

# Overall Hospital Quality Star Rating: Overview For Flex Programs and Rural Stakeholders

## 2021 Overview

Based on input from a wide variety of stakeholder meetings held in 2019, the Centers for Medicare & Medicaid Services (CMS) proposed and then finalized an updated methodology for calculating the Overall Hospital Star Rating as part of the CY 2021 CMS Outpatient Prospective Payment System final rule that was published in December 2020.

- Updated Overall Hospital Star Ratings, using the revised methodology, was released on the [CMS Care Compare website](#) in April 2021.
- More than 20% of all hospitals (primarily small and rural) consistently do not meet the minimum measures threshold to have a star rating calculated.
- More than 60% of critical access hospitals (CAHs) do not meet the minimum measures threshold to have a star rating calculated.
- On CMS Care Compare (formerly Hospital Compare), the listing for those hospitals without a star rating calculated indicates “Not available” with a note that says, “There are too few measures or measure groups reported to calculate a star rating or measure group score.”

## Background

- CMS originally started releasing Overall Hospital Quality Star Ratings on the Hospital Compare (now called Care Compare) website in July 2016, with the Star Rating calculations updated approximately annually. The objective of the Overall Hospital Quality Star Rating is to summarize information from existing measures on Care Compare in a way that is useful and easy to interpret for patients and consumers.
- CMS has systematically rolled out Star Rating programs across different health care settings including nursing homes, home health, hospice, dialysis providers, clinicians, and payers including Medicare Advantage plans.
- CMS started releasing a Patient Experience HCAHPS Star Rating program for hospitals in April 2015. The Overall Hospital Quality Star Rating is intended to be complementary to the HCAHPS Star Rating Program. The Overall Hospital Quality Star Rating does not replace the HCAHPS Star Rating calculation, nor does it replace reporting of any individual hospital quality measures on Care Compare.

## Methodology Overview and Changes

### Measure Selection

The Overall Hospital Quality Star Rating methodology uses a sub-set of acute care hospital measures already available on Care Compare.

- The measures included in the star rating calculation are based on the measures that are currently available on Care Compare at the time of calculation (so the list of measures included varies each time the Star Rating is calculated).

- CMS excludes measures that have been suspended, retired, or delayed; measures with no more than 100 hospitals reporting publicly; structural measures; and duplicative measures (i.e., individual measures that make up a composite measure).
- Forty-eight measures are included in the April 2021 star rating calculation.<sup>1</sup>

## Measure Grouping

Overall Hospital Quality Star Ratings measures are grouped by measure type. The updated methodology included a shift from seven measure groups to five, with outcome and patient experience measures carrying more weight in the overall calculation:

Measure Group	Weight†
Mortality*	22%
Safety of Care*	22%
Readmissions	22%
Patient Experience (HCAHPS)	22%
Timely and Effective Care‡	12%

\*These are the only two “outcome” groups – hospitals must have at least three measures in one of these two groups to meet the threshold to have a rating calculated.

†Measure group weights are re-proportioned if no measures are available in a measure group.

‡Consolidates process measures from three previous groups: 1) Effectiveness of Care, 2) Timeliness of Care, and 3) Efficient Use of Medical Imaging Group.

## Measure Group Scores and Hospital Scoring:

Measure group scores and hospital scores are calculated by using a simple average of measure scores within each measure group (this is a revision from the previous methodology that utilized a complex calculation including latent variable modeling).<sup>2</sup> The overall hospital score is a weighted average of the available group scores.

**Threshold for rating calculation:** To have an Overall Hospital Quality Star Rating calculated, a hospital must have a minimum of 3 measures in at least 3 groups, 1 of which must be an outcome group (Safety of Care or Mortality).

Note - In the previous methodology, Readmissions was also considered an outcome group.

## Peer Grouping and Star Rating Assignment

To address concerns about comparability of hospitals with fundamental differences such as size, volume, patient case mix, and service mix, a key change in the revised methodology was a shift to a peer grouping approach to developing Star Rating ‘cut-points’ based on the number of measure groups available for calculation:

- Hospitals with 3 measure groups
- Hospitals with 4 measure groups
- Hospitals with 5 measure groups

Number of Hospitals Per Peer Group - Using April 2021 Care Compare data<sup>3</sup>:

- 3 measure peer group – 331 (10% of hospitals with a rating, 60% of hospitals in peer group are CAHs)
- 4 measure peer group - 544 (16% of hospitals with a rating, 48% of hospitals in peer group are CAHs)
- 5 measure peer group - 2,460 (74% of hospitals with a rating, 1% of hospitals in peer group are CAHs)

<sup>1</sup> For a full list of measures and timeframes included in the April 2021 Overall Hospital Star Rating Calculation: <https://qualitynet.cms.gov/inpatient/public-reporting/overall-ratings/data-collection>.

<sup>2</sup> The previous Overall Hospital Quality Star Rating on Care Compare Methodology Report (v3.0), can be found here: [https://qualitynet.cms.gov/files/5d0d3a1b764be766b0103ec1?filename=Star\\_Rtngs\\_CompMthdlgy\\_010518.pdf](https://qualitynet.cms.gov/files/5d0d3a1b764be766b0103ec1?filename=Star_Rtngs_CompMthdlgy_010518.pdf)

<sup>3</sup> Analysis completed by Stratis Health using data posted on <https://data.cms.gov/provider-data/>

CMS has indicated that analysis shows peer grouping assignments to be stable with >95% of hospitals assigned to the same peer group between 2016 – 2019.

**For more information:**

- An [overview summary of the methodology](#) for calculating the Star Ratings can be found in Figure 1. (on page 4)
- This [list of the measures](#) included in the April 2021 Star Rating calculations, includes measure group, reporting channel, and timeframe of the data used for the calculation.
- For additional details on the Overall Hospital Star Rating Methodology see the CMS Comprehensive Methodology Report (v4.1) (02/26/2021). Available at: <https://qualitynet.cms.gov/inpatient/public-reporting/overall-ratings/resources>

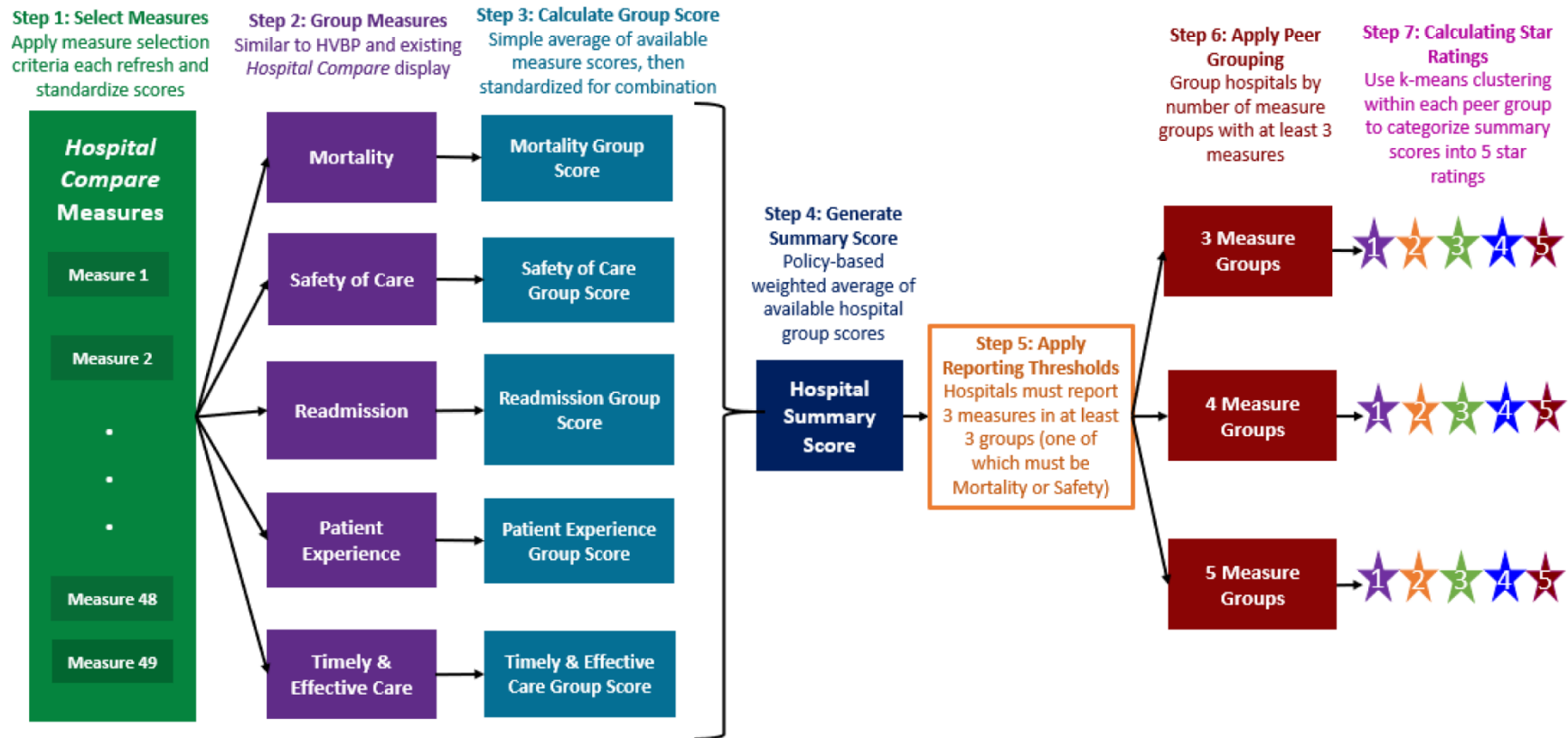
## RQITA Rural Relevant Discussion/Talking points

- We applaud the continued effort of CMS in driving towards improved quality and transparency, but concerns about Star Rating program, particularly for small rural hospitals remain, with more than 60% of the country’s critical access hospitals excluded.
- Although the updates in the Star Rating Methodology address some of the previous concerns, such as the complexity and replicability of the calculations and concerns about comparability of hospitals with fundamental differences such as size, volume, patient case mix, and service mix, **the lack of rural relevant measures continues to be primary concern for inclusion and meaningfulness of ratings for small rural hospitals.**
  - Many of the measures included in the ranking methodology are specific to a particular diagnosis or procedure. Small rural hospitals often do not have enough volume of any specific diagnosis to have measures calculated, or the procedures measured are not part of the services they provide. Low volume is not a statement about the quality of care.
  - CMS has retired several measures in recent years, including many that were rural relevant. Forty-eight measures were included in the April 2021 star rating calculation, compared to 54 measures included in the January 2020 star rating calculation. The number of CAHs eligible for a star rating dropped from 646 (48%) in January 2020 to 480 (35%) in April 2021, despite the methodology changes that made it more likely that CAHs would receive a rating.
  - For those CAHs that do receive a ranking, a significant proportion of their score is based on measures that use data that is several years old.<sup>4</sup>
- Although ‘no rating’ does not inherently imply low quality, it can be frustrating for CAHs that have been voluntarily reporting relevant measures to be excluded from the rating system and challenging to explain the rationale to the local media and/or public and their patients.
- The use of this methodology reinforces the need for action to better address quality reporting and measurement for rural and low volume facilities. [The National Quality Forum Rural Workgroup](#) has released several recommendations to address these and other challenges of healthcare performance measurement for rural and low volume providers. We strongly encourage CMS consider those recommendations to enhance and support inclusion of rural providers in quality reporting and value-based purchasing strategies.

---

<sup>4</sup> In the April 2021 release, the mortality measures, and most of the readmissions measures are based on data from 2016 – 2019.

**Figure 1: Flowchart of Overall Star Rating Methodology**



Source: Overall Hospital Quality Star Rating on Care Compare Methodology Report (v4.0)  
[https://qualitynet.cms.gov/files/603966dda413b400224ddf50?filename=Star\\_Rtngs\\_CompMthdly\\_v4.1.pdf](https://qualitynet.cms.gov/files/603966dda413b400224ddf50?filename=Star_Rtngs_CompMthdly_v4.1.pdf)

*This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$625,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official view of, nor an endorsement, by HRSA, HHS or the U.S. Government. (05/2021)*