CDP Redesign: Scientific Methods Panel Spring 2019 Update

CSAC Informational Update

April 23-24, 2019
Scientific Methods Panel (SMP) Charge

- Conduct **evaluation of complex measures** for the criterion of Scientific Acceptability, with a focus on reliability and validity analyses and results

- Serve in an **advisory capacity** to NQF on methodologic issues, including those related to measure testing, risk adjustment, and measurement approaches
The Evaluation Process
Course Corrections through Spring 2019

- Provided more information needed for evaluation
- Slightly revised the evaluation form for spring 2019 cycle
- Provided additional guidance for evaluation
- **Changed evaluation process slightly since last cycle**
  - Provide opportunity for developers to speak about their measures during the conference calls
  - Increased assistance from, and coordination with, CDP project teams
# Process Changes Effective Spring 2019 Cycle

<table>
<thead>
<tr>
<th>Fall 2018</th>
<th>Changes for Spring 2019 cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup conference calls instituted and developers/public invited</td>
<td>Subgroup conference calls continued, and developers/public invited</td>
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<tr>
<td>Developers can listen but cannot speak</td>
<td>Developers have an opportunity to clarify and answer questions from staff and Scientific Methods Panel members during the call</td>
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<tr>
<td>Majority of preparation for, and summaries of, subgroup calls conducted by core SMP team</td>
<td>Project teams now:</td>
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<tr>
<td></td>
<td>• Provide feedback to SMP team on measures designated for Scientific Methods Panel review</td>
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<td></td>
<td>• Populate basic measure information in the discussion guide</td>
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<td>• Write detailed summary of Scientific Methods Panel discussion</td>
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Performance Metrics – Spring 2019

- 47 measures evaluated
- 25 measures discussed on calls (53% of total)
  - 17 where consensus wasn’t initially reached
  - 3 pulled by panelists for discussion
  - 5 pulled by staff for discussion

Final results
- Passed, will go to SCs: n=30 (64%)
- Consensus not reached, will go to SCs: n=6 (13%)
- Did not pass, will not go to SCs: n=11 (23%)
Rationale for Spring 2019 Measures that Did Not Pass

- Required testing not conducted
- Testing methodology unclear
- Testing methodology inappropriate
- Inadequate data in testing sample (e.g., too few states for population-based measures)
- Inadequate/low testing results (reliability)
- Lack of risk adjustment
## Performance Metrics

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Fall 2017</th>
<th>Spring 2018</th>
<th>Fall 2018</th>
<th>Spring 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of complex measures submitted for evaluation by the SMP</td>
<td>8 (7 new)</td>
<td>21 (9 new)</td>
<td>39 (21 new)</td>
<td>47 (19 new)</td>
</tr>
<tr>
<td><strong>Unanimous “pass”</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td><strong>Unanimous “did not pass”</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Split decision: co-chairs arbitrated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>13</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total number of complex measures that received “low” or “insufficient” ratings from the SMP (i.e., did not go to SC)</td>
<td>4 (50%)</td>
<td>13 (62%)</td>
<td>10 (26%)</td>
<td>11 (23%)</td>
</tr>
<tr>
<td>Percent of measures where the standing committee ratings aligned with SMP recommendations</td>
<td>75%</td>
<td>100%</td>
<td>23/29 (79%)</td>
<td>TBD</td>
</tr>
<tr>
<td>Percent of measures where the standing committee ratings did NOT align with SMP recommendations</td>
<td>25%</td>
<td>0%</td>
<td>6/29 (21%)</td>
<td>TBD</td>
</tr>
<tr>
<td>Average turnover rate of SMP membership</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>
SMP Internal Disagreement

- **Initial evaluations**
  - Fall 2017: 63%
  - Spring 2018: 62%
  - Fall 2018: 51%
  - Spring 2019: 55%

- **During calls (CNRs that go to SCs)**
  - Fall 2018: 10%
  - Spring 2019: 13%
SC Nonalignment with SMP Ratings
Results from Fall 2018 To Date*
* Note that post-comment discussions have not yet occurred

<table>
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<tr>
<th>Measure</th>
<th>SMP decision</th>
<th>SC decision (to-date) and concerns</th>
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| 3456    | Passed       | Did not pass validity
Concerns due to lack of clinical risk adjustment (in part due to small sample size) and concern that differences in the measure reflect differences in underlying populations being compared, rather than differences in quality of care.
NOTE that these concerns were raised by the SMP. |
| 3366    | Passed       | CNR on validity
Concerns on the results of the risk-adjustment model (c-statistic=0.61) and possibly, lack of adjustment for social risk (dual status) |
## SC Nonalignment with SMP Ratings

**Results from Fall 2018 To Date**

*Note that post-comment discussions have not yet occurred*

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<th>SC decision (to date) and concerns</th>
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</table>
| 3443    | CNR on validity | Did not pass validity  
SC not convinced that risk-adjustment strategy accounted for differences in underlying populations being compared |
| 3445    | CNR on validity | Did not pass validity  
SC not convinced that risk-adjustment strategy accounted for differences in underlying populations being compared |
| 0964    | CNR on validity | Passed validity  
SMP divided on relatively low correlation results for validity; the SC did not have these concerns |
| 0753    | CNR on reliability | Passed reliability  
SMP divided on relatively low reliability estimates; the SC agreed that results were low but decided to pass the measure, given lack of reliability thresholds |
Advisory Functions
Discussions on Monthly Calls

- **November 2018**
  - Process updates
  - Fall 2018 reflections
  - Advice to developers to improve submissions

- **December 2018**
  - Advice to developers to improve submissions

- **January 2019**
  - Discussed whether the Panel wanted to make recommendations on potential changes to evaluation criteria
Progress To Date on White Papers

- “Perspectives” article – Two drafts completed
  - Overview of NQF measure endorsement process, rationale for SMP creation, role of the SMP, preview of upcoming papers
  - Goal: Complete draft/submit by mid-late spring
  - Goal: Submission to New England Journal of Medicine

- Outcome measures and risk adjustment – “Final” draft completed
  - Scientific acceptability of data elements (including data quality, reliability, validity); scientific acceptability of measure results (reliability, validity); risk adjustment (why needed, model development, validity of the model)
  - Goal: Submit by mid-late spring
  - Goal: Submission to Circulation
Progress To Date on White Papers

- Patient-reported outcome-based performance measures (PRO-PMs)
  - Likely to begin later this year

- Additional paper on reliability begun
  - Initial draft completed
  - Deeper dive into methods of demonstrating reliability, how these methods compare, and how to interpret results
Next Steps for the Panel
Next Steps

- Panel members continue working on journal articles
- In-person meeting scheduled for June 11, 2019
- Shift focus to the Methods “Toolkit”
  - Definitions of important terms
  - Descriptions of methods for demonstrating reliability and validity
  - Guidance on best methods for different measure types
  - “Thresholds” or acceptable results (or maybe rules of thumb)
Discussion Questions
CSAC Discussion Questions

▪ Do you have any feedback on the overall implementation of the SMP or its processes to date?*

▪ What do you think about the “gatekeeper” function of the SMP (i.e., if a measure doesn’t pass the SMP, it does not go forward to the SC)?*

▪ Do you have recommendations on additional ways to disseminate SMP guidance?

▪ Do you have recommendations on other white paper topics?

* We will be evaluating the CDP re-design later this spring/summer, and these will be key questions we pose to address recurrent concerns.