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# Hospital Governance And The Quality Of Care

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**ABSTRACT** Hospitals' boards may influence the quality of care that hospitals provide, but their engagement in quality-related issues is largely unknown. We surveyed a nationally representative sample of board chairs of 1,000 U.S. hospitals to understand their expertise, perspectives, and activities in clinical quality. We found that fewer than half of the boards rated quality of care as one of their two top priorities, and only a minority reported receiving training in quality. The large differences in board activities between high-performing and low-performing hospitals we found suggest that governing boards may be an important target for intervention for policymakers hoping to improve care in U.S. hospitals.

**T**he quality of hospital care that Americans receive is an ongoing concern.<sup>1,2</sup> To promote quality improvement, the federal government and others have launched the Hospital Quality Alliance (HQA) program, a public-private partnership to measure and publicly report on the quality of care in all U.S. hospitals. Early data from the program confirm that many hospitals often fail to provide key evidence-based treatments.<sup>3,4</sup>

Because the quality of hospital care is less than optimal, interest has increased in identifying factors associated with higher quality and in strategies to promote quality improvement. One area of particular recent interest is leadership and governance by boards of directors that oversee U.S. hospitals. In February 2007 the Institute for Healthcare Improvement launched the Boards on Board program, which seeks to engage board leadership in clinical quality.<sup>5</sup> The National Quality Forum and others have called on hospital boards to focus on quality.<sup>6</sup>

It is entirely plausible that a board of directors responsible for oversight might have a major impact on quality of care. However, we know little about whether or how boards are engaged in issues of clinical quality and if their activities influence care. To help us learn more, we con-

ducted a national survey of board chairs to determine boards' engagement and activities. Our results show that quality of care is often not a top priority for hospital boards. We also found large differences in quality-related board activities between high- and low-performing institutions, which indicates a potential target for interventions to spur quality improvement.

## Study Data And Methods

**OVERVIEW OF HOSPITAL GOVERNANCE** Each U.S. hospital is overseen by at least one board of directors (sometimes known as boards of trustees), although the board structure and the number of boards involved varies across hospitals. Further, although nonprofit hospitals typically have one board that oversees all activities, for-profit institutions often have multiple boards that provide oversight, including a national corporate board, regional boards, and local boards. Given the difficulty of identifying which board is most responsible for oversight of quality at for-profit institutions, we limited our survey to the 85 percent of U.S. acute care hospitals that are not-for-profit.

Our sampling method, identification of potential respondents, survey development, and survey administration are briefly described below and are detailed in a Technical Appendix.<sup>7</sup>

**DATA AND SAMPLING** We identified 3,410 non-profit acute care hospitals that reported quality data to the HQA in 2007. For each hospital, we calculated an overall quality score. We chose to use the HQA data because this is the primary publicly reported quality assessment program used by the Centers for Medicare and Medicaid Services (CMS), the Joint Commission (which accredits and certifies U.S. health care organizations), and others. Further, because the CMS ties Medicare and Medicaid financial incentives to hospitals' publicly reporting data on quality performance, nearly all U.S. hospitals participate.

We calculated an overall summary score based on hospitals' performance on nineteen evidence-based practices for care in three clinical conditions—acute myocardial infarction, congestive heart failure, and pneumonia<sup>7</sup>—using a widely deployed methodology.<sup>8</sup> We randomly chose 1,000 hospitals from this group, oversampling those ranked in the top 10 percent (“high-performing”) or bottom 10 percent (“low-performing”) of HQA performance. We also oversampled those with large African American populations for a secondary study.

We identified and verified the name and contact information of each hospital's board chair by contacting all hospitals in our sample between November 2007 and January 2008.

**SURVEY DEVELOPMENT** We developed the survey by reviewing the literature and interviewing experts in governance and current board chairs who were not in our sample. Based on the interviews and literature review, we identified five pertinent domains: board training and expertise in quality; quality as a priority for board oversight and evaluation of the chief executive officer's (CEO's) performance; the board as an influential entity in the quality of care delivered; awareness of current quality performance; and specific board functions such as setting priorities, devoting time to quality during meetings, and examining quality “dashboards” (for example, report cards containing the hospital's quality performance data). We solicited feedback on the survey instrument and made modifications based on that feedback.

**SURVEY ADMINISTRATION** We used Westat Inc. to field our survey to 922 board chairs who oversaw the 1,000 hospitals in our sample. The board chairs were asked by letter, with follow-up phone calls, to participate in a national survey examining governance practices of U.S. hospitals as they related to clinical quality. For the eleven board chairs who oversaw three or more hospitals in our sample, we took a more customized approach to soliciting responses.<sup>7</sup>

**ANALYSIS** We compared the characteristics of respondents to those of nonrespondents and

to those of the overall sample, and we compared the characteristics of high and low performers. Given our sampling strategy, we first weighted all responses to create national estimates. Because most of the questions had four response categories, we divided responses into two categories by combining the first two and last two response categories.<sup>7</sup> We analyzed responses both at the hospital level and at the chairperson level. The results were nearly identical; therefore, we present hospital-level data.

We initially examined differences in responses between high- and low-performing hospitals using bivariate techniques. Because we found that low-performing hospitals were disproportionately small, we used a number of alternative strategies to reduce potential confounding by hospital size, including creating multivariable models, restricting analyses to just small and medium-size hospitals, and examining patterns of responses within each individual stratum (only among small hospitals, then only among medium-size hospitals). The results from each strategy were similar; therefore, in all comparisons between high- and low-performing hospitals, results include all hospitals and are adjusted for hospital size and other potential confounders including region, location, ownership, and teaching status (members of the Council of Teaching Hospitals versus not). Differences between high- and low-performing hospitals were typically greater in unadjusted analyses compared to adjusted analyses.<sup>9</sup>

## Study Results

We received responses from 722 of 922 board chairs sampled, for a response rate of 78.3 percent. These 722 chairpersons oversaw 767 hospitals. Response rates were above 70 percent for each of our oversampled groups (high performers, low performers, and so on), and the hospital characteristics of respondents closely mirrored the entire sample, with no statistically significant differences between responders and nonresponders.<sup>10</sup> Among respondents, low-performing hospitals were more often small, located in rural areas and the South, and publicly owned.<sup>11</sup> Mean HQA quality scores were 96 percent among high-performing hospitals and 63 percent among low-performing hospitals.

Respondents had served on their hospital's board for an average of 12.3 years (standard deviation [SD] = 6.5 years) and had been their board's chairperson for an average of 3.1 years (SD = 1.4). Only 8 percent of respondents were physicians, and 7 percent were otherwise employed in the health care industry.

### BOARD TRAINING AND EXPERTISE IN QUALITY OF

**CARE** Nearly three-quarters of board chairs reported that their boards have moderate or substantial expertise in quality of care<sup>12</sup>; high-performing hospitals reported a rate of 87 percent, compared to 66 percent for low-performing hospitals. Just 32 percent of hospital boards received any formal training in clinical quality, and such training was far more common in high-performing than in low-performing hospitals (49 percent versus 21 percent). Among hospitals whose board training included clinical quality, board members spent a median of four hours total on quality issues (75 percent of hospitals that offered board training spent six hours or less on quality-of-care issues).

**QUALITY OF CARE AS A PRIORITY FOR BOARD OVERSIGHT AND CEO PERFORMANCE EVALUATION** Overall, more than half of board chairs chose clinical quality as one of the two top priorities for board oversight (Exhibit 1). Board chairs of high-performing hospitals made this choice more often than those of low-performing hospitals. Chairs from just 44 percent of hospitals chose clinical quality as one of the top two priorities for evaluating CEO performance. Respondents from high-performing institutions made this choice twice as often as respondents from low-performing institutions did (Exhibit 1). Each of these differences was highly statistically significant. Other choices of top priorities for board over-

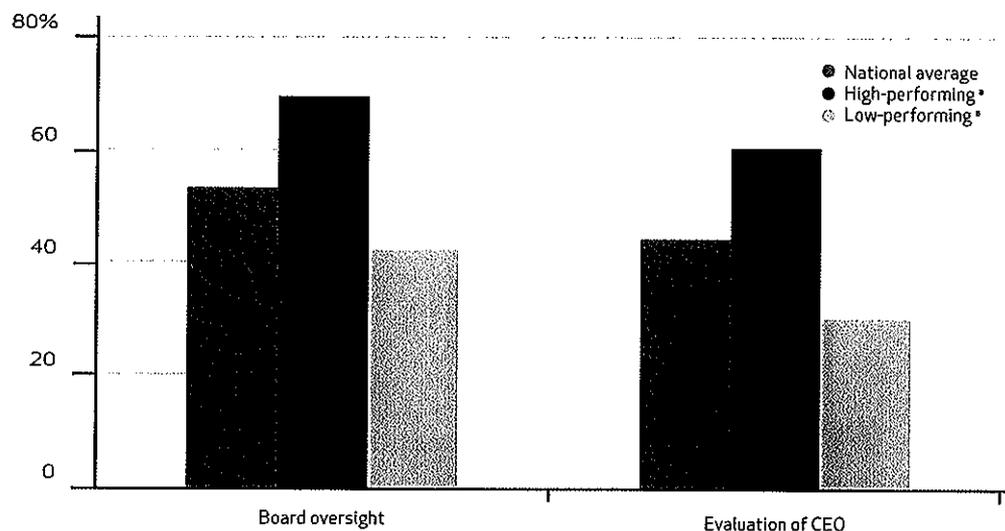
sight and CEO evaluation (data not shown) were financial performance (high-performing, 70 percent, versus low-performing, 75 percent), operations (13 percent, 42 percent), business strategy (27 percent, 20 percent), patient satisfaction (27 percent, 21 percent), and community benefit (20 percent, 8 percent).

**PERCEIVED INFLUENCES ON QUALITY OF CARE** Only 20 percent of respondents reported that the chairperson of the board, the board itself, or one of the board's committees was one of the two most influential quality forces in their hospital.<sup>13</sup> Board chairs from high-performing hospitals were nearly four times as likely as those from low-performing hospitals to report that the board was influential (38 percent versus 11 percent). In contrast, 69 percent of board chairs reported that the CEO was one of the two entities with the greatest influence on quality.

**BOARD CHAIRPERSON'S FAMILIARITY WITH AND PERCEPTIONS OF CURRENT PERFORMANCE** More than two-thirds of board chairs reported being somewhat or very familiar with the Joint Commission core measures or with HCA measures. Chairs from high-performing hospitals were significantly more likely ( $p < 0.001$ ) than those from low-performing hospitals to report being somewhat or very familiar (80 percent versus 64 percent; data not shown). When asked about their current level of performance, respondents from

#### EXHIBIT 1

Percentage Of Hospital Board Chairs Reporting That Quality Of Care Is One Of The Top Two Priorities For Board Oversight Or Evaluation Of CEO Performance, 2007-08



**SOURCE** Authors' analysis of their own survey data. **NOTE** CEO is chief executive officer. \*Statistical significance ( $p < 0.001$ ) for comparisons of the difference between the highest- and lowest-performing hospitals. Rates are adjusted for the number of beds, region, location (urban versus rural), teaching status, and ownership.

66 percent of U.S. hospitals rated their institution's performance on the Joint Commission core measures or HQA measures as better or much better than that of the typical U.S. hospital (Exhibit 2). Only 1 percent reported that their institution's performance was worse or much worse than the typical hospital. Among the low-performing hospitals, no respondent reported that their performance was worse or much worse than that of the typical U.S. hospital, while 58 percent reported their performance to be better or much better.

**PERFORMANCE REPORTING, AGENDA SETTING, AND BOARD FUNCTION** We found that quality performance was on the agenda at every board meeting in 63 percent of U.S. hospitals, and financial performance was always on the agenda in 93 percent of hospitals (Exhibit 3). Fewer than half of the hospitals spent at least 20 percent of the board's time on quality of care (a similar number spent that much time on financial performance). Nearly three in five boards had a quality subcommittee (Exhibit 3), and 72 percent regularly reviewed a quality dashboard. There were sizable gaps in most ratings between high- and low-performing institutions. For example, 91 percent of high-performing hospitals regularly reviewed a quality dashboard, compared with only 62 per-

cent of low-performing hospitals (Exhibit 3).

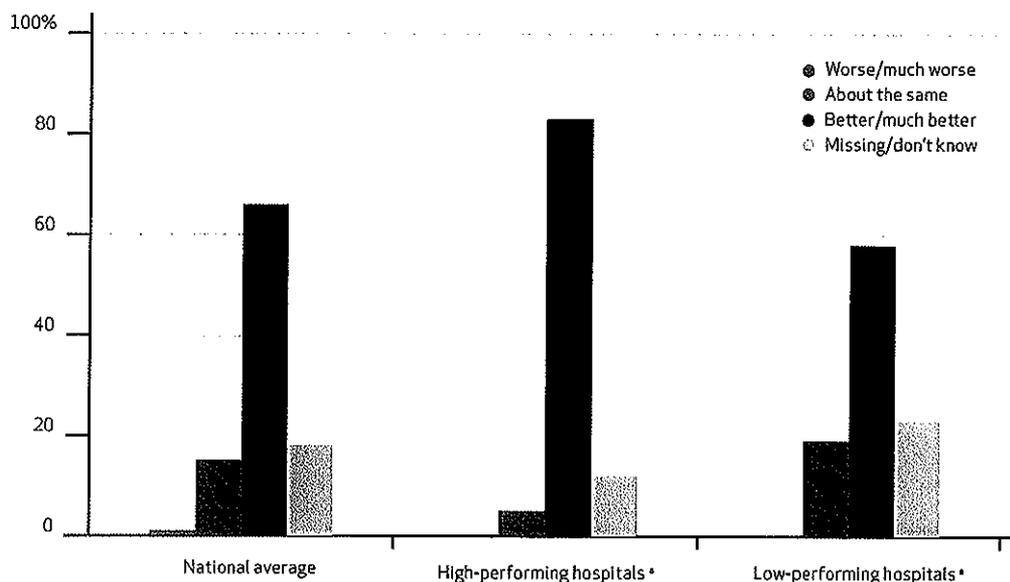
**BOARD PRIORITY SETTING** Most respondents reported that their boards had established, endorsed, or approved goals in four areas of quality<sup>14</sup>: hospital-acquired infections (82 percent), medication errors (83 percent), the HQA/Joint Commission core measures (72 percent), and patient satisfaction (91 percent). In three areas, high-performing hospitals were more likely than low-performing hospitals to have established goals to improve care, and were also more likely to publicly disseminate those goals.

## Discussion

Among our nationally representative sample of chairs of boards from nonprofit U.S. hospitals, a little over half identified clinical quality as one of the two top priorities for board oversight. Although 69 percent of board chairs thought that the CEO had great influence on quality of care, just 44 percent identified quality performance as one of the two most important criteria for evaluating the CEO's performance. Programmatic emphasis on quality was not uniformly high. Also, although only a few board chairs had work experience in the health care sector, fewer than one-third of nonprofit boards sampled had for-

### EXHIBIT 2

Hospital Board Chairs' Perceptions Of Hospital Performance, Compared With A Typical U.S. Hospital, On The Joint Commission Core Measures, 2007-08



**SOURCE** Authors' analysis of their own survey data. \*Statistical significance ( $p < 0.001$ ) for comparisons of the difference between the highest- and lowest-performing hospitals. Rates are adjusted for the number of beds, region, location (urban versus rural), teaching status, and ownership.

## EXHIBIT 3

## The Function Of Boards Among All U.S. Hospitals, As Well As Among High- And Low-Performing Hospitals, 2007-08

	National average (%)	High-performing (%) <sup>a</sup>	Low-performing (%) <sup>a</sup>	p value <sup>b</sup>
Quality performance is on the agenda at every board meeting	63	74	57	0.003
Financial performance is on the agenda at every board meeting	93	90	95	0.15
At least 20% of board time is spent on clinical quality	42	54	34	0.001
At least 20% of board time is spent on financial performance	45	36	56	0.002
Board has a quality subcommittee	59	74	52	0.001
Subcommittee reports to board at every meeting	64	71	60	0.15
Board reviews quality dashboard regularly	72	91	62	<0.001
Board reviews the following data on at least a quarterly basis				
Hospital-acquired infections	69	77	62	0.007
Medication errors	69	75	63	0.03
Joint Commission's core measures	57	69	45	<0.001
Patient satisfaction	76	80	74	0.28

**SOURCE** Authors' analysis of their survey data. <sup>a</sup>Adjusted for hospital size using number of beds, hospital region, location (urban versus rural), teaching status, and ownership (public versus private). <sup>b</sup>Difference between high- and low-performing hospitals.

mal training programs that include clinical quality. Two-thirds of boards had quality as a agenda item at every meeting, and 59 percent had a quality subcommittee.

In contrasting governance between high- and low-performing hospitals, we found sizable differences in self-perceived expertise of the board, participation in formal training programs that incorporate quality, and self-perceived ability to influence care. There was a nearly thirty-percentage-point difference in prioritizing quality for board oversight and a twofold gap in using quality performance in CEO evaluation. We found large variations in whether quality was an ever-present part of the board's agenda, whether the board had a quality subcommittee, or whether it reviewed a dashboard regularly to monitor quality performance.

It might not be surprising that engaged hospital boards can affect the quality of care in an institution, even if strong evidence of their impact had been lacking. Prominent organizations such as the National Quality Forum and the Institute for Healthcare Improvement have established efforts to engage boards in quality management despite an absence of compelling evidence demonstrating that board practices affect quality of care. Our data provide evidence of an association, although we cannot affirm a causal link. Instead of the board's being the instigator of quality performance, it is equally possible that CEOs or other senior managers seek out boards that affirm their own priorities and investments in quality improvement activities. Whether the focus on performance comes from the management, the board, or some combination may vary across institutions.

Given that approximately half of the hospital

boards did not rate quality of care as a top priority for board oversight or for CEO performance evaluation, the path to effectively engaging boards in quality-of-care issues will likely be challenging. Most boards have primarily focused on financial issues, assuming that their quality of care is adequate. However, the lack of awareness of their hospital's relative quality performance creates optimism that an educational campaign directed at board members might provide impetus for greater attention to quality improvement. Changing board practices may be a formidable task, given that quality of care is not a high priority for many board chairs. With hospitals' financial margins at 2-3 percent nationally and likely even lower in the recent economic downturn,<sup>15</sup> the focus on financial issues may reflect the reality of assuring financial viability for many hospitals. It is notable that boards of low-performing hospitals reported spending more time on issues of financial performance than those of high-performing hospitals did.

**OTHER RELATED FINDINGS** Although this study provides the first national survey of board chairs linked to quality performance, others have linked board practices and quality of care. Maulik S. Joshi and colleagues interviewed twenty-three board chairs, correlated their knowledge and practices with clinical quality in the institutions they oversaw, and found a modest relationship.<sup>16</sup> Bryan J. Weiner and colleagues surveyed hospital leaders, primarily CEOs, and found that when boards were engaged in quality-of-care issues, hospitals were more likely to have quality improvement programs.<sup>17</sup> They did not directly examine the relationship of board practices to quality of care. Others have examined board practices and their impact on

quality through individual case studies.<sup>18,19</sup> In related work on governance, H. Joanna Jiang and colleagues attempted to survey CEOs; among the 12 percent who responded to the survey, those whose hospital boards were more engaged with quality generally had lower mortality rates and better performance on process measures for common medical conditions.<sup>20,21</sup> Finally, Thomas Vaughn and colleagues used a Web-based survey of CEOs in eight states<sup>22</sup> and found that hospitals with boards that were more engaged in quality management performed better on a quality index related to hospital outcomes.

**STUDY LIMITATIONS** There are limitations to our study. First, as in any survey, there are concerns about the generalizability of the findings and nonresponse. Our response rate of 78.3 percent from a sample of nearly one-third of all nonprofit U.S. hospitals should be reassuring. Another concern is that the low-performing hospitals in our sample were far more likely than the high-performing hospitals to be small. To address potential confounding, we used a variety of analytic techniques. With each approach, we obtained nearly identical results.

Another important limitation is that we could

not determine the direction of causality: whether engagement of boards leads to higher quality, or whether high-quality institutions had managers that sought out boards to confirm their priorities. Our findings suggest that boards play an important role in many high-performing institutions. However, the relationship is likely to be bidirectional at other hospitals. Finally, we did not examine for-profit hospitals, which make up nearly 15 percent of all U.S. hospitals.

**CONCLUSION** Among board chairs of nonprofit U.S. hospitals, in conclusion, we found less-than-optimal focus on clinical quality and large differences between high- and low-performing hospitals. Major opportunities exist to shift the knowledge, training, and practices of hospital boards to promote a focus on improved clinical quality. Yet nearly half of hospital board chairs did not see quality as a top priority, which points to the difficult road ahead. Whether changing a board's priorities and practices translates into better care for patients is unclear. Given the large differences in governance between the highest- and lowest-performing U.S. hospitals, this area represents a tempting target for intervention. ■

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## NOTES

- 1 McGlynn EA, Asch SM, Adams J, Keeseey J, Hicks J, DeCristofaro A, et al. The quality of health care delivered to adults in the United States. *N Engl J Med.* 2003;348(26):2635-45.
- 2 Schoen C, Davis K, How SK, Schoenbaum SC. U.S. health system performance: a national scorecard. *Health Aff (Millwood).* 2006;25:w457-75.
- 3 Jha AK, Li Z, Orav EJ, Epstein AM. Care in U.S. hospitals—the Hospital Quality Alliance program. *N Engl J Med.* 2005;353(3):265-74.
- 4 Williams SC, Schmaltz SP, Morton DJ, Koss RG, Loeb JM. Quality of care in U.S. hospitals as reflected by standardized measures, 2002–2004. *N Engl J Med.* 2005;353(3):255-64.
- 5 Institute for Healthcare Improvement. Getting boards on board [Internet]. Cambridge (MA): IHI; [cited 2008 Sep 18]. Available from: <http://www.ihl.org/IHI/Programs/Campaign/BoardsonBoard.htm>
- 6 National Quality Forum. Hospital governing boards and quality of care: a call to responsibility. Washington (DC): NQF; 2004 Dec 2.
- 7 The Technical Appendix is available online at <http://content.healthaffairs.org/cgi/content/full/29/1/hlthaff.2009.0297/DC1>
- 8 Kahn CN, 3rd, Ault T, Isenstein H, Potetz L, Van Gelder S. Snapshot of hospital quality reporting and pay-for-performance under Medicare. *Health Aff (Millwood).* 2006;25(1):148-62.
- 9 Unadjusted results are presented in Appendix Exhibits 6a and 6b, online as in Note 7.
- 10 See Appendix Exhibit 1 (Note 7).
- 11 See Appendix Exhibit 2 (Note 7).
- 12 See Appendix Exhibit 3 (Note 7).
- 13 See Appendix Exhibit 4 (Note 7).
- 14 See Appendix Exhibit 5 (Note 7).
- 15 Medicare Payment Advisory Committee. Report to the Congress: Medicare payment policy. Washington (DC): MedPAC; 2005.
- 16 Joshi MS, Hines SC. Getting the board on board: engaging hospital boards in quality and patient safety. *Jt Comm J Qual Patient Saf.* 2006;32(4):179-87.
- 17 Weiner BJ, Shortell SM, Alexander J. Promoting clinical involvement in hospital quality improvement efforts: the effects of top management, board, and physician leadership. *Health Serv Res.* 1997;32(4):491-510.
- 18 Dulworth S. Hospitals and the competitive edge: how educated boards make a difference. *J Healthc Qual.* 2003;25(6):28-30,41.
- 19 Orlikoff JE, Totten MK. Trustee workbook 2. Best practices in governance: what makes great boards great. *Trustee.* 2003;56(4):15-8.
- 20 Jiang HJ, Lockee C, Bass K, Fraser I. Board engagement in quality: findings of a survey of hospital and system leaders. *J Healthc Manag.* 2008;53(2):121-34.
- 21 Jiang HJ, Lockee C, Bass K, Fraser I. Board oversight of quality: any differences in process of care and mortality? *J Healthc Manag.* 2009;54(1):15-29.
- 22 Vaughn T, Koepke M, Kroch E, Lehrman W, Sinha S, Levey S. Engagement of leadership in quality improvement initiatives: executive quality improvement surveys. *Journal of Patient Safety.* 2006;2(1):2-9.