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Critical Access Hospital Year 4 Hospital Compare Participation and Quality Measure Results

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Introduction

This report examines the fourth 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 reports on Hospital Compare results for CAHs.[1-3] The Flex Monitoring Team has also prepared state-level reports on Year 3 and Year 4 data.

Approach

This project used data on hospital participation and quality measure results from the CMS Hospital Compare website http://www.hospitalcompare.hhs.gov/. The measures are based on data abstracted from patient records for hospital discharges in January through December 2007. Due to the reporting schedule, data for a full calendar year is not available from CMS until the following September. Data from the website were downloaded and linked with data on all CAHs maintained by Flex Monitoring Team and with data from other secondary sources, including the American Hospital Association Fiscal Year 2007 Annual Survey.

The Hospital Compare data for 2007 discharges included 23 measures that reflect recommended treatments for acute myocardial infarction (AMI), heart failure, pneumonia and surgical infection prevention. Although the number of CAH patients for whom measures were reported had increased since the previous year's analysis, many CAHs still had a very small number of patients for several measures, especially AMI measures. Therefore, aggregate scores were calculated across groups of CAHs and other hospitals. In addition, trends from 2005 to 2007 were analyzed.

Key Findings

- 69% of CAHs participated in Hospital Compare for 2007 discharges by submitting data for at least one patient on one measure. CAH participation rates vary by state, ranging from 7.7% to 100%.
- CAHs were more likely to report data on pneumonia and heart failure measures than on AMI and surgical infection prevention measures.
- The percent of CAH patients receiving recommended care has increased for nearly all measures. At the same time, the percent of rural and urban PPS hospital patients receiving recommended care also increased.
- CAHs have room for improvement, especially with regard to recommended care for AMI and heart failure patients.

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CAH Participation in Hospital Compare

Overall, 69% of CAHs participated in Hospital Compare by submitting data on at least one measure for 2007 discharges. (This total does not include CAHs that submitted quality measure data to the national Quality Improvement Organization data warehouse, but did not allow the data to be publicly reported to Hospital Compare.)

The overall CAH participation rate of 69% for 2007 discharges compares to 41% for 2004 discharges, 53% for 2005 discharges and 63% for 2006 discharges. By state, the percent of participating CAHs ranged from 7.7% to 100%. Nine states had 100% of their CAHs participating.

CAHs certified in 1999 or earlier had the lowest Hospital Compare participation rate (51%), while those certified in 2005 had the highest rate (90%). Accredited CAHs and private non-profit CAHs are more likely than non-accredited CAHs and those with government/ public or for-profit ownership to participate.

Reporting of Measures by Condition

CAHs were more likely to report data on the pneumonia and heart failure measures than on the AMI and surgical infection prevention measures. (Small rural hospitals have high transfer rates for AMI patients, and some cardiac procedures (e.g., PCI) are rarely performed in CAHs. About one-third of CAHs do not do inpatient surgery.)

Over one-third (39%) of the 892 CAHs that participated in Hospital Compare for 2007 discharges did not report data on any of the eight AMI measures, while 53% reported data on four or more measures. In contrast, 66% of the 892 participating CAHs reported data on all four heart failure measures, while only 7% did not report data on any heart failure measures. Similarly, 76% of participating CAHs reported data on all seven pneumonia measures and an additional 14% reported data on six measures; only 0.6% did not report data on any pneumonia measures. For the surgical infection prevention measures, 57% of participating CAHs did not report data on any measures, while 36% reported data on all five measures.

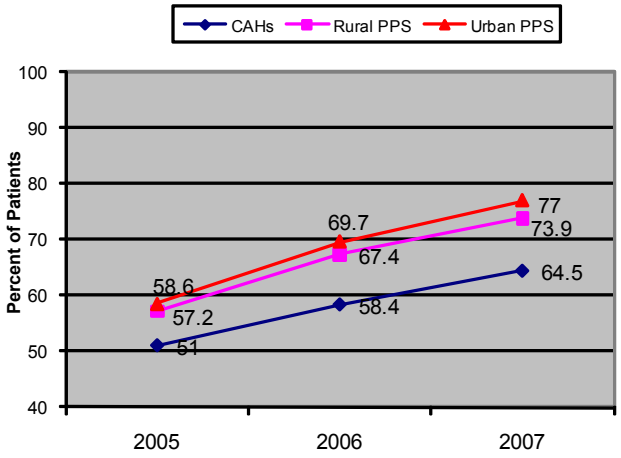
Quality Measure Results

For 2007 discharges, 69% of CAHs participated in Hospital Compare by submitting data for at least one patient on one measure. By state, the percent of participating CAHs ranged from 7.7% to 100%. Nine states had 100% of their CAHs participating. CAHs were more likely to report data on pneumonia and heart failure measures than on AMI and surgical infection prevention measures.

Similar to previous years, for 2007 discharges, CAHs did not do as well on the AMI and heart failure measures as rural and urban PPS hospitals. For pneumonia and surgical infection prevention, CAHs scored as well or better than other hospitals on some measures, and not as well on other measures. From 2005-2007, the percent of CAH, rural PPS and urban PPS patients receiving recommended care increased for nearly all measures.

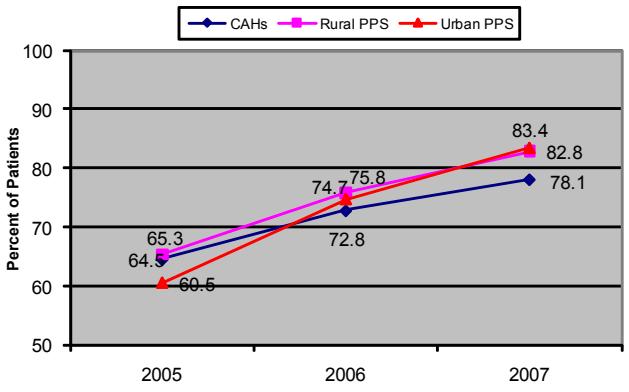
For example, the percent of CAH heart failure patients that received recommended discharge instructions increased from 51% in 2005 to 64.5% in 2007 (Figure 1). At the same time, however, the percent of rural PPS patients receiving the recommended discharge instructions increased from 57.2% to 73.9% and the percent of urban PPS patients receiving the recommended discharge instructions increased from 58.6% to 77%. Similar patterns hold true for several AMI, heart failure and pneumonia measures.

Figure 1. Percent of Heart Failure Patients Receiving Discharge Instructions 2005-2007[1]



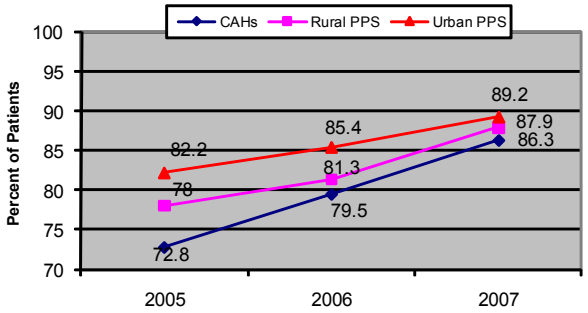
In 2005, 64.5% of CAH pneumonia patients received a pneumococcal vaccination (vs. 65.3% for rural PPS and 60.5% for urban PPS hospitals) (Figure 2). While CAH performance improved to 78.1% in 2007, rural PPS and urban PPS hospitals also improved to 82.8% and 83.4%.

Figure 2. Percent of Pneumonia Patients Receiving Pneumoccocal Vaccination



Among the three groups of hospitals, performance was similar on several surgical care improvement measures. CAHs made progress at closing the gap with rural PPS and urban PPS hospitals on the percent of surgical patients who received preventative antibiotics within one hour before their incisions (Figure 3).

Figure 3. Percent of Surgical Patients Receiving Preventative initial Antibiotic 1 Hour Before Incision 2005-2007



As with our previous analyses of Hospital Compare data, several caveats are necessary in evaluating these results. Although the percent of CAHs participating in Hospital Compare has increased, participating and non-participating CAHs still differ significantly on several organizational characteristics (e.g., accreditation status, inpatient volume). Thus, the quality measure results for CAHs that voluntarily participate in Hospital Compare may not be representative of all CAHs. Some of the differences in scores between groups of hospitals are only a few percentage points, but are statistically significant because of the large sample sizes involved. However, these differences may not be of practical significance because the scores are high for all groups.

Conclusions

The Office of Rural Health Policy (ORHP) encourages state Flex programs to work with CAHs in their states on quality improvement, measurement and reporting. An explicit focus on quality improvement was included in re-authorization of the Flex program in the Medicare Improvement for Patients and Providers Act passed by Congress in July 2008 (H.R. 6331).

The overall percent of CAHs participating in Hospital Compare has increased to 69%, but varies considerably by state, ranging from 7.7% to 100%. State Flex Programs can try to increase the number of CAHs in their state reporting to Hospital Compare by working with the Quality Improvement Organization (QIO) and/or state hospital association to provide non-reporting CAHs with technical assistance on the reporting process, and helping CAHs provide education for board members on the importance of reporting and understanding quality measure results. However, the CMS 9th Scope of Work for QIOs, which began in August 2008, does not include a rural-specific task. The lack of a rural-specific task is a concern because of uncertainty about whether QIOs will have adequate resources to assist CAHs with quality measurement, reporting and improvement as they have in the past.

Over the past four years, CAHs have significantly improved their performance on nearly all Hospital Compare measures. At the same time, however, rural PPS and urban PPS hospitals also improved their performance. Thus, CAHs continue to have lower scores relative to rural and urban PPS hospitals on several measures, especially the AMI and heart failure measures. The persistence over time of significant differences between CAHs and PPS hospitals, especially for AMI and heart failure patients, as well as within the group of CAHs, presents an ongoing quality improvement challenge for CAHs.

CMS is continuing to add inpatient and outpatient measures to Hospital Compare. Some of the new and proposed measures address conditions that are commonly treated in CAHs (e.g., AMI Emergency Department/outpatient measures, HCAHPS patient assessment of care survey measures) while others address procedures not usually performed in CAHs (e.g., cardiac surgery). Future Flex Monitoring Team analyses will examine the extent to which CAHs are voluntarily reporting data on these new measures and assess trends in performance over time on all relevant measures.

This policy brief is based on Flex Monitoring Team Briefing Paper No.22 by Michelle Casey, Michele Burlew and Ira Moscovice, available at http://flexmonitoring.org/documents/BriefingPaper20_HospitalCompare4.pdf

For more information, please contact Michelle Casey at mcasey@umn.edu.

References

1. Casey, M, Moscovice, I. *CAH participation in Hospital Compare and initial results*. (Briefing Paper No. 9). Minneapolis, MN: Flex Monitoring Team; 2006. http://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*. (Briefing Paper No. 16). Minneapolis, MN: Flex Monitoring Team; 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*. (Briefing Paper No. 20). Minneapolis, MN: Flex Monitoring Team; August 2008. http://flexmonitoring.org/documents/BriefingPaper20_HospitalCompare3.pdf