

ResearchBrief

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1301 Pennsylvania Avenue, NW, Suite 950 Washington, DC 20004 202 585 0100 tel / 202 585 0101 fax www.naph.org Larry S. Gage / PRESIDENT Christine Capito Burch / EXECUTIVE DIRECTOR

CMS Releases Latest Quality Data: NAPH Members Outperform on Most Core Measures

Members of the National Association of Public Hospitals and Health Systems (NAPH) continue to improve their performance on publicly reported quality data. In July 2009, the Centers for Medicare and Medicaid Services (CMS) released fiscal year 2008 data on its Hospital Compare¹ website, revealing that NAPH members have now surpassed the national average on most core measures. What started as ten process measures published by CMS in 2004 has now grown to include 41 measures, which CMS updates quarterly. NAPH uses this information to generate periodic analyses of its members' aggregated performance to analyze trends and determine how safety net hospitals compare with the industry as a whole.

This Research Brief highlights member performance with the most recently-released data available on all four measure categories reported by CMS: core measures, patient satisfaction measures (specifically using the Hospital Consumer Assessment of Healthcare Providers and Systems, or "HCAHPS"), 30-day mortality rates, and 30-day readmission rates.

Core Measures: Comparison between NAPH members and non-members on most recent reporting period (FY 2008)

CMS currently publishes 25 core measures.² As Figure 1 shows, NAPH members have scored as well as, or better than, all hospitals nationally on 20 of 24 measures,³ including:

- Six out of six heart attack measures;
- Four out of four heart failure measures;
- Three out of seven pneumonia measures; and
- Seven out of seven surgical care measures.

Core Measures: Trends in NAPH Member Performance from FY 2007 to FY 2008

Between FY 2007 and FY 2008, NAPH members, on average, improved their scores on 17 measures, remained steady on two measures, and recorded slightly lower scores (i.e., one percentage point) on three measures (see Table 1). Notably, NAPH members achieved vastly higher scores on three measures in particular, including:

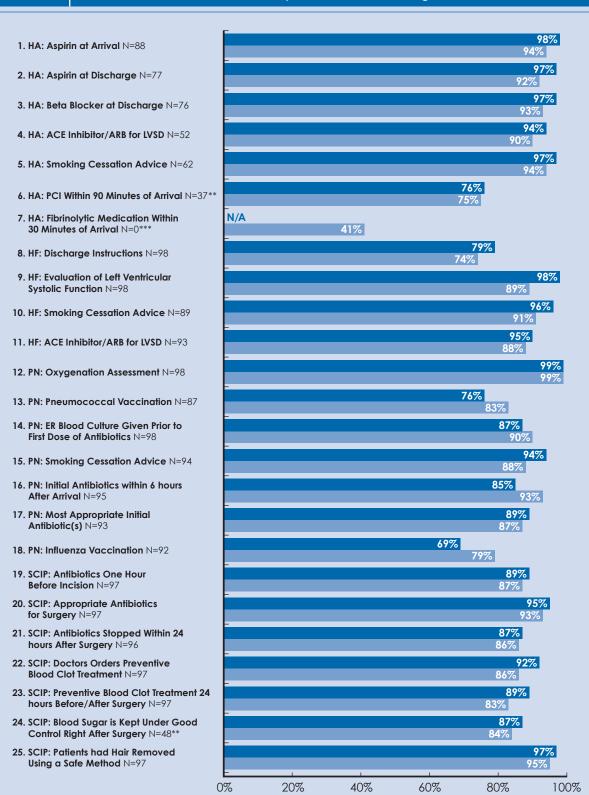
- Heart attack: PCI within 90 minutes of arrival (+13 percentage points);
- *Heart failure: discharge instructions* (+10 percentage points); and
- Pneumonia: pneumococcal vaccination (+9 percentage points).

Overall, NAPH members are consistently, and sometimes significantly, improving over time on CMS core measures.

HCAHPS: Comparison between NAPH members and non-members on most recent reporting period (FY 2008)

Using data collected from patient satisfaction surveys, HCAHPS measures reflect patients' assessment of care during their stay in the hospital. Hospitals have been required to report

Core Measures: NAPH Members Compared to National Average for FY 2008*



NAPH Average National Average

- * Note: N = the number of NAPH members that had 30 or more patients in its sample size. Hospitals with fewer than 30 patients were excluded from this analysis.
- ** Indicates a low NAPH member sample size (i.e., less than 50 percent of the 98 NAPH member hospitals included in this analysis), which may affect statistical significance.
- *** Because no NAPH members had more than 30 patients for the heart attack measure fibrinolytic medication within 30 minutes of arrival, NAPH member data on that measure has been excluded from this chart.

SOURCE NAPH Analysis of Hospital Compare Data (July 2009 Release)

TABLE 1

CMS Core Measures: Change in NAPH Average Scores from FY 2007 to FY 2008*

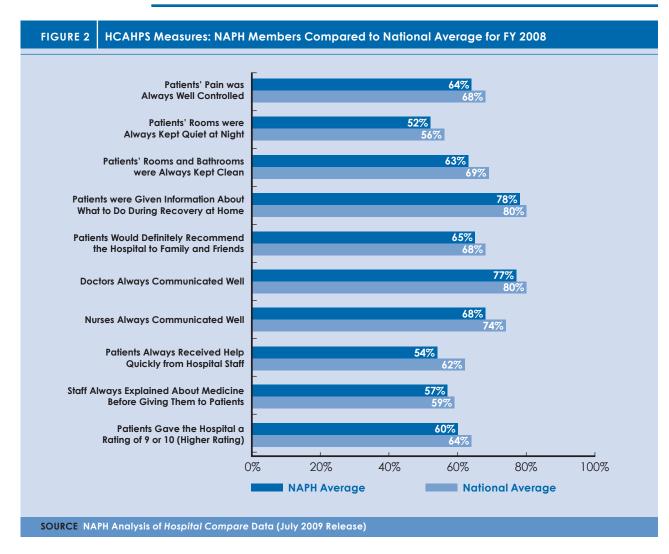
Measure	NAPH Average FY 2007	NAPH Average FY 2008	Change in Average Score from 2007 to 2008
1. HA: Aspirin at Arrival N=88	97%	98%	+1
2. HA: Aspirin at Discharge N=77	97%	97%	0
3. HA: Beta Blocker at Discharge N=76	97%	97%	0
4. HA: ACE Inhibitor/ARB for LVSD N=52	90%	94%	+4
5. HA: Smoking Cessation Advice N=62	96%	97%	+1
6. HA: PCI Within 90 Minutes Of Arrival N=37*	** 63%	76%	+13
7. HA: Fibronlytic Medication within 30 minutes of arrival N=0***	N/A	N/A	N/A
8. HF: Discharge Instructions N=98	69%	79%	+10
9. HF: Evaluation of Left Ventricular Systolic Function N=98	97%	98%	+1
10. HF: Smoking Cessation Advice N=89	91%	96%	+5
11. HF: ACE Inhibitor/ARB for LVSD N=93	92%	95%	+3
12. PN: Oxygenation Assessment N=98	100%	99%	-1
13. PN: Pneumococcal Vaccination N=87	67%	76%	+9
14. PN: ER Blood Culture Given Prior To First Dose Of Antibiotics N=98	84%	87%	+3
15. PN: Smoking Cessation Advice $N=94$	87%	94%	+7
16. PN: Initial Antibiotics within 6 Hours After Arrival N=95	86%	85%	-1
17. PN: Most Appropriate Initial Antibiotic(s) N=93	90%	89%	-1
18. PN: Influenza Vaccination N=92	64%	69%	+5
19. SCIP: Antibiotics One Hour Before Incision N=97	84%	89%	+5
20. SCIP: Appropriate Antibiotics for Surgery N=97	91%	95%	+4
21. SCIP: Antibiotics Stopped Within 24 hours After Surgery $N\!=\!96$	81%	87%	+6
22. SCIP: Doctors Ordered Preventive Blood Clot Treatment N=97	87%	92%	+5
23. SCIP: Preventive Blood Clot Treatment 24 Hours Before/After Surgery N=97	82%	89%	+7
24. SCIP: Blood Sugar is Kept Under Good Control Following Surgery N=48**	Measure not introduced until FY 2008	87%	N/A
25. SCIP: Patients Had Hair Removed Using a Safe Method N=97	Measure not introduced until FY 2008	97%	N/A

^{*} Note: N = the number of NAPH members that had 30 or more patients in its sample size. Hospitals with fewer than 30 patients were excluded from this analysis.

SOURCE NAPH Analysis of Hospital Compare Data (July 2009 Release)

^{**} Indicates a low NAPH member sample size (i.e., less than 50 percent of the 98 NAPH member hospitals included in this analysis), which may affect statistical significance.

^{***} Because no NAPH members had more than 30 patients for the heart attack measure fibrinolytic medication within 30 minutes of arrival, NAPH member data on that measure has been excluded from this chart.



to CMS on ten HCAHPS indicators since March 2008. Like core measures, the current patient satisfaction data displayed on *Hospital Compare* covers patients who were admitted to hospitals from October 2007 through September 2008 (FY 2008).

On average, NAPH members slightly trail non-members on all patient satisfaction measures (see Figure 2). Some of the variance could be due to staffing shortages, which may be more severe in public hospitals, and can adversely affect patient satisfaction

scores.⁴ However, recent studies of the HCAHPS measures suggest that the national average is generally low across all patient satisfaction indicators and that the entire hospital industry has room for improvement.^{5, 6}

There are resources available to NAPH members that may be helpful in improving HCAHPS performance. In March 2009, NAPH held a technical assistance call with presentations from Cooper Green Mercy Hospital in Birmingham, Alabama, (a top HCAHPS performer among all

hospitals nationally) and Press Ganey (a national vendor with whom many hospitals contract to conduct patient satisfaction surveys). On this call, speakers presented strategies that hospitals have used to improve patient service and, subsequently, HCAHPS scores. Materials from this recording can be found on the NAPH website.⁷

Readmission Measures

In July 2009, CMS released data on *Hospital Compare* for the first time on 30-day hospital readmission rates. The patients included in these readmission measures were:

- Fee-for-service Medicare enrollees who were hospitalized between July 2005 and June 2008 for heart attack, heart failure and pneumonia;
- At least 65 years of age at admission;

- Enrolled in Medicare for at least one year prior to their admission; and
- Not discharged against medical advice.

CMS calculates each hospital's readmission rates by determining the percentage of heart attack, heart failure, and pneumonia patients discharged and then readmitted to the hospital within 30 days, for any reason—even if the cause of readmission is unrelated to the patients' hospitals stay. In its display, CMS indicates if the hospital is "better," "no different," or "worse" than the national average.

Table 2 displays the percentage of NAPH members compared to the percentage of all hospitals in the nation that fall into the "better," "worse," and "no different" categories for the three measures. It indicates that 1.5 percent of NAPH members and 1.4

NAPH members have continued to demonstrate improvement over time on most publicly reported quality indicators and have now surpassed the national average on nearly all core measures.

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Heart Attack, Heart Failure and Pneumonia Readmission Measures: Comparison of NAPH Members to All U.S. Hospitals from July 2005 through June 2008

	Readmission for Heart Attack Patients	Readmission for Heart Failure Patients	Readmission for Pneumonia Patients
Hospitals Better Than National Rate			
NAPH Members	1.5%	3.3%	0.0%
All Hospitals In Nation	1.4%	4.2%	2.0%
Hospitals No Different Than National Rate NAPH Members	90.9%	86.8%	91.0%
			00.47
All Hospitals in Nation	96.6%	90.3%	93.6%
	96.6%	90.3%	93.6%
All Hospitals in Nation Hospitals Worse Than National Rate NAPH Members	96.6% 7.6%	90.3%	8.9%

SOURCE NAPH Analysis of Hospital Compare Data (July 2009 Release)

percent of all U.S. hospitals score better than the national rate on readmission rates for heart attack patients. Indeed, across all three measures, roughly the same percentage of NAPH members and non-members fall into the "better" and "no different" categories, but a higher percentage of NAPH members fall into the "worse" category. Specifically, 7.6 percent of NAPH members (compared with 2.0 percent of U.S. hospitals) scored worse than the national rate on readmissions for heart attack measures. Further analysis indicates that this is because a large subset of NAPH members are located in particular regions of the U.S. that have higher readmission rates generally; non-NAPH members located in those same areas also have high readmission rates, suggesting that this may be a regional occurrence.8 Other studies indicate geographic differences in performance on readmission rates across the country.9

Because readmission rates are affected by community and social factors (e.g., available housing and access to a primary care physician), CMS explains that this metric reflects the coordination of services provided in a community and is not due exclusively to issues of hospital quality. Nonetheless, CMS maintains that hospitals have the ability to change the structure of services provided within a community, and therefore, should be held accountable for readmissions for heart attack, heart failure,

and pneumonia patients.¹¹ It is likely that readmission rates may have an increasingly significant impact on hospitals and health systems, and they may become a factor in determining future Medicare reimbursement.

Mortality Measures

Similar to readmission measures, CMS displays data on hospital 30-day mortality rates for heart attack, heart failure, and pneumonia patients. The CMS methodology for calculating hospital mortality rates is similar to that of readmission rates; it includes the percentage of patients who were discharged and then died within 30 days for any cause, even if the cause is unrelated to the patients' previous hospital stay.

Table 3 displays the percentage of NAPH members compared to the percentage of all U.S. hospitals that fall into the "better," "worse," and "no different" categories for the three mortality measures. Although slightly fewer NAPH members fall into the "better" category across the three measures, fewer NAPH hospitals rank in the "worse" category. Specifically, no NAPH members (i.e., zero percent, compared with 3.9 percent of hospitals nationally) fall into the "worse" category for heart failure mortality, and fewer (i.e., 5.6 percent, compared with 6.4 percent of hospital nationally) fall into the "worse" category for pneumonia mortality.

TABLE 3

Heart Attack, Heart Failure and Pneumonia Mortality Measures: Comparison of NAPH Members to All U.S. Hospitals from July 2005 through June 2008

	Attack Patients	Mortality for Heart Failure Patients	Mortality for Pneumonia Patients
Hospitals Better Than National Rate			
NAPH Members	2.9%	3.4%	3.3%
All Hospitals In Nation	4.4%	5.1%	5.7%
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Hospitals No Different Than National F NAPH Members All Hospitals in Nation	93.5% 93.8%	96.6% 91.0%	91.0% 88.0%
NAPH Members All Hospitals in Nation	93.5%		
NAPH Members	93.5%		

SOURCE NAPH Analysis of Hospital Compare Data (July 2009 Release)

Conclusion

NAPH members have continued to demonstrate improvement over time on most publicly reported quality indicators and have now surpassed the national average on nearly all core measures. Under CMS's "Pay for Performance" reimbursement incentives, scores on such quality measures will significantly impact hospital payments. Additionally, the health care reform proposals currently before Congress maintain a strong commitment to linking reimbursement to performance. To help members in their efforts to improve hospital quality, NAPH will continue publishing analyses of *Hospital Compare* data and providing technical assistance on these critical issues.

Notes

- 1. *Hospital Compare* website: <u>www.hospitalcompare</u>. hhs.gov.
- 2. In 2009, CMS retired the heart attack measure "beta blocker at arrival" due to revised evidence-based care guidelines released by the American College of Cardiology. Available at: www.cms.hhs.gov/HospitalQualityInits/Downloads/HospitalAMI-6FactSheet.pdf. Last accessed August 5, 2009. CMS also added two surgical care infection prevention measures in 2009: "blood sugar kept under control following surgery" and "patients had hair removed using a safe method."
- **3.** In this analysis, NAPH research staff excluded any NAPH members that did not have a sample size of 30 or more patients. Because no NAPH members had more than 30 patients for the heart attack measure fibrinolytic medication within 30 minutes of arrival, data on that measure has been excluded from this report. Therefore, this Research Brief analyzes data on 24 of the 25 measures.
- **4.** This point was discussed at the annual meeting of the National Public Health and Hospital Institute (NPHHI) Board Meeting in Seattle, Washington, June 24, 2009.
- **5.** Jha A, Orav J, Zheng, J. "Patients' Perception of Hospital Care in the United States." *The New England Journal of Medicine*. Volume 359:1921-1931 Number 18. October 30, 2008.

- **6.** DerGurahian J. "Comparative satisfaction. HHS' first release of hospital patient-satisfaction data reveals that hospitals need to do more to earn top scores from their customers." *Modern Healthcare*. Volume 38 (13):6-7 Number 1. March 31, 2008.
- **7.** See www.naph.org/sp/Search.aspx?SearchMode=1&SearchPhrase=hcahp.
- 8. NAPH analyzed Hospital Compare data by region and found, for example, markedly higher 30-day readmission rates in one urban Northeastern region as compared with the rest of the nation. Further analysis indicated that NAPH members in this region achieved better rates than non-member hospitals in those same markets.
- 9. Krumholz, HM et al. Patterns of Hospital Performance in Acute Myocardial Infarction and Heart Failure 30-Day Mortality and Readmission. Circulation: Cardiovascular Quality and Outcomes. July 9, 2009. Available at: http://circoutcomes.ahajournals.org. Last accessed August 5, 2009.
- 10. See discussion from the transcript of the CMS Mortality/Readmission Measures National Call, April 30, 2009, available at: www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1219069856694. Last accessed August 18, 2009.
- **11.** Ibid.