RESEARCH BRIEF

DIFFERENCES IN HEALTH SYSTEM QUALITY PERFORMANCE BY OWNERSHIP

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SUMMARY

Further analysis of our most recent Thomson Reuters 100 Top Hospitals®: Health System Benchmarks study drills into results by ownership type, and finds that the quality, efficiency, and perception of care varies significantly. Catholic and other church-owned health systems had significantly better quality performance that surpassed investor-owned systems. Catholic health systems are also significantly more likely to provide higher quality performance to the communities served than secular not-for-profit health systems. Investor-owned systems had the lowest performance.

METHODS

This analysis used the Thomson Reuters 100 Top Hospitals: Health System Benchmarks study released on June 21, 2010, as its basis. See the appendix for information about the study methodology.

To assess the effects of ownership type on performance, we used American Hospital Association (AHA) ownership classifications to assign the 255 hospitals from the Health System study to one of four ownership categories (Catholic, other church, investor-owned, not-for-profit). Hospitals with missing ownership information were assigned to the “unknown” category. Using the rankings for system performance from the Health System study, we calculated a mean performance rank for each of the five ownership groups.

The number of hospitals in each system varies widely. To account for this difference, we used the number of hospitals in each system as a weighting variable to create a weighted average for the system performance.

Some systems are highly centralized (i.e., have member hospitals that are all in the same state, or the same market area). Other systems have hospitals widely dispersed across multiple states or regions. Such centralization or decentralization of services could be an important factor in how systems perform. To adjust for this characteristic and more fairly compare systems, we used categories developed by Dr. Lawrence Prybil, PhD, FACHE (professor in the Department of Health Services Management in the College of Public Health at the University of Kentucky).

RESULTS

Our analysis of the quality performance of the 255 health systems in the Health System study showed that significant differences in performance exist between classes of ownership. Specifically, we found:

- Catholic and other church-owned systems are significantly more likely to provide higher quality performance and efficiency to the communities served than investor-owned systems. Catholic health systems are also significantly more likely to provide higher quality performance to the communities served than secular not-for-profit health systems.
- Investor-owned systems have significantly lower performance than all other groups.
- Performance of other church-owned systems (non-Catholic) is not statistically different from either Catholic or not-for-profit systems.

The figure below shows the mean performance rank of each class of ownership. Because a lower rank is better than a higher one, shorter bars represent better performance.

**DISCUSSION**

The findings suggest a changing role for health system governance and leadership. Health systems were founded for economic purposes, including access to capital, economies of scale, increased market share, and greater negotiating power with payers. The responsibility for quality of care in most health systems was delegated to local hospital governing boards. Our data suggest that the leadership teams (board, executives, and physician and nursing leaders) of health systems owned by churches may be the most active in aligning quality goals and monitoring achievement across the system. Investor-owned health system boards and/or executive leadership may be adopting a responsibility for quality more slowly.

As the industry reacts to healthcare reform legislation, including pay-for-performance initiatives and new tax rules that could stress certain ownership types more than others and change the balance of ownership types, assessing relative alignment of system hospitals with corporate goals will become a critical tool for both system management and governance. Health system leaders will need to become more active in guiding performance from the system level to make the greatest gains in improvement.

Further study will be required to definitively determine why these differences exist and what affect they will have on the systems' future health. Researchers at the University of Michigan, School of Public Health are currently researching methods for stratifying health systems. Their results will guide us in this endeavor.

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The Health System study focused on short-term, acute care, nonfederal U.S. hospitals that treat a broad spectrum of patients. The data come from public sources including the Medicare Provider Analysis and Review (MedPAR) dataset and the Centers for Medicare & Medicaid Services (CMS) Hospital Compare dataset.

To be included in the Health System study, a system needed at least two short-term, general, acute care hospitals, as identified using the 100 Top Hospitals specialty algorithm, and after hospital exclusions had been applied. We identified the “parent” system by finding the “home office” or “related organization,” as reported on the hospitals’ 2008 Medicare cost reports. In all, 255 health systems were included in this study.

To analyze health system performance, the study aggregated data from all of a system’s included hospitals, using a methodology that accounted for hospital size and teaching status, and calculated a set of eight performance measures at the system level. These measures centered on quality of care, efficiency, and consumer satisfaction:

- Risk-adjusted mortality index (in-hospital)
- Risk-adjusted complications index
- Risk-adjusted patient safety index
- Core measures mean percent
- 30-day risk-adjusted mortality rate for heart attack, heart failure, and pneumonia*
- 30-day risk-adjusted readmission rate for heart attack, heart failure, and pneumonia*
- Severity-adjusted average length of stay
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score (patient rating of overall hospital performance)

The clinical measures and average length of stay were risk and/or severity adjusted using peer-reviewed methodologies.

The Health System study ranked health systems on their performance on each of the measures relative to the other included systems. We summed each system’s individual performance-measure rankings and then re-ranked overall to arrive at a final rank for the system. The 10 health systems with the best final rank were selected as the winners. All measures except the 30-day mortality rate and 30-day readmission rate received a weight of one in the final ranking process. For the 30-day mortality and readmission rate measures, we publish the rates for each of the conditions (heart attack, heart failure, and pneumonia) a weight of one-sixth in the final 100 Top Hospitals ranking process for winner selection.

To learn more about the 100 Top Hospitals program, including the 100 Top Hospitals: Health System Benchmarks research, visit 100tophospitals.com.
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