#### I. <u>General</u>

- IQ1: What is the purpose of Quality of Patient Care Star Ratings and why did CMS add them to Home Health Compare (HHC) now?
- IA1: CMS has created the Quality of Patient Care Star Ratings to help provide transparency by comparing the quality of care delivered by various Home Health Agencies (HHAs) and assisting consumers in making informed decisions about where they would prefer to receive care. CMS believes that the Quality of Patient Care Star Ratings will stimulate improvements in the quality of care provided and incentivize HHAs to maintain quality standards. This is part of an initiative to roll out star ratings across the various Compare websites.
- IQ2: What is the purpose of Quality of Patient Care Star Ratings when the quality measure scores are already reported on HHC?
- **IA2:** Quality of Patient Care Star Ratings are calculated using a subset of the home health quality measures that are publicly reported on HHC and are tailored to meet the needs of consumers. Quality of Patient Care Star Ratings are quick to read and comprehend and are in a format that is becoming increasingly familiar to consumers through its use on Nursing Home Compare, Physician Compare, and Dialysis Facility Compare.
- IQ3: Do Quality of Patient Care Star Ratings provide all of the information needed to choose a HHA?
- IA3: Consumers should consider multiple factors when choosing a HHA. The Quality of Patient Care Star Ratings summarize certain data about the quality of home health care provided by various HHAs in a format that is easy to view and understand. However, other data that are publicly reported on HHC can be very useful. Also, consumers should consult their healthcare professionals when making healthcare decisions such as selecting a HHA.

#### II. HHA Eligibility

**IIQ1:** Which HHAs are included in Quality of Patient Care Star Ratings?

IIA1: All Medicare-certified HHAs are potentially eligible to receive Quality of Patient Care Star Ratings. HHAs must have been certified for at least 6 months and must have 20 or more complete episodes of care during the 12-month reporting period for at least 5 of the 8 measures used to calculate the Quality of Patient Care Star Ratings to be included in the Quality of Patient Care Star Ratings for that reporting period. Consistent with the standard applied under the home health quality reporting requirements, i.e., Pay-for-Reporting (P4R), an episode of care is defined as follows: "a matching pair of OASIS assessments (i.e. - admission and discharge assessments) for [a] patient who has been ... discharged during the reporting period."

IIQ2: Why is it necessary to have at least 20 complete "episodes of care" to receive Quality of Patient Care Star Ratings? Does this mean some small agencies may have a star rating in one quarter and not the next?

IIA2: Quality measures used to compute the Quality of Patient Care Star Ratings with fewer than 20 complete episodes of care do not have sufficient statistical reliability for HHC performance measurement. Caseloads at some small HHAs may vary over time, which could mean that they meet the threshold for reporting a quality measure for some quarters and not others. An agency must have 20 complete episodes for at least 5 of the 8 component measures for a 12-month reporting period in order to have a Quality of Patient Care Star Rating calculated in a given quarter.

IIQ3: Why did our HHA not receive a Quality of Patient Care Star Rating?

IIA3: To receive a Quality of Patient Care Star Rating, a HHA must have been certified for at least 6 months and must have reported data on at least 5 of the 8 quality measures that contribute to the Quality of Patient Care Star Rating during the reporting period. In order to have reported data for a quality measure, a HHA must have 20 or more episodes of care with information on that measure for the 12-month reporting period. Consistent with the standard applied under the home health quality reporting requirements, i.e., Pay-for-Reporting (P4R), an episode of care is defined as follows: "the submission of a matching pair of OASIS assessments (i.e. -admission and discharge assessment) for a patient who has been discharged during the reporting period."

#### III. HHC Measures that Contribute to the Quality of Patient Care Star Ratings

IIIQ1: Which HHC measures are included in the calculation of the Quality of Patient Care Star Ratings?

**IIIA1:** The Quality of Patient Care Star Ratings is based on a subset of the quality measures reported on HHC. These measures include:

#### **Process Measures**

Timely Initiation of Care

#### **Outcome Measures**

Improvement in Ambulation
Improvement in Bed Transferring
Improvement in Bathing
Improvement in Pain Interfering With Activity
Improvement in Dyspnea
Improvement in Management of Oral Medications
Acute Care Hospitalization

#### IIIQ2: How did you select HHC measures for use in the calculation of the Quality of Patient Care Star Ratings?

**IIIA2:** Specific measures were considered for inclusion in the Quality of Patient Care Star Ratings calculation based on several criteria:

- The measure applies to a substantial proportion of home health patients so that it can be reported for a majority of home health agencies.
- The measure shows a reasonable amount of variation among home health agencies, and it is possible for a home health agency to show improvement in performance (i.e., the measure is not "topped out".)
- The measure has high "face validity" (can be taken at face value) and clinical relevance.
- The measure cannot be susceptible to random variation over time.

To capture multiple dimensions of the quality of care provided by HHAs, 1 HHC measure reflects a process of care and the agency's use of evidence-based best practices; 6 HHC measures reflect patient clinical and functional improvement outcomes; and the remaining HHC measure reflects service utilization (acute care hospitalization). Measures included in the star rating calculation have been publicly reported since 2011, so beneficiaries and providers are likely to be familiar with them.

More detailed analysis supporting the measure selection process is available in the **Quality** of Patient Care Star Rating Methodology Report found in the "Downloads" section of

https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIHomeHealthStarRatings.html

#### IIIQ3: Have there been any changes to the measures used to calculate the QoPC star ratings?

- IIIA3: Yes. Based on stakeholder input, including a Technical Expert Panel convened in 2016 and two public comment opportunities, CMS finalized a decision to remove the Influenza Immunization Received for Current Flu Season measures from the calculation. This change was effective with the April 2018 Home Health Compare refresh. Previous to this change, HHAs needed to be able to report on 5 of 9 measures in order to have a rating reported. In 2018, CMS recommended the removal of the Drug Education on all Medications Provided to Patient/Caregiver measure. This was based on findings from ongoing monitoring of the Star Rating and component measures. This measure exhibited very little variation and, thus, limited ability to distinguish performance across providers. CMS recommended adding the Improvement in Management of Oral Medications, an outcome measure reported on HHC. These changes were presented in a June 2018 Medicare Learning Event call followed by a 30-day comment period. CMS announced its final decision to remove the Drug Education on all Medications Provided to Patient/Caregiver measure and add the Improvement in Management of Oral Medications measure in October 2018, effective in the April 2019 HHC refresh.
- IIIQ5: Will patient experience of care measures (based on the Home Health Consumer Assessment of Healthcare Providers and Systems or HHCAHPS data) be included in the Quality of Patient Care Star Ratings calculation?
- **IIIA5:** CMS has developed a methodology to compute star ratings using the HHCAHPS Patient Survey data; these ratings are currently reported on Home Health Compare
- IIIQ6: Will survey results and consumer complaints be incorporated into the Quality of Patient Care Star Ratings?
- **IIIA6:** CMS will consider how additional information might be incorporated into the Quality of Patient Care Star Ratings under future refinements.
- IIIQ7. The Quality of Patient Care Star Ratings methodology includes six outcome measures that assess improvement, but no measures of stabilization. Why weren't stabilization measures included?
- IIIA7. The measures selected for inclusion were drawn from those already reported on HHC, which does not include any stabilization measures. In general, the stabilization measures included in the CASPER reports are "topped out" and would not have met the second selection criteria regarding opportunity for improvement (see IIIA2). They also have not been endorsed by the National Quality Forum (NQF). Finally, the stabilization measures identify all patients whose function has not declined, including both those who have improved or stayed the same. Hence these measures overlap with the improvement measures. We anticipate the Quality of Patient Care Star Ratings methodology will

evolve over time. Future revisions to the methodology may add measures, including revised versions of the stabilization measures, as CMS recognizes that stabilization is an important home health objective for some patients.

- IIIQ8. Do the outcome measures included in the Quality of Patient Care Star Ratings calculation take into account differences in payer source, e.g. Medicaid, and patient acuity? What about socio-demographic status?
- All of the outcome measures reported on HHC, including those incorporated in the Quality of Patient Care Star Ratings calculation, are risk-adjusted. Payer source and acuity are among the many variables included in the risk models, if analysis shows they are a significant predictor of the outcome. The Acute Care Hospitalization measure is only calculated for Medicare fee-for-service patients, and is also risk-adjusted to account for differences in initial patient characteristics, including acuity. The National Quality Forum is undertaking a demonstration project with CMS looking at the incorporation of socio-demographic variables in risk models, and these may be explored for the Acute Care Hospitalization measure in the future.

#### IV. Methodology for Assigning Quality of Patient Care Star Ratings

IVQ1: What is the methodology for assigning Quality of Patient Care Star Ratings for each HHA?

IVA1: The methodology for calculating the Quality of Patient Care Star Ratings is based on a combination of individual measure rankings and the statistical significance of the difference between the performance of an individual HHA on each measure (riskadjusted, if an outcome measure) and the performance of all HHAs. Each HHA's quality measure scores are compared to the national agency median, and its rating is adjusted to reflect the differences relative to other agencies' quality measure scores. These adjusted ratings are then combined into one overall rating that summarizes agency performance across all 8 individual measures.

The specific steps are as follows:

- 1. First, all HHAs' scores on each of the 8 quality measures are sorted low to high and divided into 10 approximately equal size groups (deciles) of agencies. For all measures, except acute care hospitalization, a higher measure value means a better score.
- 2. Each HHA's score on each measure is then assigned its decile location, e.g. bottom tenth, top tenth, etc., as a preliminary rating. Each decile is assigned an initial rating from 0.5 to 5.0 in 0.5 increments (e.g., 0.5, 1.0, 1.5, 2.0, etc.)
- 3. The initial rating is then adjusted according to the statistical significance of the difference between the agency's individual quality measure score and the national agency median for that quality measure. Because all the measures are proportions (e.g., proportion of patients who improved in getting in and out of bed), the calculation uses a binomial significance test.
  - If the agency's initial rating for a measure is anything other than a 2.5 or 3 (the two middle decile categories), and the binomial test of the difference yields a probability value greater than .05 (meaning that the difference between the agency score and the national agency median is not is considered statistically significant), the initial rating is adjusted to the next half star level closer to the middle categories. The results of this transformation are referred to as the "adjusted ratings."
- 4. To obtain one overall score for each HHA, the adjusted ratings are averaged across the 8 measures and rounded to the nearest 0.5. An overall star rating is then assigned to each agency so that ratings will range from 1 to 5 in half star increments (see table below). Thus, there are 9 star categories, with 3.0 stars being the middle category in this distribution.

<sup>&</sup>lt;sup>1</sup>The cut points for the deciles are generated in SAS® using the RANK procedure.

Overall score after averaging across QMs and rounding to the nearest half star	Quality of Patient Care Star Rating
4.5 and 5.0	5 <b>***</b>
4.0	4.5
3.5	4.0 ★★★★
3.0	3.5
2.5	3.0 ***
2.0	2.5
1.5	2.0 **
1.0	1.5 📩
0.5	1 🛨

For more details, please see the **Quality of Patient Care Star Ratings Methodology** report, which is available in the "Downloads" section on the HH Star Ratings web page:

http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIHomeHealthStarRatings.html

CMS anticipates future modifications to the methodology, and welcomes comments for consideration. They can be sent via email to <a href="mailto:HomeHealthQualityQuestions@cms.hhs.gov">HomeHealthQualityQuestions@cms.hhs.gov</a>

- IVQ2: Why are initial star ratings for each measure not adjusted for statistically-significant differences if they are two and a half or three stars?
- **IVA2:** The purpose of the adjustment based on statistically-significant differences is to distinguish which results are truly different from the national result or overall median. A value of two and a half or 3 stars indicates that, for a specific measure, the HHA is performing similar to this median or national rate.
- IVQ3: What is the statistical method used to compare the measure score to the median? If confidence intervals are used, how are they calculated and what are the criteria to define a score statistically different from median?
- **IVA3:** A one-sided binomial test is used to compare an agency's measure score to the national median (across all agencies). If the test yields a probability value (p-value) higher than 5 percent (p>.05), the agency's measure score is considered not statistically significantly different from the national median.
- IVQ4: Does the Quality of Patient Care Star Rating include all patients eligible for reporting with OASIS, i.e. Medicaid and Medicare Advantage?
- **IVA4:** Medicaid and Medicare Advantage patients are not specifically excluded from the calculation of the HHC measures used in the Quality of Patient Care Star Ratings

methodology, with the exception of the claims-based hospitalization measure. This measure is calculated for Medicare fee-for-service patients only.

IVQ5: Why does the Quality of Patient Care Star Rating methodology force all the results into a "bell curve," so that most agencies have scores of 3 or 3.5 stars rather than their actual performance?

IVA5: The Quality of Patient Care Star Rating methodology does not "force" agencies into a bell curve. The methodology computes each agency's comparative performance on each measure by ranking all HHAs low to high and assigning each HHA to one of ten equal categories (highest 10%, second highest 10%, etc.) based on each HHA's actual performance on that measure relative to other agencies. The overall star rating is based on the average of those rankings across the measures, and falls naturally into a bell curve. While there is a small statistical adjustment to individual measure rankings in agencies with very small numbers of cases when statistical tests suggest that differences from the national median are random, rather than true, differences, the distribution of agency average ratings based on their average ranking across all the measures, remains a bell curve. Most agencies' average performance across all the measures falls "in the middle" of the distribution, while relatively few have average performance that is significantly better or worse than their peers.

#### V. Implementation of the Quality of Patient Care Star Ratings

- **VQ1:** When were the Quality of Patient Care Star Ratings first reported?
- VA1: The first public reporting of the Quality of Patient Care Star Ratings occurred in July 2015. HHAs had an opportunity to see their rating in advance when a Provider Preview Report was posted in their CASPER folder in April, 2015.
- VQ2: Where can HHAs find their Provider Preview Reports on the CASPER system?
- VA2: The Provider Preview Reports that show an HHA's Quality of Patient Care Star Rating are available through CASPER. Providers can preview their own ratings through this system. To access the reports, select the CASPER Reporting link located at the top of your HHA State Welcome page. Once in the CASPER Reporting system, select the 'Folders' button and access the Home Health Star Rating Provider Preview Report in your 'st HHA facid' folder, where "st" is the 2-character postal code of the state in which the agency is located and "facid" is the state-assigned Agency ID of the agency.

Note that the Provider Preview Reports appear in a different folder than the OBQI reports that HHAs also receive. HHAs that have problems locating their Provider Preview Reports can obtain assistance from the QTSO Help Desk, phone: 800-339-9313, e-mail: help@qtso.com

- VQ3. Are HHAs able to request a review of their Quality of Patient Care Star Rating before publication?
- VA3. If a HHA has evidence of an error in the Quality of Patient Care Star Ratings calculation the HHA may request a review of their rating. This request must include specific information and provide documentation/examples about the error. Please note that any documentation provided should not include any patient health information, such as service dates, admission dates, discharge dates, birth dates or individual patient IDs. Depending on the results of the review, the HHA's rating may be suppressed for one reporting period. HHAs have about two and half weeks each quarter after they receive their Provider Preview Reports to submit review requests and supporting documentation. More information about making these requests is posted at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIHomeHealthStarRatings.html.
- VQ3: What is the reporting period for the first set of Quality of Patient Care Star Ratings?
- VA3: The Quality of Patient Care Star Ratings have the same 12-month reporting period as the rest of the quality measures being reported on HHC at the same time; these ratings are just a summary of 8 of the measures already being reported. For both the OASIS- based and claims-based measures, the delay is 9 months (e.g., measures posted in April 2019 will be based on data from July 2017 through June 2018.) This delay is necessary to allow HHAs

sufficient time to preview their Quality of Patient Care Star Ratings before publication on HHC. The claims-based Acute Care Hospitalization measure is based on calendar year data, refreshed each October. For the April and July 2019 HHC refresh, the measures will be based on calendar year 2017 data. In October 2019, the measure will be updated to be based on calendar year 2018 data.

- VQ4: Is there be wording on the website to clarify what the star values signify? People generally think of three stars as "not so good." Has CMS done consumer testing to ensure that consumers understand the Quality of Patient Care Star Ratings correctly?
- VA4: The HHC website is designed to allow consumers to compare the performance of the HHAs that serve their area on a variety of measures and to use this information, along with other considerations, in choosing a provider. On the HHC website, the Quality of Patient Care Star Ratings show which providers are performing at a level similar to most providers (three or three and one- half stars) and which have performance that is better than the national median (four to five stars) and which have performance that is lower than the national median (one to two and one-half stars). This is clearly explained on the website. CMS has tested alternative options for presenting star ratings to confirm that consumers comprehend the information being presented. This includes explanations about how comparative ratings, like the Quality of Patient Care Star Ratings, differ from quality ratings based on consumer satisfaction, such as those found on many retail websites.
- VQ5: How did you get input on the Quality of Patient Care Star Ratings methodology from home health providers and other stakeholders? Was there be a public comment period?
- **VA5:** CMS solicited input from home health agencies and associations, from consumer advocates, and from other stakeholders.
  - We have published the methodology at:
    - http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIHomeHealthStarRatings.html
  - We held our first Special Open Door Forum to present the methodology and receive stakeholder feedback on December 17, 2014. A second Special Open Door Forum was held on February 5, 2015 to present updates to the methodology and solicit additional feedback. Each session was followed by a public comment period. CMS chose this approach over formal rule-making to allow flexibility for more iterative development and comment. Transcripts and audio files, as well as the slides presented at both Special Open Door Forum sessions are posted here:
    - http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIHomeHealthStarRatings.html
  - Our design/implementation contractor convened a stakeholder group including representatives from stakeholder organizations, in 2016 to provide input on system design, implementation, and future refinements. Based on the TEP recommendations, we held calls in January and October 2017 to present proposed

changes to the methodology. Each call was followed by a 30-day public comment period. Please see IIIQ3 for information about the changes.

• We have also established an email box for submission of comments, questions, and suggestions about the Quality of Patient Care Star Ratings, and we encourage all interested parties to submit their input to:

HomeHealthQualityQuestions@cms.hhs.gov

#### VI. Potential Impacts of the Quality of Patient Care Star Ratings

- VIQ1: Will the Quality of Patient Care Star Ratings impact our annual market basket update payment?
- **VIA1:** The Quality of Patient Care Star Ratings will not be used in the annual market basket payment update (APU) determination.
- VIQ2: Will the Quality of Patient Care Star Ratings, or the measures used for the Quality of Patient Care Star Ratings, be used for value-based purchasing in the future?
- **VIA2:** The Quality of Patient Care star rating is not being used in the Home Health Value-Based Purchasing demonstration.
- VIQ3: Won't the Quality of Patient Care Star Ratings create a disincentive for home health agencies to serve beneficiaries who are not expected to improve?
- **VIA3:** The HHC quality measures that are based on patient improvement are already riskadjusted in order to account for each agency's patients who are not expected to improve. This should mitigate agencies' concerns about serving such patients.
- VIQ4: How do the Quality of Patient Care Star Ratings affect small agencies? Will we be excluded?
- VIA4: Agencies with a very small number of patients with a given quality measure (fewer than 20) currently do not have the measure reported on HHC because with such a small number of patients, the result may reflect random variation and can be easily distorted by a single case. Since the Quality of Patient Care Star Ratings are based on data from 8 of the HHC measures, the methodology requires that an agency have reportable data for at least five of those measures to receive a rating. This is to ensure that these ratings reflect a reasonably wide range of performance measures for all agencies, and that they are comparable across providers. The data reported on the October 2017 HHC showed that 8,963 out of 11,670 active agencies (77%) received a rating. The remaining 23% were too small or too new. The HHC website includes language explaining that agencies without ratings were too small or too new, and that this absence does not reflect on agency quality or performance.
- VIQ5: Since there are relatively few agencies that rate 4 or 5 stars under the Quality of Patient Care Star Ratings system, is it possible that some consumers will not have access to any 5-star agencies?
- VIA5: Consumers who currently use HHC can easily compare the performance of their local home health agencies to the overall performance for their state and for the nation. Those who reside in areas served by relatively few agencies can already see how their agencies compare to the national performance level. The Quality of Patient Care Star Ratings do not change the distribution of HHAs or their performance. The distribution of agencies across the Quality of Patient Care Star Ratings, and the concentration of agencies in the middle categories reflect that most agencies are performing well and there are relatively few agencies whose performance is significantly better or worse than HHAs nationwide. The explanatory language presented on Home Health Compare along with the Quality of Patient Care Star Ratings will emphasize that a three-star rating means performance that is typical of HHAs nationally.