

Critical Access Hospital Year 8 Hospital Compare Participation and Quality Measure Results

Michelle Casey, MS, Peiyin Hung, MSPH, Maeve McClellan, BS, and Ira Moscovice, PhD
University of Minnesota Rural Health Research Center

Introduction

This report examines the eighth-year participation and quality measure results for Critical Access Hospitals (CAHs) in the Centers for Medicare and Medicaid Services (CMS) Hospital Compare public reporting database. Although CAHs do not face the same financial incentives as hospitals paid under the Medicare Prospective Payment System (PPS) to participate, the Hospital Compare initiative provides an important opportunity for CAHs to assess and improve their performance on national standards of care. This report updates previous national reports on Hospital Compare results for CAHs.¹⁻⁷ The Flex Monitoring Team has also prepared state-level reports on 2006-2011 data, available at <http://www.flexmonitoring.org/indicators.shtml>.

Approach

The current Hospital Compare quality measures include inpatient process of care measures that reflect recommended treatments for acute myocardial infarction (AMI), heart failure, pneumonia, and surgical care improvement; outpatient AMI/chest pain and surgical process of care measures; Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patients' assessment of care survey results; and hospital 30-day risk-adjusted mortality and readmission rates for AMI, heart failure, and pneumonia calculated by CMS using Medicare claims data.

Data on the inpatient and outpatient process of care measures and HCAHPS survey results for January through December 2011, and data on the 3 year (July 2008 to June 2011) mortality and readmission rates calculated by CMS, were downloaded from the CMS Hospital Compare website (<https://data.medicare.gov/data/hospital-compare>) in October 2012. These data were linked with previously downloaded data for 2006-2010 and data on all CAHs maintained by the Flex Monitoring Team; and data on hospital characteristics from the Fiscal Year 2010 American Hospital Association Annual Survey.

The percentages of patients that received recommended care for the inpatient and outpatient process of care quality measures were calculated by dividing the total number of patients who received the recommended care by the total number of eligible patients in all CAHs nationally. The percentages of patients reporting the highest response (e.g., always) on each HCAHPS measure were summed and averaged across all CAHs nationally and for all other hospitals in the U.S.

Key Findings

- The 2011 CAH national participation rate in Hospital Compare (defined as publicly reporting data on at least one inpatient process of care measure) is 80%.
- By state, CAH reporting on inpatient measures ranges from 36% to 100%. 12 states have 100% of CAHs reporting while three states have less than half of CAHs reporting.
- 27% of CAHs reported data on at least one outpatient measure. By state, outpatient reporting ranges from 0% to 100% of CAHs.
- About one-fifth (19%) of CAHs are not publicly reporting any quality data to Hospital Compare.
- The percent of CAH patients receiving recommended care has increased for nearly all measures, but CAHs continue to have lower scores relative to rural and urban PPS hospitals on several measures.
- On average, CAHs have significantly higher HCAHPS scores than all other hospitals.

CMS calculates hospital-level 30-day risk-standardized mortality and readmission rates for pneumonia, heart failure, and AMI using Medicare fee-for-service claims and enrollment data and statistical modeling techniques. Rates are not calculated for hospitals that are not in the Hospital Compare database or for hospitals with less than 25 qualifying cases over the three-year period. For this report, the number and percent of CAHs for which CMS did not calculate risk-adjusted mortality rates and readmission rates were determined. The number and percent of CAHs whose rates for each condition were not different, better, or worse than the national rates (as determined by CMS) were then summed nationally.

Reporting of Inpatient Process of Care Measures

Nationally, participation in Hospital Compare (defined as publicly reporting data on at least one inpatient process of care measure) increased from 41% of CAHs in 2004 to 80% of CAHs in 2011. By state, the percent of CAHs reporting

inpatient process of care measures for 2011 ranged from 36% to 100%. Twelve of the 45 states in the Flex Program had 100% of their CAHs publicly reporting in 2011, while three states had less than half of their CAHs reporting.

CAHs were more likely to report data on the pneumonia and heart failure measures than on the AMI and surgical care improvement measures. Over three-fifths (61%) of all CAHs did not report data on any of the eight AMI measures, while 33% reported data on three or more measures. In contrast, 48% reported data on all four heart failure measures, while 25% did not report data on any heart failure measures. Moreover, 61% of CAHs reported data on all six pneumonia measures and an additional 11% reported data on five measures; 22% did not report data on any pneumonia measures. For the surgical care measures, 53% of CAHs with inpatient surgery services did not report data on any measures, while 42% reported data on six or more measures.

Figure 1. Percent of Patients Receiving Recommended Care

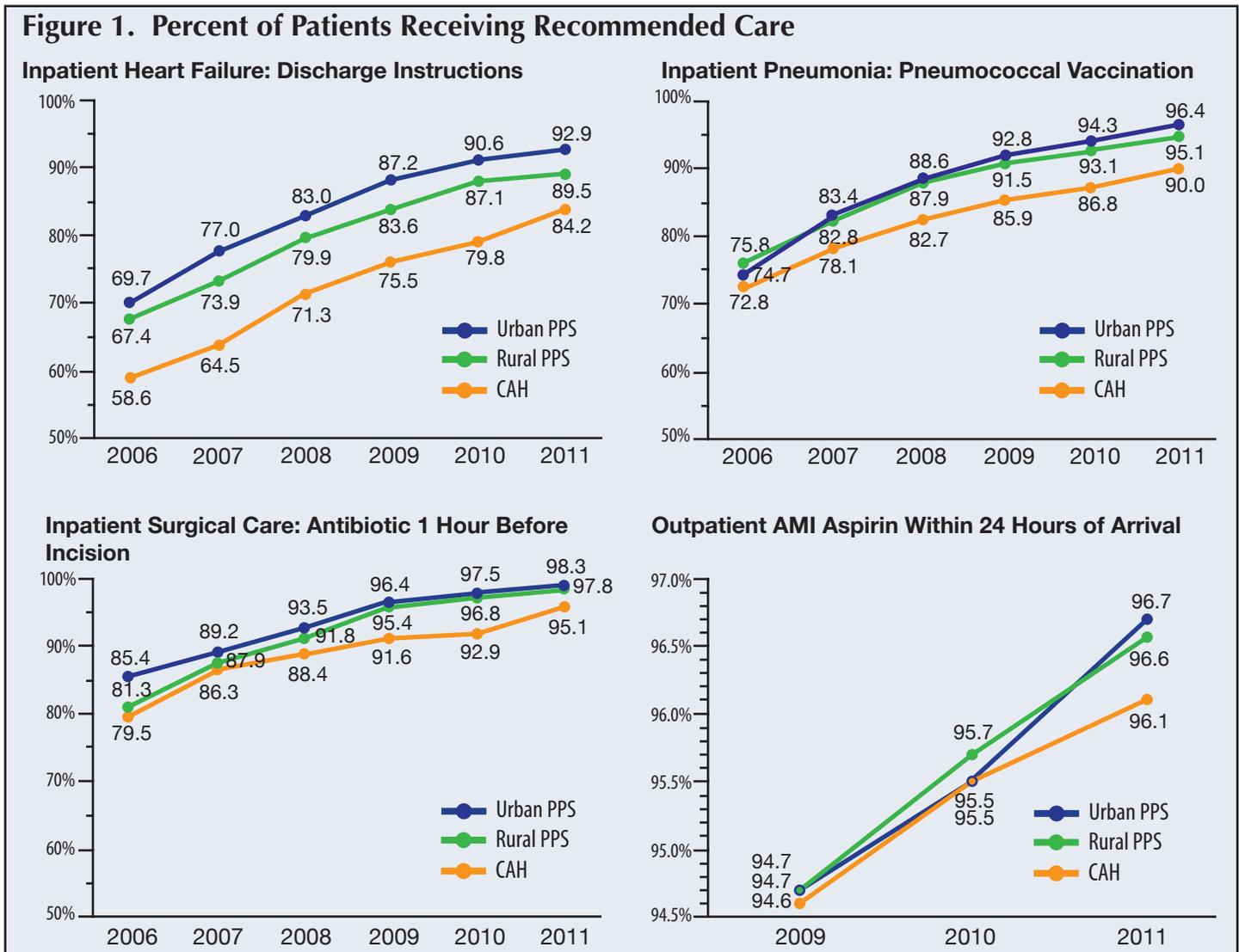


Table 1. HCAHPS Results for CAHs Nationally for 2011

Percent of patients who reported:	Mean (average) for:	
	CAHs (n=548)	Non-CAHs (n=3,318)
Their nurses “Always” communicated well	81%	77%
Their doctors “Always” communicated well	85%	80%
They “Always” received help as soon as they wanted	74%	64%
Their pain was “Always” well-controlled	73%	70%
Staff “Always” explained about medicines before giving it to them	67%	61%
“Yes,” they were given information about what to do during their recovery at home	85%	83%
The area around their room was “Always” quiet at night	64%	59%
Their room and bathroom were “Always” clean	80%	71%
An overall hospital rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest)	73%	68%
“Yes,” they would definitely recommend the hospital to friends and family	73%	70%

Inpatient Process of Care Results

For 2011 discharges, CAHs did not perform as well as rural and urban PPS hospitals on many of the inpatient process of care measures. From 2005-2011, the percent of CAH patients receiving recommended care increased annually for nearly all measures. However, the percent of rural and urban PPS hospital patients receiving recommended care also increased during this time period. Thus, while showing improvement, CAHs continued to have lower scores relative to rural and urban PPS hospitals on most measures.

For example, the percent of CAH heart failure patients that received recommended discharge instructions increased from 58.6% in 2006 to 84.2% in 2011 (Figure 1). At the same time, however, the percent of rural PPS patients receiving the recommended discharge instructions increased from 67.4% to 89.5% and the percent of urban PPS patients receiving the recommended discharge instructions increased from 69.7% to 92.9%. Similar patterns hold true for several AMI, heart failure, and pneumonia measures.

In 2006, 72.8% of CAH pneumonia patients received a pneumococcal vaccination (vs. 75.8% for rural PPS and 74.7% for urban PPS hospitals) (Figure 1). While CAH performance improved to 90.0% in 2011, rural PPS and urban PPS hospitals also improved to 95.1% and 96.4%, respectively.

Similarly, in 2006, 79.5% of CAH inpatient surgical patients received an initial preventative antibiotic one hour before their incision (vs. 81.3% for rural PPS

and 85.4% for urban PPS hospitals.) (Figure 1). CAH performance improved to 95.1% in 2011, while rural PPS and urban PPS hospitals also improved to 97.8% and 98.3%.

Outpatient Process of Care Reporting and Results

A total of 362 CAHs (27.3%) publicly reported data on at least one outpatient process of care measure for 2011 discharges. By state, the percent of CAHs reporting outpatient process of care measures ranged from 0% to 100%.

For 2009-2011 discharges, CAHs performance on the outpatient AMI/Chest Pain aspirin at arrival measure has been consistently high and similar to that of rural and urban PPS hospitals (Figure 1). CAH performance on the outpatient surgical antibiotic measures has been a little lower than PPS hospitals from 2009-2011.

HCAHPS Survey Reporting and Results

Over one-third (41.3%) of CAHs publicly reported HCAHPS data to Hospital Compare in 2011. By state, the percent of CAHs publicly reporting HCAHPS data in 2011 ranged from 0% (1 state) to 100% (3 states).

Table 1 displays the mean (average) percentages of patients that gave the highest level of response (e.g., “always”) for each of the HCAHPS survey measures in two groups of hospitals that publicly reported HCAHPS data for 2011: CAHs nationally, and all US hospitals. For all HCAHPS measures, CAHs had significantly higher average scores than all US hospitals ($p < 0.0001$).

Mortality and Readmission Results

While mortality and readmission rates are important outcome measures for hospitals, small volume limits their usefulness as individual hospital measures for CAHs. Only 6.7% of CAHs had an AMI mortality rate calculated by CMS, and none had a rate that was different from the US rate for all hospitals. More CAHs had the minimum number of patients to reliably calculate mortality rates for heart failure (56.7%) and pneumonia (76.3%), but very few CAHs had mortality rates that are either better than or worse than the US rates for all hospitals (fewer than 1% of CAHs for heart failure and 3.3% of CAHs for pneumonia).

Only 2.4% of CAHs had an AMI readmission rate calculated by CMS, and none had a rate that was different from the US rate for all hospitals. More CAHs had the minimum number of patients to reliably calculate readmission rates for heart failure (61.3%) and pneumonia (77.2%), but few CAHs had readmission rates that are either better than or worse than the US rates for all hospitals (0.1% of CAHs for heart failure and 0.3% of CAHs for pneumonia).

Conclusions

The percent of CAHs reporting publicly on inpatient process of care measures increased from 73.5% for 2010 to 79.7% for 2011. Public reporting of outpatient process measures also increased from 21.2% of CAHs for 2010 to 27.3% for 2011. CAH reporting of HCAHPS measures increased a little, from 38% in 2010 to 41.3% in 2011.

As with previous years, there was wide variation across the 45 Flex states in CAH reporting. For inpatient measures, 12 states had 100% of CAHs reporting while three states had less than half of CAHs reporting. Outpatient reporting ranged from 0% of CAHs in two states to 100% in one state, and HCAHPS reporting ranged from 0% in one state to 100% of CAHs in three states.

Quality measurement is an important component of health care reform efforts. CAHs will need to report quality measures to show meaningful use of electronic health records (EHRs) and to participate in payment reform initiatives, such as Accountable Care Organizations. In states where CAH reporting is lower than the national average, additional state initiatives may be necessary to encourage reporting. Efforts to assist CAHs in quality reporting are underway as part of the Medicare Beneficiary Quality Improvement Project (MBQIP) and

Quality Improvement Organizations' (QIO) 10th Scope of Work.

For 2011 discharges, CMS instituted a policy of suppressing Hospital Compare data for hospitals that reported data for ten or fewer patients on a measure. As a result, 151 CAHs had their data suppressed or missing for all inpatient measures and 105 CAHs had their data suppressed or missing for all outpatient measures. We were not able to include those data in this analysis.

CMS has agreed to provide the full reporting data to ORHP going forward in order to allow access to all data reported by CAHs to Hospital Compare, including the suppressed data, for ongoing monitoring of CAH quality performance at the hospital, state and national levels. We anticipate being able to include these data in future reports on CAH reporting and quality measure results.

Hospital Compare and MBQIP have several pneumonia and heart failure measures in common. Hospital Compare also includes several additional quality measures that are relevant to CAHs. ORHP encourages CAHs to participate in both MBQIP and public reporting to Hospital Compare, and to report on all cases, regardless of low volume. MBQIP data reports include all cases meeting CMS inclusion criteria reported by CAHs, with no data suppression. As MBQIP continues to be implemented and more CAHs begin to participate in MBQIP, CAH reporting to Hospital Compare will continue to be tracked and monitored.

ORHP encourages each State Flex program to continue working with the CAHs in their state to ensure that the CAHs are reporting their data. When MBQIP reports are received each quarter, this data should be used to engage CAHs in quality improvement activities that will lead to improvements in their quality measure outcomes.

CMS also made several changes to the Hospital Compare inpatient quality measure set that became effective starting with 2012 discharges.⁸ These changes included:

- Retiring the pneumonia initial antibiotic timing measure due to concerns about potential incentives to overuse antibiotics.
- Retiring the pneumonia, heart failure and AMI smoking cessation advice measures and the pneumonia influenza and pneumococcal vaccination measures.
- Suspending data collection for three inpatient AMI measures (aspirin at arrival, ACEI/ARB for LVSD, and

beta blocker at discharge) because performance was uniformly high nationwide (although CAH performance is not as high as other hospitals).

- Adding two new global influenza and pneumococcal vaccination measures.

The CMS changes to the Hospital Compare measure set are reducing the number of quality measures for pneumonia and heart failure, which are the most common inpatient conditions in CAHs. Some new inpatient and outpatient measures for other conditions being added to Hospital Compare are relevant to CAHs, while others are not. Future reports will reflect these changes and monitor their impacts on CAH participation in public reporting and quality performance.

This policy brief is based on Flex Monitoring Team Briefing Paper No. 33. For more information, contact Michelle Casey (mcasey@umn.edu).

References

1. Casey, M. and Moscovice, I. CAH Participation in Hospital Compare and Initial Results. Flex Monitoring Team Briefing Paper No. 9, February 2006. http://www.flexmonitoring.org/documents/BriefingPaper9_HospitalCompare.pdf
2. Casey, M., Burlew, M. and Moscovice, I. Critical Access Hospital Year 2 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 16, April 2007. http://www.flexmonitoring.org/documents/BriefingPaper16_HospitalCompare2.pdf
3. Casey, M., Burlew, M. and Moscovice, I. Critical Access Hospital Year 3 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 20, August 2008. http://www.flexmonitoring.org/documents/BriefingPaper20_HospitalCompare3.pdf
4. Casey, M., Burlew, M. and Moscovice, I. Critical Access Hospital Year 4 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 22, October 2009. http://www.flexmonitoring.org/documents/BriefingPaper22_HospitalCompare4.pdf
5. Casey, M., Burlew, M. and Moscovice, I. Critical Access Hospital Year 5 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 26, March 2010.
6. Casey, M., Burlew, M. and Moscovice, I. Critical Access Hospital Year 6 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 26, April 2011.
7. Casey, M., Hung, P., Barton, B., and Moscovice, I. Critical Access Hospital Year 7 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper No. 30, August 2012. <http://www.flexmonitoring.org/documents/Hospital-Compare-PolicyBrief-Year7.pdf>
8. CMS. Specifications Manual for National Hospital Inpatient Quality Measures. Discharges 01-01-12 (1Q121Q12) through 12-31-12 (4Q124Q12). Available at www.qualitynet.org.