



# Case Study

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For more information about this study, please contact:

Jennifer Edwards, Dr.P.H.  
Health Management Associates  
[jedwards@healthmanagement.com](mailto:jedwards@healthmanagement.com)

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## Brigham and Women's Hospital: “Moving the Needle” Takes People, Processes, and Leadership

JENNIFER EDWARDS, DR.P.H.  
HEALTH MANAGEMENT ASSOCIATES

### Vital Signs

*Location:* Boston, Mass.

*Type:* Nonprofit teaching hospital, affiliated with Harvard Medical School and a member of the Partners HealthCare System, an integrated health care delivery system that includes Massachusetts General Hospital and other Boston-area facilities.

*Beds:* 777

*Distinction:* Top 5 percent of more than 700 large hospitals (300+ beds) in the portion of patients who gave a rating of 9 or 10 out of 10 when asked how they rate the hospital overall. Timeframe: October 2006 through June 2007. To be included, hospitals must have reported at least 300 surveys. See the [Appendix](#) for full methodology.

This case study describes the strategies and factors that appear to contribute to high patient satisfaction at Brigham and Women's Hospital. It is based on information obtained from interviews with key hospital personnel and materials provided by the hospital during September 2008.



### SUMMARY

The focus on customer service at Brigham and Women's Hospital (BWH) dates back to the 1990s, when patient satisfaction surveys were first used. However, a concerted effort to “move the needle” to improve patient satisfaction began in 2002. That year, the new CEO, Gary Gottlieb, M.D., M.B.A., made service excellence one of the hospital's top priorities. Gottlieb's leadership on this issue is evident in three initiatives over the past six years:

- BWH allocated significant new funding for quality measurement and process improvement work, including establishing and expanding a Center for Clinical Excellence;

- BWH developed a management information system for hospital leaders that tracks patient and family experiences, along with other hospital performance indicators; and
- BWH sought to enhance patients' experiences by working with frontline staff, including implementing new recruitment, training, management, and improvement strategies.

As a result, Brigham and Women's has seen its patient satisfaction scores rise considerably, compared with other teaching hospitals. Its experience suggests a few lessons for hospitals seeking to enhance patient experience:

- Achieving high patient satisfaction scores is possible, even for hospitals that have reached only average performance levels. Brigham and Women's Press Ganey survey scores rose dramatically in six years, with several departments moving from the 50th to the 90th percentile.
- A single strategy for improvement will not work. To raise patient satisfaction scores and sustain the gains, Brigham and Women's pursued three strategies simultaneously and deliberately: securing strong leadership commitment; improving care processes; and training a customer-focused staff.

## **ORGANIZATION**

BWH is a 777-bed teaching hospital located in Boston. BWH is a founding member of Partners HealthCare System, the largest integrated health care delivery network in New England, and a major teaching site for Harvard Medical School. In 2007, inpatient admissions at BWH totaled approximately 44,000.

Like a growing number of hospitals, Brigham and Women's posts quality scores on its public Web site. Notably, it also posts the Joint Commission's most recent review of the hospital, including plans to address deficiencies.

BWH has earned numerous awards for quality, safety, and patient-centeredness. It has been named one of the top five hospitals in the University HealthSystem Consortium 2007 Quality and Accountability Study. In 2008, it was listed on the *U.S. News and World Report* "Top Hospital" honor roll for the 15th year in a row. In 2007, for the third year in a row, BWH was named as one of 33 adult hospitals on the Leapfrog Group's list of "Top Hospitals" for making significant strides in improving quality and patient safety.

## **STRATEGIES FOR SUCCESS**

Over the past six years, CEO Gary Gottlieb and the leadership team have focused on improving the quality of care and patient satisfaction while maintaining BWH's status as a leading teaching and research hospital in a competitive health care market. Key members of the leadership team include Michael Gustafson, M.D., M.B.A., vice president for clinical excellence; Anthony Whittemore, M.D., chief medical officer; and Mairead Hickey, R.N., Ph.D., chief nursing officer; as well as the chiefs council of academic department chairs.

## **Demonstrating Leadership Commitment**

The leadership commitment to patient satisfaction is evident in the hospital's financial commitment to data collection, monitoring, and improving; investment in staff to address problems and facilitate improvement; and repeated emphasis of the goals. Quality, patient safety, and service excellence are part of the agenda at all senior leadership meetings.

Hospital leaders encourage multidisciplinary collaborations, particularly among physicians and nurses, to improve patient experiences. Many improvement projects are co-led by a physician and a nurse. Setting an example, Whittemore, the chief medical officer, and Hickey, the chief nursing officer, chair many committees together. Though it is sometimes hard to get physicians to pay attention to quality improvement initiatives, having the chief or the department chairperson involved has helped greatly.

## Hearing from Patients

Measuring patient satisfaction began at BWH in the late 1990s, with the use of a Picker Institute survey that assessed the patient-centeredness of clinical care, hospitality features of the hospital, and patients and families' interpersonal experiences with staff. In 2001, the hospital began using the Press Ganey survey, which includes many of the same concepts but collects more detailed information for multiple parts of patients' care experiences. It has the additional benefit of being used by many hospitals, against which BWH can benchmark its performance. Public reporting of Press Ganey patient satisfaction data began in 2004.

The hospital's sampling strategy has grown over time, so that 70 percent of all discharged patients are now surveyed within a week of discharge. A relatively high proportion of patients and families—between 30 and 35 percent—respond, probably due in part to the survey reaching them soon after discharge, when their hospital experience is still vivid. Because BWH receives 10,000 to 12,000 responses each year, the hospital's Center for Clinical Excellence staff are able to examine the data in multiple ways, including by nursing unit, clinical area, and department.

Every doctor for whom at least 20 to 30 patient responses per year are available receives a report on their patients' experiences. At first, doctors did not

find these data useful or compelling. However, BWH has been able to demonstrate that patient dissatisfaction as measured on Press Ganey surveys tracks consistently with complaints lodged directly to the hospital as well as with malpractice claims against individual physicians. Gustafson says these trends have encouraged physicians to pay attention to the survey results.

## Bidirectional Performance Analysis and Improvement

The detailed information that BWH has generated from Press Ganey surveys has facilitated the development of what Dorothy Goulart, R.N., M.S., director of performance improvement, calls a "bidirectional perspective." She and her staff of performance improvement specialists look across the dozen departments or service lines reviewed in the survey as well as along its 11 sections, and plot performance on these two dimensions. This type of analysis made them aware that, when pain management improves, other scores not directly related to pain, such as satisfaction with other aspects of nursing care, also rise. Similarly, satisfaction with room service raises patients' satisfaction with their overall hospital experience. The survey data have thus led to improvement strategies specific to particular services as well as cross-department strategies.

As one example of the performance improvement work undertaken over the last seven years,

### Patient and Family Advisory Council in the NICU

A small but growing number of hospitals are using Patient and Family Advisory Councils to gain insights into patients and families' concerns.<sup>1</sup> BWH recently invited two parents of former neonatal intensive care unit (NICU) patients to work with the unit's physician, nursing, and administrative leaders to identify ways the unit could better serve their needs. These five individuals took a training course to learn how to work as an advisory council, then began regular meetings. The early discussions focused on facility issues, which were relatively easy to address. Having developed some trust and confidence, the group is now moving into the much more challenging area of communication. Families at BWH, as at many hospitals, often feel out of the loop and isolated when their child is in the NICU. At the recommendation of the Advisory Council, families are now included in daily rounds, visiting policies have been revised, and a Web-based communication portal has been established. Hickey, the CNO, says, "The process has been very informative for NICU staff. When a patient or family member raises an issue, it is front and center with the staff. Hearing it from the family member's perspective takes its importance to a new level."

<sup>1</sup> See <http://www.ahrq.gov/qual/advisorycouncil/adccouncil2.htm>.

Goulart describes the hospital’s work on the obstetrics unit. “When we started looking at data, our labor and delivery scores were very high, but the postpartum scores were low, around the 65th percentile,” she says. Hickey, Gustafson, and then director of women and newborn nursing, Paula Gillette, partnered with IDEO, a consulting firm, and the hospital’s Center for Clinical Excellence to develop several interventions to match staffing to the needs of patients. The first intervention was to find the right staff for the positions. This involved enlisting the help of frontline staff in interviewing new hires to ensure they understood the job and were well suited to the unit. Staff also wrote values statements to reflect how they wanted to perform their jobs. The hospital reinforced positive performance through a program called “Caught in the Act,” which recognized when someone exceeded expectations in their work. Employees received small gifts such as movie tickets, along with recognition by peers and in hospital newsletters.

In addition, the staff rewrote the patient education materials, providing better information on postnatal care, breastfeeding, and support for mothers and babies after discharge. After these changes, patients’ ratings of their postpartum care rose.

But in 2005, three years after initiating these changes, BWH saw their scores on postpartum care

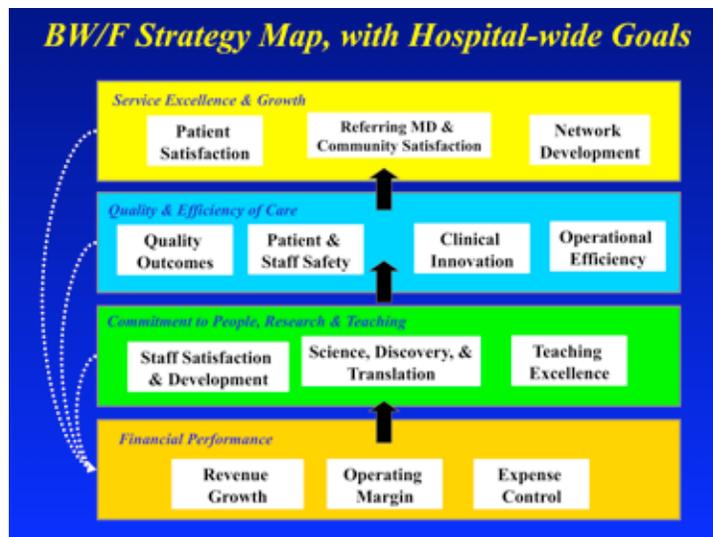
dipping and so tried new improvement strategies. They trained nurses and other frontline staff in ways to interact with patients and family members. Staff were coached on words and phrases that would be appropriate in different circumstances and encouraged to make eye contact with patients and family members. Similar types of training for staff from such departments as transport, environmental services, and dietary have proven effective.

Nurse managers and other departmental supervisors took a four-hour training course on communication methods. They are tasked with setting clear expectations for their staff, observing patient interactions, and providing feedback. Additional interventions are under way to improve patients’ postpartum experiences, including streamlining room turnover, discharge processes, and the transporting of mothers and babies to waiting vehicles. BWH continues to track data to see if these interventions achieve greater patient satisfaction.

**Balanced Scorecard**

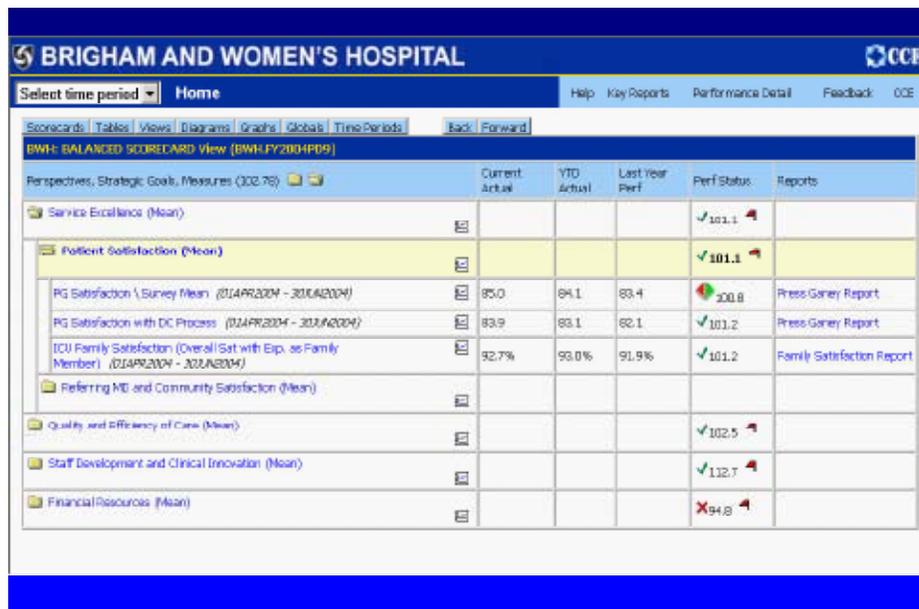
In 2001, Brigham and Women’s developed a Balanced Scorecard, which enables them to track changes in performance on a number of indicators (Figures 1 and 2). The term “balanced” reflects a shift from only monitoring financial performance or productivity to tracking customer and employee satisfaction, as well.

**Figure 1. Balanced Scorecard Strategy Map**



Source: Brigham and Women's Hospital, 2008.

Figure 2. Balanced Scorecard Sample Page



Source: [www.brighamandwomens.org](http://www.brighamandwomens.org), fall 2008.

BWH was one of the first health care organizations to adapt this manufacturing industry tool to health care.

The four quadrants on BWH's Balanced Scorecard are: Quality and Efficiency of Care; Commitment to People, Teaching, and Research; Financial Performance; and Service Excellence and Growth. The latter category tracks patient and family experiences, as well as levels of satisfaction among referring physicians and hospitals. Together, these groups comprise BWH's key external customers. The Press Ganey data supply the inpatient measures of patient and family experience. Other surveys assess the experiences of patients who use the emergency department and ambulatory care services.

### Center for Clinical Excellence

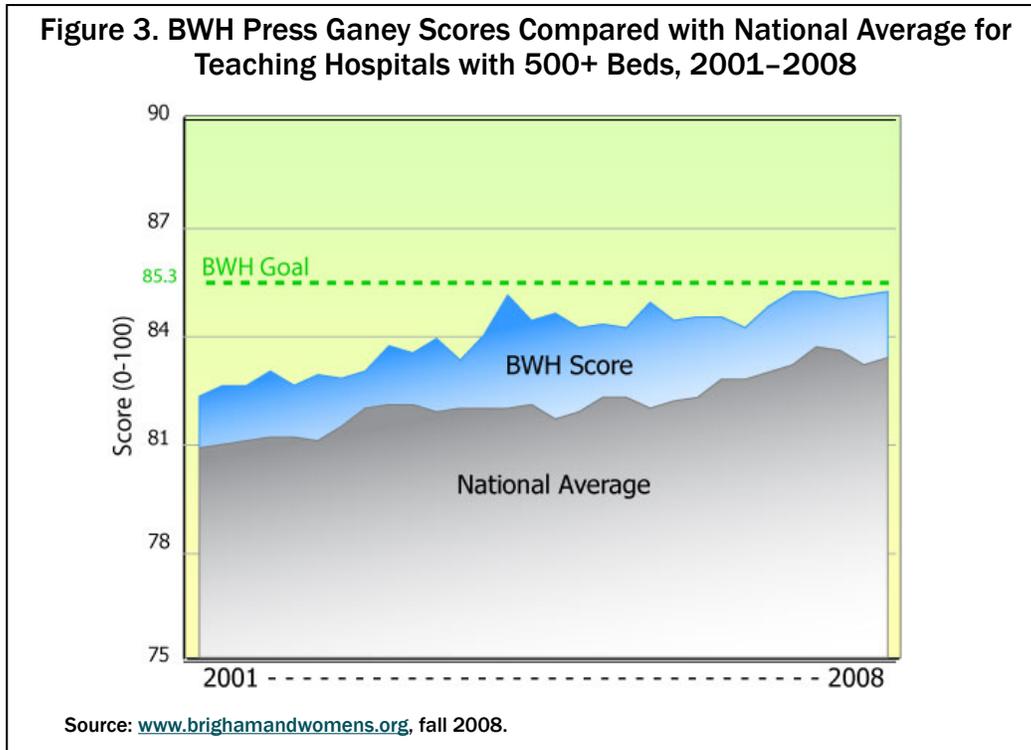
To support quality and efficiency in patient care, BWH created a Center for Clinical Excellence in 2001. Reflecting a major institutional commitment, the Center has grown to include 30 full-time employees who work throughout the institution on ongoing improvement efforts as well as special projects, such as launching new services and integrating care across sites. The resources they bring to a problem include data, tools, improvement methods, content expertise,

team facilitation, and high-level project management. BWH leaders believe the Center for Clinical Excellence has been one of the cornerstones of their successful efforts to improve patient and staff satisfaction, as well as quality outcomes and patient safety.

### RESULTS

BWH has seen their performance on Press Ganey patient satisfaction surveys rise over the last seven years—moving closer to the goal of achieving 85.3 percent overall satisfaction, which would rank the hospital in the 90th percentile compared with other large teaching hospitals. They have achieved this goal in several departments, though the hospital-wide average shows there is still room for improvement. Figure 3 shows the performance trends over time. The benchmark is all teaching hospitals with 500 or more beds.

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) data are newly available, so there are no trends to report. The Table shows calendar year 2007 data for the hospital. Scores are much lower overall than Press Ganey scores, and variation between departments cannot be seen in the aggregate scores. BWH scored at or near national averages on many specific measures of patient experi-



ences. On measures of noise and bathroom cleanliness, the hospital fell well below national averages.

However, on the two global measures, a patient's overall rating of their hospital experience and willingness to recommend the hospital to friends or family, BWH exceeds national averages by several percentage points. At BWH, hospital leaders expect to apply the same principals that have helped them to improve performance on Press Ganey surveys to raise their HCAHPS scores.

Hospital leaders tie success in achieving patient satisfaction to the overall financial success of the institution. In particular, the hospital has experienced higher inpatient and outpatient volumes in recent years, including inpatient occupancy rates that average over 90 percent. The *Boston Business Journal* reports that operating margins have risen during Gottlieb's tenure from 1.9 percent in his first year to 5.2 percent

in the second quarter of 2008. Total surplus has risen from \$23 million in 2002 to exceed \$90 million in 2008.<sup>1</sup>

### LESSONS LEARNED

Brigham and Women's experience offers the following lessons to other hospitals seeking to improve patients' satisfaction with their care:

- Major improvement in patient satisfaction scores can be achieved. In the case of BWH, Press Ganey scores rose dramatically in the past six years, with some departments moving from the 50th to the 90th percentile. The expectation is that similar strategies will improve the hospital's HCAHPS scores as well.
- To raise patient satisfaction scores and sustain the gains, hospitals should pursue many improvement strategies at once. Gustafson says three simultaneous changes have made a difference at Brigham and Women: strong leadership commitment; improving key care

<sup>1</sup> R. Celaschi, "Brigham and Women's Gottlieb Is a Man with a Mission," *Boston Business Journal*, August 15–21, 2008.

delivery processes; and maintaining a customer-focused staff.

The biggest challenge to continuing to improve is the complacency that can come when you are already doing well. As an institutional leader, Gustafson says, it is hard to convince people to do more when they see strong scores.

Goulart says the greatest challenge for frontline staff is to become problem solvers. Given their training and focus on meeting patients' immediate needs, it is more natural for frontline staff to work around a problem than to try to solve it for the long term. BWH is using Lean concepts and tools adapted from the Toyota Production System to encourage frontline staff

to be critical thinkers, identify problems, and get help fixing them and to teach supervisors to support staff in these efforts.

Gustafson noted another challenge: for BWH to balance their two sides, that of a "warm fuzzy hospital with excellent patient experience" and a top research and teaching facility.

### FOR MORE INFORMATION

Contact Michael Gustafson, M.D., M.B.A., vice president for clinical excellence, (617) 732-8937, or Dorothy Goulart, R.N., M.S., director of performance improvement, (617) 732-7729.

**Table. Brigham and Women's HCAHPS Scores Compared with National Average, CY 2007**

Percent of patients who reported that:	BWH	National Average
Their nurses "always" communicated well.	79%	74%
Their doctors "always" communicated well.	81%	80%
They "always" received help as soon as they wanted.	63%	63%
Their pain was "always" well controlled.	70%	68%
Staff "always" explained about medicines before giving it to them.	59%	59%
Their room and bathroom were "always" clean.	68%	70%
The area around their room was "always" quiet at night.	48%	56%
Yes, they were given information about what to do during their recovery at home.	86%	80%
Gave their hospital an overall rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest).	76%	64%
Yes, they would definitely recommend the hospital.	83%	68%

Source: <http://www.hospitalcompare.hhs.gov/Hospital/Search/compareHospitals.asp>, accessed fall 2008.

## APPENDIX. SELECTION METHODOLOGY

Selection of hospitals for inclusion in this case study series is based on data voluntarily submitted by hospitals to the Centers for Medicare and Medicaid Services (CMS). Between October 2006 and June 2007, hospitals or their survey vendors sent a survey to a random sample of recently discharged patients, asking about aspects of their hospital experience. The survey instrument, called the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), was developed with funding from the Agency for Healthcare Research and Quality (AHRQ). CMS posts the data on the Hospital Compare Web site ([www.hospitalcompare.hhs.gov](http://www.hospitalcompare.hhs.gov)).

The survey contains several questions about nurse and physician communication, the physical environment, pain management, and whether the patient would recommend the hospital to family or friends. One question inquires about the patient's overall experience: "Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?"

HCAHPS is a relatively new survey, and hospitals across the country are not yet achieving very high scores across all of the questions. Nevertheless, some hospitals are scoring significantly better than others. By profiling hospitals that score within the top 5 percent (among those that submitted at least 300 surveys) on the question concerning overall experience, this case study series attempts to present factors and strategies that might contribute to and/or improve patient satisfaction.

An initial list of top scorers among all hospitals submitting HCAHPS data contained a disproportionate number of very small, southern hospitals.<sup>1</sup> Concerned about the ability to generalize experiences and lessons and replicate strategies, we profiled one hospital from this list but chose to then examine high scorers among larger hospitals that were more diverse in: region of the country, urban/suburban/rural setting, and teaching/nonteaching status. We thought that such diversity would provide lessons that would be useful to a broader range of U.S. hospitals.

Therefore, for this case study series, most hospitals were selected from among 736 large hospitals (300 or more beds), primarily based on their ranking in the percentage of survey respondents giving a 9 or 10 rating on the "overall" HCAHPS question. In the future, we will present case studies of hospitals of different size, ownership status (e.g., public, private), and other peer groupings.

While high HCAHPS ranking was the primary criteria for selection in this series, the hospitals also had to meet the following criteria: ranked within the top half of hospitals in the U.S. on a composite of Health Quality Alliance process-of-care measures as reported to CMS; full accreditation by the Joint Commission; not an outlier in heart attack and/or heart failure mortality; no major recent violations or sanctions; and geographic diversity.

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<sup>1</sup> Further examination and analysis may reveal reasons for this.

#### ABOUT THE AUTHOR

Jennifer Edwards, Dr.P.H., M.H.S., is a principal with Health Management Associates' New York City office. Jennifer has worked for 20 years as a researcher and policy analyst at the state and national levels to design, evaluate, and improve health care coverage programs for vulnerable populations. She worked for four years as senior program officer at The Commonwealth Fund, directing the State Innovations program and the Health in New York City program. She has also worked in quality and patient safety at Memorial Sloan-Kettering Cancer Center, where she was instrumental in launching the hospital's Patient Safety program. Jennifer earned a Doctor of Public Health degree at the University of Michigan and a Master of Health Science degree at Johns Hopkins University.

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This study was based on publicly available information and self-reported data provided by the case study institution(s). The Commonwealth Fund is not an accreditor of health care organizations or systems, and the inclusion of an institution in the Fund's case studies series is not an endorsement by the Fund for receipt of health care from the institution.

The aim of Commonwealth Fund–sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.

