



Research Brief

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HCAHPS Survey: Patients' Perspectives of Care

Health care quality and performance improvement are critical components of the National Association of Public Hospitals and Health System's (NAPH) three-year strategic plan. That document calls upon NAPH to "enhance the quality of patient care in safety net hospitals to strengthen member performance and to underscore the need for continuing financial support." As a result, the National Public Health and Hospital Institute (NPHHI), the research affiliate of NAPH, has been involved with several major quality improvement-related activities, including tracking NAPH member performance on quality indicators, participating extensively in national quality organizations such as the National Quality Forum and the Hospital Quality Alliance, and using research findings to inform NAPH's educational and advocacy efforts. In 2006, NPHHI began publishing a series of Research Briefs on quality-related topics, including *Quality Measures: A Major Focus for NAPH* (October 2006) and *NAPH Members Perform Well on CMS Core Measures* (June 2007). The current Research Brief, the third in the

quality series, examines issues related to patient satisfaction.

Patient satisfaction is an important part of how hospitals and the Centers for Medicare and Medicaid Services (CMS) measure quality of care. CMS has recently begun publicly reporting results of a patient satisfaction survey called the "Hospital Consumer Assessment of Healthcare Providers and Systems" ("Hospital CAHPS" or "HCAHPS") as a way to provide incentives for hospitals to improve their quality of care and enhance public accountability. Although initially a voluntary program at its inception in 2006, CMS now links participation in HCAHPS with reimbursement. Hospitals can lose 2.0 percentage points from their annual Medicare payment update if they choose not to participate in HCAHPS data collection and reporting.

In March 2008, CMS published the first set of voluntarily-supplied HCAHPS data on the *Hospital Compare* website,¹ covering the reporting period of October 2006 through June 2007. This included 48 NAPH members. However, because CMS publishes HCAHPS results only for hospitals that

have submitted one full year's worth of data, CMS' August 2008 data release included only six additional member hospitals. As shown in the charts below, NAPH member hospitals performed as well as, or better than, the national average in several key areas.

This Research Brief will help provide insight into the HCAHPS survey by exploring:

- Factors leading to its development;
- Its fiscal implications; and
- Performance of NAPH member hospitals in the voluntary data reporting period and the initial mandatory reporting period, as well as how the scores changed over time.

Background and Development of HCAHPS Survey Tool

Historically, hospitals and health systems have collected information on patient satisfaction using their own measures and methods, making it difficult for patients to compare one facility to another. HCAHPS, an evolving project led by CMS and the Agency for Healthcare Research and Quality (AHRQ), addresses this challenge by instituting a standardized survey instrument and data collection methodology to ascertain and compare patient satisfaction across all U.S. hospitals. Its initial version, "CAHPS I" (1995-2001), focused on measuring

Hospitals that do not participate in HCAHPS will be subject to a 2.0 percentage point reduction in CMS' annual payment update. Given that public hospitals already operate on narrow margins, such cuts could have a dramatic effect on public hospital viability.

patient perspectives on health plans. Under the more recent "CAHPS II" (2002-2007) effort, AHRQ contracted with RAND, Harvard Medical School, and the American Institutes for Research to develop patient satisfaction surveys for multiple care settings, including hospitals.²

HOSPITAL CAHPS DEVELOPMENT

HCAHPS development began with a literature review of methodological issues, as well as a public solicitation for hospital patient surveys currently in use, which the CAHPS II team reviewed for reliability, validity, and concordance with domains the Institute of Medicine identified as indicators of quality health care.³ The development team also conducted consumer focus groups, public "web chats," and vendor meetings to solicit stakeholder comments. The resulting 66-item draft survey was submitted to CMS in January 2003,⁴ and reduced to 32 items later that year after being piloted in three states (Maryland,

Arizona, and New York). In July 2005, the National Quality Forum (NQF) officially endorsed the finalized 27-item HCAHPS survey.^{5,6}

SCORING

Much like the CMS core process measures, a hospital's HCAHPS score for a particular measure reflects the percentage of "yes" responses to that survey question. For example, when patients are asked if they would recommend the hospital to family and friends, the percentage of patients that respond "yes" equals the hospital's overall score on that measure. The percentage for each hospital is then reported on CMS's *Hospital Compare* website and is shown in comparison to the average score of all reporting hospitals in both the state and the U.S.

The survey also includes six composite measures, which cluster multiple questions into a single metric. Each of the composite measures includes three possible responses: "always," "usually," or "sometimes/never." For example, the "nurse communication" composite measure asks the respondent to select whether "nurses always communicated well," "nurses usually communicated well," or "nurses sometimes/never communicated well." The percentage of respondents to the "always" question is the only score reported on the *Hospital Compare* website. Similarly, for the global measure (which asks for the patient's overall hospital rating), only the scores of "9" or "10" on a scale of 0-to-10 (0 being the worst, 10

TABLE 1 Final HCAHPS Survey Measures ⁷	
The Current HCAHPS Survey Includes:	
Six Composite Measures	Communication with Nurses Communication with Doctors Responsiveness of Hospital Staff Pain Management Communication About Medicines Discharge Information
Two Individual Items	Cleanliness of Hospital Environment Quietness of Hospital Environment
Two Global Items	Recommend the Hospital Overall Hospital Rating
SOURCE Centers for Medicare and Medicaid Services	

the best) are publicly reported. *Hospital Compare*, therefore, only shows the percentage of patients who would give the hospital an overall “high” rating.

MODE AND PATIENT-MIX ADJUSTMENTS

A large-scale experiment involving 27,229 discharges from 45 hospitals in 2006 enabled CMS to quantify potential bias in hospital-level HCAHPS data due to data collection mode, patient-mix, or non-response. As a result, CMS adjusts for mode and patient mix before reporting HCAHPS data on *Hospital Compare*.⁸ One study found that the patient-mix adjustment had a small impact on HCAHPS scores, but may have a larger effect on hospital ranking. It also concluded that the adjustment can lead to a reduction of bias in comparisons between hospitals.⁹

Studies indicate that adjustment does reduce bias in HCAHPS scoring, yet some wonder if these adjustments are sufficient to create an even playing field. For example, patients who receive emergency care have been found to rate their overall experience lower than patients receiving scheduled care,¹⁰ and public hospital patients are more likely than non-public hospital patients to be admitted through the emergency department (ED). CMS does adjust somewhat for ED treatment, but regional trauma centers fear that CMS does not adequately account for hospitals with high volumes of HCAHPS-participating ED patients, putting them at a disadvantage when compared to hospitals that lack a wide

range of emergency services. This is a particular concern for public hospitals. In 2006, the percentage of discharges for patients admitted through the ED was 44 percent for hospitals nationally,¹¹ compared with 55 percent at NAPH member facilities.¹²

Critics also suggest that CMS fails to account for other variables that might prevent equal comparison between public hospitals and hospitals nationally. For instance, workplace environment has been linked to quality of care, and variables like overcrowding, work interruptions, and number of available staff all relate to how patients are treated.¹³

Implementation of HCAHPS

SAMPLING

Samples for HCAHPS data are drawn randomly from eligible discharges on a monthly basis, which are then aggregated quarterly, and the most recent four quarters (i.e., 12 months) of data are publicly reported. Hospitals may switch the type of sampling, mode of survey administration, or survey vendor only at the beginning of each calendar year.¹⁴

To be eligible in the HCAHPS pool, patients must:

- Be 18 years or older at the time of admission;
- Have experienced a length of stay that includes at least one night (see operational definition below);
- Have received a non-psychiatric principal diagnosis at discharge; and
- Logically enough, be alive at the time of discharge.

The aggregated August 2008 NAPH HCAHPS data indicate that public hospitals continue to match or exceed national hospital averages.

Within this group, certain patients are excluded, including prisoners, patients with a foreign home address, and patients discharged to hospice care.¹⁵

To maintain statistical precision in the HCAHPS data, hospitals should obtain at least 300 completed HCAHPS surveys over the 12-month reporting period. However, data from all participating hospitals will be publicly reported, regardless of sample size, and those with fewer than 100 completed surveys will be noted as

such.¹⁶ To ensure validity, CMS urges smaller hospitals with fewer than 909 eligible discharges to survey all eligible discharges.¹⁷

HCAHPS DATA COLLECTION

Hospitals may collect HCAHPS data themselves or hire a vendor to do so. Those who collect the data, however, must first complete a mandatory training, follow quality assurance guidelines, develop a quality assurance plan, and participate in oversight

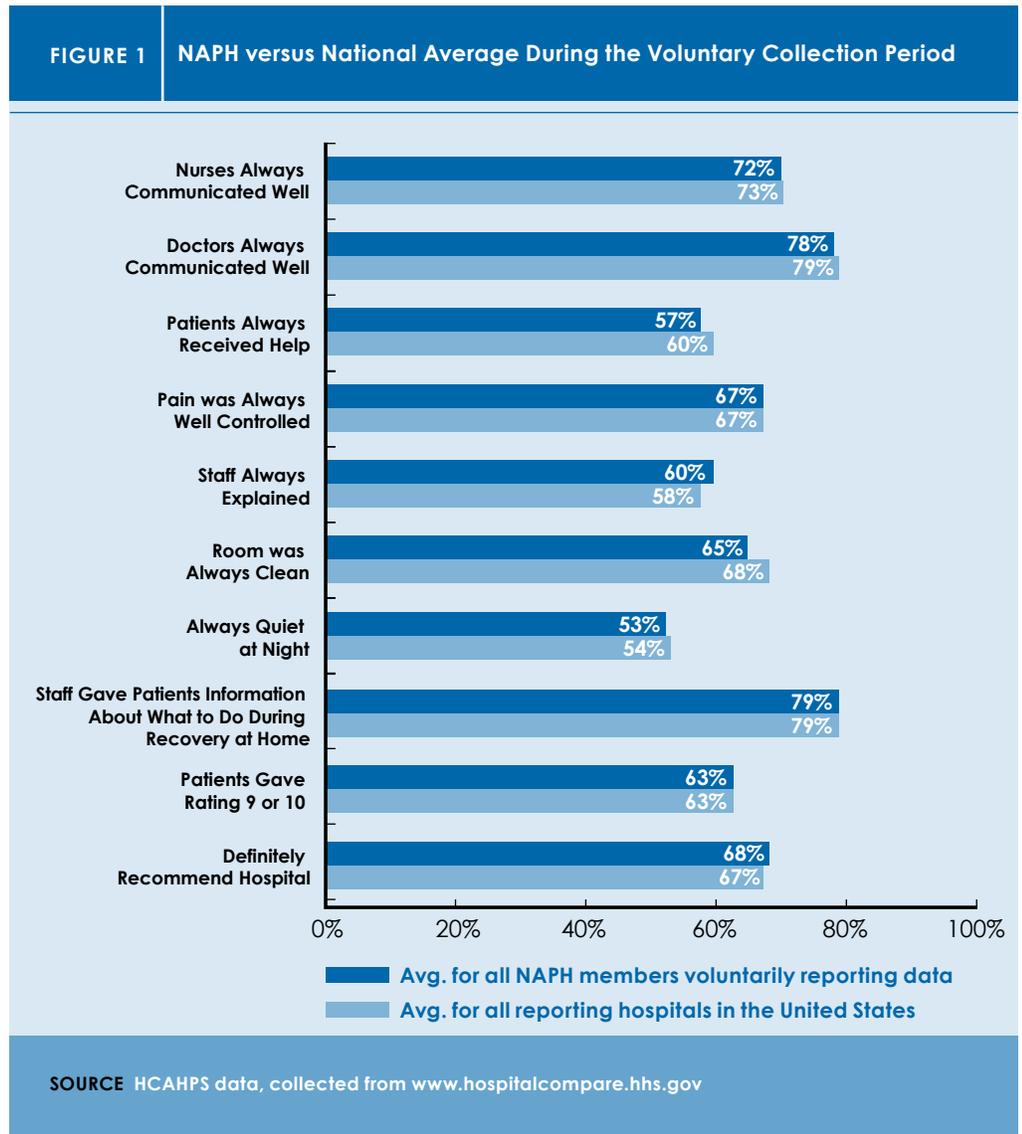
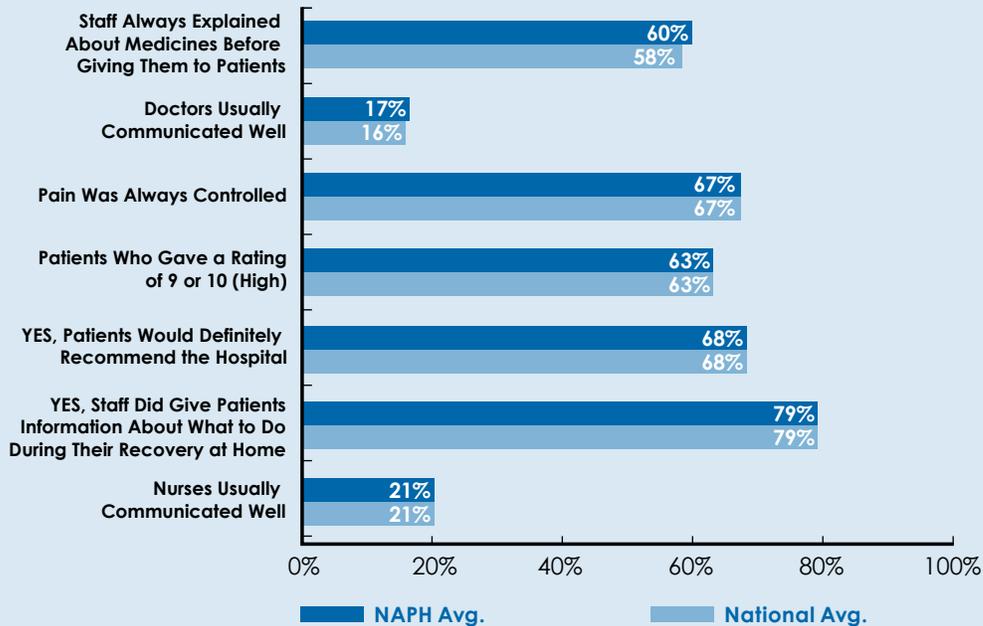


FIGURE 2

HCAHPS Measures for which NAPH Members' Performance Equals or Exceeds non-NAPH Member Performance



SOURCE HCAHPS data, collected from www.hospitalcompare.hhs.gov

activities. They also must demonstrate survey experience, survey capacity, and adhere to quality control procedures.

FINANCIAL IMPLEMENTATIONS

A study by Abt Associates Inc., commissioned by CMS, estimated that HCAHPS currently has a weighted cost of between \$3,300 and \$4,575 per hospital (or between \$11.00 and \$15.25 per completed survey). However, the cost of implementing HCAHPS along with other surveys is much less, an estimated \$978 per hospital (or \$3.26 per completed survey).¹⁸ Hospitals that do not participate in HCAHPS will be subject to a 2.0 percentage point reduction in CMS’s annual payment update. Given that public hospitals

already operate on narrow margins, such cuts could have a dramatic effect on public hospital viability.

Initial Performance of NAPH Member Hospitals

Because the initial HCAHPS collection was voluntary, the data does not entirely represent either NAPH or the true national average. A more robust picture of patient satisfaction will emerge as CMS receives data from more hospitals. However, the published data does allow researchers to gauge initial performance.

Aggregated participating NAPH member hospitals performed as well as, or better than, the national average in

several areas (see Figure 1). Specifically, patient satisfaction rates among both NAPH members and the industry average were indistinguishable for pain control, providing discharge information, and giving the hospital an overall high rating. Public hospitals performed slightly higher than the national average on “would recommend the hospital to others” and “staff always explained.” This is particularly meaningful given that most NAPH hospital patients are admitted through the ED, and patients seen on an emergency rather than a scheduled basis have lower satisfaction rates.¹⁹

Although based on a small number of hospitals, the data suggest that public hospitals can perform extremely well in key areas of patient satisfaction.

The initial data collection also indicated areas for improvement. For example, on the measure “patients always receive help,” aggregated NAPH members scored 57 percent, compared with the national average of 60 percent. Similarly, NAPH averaged 65 percent for “the room was always clean,” compared to a national average of 68 percent. NAPH averages were never more than three percentage points below the national average.

Latest Report of HCAHPS Data: First Mandatory Data Collection

The August 2008 data release on *Hospital Compare*, which was the first since CMS made HCAHPS reporting mandatory for full reimbursement, included more than one-third of NAPH’s membership (i.e., 54 hospi-

tals—six more than in the initial voluntary data collection in March). Although every hospital must now report HCAHPS data to avoid the two-percentage-point reimbursement penalty, only those hospitals that have been collecting patient satisfaction data for a full 12 months were included in the August *Hospital Compare* upload. The next several data updates, which will be made quarterly, will likely include all remaining NAPH members.

The aggregated August 2008 NAPH HCAHPS data indicate that public hospitals continue to match or exceed national hospital averages. For example, NAPH’s average score on the measure “having staff always explain about medicines before administration” was 60 percent, compared with the national average of 58 percent (see Figure 2). Similarly, NAPH members scored identically to the national average on “nurses usually communicated well” (21 percent) and on “staff usually explained medications before administration” (18 percent). Patients of NAPH members reported that they would recommend their hospital at exactly the same rate as patients receiving care from hospitals nationally (68 percent), and the average score for patients rating their hospital highly was the same for patients of public hospitals and hospitals nationally (63 percent).

Performance Over Time

When comparing NAPH member average scores from the first period of data collection to the second, only one notable difference emerged: On the

measure “nurses always communicated well,” NAPH members had a slight performance dip in the second round (i.e., performance fell from 72 percent to 70 percent), which may be driven by the six additional hospitals included in the later sample.

Conclusion: NAPH Members are Committed to Patient Satisfaction

Although the sample size is still small, HCAHPS scores for the first and second series of reporting peri-

ods demonstrate that NAPH members are performing at or above the level of hospitals nationally on many patient satisfaction measures. Although these scores show room for improvement, the data currently reflects only 37 percent of NAPH members. As more hospitals collect and report HCAPHS data, future CMS uploads will include a more robust sample and will enable an increasingly sharper picture of public hospital performance on patient satisfaction measures. ■

NAPH members are highly involved in improving patient satisfaction at their hospitals. Two examples are Cooper Green Mercy Hospital and Harris County Hospital District (HCHD).

COOPER GREEN MERCY HOSPITAL PATIENT SATISFACTION PROGRAM

Cooper Green Mercy Hospital in Birmingham, Alabama has been nationally recognized for its high marks on HCAHPS data. A full 96 percent of its surveyed patients report they would “definitely” recommend the hospital to others.²⁰ This high rate of satisfaction emerged after Cooper Green developed an 11-point employee pledge that included “a commitment to serve our patients with courtesy and respect.” All employees are required to review that pledge every year.²¹ Cooper Green also has its own satisfaction survey, which tracks performance in outpatient services, same day surgery, and other areas. To accomplish its ambitious patient satisfaction goals, Cooper Green first looked at nursing and physician interaction. “Overall, what really affected their experience was how courteous the support staff, nurses and other providers treated them,” noted Mr. Darryl Webb, Cooper Green’s Director of Customer Services.

HARRIS COUNTY HOSPITAL DISTRICT SERVICEFIRST PROGRAM

Harris County Hospital District in Houston, Texas, implemented a customer service initiative in 2005 entitled “ServiceFIRST.” All staff must sign a “ServiceFIRST Pledge” and attend an annual continuing customer service education class as a condition of employment. HCHD also employs unit-specific strategies, such as “patient satisfaction project specialists,” who help individual units develop plans for improvement and participate in real-time rounding for in patients.²²

Notes

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3. Institute of Medicine's domains of quality of health care include: respect for patients' values; preferences and expressed needs; coordination and integration of care; information, communication and education; physical comfort; emotional support; involvement of family and friends; transition and continuity; and access to care.
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6. *CAHPS Hospital Survey (English)*. hcahpsonline.org. Centers for Medicare & Medicaid Services, Baltimore, MD. January, 2007. Available at [www.hcahpsonline.org/Files/Appendix%20D%20-%20CAHPS%20Hospital%20Survey%20\(English\).pdf](http://www.hcahpsonline.org/Files/Appendix%20D%20-%20CAHPS%20Hospital%20Survey%20(English).pdf). Last accessed 6/12/2008.
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8. *Mode and Patient-mix Adjustment of the CAHPS® Hospital Survey (HCAHPS)*. Centers for Medicare & Medicaid Services, Baltimore, MD. Available at www.hcahpsonline.org/files/Final%20Draft%20Description%20of%20HCAHPS%20Mode%20and%20PMA%20with%20bottom%20box%20modedoc%20April%2030,%202008.pdf. Last accessed 6/12/2008.
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11. See HCUP-Net at <http://hcupnet.ahrq.gov>. Last accessed 10/9/2008.
12. Preliminary data analysis of 50 NAPH hospitals using 2006 NAPH Characteristics data, conducted 10/8/2008.
13. See: www.ahrq.gov/clinic/epcsums/worksum.pdf. Last accessed 9/23/2008.
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17. *CAHPS® Hospital Survey (HCAHPS) Quality Assurance Guidelines*.
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19. See both Goldstein E, 6/10/2008, and preliminary data analysis of 50 NAPH hospitals using 2006 NAPH Characteristics data, conducted 10/8/2008.
20. Anna Velasco. "Birmingham's Cooper Green Mercy Hospital tops patient satisfaction survey among area hospitals: Patients are among nation's most satisfied." The Birmingham News, 4/11/2008. See: <http://bama.live.advance.net/news/birminghamnews/index.ssf?/base/news/120790172119000.xml&coll=2> Last accessed 10/9/2008.
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22. *The Safety Net Magazine*, Vol 22, No 2. *Innovations in Quality*, October 2008.