Demonstrating Meaningful Use through Quality Measures

*NENIC Conference*

Friday, May 21, 2010

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National Quality Forum
1. The Re-Evolution of Quality Measurement
   - The Role of NQF on the Quality Landscape
   - Evolving the Portfolio of NQF Endorsed Measures

2. Quality Measurement and the Transition to EHRs
   - The Role of Informatics and Health Information Technology (HIT)
   - Quality Data Set (QDS)
   - Retooling initiative

3. What it Means for You
There are 20 medical conditions identified by the CMS account for over 95% of Medicare's costs.
The Goal
A journey into where we’re from
and where we’re going
Some Essential
Florence Nightingale RN
Collecting Mortality Data
19th Century

1914 Address to Nurses of The Nightingale School at St. Thomas’s Hospital

“For us who nurse, our nursing is a thing which unless in it we are making progress every year, every month, every week, take my word for it, we are going back”
Ernest Codman MD
Outcomes Hypothesis
20th Century

- Advocate for tracking outcomes and making them public
- 1914 Defined a plan for evaluating surgeon competence
- Lost privileges
- Opened his own hospital “End Result Hospital”
- 337 patients between 1911 - 1916 he recorded and published 123 errors
Quality Measurement Leaders

Florence Nightingale RN
Collecting Mortality Data
19th Century

Ernest Codman MD
Outcomes Hypothesis
20th Century

Avedis Donabedian MD
Structure Process Outcome
20th Century
NQF Mission

Improve the quality of American healthcare by **setting national priorities and goals** for performance improvement

**Endorse national consensus standards** for measuring and publicly reporting on performance

Promote the attainment of national goals through **education and outreach programs**
Progress Has Been Slow

• The National Health Care Quality Report
  - Showed an average annual *improvement* of only *1.9%* on a selected set of *performance measures* between 2000 and 2004.
  - By contrast, the rate of healthcare *expenditures grew 7.6%* during the same time period.

• *Entrenched overuse, misuse and underuse of services*
  - These gaps in quality affect everyone, but place the greatest burden on minorities.
  - Efforts to close the disparities gap have had little impact.
Quality Measurement and the EHR - Historically Separate Worlds
Typical Question for the IT Department

What’s the percentage of *heart failure patients* discharged home with *written instructions or educational material* given to patient or caregiver *at discharge*
A given measure contains a numerator, denominator, exclusions, and exceptions.

**numerator**
(received discharged education)

**denominator - exclusions - exceptions**
(all heart failure patients)
Anatomy of a Quality Measure

numerator

denominator - exclusions - exceptions

Should be able to get from the EHR so action can be taken

Some group of people (or person) who meet some criteria

Evidence or documentation that some other exclusion or exception criteria are met
**Case Example** - Using the EHR to assess performance against the following quality measure?

- Percentage of *heart failure patients* discharged home with *written instructions or educational material* given to patient or caregiver *at discharge*
HIT Hasn’t Helped

Retrieving Information for Quality Management

- It is conservatively estimated that centers spend **22.2 minutes** per heart failure case to abstract the data, which in aggregate amounts to more than **400,000 person-hours** spent each year by US hospitals.

  - Mostly retrospective
  - Humans are “creating” the data
  - Data are in different sources in different levels of granularity, with varying definitions (requires mapping)
  - **Everyone speaks a different language**

HIT Goals for Quality

Quality measurement as a byproduct of documentation

Comprehensive exchange of information

Common language between developers of guidelines, quality measures, HIT and users
Disconnected World

Gaps in Information Flow

Guidelines of Care

Measure Developers

Quality Measures

HIT Standards

EHR 1

EHR 2

EHR 3
National Agenda for Change
Congress specified three types of requirements for meaningful use

1. Use of certified EHR technology in a meaningful manner
2. Electronic exchange of health information to improve care quality
3. Submission of clinical quality measures

Perform quality measurement as a byproduct of meaningful use
Proposed

2011
- Detailed specs for electronic submission are not ready, target date is April 1, 2010
- **Attestation methodology** for submitting quality measure summary information to CMS
- Demonstrate use of certified EHR to capture data elements and calculate results for applicable quality measures

2012
- Electronic submission of information on clinical quality measures
- Publish technical specifications for EHR vendors for obtaining certification of their systems.
Attestation

- Clinical quality measures are generated as output from a certified EHR
- The information is accurate to the best of the knowledge of the official submitting
- The information submitted includes all patients to whom the measure applies.
- The numerators, denominators, and exclusions for each clinical quality measure is reported
Measures for Eligible Professionals (EP)

- **Close to 90 quality measures**
  - Endorsed by NQF, AQA, and PQRI (6 not endorsed)
  - Includes a Core Set and Specialty Group Set
  - Specialty Group Set
  - Domains in the Core Set
    - Medical conditions and treatment, preventive care screening, documentation blood pressure, tobacco use, and BMI
Measures for Eligible Hospitals (EHs)

- **35 quality measures (endorsed by NQF)**
  - ED throughput, stroke, VTE, AMI, heart failure, pneumonia, prophylactic antibiotics, ventilator bundle, central line bundle, urinary catheter associated infections, central line infection, and readmission rates.

- Measures endorsed by NQF or selected from the RHQDAPU program

- Overlap with existing core measures (approximately 7)
• NQF with support from AHRQ established the Health Information Technology Expert Panel (HITEP)
  - To accelerate ongoing efforts defining how (HIT) can evolve to effectively support performance measurement.

• Their Work

  1. Created definition for a ‘well defined quality measure’

  2. Recommended Common Data Types and Prioritized Performance Measures for EHR’s to collect and report

  3. Created the first draft of a quality data set (QDS) to empower automated quality measurement
• A “**well-defined quality measure**” is composed of a set of common data elements, encoded using **standard taxonomies**, **structured logically into a standardized expression** that can be shared and applied to patient data and reported.
Quality Measurement and Informatics

- Establish National Priorities
- Identify Measure Gaps
  - Measure Development
    - e-Specification guidelines
    - Measure authoring tool
    - Measure retooling support
- Endorse Measures and Practices
- Publicly Report Results
- Align Payment and Other Incentives
- Improve Performance
  - Build Data Platforms
    - Quality Data Set
    - HIT Advisory Committee
  - Evaluate
The Goal

Evidence-Based Practice

Measure Developers

code list
Code.xxx
concept
Fall risk

data flow
data type
active

Electronic Quality Measures Using Quality Data Sets

Interoperable HIT Standards Using Quality Data Sets
<table>
<thead>
<tr>
<th>STANDARD CATEGORIES</th>
<th>QDS DATA TYPES</th>
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Quality and Information Technology
3 Actions for You to Take
What You Can Do

- Capture the right data (standardized terminology and use evidence-based content)
- Calculate the performance measure (vendor support for eMeasure)
- Provide real-time information to the clinician with decision support
- Publicly report for secondary uses: accountability, payment, public health, and comparative effectiveness
Measures for Eligible Professionals (EP)

Top 20 high-impact conditions

1. Acute myocardial infarction (AMI) 11. Endometrial cancer
3. Atrial fibrillation 13. Hip/pelvic fracture
5. Cataract 15. Lung cancer
6. Congestive heart failure (CHF) 16. Major depression
7. Chronic kidney disease 17. Osteoporosis
8. Colorectal cancer 18. Prostate cancer
9. COPD 19. Rheumatoid arthritis and osteoarthritis
10. Diabetes 20. Stroke/transient ischemic attack (TIA)
Thank You

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