Navigating the Quality Measurement Maze

April 13, 2015 1pm-2pm S100A

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DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.
Conflict of Interest

Ferdinand Velasco, MD, CHIO Texas Health Resources
and
Maggie Lohnes, RN, Principal, Sound Informatics

have no real or apparent conflicts of interest to report.
Learning Objectives

• Explain the ecosystem of mandated, standardized and local measures

• Interpret a framework for evaluating measures to optimize care quality and compensation

• Assess quality measure future trends

• Apply the lessons learned from Texas Health Resource’s Quality and Performance Improvement program’s experience in manual and electronic quality measurement
HIMSS IT Value Suite STEPS™

Satisfaction: Staff satisfaction: by leveraging EHR for quality measurement; staff spend more time focusing on clinical performance improvement, rather than manual chart abstraction

Treatment/clinical: Measurement is critical to objectively assessing the quality of care delivery

Electronic information/data: By capturing clinical data electronically as a byproduct of care, EHRs can help monitor and ensure adherence to evidence-based medical practice

Prevention/patient education: Increasingly, patients will represent an important source of clinical data and outcomes, underscoring the importance of patient portals and personal health records

Savings: As the healthcare system becomes increasingly shifts from fee-for-service to a value-based model, quality measurement and reporting will be essential for ensuring long-term financial sustainability

http://www.himss.org/ValueSuite
Texas Health Resources

- 2013 HIMSS Nicholas E. Davies Award (Enterprise)
- HIMSS EMRAM Stage 7
- Meaningful Use Sage 2
Institute of Medicine

“…a new health care delivery system is needed – a system that both prevents errors and learns from them when they occur. This requires, first, a commitment by all stakeholders to a culture of safety, and, second, improved information systems.” (2002)

“A learning health care system generates and applies the best evidence for the collaborative health care choices of each patient and provider; drives the process of discovery as a natural outgrowth of patient care; and ensures innovation, quality, safety, and value in health care.” (2013)
Quality Measure Ecosystem and Future Trends

Maggie Lohnes, RN
National Measurement Burden for Hospitals

- CMS IQR
- CMS OQR
- AHRQ
- Institute for Healthcare Improvement
- National Patient Safety Foundation
- Joint Commission
- Numerous Health Plans
- Professional Societies
- Institute for Safe Medication Practices
- National Committee for Quality Assurance
- Partnership for Patients, HENs
- CMS HAC Penalty
- CMS Meaningful Use
- CMS VBP
- PSO
- Leapfrog Group
- CDC’s NHSN
- PCPI

American Hospital Association
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Quality Measurement Maze

- Inpatient or Outpatient?
- Medicare or Medicaid?
- Electronic or Manual?
- GOAL: Highest Value Measures – Least Burden
- Current or new workflow?
- Mandated or Optional?

GOAL: Highest Value Measures – Least Burden
GOAL: Highest value, least burden

Value:
- Meet mandated requirements: government/private payers
- Decreased research-to-practice guideline implementation time
- Support clinical quality improvement initiatives
- Leverage automation to decrease manual resource cost and potential for human error
- Positive financial impact of incentive payments

Burden:
- Clinical acceptance of measure guidelines; delay in implementation of new science into regulated measures
- Information system upgrade and user interface changes
- Audit processes – manual and automated
- Data submission – attention to deadlines
- Negative financial impact of payment adjustments
Quality Measurement Ecosystem

- Patients
- Pharmaceutical Manufacturers
- Providers
- Public Health
- Measure Developers
- Implementers
- Government/Payers
- Health Information Exchanges
- Clinical Researchers
<table>
<thead>
<tr>
<th>CQM Macro Trends</th>
<th>CAREVENUE</th>
<th>Provider</th>
<th>Group</th>
<th>Region</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATA SOURCE</td>
<td>Provider</td>
<td>Enterprise</td>
<td>Affiliated Providers</td>
<td>Patient Reported</td>
<td></td>
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<tr>
<td>INCENTIVES/ADJUSTMENTS</td>
<td>Pay for Reporting</td>
<td>Pay for Performance</td>
<td>Performance Improvement</td>
<td>Patient Directed Care</td>
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</tr>
<tr>
<td>eCQM PROGRAMS</td>
<td>Meaningful Use</td>
<td>CMS Report Once</td>
<td>Federal, State + Local</td>
<td>Government + Commercial</td>
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<tr>
<td>SOURCE RECORDS</td>
<td>EHR or Claims</td>
<td>EHR and Claims</td>
<td>Health Information Exchange</td>
<td>Personal Health Record</td>
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<tr>
<td>MEASURE TYPE</td>
<td>Process</td>
<td>Results/Outcomes</td>
<td>Trended</td>
<td>Value</td>
<td></td>
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<tr>
<td>REPORTING FREQUENCY</td>
<td>Annual</td>
<td>Quarterly</td>
<td>Immediate</td>
<td>Prospective Modeling</td>
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<tr>
<td>REPORTING PROCESS</td>
<td>Manual Attestation</td>
<td>Electronic Attestation</td>
<td>Electronic Reporting</td>
<td>Automated Reporting</td>
<td></td>
</tr>
</tbody>
</table>

2015 Attribution: M. Lohnes, Sound Informatics
Measure Types: From Process to Value

PROCESS: Did you take a blood pressure reading?

RESULTS: Did the BP readings improve over time?

OUTCOMES: Did the patients with hypertension avoid a stroke?

VALUE: How much money was saved? Reduced time off? Increased bed capacity?
Source Records - Original

Coder Analysts

Meaningful Use – EHR Only

PQRS – Claims Only
Source Records – Future

- EHRs
- HIEs
- PHRs
- Claims
- Audit
## Manual v. Electronic CQMs

<table>
<thead>
<tr>
<th>Manually Abstracted Clinical Quality Measures</th>
<th>Electronically Extracted Clinical Quality Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Definition: Human Readable narrative definition</td>
<td>• Definition: CMS Measure eSpecification (HQMF XML)</td>
</tr>
<tr>
<td>• Manual chart review allows data collection from any documentation</td>
<td>• Certification requirements demand specific data coding per QDM category</td>
</tr>
<tr>
<td>• Inconsistent provider documentation standards offset by use of manual abstraction coding staff</td>
<td>• Consistent provider documentation required to assure accurate record tagging for analysis</td>
</tr>
<tr>
<td>• Data elements not aligned with EHR requirements</td>
<td>• Data elements aligned with EHR requirements</td>
</tr>
</tbody>
</table>
What does “Alignment” mean?

- Common MU technical platform
- Identical reporting periods
- Same measures for same conditions
CMS Report Once Meet Many

- Hospital Quality
  - EHR Incentive Program
  - PPS-Exempt Cancer Hospitals
  - Inpatient Psychiatric Facilities
  - Inpatient Quality Reporting
  - HAC payment reduction program
  - Readmission reduction program
  - Outpatient Quality Reporting
  - Ambulatory Surgical Centers

- Physician Quality Reporting
  - Medicare and Medicaid EHR Incentive Program
  - PQRS
  - eRx quality reporting

- PAC and Other Setting Quality Reporting
  - Inpatient Rehabilitation Facility
  - Nursing Home Compare Measures
  - LTCH Quality Reporting
  - ESRD QIP
  - Hospice Quality Reporting
  - Home Health Quality Reporting

- Payment Model Reporting
  - Medicare Shared Savings Program
  - Hospital Value-based Purchasing
  - Physician Feedback/Value-based Modifier
  - CMMI Payment Models

- "Population" Quality Reporting
  - Medicaid Adult Quality Reporting
  - CHIPRA Quality Reporting
  - Health Insurance Exchange Quality Reporting
  - Medicare Part C
  - Medicare Part D
ONC Strategy

• Three Paths:
  – Policy alignment = e.g. PQRS and Meaningful Use
  – Program alignment = 1 measurement program/submission system
  – Technical alignment – ONC helping to insure open portal

• Common questions from community
  – Burden question
  – Tension between measures stable enough to measure but nimble enough to adapt to new science
  – Not enough specialty measures
  – Lot of terrific work by registries (IRIS for ophthalmology, etc)

• On the horizon
  – Patient reported outcomes
  – Kaizen work to improve measure accuracy
ONGOING EFFORTS: Standards and Interoperability Framework

Clinical Quality Framework Initiative
Implications for healthcare providers

Ferdinand Velasco, MD
Drivers

Quality improvement

Regulatory
- Meaningful Use
- Transparency
- Accreditation

Health reform
- Population health
- Reimbursement

- Value-based purchasing
- Accountable Care Organizations
Considerations

- **People**
  - Leadership
  - ITS and Quality

- **Process**

- **Technology**
  - EHR vendor, maturity
  - Quality measure intermediary
Approach

1. Engage key leaders and create a guiding coalition
2. Form an interdisciplinary working team:
   - Quality improvement
   - Quality measurement / analytics
   - EHR configuration and reporting
   - Medical informatics
   - Front-line clinical staff
   - MU program manager
Organizational approach

CIO

CHIO

SVP Quality

Meaningful Use

- Medical informatics
- Nursing informatics
- Quality reporting
- Data management
Approach

1. Engage key leaders and create a guiding coalition
2. Form an interdisciplinary working team
3. Develop strategy for supporting abstracted CQMs and electronically generated CQMs
   - Assess organizational context
     • Determine capacity for change (culture, resources, capabilities, risk tolerance)
     • Identify relevant high impact initiatives (e.g., service line, new programs)
   - Establish guiding principles
Approach

1. Engage key leaders and create a guiding coalition
2. Form an interdisciplinary working team
3. Develop strategy for supporting abstracted CQMs and electronically generated CQMs
4. Create action plans
   - Prioritize CQMs (“measure families”) to focus on for development, validation, testing, implementation
   - Follow disciplined data governance principles in populating and maintaining value sets (“data dictionaries”)
   - Build contingency plans
   - Communicate progress and escalate issues to stakeholders
Suggested CQM prioritization criteria

• Alignment with organizational priorities (STEPS)
  – Potential to accelerate performance improvement initiatives (e.g., real-time identification of “fall-outs”)
  – Savings from labor-intensive abstraction processes
• Optimize use of shared value sets
  – Synergy between quality measurement and clinical decision support
• Maximize overlap between MU/HIQR/TJC and MU/PQRS/ACO
• Good correspondence between abstracted and electronic CQMs
Three Phases through the Maze

1. Assemble Navigation Tools
   Payer mix and volume reports, Clinical specialty lists, Quality Improvement Plans, Measure set menus, Technical resources, Reference Sites

2. Sift through data
   Adequate volumes to meet incentive programs? Minimum number of measures to cover maximum programs? What are the organization’s performance improvement goals?

3. Execute the Plan
   Clinical Documentation training, Audit results, Test electronic file submission, Submit reports before required deadline

More detail provided in Addenda
## Examples

<table>
<thead>
<tr>
<th>CQM ID</th>
<th>Description</th>
<th>Num</th>
<th>Den</th>
<th>Rate</th>
<th>Num</th>
<th>Den</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>STK-2</td>
<td>Discharged on Antithrombotic Therapy</td>
<td>177</td>
<td>177</td>
<td>100.00%</td>
<td>172</td>
<td>214</td>
<td>80.37%</td>
</tr>
<tr>
<td>CMS 104</td>
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<td></td>
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<tr>
<td>STK-3</td>
<td>Anticoagulation Therapy for Atrial Fibrillation/Flutter</td>
<td>30</td>
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<td>CMS 71</td>
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<td>STK-5</td>
<td>Antithrombotic Therapy By End of Hospital Day 2</td>
<td>154</td>
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<td>163</td>
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<td>STK-6</td>
<td>Discharged on Statin Medication</td>
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<td>CMS 105</td>
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<td>STK-10</td>
<td>Assessed for Rehabilitation</td>
<td>222</td>
<td>225</td>
<td>98.67%</td>
<td>188</td>
<td>214</td>
<td>87.85%</td>
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</table>
## Case studies

<table>
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<th>Measure</th>
<th>Description</th>
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<tr>
<td>NQF 0495 (ED-1)</td>
<td>Median time from ED arrival to departure for admitted patients</td>
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<tr>
<td>NQF 0041, 1659 (IMM-2)</td>
<td>Influenza immunization</td>
</tr>
<tr>
<td>NQF 0436 (STK-3)</td>
<td>Ischemic Stroke: anticoagulation therapy for atrial fibrillation/flutter</td>
</tr>
<tr>
<td>NQF 0527 (SCIP-Inf-1a)</td>
<td>Prophylactic antibiotic within 1 hour prior to surgical incision</td>
</tr>
</tbody>
</table>

Median time from ED arrival to departure for admitted patients (ED-1)

• Measure output relevant and meaningful both internally and externally
• eCQM specification relatively simple
• Documentation of workflows in EHR able to capture discrete data for calculating eCQM
• Excellent correlation between manual abstraction and EHR method
Median time from ED arrival to departure for admitted patients (ED-1)

Potential opportunities for improvement:
- More meaningful segmentation
- Correlation with
  - ED wait times / census
  - ED staffing ratios
  - Patient satisfaction
  - Syndromic surveillance
- Use of realtime location sensing technology to eliminate manual time stamps in EHR
- Similar measures for inpatient, OR, ambulatory throughput
Median time from ED arrival to departure for admitted patients (ED-1)
This season’s flu activity has reached the epidemic threshold, the CDC says

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2014-15 Influenza Season Week 51 ending Dec 20, 2014
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2014-15 and Selected Previous Seasons

Source: Texas Dept. of State Health Services, Texas Influenza Surveillance Report 2013–2014 Season
THR ED flu like visits: 2013 compared to 2014
## Influenza immunization

<table>
<thead>
<tr>
<th>Measure steward</th>
<th>NQF 1659</th>
<th>NQF 0041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>CMS</td>
<td>AMA-PCPI</td>
</tr>
<tr>
<td>Description of Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inpatients age 6 months and older discharged during October, November, December, January, February or March who are screened for influenza vaccine status and vaccinated prior to discharge if indicated. (IMM-2)
### Influenza immunization (IMM-2)

#### IMM-2: Influenza Vaccination
**October 2013 - March 2014**

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>Threshold</th>
<th>Par</th>
<th>Max</th>
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</thead>
<tbody>
<tr>
<td>THR - System</td>
<td>98.99%</td>
<td>95.16%</td>
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<td>99.77%</td>
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<tr>
<td>THA</td>
<td>99.41%</td>
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<td>97.46%</td>
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<tr>
<td>THAL</td>
<td>98.51%</td>
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<tr>
<td>THAMH</td>
<td>98.92%</td>
<td></td>
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<tr>
<td>THAZ</td>
<td>100.00%</td>
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<tr>
<td>THC</td>
<td>99.76%</td>
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<tr>
<td>THD</td>
<td>99.33%</td>
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<tr>
<td>THDN</td>
<td>99.85%</td>
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<tr>
<td>THFM</td>
<td>99.20%</td>
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<tr>
<td>THFW</td>
<td>97.41%</td>
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<td>THHEB</td>
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<td>THK</td>
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<tr>
<td>THP</td>
<td>97.73%</td>
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<tr>
<td>THRW</td>
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<tr>
<td>THS</td>
<td>98.73%</td>
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<tr>
<td>THSW</td>
<td>99.22%</td>
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</table>

#### IMM-2: Influenza Vaccination
**October 2014 PRELIMINARY**

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<th>Score</th>
<th>Threshold</th>
<th>Par</th>
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<td>THR - System</td>
<td>99.28%</td>
<td>95.16%</td>
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<td>99.77%</td>
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<tr>
<td>THA</td>
<td>98.04%</td>
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<td>THAL</td>
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<td>97.75%</td>
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<td>98.33%</td>
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<td>THDN</td>
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<td>THFM</td>
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<td>THFW</td>
<td>99.02%</td>
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<td>THHEB</td>
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<td>100.00%</td>
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<tr>
<td>THSW</td>
<td>100.00%</td>
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</table>
Stroke: anticoagulation therapy for atrial fibrillation/flutter (STK-3)

- Measure output relevant and meaningful both internally and externally
- Measure logic complex
- Documentation of workflows uneven
- Challenges with translating EHR data into discrete variables needed to generate CQM
- Modest success with reconciling abstracted and EHR-derived data
**Population criteria**

- **Initial Patient Population**
  - AND: "Patient Characteristic Birthdate: birth date" $\geq$ 18 year(s) starts before start of "Occurrence A of Encounter, Performed: Inpatient Encounter (length of stay $\leq$ 120 day(s))"
  - AND: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge datetime)" during "Measurement Period"
  - OR: "Diagnosis, Active: Ischemic Stroke (ordinality: 'Principal Diagnosis')"
  - OR: "Diagnosis, Active: Hemorrhagic Stroke (ordinality: 'Principal Diagnosis')"
  - starts during "Occurrence A of Encounter, Performed: Inpatient Encounter"

- **Denominator**
  - AND: "Initial Patient Population"
  - AND: "Diagnosis, Active: Ischemic Stroke (ordinality: 'Principal Diagnosis')" starts during "Occurrence A of Encounter, Performed: Inpatient Encounter"
  - OR: "Procedure, Performed: Atrial Ablation" starts before start of "Occurrence A of Encounter, Performed: Inpatient Encounter"
  - OR: "Diagnosis, Active: Atrial Fibrillation/Flutter" starts before or during "Occurrence A of Encounter, Performed: Inpatient Encounter"
  - OR: "Diagnosis, Inactive: Atrial Fibrillation/Flutter" starts before start of "Occurrence A of Encounter, Performed: Inpatient Encounter"

- **Denominator Exclusions**
  - AND:
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge status: 'Patient Expired')"
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge status: 'Discharge To Another Hospital')"
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge status: 'Discharged to Home for Further Care')"
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge status: 'Discharged to Home for Further Care')"
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (reason: 'Carotid Intervention')"
    - OR: "Occurrence A of Encounter, Performed: Inpatient Encounter (discharge status: 'Left Against Medical Advice')"
    - OR:
      - AND: "Occurrence A of Encounter, Performed: Inpatient Encounter (admission datetime)" $\leq$ 1 hour(s) from "Department Visit (facility location departure datetime)"
      - AND:
        - OR:
          - AND: "Occurrence A of Intervention, Order: Palliative Care" starts after start of "Occurrence A of Encounter, Performed: Inpatient Encounter (admission datetime)"
**Initial Patient Population:**
Patients admitted to the hospital for inpatient acute care with a Principal Diagnosis Code for ischemic or hemorrhagic stroke with hospital stays <= 120 days during the measurement period for patients age 18 and older at the time of hospital admission.

**Numerator:**
Ischemic stroke patients prescribed anticoagulation therapy at hospital discharge, Exclusions: Not Applicable

**Denominator:**
Ischemic stroke patients with documented atrial fibrillation/flutter, Exclusions: Patients with a documented reason for not prescribing anticoagulation therapy, Exclusions: Patients with comfort measures only documented

- Patients admitted for elective carotid intervention
- Patients discharged to another hospital
- Patients who left against medical advice
- Patients who expired
- Patients discharged to home for hospice care
- Patients discharged to a health care facility for hospice care

Source: AHRQ United States Health Information Knowledgebase, http://ushik.org/mdr/portals
Stroke: anticoagulation therapy for atrial fibrillation/flutter (STK-3)

- Leverage shared value sets with other eCQMs (VTE prophylaxis) and clinical decision support interventions
- Correlation with long term anticoagulation effectiveness and safety
- Candidate CDS application: pre-discharge checklist
SCIP-Inf-1a: Prophylactic antibiotic within 1 hour prior to surgical incision

- Lessons learned:
  - Hospital had decided not implement electronic anesthesia intraoperative documentation (preoperative antibiotic administration documented on paper)
  - Circulating nurses were documenting administration of preoperative antibiotics on the MAR (“given by physician”) 50% of the time
  - Some antibiotics that were used in the operative field (e.g., irrigation, topical gels) were not properly configured
Conclusions

• Transition from manually abstracted measures to eMeasures will be a long journey
  – Approach needs to be meticulous and systematic
  – Some eCQMs can readily be used to replace abstraction; most are not
• Abstraction may never be completely eliminated, at least for CQMs with complex measure logic
  – Shift focus from retrospective chart abstraction to concurrent care management
• Electronic submission of eCQMs fraught with many technical challenges
• Don’t be constrained by Meaningful Use
Summary

1. Engage key leaders and create a guiding coalition
2. Form an interdisciplinary working team
3. Develop a strategy for supporting abstracted CQMs and electronically generated CQMs
4. Create action plans and execute
5. Share lessons learned, provide input in policy development, and contribute to CQM discussions and work
Provide Input

- Healthcare Information and Management Systems Society [www.himss.org](http://www.himss.org)
- HIMSS LinkedIn Quality Measure Collaboration Center
- National Quality Forum [www.qualityforum.org](http://www.qualityforum.org)
- Office of the National Coordinator FACAs
- Participate in pilots (e.g., 100 eCQM pilot hospitals)
Community Outreach
Provider Involvement Opportunities

- ONC HIT Policy/Standards Committee meetings
- National Quality Forum
- HIMSS Quality Cost and Safety Committee Workgroups
- LinkedIn Quality Measure Collaboration Center
- The Joint Commission Measurement initiatives
- AMA Physician Consortium for Quality Improvement
Thank You and Contact

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A Review of Benefits Realized for the Value of Health IT

SATISFACTION: Staff satisfaction: by leveraging EHR for quality measurement; staff spend more time focusing on clinical performance improvement, rather than manual chart abstraction.

TREATMENT/CLINICAL: Measurement is critical to objectively assessing the quality of care delivery.

ELECTRONIC INFORMATION/DATA: By capturing clinical data electronically as a byproduct of care, EHRs can help monitor and ensure adherence to evidence-based medical practice.

PREVENTION/PATIENT EDUCATION: Increasingly, patients will represent an important source of clinical data and outcomes, underscoring the importance of patient portals and personal health records.

SAVINGS: As the healthcare system becomes increasingly shifts from fee-for-service to a value-based model, quality measurement and reporting will be essential for ensuring long-term financial sustainability.

http://www.himss.org/ValueSuite
Addenda
Question 1

Which of the following organizations is NOT a developer of clinical quality measures:

a. Agency for Healthcare Research and Quality (AHRQ)
b. The Joint Commission (TJC)
c. The National Quality Forum (NQF)
d. Centers for Medicare & Medicaid Services (CMS)

Answer: c

The NQF is a convener of key stakeholders in quality measurement and has responsibility for endorsing measures. However, it does not develop them.
Question 2

Which of the following federal quality reporting programs utilizes electronic quality measures:

a. Hospital Inpatient Quality Reporting (HIQR)
b. Physician Quality Reporting System (PQRS)
c. EHR Incentive Program (Meaningful Use)
d. all of the above

Answer: d

All of the programs listed are able to leverage electronic quality measurement and reporting. It is the stated aim of CMS to align MU quality reporting with HIQR for eligible hospitals and with PQRS for eligible professionals.
Question 3

True/False: Currently, the calculation of most electronic clinical measures (eMeasures) will yield results that are comparable to the results obtained from manual chart abstraction.

Answer: False

The intent of the alignment of the quality reporting programs is to eliminate the need for manual chart abstraction by leveraging EHRs for quality measurement. However, given numerous considerations having to do with clinical workflow, EHR technical configuration, and measure specification, eMeasures and manually abstracted measures often do not produce comparable results.
The international community of healthcare providers has witnessed an explosion in both mandated and standardized healthcare quality measures. Hospital and ambulatory providers are faced with the confusing and complex task of selecting and implementing quality measures that insure compliance with government and commercial payment programs, accurately report public quality scores, and serve to improve the quality of care they provide. The ability to leverage the experience of leading healthcare organizations who trail-blazing use of quality measures, their knowledge of process and pitfalls, and their recommendations for measures that matter to patients, provides a context for building an efficient quality program. This session will bring together the practical experience of a large leading health system with the direction of healthcare policy and electronic health record technology to inform the development of a healthcare quality program for your institution.
Approach

In their roles as chairs of HIMSS Quality Cost and Safety Committee for fiscal years 2013-2014, the presenters engaged a diverse group of healthcare providers, consultants and vendors in providing HIMSS thought leadership in the ecosystem of quality measurement and clinical decision support. An active agenda of policy review and public comment, demonstration of practical experience from the field and publication of expert analysis and recommendations serve to support clinicians as we experience the tremendous increase in quality measure reporting.

Primary presenter, Ferdinand Velasco, MD, will share his experience as chief health information officer at the Davies Award Winning, 25-hospital, Arlington, Texas-based Texas Health Resources, bringing practical knowledge of the selection, implementation and use of clinical quality measures in a large healthcare enterprise. Co-presenter, Maggie Lohnes, RN, brings experience as a direct patient caregiver, health system administrator, government contractor and electronic health care vendor, to present a practical framework for selecting quality measures that meet organizational goals and monitor future trends.
Challenges

The challenges to developing an understanding of the topic include:
- Complexity of the federal regulatory process.
- Diversity of quality reporting programs.
- Inter-relationships between quality measurement stakeholders (measure developers, stewards, NQF, TJC, and CMS)
Method Analysis

The authors developed and used an analytical framework for studying and classifying clinical quality measures. The dimensions of this framework are:
- Population
- Purpose
- Programs
- Author
- Source
- Measure type
- Timing
- Reporting
Conclusion

A learning health system is one that effectively uses performance data to drive continuous quality improvement. To be successful in realizing the value of electronic health records, organizations must leverage these clinical systems for quality measurement, both for internal process improvement and external reporting. Accomplishing this requires an organizational structure that ensures a close, collaborative working relationship between quality and IT professionals.
Recommendation

The transition from manually abstracted measures to eMeasures will be a long journey. The approach taken by provider organizations needs to be meticulous and systematic. Abstraction will likely never be completely eliminated, at least for indicators with complex measure logic. However, providers must shift their focus from retrospective chart abstraction to concurrent care management to better take advantage of the benefits of quality measures derived from EHRs.
eCQM PROGRAMS: From MU to Many

Meaningful Use Stages

MU Clinical Quality Measurement (CQM) Foundation

- **CQM DEFINITION:** CQMs defined in Healthcare Quality Measurement Format “HQMF” with specific coded value sets
- **SOURCE:** Data derived from certified electronic health records
- **EXTRACTION FORMAT:** Data extracted in Quality Reporting Document Architecture “QRDA “Category 1 format
- **CERTIFICATION:** Calculation engine ONC-certified
- **REPORTING:** Results transmitted to CMS (QualityNet?) in QRDA Category 1 and 3 formats
ONC Perspective – Kevin Larsen, MD

• Three Paths:
  – Policy alignment = e.g. PQRS and Meaningful Use
  – Program alignment = 1 measurement program/submission system
  – Technical alignment – ONC helping to insure open portal

• Common questions from community
  – Burden question
  – Tension between measures stable enough to measure but nimble enough to adapt to new science
  – Not enough specialty measures
  – Lot of terrific work by registries (IRIS for ophthalmology, etc)

• On the horizon
  – Patient reported outcomes
  – Kaizen work to improve measure accuracy
CMS Perspective – Cindy Tourison

Inpatient Quality Reporting and Hospital Value Based Purchasing

• April 1st IQR Notice of Proposed Rulemaking – highlights
• 100 Hospital eCQM Pilot currently underway
• Submit test files for practical experience – Signal that test files may be required in future rules
• User acceptance testing submission – working with CMS technical resources to improve testing
• Participate in NQF Measures Applications Partnership (MAP) to help review measures under consideration
• CMS/ONC CQM for Kaizens now include increasing number of providers
Three Phases through the Maze
Step #1: Assemble Navigation Tools

Assemble the following data to guide your route:

- **BILLING**: Payer mix and volumes reports
- **CLINICAL**: Clinical condition and care venues
- **QUALITY IMPROVEMENT**: Current and future clinical focus areas for improvement
- **FINANCIAL**: Financial Goals and Performance
- **MEASURE MENU SETS**: Federal, state, local, Centers of Excellence, The Joint Commission (TJC), National Consortium for Quality Assurance (NCQA)
- **TECHNICAL**: Status of eCQM functionality, available eCQM measures, electronic submission
- **REFERENCE SITES**: National Quality Forum Quality Positioning System (NQF QPS); HHS Jira Issues Tracking
Three Phases through the Maze
Step #2: Sift through data

- **BILLING**: Adequate patient volumes to meet Medicare incentive? Consider Medicaid program instead.
- **CLINICAL**: Highest volumes of cardiac patients?
- **QUALITY IMPROVEMENT**: Can we select measures that measure our organization’s quality focus goals?
- **FINANCIAL**: What is the impact of incentives and payment adjustments on our bottom line?
- **MEASURE MENU SETS**: What is the minimum number of quality measures we can use to meet the maximum number of reporting needs?
- **TECHNICAL**: Are our information systems capable of capturing and reporting discrete data elements and measures?
- **REFERENCE SITES**: What is the intent of the measure? Where can I report a problem with the measure specification?
Three Phases through the Maze

Step #3: EXECUTE

- **TRAINING**: Ensure that clinical staff understand importance of proper documentation to support measurement process; Train Quality Improvement team on reporting goals and process
- **AUDIT**: Institute cross-checks for results accuracy
- **TEST**: Validate test result files to ensure integrity
- **REPORT**: Submit reports prior to deadlines