Implementing Outcome-Based Quality Measures Using the MDS-HC

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Implementing Outcome-Based Quality Measures Using the MDS-HC

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The Long Term Services and Supports (LTSS) Policy Lab is a resource to aid Executive-level decision-makers in program planning, policy evaluation and fiscal forecasting in the LTSS arena and is an outgrowth of UMass Medical School’s long-standing partnership with the family of state agencies in the Commonwealth of Massachusetts. For more information on the LTSS Policy Lab, contact: Abbie Averbach, Director, Office of Data Analytics, Abigail.Averbach@umassmed.edu or Frederick Perro, Senior Director, Data Management Services, Rick.Perro@umassmed.edu.
Overview

• Need for Outcome Measures for Community-Based Services
• Study Methodology
• Implementing Quality Measures
Need for Outcome Measures for Community-Based Services

• Current measures: process, medical, consumer survey

• Need reliable and **objective** *outcome measures* community services
  
  - Help improve program services
  - Support alternative payment models
Need for Outcome Measures, con’t

- Measures based on MDS-HC
  - Outcome-based
  - Validated
  - Existing data
  - Used in Ontario, Manitoba and Michigan
  - Population-level analysis

- Research question
  Can State use its assessment data to implement interRAI’s outcome measures?
Set up analysis

- Map MDS-HC to assessment questions
  - Identify any textual differences between questions (e.g., “last 30 days” vs. “last 2 weeks”)

<table>
<thead>
<tr>
<th>Measure</th>
<th>MDS-HC Question</th>
<th>Corresponding State Assessment Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of unintended weight loss</td>
<td>W24. Unintended weight loss of 5% or more in last 30 days (or 10% or more in last 180 days)</td>
<td>Q.1243 Unintended weight loss of 5% or more in last 30 days</td>
</tr>
</tbody>
</table>
| Prevalence of delirium       | C3.1. Sudden or new onset/change in mental function  
-OR-  
Client has become agitated or disoriented | Q.1148 Sudden or new onset/change in mental function  
-OR-  
Q.1149 Client has become agitated or disoriented |
Set up analysis, con’t

• Create study protocols
  – Link client assessments to program enrollment date
  – Develop filters (age, target programs, etc.)

• Gain in-depth understanding of how assessments are given

• Utilize iterative process
Analyze results

• **Response Rates per question (%)**
  – Overall response rates
  – Longitudinal questions
  – Response rates overall vs. by program

• **Response Patterns per question (answer options)**
  – Examined face validity of patterns
  – Compared patterns for low vs. high LOC programs
Response pattern for entire population

Ability to use the toilet

- Independent: 55%
- Total Dependence: 1%
- Unwilling to perform: 1%
- Activity did not occur: 0%
- Extensive Assistance: 3%
- Limited Assistance: 7%
- Supervision: 4%
- Intermittent supervision or minimal physical assistance: 4%
- Independent – but experiences difficulty: 24%
- Unwilling to perform: 1%
- Activity did not occur: 0%
- Extensive Assistance: 3%
- Limited Assistance: 7%
- Supervision: 4%
- Intermittent supervision or minimal physical assistance: 4%
- Independent – but experiences difficulty: 24%

Figures drawn from feasibility study
### Response pattern by program

#### Ability to use the toilet

<table>
<thead>
<tr>
<th>Program Description</th>
<th>SNF LOC 1</th>
<th>SNF LOC 2</th>
<th>SNF LOC 3</th>
<th>Lower LOC 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Independent</td>
<td>36%</td>
<td>35%</td>
<td>35%</td>
<td>71%</td>
</tr>
<tr>
<td>2. INDEPENDENT - but experiences difficulty</td>
<td>27%</td>
<td>31%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>3. Intermittent supervision or minimal physical assistance</td>
<td>13%</td>
<td>12%</td>
<td>15%</td>
<td>21%</td>
</tr>
<tr>
<td>4. Supervision</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>5. Limited Assistance</td>
<td>7%</td>
<td>8%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>6. Extensive Assistance</td>
<td>8%</td>
<td>13%</td>
<td>15%</td>
<td>7%</td>
</tr>
<tr>
<td>7. Total Dependence</td>
<td>12%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>8. Unwilling to perform</td>
<td>5%</td>
<td>12%</td>
<td>36%</td>
<td>27%</td>
</tr>
<tr>
<td>9. Activity did not occur</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Figures drawn from feasibility study.

Programs based on level of Care (LOC) – Skilled Nursing Facility (SNF) vs. lower level.
Implementing Quality Measures

• Complete additional data work
  – Apply interRAI’s member-level screens (e.g., filter out cancer patients from measure on weight loss)
  – Re-analyze questions overall and by program

• Implement measures
  – 5 ready for use

• Resolve data issues
  – Additional 8 - 11 measures may be ready after data issues resolved
Potential application: Using quality measures to compare providers

Prevalence of unintended weight loss (rate of negative outcomes)

Boxes show average score per provider; horizontal lines show range of scores with confidence intervals. Green boxes show 75th %ile achievability level. Successful providers can share best practices.
Questions?

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