

# Health Care Reform, Quality, and Critical Access Hospitals

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**NRHA CAH Conference**

**Portland, OR**

**Oct. 9, 2009**



A Performance Monitoring Resource for  
Critical Access Hospitals, States, and Communities

**Flex Monitoring Team** | University of Minnesota  
University of North Carolina at Chapel Hill  
University of Southern Maine



## Overview of Presentation

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- Health care reform proposals for improving quality: implications for CAHs
- Status of quality measurement and reporting for CAHs
- Future quality performance issues for CAHs



# Health Care Reform and Quality

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- Funding for comparative effectiveness research
- Health Information Technology funding to increase electronic health record adoption
- Improve care coordination by increasing Medicaid and Medicare payments for primary care
- Medicare payment incentive models (e.g., bundled payments, patient-centered medical homes, accountable care organizations)



## **Health Care Reform and Quality**

- Medicare payment reform proposed to address problems in current system (e.g., lack of care coordination, payment for poor quality care)
- Demonstration projects have primarily involved large urban integrated delivery systems
- Many challenges implementing in rural areas (e.g., organizing providers; achieving minimum patient base necessary to assume risk)
- Payment reform increases need to measure and report data on quality of care

## **Implications for CAHs**

- Public reporting of quality measures to Hospital Compare has been voluntary for CAHs
- As we move toward a system that rewards high-quality care, CAHs will need to publicly report on quality measures to demonstrate the quality of the care they are providing
- HIT “meaningful use” will require all hospitals to report data on selected quality measures to CMS to qualify for reimbursement incentives

# Hospital Compare Inpatient Measures

## Reported by hospitals

## Calculated by CMS using Medicare data

Process of care for heart attack (AMI), heart failure, pneumonia, surgical care improvement (e.g., for pneumonia: blood culture prior to first antibiotic; influenza and pneumococcal vaccinations)

Patient assessment of care (HCAHPS) survey results (e.g., communication with nurses, communication with physicians; pain control)

30 day mortality rates for AMI, heart failure, pneumonia

30 day readmission rates for AMI, heart failure, pneumonia (release date June 2009)

Patient safety and inpatient quality indicators (e.g., accidental puncture or laceration; hip fracture mortality rate – release date Dec. 2009)

Nursing sensitive measure (failure to rescue for Medicare patients - release date TBD)

# Hospital Compare Outpatient Measures

## Reported by hospitals

Process of care for AMI in Emergency Department (e.g., aspirin at arrival; median time to ECG.)

Surgical care improvement (e.g., timing and selection of antibiotics for outpatient surgeries)

## Calculated by CMS using Medicare data

Imaging measures (e.g., MRI of the Lumbar Spine with a diagnosis of low back pain without claims-based evidence of antecedent conservative therapy; patients with mammography screening followed by diagnostic mammography or ultrasound.)



# Rural Relevance of Quality Measures

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## AMI

- Small rural hospitals have high transfer rates for AMI patients, and some cardiac procedures (e.g. PCI) are rarely performed
- Inpatient AMI measures may not be relevant for many CAHs
- AMI Emergency Department outpatient measures are rural relevant





# Rural Relevance of Quality Measures

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## Pneumonia and Heart Failure

- Among the most common inpatient diagnoses in small rural hospitals
- Measures are rural relevant

## Surgical Improvement

- 2/3 of CAHs provide inpatient surgery and 4/5 of CAHs provide outpatient surgery
- Measures are relevant for CAHs that provide the types of surgery covered by the measures



# Rural Relevance of Quality Measures

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## New Inpatient Measures

- Children's asthma measures primarily for urban children's hospitals
- 30 day risk-adjusted heart failure and pneumonia mortality and readmission rates are rural relevant in theory, but small volume is a major problem



# Rural Relevance of Quality Measures

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## HCAHPS

- Survey questions are relevant to small rural hospitals

## New and Proposed Outpatient Measures

- Upper Midwest RHRC project is assessing the rural relevance of new and proposed Hospital Compare outpatient measures



## Small Volume Issues

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- CMS considers 25 patients the minimum to reliably measure performance at hospital level

### For 2007 discharges

- AMI - very few CAHs had data for 25 patients or more for any of the AMI measures
- Pneumonia - more than 1/3 of CAHs had data for 25+ patients on 5 of 7 pneumonia measures

## Small Volume Issues

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- Heart failure: almost half of CAHs had data for 25+ patients on 1 of the 4 heart failure measures, and just over 1/4 had data for 25+ patients for a second measure
- Surgical improvement: about 1/5 of reporting CAHs had data for 25+ patients for all measures
- 30 day risk-adjusted mortality and readmission: most CAHs either have too few cases to reliably calculate rates or rates are not statistically different from national averages

# Small Volume Issues

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- Options for addressing small volume
  - Calculate composite measures
  - Aggregate data across groups of similar hospitals
  - Use a longer time period to calculate measures
  - Use statistical methods (e.g., Bayesian models)
- No perfect solution: pros and cons for each option



# Flex Monitoring Team Hospital Compare Reports

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- National and State Reports on CAH participation and results annually and trends over time
- Aggregate data across CAHs nationally and by state (25 patients per measure minimum)
- State report drop down menu on FMT website <http://www.flexmonitoring.org/indicators.shtml>
- In addition to inpatient data, this year's reports will include outpatient and HCAHPS data if a sufficient number of CAHs report data



# CAH Reporting to Hospital Compare

## Inpatient Process of Care Measures

- For 2004 through 2007, public reporting increased from 41% to 69% of CAHs
- The percent of CAHs publicly reporting by state varies widely
  - Range of 7.7% to 100% in 2007
  - Nine states had 100% of CAHs reporting
  - Nine states had less than half of CAHs reporting





# CAH Reporting to Hospital Compare

## Inpatient Process of Care Measures (cont.)

- 22% of CAHs only submitted data to QIOs, not to Hospital Compare; 15% of CAHs did not report to either (2006)
- Reporting varies by condition and measure
- CAHs are more likely to report data on pneumonia and heart failure inpatient measures than AMI and surgical improvement



# CAH Reporting to Hospital Compare

## Patient Assessment of Care Surveys (HCAHPS)

- 32% of CAHs publicly reported HCAHPS data (Q3-4 2007/Q1-2 2008)
- By state, reporting ranged from 0% to 100% of CAHs

## Outpatient Process of Care Measures

- CMS initially limited to PPS hospitals, but allowed CAHs to voluntarily report beginning in January 2009; data not yet available



# Hospital Compare Results

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## Inpatient Process of Care Measures

- CAHs and rural PPS hospitals have not performed as well as urban PPS hospitals on AMI and heart failure measures
- Results are mixed for pneumonia and surgical improvement measures
- Large variation *within* groups of CAHs and PPS hospitals



# Hospital Compare Results

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## Inpatient Process of Care Measures

- Both CAHs and PPS hospitals have improved on most measures over time, but the gap in performance between PPS hospitals and CAHs has not been reduced for many measures
- CAHs that report to Hospital Compare had significantly better scores on 15 measures than those who only report to QIOs; no information for CAHs that don't report to either



# Hospital Compare Results

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## HCAHPS

- CAHs score significantly higher than rural and urban PPS hospitals on HCAHPS measures
- Significant differences remain after controlling for hospital characteristics (e.g., inpatient volume, nurse staffing ratios)



# Future Quality Performance Issues for CAHs

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- Assessing rural relevance of new quality measures
- Measuring quality of episodes of care (across time and locations, especially for chronically ill)
- Addressing small volume issues
- Increasing public reporting by CAHs



# Future Quality Performance Issues for CAHs

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- Improving CAH performance on quality measures, and reducing gaps with larger rural and urban hospitals
- Coordinating state reporting and benchmarking with national initiatives
- CAH reporting of quality measures for HIT “meaningful use”
- Determining role for CAHs in Medicare payment incentive models and related reforms



## **Additional Information**

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- Flex Monitoring Team (Rural Health Research Centers at the Universities of Minnesota, North Carolina and Southern Maine)  
[www.flexmonitoring.org](http://www.flexmonitoring.org)
- Upper Midwest Rural Health Research Center (University of Minnesota Rural Health Research Center and University of North Dakota Center for Rural Health) [www.uppermidwestrhrc.org](http://www.uppermidwestrhrc.org)
- University of Minnesota Rural Health Research Center <http://www.hpm.umn.edu/rhrc/>