Implementation of SNOMED CT in Clinical Quality Measures

IHTSDO Implementation Showcase
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NCQA
Measuring quality. Improving health care.
AGENDA

• About the National Committee for Quality Assurance (NCQA)
• Snapshot of Clinical Quality Measures (CQMs)
• Implementation of SNOMED CT in CQMs
A BRIEF INTRODUCTION

• Private, independent non-profit health care quality oversight organization founded in 1990
• Committed to measurement, transparency, and accountability
• Unite diverse groups around common goal: improving health care quality
OUR MISSION AND VISION

MISSION
To improve the quality of health care.

VISION
To transform health care through quality measurement, transparency, and accountability.
VALUES

• Our passion is improving the quality of health care.

• We stand for accountability throughout the health care system.

• NCQA’s information empowers people to make informed decisions.

• We are committed to providing excellent service to all customers, both internal and external.

• We realize our mission through the invaluable commitment and contributions of diverse stakeholders.
NCQA MILESTONES

- 90 percent of Americans enrolled in an HMO are in a Health Maintenance Organization (HMO) accredited by NCQA.

- More than half of managed care organizations report Healthcare Effectiveness Data and Information Set (HEDIS®) quality data.

- 118 million Americans are enrolled in a plan that collects and/or reports HEDIS.

HEDIS® is a registered trademark of NCQA.
NCQA MILESTONES, CONT’D

- 1,000 health plan products submitted HEDIS to NCQA
  - 715 HMO products
    - More than 90% of HMOs
  - 294 Preferred Provider Organization (PPO) products
    - Up from 277 in 2009

- 40 states and the Federal government rely on NCQA Accreditation and HEDIS

- Over 27,000 physicians recognized through NCQA’s Recognition Programs
  - NCQA’s Recognition Programs form the basis of quality improvement programs nationwide
CLINICAL QUALITY MEASURES

• Developed by a number of measure stewards of which NCQA is one
• Data collected by physicians, hospitals, and other health care settings
• Data reported to Centers for Medicare and Medicaid Services (CMS) and others
CLINICAL QUALITY MEASURES

• Integral part of pay-for-reporting or pay-for-performance at US federal, state, and local levels

• Included in healthcare reform initiatives
  – Meaningful use, value based purchasing, and accountable care

• Quality measurement data publically available on the Internet, e.g., Hospital Compare
# CLINICAL QUALITY MEASURES

**Where we have been**
- ✓ Claims based – administrative data
- ✓ Manual data capture
- ✓ Manual abstract process
- ✓ ICD-9-CM, CPT, HCPCS

**Where we are headed**
- ✓ EHR based – clinical data
- ✓ Electronic data capture
- ✓ Automatic abstraction (eMeasures)
- ✓ SNOMED CT, LOINC, RxNorm, CVX, ISO-639, Payer topology, and others

**Transition Systems**
- CPT, HCPCS, ICD-9-CM, ICD-10-CM, ICD-10-PCS
## CMS Blueprint for Quality Measures

<table>
<thead>
<tr>
<th>Quality Data Model Concept</th>
<th>Clinical Vocabulary Standards</th>
<th>Transition Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition/Diagnosis/Problem</td>
<td>SNOMED CT</td>
<td>ICD-9-CM, ICD-10-CM</td>
</tr>
<tr>
<td>Procedure</td>
<td>SNOMED CT</td>
<td>CPT, HCPCS, ICD-9-CM (Procedures), ICD-10-PCS</td>
</tr>
<tr>
<td>Laboratory test names</td>
<td>LOINC</td>
<td>N/A</td>
</tr>
<tr>
<td>Diagnostic study test names</td>
<td>LOINC</td>
<td>HCPCS</td>
</tr>
</tbody>
</table>
SNAP SHOT SUMMARY

- Quality measures are undergoing transformation
- Workflow is impacted
- Vocabulary standards are key
- Vocabulary standards are transitioning
IMPLEMENTATION OF SNOMED CT IN CQMs

• Office of the National Coordinator (ONC)
  – 2014 Electronic Health Record (EHR) certification criteria
    • EHR technology submitted for certification for CQMs, must be capable of capturing the data elements specified in the Data Element Catalog August 2012 Version
      – Catalog contains a comprehensive summary of the data elements and the vocabulary standard required by each CQM.
EXAMPLE

If an EHR technology developer requests certification of the EHR technology for CQMs 0018 through 0043, 0101 and 0110, then the developer reviews the list of data elements for these CQMs. For each CQM, the developer is required to demonstrate that each data element can be captured by the EHR technology using the vocabulary standard listed.
DATA ELEMENT CATALOG

- Vocabulary standards listed in the catalog are listed by measure title, data element, National Quality Forum (NQF) Identifier, Care Setting, Category, and Element Vocabulary

AMBULATORY 0018
CONTROLLING HIGH BLOOD PRESSURE

• Description: Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90mmHg) during the measurement period.
## AMBULATORY 0018
### CONTROLLING HIGH BLOOD PRESSURE

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Category</th>
<th>Element Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face interaction</td>
<td>Encounter</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>Essential hypertension</td>
<td>Condition/Diagnosis/Problem</td>
<td>ICD10CM, ICD9CM, SNOMEDCT</td>
</tr>
<tr>
<td>Kidney transplant</td>
<td>Procedure</td>
<td>CPT, SNOMEDCT</td>
</tr>
<tr>
<td>Dialysis services</td>
<td>Procedure</td>
<td>CPT, SNOMEDCT</td>
</tr>
<tr>
<td>Other services related to dialysis</td>
<td>Intervention</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>Dialysis education</td>
<td>Intervention</td>
<td>SNOMEDCT</td>
</tr>
</tbody>
</table>
ASPIRIN PRESCRIBED AT DISCHARGE FOR AMI

- Description: Acute myocardial infarction (AMI) patients who are prescribed aspirin at hospital discharge.
<table>
<thead>
<tr>
<th>Data Element</th>
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<th>Element Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort measures only</td>
<td>Intervention</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>AMI</td>
<td>Condition/Diagnosis/Problem</td>
<td>ICD10CM, ICD9CM, SNOMEDCT</td>
</tr>
<tr>
<td>Medical reason</td>
<td>Attribute</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>Clinical trial participant</td>
<td>Individual characteristic</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>Inpatient hospital care</td>
<td>Transfer of care</td>
<td>SNOMEDCT</td>
</tr>
<tr>
<td>Encounter inpatient</td>
<td>Encounter</td>
<td>SNOMEDCT</td>
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</table>
VALUE SET AUTHORITY CENTER (VSAC)

- US National Library of Medicine
  - Assist EHR technology developers in meeting the requirements for CQM reporting
  - Access and download official versions of vocabulary value sets contained in the CQMs
    - Value sets will list the standard vocabulary’s numerical values and names that are used in the CQMs
Questions