

February 4, 2019

Updated Star Ratings and List of HAC-penalized Hospitals Coming this Month

At A Glance

At Issue:

As part of the February refresh of [Hospital Compare](#), the Centers for Medicare & Medicaid Services (CMS) plans to update its hospital overall star ratings. In addition, we expect CMS will release the performance results from the fiscal year (FY) 2019 Hospital-acquired Condition (HAC) Reduction Program, including the list of penalized hospitals. The release of these data could generate interest from the media.

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. In addition, while hospitals strongly support programs to improve patient safety, the HAC Reduction Program results in arbitrary penalties that do not advance patient safety.

What You Can Do:

- ✓ Share this advisory with your chief quality officer, clinical leaders and media team.
- ✓ Review preview reports to understand each rating's basic approach and your organization's star rating and HAC 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 and HACs.

Further Questions:

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Key Takeaways

Hospital Overall Star Ratings

- The ratings will be updated for the first time since December 2017. CMS heeded the AHA's [call](#) not to update the ratings in July 2018.
- The methodology has undergone only minor changes since December 2017, and the overall distribution of star ratings will be similar in the February release.
- There remains major concerns about the validity and usefulness of star ratings that CMS has not addressed. That is why AHA and the other national hospital associations asked CMS to [postpone](#) their publication.

HAC Reduction Program Penalties

- Since fiscal year 2015, the HAC Reduction Program has imposed a 1 percent penalty on hospitals in the highest quartile of HAC rates.
- The HAC Reduction Program's design remains deeply flawed and tends to unfairly penalize hospitals caring for patients with complex health needs.

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Hospital Overall Star Ratings

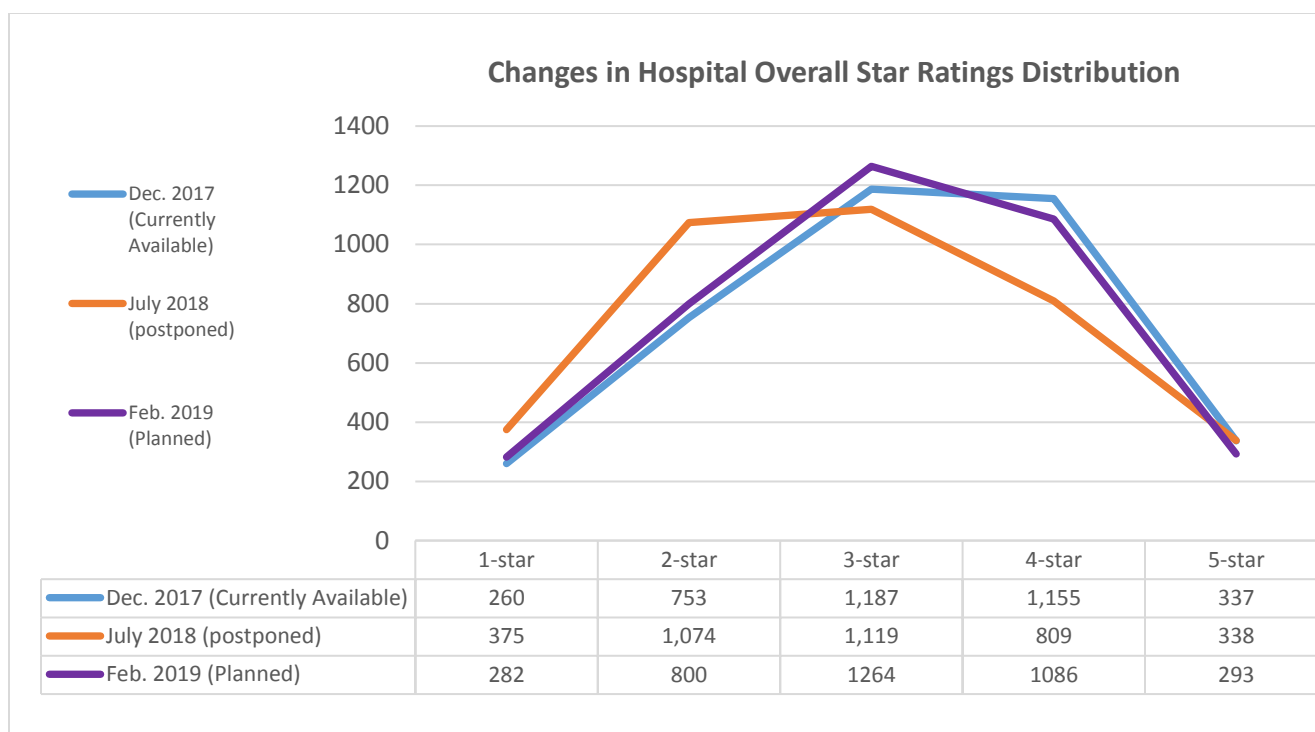
Star Ratings Background

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.

However, CMS has made only very modest changes to the methodology for February 2019. Publicly available information from CMS shows that the overall distribution of performance across hospitals will be similar (see graph below).



Overview of Star Ratings Methodology

A comprehensive methodology [document](#), as well as a [summary](#) of the minor changes for February 2019 ratings, 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 February 2019 ratings will include 57 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 February 2019, CMS reports that on average, hospitals reported five measure groups and 36 measures, and that 81.5 percent 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.

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 you 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.
- 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 provide 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 percent 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 all have endorsed a set of principles for evaluating publicly reported provider performance data. To access the document, visit: <http://aamc.org/publicreporting>.

Hospital acquired-Condition Reduction Program

Background on the HAC Reduction Program

The HAC Reduction Program imposes a 1 percent reduction to Medicare inpatient payments for hospitals in the worst performing quartile (25 percent) of risk-adjusted national HAC rates. Affected hospitals were informed by CMS that they would receive a penalty in the fall of 2018, and are being penalized for discharges from Oct. 1, 2018 to Sept. 30, 2019.

For FY 2019, hospital performance in the program is determined using six measures split into two measurement domains. One domain, which comprises 85 percent of a hospital's score, includes five healthcare-associated infection (HAI) measures – central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), surgical-site infections (SSIs), Methicillin resistant staphylococcus aureus (MRSA) infections, and *Clostridium difficile* (C. Difficile) infections. The remaining 15 percent of a hospital score is determined by a Medicare claims data-derived Patient Safety Indicator composite measure (PSI 90) that combines performance on several safety indicators, such as pressure ulcers, post-operative hip fractures and post-operative blood clots.

HAC Reduction Program Talking Points

The talking points below may be helpful in responding to inquiries about your hospital's HAC Reduction Program performance.

- **America's hospitals are deeply committed to keeping patients safe. We support programs that effectively promote patient safety improvements. And we're improving.**
 - According to a January 2019 preliminary report from the Agency for Healthcare Research and Quality, hospitals generated a **13 percent decline in many HACs between 2014 and 2017. That translates to 20,500 lives saved and nearly \$7.7 billion in health care costs averted.**
- **At (insert name of hospital) we have been working diligently to reduce infections and improve safety by (insert two or three examples of how your hospital has improved safety in the past 3 to 5 years.)**
- **Unfortunately, the HAC Program is a poorly designed policy that unfairly penalizes hospitals that care for the sickest patients.**
 - Penalties disproportionately affect the nation's teaching and large urban hospitals.
 - These types of hospitals tend to have sicker patients and perform more complex surgeries.
 - The HAC program's methodology scores hospitals only on those measures for which they have sufficient data:
 - When the hospital has too little data, the CMS methodology substitutes the average performance for the hospital's specific performance on a measure. This puts larger and teaching hospitals at a disadvantage because they are more likely to have data for each measure and tend to treat a sicker patient population.
 - It also can disadvantage small hospitals whose performance is tied to only a small number of metrics, providing a narrow characterization of patient safety.
 - A recent [article](#) in the *American Journal of Medical Quality* reviews some of the inherent biases in the HAC Program.
- **HAC penalties are arbitrary because they do not reflect meaningful differences in hospital performance.**
 - A 2018 [article](#) showed that more than half of all hospitals have performance that cannot be distinguished statistically from the penalty threshold level.
- **In fact, hospitals may even be punished in the HAC Program for improving performance.**
 - For example, many infection reduction efforts correctly focus on reducing the use of unnecessary central lines and urinary catheters. However, the rates could remain high because the measure denominators (i.e., days that patients are on central lines and catheters) become smaller.

- A better design for this type of program is embedded in the Value-Based Purchasing (VBP) program and in using better measures. It more effectively promotes continuous progress on quality by rewarding both a high level of performance and significant improvement.
- **Even CMS agrees some of the measures do not truly capture hospital performance, especially for hospitals that care for patients with complex health needs.**
 - According to a 2012 analysis commissioned by CMS, many of the individual components of the composite Patient Safety Indicator (PSI 90) measure, which combines performance on several safety indicators, such as pressure ulcers, post-operative hip fractures and post-operative blood clots, fail to reliably capture hospital performance.
 - Because of inadequate risk adjustment in the PSI 90 measure, hospitals may score worse simply because of their complex patient mix. That fails to accurately portray hospital performance.
 - Additionally, PSI 90 is calculated using claims data, which do not fully reflect the details of a patient's history, course of care and clinical risk factors. As a result, the rates derived from the measures are inexact. For example, the PSI pressure ulcer measure (PSI 3) relies on physician documentation to calculate rates, but the most detailed information on pressure ulcers often comes from nursing notes. That makes the measure ineffective.
- **By law, 25 percent of hospitals always will face HAC penalties regardless of improved performance.**
 - By law, the program must impose penalties on 25 percent of hospitals each year.
 - So even if the hospital field as a whole achieves strong performance, one quarter of all hospitals still will be subject to payment reductions.
 - And if an individual hospital significantly improves its performance from one year to the next, it still may be subject to a penalty if it falls in the bottom 25 percent.
 - That would be like a college professor deciding that – at the beginning of a semester – 25 percent of the students in his or her class would fail, regardless of how well they do.
- **We want the HAC program to stop unfairly penalizing hospitals.**
 - The program should not disproportionately penalize those hospitals serving the sickest among us.

- The current law needs to be reformed to more effectively promote improvement.
- Better measures are needed that accurately reflect performance on important issues.