



## **2009-2010 Hospital Value Index™ Teaching Hospitals Analysis**

### **Headline: For Routine Care, U.S. Teaching Hospitals Provide Similar Value to Non-Teaching Hospitals**

Academic medical centers and their hospitals are widely respected for developing and applying cutting edge technologies. Their special units for severely injured trauma and burn patients are well-known, as are their specialty services for rare and highly complex disease and illnesses. Does their leadership also extend to providing the highest value for the most common and routine medical needs, which account for the majority of services and costs?

The answer is NO. According to the most recent Hospital Value Index™ (“Index”) study released by Data Advantage, LLC, of Nashville TN, a national review of these programs provided only nominal differentiation when it comes to routine care. There is no reason to assume that a hospital provides higher value for routine care just because it is a teaching institution, nor any reason to assume that because one isn’t that care is inferior value.

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The Hospital Value Index™ is a composite score which rates the care provided by individual hospitals based on quality, affordability and efficiency, and patient satisfaction. Scores are based on the most recently available public data and, to the extent possible, are calculated based on measures and methodologies championed by the Centers for Medicare and Medicaid Services (CMS). Market basket methodologies focus on routine, high volume Medicare inpatient DRGs and outpatient services. The most recent Index results scheduled to be released September 15, 2009 examine 660 teaching hospitals and 2327 non-teaching hospitals.

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The aggregate median Index score for Teaching hospitals was 53.19 points, very close to the non-teaching hospitals’ median of 53.04 points. (Aggregate Index scores ranged from 18.00 to 84.60 points, based on a possible score of 0 to 100.) More to the point, the distribution of scores in each group was virtually identical (see Table 1). In other words, any given teaching hospital has no immediate likelihood of scoring better than any non-teaching hospital.

The component mean scores for the two groups showed consistent results (see Table 2) yet with some perplexing means for attaining similar overall Index scores. Component scores are based on a 0 – 100 point scale, based on the range between the lowest and highest achieved score.

Patient Satisfaction scores are virtually equivalent between teaching hospitals and non-teaching hospitals:

- Teaching hospitals score better than non-teaching hospitals in the Quality Metric Core Measures (mean 51.00 vs. 46.03, respectively).
- Non-teaching hospitals score better than teaching hospitals in Affordability (mean 66.19 vs. 63.15, respectively), Efficiency (mean 52.79 vs. 40.15, respectively) and Patient Safety (mean 68.89 vs. 58.71, respectively).

The highest Index score for a Teaching hospital (77.99 points) is earned by United Hospital Center in Clarksburg WV. The highest scoring hospital overall (84.60 points) is Flowers Medical Center in Dothan AL, a non-teaching facility.

The variations in Index results across the 660 teaching hospitals can be delineated by looking at examples from the top-scoring 10%, the bottom-scoring 10%, and the “middle of the distribution”. Discussion below focuses on variations in the Core Measures, Affordability & Efficiency, and Patient Satisfaction.

Teaching hospitals in the top 10% consistently had relatively high scores across all three of these component factors. For example, St Vincent Medical Center in Worcester, MA ranked 19<sup>th</sup> of 660 Teaching Hospitals (and 94<sup>th</sup> of all hospitals), with an Index score of 69.74. This result was largely based on the relatively high scores for Core Measures (74.00), Affordability and Efficiency (72.21) and Patient Satisfaction (71.00).

Top 10% teaching hospitals include large and small institutions. St Joseph’s Hospital of Yonkers, NY is an example of a smaller hospital with a small teaching program (30 residency positions). This is their second year in the top 10% nationally, ranking 26<sup>th</sup> of 660 teaching hospitals (and 132<sup>nd</sup> of all hospitals), with an Index score of 68.52. This score was based on relatively high component scores in Core Measures (63.6) and Affordability and Efficiency (91.77). As a high-value teaching institution focused on Family Medicine training with a community focus, St Joseph’s is delivering what the White House is calling for in healthcare system reform.

Teaching hospitals in the bottom 10% generally had low scores across these component factors. Mt. Sinai Medical Center of Miami Beach, FL ranked 616<sup>th</sup> of 660 teaching hospitals, based on a lower scores in Core Measures (30.80), Affordability and Efficiency (35.45), and Patient Satisfaction score of (52.50). Other low-ranking Teaching hospitals were dragged down by a single, very low score in one component. For example, the University of Kentucky Hospital, in Lexington KY, ranked 635<sup>th</sup> of 660 teaching hospitals, with an Index score of 37.18, primarily based on a very low Core Measures score (19.26).

Teaching hospitals in the middle of the distribution had all combinations of low, high, and average scores in these components. For example, the Mayo Clinic's St. Mary's Hospital in Rochester, MN ranked 133rd of 660 Teaching hospitals, with an Index score of 60.57, based on a Core Measures score of 67.60, an Affordability and Efficiency score of 48.04, and a Patient Satisfaction score of 79.0. The Mayo Clinic's Methodist Hospital in Rochester, MN ranked 280<sup>th</sup> of 660 Teaching hospitals, with an Index score of 55.19, based on a Core Measures score of 53.20, an Affordability and Efficiency score of 47.57, and a Patient Satisfaction score of 76.50.

As another example, Mary Hitchcock Medical Center in Lebanon NH, ranked 338<sup>th</sup> of 660 teaching hospitals, with an Index score of 52.89 based on a Core Measures score of 56.80, an Affordability and Efficiency score of 33.93, and a Patient Satisfaction score of 80.50.

As demonstrated by these nationally known institutions, there is considerable variability and inconsistency among the majority of teaching hospitals, with no single metric that explains the variances. A hypothesis was that teaching hospitals might be consistently inefficient because of their teaching burden, yet this was proven false, as other component scores equally brought them to lower levels of value performance.

Healthcare stakeholders are increasingly focused on Value-Based Purchasing of routine healthcare, as a means to achieving accountable quality, affordability and efficiency. To date, the White House and Congress have lauded a select few teaching hospitals as the models of healthcare reform. While teaching hospitals are almost certainly the best option for treatment of complex and rare diagnoses, the vast majority of services delivered by hospitals are less complex.

The most recent Hospital Value Index™ results demonstrate that, as a group, teaching hospitals are not distinguished by providing higher value for routine medical care as compared to non-teaching hospitals. Furthermore, teaching hospitals show considerable variations among themselves in all components of value, as measured by the Hospital Value Index™. As various constituents in the country address healthcare reform, the Hospital Value Index™ suggests that teaching hospitals do not deliver consistent value in providing routine care.

As various constituents in the country address healthcare reform, it is fair to suggest that Teaching hospitals come to the table without a track record of proven consistent delivery of value in providing routine care.

**TABLE 1: Aggregate Hospital Value Index™ Score Distribution**

	Teaching Hospitals	Non-Teaching Hospitals
<b>Number:</b>	660	2,327
<b>Mean:</b>	52.98	53.13
<b>Standard Deviation:</b>	8.92	9.08
<b>10<sup>th</sup> Percentile:</b>	41.45	41.80
<b>25<sup>th</sup> Percentile:</b>	46.56	47.41
<b>Median:</b>	53.19	53.04
<b>75<sup>th</sup> Percentile:</b>	59.27	59.28
<b>90<sup>th</sup> Percentile:</b>	64.85	64.72

**TABLE 2: Selected Hospital Value Index™ Component Mean Scores**

	Teaching Hospitals	Non-Teaching Hospitals
<b>Core Measures:</b>	51.00	46.03
<b>Patient Safety:</b>	58.71	68.89
<b>Affordability:</b>	63.15	66.19
<b>Efficiency:</b>	40.15	52.79
<b>Patient Satisfaction:</b>	64.39	64.27