Modifications to the Quality of Patient Care Star Rating Algorithm for Home Health Agencies

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Acronyms in this Presentation

• CCSQ: Center for Clinical Standards and Quality
• HHA: Home Health Agency
• HHC: Home Health Compare
• HHCAHPS: Home Health Consumer Assessment of Healthcare Providers and Systems
• MLN: Medicare Learning Network
• OASIS: Outcome and Assessment Information Set
• TEP: Technical Expert Panel
• QoPC: Quality of Patient Care
Agenda

- Introduction and Purpose
- Overview of current Quality of Patient Care (QoPC) Star Rating methodology
- Recommended changes to QoPC Star Rating methodology
- Timelines
- Questions & Answers
- Resources
Introduction and Purpose
Goal of Reporting Star Ratings

- Displays of stars are an efficient, familiar, consumer-centric way to communicate relative performance (visual shortcut).

- Format addresses the barrier of innumeracy, i.e. it is not necessary to understand or interpret the numbers behind the stars to understand and use them.

- CMS Star Ratings are an important tool for empowering consumers, encouraging providers to strive for higher levels of quality, and driving overall health system improvement.

Ongoing monitoring and improvement to the Quality of Patient Care (QoPC) Star Rating methodology to ensure meaningful and accurate comparison across Home Health Agencies (HHAs)
Quality of Patient Care (QoPC) Star Ratings History and Milestones

• Preview reports first provided to HHAs in **April 2015**

• Results first displayed on HHC in **July 2015**

• Influenza Immunization Received for Current Flu Season (OASIS-based) removed from the QoPC Star Ratings in **April 2018** (still reported on HHC)

• Solicited and incorporated stakeholder feedback and during the development of the QoPC Star Ratings and prior to recommended changes
Recommended Modifications to the QoPC Star Ratings

• Remove from the QoPC Star Ratings the measure “Drug Education on All Medications Provided to Patient/Caregiver” - process measure based on Outcome and Assessment Information Set (OASIS) data
  • Measure is “topped-out,” exhibiting very little variation across agencies
  • Does not distinguish performance differences across agencies
• Add to the QoPC Star Ratings the measure “Improvement in Management of Oral Medications” - OASIS-based, risk-adjusted, outcome measure
  • Reported on Home Health Compare (HHC)
  • Exhibits good statistical properties: not “topped-out” and variation across agencies
  • Addresses an important home health goal
• Recommended changes would be effective April 2019
Overview of Current QoPC Star Rating Methodology
Some Background: The Home Health Setting

- Over 12,000 HHAs
- 23 quality measures currently on HHC.
  - 7 OASIS-based process measures
  - 7 OASIS-based outcome measures
  - 4 Claims-based utilization measures
  - 5 HHCAHPS-based measures
- Separate star ratings for Quality of Patient Care and Patient Experience (based on survey data from Home Health Consumer Assessment of Healthcare Providers and Systems [HHCAHPS])
- Other existing CMS star ratings programs: Nursing Home Compare, Physician Compare, Dialysis Facility Compare and Hospital Compare
Measure Criteria Used for QoPC Star Rating

• Original development included selecting a subset of the non-survey measures reported on HHC in late 2014

• Criteria for selecting measures:
  • The measure applies to substantial proportion of home health patients, and has sufficient data to report for a majority of agencies
  • The measure shows reasonable amount of variation among agencies, and it is possible for agencies to show improvement
  • The measure has high face validity and clinical relevance
  • The measure is stable with respect to random variation over time
Measures Selected for QoPC Star Rating

- 9 measures initially used in QoPC Star Ratings; “Influenza Immunization Received for Current Flu Season” removed in April 2018 HHC refresh resulting in a total of 8 measures
- HHAs must be able to report 5 of the 8 measures to have a Star Rating computed

<table>
<thead>
<tr>
<th>Measure Type</th>
<th>9 Total Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process (not risk adjusted)</td>
<td>1. Timely Initiation of Care</td>
</tr>
<tr>
<td></td>
<td>2. Drug Education on all Medications Provided to Patient/Caregiver</td>
</tr>
<tr>
<td>Outcome (risk adjusted)</td>
<td>3. Improvement in Ambulation</td>
</tr>
<tr>
<td></td>
<td>4. Improvement in Bed Transferring</td>
</tr>
<tr>
<td></td>
<td>5. Improvement in Bathing</td>
</tr>
<tr>
<td></td>
<td>6. Improvement in Pain Interfering With Activity</td>
</tr>
<tr>
<td></td>
<td>7. Improvement in Dyspnea</td>
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<tr>
<td></td>
<td>8. Acute Care Hospitalization (claims-based)</td>
</tr>
</tbody>
</table>
Summary of Methodology

1. For each of the 8 measures, rank all agencies based on score and assign into 10 equally sized groups (deciles).

2. Adjust (or not adjust) the HHA’s initial individual measure rating to help distinguish scores that are different from the national median based on a statistical test.

3. For each agency, average the adjusted ratings across all measures (at least five needed) and round to the nearest 0.5.

4. Assign ratings from 1 to 5 in half star increments.

5. Refer to methodology document for more detail.
Distribution of QoPC Star Ratings, April 2018 Home Health Compare

- 11 quarters of QoPC Star Rating data currently completed
- 8,963 HHAs (76.8%) reporting with average rating of 3.27
Recommended Changes to QoPC Star Rating Methodology
Recommended Modifications to the QoPC Star Ratings

1. Remove the “Drug Education on All Medications Provided to Patient/Caregiver” OASIS-based process measure from the QoPC Star Ratings

2. Add “Improvement in Management of Oral Medications” OASIS-based outcome measure to the QoPC Star Ratings
Drug Education on all Medications Provided to Patient/Caregiver Measure Exhibits Little Variation

- Measure percentiles show little room for improvement.

<table>
<thead>
<tr>
<th># HHAs</th>
<th>Mean</th>
<th>5th Percentile</th>
<th>10th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,962</td>
<td>96.5%</td>
<td>85.7%</td>
<td>91.5%</td>
<td>98.7%</td>
<td>99.7%</td>
</tr>
</tbody>
</table>

- 53.3 percent of HHAs have a score of 99% or higher.
### Difficult to Generate Decile Cut Points for Drug Education on all Medications Provided to Patient/Caregiver Measure

Upward trend of Drug Education cut points has made it very difficult to assign HHAs into ten equally sized groups for this measure.

<table>
<thead>
<tr>
<th>Decile</th>
<th>October 2017</th>
<th>January 2018</th>
<th>April 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>89.0</td>
<td>90.0</td>
<td>90.5</td>
</tr>
<tr>
<td>2</td>
<td>94.2</td>
<td>94.7</td>
<td>95.0</td>
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<tr>
<td>3</td>
<td>96.4</td>
<td>96.6</td>
<td>96.8</td>
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<tr>
<td>4</td>
<td>97.6</td>
<td>97.8</td>
<td>97.9</td>
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<tr>
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<td>98.4</td>
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<tr>
<td>10</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Rationale for Removing Drug Education from the QoPC Star Ratings

• Improvement in this measure has reached the point where most agencies are performing perfectly or very close to perfectly.

• While this is beneficial to home health patients, there is little room left for improvement in this measure.

• Moreover, the limited variation limits the ability to meaningfully discriminate quality across HHAs (difference between 99.9 and 100.0 is not meaningful).

• Recommendation: Remove “Drug Education on all Medications Provided to Patient/Caregiver” from the QoPC Star Ratings
Improvement in Management of Oral Medications

- **NQF #:** 0176; **Type:** Outcome measure (risk-adjusted).

- **Description:** Percentage of home health episodes of care during which the patient improved in ability to take their medicines correctly (by mouth).

- **Numerator:** Number of home health episodes of care where the value recorded on the discharge assessment indicates less impairment in taking oral medications correctly at discharge than at start (or resumption) of care.

- **Denominator:** Number of home health episodes of care ending with a discharge during the reporting period, other than those covered by measure-specific exclusions.

- **Exclusions:** Home health episodes of care for which the patient, at start/resumption of care, was able to take oral medications correctly without assistance or supervision; episodes that end with inpatient facility transfer or death; patient is nonresponsive; or patient has no oral medications prescribed.
Improvement in Management of Oral Medications

Measure available for nearly 80 percent of HHAs and mean is 63.5 percent

Source: Quality episodes from 7/1/2016-6/30/2017

*2018Q1 = Quality episodes from 7/1/2016-6/30/2017
QoPC Star Rating Simulation: Remove Drug Education and Add Improvement in Oral Medications

- **Current**: 8,963 HHAs (76.8%) reporting with average rating of 3.27
- **Remove Drug Education and add Improvement in Oral Medications**: 8,917 HHAs (76.4%) reporting with average rating of 3.27

Data: Episodes ending between 7/1/2016-6/30/2017
QoPC Star Rating Remains Stable

Stability remains largely the same when removing “Drug Education on all Medications Provided to Patient/Caregiver” and adding “Improvement in Management of Oral Medications”

Data: Episodes ending between 7/1/2016-6/30/2017
Rationale for Adding Improvement in Management of Oral Medications

• Management of oral medications is important for home health patients – particularly, with the removal of the Drug Education process measure.

• Inclusion of this measure would keep the number of QoPC Star Ratings measures at eight (assuming removing of the Drug Education measure) - allows for better reportability by HHAs

• This risk adjusted outcome measure exhibits positive statistical properties, with “room for improvement”

• Recommendation: Add “Improvement in Management of Oral Medications” to the QoPC Star Ratings
Summary

• “Drug Education on all Medications Provided to Patient/Caregiver” recommended for removal from the QoPC Star Ratings based on limited variability.

• Recommendation to add the “Improvement in Management of Oral Medications” measure that is currently reported on HHC.

Removing the Drug Education measure and adding the Oral Medications measure yields:

• Very slight decrease in the percent of HHAs that can report a QoPC Star Rating – from 76.8% to 76.4% of HHAs for episodes ending between 7/1/2016 - 6/30/2017.

• Same average QoPC Star Rating – 3.27

• Generally, no change in quarter-to-quarter stability of the QoPC Star Ratings
Timelines
Timeline for Recommended Changes to QoPC Star Rating

• Public comment period: June 26, 2018 to July 26, 2018
  • Comments should be submitted to HH_QM_Comment@abtassoc.com
  • Comment summary to be posted in early September

• Second stakeholder webinar planned October 2018

• If proceed with recommended modifications, first QoPC Star Rating Provider Preview Report to HHAs using new calculation algorithm: January 2019

• Home Health Compare refresh displaying updated QoPC Star Rating: April 2019
  • All measures (OASIS- and claims-based) report on data from July 1, 2017 to June 30, 2018
Question & Answer Session
For More Information

- QoPC Star Rating Methodology
- Home Health Quality Reporting Program
- Home Health Compare

- Email box for questions: HomeHealthQualityQuestions@cms.hhs.gov
- Email box for public comment: HH_QM_Comment@abtassoc.com
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