Using Assessment Data to Perform Outcome-Based Quality Measurement

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I have no relevant commercial relationships to disclose.
USING ASSESSMENT DATA TO PERFORM OUTCOME-BASED QUALITY MEASUREMENT

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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 2 weeks</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, cont’d

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

Figures drawn from feasibility study
Response pattern by program

Ability to use the toilet

- 1. Independent
- 2. INDEPENDENT - but experiences difficulty
- 3. Intermittent supervision or minimal physical assistance
- 4. Supervision
- 5. Limited Assistance
- 6. Extensive Assistance
- 7. Total Dependence
- 8. Unwilling to perform
- 9. Activity did not occur

Figures drawn from feasibility study

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

• Implement measures
  – 13 ready for use

• Resolve data issues
  – Additional 3 measures may be ready with increased response rates
<table>
<thead>
<tr>
<th>Measure</th>
<th>Domain</th>
<th>Subdomain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready for construction and Phase 2 evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Prevalence of not receiving medication review by a physician</td>
<td>Program Performance</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>2. Prevalence of ADL/rehabilitation potential and no therapies</td>
<td>Program Performance</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>3. Prevalence of weight loss</td>
<td>Client Functioning</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>4. Prevalence of dehydration</td>
<td>Client Functioning</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>5. Prevalence of negative mood</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>6. Failure to improve/incidence of cognitive decline</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>7. Failure to improve/incidence of bladder incontinence</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>8. Failure to improve/incidence of ADL impairment</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>9. Prevalence of falls</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>10. Failure to improve/incidence of difficulty in communication</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>11. Failure to improve/incidence of impaired locomotion in the home</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>12. Prevalence of no assistive device among clients with difficulty in locomotion</td>
<td>Program Performance</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>13. Prevalence of social isolation</td>
<td>Client Experience</td>
<td>Full Community Inclusion</td>
</tr>
<tr>
<td>Potential to use with increased response rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Prevalence of inadequate meals</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>15. Failure to improve/incidence of skin ulcers</td>
<td>Client Functioning</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>16. Prevalence of delirium</td>
<td>Client Functioning</td>
<td>Health and Well-Being</td>
</tr>
<tr>
<td>Claims data is a better source for these measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Hospitalization</td>
<td>Health Care Utilization</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>18. Emergency Department Visit</td>
<td>Health Care Utilization</td>
<td>Effectiveness/Quality of Services</td>
</tr>
<tr>
<td>19. Emergent Care</td>
<td>Health Care Utilization</td>
<td>Effectiveness/Quality of Services</td>
</tr>
</tbody>
</table>
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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