Hospital Report Cards: Friend or Foe?

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Abstract
The original intent of hospital report cards was to provide information to the public to enable them to make educated choices in selecting health care services and to stimulate provider activities to improve outcomes of care. Serious issues have been raised about the timeliness, accuracy, validity, meaningfulness, and interpretability of these reports, which has impacted both provider and consumer response. To make report cards more useful, steps should be taken to increase consumers’ understanding of the intent of these reports, what the data actually mean, and how best to use the data to make the most appropriate health care choices. Hospitals and their representative associations must have input into report content and design to help ensure that accurate, representative, and meaningful information is provided to consumers. They also must be afforded an opportunity to comment on the findings and implications. At the same time, they need to take a more introspective look at their results to determine if indeed there is an opportunity to improve outcomes of care.

Evolution of Report Cards
The Health Care Financing Administration (HCFA) published hospital mortality data in the late 1980s, initiating the first large-scale effort to consistently release outcomes data into the public domain. HCFA provided hospitals with reports comparing actual to expected mortality rates and asked them to comment on the data prior to public release. These efforts received wide public recognition, with the results frequently being featured on the front page of local newspapers. However, the data gathering and reporting process was plagued by concerns over data credibility and the ability of consumers to interpret and assimilate the data in a meaningful fashion. HCFA abandoned the project in 1993 because of data quality concerns.

The Pennsylvania Cost Containment Council made the next major concerted effort to issue hospital report cards with its release of hospital and physician complication and mortality rates for coronary artery bypass grafting (CABG) procedures. This report stimulated animosity on the part of hospitals and physicians but had little effect on consumer behavior. One survey report indicated that only 12% of cardiac patients actually looked at the data, and less than 1% said that they could effectively interpret the findings [1]. Soon after the experience in Pennsylvania, New York State released hospital- and physician-specific CABG mortality rates, which unexpectedly were published in local newspapers. Beyond provoking an outraged response from hospitals and physicians, the report led many cardiac surgeons in both Pennsylvania and New York to refuse to operate on more complicated patients over concerns of having a negative performance profile [2,3].

The next major public report card project came from the managed care sector. As part of the HEDIS report card project, managed care organizations were asked by the National Committee for Quality Assurance to voluntarily report on a range of patient outcome indicators. Although this effort too received a great deal of media attention, its actual impact was limited because compliance was voluntary and the public did not understand how to use the information.

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The report card movement was transformed in the late 1990s by the internet, which provided both easy access to medical information and a means for rapid, wide-scale dissemination. A wide array of organizations now produce report cards, including the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the American Hospital Association (AHA), the Centers for Medicare and Medicaid Services (CMS), and the National Quality Forum (NQF). In addition, other federal and state agencies, accreditation agencies, newspapers and periodicals, information system companies, and an assortment of not-for-profit and for-profit health care agencies also produce report cards. A new multicolaborative initiative (The Quality Initiative: A Public Resource on Hospital Performance) sponsored by the AHA, the Federation of American Hospitals, and the Association of Medical Colleges encourages hospitals to voluntarily submit patient care data, some of which is already being collected as part of the hospital accreditation process. Hospitals are asked to report data on 10 quality process measures endorsed by the NQF, the Agency for Healthcare Research and Quality (AHRQ), and JCAHO for 3 medical conditions (acute myocardial infarction, congestive heart failure, community-acquired pneumonia). The data will be displayed on the CMS Web site (www.cms.hhs.gov/quality/hospital). More than 1400 hospitals have signed up to participate in the project, with 200 hospitals enrolled in a pilot project in Arizona, Maryland, and New York. By 15 June 2003, 415 hospitals had posted at least one measure, and more than 1000 hospitals have submitted data to CMS for the next posting in February 2004.

Pay-for-Quality Initiatives

Diverging from the original educational and quality improvement goals of report cards, organizations such as Blue Cross/Blue Shield and CMS have incorporated report card-style data reporting in projects that offer financial incentives for high-quality care [4]. For example, Blue Shield of California requires consumers to pay higher copayments when they use a hospital that is not part of the preferred hospital list. Preferred list selections are based on both quality and cost-effectiveness criteria [5,6]. Similar types of Blue Cross and Blue Shield pay-for-quality incentives are beginning to appear in other parts of the country [7]. In addition, CMS has entered into an agreement with the hospital alliance Premier, Inc., to provide higher Medicare payments to Premier hospitals that achieve specific quality goals. The national demonstration project was begun in October 2003 and involves 300 Premier hospitals. CMS will pay a total of $7 million in bonuses to hospitals that score well on 35 quality measures in 5 clinical areas. Hospitals in the top 10% for each clinical area will receive a 2% bonus in Medicare payments, and hospitals in the second 10% will receive a 1% bonus. Information about participating hospitals’ performance will be available on the CMS Web site [8].

Provider Reaction

Initially, provider reaction to public report cards was relatively guarded, reflecting a general sense of resistance to being measured by an outside agency. Immediate concerns were raised about the true intent of the reports, who was doing the measuring, and who and what was being measured. Furthermore, a range of concerns about data led critics to question their accuracy, reliability, meaningfulness, and interpretability [2,9,10]. The first concern was the data source. Many of the earlier versions of report cards were based on administrative/billing data. Using administrative data as a tool for measuring quality requires a huge leap of faith in linkage and applicability [11], and this concern is further compounded by such issues as timeliness, variations in coding practices, and patient demographics (Medicare versus all-payer data). A second concern is data integrity. Does the data set provide a representative sample of the patient population? Important considerations affecting apple-to-apple comparisons include case volume, sampling methodology, inclusion and exclusion criteria, analytical tools, severity of illness, risk adjustment assumptions and methodologies, and hospital characteristics (size, location, teaching affiliation) [12]. A third concern involves quality measurement. Are the outcome and/or process measures that are being used truly representative of quality care [9,13–15]? Only meaningful measures can provide meaningful comparisons. Finally, the design and methodology of report cards were a concern. Differences in input, assumptions, analytical applications, and grading criteria affect results and can produce a high score for a hospital in one report card and a low score in another for the same service outcome.

These concerns as well as questions about interpretability and lack of incentives are key factors that have inhibited provider acceptance of externally generated reports [16]. Provider distrust of report cards is exacerbated when providers are denied input regarding report design, content, and methodology. An unintended consequence of report cards has been that some hospitals that did not fare well in a particular area in earlier report cards have resisted taking on more complicated cases [2,3]. Furthermore, with calls for voluntary disclosure, hospitals doing poorly may choose not to report their results at all [17].

A potential positive consequence of report cards is that they will encourage providers to use the reported information to identify quality improvement opportunities. After all, the hallmark of traditional performance improvement programs is to compare internal performance to external benchmarks and learn from hospitals that demonstrate best practice patterns. Unfortunately, there have been few published reports of hospitals using report card information for this
Presented below are examples of some national and regional report card sites that highlight the different indicators and measurement methodologies used to evaluate hospital performance.

**HealthGrades (www.healthgrades.com)**
Healthgrades.com is described as a health care consumer information service. It is one of the most popular internet sites for hospital performance review, with more than 22 million page visits per year. The site allows consumers to perform a comparative review of hospital outcome data on more than 20 clinical indicators of care. Healthgrades.com covers topics in cardiology, orthopedics, women’s health and obstetrics, neurosciences, pulmonary disease, vascular surgery, and Leapfrog-supported patient safety criteria. Outcomes are based on review of Medicare data. Hospitals are graded on a 5-star system. The site also offers quality ratings for physicians and nursing homes.

**Solucient Top 100 (www.solucient.com)**
Solucient has been publishing its Top 100 Hospital Report since 1993 [1]. The report focuses on 8 clinical, operational, and financial performance indicators extracted from publicly available data, including Medicare billing files and cost reports. Specific measures include risk-adjusted mortality, risk-adjusted complications, severity-adjusted length of stay, expense per discharge (case and wage mix adjusted), profitability (cash flow margin), productivity (total asset turnover ratio), and proportion of outpatient revenue. More recent reports include top 100 hospital lists for cardiovascular, orthopedic, intensive care unit, and stroke care.

The *U.S. News and World Report* list of best hospitals, now in its 14th edition, ranks hospitals based on a combination of indicators such as hospital reputation, mortality ratio, registered nurse-to-bed ratio, and other care-related factors and covers 17 specialties, including cardiovascular, orthopedics, neurology, and neurosurgery. The report focuses on major academic teaching institutions with a large volume of cases.

**PacifiCare Quality Index**
PacifiCare is a health maintenance organization that serves more than 20 million enrollees in California. In March 2003 it issued the first edition of its hospital report card titled the Quality Index [2]. The report rates more than 200 California acute care facilities on 56 criteria that include volume, utilization, outcomes, and patient satisfaction. The measures are grouped into 4 categories: appropriate care (avoidance of hospital-based complications), patient safety (mortality and Leapfrog safety criteria), satisfaction, and utilization. Hospitals are graded on a letter system, with top one third hospitals receiving an A, middle one third hospitals receiving a B, and lower one third hospitals receiving a C. The grades indicate the relative performance of each hospital based on percentile placements for each of the measures. Data are obtained from the California OSHPD, federal MEDPAR databases, a statewide patient evaluation program, and the Leapfrog Group.

**Patients’ Evaluation of Performance in California (PEP-C)**
The PEP-C report focused on patient satisfaction with a recent hospital experience. The survey was developed by the Picker Institute and was sponsored by the California Health Care Foundation and the California Institute for Health Systems Performance. Specific questions focused on respect for patient’s needs, coordination of care, information and education, physical comfort and pain relief, emotional support, involvement of family and friends, transition to home, and continuity of care. The report analyzed results from more than 35,000 patients who spent at least 1 night in a California hospital between 1 July and 31 October 2002. Patient responses were received from 181 California hospitals, representing 54% of the state’s licensed beds. Overall results showed that 25% of California hospitals scored above average, 57% scored average, and 18% scored below average. California hospitals did particularly well compared to the national average in physical comfort, coordination of care, and respect for patient preferences. Opportunities were noted in the areas of providing emotional support and transition to home. The report was not designed as a guide to rating a hospital but rather as a consumer guide on how to choose a hospital.

**References**
purpose [10,18,19]. A recent article in Health Affairs concluded that “only a few existing report cards have stimulated quality improvement” [16]. Although all hospitals constantly strive to improve outcomes, these activities do not appear to be directly correlated with report card results. On the other hand, many hospitals that have received high grades on a report card will publicize the results as part of their marketing campaign [20]. Fortunately, the latest wave of report cards are focusing on more widely accepted core quality measures, making it more likely that providers will use the results in performance improvement activities.

**Consumer Response**

Recent trends in health care offer consumers good reasons to take advantage of the readily available public information on health care delivery found in report cards. Such trends include increasing consumer financial responsibility for health care services and growing concerns about patient safety, medical errors, and variations in outcomes of care. However, several studies have shown that overall consumer awareness, attention, and response to report card information is relatively low [1]. Follow-up surveys after the California Office of Statewide Planning’s (OSHPD) report on CABG results showed no significant impact on consumer reaction [21]. The frequently quoted 2002 Harris poll on consumer reaction to quality ratings revealed that 26% of consumers had seen data on hospital quality, 3% said that they would consider changing their hospital based on quality rankings, and 1% reported that they actually made a change [15,22,23]. A more recent survey conducted by VHA found that 9% of survey participants paid attention to health care quality ratings, and only 5% said that being included in a top 100 list was an important characteristic in choosing a hospital [24]. In a recent Consumer Report poll of 21,144 readers, only 30 respondents (0.001%) said that they picked a hospital based on a public report card [25]. These findings suggest that although report cards may generically affect public image of hospitals, public reporting has yet to demonstrate a positive effect or significant impact on moving market share [13,18].

Consumer response to report cards has been influenced by a number of factors. Surveys have shown that consumers do not trust the accuracy of online health care information and, moreover, very few consumers have the skills to meaningfully interpret the data [26]. Several studies have suggested that consumers are more likely to respond to a Web site’s format than its content [27]. Finally, many studies have shown that perceptions of quality care are not the main driving factor stimulating consumer choice. Instead, insurance coverage, physician preference, satisfaction with previous experience, location, availability of specialty services, reputation, and recommendation by friends are the strongest influences of patient choice [15,22,28,29].

**Future Directions**

Health care report cards have undergone considerable changes since the 1980s. Thanks to improved data collection and dissemination techniques, report card data are easier to access and more user-friendly, direct head-to-head comparisons are possible, and more meaningful measures of quality performance are featured. Despite these advancements, much work still is needed to improve overall consumer understanding and provider acceptance of these reports. Consumers need to better understand the intent of these reports, what the data actually mean, and how best to use the data to make the most appropriate health care choices. Consumers must be able to trust the data and understand its source and limitations. Much of this education is provided in supporting text by the report card authors. However, a better approach to improving consumer understanding is for health care providers to take a more active role in discussing these reports and helping consumers appreciate what the information means from a clinical perspective as well as how to use the information in a more effective manner. Fostering a more thorough consumer understanding and appreciation of quality care and how it is measured is crucial to report card success.

Providers will more readily accept health care report cards if their purpose and clinical value are made clear. The primary focus of public reporting of health outcomes must be quality improvement. Providers need to be convinced that the purpose of report cards is to provide comparative data to identify potential opportunities for improvement rather than to focus on bad apples. Admittedly, the data comprising the reports are imperfect and have limitations. However, rather than focusing on reasons why the data are skewed, providers would do better to look at the factors affecting performance results and use this information as part of their quality improvement process.

Another important component of provider acceptance of report cards is making providers feel that they are part of the process. Providers should have input into report card design, content, and format and be afforded an opportunity to comment on the findings and implications. Fortunately, various hospital associations, medical societies, and other groups are beginning allow providers to play a more active role in the development of report cards [Jim Barber, oral communication, June 2003].

**Conclusion**

Hospital report cards are here to stay. The growing concerns about problems with quality of care and patient safety, a growing willingness by consumers to take greater responsibility for their own health care needs, and the ready availability of public information will continue to put pressure on hospitals to document positive outcomes of care. Hospitals and their representative associations must have input into
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report content and design to help ensure that accurate, representative, and meaningful information is provided to consumers. At the same time, they also need to take a more introspective look at their results to determine if indeed there is an opportunity to improve outcomes of care. Greater efforts must be made to educate the consumer, present the information in a standardized, user-friendly format, and provide the necessary tools and support for consumers to make educated health care decisions.

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