American Hospital Association™
Advancing Health in America

Member Advisory

January 15, 2020

CMS Star Ratings Refresh Expected This Month, Bigger Changes Possible in 2021

At A Glance

At Issue:

As part of the January refresh of *Hospital Compare*, the Centers for Medicare & Medicaid Services (CMS) plans to update its hospital overall star ratings. The release of these data could generate interest from the media. CMS also has announced its intention to propose significant methodology changes to star ratings that could take effect as soon as 2021.

Our Take:

Hospitals and health systems have long supported transparency on quality. However, CMS's approach to star ratings is deeply flawed and may mislead consumers. While we appreciate that CMS is considering ways to improve the star ratings methodology, we continue to believe the ratings should be removed from *Hospital Compare* until CMS can improve their accuracy and meaningfulness.

What You Can Do:

- ✓ Share this advisory with your chief quality officer, clinical leaders and media team.
- ✓ Review preview reports to understand the basic approach of star ratings and your organization's performance.
- ✓ Use the talking points included in this advisory to help prepare for questions about your organization's performance.
- ✓ Be ready to speak to performance improvement efforts related to the measures and topics in star ratings.

Key Takeaways

- The methodology has undergone only minor changes since December 2017, and the overall distribution of star ratings will be mostly unchanged in this refresh.
- CMS has yet to address major concerns about the validity and usefulness of star ratings. That is why AHA and the other national hospital associations asked CMS to suspend their publication.
- Among other challenges, CMS's current approach to star ratings:
  - Creates confusion for patients, especially given how many other public report cards are available.
  - Lacks relevance for some patients.
  - Has very limited usefulness for hospital quality improvement.
- As soon as this spring, CMS intends to propose more significant changes to the star ratings that could affect the ratings hospital see in 2021.

Further Questions:

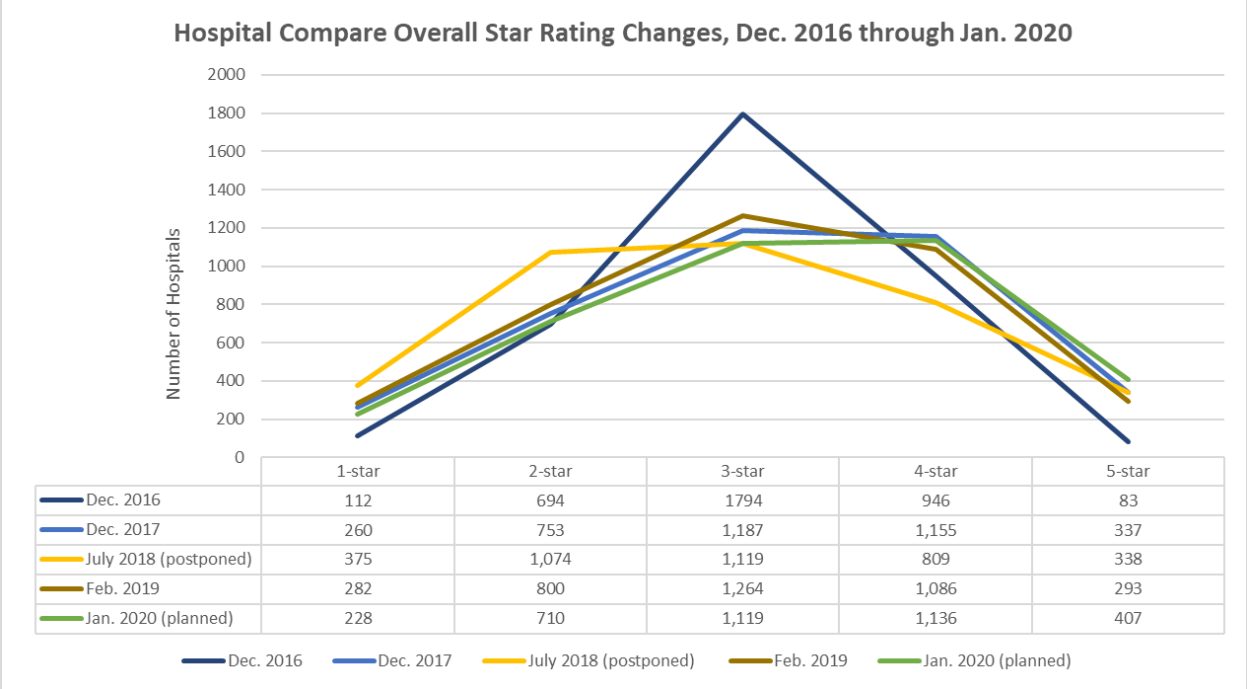
Please contact Akin Demehin, director of policy, at (202) 626-2365 or ademehin@aha.org.

Star Ratings Background

In July 2016, the Centers for Medicare & Medicaid Services (CMS) began to report an overall star rating reflecting performance on nearly 60 *Hospital Compare* measures. At the time, the AHA with other hospital associations, the majority of Congress and many other stakeholders voiced significant concerns about the accuracy and meaningfulness of the ratings, and urged CMS not to publish the ratings unless and until they could be improved. Nevertheless, CMS published the ratings.

In 2017, further analyses identified issues with the execution of CMS's chosen methodology. CMS temporarily suspended star ratings, proposed several technical updates to its methodology and posted revised ratings in December 2017.

CMS planned to update the ratings again in July 2018 using the same methodology. However, hospitals reported hard-to-explain shifts in their performance that could not be explained by changes in underlying measure performance. As a result, CMS postponed the update to allow for further analysis and input, and re-published the ratings in February 2019. Since then, CMS has made only modest changes to the methodology, and as a result, the overall distribution of star ratings for January 2020 will be similar (see graph below).



	1-star	2-star	3-star	4-star	5-star
Dec. 2016	112	694	1794	946	83
Dec. 2017	260	753	1,187	1,155	337
July 2018 (postponed)	375	1,074	1,119	809	338
Feb. 2019	282	800	1,264	1,086	293
Jan. 2020 (planned)	228	710	1,119	1,136	407

Overview of Star Ratings Methodology

A comprehensive methodology document, as well as list of frequently asked questions, is available on CMS's QualityNet website. At a high level, the methodology works as follows:

1. Measure selection and grouping. CMS selects measures from *Hospital Compare* and assigns the measures to seven groups that have a weight toward the overall star rating. The January 2020 ratings will include 51 measures.

2. Calculation of measure group and summary scores using a latent variable model (LVM). An LVM is a statistical technique that summarizes the performance of all the measures in a group into a single score. The LVM combines actual measure performance with statistical assumptions about unobserved (or latent) dimension of quality that are based on available measure data. CMS calculates a "loading factor" for each measure that determines how much it drives performance within the group – the higher the loading factor, the more it drives performance. CMS then uses these factors to calculate a latent variable value for each of the seven measure groups. Lastly, it computes a weighted average of those scores to create a summary score for every hospital.

3. Application of reporting thresholds. To receive an overall star rating, hospitals must report at least three measures in at least three measure groups, one of which must be an outcome measure group (i.e., mortality, safety, readmissions). For the January 2020 release, CMS reports that on average, hospitals reported five measure groups and 31 measures, and that 78.5% of hospitals on *Hospital Compare* met the thresholds.

4. Determination of overall star rating using *k*-means clustering. Finally, to assign hospitals a star rating, CMS uses another statistical technique known as "*k*-means clustering." The basic intent of *k*-means clustering is to ensure hospital scores within the same star rating are as similar as possible, and scores of hospitals in different star ratings are as different as possible.

Potential Future Changes to Hospital Star Ratings

When CMS refreshed the star ratings in 2019, the agency simultaneously issued a request for information (RFI) outlining several future changes to the ratings approach that the agency was considering in future years to address stakeholder concerns. In an August 2019 announcement, CMS indicated that it would use formal rulemaking during 2020 to propose any specific changes. **While the agency did not announce a more specific timeframe, the AHA believes CMS may use the FY 2021 inpatient prospective payment system (IPPS) proposed rule to propose methodology changes; we expect the IPPS proposed rule will be issued by the end of April 2020.** Once CMS formally proposes the changes, the AHA will work with members to gather feedback and respond to CMS.

The AHA has urged CMS to suspend the star ratings while it works on improvements to the methodology. At the same time, we have continued to work with CMS as it develops methodology changes. We believe that some of them – especially peer grouping and moving away from the LVM approach to a less complex "explicit approach" – may have merit. We have engaged the agency in several ways, including by responding to the RFI, co-chairing a multi-stakeholder group at the National Quality Forum (NQF) that

gave CMS recommendations on improving star ratings and meeting with agency officials.

Star Ratings Talking Points

The talking points below may be helpful in responding to inquiries about your star ratings.

- **Hospitals have been pioneers in quality measurement, and have long shared safety and quality data with the public** because patients and their families need clear information to make health care decisions.

- **When making health care decisions, patients should use all available tools at their disposal,** such as talking with friends and family and consulting with doctors, nurses and other health care providers.

- **(Insert name of hospital) is committed to quality and safety.** In fact, we are pleased that over the past few years, we have (insert data demonstrating a significant improvement in quality or safety your hospital has made).

- **At (insert name of hospital), we have been working diligently to improve safety** by (insert two or three examples of how your hospital has improved safety in the past few years).

- While it may be well intentioned**, the CMS star ratings program is confusing for patients and families and raises far more questions than answers.** These ratings also have been broadly criticized by quality experts and Congress as being inaccurate and misleading to consumers.

- The measures included in the ratings were never intended to create a single, representative score of hospital quality. Furthermore, the ratings often do not reflect the aspects of care most relevant to a particular patient's needs. Thus, arbitrary choices of measures and methodology have far too much impact on how a hospital is rated.

- **Some measures in star ratings lack sociodemographic adjustment, which biases the ratings against those hospitals caring for poorer patients.** Two-thirds of a hospital's star rating is based on readmissions, patient experience and mortality measures. A body of literature shows these measures can be influenced by sociodemographic factors (e.g., income, insurance status) beyond hospitals' control. We believe sociodemographic adjustment must be incorporated into these measures before they are used for star ratings

- **There is limited "line of sight" between ratings and underlying measures, which severely limits the usefulness of the ratings for quality improvement.** Hospitals do not know what rating they will get – or how well they need to score on individual measures to achieve a particular star rating – until after CMS

applies its complex LVM and clustering approaches and provides them with preview reports. Simply put, hospitals cannot achieve a target they cannot see.

- As longstanding supporters of transparency, **hospitals are committed to continuing the dialog with CMS about the goal we share – providing the public with accurate, meaningful information about quality**.

- **CMS is one of a number of organizations that provides reports and rankings of hospital performance.** As with any report cards or ratings, each must be interpreted in context, and it is unlikely any one report card will provide a robust and reliable portrait of quality in a hospital. For example, some of the data used to calculate hospital grades can be years old, and may not reflect more recent performance improvement efforts. In addition, not all measures apply to all patients, which can matter when report cards are used as the primary tool to select a hospital for a specific procedure.

- **The proliferation of scorecards means that hospitals often receive divergent ratings across different reports**, even when the reports are based on some of the same measures.
    - In fact, a 2015 *Health Affairs* study examining hospital performance on four rating systems showed that only 10% of the 844 studied hospitals rated as a high performer by one rating system were rated as a high performer by any of the other rating systems.

- **Variation among numerous reports and rankings of hospital performance has caused confusion for health care professionals and patients.**
    - To address these concerns, national hospital associations have endorsed a set of principles for evaluating publicly reported provider performance data. To access the document, visit: http://aamc.org/publicreporting.