CAH Quality Measurement and Evidence-Based Quality Improvement

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Presented at the Flex Conference
Portland, Maine
July 12, 2011
Overview of Presentation

• Building the evidence base to improve quality of care in CAHs
  – Importance of reporting quality data
  – Relevant quality measures for CAHs
  – Medicare Beneficiary Quality Improvement Project (MBQIP)

• Evidence-based quality improvement programs and strategies for CAHs
  – Pneumonia example
Importance of Public Reporting of CAH Quality Data

- Long term viability of the Flex Program depends on having national data on program effectiveness.
- Existing state and multi-state quality reporting and benchmarking efforts are important and should continue, but comparable national data are needed.
- All CAHs need to report on a core set of measures the same way so data are comparable nationally.
- Public reporting of quality data provides a richer environment for CAH benchmarking and QI.
Reasons given for not reporting to Hospital Compare

- It’s only the small states that have high CAH participation
- The measures are not “rural relevant”
- We have our own quality measurement system
- CMS does not require CAHs to participate
Rural Relevant Quality Measures for CAHs

• Current work:
  – Evaluating the relevance of the current and proposed CMS outpatient quality measures
  – Developing an up-to-date list of rural relevant inpatient quality measures for CAHs
Criteria for Assessing Rural Relevance

• Prevalence/volume in CAHs
• Internal usefulness for QI processes
• External usefulness for public reporting and payment reform
• Additional considerations
  – Ease of data collection (e.g., calculation using claims data; effort required for medical record abstraction; and feasibility of using EHRs)
Rural Relevant Outpatient Measure Project

- Review of peer-reviewed literature
- Descriptive analysis of Medicare Hospital Outpatient 2008 claims using specifications for current and proposed CMS outpatient measures
- Descriptive analysis of Hospital Compare 2009 outpatient quality measure data for AMI/chest pain and outpatient surgery
- Review of measures by UMRHRC Expert Work Group
CMS Current and Proposed Outpatient Measures

- Emergency Department
- Outpatient Surgery
- Imaging (e.g., CT scans, mammography)
- Structural measures (e.g., use of health information technology)
- Measures for specific clinical conditions: diabetes, cancer, and heart failure
- Other measures (e.g. vaccination, medication reconciliation)
Rural Relevant
Outpatient Measures

Emergency Department Measures

• Median time to transfer to another facility for acute coronary intervention for AMI patients
• Aspirin at arrival for patients with AMI or chest pain
• Median time to ECG for patients with AMI or chest pain
• Emergency Department Transfer Communication Measures
• Transition record with specified elements received by discharged patients
• Door to diagnostic evaluation by a qualified medical professional
• ED head CT scan results for stroke within 45 minutes of arrival
Rural Relevant Outpatient Measures

Outpatient Surgical Care Improvement Measures

- Timing of antibiotic prophylaxis
- Prophylactic antibiotic selection for surgical patients
- Appropriate surgical site hair removal

Structural HIT Measures

- Ability for providers to receive laboratory data electronically into EHR system as discrete searchable data
- Tracking clinical results between visits

Other Measures

- Pneumococcal and influenza vaccination status
- Medication reconciliation
- Advance care directives
Rural Relevant Inpatient Measure Project

- Analyzed several sets of quality measures
  - Earlier University of Minnesota/Stratis Health work and NRHA meeting on quality metrics
  - CMS Hospital Compare, hospital acquired conditions, and HIT meaningful use measures
  - NQF-endorsed, AHRQ, Joint Commission measures
- Used Hospital Compare data, AHRQ discharge data and literature to assess volume in CAHs
- Expert work group to review and rate the inpatient quality measures later in July 2011
Potential Rural Relevant Inpatient Measures for CAHs

- Process of Care Measures for Specific Conditions
  - Pneumonia
  - Heart failure
  - AMI (except fibrinolysis, PCI)
  - Stroke
  - Venous thromboembolism
  - Surgical care improvement (except cardiac surgery)
  - Obstetrical measures
Potential Rural Relevant Inpatient Measures for CAHs

• **Hospital-wide Measures**
  – HCAHPS
  – Hospital Acquired Conditions
  – Healthcare-associated Infections
  – Patient Safety Indicators
  – Care transitions
  – Medication reconciliation
  – Advance directives

• **Structural Measures**
  – Participation in relevant clinical database registries
MBQIP will identify areas where CAHs can improve performance and focus QI activities on those areas.

Areas of focus:

- Phase 1: Hospital Compare inpatient pneumonia and heart failure measures.
- Phase 2: Hospital Compare outpatient AMI/chest pain measures, outpatient surgical measures, and HCAHPS.
- Phase 3: Pharmacist CPOE/24 hour verification of medication orders and transfer communication measures.
Evidence-based QI Programs and Strategies for CAHs

• Growing awareness that QI strategies need to rest on a strong evidence base, and we need to understand why particular interventions work and factors that affect their success in different settings.

• Current FMT project is identifying evidence-based QI programs/strategies for pneumonia, heart failure, AMI and surgical care improvement for CAHs.

• Synthesized findings from literature; additional information from FMT Expert Work Group, State Flex Grant Applications, sponsoring organizations.
Key Findings: Pneumonia

- Majority of peer-reviewed articles address QIO programs to improve hospitals’ documentation and scores on pneumonia quality measures.
- The programs primarily focus on improving:
  - timing and selection of appropriate antibiotics
  - pneumococcal and influenza vaccination documentation and rates
- Implemented in collaboration with State Flex Programs, State Hospital Associations, Universities, health systems and other partners.
Strategies for improving timing and selection of appropriate antibiotics

• Baseline data on hospital performance, data feedback and benchmarking
• Development of a QI plan
• Educational sessions with medical staff and/or QI staff
• Standardized/pre-printed admission order sheets
• Clinical pathways (for antibiotic administration)
• Standing orders (for blood/sputum cultures)
• Medical records checklists, forms and reminders
• Physician/nursing/pharmacy champions
Strategies for improving pneumococcal and influenza vaccination rates

- Provision of baseline data on hospital performance
- Data feedback and benchmarking
- Educational sessions with medical staff and/or nursing/QI staff
- Standardized/pre-printed admission/intake assessment forms
- Standing orders for immunizations by nurses
- Medical records checklists, forms and reminders
Examples of Pneumonia QI Programs Involving CAHs

- Kansas Foundation for Medical Care (QIO) and the Kansas Rural Health Options Project with 17 CAHs
  - Information on importance of hospital immunization programs
  - Examples of standing orders and standardized nursing admission or intake assessment forms, but no hospitals obtained support from their medical staff to implement standing orders
  - Monthly peer comparison feedback on performance
- Documentation and receipt of influenza immunization status improved; documentation of pneumococcal immunization status improved but immunization receipt did not change
Examples of Pneumonia QI Programs Involving CAHs

• Oklahoma Foundation for Medical Quality (QIO) intervention with 36 mostly rural community hospitals
  – Face-to-face meeting with each hospital’s medical staff
  – Personalized packet included data on each hospital's performance on quality indicators, review of the literature and sample QI plan.
  – Additional QI training, site visits, teleconferences as requested

• Statistically significant improvements occurred in the performance of all quality indicators
Examples of Pneumonia QI Programs Involving CAHs

• Mountain-Pacific Quality Health Foundation (QIO) and Montana Health Research and Education Foundation with 34 CAHs in Montana

• Numerous interventions included one-on-one training with CAHs; online training sessions with national and local experts; presentations at CAH conferences; development of tools and educational materials; provision of literature; and assistance with data collection

• Pneumococcal immunization rate increased from 6.9% at baseline to 35.4%
Additional Information

• Flex Monitoring Team Website
  www.flexmonitoring.org

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