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Relevant Quality Measures for Critical Access Hospitals

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Introduction

The nation's 1,327 Critical Access Hospitals (CAHs), small rural hospitals with 25 or fewer beds, do not have the same financial incentives as Medicare Prospective Payment System (PPS) hospitals do to publicly report quality measures to the Centers for Medicare and Medicaid Services (CMS) and have the data available on the CMS Hospital Compare website. However, many CAHs voluntarily participate in public reporting to Hospital Compare. For 2009 discharges, 71% of CAHs reported data on at least one inpatient quality measure and 16% of CAHs reported data on at least one outpatient quality measure.[1]

Recent legislation expands the use of quality measures in reporting and payment reform under federal health programs. The American Reinvestment and Recovery Act of 2009 provides payment incentives for meaningful use of certified Electronic Health Record (EHR) technology by hospitals, including CAHs.[2] Although CAHs are currently excluded from the CMS Value-Based Purchasing (VBP) Program, the Patient Protection and Affordable Care Act of 2010 included provisions for CMS to establish VPB demonstrations for CAHs and other low volume hospitals.

State Flex Programs are involved in implementing the Medicare Beneficiary Quality Improvement Project (MBQIP), which was created by the Federal Office of Rural Health Policy. CAHs that opt to participate in MBQIP are being asked to report data on a set of quality measures selected by ORHP and to engage in quality improvement projects to benefit patient care. The MBQIP measures include the CMS inpatient pneumonia and heart failure measures (to be implemented starting in 2011-2012); CMS outpatient AMI/chest pain, outpatient surgery, and HCAHPS measures (starting in 2012-2013); the outpatient Emergency Department Transfer Communication measures and Pharmacist CPOE/verification of medication orders within 24 hours (starting in 2013-2014).

Purpose of the Study

The purpose of this study is to provide rural health care providers and policymakers with an up-to-date set of relevant quality

Key Findings

- A comprehensive set of quality measures are relevant for Critical Access Hospitals (CAHs), including those addressing appropriate care for inpatients with specific medical conditions, global measures addressing appropriate care across multiple medical conditions, and Emergency Department measures.
- Although CAHs have low volume for some measures, the measures are relevant because they address serious conditions, are based on strong evidence, and reflect the standard of care that all hospitals should aim to provide for every patient.
- Many relevant quality measures are now ready for reporting by CAHs.
- The reporting burden for CAHs would be significantly reduced if all entities involved in regulation, accreditation, and payment agree on a single set of quality measures.
- To motivate improvement in the quality of care and help patients make informed decisions in selecting health care providers, all CAHs should publicly report on relevant quality measures.

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measures for CAHs. The study was undertaken in response to multiple requests from rural health care providers and policymakers for an up-to-date set of hospital quality measures that are relevant for CAHs. Since an initial set of rural relevant quality measures was identified in 2004,[3] many new hospital quality measures have been developed and existing measures have been revised or retired. The increased use of quality data for reporting and payment purposes has made it imperative to examine the rural relevance of hospital quality measures.

Approach

A multi-faceted approach was used to select a comprehensive set of quality measures that are relevant for CAHs. We first reviewed the rural relevant quality measures from previous work to determine which measures were still potentially relevant.[3] To help identify important quality measurement topic areas, we also reviewed the summary notes from a national meeting on quality metrics for small rural hospitals organized by the National Rural Health Association for the Federal Office of Rural Health Policy in January 2010.

Next, we analyzed several sets of measures being used for national quality improvement, public reporting, and payment reform initiatives, using three criteria: 1) patient volume for the measure; 2) internal usefulness for quality improvement; and 3) external usefulness for public reporting and payment reform. We began with measures for the CMS Inpatient and Outpatient Quality Reporting Programs, which many CAHs are already publicly reporting and using for quality improvement. We also considered measures from other sources, including the Joint Commission and the National Quality Forum (NQF), for measurement topics not covered by CMS.

Because of the importance of identifying quality measures that could be reported by CAHs in the near future and the length of time involved in developing and testing new quality measures, this study focused on evaluating the rural relevance of existing measures, rather than developing new measures for CAHs. A six member expert panel provided input regarding the final measure selection. Panel members were chosen based on their knowledge regarding hospital quality measurement and quality improvement.

Results

A comprehensive set of quality measures are relevant for CAHs, including measures addressing appropriate care for inpatients with specific medical conditions, global measures addressing appropriate care across multiple medical conditions, and Emergency Department measures. Table 1 lists the measures and recommended modifications. The relevant measures are designated as Category 1 or Category 2 measures. Category 1 includes measures that CAHs could report to CMS now using established specifications and the CART tool or vendors. Category 2 includes measures for which specifications need to be finalized and/or a data reporting mechanism needs to be established; these measures could be reported starting in January 2013.

Policy Implications

To motivate improvement in the quality of care and help patients make informed decisions in selecting health care providers, all CAHs should publicly report on relevant quality measures. Public reporting will be a significant challenge for many CAHs. Actions that would facilitate the process include a phased approach to implementing relevant quality measures in CAHs, the provision of technical assistance, and agreement by all entities involved in regulation, accreditation, and payment to accept a single consolidated set of quality measures with common specifications for CAHs.

Endnotes

1. Casey MM, Burlew M, Moscovice I. Critical Access Hospital Year 6 Hospital Compare Participation and Quality Measure Results. Flex Monitoring Team Briefing Paper #28. 2011; May. Available at: http://www.flexmonitoring.org/documents/Hospital-Compare-Yr6-Report.pdf (accessed October 5, 2011).

2. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Parts 422 and 480. Medicare Program; Hospital Inpatient Value-Based Purchasing Program. Final Rule. Federal Register 2011, May6; 76(88):26490-26547.

3. Moscovice I, Wholey DR, Klingner J, Knott A. Measuring rural hospital quality. J Rural Health. 2004; 20(4):383-393.

Table 1. Relevant Quality Measures for Critical Access Hospitals		
Measures	**Recommended Modifications**	**Category**
Pneumonia Inpatient Blood culture in Emergency Department prior to initial antibiotic[1,3,4] Appropriate initial antibiotic[1,3,4]	None	1
Heart Failure Inpatient Evaluation of LVS function[1,3,4] ACEI or ARB for LVSD at discharge[1,3,4]	None	1
Acute Myocardial Infarction (AMI) ***Inpatient and Emergency Department*** Aspirin at arrival[1,2,3,4] Fibrinolytic therapy within 30 minutes[1,2,3,4] ***Inpatient*** Aspirin at discharge[1,3,4] ACEI or ARB for LVSD[1,3,4] Beta-blocker at discharge[1,3,4] Statin prescribed at discharge[1,4] ***AMI/Chest Pain Emergency Department*** Median time to fibrinolysis for AMI patients[2,4] Median time to transfer to another facility for acute coronary intervention[2,4] Median time to ECG[2,4]	• Allow CAHs to continue reporting inpatient aspirin at arrival, ACEI or ARB for LVSD and beta-blocker at discharge after CMS suspends data collection 1/1/12 • Combine Inpatient and Emergency Department aspirin at arrival measures to increase volume for CAHs. • Combine Inpatient and Emergency Department AMI fibrinolytic measures to increase volume for CAHs	1
Stroke Inpatient Discharged on anti-thrombotic therapy [1,3,4,5] Anti-coagulation therapy for atrial fibrillation/flutter[1,3,4,5] Anti-thrombotic therapy by end of day 2[1,3,4,5] Discharged on statin medication[1,3,4,5] Stroke education[1,3,4,5] Assessed for rehabilitation[1,3,4,5]	None • Data collection for Inpatient Quality Reporting Program starts in January 2013	2
Venous Thromboembolism(VTE)Inpatient VTE prophylaxis[1,3,4,5] VTE patients with anti-coagulation overlap therapy[1,3,4,5] Incidence of potentially preventable VTE[1,3,4,5]	• Include stroke patients in VTE prophylaxis measure rather than separate stroke measure and ICU patients in potentially preventable VTE measure rather than separate ICU measure • Data collection for Inpatient Quality Reporting Program starts in January 2013	2
HCAHPS Communication with nurses[1,5] Communication with doctors[1,5] Responsiveness of hospital staff[1,5] Cleanliness/quietness of hospital[1,5] Pain management[1,5] Communication about medicines[1,5] Discharge information[1,5] Overall rating of hospital[1,5] Recommendation of hospital[1,5]	• Reported results should include the number of completed surveys. Some CAHs may have fewer eligible patients annually than the 300 surveys recommended by CMS, but should still report. • CMS should reconsider its decision to exclude patients discharged to swing beds from HCAHPS, which reduces the number of eligible patients in 92% of CAHs.	1

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Measures	**Recommended Modifications**	**Category**
Global tobacco use Tobacco use screening[3] Tobacco use treatment provided/offered during inpatient admission or at discharge[3]	• Need NQF endorsement and Joint Commission field test results • Implement reporting mechanism for non-accredited CAHs • Consider a combined treatment during admission and at discharge measure that takes into account the short average length of stay in CAHs and addresses discharges to swing beds.	2
Global Vaccination Influenza vaccination overall rate[1] Pneumococcal immunization overall rate[1]	• Data collection for Inpatient Quality Reporting Program starts in January 2012	1
Emergency Department Door to diagnostic evaluation by qualified medical professional[2] Median time to pain management for long bone fracture[2] Head CT or MRI scan results for stroke within 45 minutes[2] Median time from Emergency Department arrival to departure for admitted patients[1,5] Admit decision time to Emergency Department departure time for admitted patients[1]	None	1
Emergency Department Transfer Communication Measures[4]	• Implement mechanism for reporting	2
Care Transitions Transition record with specified elements received by discharged Emergency Department patients[2,4] Transition record with specified elements received by inpatient discharges[4] Timely transmission of transition record for discharged inpatients to health care provider for follow-up care[4] Care Transition Measure[4]	• Include patient discharge components for heart failure patients and VTE patients to replace condition-specific discharge measures • Calculate overall inpatient measure and for patient sub-groups with high potential for readmission (e.g., heart failure) • Implement mechanism for reporting inpatient measures	2
Healthcare-Associated Infection Catheter Associated Urinary Tract Infection[1,3,6] Central Line Associated Bloodstream Infection (CLABSI)[1,3,6] Surgical Site Infection[1,3,6] Healthcare Provider Influenza Vaccination[1,3,6] MRSA infection rate[1,6] Clostridium Difficile infection rate[1,6]	• Provide CAHs with technical assistance on reporting to CDC National Health Safety Network • Expand CLABSI measure beyond ICUs to allow CAHs to submit overall facility CLABSI data	2

Table 1. Relevant Quality Measures for Critical Access Hospitals		
Measures	**Recommended Modifications**	**Category**
Surgical Care Improvement – CAHs Providing Surgery ***Outpatient and Inpatient Surgery*** Prophylactic antibiotic one hour prior to incision[1,2,3,4] Prophylactic antibiotic selection for surgical patients[1,2,3,4] ***Inpatient Surgery*** Prophylactic antibiotics discontinued within 24 hours[1,3,4] Surgery patients on beta-blockers who received beta-blocker during perioperative period[1,3,4] Surgery patients who received appropriate VTE prophylaxis within 24-hours prior to 24 hours after surgery[3,4] Perioperative urinary catheter removal post-op day 1-2[1,3,4] Perioperative temperature management[1,3,4]	• Combine outpatient and inpatient prophylactic antibiotic timing measures to increase volume for CAHs • Combine outpatient and inpatient prophylactic antibiotic selection measures to increase volume for CAHs	1
Perinatal Measures – CAHs providing Obstetrics Elective delivery prior to 39 weeks gestation[3,4] C-section rate for low risk first birth women[3,4] Exclusive breast-feeding during birth hospitalization[3,4]	• Implement reporting mechanism for non-accredited hospitals	2

Sources:

[1]CMS Inpatient Quality Reporting/Hospital Compare measure; HCAHPS specifications at http://www.hcahpsonline.org/techspecs.aspx; Centers for Disease Control National Health Safety Network specifications below; specifications for all other measures at http://www.qualitynet.org;

[2]CMS Outpatient Quality Reporting/Hospital Compare measure; specifications at http://www.qualitynet.org

[3]Joint Commission measure; tobacco use specifications (CMS informational measures) at http://www.qualitynet.org; perinatal specifications at http://manual.jointcommission.org/releases/TJC2011A/

[4]National Quality Forum endorsed measure; information on all endorsed measures at http://www.qualityforum.org; information on Emergency Department Transfer Communication Measures at http://qualitymeasures.ahrq.gov/; Care Transition measure specifications at http://www.caretransitions.org

[5]CMS Electronic Health Record Meaningful Use measure.

[6]Centers for Disease Control National Health Safety Network measure; specifications at http://www.dcd.gov/nhsn/

[7]American Medical Association Physician Consortium on Performance Improvement measure; specifications at http://www.ama-assn.org/ama/pub/physician-resources/clinical-practice-improvement/clinical-quality/physician-consortium-performance-improvement/pcpi-measures.page

Additional Information

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