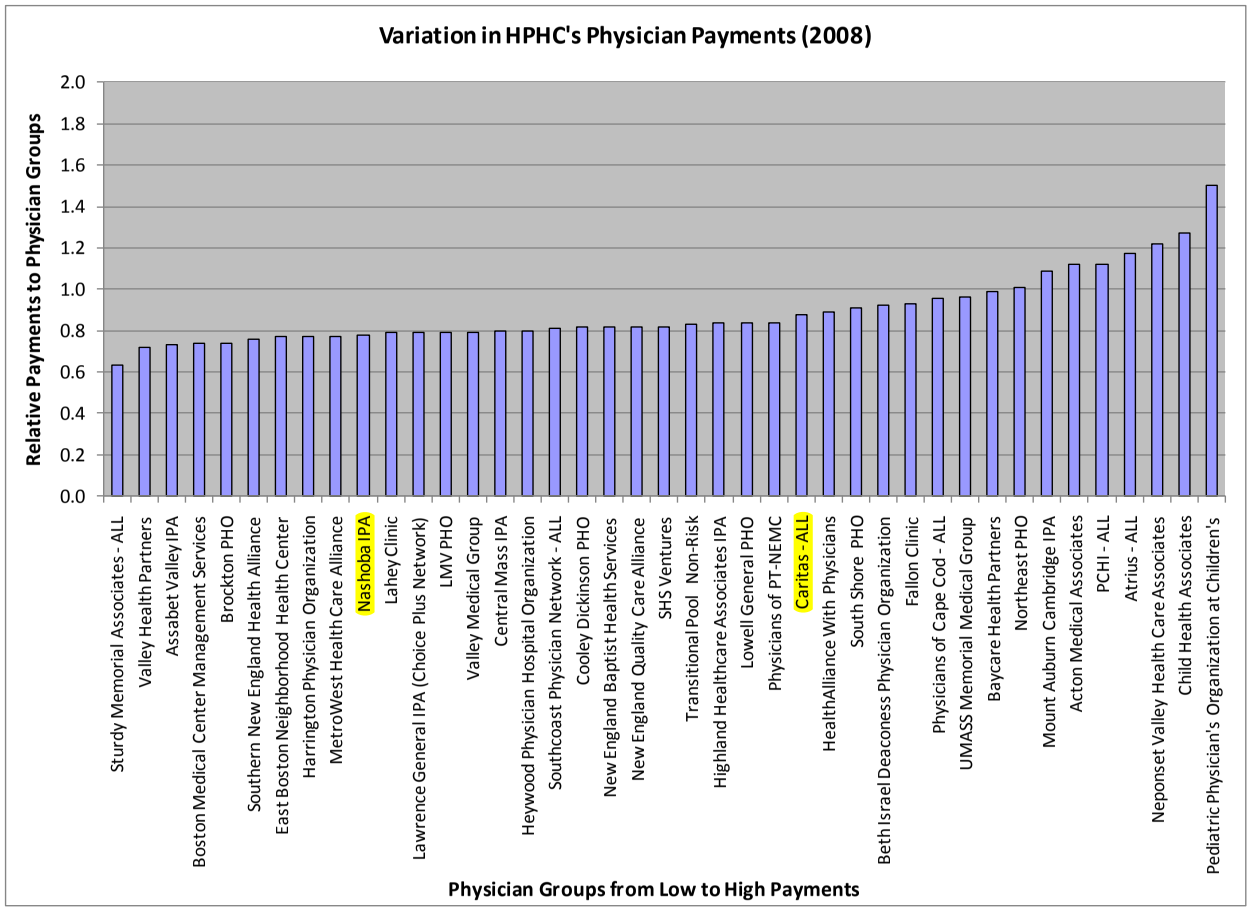
This next graph shows the significant variation in prices paid by one major insurer to the physician groups in its network.



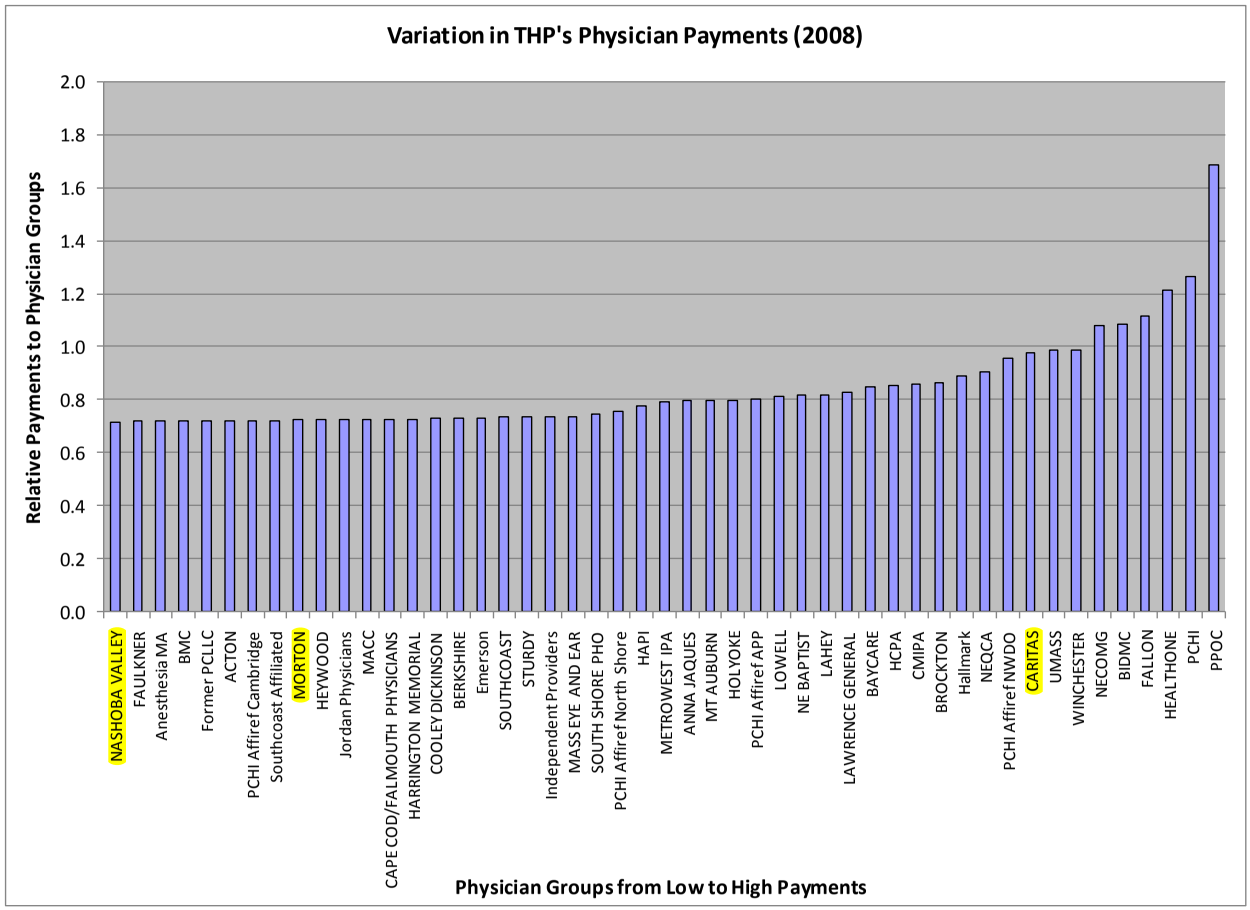

NOTE: Data from Blue Cross Blue Shield's supplemental written testimony for the Annual Public Hearing, available at http://www.mass.gov/Eeohhs2/docs/dhcfp/cost_trend_docs/testimony_bcbs_supplemental.pdf (p. 9).

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

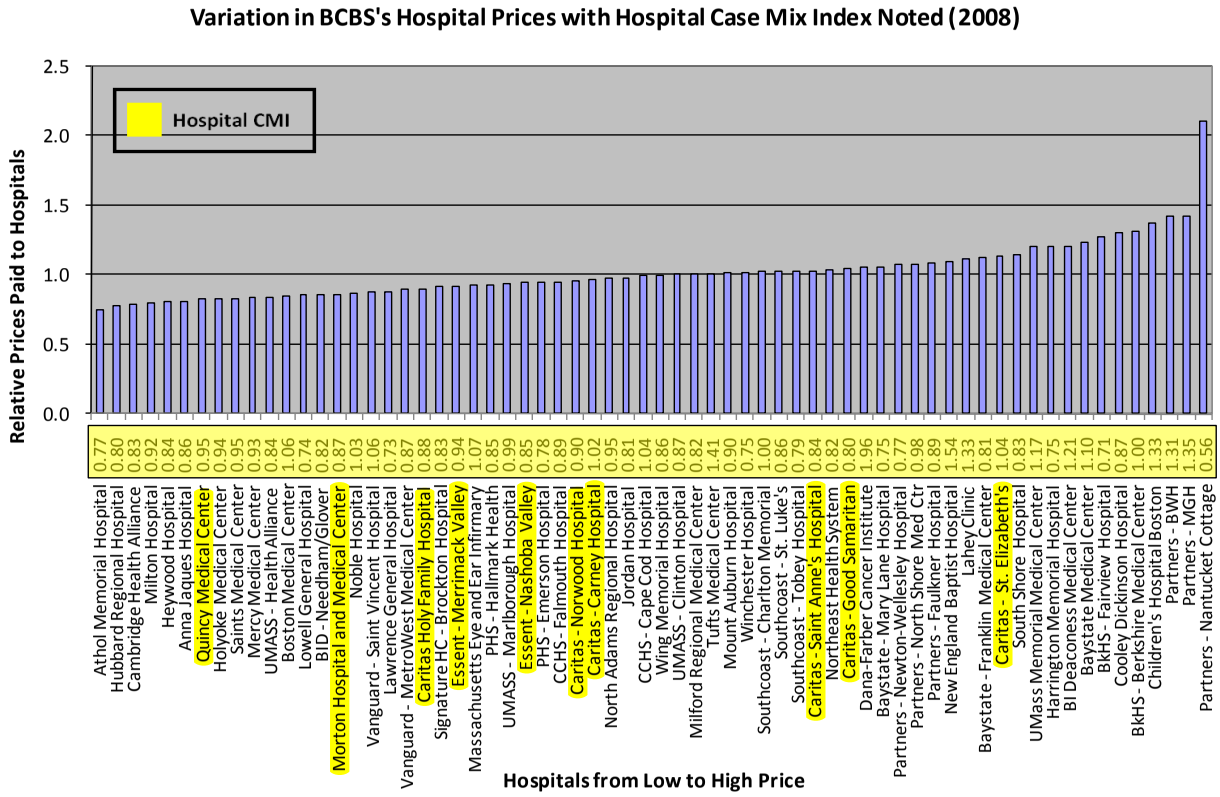
As the above tables show, insurer and provider contract negotiations continue to produce prices for hospitals and physician groups that vary widely. Because of these existing wide variations, even if hospitals and physician groups were held to identical rate increases going forward, prices disparities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

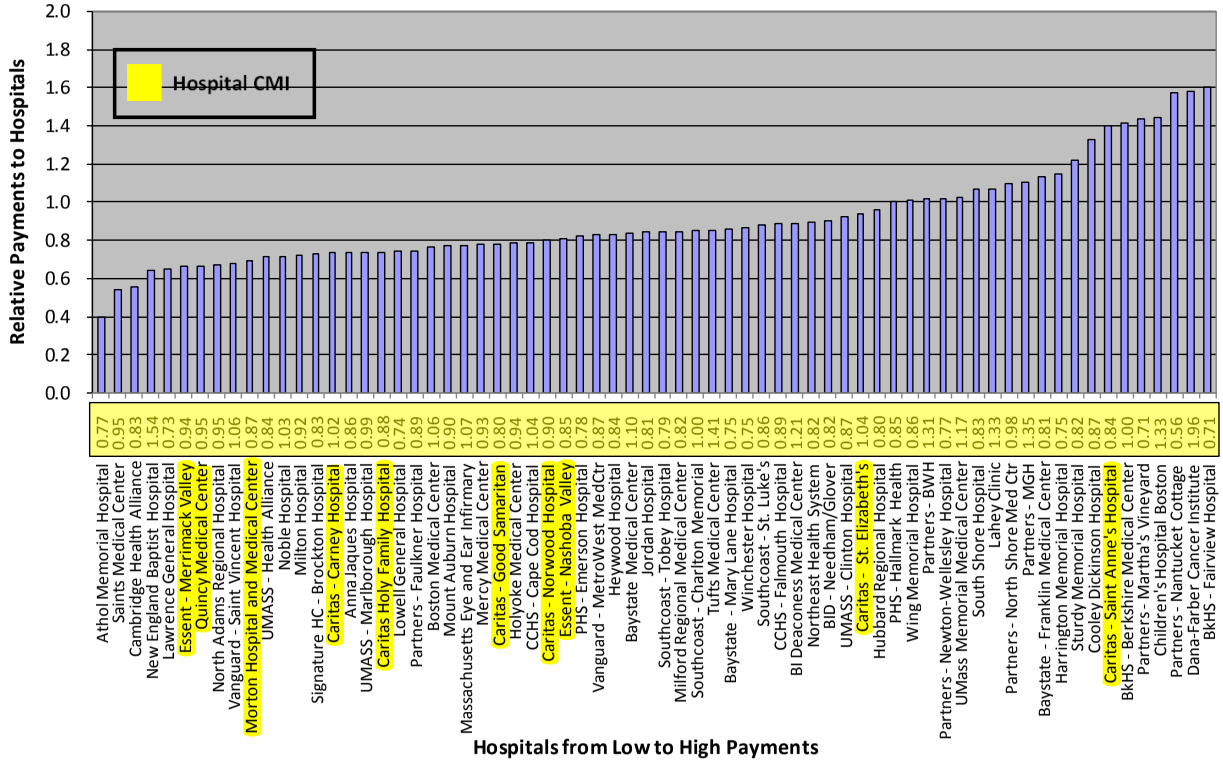
Finance and Policy and publicly available on the Executive Office of Health and Human Services' website.[13] A CMI of 1.0 is average and hospitals with a higher CMI (above 1.0) serve a more complex or sicker population on average. The next three graphs show hospitals in Massachusetts sorted from lowest 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.



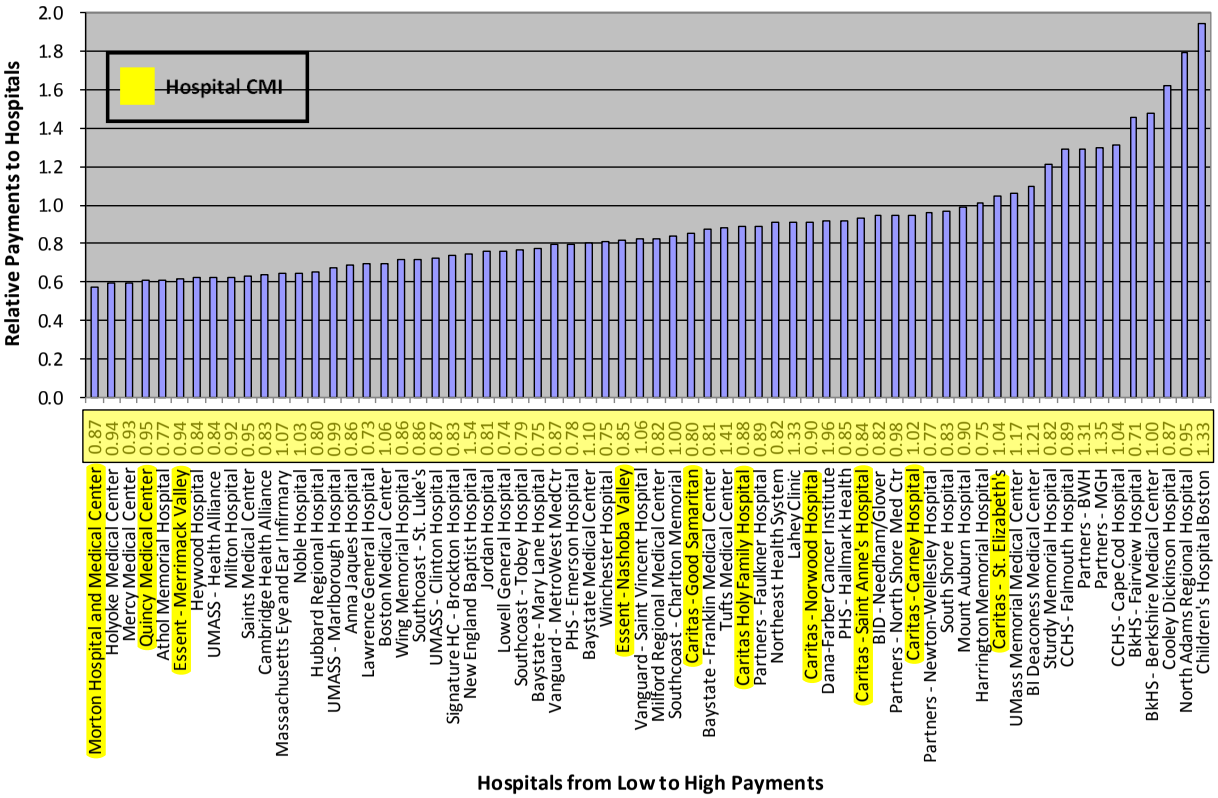

NOTE: Where DHCFP reported CMI separately for related hospitals or hospital campuses, we blended the CMIs of the hospital campuses on a weighted basis using the number of admissions at each campus.

[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)



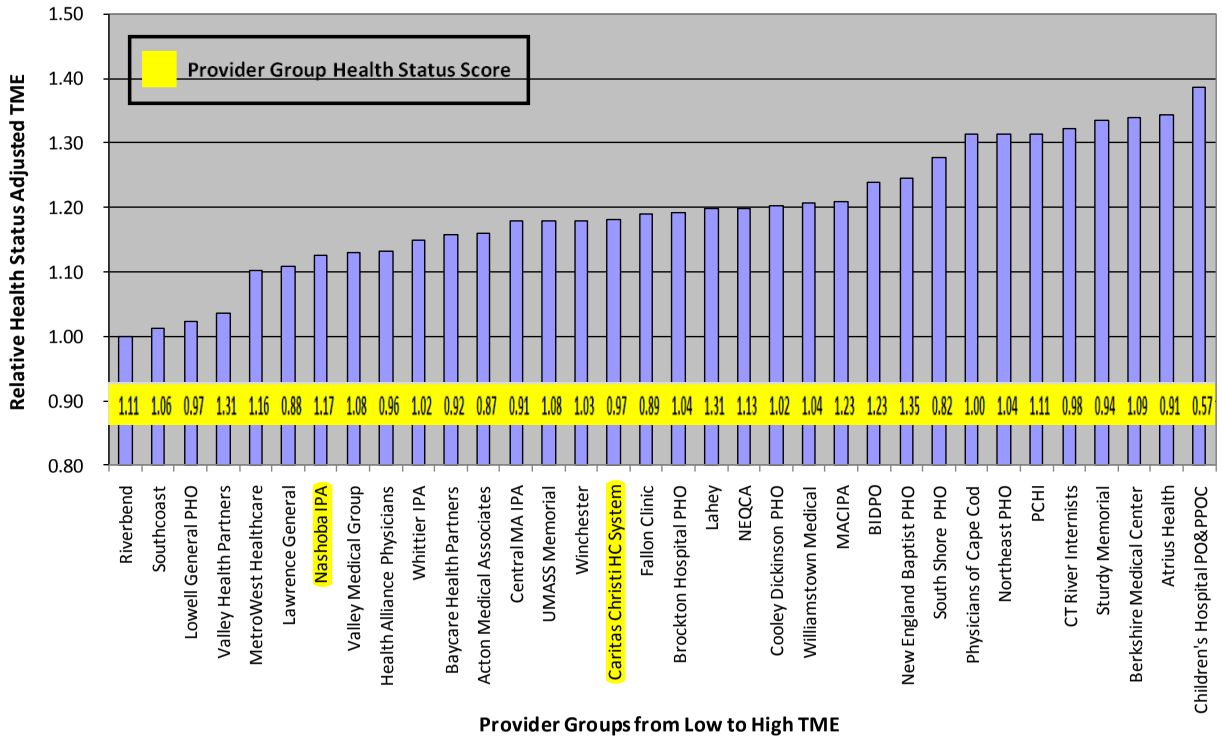

## Variation in THP's Hospital Payments with Hospital Case Mix Index Noted (2008)



### 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.

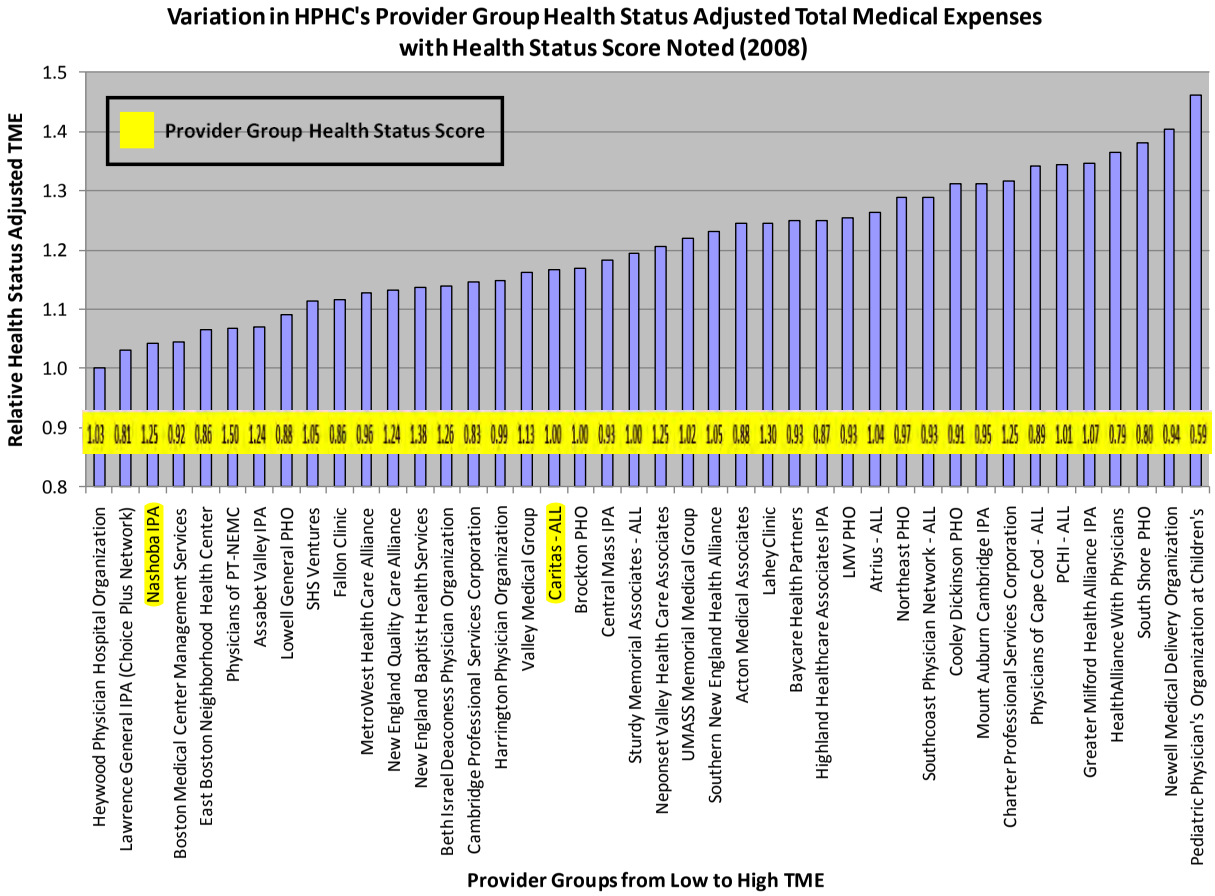
**Variation in BCBS's Provider Group Health Status Adjusted Total Medical Expenses with Health Status Score Noted (2008)**




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:

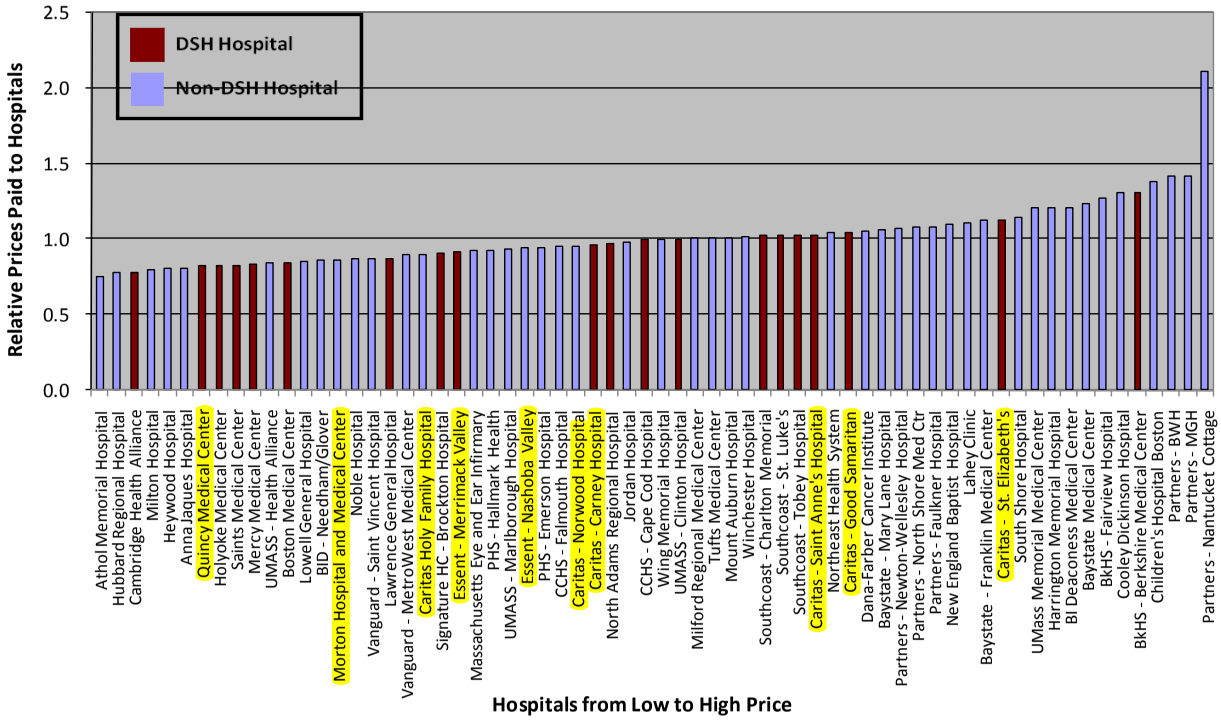
(1) Graph includes all provider groups with at least 5,000 Harvard Pilgrim HMO/POS member months.

(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.

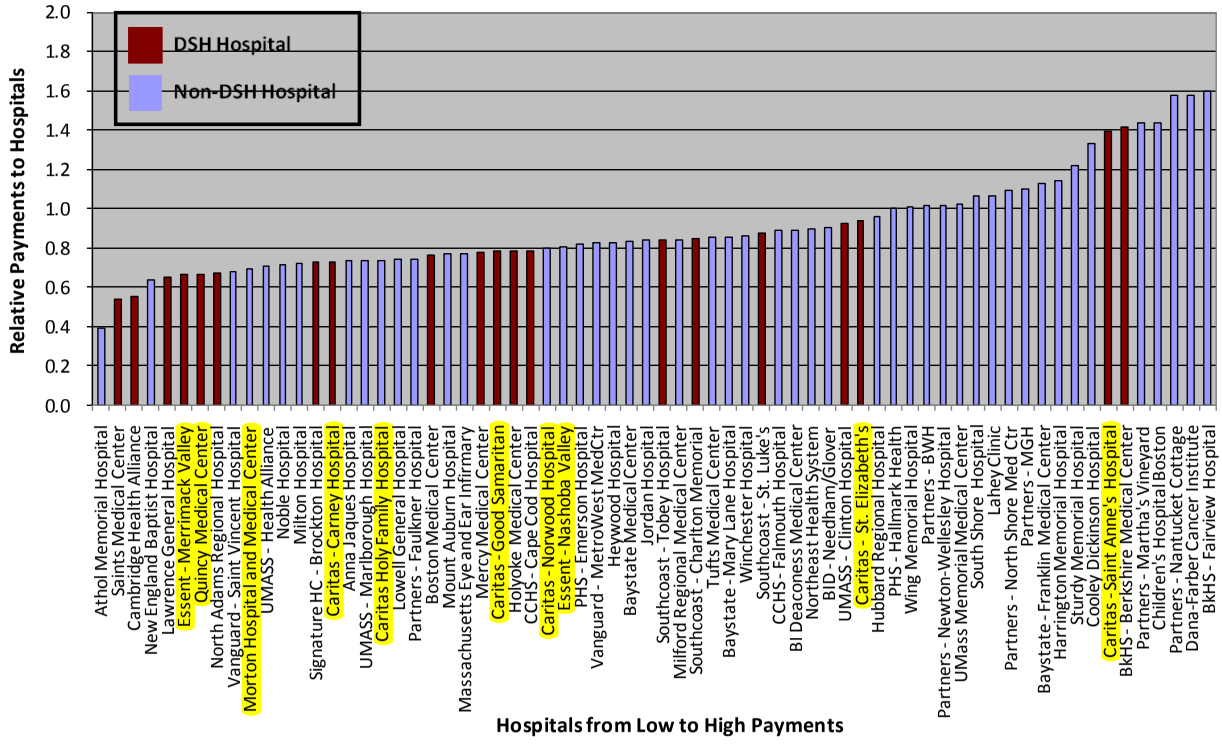
### 3. Wide disparities in prices are not explained by the extent to which a provider cares for a large portion of patients on Medicare or Medicaid

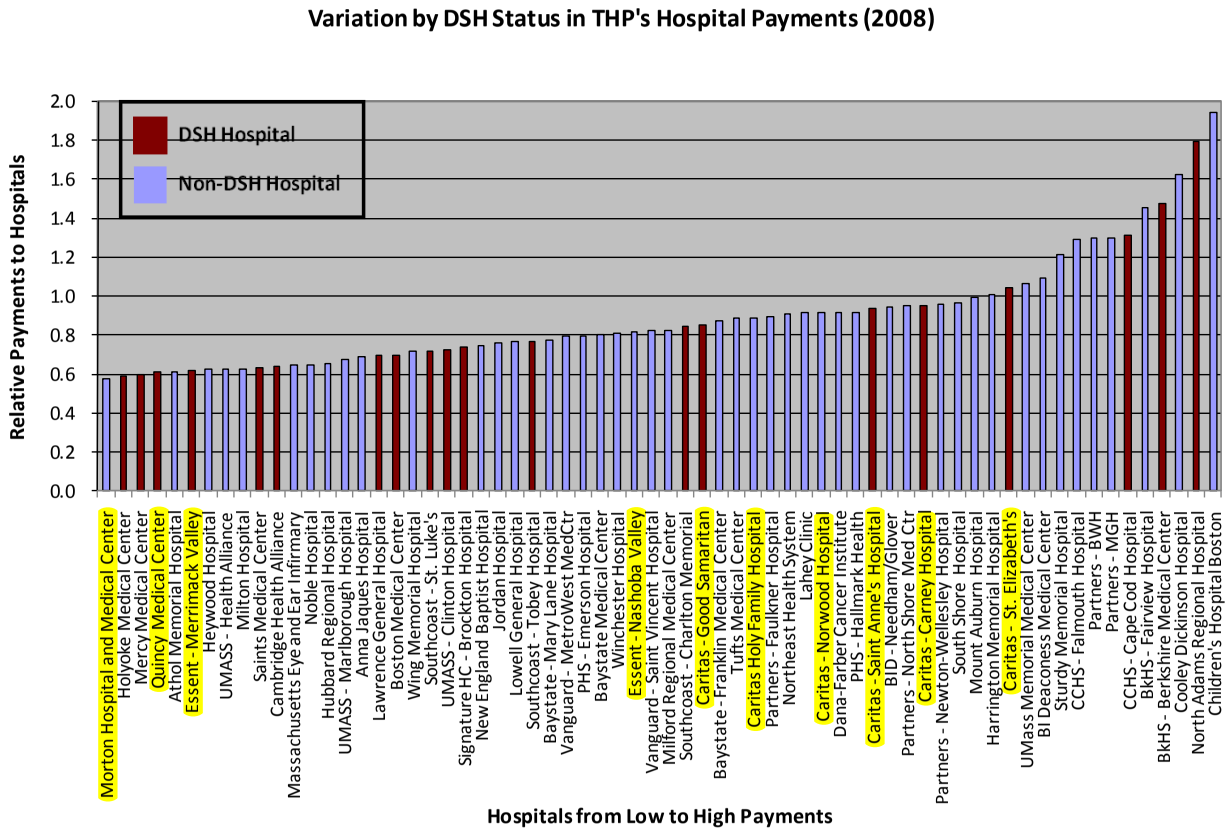
Commercial insurers generally pay lower prices to disproportionate share hospitals (DSHs), which have a large percentage (e.g., 63% or more) of patient charges attributed to Medicare, Medicaid, other government payers, and/or free care. The three graphs below show three major health plans' relative prices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





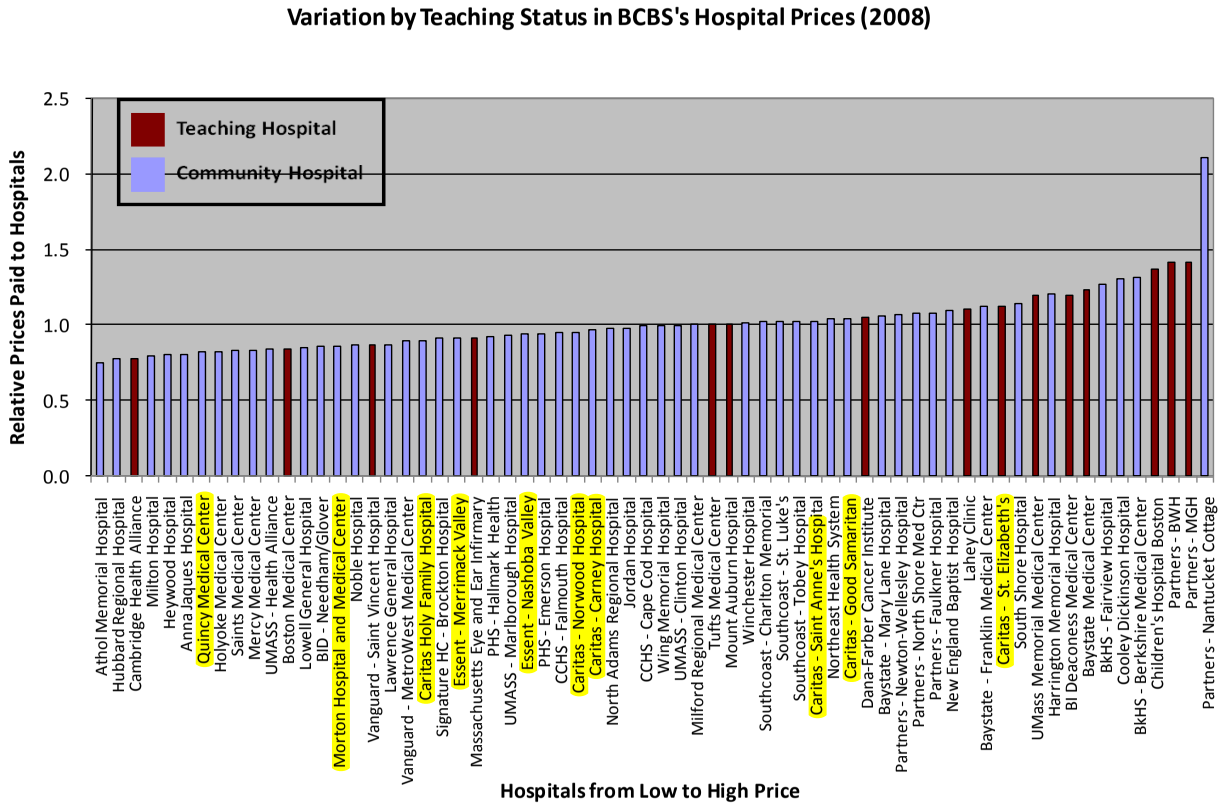

As shown in the table below, information from these three health plans shows that on average, these plans pay non-DSH hospitals prices or payments that are about 9 to 26% higher than those paid to DSH hospitals.

| | 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% |

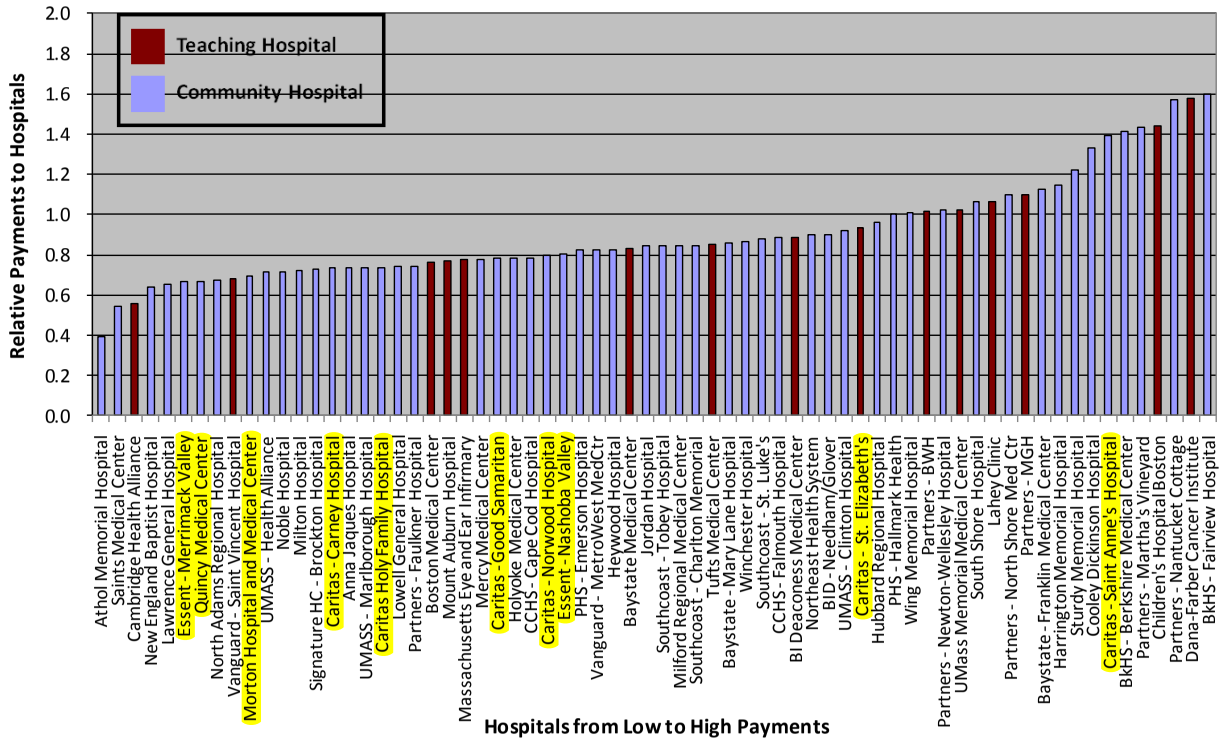
NOTE: The calculation of average differences in payments made by HPHC and THP is weighted by hospital volume, since the payment information provided by HPHC and THP factors in volume. The calculation of average differences in prices paid by BCBS is not weighted, since price does not take hospital volume 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

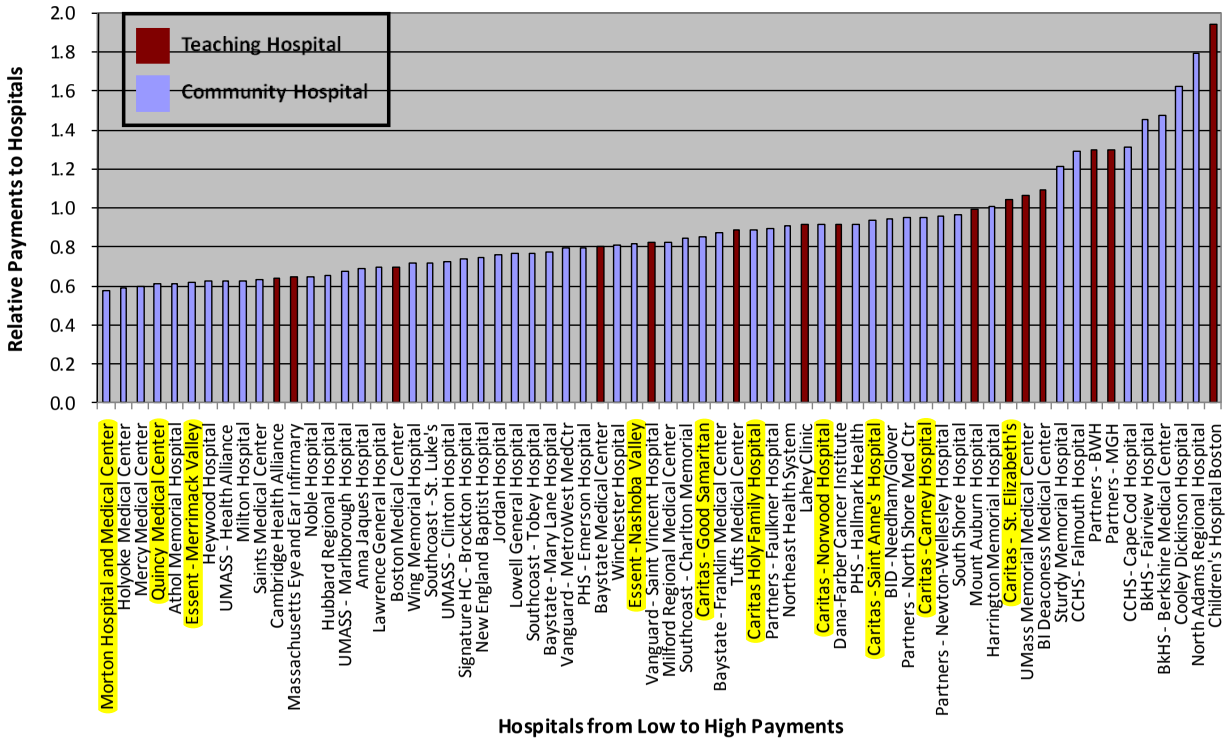
Insurers do not consistently pay higher prices to hospitals that provide academic teaching and research services. As shown in the three graphs below, which illustrate three major health plans' relative prices or payments to Massachusetts hospitals, those hospitals identified by DHCFP as teaching hospitals (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.



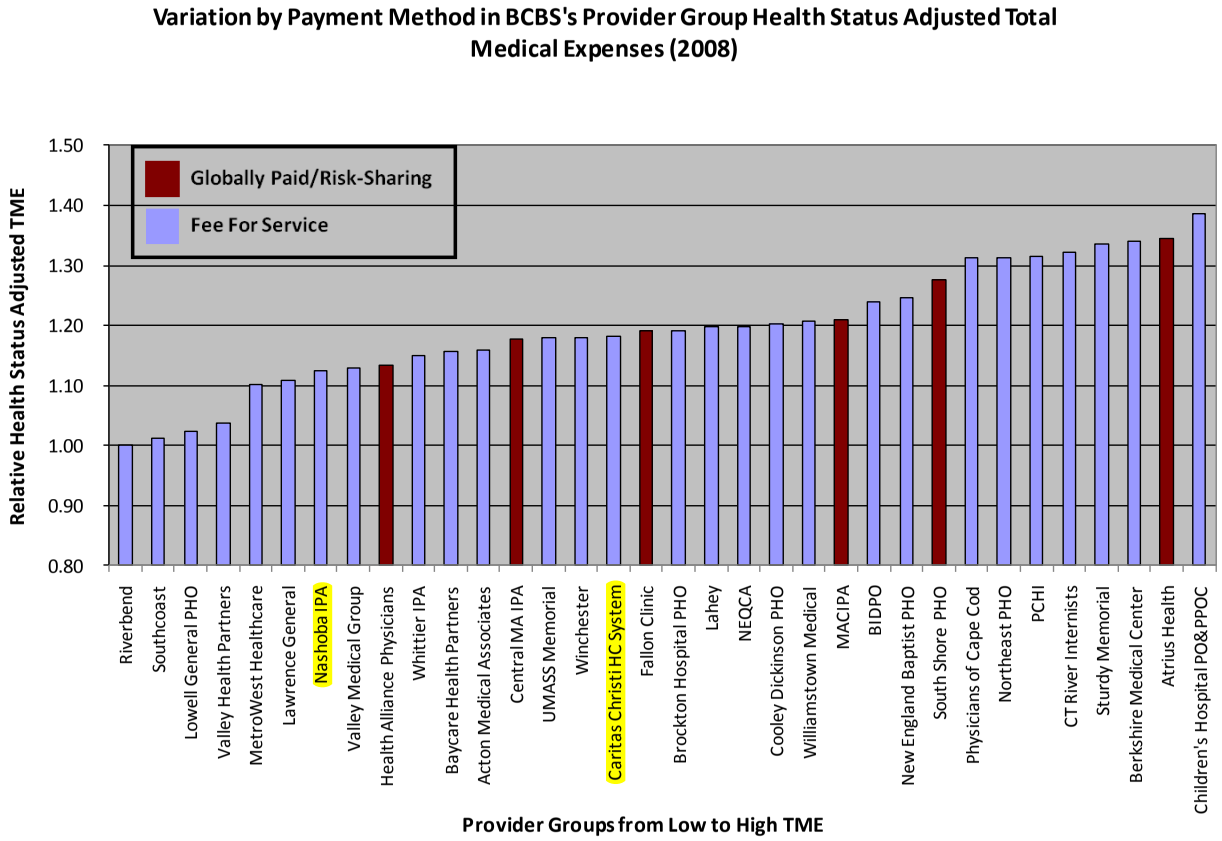
## Variation by Teaching Status in HPHC's Hospital Payments (2008)




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

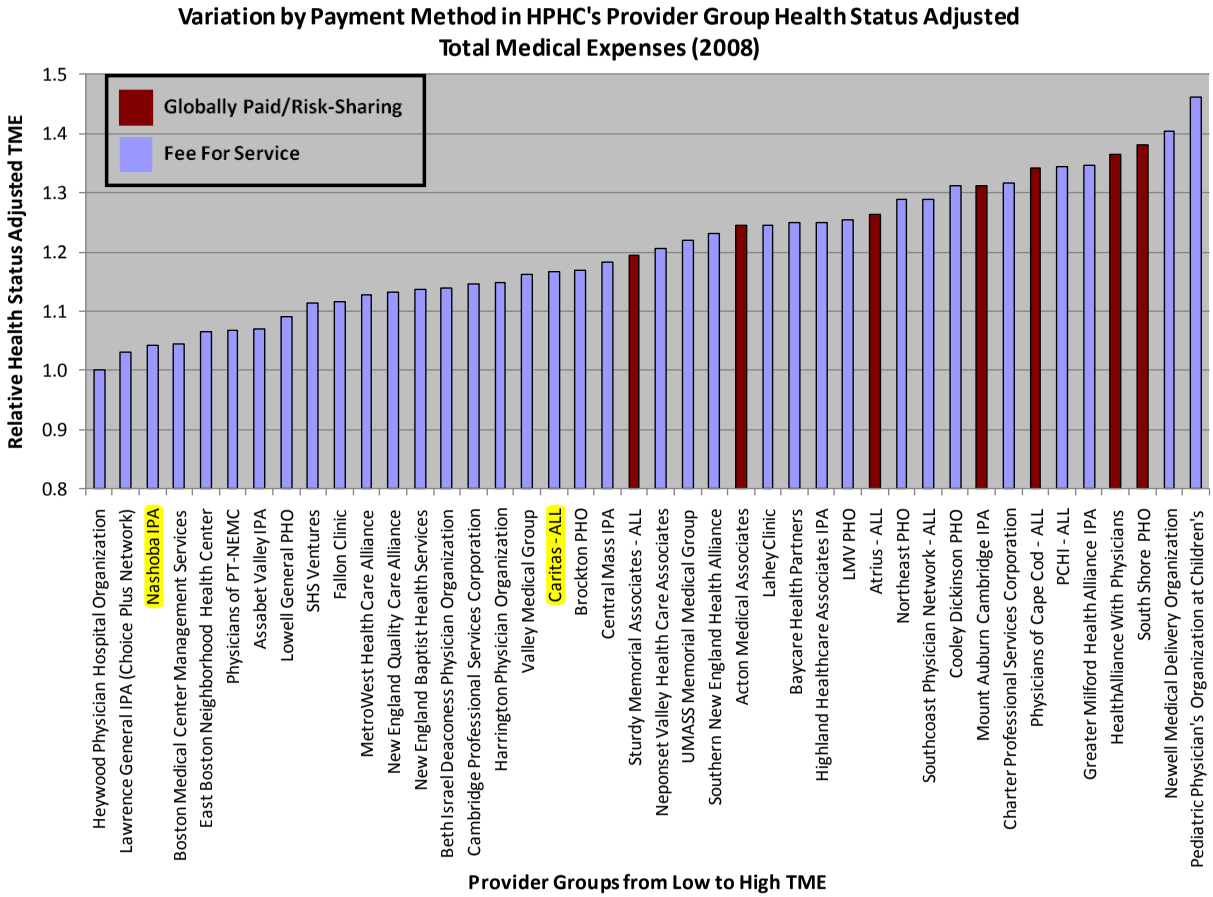


illustrate the per member per month TME of major provider groups with those groups paid on a global budget or otherwise sharing risk shown in red.[21]




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.

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 |