VBP Impact Analysis – FFY 2025 Program

Update Based on Care Compare's 2nd Quarter 2024 Data Release | Version 1

Analysis Description

The Value-Based Purchasing (VBP) Impact Analysis is intended to provide hospitals with an estimation of the potential impact of the federal fiscal year (FFY) 2025 Medicare inpatient hospital VBP program based on publicly available data and program rules established by the Centers for Medicare and Medicaid Services (CMS).

The reports included in this analysis estimate VBP scores, impacts, scoring trends, and provide full details on how the points and scores for each VBP measure and domain are calculated.

CMS neither penalized nor rewarded hospitals for the FFY 2023 VBP program due to the impact of the COVID-19 pandemic. CMS did provide a subset of data for individual measures and the Clinical Outcomes and Efficiency domains, but did not provide Total Performance Scores (TPS) or adjustment factors, and therefore no impacts were calculated.

For FFYs 2024 and 2025 VBP, performance periods are impacted by the extraordinary circumstances exception granted by CMS in response to the COVID-19 public health emergency, so no claims data or chart-abstracted data reflecting services provided January 1, 2020 - June 30, 2020 will be used in the calculations for the VBP.

The analysis of the FFY 2025 program does not use the actual data CMS will use to calculate final VBP scores and Medicare inpatient payment redistributions. This data will not be publicly available until on or around the date that the official program is implemented.

Estimated FFY 2025 VBP scores, FFY 2025 adjustment factors, and FFY 2025 dollar impacts in this analysis may differ slightly from analyses provided by other organizations due to differences in data source and analytic methods.

The Performance Scorecard tab includes reports that break down estimated impacts by domain and by measure. Overall contribution amounts are distributed to each domain by weight. A hospital's VBP payment (contribution amount × slope × total performance score) is then distributed the same way. Estimated domain impacts are calculated by comparing the contribution amount and the VBP payment amount. Measure contribution amounts are determined by dividing the domain level contribution amounts by the number of scored measures in each domain. Measure VBP payments are then determined by taking this contribution value, and multiplying by the measure score divided by ten to convert the score into a percentage. As with the domain level, impacts are then estimated by comparing the overall contribution amounts and VBP earnings. Please note that impacts provided in

this report are heavily dependent on the VBP slope, which is based on national performance levels. As a result, although changes to measure VBP scores for FFY 2025 will affect these estimates, the relative size of the estimated impacts compared to the contribution amounts are dependent on the final slope determined for the VBP program.

The filters on the left panel on the Performance Scorecard can be used to select a program year for the measure impact graph and a domain for the measure impact graph and table below.

When a measure or domain is missing or blank, it shows no data is available or the hospital does not meet case count requirements.

Data Sources

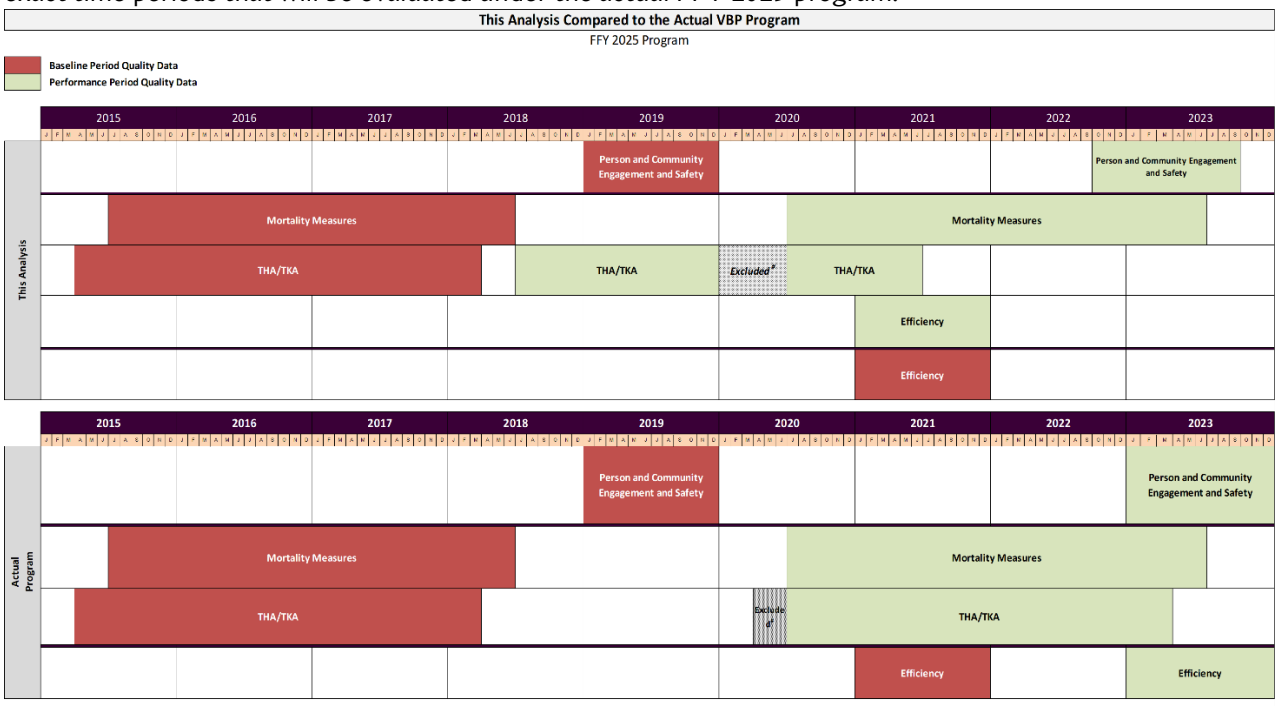
To measure hospital performance, this analysis utilizes data provided by CMS on its Care Compare website at https://www.medicare.gov/care-compare/.

In general, historical data from Care Compare are used for the VBP baseline periods and the most recent data from Care Compare are used for the VBP performance periods. In some cases, the data periods analyzed between this analysis and the actual program match; in others, the best available proxy is used.

FFY 2025 VBP will assess hospital performance using measures grouped into four domains:

- Person and Community Engagement
- Clinical Outcomes
- Safety
- Efficiency and Cost Reduction

The table below describes, by measure and by domain, the time periods analyzed in this analysis compared to the exact time periods that will be evaluated under the actual FFY 2025 program.



*These performance periods are impacted by the extraordinary circumstances exception granted by CMS in response to the public health emergency so no claims data or chart-abstracted data reflecting services provided January 1, 2020 - June 30, 2020 will be used in calculations for the VBP Program.

The Care Compare quarterly releases that correspond with the measure collection periods described in the above table are as follows:

Baseline Periods:

- 2nd quarter 2019 update: Clinical Outcomes
- 3rd quarter 2020 update: Person and Community Engagement; Safety
- 4th quarter 2022 update: Efficiency

Performance Periods:

- 2nd quarter 2022 update: THA/TKA
- 4th quarter 2022 update: Efficiency
- 2nd quarter 2024 update: Mortality, Person and Community Engagement, and Safety

The national performance standards used to evaluate hospital performance are taken from CMS and were finalized in the Inpatient Prospective Payment System (IPPS) FFY 2023 final rule at https://www.govinfo.gov/content/pkg/FR-2022-08-10/pdf/2022-16472.pdf.

The national performance standards for the Medicare Spending per Beneficiary (MSPB) measure are calculated based on hospital performance scores during the performance period analyzed. CMS will establish the official FFY 2025 national performance standards for this measure based on data from the actual performance period. As a result, the actual national performance standards for this measure will differ from the standards estimated in this analysis.

The THA/TKA measure updated with 2Q2023 and 2Q2024 Care Compare uses the modified methodology adopted in the FFY 2024 IPPS final rule. This methodology will not be used for VBP until the FFY 2030 program, and therefore an older update of THA/TKA is used in this analysis.

The MSPB measure updated with 4Q2023 Care Compare uses the modified methodology adopted in the FFY 2024 IPPS final rule. This methodology will not be used for VBP until the FFY 2028 program, and therefore an older update of MSPB is used in this analysis.

Hospitals are only eligible for the VBP program if they are currently eligible for, and adequately participate in, the Inpatient Quality Reporting (IQR) program.

Estimated VBP program contributions and payouts are based on Medicare inpatient operating payments calculated from hospital payment data provided by CMS in the FFY 2025 IPPS final rule impact file. By law, the VBP program only impacts base operating inpatient payments, and therefore does not apply to capital, outlier, indirect medical education (IME), disproportionate share hospital (DSH), etc. Sole Community Hospitals contribute to the VBP program based on their federal rate calculation, regardless of whether they are actually paid based on a hospital-specific rate. Medicare Dependent Hospitals contribute to the VBP Program based on the blended rate if they are eligible to be paid at that rate; otherwise, the contribution is based on their federal rate calculation.

VBP trends and ranks for the FFY 2025 program year are based on hospital performance from the current and historical Care Compare updates. The trending of current estimates is intended to show how estimated VBP scores for each domain and the VBP TPS change over time as well as how those scores compare to hospitals in the state

and the nation. A hospital with VBP scores that are not improving at a rate comparable to or better than those of the nation may have scores that are improving but will lose ground overall under the program.

VBP Scoring and Impact Estimates

This analysis uses CMS-defined formulas for calculating VBP points for each measure under each domain. CMS has established the following formulas to calculate VBP points:

$$Achievement\ Points\ (all\ program\ measures) = 9 \times \left[\frac{Performance\ Period\ Score - Achievement\ Threshold}{Benchmark - Achievement\ Threshold}\right] + 0.5$$

$$Improvement\ Points\ (all\ program\ measures) = 10 \times \left[\frac{Performance\ Period\ Score - Achievement\ Threshold}{Benchmark - Achievement\ Threshold}\right] - 0.5$$

$$Final\ Points\ (all\ program\ measures) = Higher\ of\ Achievement\ and\ Improvement$$

$$Final\ Points\ (SSI\ measure) = \left[\frac{Final\ Point_{HAI3} \times Predicted\ Infection_{HAI3} + Final\ Points_{HAI4} \times Predicted\ Infection_{HAI4}}{Predicted\ Infection_{HAI3} + Predicted\ Infection_{HAI4}}\right]$$

$$Consistency\ Points\ (person\ and\ comm.engagement) = [20 \times Lowest\ Measure\ Consistency\ Points\ Multiplier] - 0.50$$

$$Consistency\ Points\ Multiplier\ (person\ and\ comm.engagement) = \left[\frac{Performance\ Period\ Score - Floor}{Achievement\ Threshold - Floor}\right]$$

The following describes the minimum requirements for measure scoring (other exclusionary criteria apply):

- Person and Community Engagement — 100 surveys
- Clinical Outcomes — 25 cases
- Safety — one predicted infection
- Efficiency and Cost Reduction — 25 cases.

The filter on the left of the Score Calculation tab can be used to select a domain in which to view the calculation of measure and domain scores.

Case counts in this analysis are adjusted where possible to reflect the shortened performance periods due to the COVID-19 pandemic.

If a hospital has insufficient data in the performance period, the measure is not scored. If a hospital has insufficient data in the baseline period, but usable data for the performance period, only the hospital's achievement points may be scored (no improvement points). The various reports in this analysis state when the necessary data to calculate VBP points are lacking.

The Affordable Care Act (ACA) requires the VBP program to be calculated as budget neutral, such that all funds contributed to the program by hospitals are paid out during the same period. The VBP program is funded with 2.0% of hospitals' Medicare IPPS base operating dollars.
For each hospital, once the final points are calculated for each individual measure, overall domain scores are then calculated for each of the program's domains (person and community engagement, safety, clinical outcomes, and efficiency). The overall domain scores are then combined to calculate a TPS for each hospital. The TPS serves as the basis for determining hospitals' VBP payments (or gain/loss) under the program. CMS is required to assign weights to each domain when calculating the TPS.

The following describes how overall domain scores will be calculated and how domains will be weighted to calculate each hospital's TPS for the FFY 2025 program:

- Calculating Overall Domain Scores (all domains): For each domain, the overall domain score is the sum of the final points earned for the domain divided by the maximum possible points for all useable measures in the domain. Hospitals must have a minimum of 100 HCAHPS surveys to obtain a Person and Community Engagement Domain score; two useable measures to obtain a Clinical Outcomes Domain score; two useable measures to obtain a Safety Domain score; and one useable measure to obtain an Efficiency and Cost Reduction Domain score.

- Domain Weighting and Calculating a TPS: The following weights will be applied to each domain to estimate each hospital's TPS under the FFY 2021 program:

    - Person and Community Engagement: 25%
    - Clinical Outcomes: 25%
    - Safety: 25%
    - Efficiency and Cost Reduction: 25%
    -

Hospitals only need domain scores in three out of the four domains in order to be included in the program, and the TPS will be reweighted proportionately to the scored domains.

$$Reweighted\ Domain\ Weight = Original\ Domain\ Weight\ \times \frac{1}{Sum\ of\ Remaining\ Domain\ Weights}$$

Once a TPS is calculated, CMS applies a linear payment exchange function to redistribute inpatient payments based on each hospital's performance under the VBP program. The linear exchange function is the formula for a line that will start at 0% payment for a TPS of 0% and will end at some percentage (x%) for a TPS of 100%. The x% is based on the slope of the line and will be determined using the national distribution of TPSs, such that the sum of all hospitals' VBP payments will equal the amount of dollars contributed to the program.

The filter on the bottom left of the Performance Scorecard can be used to select a program year to view the linear exchange function graph.

For FFY 2025, each hospital's VBP payment percentage will equal its TPS multiplied by 4.2990 (under the linear exchange payment function, 4.2990 is the calculated slope of the line using the most currently available data that will redistribute all VBP contributions based on hospital performance under the VBP program). The slope estimated is expected to flatten out over time. Traditionally, hospital performance improves as more recent data become available and more time elapses between the data used for the baseline period and the performance period.

Data Dictionary

Estimated Base Operating Revenue = Most recent estimated total revenue adjusted by an update factor as needed

$$\text{Contribution} = \text{Estimated Base Operating Revenue x } 2.0\%$$

$$\text{Adjusted Cases} = \text{Measure Casex x } \frac{Number\ of\ Months\ in\ Proxy\ Data\ Period}{Number\ of\ Months\ in\ Actual\ Data\ Period}$$

$$\text{Consistency Points Multiplier} = \frac{\text{Hospital's HCAHPS Performance Period Score} - \text{Floor for that Measure}}{\text{Achievement Threshold for that Measure} - \text{Floor for that Measure}}$$

$$\text{Consistency Points} = (20 \text{ x Lowest Consistency Point Multiplier}) - 0.5$$

$$\text{Achievement Points} = 9 \text{ x } \frac{\text{Hospital Performance Period Score} - \text{Achievement Threshold}}{\text{Benchmark} - \text{Achievement Threshold}} + 0.5$$

$$\text{Improvement Points} = 10 \text{ x } \frac{\text{Hospital Performance Period Score} - \text{Hospital Baseline Period Score}}{\text{Benchmark} - \text{Hospital Baseline Period Score}} - 0.5$$

$$\text{Final Points} = \text{Higher of Achievement or Improvment Points}$$

$$\text{Domain Score} = \frac{\sum \text{Final Points Earned}}{\text{Maximum Points Possible}}$$

$$\text{Reweighted Domain Weight} = \frac{\text{Original Domain Weight}}{\sum \text{Scored Domain Weights}}$$

$$\text{Weighted Domain Score} = \text{Unweighted Domain Score x Reweighted Domain Weight}$$

$$\text{Pre-Slope Payment} = \text{Contribution x TPS}$$

$$\text{Slope} = \frac{\sum \text{Eligible Hospitals Contributions}}{\sum \text{Eligible Hospitals Pre-Slope Payment}}$$

$$\text{Measure Impact} = \frac{\left(\text{Contribution x Slope x Reweighted Domain Weight x } \frac{\text{Final Points}}{10}\right) - (\text{Contribution x Reweighted Domain Weight})}{\text{Count of Scored Measures in Domain}}$$

$$\text{Domain Impact} = (\text{Contribution x Unweighted Domain Score x Reweighted Domain Weight x Slope}) - (\text{Contribution x Reweighted Domain Weight})$$

$$\text{TPS} = \sum (\text{Unweighted Domain Score x Reweighted Domain Weight})$$

$$\text{VBP Payment Percentage} = \text{TPS x Slope}$$

$$\text{VBP Payment} = \text{Contribution x VBP Payment Percentage}$$

$$\text{Adjustment Factor} = 1 + [(2.0\% \text{ x VBP Payment Percentage}) - 2.0\%]$$

$$\text{Impact Percentage} = (2.0\% \text{ x VBP Payment Percentage}) - 2.0\%$$

$$\text{VBP Impact} = \text{VBP Contribution} - \text{VBP Payment}$$