

# Quality Leadership for CAHs in Turbulent Times

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# Overview of Presentation

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Part 1 – Health Care Reform and Rural Health Quality

Part 2 – Current State of Quality Measurement and Reporting for CAHs

Part 3 – Quality of Care in CAH Emergency Departments

Part 4 – What Can Rural Hospitals Do Now to Meet the Rural Health Quality Imperative?

## Part 1

# Health Care Reform and Rural Health Quality



# American Health Care System is Confronting a Crisis

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- Safety – Tens of thousands die due to errors (IOM, 99)
- Effectiveness – 50/50 chance of getting appropriate care (McGlynn, 03)
- Uninsured – Over 47 million people
- Racial and ethnic disparities
- Workforce shortages and turnover
- Rapidly rising costs
- Reduced access to capital

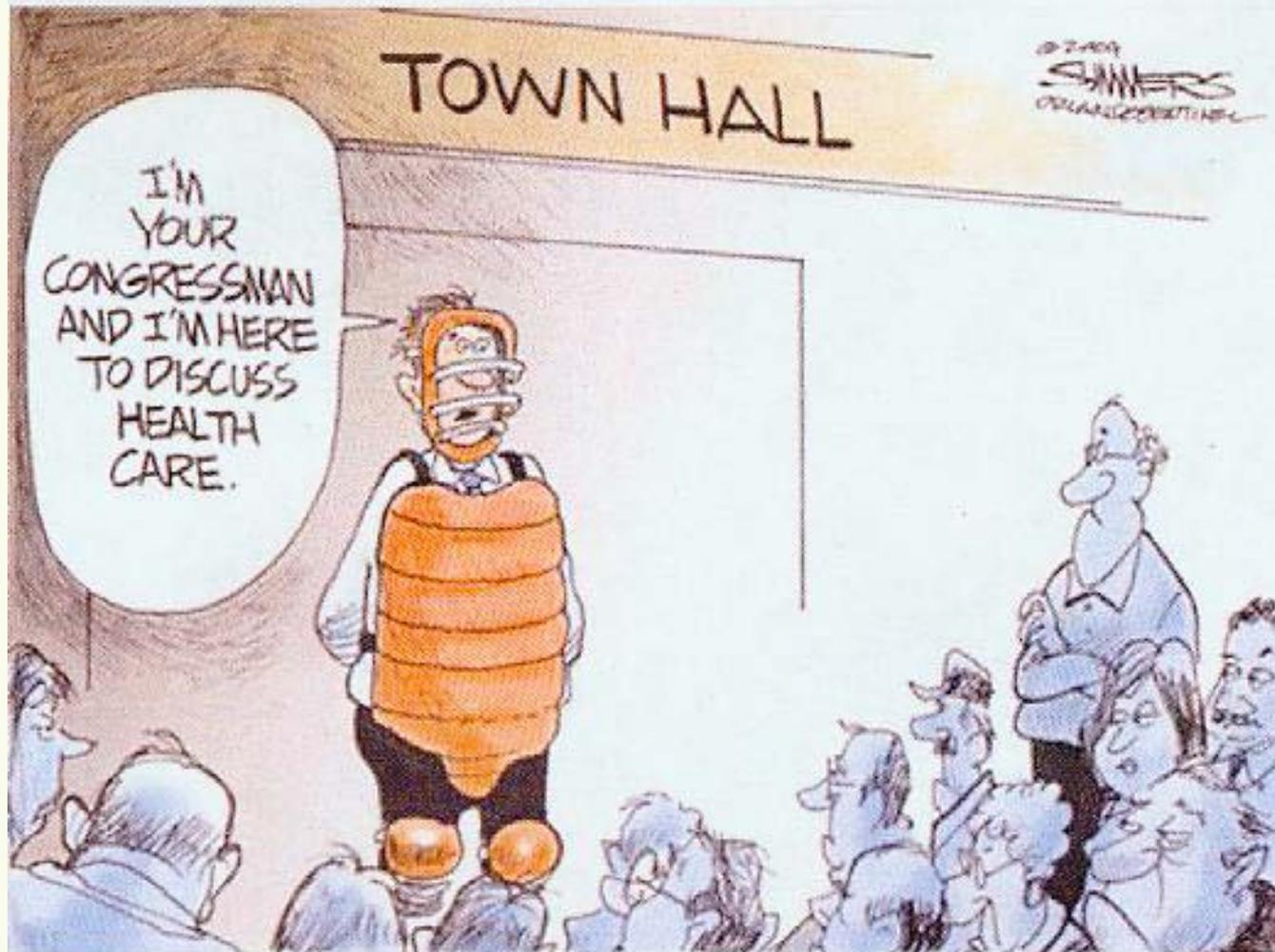


# Guiding Principles for Health Reform: Outlined in President's Budget

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- Eight principles
  - Protect families' financial health
  - Make health coverage affordable
  - Aim for universality
  - Provide portability of coverage
  - Guarantee choice
  - Invest in prevention and wellness
  - Improve patient safety and quality care
  - Maintain long-term fiscal sustainability
- Reform must be deficit neutral with financing coming from both savings from the health system due to health system improvements and new revenue
- Details of the reform plans left to committees of jurisdiction in Congress

Upper Midwest  
Rural Health  
Research Center





# Building Blocks for Health Reform Nationally

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- Expand access to health care coverage
  - Individual mandate, financial penalty for not having coverage
  - Employer requirements to offer coverage and contribute to premium costs, with small employer exemptions
  - Expansion of public programs
    - Medicaid, CHIP
  - Premium subsidies for individuals
    - Sliding scale, based on % of poverty

# Building Blocks for Health Reform Nationally

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- Expand access to coverage (cont.)
  - Premium subsidies for small employers and employers covering 55-64 year old retirees
  - Insurance pooling mechanisms
    - National Health Insurance exchange
    - Public option/health insurance cooperatives
  - Changes to private insurance
    - Require guarantee issue and renewability
    - Prohibit pre-existing condition exclusions
    - Limit rating variation



# Building Blocks for Health Reform Nationally

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- Cost containment
  - Expand federal oversight to reduce fraud, waste
  - Simplify health insurance administration, adopt standards for financial and administrative transactions
  - Modify provider payments under Medicare
  - Restructure Medicare Advantage payments
  - Medicaid drug rebates



# Building Blocks for Health Reform Nationally

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- Improving quality
  - Support for comparative effectiveness research
  - Improve care coordination by increasing Medicaid and Medicare payments for primary care
  - Restructure Medicare Advantage payments
  - Test Medicare payment incentive models (e.g., accountable care organizations, bundled payments, medical homes)
  - Development and public reporting of quality measures

Source: Kaiser Foundation Summary of Senate and House Health Care Reform Legislative Proposals



# Major Areas of Similarities and Differences between Current Health Care Reform Bills

<b>Similarities between Bills</b>	<b>Differences between Bills</b>
<ul style="list-style-type: none"> <li>• Individual mandate</li> <li>• Insurance exchange</li> <li>• Premium and cost-sharing subsidies</li> <li>• Insurance market regulations</li> <li>• Essential standard benefit package standard</li> <li>• Medicaid/CHIP expansion</li> <li>• Pilot programs for rapid cycle testing of innovative payment methods</li> <li>• Creating a national quality improvement strategy</li> <li>• Improving primary care reimbursement</li> <li>• Center for Comparative Effectiveness Research</li> <li>• Create and expand wellness and prevention programs</li> </ul>	<ul style="list-style-type: none"> <li>• Choice of public plan in exchange</li> <li>• Employer shared responsibility</li> <li>• Changing the Sustainable Growth Rate formula for Medicare physician fee update</li> <li>• Medicare Commission to extend Medicare solvency, slow Medicare cost growth and increase quality of care</li> <li>• Sources of revenue: surcharges on higher income vs. excise tax on high cost health plans</li> </ul>

Source: Commonwealth Fund analysis of health reform proposals



# What Happened to Delivery Side Reform?

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- What is in the Senate Finance Committee bill?
  - Encourages development of new patient care models such as ACOs
  - Creates CMS Innovation Center to test and evaluate patient-centered delivery and payment models
  - Establishes a national pilot program on payment bundling
- Does it make sense to implement insurance reform without substantial delivery side reform?
- Are we simply providing increased access to an inefficient system?
- Can we achieve cost containment without substantial delivery side reform?



# How Do We Want Health Care to be Delivered?

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- Clinically relevant information available
- Care coordination among multiple providers with active management of transitions
- Clear accountability for total care of patients
- Patients have easy access to appropriate care and information
- System is continuously innovating and learning
- ***Conclusion: Some form of organization (i.e. established mechanisms for working across providers and settings) is required to achieve the above***

# Medical Homes

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- Patient-centered “medical home” principles agreed on by primary care specialty societies:
  - personal physician;
  - whole-person orientation;
  - safe, high-quality care (e.g., evidence-based medicine, appropriate use of HIT);
  - enhanced access to care; and
  - payment that recognizes the added value provided to patients who have a patient-centered medical home
  
- A variety of organizations have initiated “medical home” demonstration projects



# NCQA's National Measures for Medical Homes

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- A practice must demonstrate proficiency in at least 5 of 10 areas
- Areas include:
  - standards for patient access and patient communication
  - use of charting tools to organize clinical information
  - implementation of evidence-based guidelines for 3 conditions
  - active support of patient self-management
  - systems to track abnormal results and referrals
  - measurement and reporting of performance
- Some critics suggest the measures place too much emphasis on technology
- Challenge for small practices without EHR

# Accountable Care Organizations (ACOs)

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- A set of providers (hospital, primary care physicians and specialists) responsible for the quality and cost of health care for a defined population of Medicare beneficiaries
- Goal: constrain costs and improve quality
- Would need a formal organization and structure
  - Could be formed from an integrated delivery system, physician-hospital organization or academic medical center
  - Minimum of at least 5,000 patients



# Accountable Care Organizations (ACOs)

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- Medical Homes as “building blocks” for ACOs
- MedPAC recommends CMS inform physicians and hospitals about resource use over time, to inform ACO development

Source: MedPAC Report to Congress June 2009

# Accountable Care Organizations (ACOs)

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- **Setting cost targets**
  - Base incentives on changes in spending, not levels
  - Need to address geographic variation in spending
  - To be fair to low use areas, adjust for area wages and patient severity, but not regional utilization differences
  
- **Setting quality targets**
  - Initially process measures with a limited set of outcomes
  - Future measures could include mortality, hospital readmissions, ambulatory care sensitive admissions, patient satisfaction, improvements in functionality

## ■ Rural Challenges

- Achieving minimum patient base of 5,000 in thinly populated areas
- Rural providers less likely to have formal organizational structure, integrated providers (How do CAHs, RH clinics, networks etc. fit in?)
- Many rural areas have historically low costs
- Financial vulnerability of many rural providers
- Aligning bonuses (and penalties, if any) with cost-based reimbursement
- Small volume issues in measuring quality



# Bundled Payments and Care Coordination

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- Silo structure of Medicare payments reduces care coordination across treatment modalities
- Bundling provides a fixed payment for a set of services (e.g. acute and post-acute care services for pneumonia, stroke, hip fractures, CHF, and AMI)
- In theory, bundled payments should encourage smoother patient handoffs and better coordination of care

# Bundled Payments and Care Coordination (cont.)

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- It may save money through negotiations across provider types and by choosing less expensive venues
- Challenges to bundling payments include
  - How hospitals form necessary agreements with other providers on allocation of single payment
  - Developing relevant quality measurement and QI initiatives
  - Constructing risk-adjustment systems

# Bundled Payments and Care Coordination (cont.)

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- Challenges to bundling payments in rural settings
  - Cost-based reimbursement incentives (e.g. for CAHs) are very different than incentives bundling attempts to provide
  - Rural patients may receive hospital care and post-acute care in geographically dispersed facilities making it difficult to “virtually” integrate
  - Some rural hospitals have few options for post-acute care and would be disadvantaged at the negotiating table
  - Changes in reimbursement structures may lead financially unstable rural providers to exit the market



# Bundled Payments : Potential Rural Strategies

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- CMS Contract Strategies:
  - Design optimal contractual arrangements with templates for rural providers
  - Develop risk and volume-adjusted performance criteria for contracts
  - Provide contract guidance and technical support for small rural providers
  - Where feasible, require larger hospitals to establish multiple post-acute contracts for consumer choice



# Bundled Payments : Potential Rural Strategies

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## ■ Reimbursement Strategies

Congress and CMS should consider:

- Exempting CAHs from the bundled payment methodology
- Carving out post-acute services provided by CAHs for bundled payments under the same methodology used for Prospective Payment System (PPS) providers; and/or
- Creating a “fixed-bonus” payment to support continued operation of CAHs and avoid loss of access to needed services in rural areas without alternative sources of care

- The American Recovery and Reinvestment Act provides \$1.1 billion to AHRQ and NIH in federal support of comparative effectiveness research
- Institute of Medicine Comparative Effectiveness Committee identified a list of 100 priorities for CER
- Federal Coordinating Council for CER has recommended uses of ARRA funds for:
  - Investment in data infrastructure
  - Dissemination and translation of CER findings
  - Priority populations: racial and ethnic minorities, persons with disabilities, persons with multiple chronic conditions, elderly, and children.

- Lack of clinical research in rural environments and limited participation of rural patients in clinical trials
  - Ensure that academic medical centers conducting clinical trials work with community partners to recruit rural subjects (NIH, AHRQ)
  - Ensure that rural patients are represented in medical registries (NIH, CDC, federal/state health agencies)
  - Grant support and TA for rural providers to participate in primary care practice-based research networks (AHRQ)
  - Financial support and TA for HIT to facilitate participation in clinical trials and medical registries by rural providers (AHRQ, ORHP)

- Implementation of practice guidelines in rural settings often lags behind urban settings
  - Fund studies/demonstrations to examine impact of health system factors on rural relevance of guidelines and implementation in rural settings (AHRQ)
  - Expand guidelines to address patients with multiple chronic conditions, care shared among providers (AHRQ, CMS)
  - Include information about rural relevance of guidelines in National Guideline Clearinghouse (AHRQ)
  - Support rural providers in implementing HIT needed to incorporate reminders, prompts, alerts (AHRQ)
  - Fund QIOs to work with rural providers on implementation of rural relevant guidelines (CMS)

- Rural health professionals may have limited access to current evidence-based information; rural patients have difficulty obtaining appropriate information to make health care decisions
  - Require Clinical and Translational Science Awardees to include outreach to rural providers (NIH)
  - Expand dissemination efforts to make rural patients aware of existing resources (e.g., Medline Plus) (NLM)
  - Expand AHRQ Effective Health Care Program to include a special focus on rural clinicians and consumers
  - Fund demonstration projects to provide online access to a core set of clinical information resources (AHRQ, NLM)

## Part 2

# Current State of Quality Measurement and Reporting for CAHs

**RWHC Eye On Health**



"OK. I understand a lot is going to change.  
But how do I stay the same?"



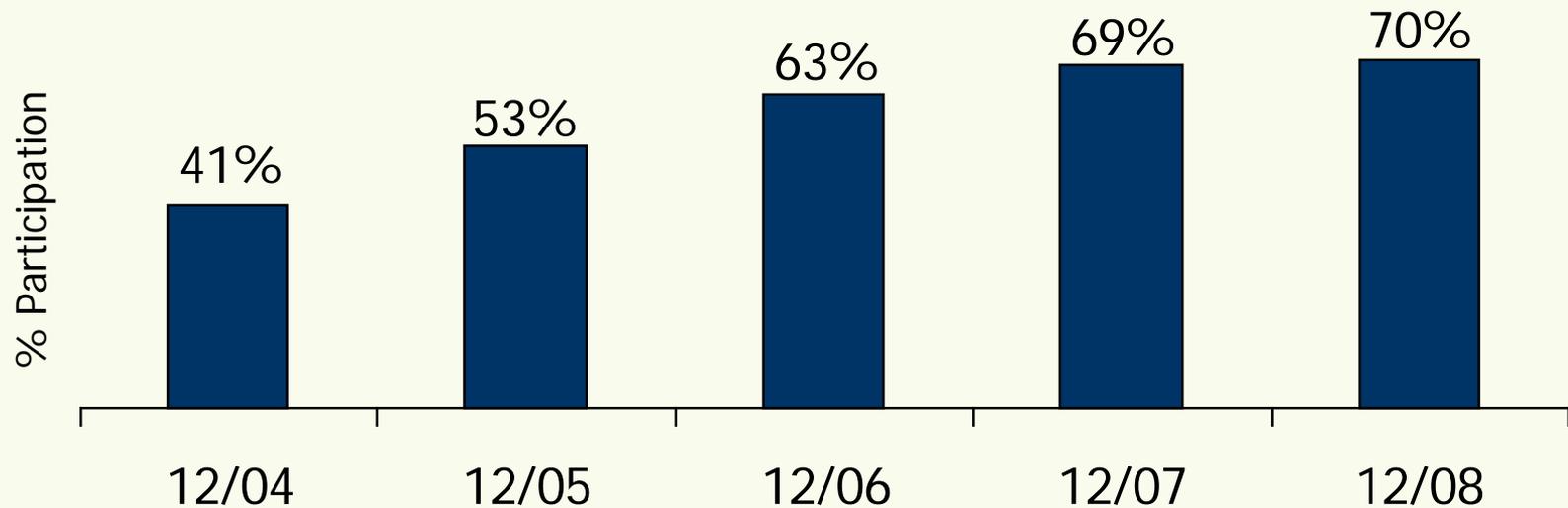
# The Rural Health Quality Imperative

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The rural hospitals that survive will be the institutions that demonstrate they are able to provide good quality care.

# CAH Participation in CMS Hospital Compare

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- CAH participation varies widely by state from a low of 11% to 100% participation in 8 states. Oregon's CAH participation rate in 2008 was 88%.



# CAH Participation in CMS Hospital Compare (cont.)

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- Approximately one-fourth of CAHs submitted data on all 20 measures.
- JCAHO accredited, higher volume, system members are more likely to participate



# CAH Participation in CMS Hospital Compare Data Collection

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## ■ Volume is an issue

### 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
- 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.



## Options for Addressing Small Volume

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- 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



# CMS Hospital Compare Data Summary

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## Inpatient Process of Care Measures

- Nationally, CAHs have improved over time on all but 1 measure but the gap in performance between urban hospitals and CAHs has not been reduced for the majority of 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
- In 2008, CAHs in Oregon were performing better than CAHs nationally on 70% of the measures

– Better than CAHs nationally on:

AMI	3 of 3 measures
CHF	2 of 4 measures
Pneumonia	7 of 7 measures
SIP	2 of 6 measures



# CMS Hospital Compare Data Summary

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## HCAHPS (Hospital Consumer Assessment of Health Care Providers)

- 34% of CAHs publicly reported HCAHPS data for 2008 (44% of Oregon CAHs)
- 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)

- What are the reasons for the above results?
  - Availability of specialists and technology
  - Nurse staffing
  - Organizational culture/leadership
  - Use of clinical and administrative guidelines/protocols
  - QI/Continuing education programs
  - Patient volume
  - Documentation issues
  - Systems issues (e.g. related to turf control)



# 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

## 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
- Some types of surgery in the measures are not performed in CAHs while others are; measures are relevant for CAHs where surgery is provided



# 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 will assess the rural relevance of new and proposed Hospital Compare outpatient measures



# Quality Measurement and Improvement: Future Issues for CAHs

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- Rural relevance of quality measures and options for addressing small volume
- Measuring quality of episodes of care (across time and locations, especially for chronically ill)
- Increasing public reporting by CAHs including for HIT “meaningful use” reimbursement incentives
- Improving CAH and rural hospital performance and reducing gap with urban hospitals
- Use of quality measure results in pay-for-performance initiatives (e.g., CMS Medicare Value-Based Purchasing Program)

## Part 3

# Quality of Care in CAH Emergency Departments



# Three Field Tests of Emergency Department Quality of Care

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- Field Test #1 – Partnership with QIOs
- Field Test #2 – Train the Trainer Model
- Field Test #3 – Electronic Collection and Submission of Data

# Field Test #1

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- Rural hospitals with less than 50 acute beds in MN, NV, UT recruited by Stratis Health and HealthInsight
- 22 rural hospital participants collected data over 6 months (3/04-9/04)

# ED Chest Pain/AMI

## *Measurement Results – Field Test #1*

<b>Measure</b>	<b>Percent of Cases that Met the Standard</b>	<b>Sample Range</b>
Aspirin within 24 Hours of Arrival	59.9% (466 cases)	25% - 93.8% (22 hospitals)
ECG within 10 Minutes of Arrival	50.8% (500 cases)	16.7% - 83.3% (22 hospitals)
Blood Draw within 10 Minutes of Arrival	15.8% (449 cases)	0% - 45.8% (22 hospitals)
Thrombolytics within 30 Minutes of Arrival	33.3% (33 cases)	0% - 83.3% (11 hospitals)

- Washington Rural Health Quality Network
  - 36 CAHs, 17 participated in field test
- Focus on ED timeliness and transfer communication measures
- Data collection – 1/06 to 6/06

## ED Chest Pain/AMI

### *Measurement Results – Field Test #2*

<b>Measure</b>	<b>Percent of Cases that Met the Standard</b>
Aspirin within 24 hours of arrival	71.5% (393 cases)
ECG within 10 minutes of arrival	36.7% (474 cases)
Thrombolytics within 30 minutes of arrival	8.0% (25 cases)

# ED Transfer Communication

## *Measurement Results – Field Test #2*

Category	Data Element	Mean and % of Cases (n=616)
Administrative information (Range 0-2)	<ol style="list-style-type: none"> <li>1) Nurse communication with receiving hospital staff</li> <li>2) Physician communication with receiving professional</li> </ol>	<p>Mean = 1.81 84.1%</p> <p>96.9%</p>
Patient information (Range 0-6)	<ol style="list-style-type: none"> <li>1) Name</li> <li>2) Address</li> <li>3) Age</li> <li>4) Gender</li> <li>5) Contact information for significant others</li> <li>6) Insurance information</li> </ol>	<p>Mean = 4.74</p> <p>87.1%</p> <p>73.9%</p> <p>86.5%</p> <p>86.5%</p> <p>69.3%</p> <p>69.8%</p>

# ED Transfer Communication

## *Measurement Results – Field Test #2*

Category	Data Element	Mean and % of Cases (n=616)
Vital signs (Range 0-7)	1) Pulse	Mean = 5.92 83.4%
	2) Respiration	82.8%
	3) Blood pressure	79.9%
	4) Temperature	78.0%
	5) Oxygen level	77.5%
	6) Glasgow score	89.0%
	7) Apgar score	99.2%
Medication communication (Range 0-3)	1) Medication history	Mean = 2.45 80.4%
	2) Medications Given (MAR)	81.4%
	3) Allergies	83.0%

# ED Transfer Communication

## *Measurement Results – Field Test #2*

<b>Category</b>	<b>Data Element</b>	<b>Mean and % of Cases (n=616)</b>
Physician documentation (Range 0-2)	1) Physician's history and physical	Mean = 1.68 78.0%
	2) Physician's orders and reason for transfer	89.6%
Nursing documentation (Range 0-6)	1) Nurse documentation: interventions/response to care	Mean = 4.96 80.1%
	2) Impairments	84.2%
	3) Immobility	88.5%
	4) Respiratory support given	83.2%
	5) Oral restrictions	81.4%
	6) Catheters	81.3%

# ED Transfer Communication

## *Measurement Results – Field Test #2*

<b>Category</b>	<b>Data Element</b>	<b>Mean and % of Cases (n=616)</b>
Tests and procedures (Range 0-2)	1) Tests and procedures done	Mean = 1.64 82.3%
	2) Tests and procedures sent	81.5%

- Current test of electronic collection and submission of data using RPM system of Stroudwater Associates
- 30 CAHs in 4 states (NY, PA, OH, HI) in collaboration with SORH and QIO
- Data collection – 7/08 to 3/09

## Conclusion

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- Relevant quality measures can be systematically collected from small rural hospitals who receive appropriate training and support from QIOs, networks, SORHs and other entities.
- The transfer communication and ED timeliness of care measures have been endorsed by NQF. The ED timeliness of care measures are currently being used by CMS as hospital outpatient quality measures. In January, 2009, NQF issued a call for performance measures for care coordination.

## Part 4

What Can Rural Hospitals Do  
Now to Meet the Rural Health  
Quality Imperative?



# What can rural hospitals do now?

- Link QI to your mission and strategic plan
- Establish an organizational culture that actively supports QI in a non-punitive environment
- Reorient QI strategies from patient or provider-centered approach to one that also embraces a community/population approach
- Assess community health status and community health priorities



# What can rural hospitals do now?

- Define a relevant quality measure set for your hospital
- Collect data on patient care processes and outcomes on a regular basis
- Report results on a regular basis using an easy-to-read format
- Participate in public reporting initiatives
- Invest in HIT that supports QI



# What can rural hospitals do now?

- Develop small QI teams in your hospital that address quality and patient safety issues (e.g. a proactive medication management team)
- Work with a support hospital on QI activities
- Join/develop a network that facilitates QI activities for rural hospitals



# What can rural hospitals do now?

- Initiate QI activities related to care coordination for the chronically ill
- Work with your QIO, SORH, state hospital association, and universities on QI activities
- Apply for QI-related grants

# Conclusion

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Rural America can lead in the design, implementation and testing of strategies for improving population health and personal health care delivery.



# Additional Information

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