Hospital Compare Highlights Potential Challenges in Public Reporting for Hospitals

by Mary Laschober

Hospital Compare, a central component of the Centers for Medicare & Medicaid Services (CMS) Hospital Quality Initiative, is a web-based tool released for consumer use in April 2005 to report credible and useful information about the quality of care delivered in the nation’s hospitals. It is the result of extensive collaboration between CMS and the Hospital Quality Alliance (see box). Approximately 4,200 acute care and critical access hospitals nationwide voluntarily submit quality data to Hospital Compare on up to 20 process-of-care measures for heart attack, chronic heart failure, pneumonia, and surgical infection prevention (see www.hospitalcompare.hhs.gov for more information). This issue brief is based on Mathematica’s study for CMS of how public reporting of quality information has influenced quality improvement efforts within hospitals; our work has also identified challenges to these improvements.

Closing the Information Gap

Public release of information on the quality of care associated with specific health plans and providers is intended to help consumers make better choices for themselves, and ultimately to help propel the entire health care system toward higher quality. Public reporting can also induce providers to make changes to improve their quality of care even ahead of consumer demand, in response to concerns about reputation or legal exposure. In the past decade, public reporting on health outcomes and medical care processes has proliferated in the United States, driven in part by high-profile reports on quality of care shortcomings from the Institute of Medicine and others. In response to growing interest in quality report cards, roughly 50 state agencies and private organizations now publish quality metrics focused on hospital care alone.

As part of Mathematica’s assessment of CMS’s Hospital Quality Initiative, we conducted a national survey in summer 2005 of hospital administrative leaders, such as chief executive officers, quality improvement (QI) directors, and chief medical officers, on internal impacts of Hospital Compare. They were also asked about barriers they faced in making hospital improvements that could be reflected in higher Hospital Compare scores.
Barriers to Improving Scores

Although many hospitals surveyed saw increases in their Hospital Compare quality measurement scores from one reporting period to the next—about 8 in 10 reported significant improvement on one or more of their scores—5 percent reported a significant decline in at least one measure. Of these hospitals, more than one-quarter (28 percent) attributed the fall in scores to documentation problems; another 13 percent said it was due to a few bad outlier cases. Additionally, approximately 60 percent of hospitals stated they had substantial room for improvement on one or more Hospital Compare indicators because the measure’s score was below the 50th percentile benchmark.

Mathematica’s survey asked respondents who reported having substantial room to improve about the difficulties they faced in boosting their Hospital Compare results. Hospitals reported multiple barriers, but three were most common (Table 1):

- **Inaccurate documentation.** The most common barrier reported was inaccurate documentation (cited by 90 percent of both quality improvement directors and senior executives). When physicians or other hospital staff failed to document that appropriate care was given to a patient, or when data reporting processes were incomplete, it counted against the hospital’s score on the relevant measure. This means that published scores are not a fully accurate reflection of the care provided.

- **Failure to involve physicians.** Failure to engage physicians in hospital quality improvement efforts was reported by 76 percent of senior executives and 83 percent of quality improvement directors as a key obstacle to measure improvement. Research by Mathematica and others has confirmed that physician and organizational resistance are fundamental barriers to improvement. Physician resistance can include workload issues that preclude them from facilitating or adopting changes, inadequate incentives, inconsistent alignment between hospital and physician payment schemes, low levels of computer literacy for some physicians, and lack of involvement in quality improvement design and implementation processes.

- **Insufficient resources.** Between 70 and 76 percent of survey respondents cited a general lack of financial resources as a barrier. Additionally, 64 percent said their hospitals had too few staff trained in how to identify, instigate, implement, or provide ongoing support for quality improvement initiatives. Previous research also indicates that many hospitals have too few resources to adopt health information technologies that might improve quality of care and care documentation.

Previous research also emphasizes that substantial improvement in hospital quality requires active participation and broad-based commitment from hospital leadership and staff. Even well-designed quality reporting efforts will not succeed if staff commitment is limited to hospital quality improvement departments. Our survey analysis also found lack of hospital leadership to be a barrier to improving Hospital Compare scores, but it was less frequently

### Table 1

<table>
<thead>
<tr>
<th>Type of Barrier</th>
<th>Major Improvement Directors</th>
<th>Senior Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation of care given is a major problem</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Physicians lack interest or involvement</td>
<td>83</td>
<td>76</td>
</tr>
<tr>
<td>Resource constraints, other than staffing, limit improvement strategies</td>
<td>76</td>
<td>70</td>
</tr>
<tr>
<td>Hospital lacks enough staff trained in quality improvement</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Hospital has other higher priorities</td>
<td>45</td>
<td>44</td>
</tr>
<tr>
<td>Hospital disagrees with selection of the measure or its definition</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Hospital is unsure of how to improve performance</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Senior management provides insufficient leadership and support</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Hospital has no incentive to improve</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

*As a percentage of quality improvement directors (66%) and senior executives (57%) whose Hospital Compare data had at least one measure below the 50th percentile benchmark

reported (Table 1). Slightly less than one-quarter of quality improvement directors and senior executives said that insufficient senior management leadership and support was either a major or minor obstacle to Hospital Compare measure improvement.

Differences in Views

Overall, our survey findings indicate that these quality improvement directors and senior executives generally agreed on the key barriers to improving Hospital Compare scores. The top four barriers were the same for both types of respondents. Still, some views differed as to what constituted a major barrier to measure improvement (Figure 1). Most notably, senior executives were quite a bit less likely than quality improvement directors to view inadequate physician involvement as a major impediment (22 percent versus 39 percent, respectively).

Several factors were not viewed as major hindrances to improving Hospital Compare scores, which is encouraging because it suggests an evolving consensus among hospital leadership on at least some quality measures and the importance of improving them. Specifically, no more than 11 percent of respondents (often substantially fewer) reported the following as key problems: (1) disagreement about the selection or definition of the Hospital Compare measures; (2) insufficient knowledge about how to improve quality; (3) low level of commitment from senior leadership; or (4) deficient incentives to improve. Additionally, only three to four percent of small hospitals noted that low patient volume made it difficult for them to improve their score. Another three to four percent of hospitals of all sizes reported the following as problems: (1) complexity or difficulty implementing evidence-based guidelines to improve care; or (2) time needed to collect and report required data to the public reporting entity.

Steps to Improvement

Despite several obstacles to raising Hospital Compare scores, many hospitals are actively pursuing new or expanded initiatives aimed at improving the quality of care provided, documentation of this care, and enhanced support for quality measurement and reporting. Additional findings from the Mathematica survey reveal that slightly over one-half of the hospitals in the study increased the number of staff dedicated to reporting quality data and focusing on quality improvement during the past two years, in addition to devoting more staff time to these activities. About 60 percent also reported that their hospital had purchased new computer hardware or software within this period that support quality measurement and reporting. Additionally, nearly all quality improvement directors (95 percent) said their hospital had implemented new or enhanced quality improvement initiatives within the past two years; 85 percent said their hospital had undertaken new data collection or abstraction activities for quality measurement purposes.

**Figure 1: Top Five Major Barriers to Improving Hospital Compare Measures***

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>QI Directors</th>
<th>Senior Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality care not documented</td>
<td>53.9%</td>
<td>64.9%</td>
</tr>
<tr>
<td>Lack of physician involvement</td>
<td>22.3%</td>
<td>39.2%</td>
</tr>
<tr>
<td>Financial resource constraints</td>
<td>32.1%</td>
<td>35.2%</td>
</tr>
<tr>
<td>Insufficient QI staff</td>
<td>25.6%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Other higher priorities</td>
<td>3.1%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

*As a percentage of quality improvement directors (66%) and senior executives (57%) whose Hospital Compare data had at least one measure below the 50th percentile benchmark


Moving Forward

Although Mathematica’s survey did not focus on ways to overcome the barriers, previous research offers some suggestions:

- Demonstrate organizational will to improve quality and aggressively communicate a common and clear vision to staff
- Show all staff that investments to enhance quality and measure reporting produce financial
benefits—that is, conduct a strong and objective business case analysis demonstrating that quality improvement creates greater patient safety, improves efficiency or market share, and so forth

- Ensure through internal rewards, third-party payer incentives, and alignment of physician and hospital financial incentives that financial benefits identified in the business case analysis will accrue to all who are involved in quality improvement and reporting

- Promote investment in electronic systems to facilitate documentation and enhance training on the importance of documentation

- Identify physician champions who can promote acceptance of quality improvement among staff; this includes doing a better job of engaging physicians without close ties to the hospital but who are critical to achieving its goals

- Seek direct financial support for quality improvement projects, technical assistance, and electronic systems that facilitate public reporting

Public information on the quality of health care in our nation’s hospitals is on a fast track for expansion. Increasing evidence shows that hospitals and other providers respond in substantive and positive ways to public reporting. Continual work to address the barriers identified here is important to improve public reporting of hospital quality measures. Mathematica’s survey indicates that public reports can be a useful tool in the quest to provide consumers and purchasers, as well as hospitals themselves, with meaningful, relevant, and easy-to-understand data on quality.

---

**About the Survey**

In summer 2005, Mathematica conducted telephone interviews with quality improvement directors and senior executives involved in quality improvement. The target population was short-term acute care general and critical access hospitals in the 50 states and the District of Columbia that submitted hospital quality data for the Hospital Compare publication in 2005. Mathematica selected a stratified random sample based on hospital size, participation in CMS’s Premier Hospital Quality Incentive Demonstration, and accreditation by the Joint Commission on Accreditation of Healthcare Organizations. Completed surveys from 664 quality improvement directors resulted in a 98 percent unweighted and a 96 percent weighted response rate; completed surveys from 650 senior executives yielded a 96 percent unweighted and an 89 percent weighted response rate. The statistics in this brief are weighted results.

**For Further Reading**

The following report is available from Mathematica Publications, (609) 275-2350, or visit our website.


For more information about this study, funded by CMS through the Delmarva Foundation, please contact Myles Maxfield, senior fellow and associate director of health research, at mmmaxfield@mathematica-mpr.com, (202) 484-4682. To read more about Mathematica’s quality of care research, go to www.mathematica-mpr.com/health/qualityofcare.asp.

Mathematica® is a registered trademark of Mathematica Policy Research, Inc.