Quality Program Measure Trends Analysis

Updated Based on Care Compare's 4th Quarter 2023 Data Release | Version 1

Analysis Description

The Quality Program Measure Trends Analysis (4th quarter 2023 update) is designed to provide hospitals with a comparative review of the quality data collected over time by the Centers for Medicare and Medicaid Services (CMS) which is published on the Care Compare website at https://www.medicare.gov/care-compare/.

The measures analyzed represent those included in the Medicare Quality Programs which include:

- Value Based Purchasing (VBP)
- Readmissions Reduction Program (RRP)
- Hospital Acquired Conditions (HAC) reduction program
- Comprehensive Care for Joint Replacement (CJR) program

The analysis also includes Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey data and overall star ratings. Measures are divided into categories: Star Ratings, Safety, Person and Community Engagement (VBP/CJR), Outcomes, Readmissions, and Efficiency. Measures that CMS has adopted for use in at least one of the 4 programs for the current program year and forward are also included, though some measures do not apply to all program years. The "Notes" tab of the analysis specifies the applicable program years for each measure. Measures collected by CMS that have not been adopted for use in one of the programs but are included in the Care Compare database are not evaluated in this analysis, with the exception of star ratings. Measures that have been finalized for use in one of the four programs but are lacking complete data in Care Compare are not evaluated in this analysis. In order to focus on measures relevant to the quality programs going forward, this analysis does not include measures that CMS has removed from the current program year.

Performance periods vary in the 2nd quarter 2021 through 4th quarter 2021 releases of Care Compare due to the COVID-19 exclusion of data from January 1, 2020 through June 30, 2020.

Hospital performance levels are shown in graphical form with relevant comparisons to national standards. These standards are intended to give a hospital an indication of how it would perform in the quality programs. National performance comparison groups can be toggled on and off by users. Multiple measures in each domain can be viewed using the scroll bar at the bottom of the graph or by selecting/deselecting measures in the "Measures" filter section on the left.

The graphs in this analysis are set to display hospital performance relative to national performance (average, 25th, 50th, 75th, and 90th percentiles). As a result, the axis for each chart varies. The peer group selection allows Critical Access Hospitals (CAHs) and small rural hospitals to be compared to all hospitals or just to other CAHs/small rural hospitals. The

start period drop down indicates the oldest Care Compare release of data shown in charts/reports throughout the analysis and can be used to filter out older periods of data from inclusion in those charts/reports. Changing any filter in the controls on the left will reset all filter options below it.

Hospital performance levels are also shown in tabular form, including rankings within the nation and the state to show how hospital performance is changing relative to performance across the country (a hospital with performance levels that are not improving at a rate comparable to or better than the nation may have performance levels that are improving but will have a national ranking that is falling). Rankings are not provided for hospitals that do not meet the minimum case count requirement for at least one quality payment program. Hospital counts, case count minimums, and reporting practices by CMS may change from quarter to quarter.

This analysis eliminates measure case count requirements and therefore, when possible, calculates measure scores for hospitals for measures that do not meet program case count requirements. CMS does not provide a measure score for those measures but provides the data elements to calculate the score. Measure scores that are calculated in this way are indicated by a data row highlighted in gray.

Z-scores are calculated with respect to the measure and data period, with higher z-scores being better. A z-score is the distance from the national mean in units of standard deviation and allows measures on different scales to be compared. There is also a "Bottom Measures" tab in the analysis where measures are ordered by z-score. This tab only reflects the "All" peer group and does not rank CAHs/small rural hospitals against solely CAHs/small rural hospitals. Z-scores are compared for the most recent data period for each measure (up to 5 Care Compare release quarters back). No measures will be ranked if a hospital does not have any data in the last 5 Care Compare releases and these charts will read "No Data to Graph". Z-scores are not compared for those measures that do not meet case count requirements.

This analysis evaluates performance for all prospective payment system and critical access hospitals included in CMS' Care Compare database, not just those included in the programs. Therefore, in some cases, there may be multiple measures that are unavailable for a hospital for all quarters.

Data is not shown for releases where data was incomplete or where the measures were not yet being reported. If no data exists for a measure within the chosen timeframe there will be no option in the filters to select the measure.

Sources, Time Periods, and Measures Analyzed

The following describes the sources, time periods, and measures evaluated in this analysis by measure category. The measure collection dates related to these database updates are listed directly in the analysis.

Person and Community Engagement/HCAHPS Measures (VBP):
Hospital performances are from the updates to the CMS Care Compare quality database from 1st quarter 2019 through 4th quarter 2023. CMS did not update the HCAHPS measures in 4th quarter 2020, 1st quarter 2021, 2nd quarter 2021, nor 1st quarter 2022 Care Compare due to the COVID-19 extraordinary circumstances exception. National performance standards are calculated based on hospital performance when not available on Care Compare.

The 9 HCAHPS survey VBP measures analyzed include:
- Communication with Nurses
- Communication with Doctors
- Responsiveness of Hospital Staff
- Communication about Medicines
- Discharge Information

- 3-Item Care Transitions Measure (CTM-3)
- Patients' Rooms and Bathrooms Were Always Kept Clean
- Area Around Patients' Rooms Was Always Kept Quiet at Night
- Overall Rating of Hospital

The VBP Program technically evaluates 8 measures—the "clean and quiet" measures are combined for the purposes of VBP. This analysis provides hospitals with performance levels and rankings for each individual measure.

Person and Community Engagement/HCAHPS Measures (CJR):
The HCAHPS measures in the CJR program differ from those in the VBP program as the CJR program uses the linear mean score for each measure and also includes a "Patient Would Recommend Hospital" measure. Hospital performances are from the quarterly updates to the CMS Care Compare quality database from 1st quarter 2019 through 4th quarter 2023. CMS did not update the HCAHPS Measures in 4th quarter 2020, 1st quarter 2021, 2nd quarter 2021, nor 1st quarter 2022 Care Compare due to the COVID-19 extraordinary circumstances exception. National performance standards are calculated based on hospital performance when not available on Care Compare.

Safety Measures:
For the 8 hospital-acquired infection (HAI) measures, hospital performance levels are from the 1st quarter 2019 through 4th quarter 2023 updates to the CMS Care Compare quality database for data that are complete. CMS did not update the Safety measures with 4th quarter 2020, 1st quarter 2021, or 1st quarter 2022 Care Compare due to the COVID-19 extraordinary circumstances exception. National performance standards are calculated based on hospital performance when not available on Care Compare.

For the one patient safety indicator (PSI) composite measure, PSI-90, hospital performances are from the annual updates to the CMS Care Compare database from 2nd quarter 2019 through 4th quarter 2023. National performance standards are calculated based on hospital performance when not available on Care Compare.

The 8 Safety measures analyzed include:

- Central Line-Associated Bloodstream Infection (ICU + Select Wards) (HAI-1)
- Catheter Associated Urinary Tract Infection (ICU + Select Wards) (HAI-2)
- Surgical Site Infection (SSI) – Colon (HAI-3)
- SSI – Abdominal Hysterectomy (HAI-4)
- Methicillin Resistant Staph Infection (MRSA) (HAI-5)
- Clostridium Difficile (C.Diff) (HAI-6)
- Patient Safety and Adverse Events (Composite of 10) (PSI-90)
- Sepsis Care (Sep-1)

The VBP Program takes a weighted average of the final scores for the 2 SSI measures (abdominal hysterectomy and colon surgical site infection) when determining the Safety domain score. This analysis shows the measures independently to provide hospitals with performance levels and rankings for each individual measure.

Outcomes of Care Measures:
For the 5 mortality and 1 complication rate measures, hospital performances are from the annual updates to the CMS Care Compare quality database from 2nd quarter 2019 through 2nd quarter 2023, where complete data are available. The PN 30-Day Mortality Rate measure was not updated with 2nd quarter 2022 Care Compare due to the impact of COVID-19 on the measure but was provided with the 4th quarter 2022 update. National performance standards are calculated based on hospital performance when not available on Care Compare.

The 6 Patient Outcomes measures analyzed include:

- AMI 30-Day Mortality Rate (MORT-30-AMI)
- HF 30-Day Mortality Rate (MORT-30-HF)
- PN 30-Day Mortality Rate (MORT-30-PN)
- COPD 30-Day Mortality Rate (MORT-30-COPD)
- CABG 30-Day Mortality Rate (MORT-30-CABG)
- Risk Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA) (COMP-HIP-KNEE)

In the VBP program, the 5 mortality rates are converted to survival rates. The mortality rates in this analysis are not converted.

The 2nd quarter 2023 THA/TKA measure uses the new modified methodology adopted in the FFY 2024 IPPS Final Rule and therefore should not be compared to prior quarters.

Readmission Measures:
For the 6 readmission measures, hospital performances are from the annual updates to the CMS Care Compare quality database from 2nd quarter 2019 through 2nd quarter 2023 where complete data are available. The PN 30-Day Readmission Rate measure was not updated with 2nd quarter 2022 Care Compare due to the impact of COVID-19 on the measure but was provided with the 4th quarter 2022 update. National performance standards are calculated based on hospital performance when not available on Care Compare.

The 6 Readmissions measures analyzed include:
- AMI 30-Day Readmission Rate (READM-30-AMI)
- HF 30-Day Readmission Rate (READM-30-HF)
- PN 30-Day Readmission Rate (READM-30-PN)
- COPD 30-Day Readmission Rate (READM-30-COPD)
- CABG 30-Day Readmission Rate (READM-30-CABG)
- Risk Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA) 30-Day Readmission Rate (READM-30-HIP-KNEE)

Efficiency Measures:
Hospital performance for the Medicare Spending Per Beneficiary measure is from the 4th quarter 2019 to the 4th quarter 2023 updates to Care Compare. National performance standards are calculated based on hospital performance when not available on Care Compare.

The Efficiency measure analyzed is:
- Medicare Spending Per Beneficiary (MSPB-1)

Star Ratings:
Hospital performances are from the quarterly updates to the CMS Care Compare quality database. Hospitals are given between 1 and 5 stars based on their performance.

For the Overall Star Rating, quality data is from 4th quarter 2019 through 2nd quarter 2023. Also shown are the number of hospitals with each star category for each quarter within the state and the nation. If a state does not have any hospitals in one or more star category, that spot will be blank. CMS updated the Overall Star Rating with the methodology in the Calendar Year 2021 Outpatient Prospective Payment System final rule which was included in the 1st quarter 2021 Care Compare.

For the HCAHPS star ratings, quality data is from 1st quarter 2019 through 4th quarter 2023. CMS did not update the HCAHPS star ratings with 4th quarter 2020, 1st quarter 2021, 2nd quarter 2021, or 1st quarter 2022 Care Compare due to the COVID-19 extraordinary circumstances exception.

Star ratings developed by CMS and included in the Care Compare database are not tied to any payment program and thus do not affect reimbursement.