Rules Engine
National Quality Measures

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AGENDA

• Brief definitions
• Structure
• Quality measures in the DAI
• How the measures are different than HEDIS
• Gaps in Care measures in the DAI
• Patient Health Record (for Gaps in Care)
QUALITY MEASURES

• Evidence-based guidelines
  – Given a clinical situation
  – Something should be done (or not done)
  – Based on clinical research, not anecdotal experience or conventional wisdom

• Outcomes measures
  – Did a desired outcome occur
  – Was an undesired outcome avoided (admission ER visit)
BASIC QUALITY MEASURES STRUCTURE

• Denominator
  – People with Disease
  – People with the right demographics for preventive care
  – Continuously enrolled to be certain of numerator
  – Not disqualified

• Numerator
  – The desired procedure has taken place
  – The undesired procedure has not taken place
NATIONAL QUALITY FORUM

- HEDIS is the leading standards organization
- We are looking to NQF for measure adoption
- Using measures as defined – not second guessing criteria
HEDIS-BASED MEASURES – 3 GROUPS

• Event measures—*for patients who experience event A, (e.g., admission or ambulatory visit for a specified condition)*, *how many of them had procedure B*

• Diseased population measures—*for patients with a particular disease*, *how many had a specified procedure*

• General population measures—*for patients of a certain age and/or gender*, *how many had a specified procedure*
HEDIS-BASED MEASURES – 3 GROUPS

Event Measures
• Pats Low Back % wo Imag Studies
• Pats Child Pharyn % Strep Tests
• Pats Child URI % wo Antibiotics
• Pats MH % Post Disch Visit

Diseased Population Measures
• Pats Epis Asthma % Asthma Drugs
• Pats Epis Diabet % Eye Exams
• Pats Epis Diabet % HbA1c Tests
• Pats Epis Diabet % Kidney Svcs
• Pats Epis Diabet % LDL Tests

General Population Measures
• Pats Women % Chlamydia Tests
• Pats Adolescent % Well Care
• Pats Child 1 to 2 % Prim Care
• Pats Child 2 to 6 % Prim Care
REMAINING DIFFERENCES FROM NATIONAL MEASURES

• Detailed in Analytic Guide on Customer Portal (See example)

• Missing Some Exclusions

• Differ with regard to age
ADVANTAGE EXTENSIONS TO QUALITY MEASURES

• When was the most recent occurrence of the desired procedure
  – Used for patient management

• Which physician should be accountable for the care of this patient for this disease
  – Quality measures as adopted by NQF do not specify attribution to physicians
  – Key to provider profiling
NATIONAL QUALITY MEASURES FOLDER

- Organized by Disease Condition

Not Inside the Clinical Folder
NATIONALLY ENDORSED* QUALITY MEASURES

**Coronary Artery Disease**
- Drug Therapy for Lowering LDL Cholesterol
- Beta-Blocker Treatment after a Heart Attack
- Beta-Blocker Therapy Post-MI
- Cholesterol Screen
- Lipid Profile
- Antiplatelet Therapy
- Beta-Blocker Therapy Prior-MI
- ACEI/ARB Therapy

**Heart Failure**
- ACEI/ARB Therapy
- LVF Assessment
- Beta-Blocker Therapy
- Warfarin Therapy Patients with Atrial Fibrillation

**Asthma**
- Use of Appropriate Medications for People with Asthma

**Diabetes**
- HbA1C Management
- Lipid Measurement
- Eye Exam
- Microalbumin Test for Nephropathy

**Behavioral Health**
- Antidepressant Medication Management - Acute Phase
- Antidepressant Medication Management - Continuation Phase
- Optimal Practitioner Contacts for Medication Management

**Misuse/Overuse**
- Appropriate Treatment for Children with Upper Respiratory Infection (URI)
- Appropriate Testing for Children with Pharyngitis

**Bone Disease**
- Osteoporosis Management in Women who have had a Fracture

**Preventive**
- Breast Cancer Screening
- Colorectal Cancer Screening
- Cervical Cancer Screening
- Influenza Vaccination
- Pneumonia Vaccination
- Childhood Immunization Status

*Endorsed by the NQF*
RULES MEASURES ARE AS OF END OF PERIOD

• What is the state of this patient at the end of the time period
• Look back from end of period for required period of time
  – Most measures are a year
  – Some are two or three years
• Patient must meet continuous enrollment for the measure period

<table>
<thead>
<tr>
<th>Reporting Year</th>
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</thead>
<tbody>
<tr>
<td>HbA1C</td>
</tr>
<tr>
<td>Breast Cancer Screen</td>
</tr>
<tr>
<td>Cervical Cancer Screen</td>
</tr>
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</table>
REPORTING IN ADVANTAGE – EXAMPLE REPORTS

Report using quality measure rates

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Subset</td>
<td>Diabetic</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fact</td>
<td>Jan 2004-Dec 2004</td>
</tr>
<tr>
<td>4</td>
<td>Diabetes Eye Exam Rate {QM}</td>
<td>27%</td>
</tr>
<tr>
<td>5</td>
<td>Diabetes HbA1c Test Rate {QM}</td>
<td>64%</td>
</tr>
<tr>
<td>6</td>
<td>Diabetes Lipid Test Rate {QM}</td>
<td>56%</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes Microalbumin Rate {QM}</td>
<td>62%</td>
</tr>
<tr>
<td>8</td>
<td>Number of Gaps in Care {QM}</td>
<td>4,135</td>
</tr>
</tbody>
</table>
### Reporting in Advantage – Example Reports

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subset</strong></td>
<td>All Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time Period</strong></td>
<td>Jan 2004 – Dec 2004</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rule Measure</th>
<th>Quality Measure Base (QMB)</th>
<th>Quality Measure Base Rate (QM)</th>
<th>Number of Gaps in Care (QG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma Medication Management</td>
<td>288</td>
<td>347</td>
<td>86%</td>
</tr>
<tr>
<td>Breast Cancer Screen</td>
<td>7,387</td>
<td>12,186</td>
<td>61%</td>
</tr>
<tr>
<td>CAD ACE Inhibitor/ARB Therapy</td>
<td>218</td>
<td>379</td>
<td>56%</td>
</tr>
<tr>
<td>CAD Antiplatlet Therapy</td>
<td>134</td>
<td>570</td>
<td>24%</td>
</tr>
<tr>
<td>CAD Beta Blocker Therapy 6 Months Post MI</td>
<td>21</td>
<td>34</td>
<td>62%</td>
</tr>
<tr>
<td>CAD Beta Blocker Therapy 7 Days Post MI</td>
<td>20</td>
<td>31</td>
<td>65%</td>
</tr>
<tr>
<td>CAD Beta Blocker Therapy Prior MI</td>
<td>96</td>
<td>127</td>
<td>76%</td>
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<tr>
<td>CAD Event Cholesterol Test</td>
<td>422</td>
<td>564</td>
<td>65%</td>
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<tr>
<td>CAD LDL Lowering Drug Therapy</td>
<td>448</td>
<td>570</td>
<td>79%</td>
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<tr>
<td>CAD Lipid Test</td>
<td>383</td>
<td>570</td>
<td>67%</td>
</tr>
<tr>
<td>Chicken Pox (ZVZ) Vaccine</td>
<td>480</td>
<td>590</td>
<td>70%</td>
</tr>
<tr>
<td>Colorectal Cancer Screen</td>
<td>4,801</td>
<td>15,291</td>
<td>31%</td>
</tr>
<tr>
<td>Depression Acute Phase Therapy</td>
<td>196</td>
<td>280</td>
<td>70%</td>
</tr>
<tr>
<td>Depression Continuation Phase Therapy</td>
<td>145</td>
<td>280</td>
<td>52%</td>
</tr>
<tr>
<td>Depression Optimal Practitioner Visits</td>
<td>0</td>
<td>280</td>
<td>0%</td>
</tr>
<tr>
<td>Diabetes Eye Exam</td>
<td>596</td>
<td>2,170</td>
<td>27%</td>
</tr>
<tr>
<td>Diabetes HBA1c Test</td>
<td>1,394</td>
<td>2,170</td>
<td>64%</td>
</tr>
<tr>
<td>Diabetes Lipid Test</td>
<td>1,220</td>
<td>2,170</td>
<td>66%</td>
</tr>
<tr>
<td>Diabetes Microalbumin Test for Nephropathy</td>
<td>1,335</td>
<td>2,170</td>
<td>62%</td>
</tr>
</tbody>
</table>
GAPS MEASURES IGNORE CONTINUOUS ENROLLMENT

• For Quality Measurement {QM} it is important to see all claims for the target time period
  – Did the numerator event not happen…
  – Or do we just not see it

• Gaps in Care is for reminding patients (or doctors) to get recommended care
  – If we can’t see it, we’ll still recommend it
  – Provides most recent date as a management tool
PATIENT HEALTH RECORD – GAPS IN CARE ALERTS

• Available on the Patient Summary tab
• Identifies services that are missing or overdue for a patient according to nationally endorsed evidence-based guidelines
• Information detailed includes the service, date when the service was last rendered, and the status (i.e. missing, or overdue)
PATIENT HEALTH RECORD - RECOMMENDED CARE

- Separate tab which provides a summary of all recommended services according to nationally endorsed evidence-based guidelines
- Section for Preventive Services (e.g., influenza vaccine, colonoscopy, etc.)
- Section for Disease Specific Services (e.g., Diabetes - eye exam, urine protein test, HbA1c testing for diet compliance)
- Information detailed includes the service, frequency for how often the service should occur, date when the service was last rendered, and the status (i.e. missing, or overdue)
QUESTIONS?

- thomsonreuters.com, click ‘Healthcare’
- thomsonreuters.com/products_services/healthcare
- ross.merritt@thomsonreuters.com