

How to Read Your Fiscal Year (FY) 2021 Hospital Value-Based Purchasing (VBP) Program Percentage Payment Summary Report (PPSR)





Background of the Hospital VBP Program

The Hospital Value-Based Purchasing (VBP) Program is the nation's first national pay-for performance program for acute care hospitals. The program serves as an important driver in redesigning how the Centers for Medicare & Medicaid Services (CMS) pays for care and services.

Hospitals that participate in the Hospital VBP Program will receive their Fiscal Year (FY) 2021 Percentage Payment Summary Report (PPSR) from CMS. The PPSR displays their Total Performance Score (TPS) and value-based incentive payment percentage for each Medicare fee-for-service discharge occurring in FY 2021 and paid under the inpatient prospective payment system (IPPS).

This *How to Read Your Fiscal Year FY 2021 Hospital VBP Program PPSR* document serves as a page-by-page help guide to provide assistance on program participation, program eligibility, the values displayed on the report, and scoring calculations.

Eligibility

The program applies to subsection (d) hospitals located in the 50 states and the District of Columbia, as defined in Social Security Act section 1886(d)(1)(B). Subsection (d) hospitals found ineligible in Fiscal Year (FY) 2021 based on one of the following exclusion criteria will still receive a PPSR:

- The hospital is subject to a payment reduction under the Hospital Inpatient Quality Reporting (IQR) Program.
- The hospital has been cited for three or more deficiencies during the performance period that pose immediate jeopardy to patients' health or safety.
- The hospital is in the State of Maryland and has received a waiver to participate in the Maryland All-Payer Model.
- The hospital has received an extraordinary circumstances exception to the Hospital VBP Program from CMS.
- The hospital did not meet the minimum number of measures/dimensions in at least three domains based on the minimum data requirements.

Hospitals excluded from the IPPS (i.e., long-term care, children's, psychiatric, rehabilitation, and the 11 prospective payment system-exempt cancer hospitals) are not eligible to participate in the Hospital VBP Program and will not receive a PPSR.

Note: Hospitals that are excluded from the Hospital VBP Program will **not** have their base operating Medicare Severity Diagnosis Related Group (MS-DRG) payments reduced by 2.0 percent nor be eligible for incentive payment adjustments.



Background of the Hospital VBP Program

Minimum Data Requirements

CMS established a minimum number of cases, surveys, episodes of care, and measures for hospitals to report to become eligible for a domain score in the Hospital VBP Program. The required minimums are applied for overall program scoring to reliably evaluate quality and improvement using sufficient amounts of data to adjust hospital payments. The following are the minimum data requirements:

- Hospitals must report the required case minimum for at least two of the five measures in the Clinical Outcomes domain. The minimum reporting requirement to receive a Clinical Outcomes domain score is 25 applicable cases for at least two of the five Clinical Outcomes domain measures during the performance period.
- A minimum of 100 Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Surveys (aka CAHPS[®] Hospital Survey) is required in the Person and Community Engagement domain during the performance period to receive dimension scores and a domain score.
- Hospitals must report the required case minimum for at least two of the five measures for the Safety domain to receive a domain score. The following are the minimum reporting requirements for the Safety domain measures:
 - One predicted infection as calculated by the Centers for Disease Control and Prevention (CDC) for the healthcare-associated infection (HAI) measures during the performance period is required to receive a measure score.
 - The surgical site infection (SSI) measure is scored by the combination of two strata, Abdominal Hysterectomy and Colon Surgery. A hospital must have at least one predicted infection as calculated by the CDC for one of the stratum during the performance period to receive an SSI measure score.
- A minimum of 25 episodes of care is required for the Medicare Spending per Beneficiary (MSPB) measure during the performance period in order to receive an Efficiency and Cost Reduction domain score.



Background of the Hospital VBP Program

Purpose of the Report

The PPSR provides hospitals participating in the Hospital VBP Program with the opportunity to review their Total Performance Score (TPS) and value-based incentive payment adjustment factor that will be applied in FY 2021. The FY 2021 report provides hospitals their TPS and value-based incentive payment adjustment percentage. This is the ninth year of the program.

Your hospital's report has five sections:

1. The **Percentage Summary Report** summarizes the results of the Hospital VBP Program and provides a hospital's scores for Total Performance Score, Clinical Outcomes domain, Person and Community Engagement domain, Safety domain, and Efficiency and Cost Reduction domain, along with its value-based incentive payment adjustment factor.
2. The **Clinical Outcomes Detail Report** provides details on the five Clinical Outcomes measures, including thresholds, benchmarks, and a hospital's measure scores, which are based on the rates for the measures during the baseline and performance periods.
3. The **Person and Community Engagement Detail Report** provides details on the eight HCAHPS dimensions, including floor values, thresholds, benchmarks, and a hospital's dimension scores, which are based on the rates associated with the HCAHPS dimensions for the baseline and performance periods.
4. The **Safety Measures Detail Report** provides details on the five HAI measures, including thresholds, benchmarks, and a hospital's measure scores, which are based on the rates or standardized infection ratio (SIR) from the baseline and performance periods.
5. The **Efficiency and Cost Reduction Detail Report** provides details on the MSPB measure, including the threshold, benchmark, measure score, and episodes of care. The measure score is based upon the MSPB measure (ratio) for the baseline and performance periods. This also displays the MSPB amount (numerator) and median MSPB amount (denominator) used to calculate the MSPB measure.

The **Appendix** lists the formulas CMS used to create the report.



Percentage Summary Report

Section 1. Percentage Summary Report

This section summarizes the results of the Hospital VBP Program for a hospital.

Image 1. Percentage Summary Report

Page 1 of 5

Report Run Date: 07/30/2020		Hospital Value-Based Purchasing – Value-Based Percentage Payment Summary Report		
		Percentage Summary Report		
		Provider:		
		Reporting Period: Fiscal Year 2021		
Data As Of: 07/24/2020				
1.1	Total Performance Score	Facility	State	National
		69.250000000000	47.569000000000	30.560126582278
		Unweighted Domain Score	Weighting	Weighted Domain Score
	Clinical Outcomes Domain	100.000000000000	25%	25.000000000000
1.2	Person and Community Engagement Domain	29.000000000000	25%	7.250000000000
	Safety Domain	48.000000000000	25%	12.000000000000
	Efficiency and Cost Reduction Domain	100.000000000000	25%	25.000000000000
1.3	Value-Based Percentage Payment Summary - Fiscal Year 2021	Base Operating DRG Payment Amount Reduction	Value-Based Incentive Payment Percentages	Net change in Base Operating DRG Payment Amount
		2.000000000000%	4.0038759857%	+2.0038759857%
			Value-Based Incentive Payment Adjustment Factor	Exchange Function Slope
			1.0200387599	2.8908851882

Calculated values were subject to rounding.
Reference the Hospital Value-Based Purchasing page on QualityNet for report information, calculations, and Hospital VBP resources.

Note: Displayed values in Image 1 and subsequent images in this document do not represent actual values. The values shown are for illustration purposes only. Values for your hospital will be found in your unique PPSR.

1.1 Total Performance Score

This section displays your hospital's TPS and compares it to the average TPS for the state and the average TPS for the nation. The TPS is a sum of the Clinical Outcomes, Person and Community Engagement, Safety, and Efficiency and Cost Reduction weighted domain scores. If "Hospital VBP Ineligible" appears in the Facility field, your facility did not receive a TPS because it did not meet the eligibility requirements for the FY 2021 Hospital VBP Program.

1.2 Clinical Outcomes, Person and Community Engagement, Safety, and Efficiency and Cost Reduction Domains

This section displays a hospital's unweighted and weighted scores for the Clinical Outcomes, Person and Community Engagement, Safety, and Efficiency and Cost Reduction domains. If "Hospital VBP Ineligible" appears in the fields, the facility did not receive a TPS because it did not meet the eligibility requirements for the FY 2021 Hospital VBP Program.

Unweighted Domain Scores

CMS calculates unweighted domain scores through a normalization process. CMS normalizes domain scores by converting a hospital's earned points (the sum of the measure scores) to a percentage of total points that were possible, with the maximum score equaling 100.



Percentage Summary Report

Weighting

CMS finalized the domain weights listed in the table below in the FY 2019 IPPS Final Rule (83 FR 41464).

Domain	Weight
Clinical Outcomes	25%
Person and Community Engagement	25%
Safety	25%
Efficiency and Cost Reduction	25%

For the FY 2021 Hospital VBP Program, CMS finalized that a minimum of three domains of the four are required to receive a TPS. When at least three but less than four domains are scored, the proportionate domain reweighting formula is used. The formula for proportionate domain reweighting may be found in the **Appendix**.

Weighted Domain Scores

CMS calculates the weighted domain score for each domain by multiplying the calculated unweighted domain score by the given weight for the domain.

1.3 Value-Based Percentage Payment Summary – FY 2021

This section summarizes the change to a hospital's base operating MS-DRG payments for FY 2021.

Base Operating MS-DRG Payment Amount Reduction

This is the percentage by which a hospital's base operating MS-DRG payments will initially be reduced before applying the value-based incentive payment percentage. This amount is 2.0 percent for FY 2021, as required by section 1886(o)(7)(C) of the Social Security Act.

- If a hospital is not eligible for the Hospital VBP Program, "Hospital VBP Ineligible" appears in the field.

Value-Based Incentive Payment Percentage

This is the portion of the base operating MS-DRG amount a hospital earned back, based on its performance in the Hospital VBP Program.

- If this number is greater than the base operating MS-DRG reduction amount, the hospital earned back more than the base operating MS-DRG reduction amount.
- If this number is equal to the base operating MS-DRG reduction amount, the hospital earned back the entire base operating MS-DRG reduction amount.
- If this number is less than the base operating MS-DRG reduction amount, the hospital did not earn back the full base operating MS-DRG reduction amount.
- If your hospital is not eligible for the Hospital VBP Program, "Hospital VBP Ineligible" appears in the field.



Percentage Summary Report

Net Change in Base Operating MS-DRG Payment Amount

This is the amount a hospital's FY 2021 base operating MS-DRG payments will be changed due to the Hospital VBP Program. The amount is equal to the value-based incentive payment percentage *less* the base operating MS-DRG payment amount reduction.

- A positive number means the hospital will have higher FY 2021 payments because of its Hospital VBP Program performance.
- A net amount of 0 means there will be no change to the hospital's FY2021 payments as a result of the Hospital VBP Program.
- A negative number means the hospital's FY 2021 payments will be lower because of its Hospital VBP Program performance.
- "Hospital VBP Ineligible" appears if your hospital is not eligible. There is no change to your FY 2021 payments.

Value-Based Incentive Payment Adjustment Factor

This factor is the number multiplied by the base operating MS-DRG amount for each Medicare fee-for-service discharge at a hospital paid under the IPPS occurring in FY 2021 due to the Hospital VBP Program. The amount is equal to 1 *plus* the net change in base operating MS-DRG payment amount.

- If this value is greater than 1, a hospital will have higher FY 2021 payments because of its Hospital VBP Program performance.
- If this value is equal to 1, a hospital's payments will not be changed due to the Hospital VBP Program.
- If this value is less than 1, a hospital's FY 2021 payments will be lower due to the Hospital VBP Program.
- "Hospital VBP Ineligible" appears if your hospital is not eligible. There is no change to your FY 2021 payments.

Exchange Function Slope

The exchange function slope is used to translate a hospital's TPS into the value-based incentive payment percentage earned by that hospital.

- CMS used the linear exchange function to calculate the value-based incentive payment percentage.
- Each year CMS calculates the slope of the linear exchange function for FY 2021. With this slope, the estimated total value-based incentive payments to all participating hospitals for FY 2021 will equal 2.0 percent of the estimated total base operating MS-DRG payment amounts for all hospitals for FY 2021.
- "Hospital VBP Ineligible" appears if your hospital is not eligible for the Hospital VBP Program.

Note: If your hospital did not meet the eligibility requirements for the FY 2021 program during the report performance period, the "HVBPE Exclusion Reason" field explains the reason for exclusion.



Clinical Outcomes Detail Report

Section 2. Clinical Outcomes Detail Report

This section displays a hospital's performance on the Clinical Outcomes domain.

Image 2. Clinical Outcomes Detail Report

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Hospital Value-Based Purchasing – Value-Based Percentage Payment Summary Report
Clinical Outcomes Detail Report
Provider:
Reporting Period: Fiscal Year 2021

2.1	2.2	2.3	2.4							
Mortality Baseline Period (AMI, HF, COPD): 07/01/2011 - 06/30/2014 Mortality Performance Period (AMI, HF, COPD): 07/01/2016 - 06/30/2019 Mortality Baseline Period (PN): 07/01/2012 - 06/30/2015 Mortality Performance Period (PN): 09/01/2017 - 06/30/2019		FY 2021 Baseline Period Totals		FY 2021 Performance Period Totals		HVBP Metrics				
Mortality Measures		Number of Eligible Discharges	Baseline Period Rate	Number of Eligible Discharges	Performance Period Rate	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	Measure Score
30-Day Risk-Standardized Mortality Measures										
Acute Myocardial Infarction (AMI) 30-Day Mortality Rate		257	0.864104	25	0.879714	0.860355	0.879714	9	10	10
Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate		249	0.921830	25	0.938664	0.923253	0.938664	9	10	10
Heart Failure (HF) 30-Day Mortality Rate		293	0.880879	25	0.906144	0.883803	0.906144	9	10	10
Pneumonia (PN) 30-Day Mortality Rate		595	0.823334	25	0.870506	0.836122	0.870506	9	10	10
Baseline Period: 04/01/2011 - 03/31/2014 Performance Period: 04/01/2016 - 03/31/2019		FY 2021 Baseline Period Totals		FY 2021 Performance Period Totals		HVBP Metrics				
Complication Measure		Number of Eligible Discharges	Baseline Period Rate	Number of Eligible Discharges	Performance Period Rate	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	Measure Score
Elective Primary Total Hip Arthroplasty/Total Knee Arthroplasty Complication Rate		352	0.038918	25	0.022418	0.031157	0.022418	9	10	10
2.5	Clinical Outcomes Measures: Unweighted Clinical Outcomes Measures Domain Score: 100.000000000000 Weighted Clinical Outcomes Measures Domain Score: 25.000000000000 5 out of 5 Calculated values were subject to rounding.									

2.1 Baseline and Performance Periods (Clinical Outcomes)

This section displays the baseline period and performance period used to compute a hospital's actual scores for the four Clinical Outcomes domain measures. The PPSR uses the following time periods, as published in the FY 2016 and FY 2017 IPPS Final Rules:

Mortality measures (AMI, COPD, HF)

- Baseline period: July 1, 2011–June 30, 2014
- Performance period: July 1, 2016–June 30, 2019

Mortality measure (PN)

- Baseline period: July 1, 2012–June 30, 2015
- Performance period: September 1, 2017–June 30, 2019

Complication measure

- Baseline period: April 1, 2011–March 31, 2014
- Performance period: April 1, 2016–March 31, 2019



Clinical Outcomes Detail Report

2.2 FY 2021 Baseline Period Totals

This section displays FY 2021 baseline period totals.

Explanation of Report Fields for 2.2 – Clinical Outcomes Measures

Number of Eligible Discharges

This number reflects the number of measure-specific claims used for quality measure calculations in the baseline period.

- An “N/A” appears if not applicable or if no data were submitted for the hospital during the baseline period.

Baseline Period Rate

The baseline period rate represents a hospital’s performance for each measure during the baseline period, which is used as input for scoring improvement points. A minimum of 25 eligible discharges (i.e., a baseline period number of eligible discharges value greater than or equal to 25) is required to compute improvement points.

- A dash in a field indicates not applicable or that no data are available.

2.3 FY 2021 Performance Period Totals

This section displays FY 2021 performance period totals.

Explanation of Report Fields for 2.3 – Clinical Outcomes Measures

Number of Eligible Discharges – Clinical Outcomes Measures

This number reflects the measure-specific claims used for quality measure calculations in the baseline period.

- “N/A” appears if not applicable or if no data were submitted for a hospital during the baseline period.

Performance Period Rate – Clinical Outcomes Measures

The performance period rate reflects a hospital’s performance for each measure during the baseline period, which is used as input for scoring improvement points. A minimum of 25 eligible discharges (i.e., a performance period number of eligible discharges value greater than or equal to 25) is required to compute improvement points and achievement points.

- A dash in a field indicates not applicable or that no data were available.



Clinical Outcomes Detail Report

2.4 HVBP Metrics

This section displays a hospital's metrics. The metrics section displays calculation results, including achievement threshold, benchmark, and improvement and achievement points, for each measure score in the Clinical Outcomes domain.

Explanation of Report Fields for 2.4 – Clinical Outcomes Measures

Achievement Threshold

The achievement threshold specifies the 50th percentile of all hospitals' performance during the baseline period for each measure.

Benchmark

The benchmark is the mean of the top decile of all hospitals' performance during the baseline period for each measure.

Improvement Points

These are points awarded to a hospital by comparing its performance on a measure during the performance period with its performance on the same measure during the baseline period. Points are awarded as follows:

- **Nine improvement points** are awarded if a hospital's performance period rate is equal to or better than the benchmark and is better than the baseline period rate.
- **Zero improvement points** are awarded if a hospital's performance period rate is worse than or equal to its baseline period rate.
- **Zero to nine improvement points** are awarded if a hospital's performance period rate is between its baseline period rate and the benchmark.

A dash indicates not applicable or that no data were available.

Achievement Points

These are points awarded to a hospital by comparing its performance on a measure during the performance period with all hospitals' performance during the baseline period. Points are awarded as follows:

- **Ten achievement points** are awarded if your hospital's performance period rate is equal to or better than the benchmark.
- **Zero achievement points** are awarded if your hospital's performance period rate is worse than the achievement threshold.
- **One to nine achievement points** are awarded if your hospital's performance period rate is equal to or better than the achievement threshold and worse than the benchmark.

A dash indicates not applicable or that no data were available.



Clinical Outcomes Detail Report

Measure Score

The measure score is awarded to a hospital for each measure, based on the greater of the improvement or achievement points.

A dash appears if a hospital received neither achievement nor improvement points.

2.5 Clinical Outcomes Summary Totals

This section displays the Clinical Outcomes domain summary totals, including the number of eligible measures used to calculate a hospital's score for this domain, along with the unweighted and weighted scores for the domain.

Explanation of Report Fields for 2.5 – Clinical Outcomes Measures

Eligible Clinical Outcomes Measures

These are the measures used to compute a hospital's Clinical Outcomes domain score. A minimum of two measures with 25 eligible discharges in the performance period per measure is required to compute a hospital's Clinical Outcomes domain score.

Unweighted Clinical Outcomes Measures Domain Score

This unweighted score reflects a hospital's total earned points for the Clinical Outcomes domain divided by the total possible points, multiplied by 100. A dash indicates the minimums were not met for scoring the domain.

Weighted Clinical Outcomes Measures Domain Score

A hospital would receive this score for the Clinical Outcomes domain, which accounts for 25 percent of the hospital's TPS and comprises its scores from the eligible Clinical Outcomes measures. A minimum of 25 cases in the performance period per measure and at least two applicable measures are required to receive a Clinical Outcomes domain score. A dash indicates the minimums were not met for scoring the domain.



Clinical Outcomes Detail Report

Independent Calculation of TPS

A hospital may elect to perform an independent calculation of its TPS using data displayed on the report.

- To perform an independent calculation of the performance rates for the Clinical Outcomes measures, a hospital can reference its Hospital VBP Program Hospital-Specific Report (HSR) for the 30-Day Mortality and Complication measures on *QualityNet*. For more information on the HSR, reference the *QualityNet* news article, [*CMS Releases HSRs for the FY 2021 Hospital VBP Program Risk-Standardized Mortality and Complication Measures*](#), from April 9, 2020.
- The PPSR only displays a precision of six decimal places (x.xxxxxx) for the baseline period rate and performance period rate.
- To perform an independent calculation of the weighted Clinical Outcomes domain score and TPS, a hospital can manually normalize the domain scores by first calculating the total possible points. To calculate the total possible points (also known as the unweighted normalized Clinical Outcomes domain score), multiply the number of eligible Clinical Outcomes measures by 10, divide the total earned points for the Clinical Outcomes domain by the total possible points, and multiply the result by 100. To calculate the weighted Clinical Outcomes domain score, multiply the unrounded unweighted normalized Clinical Outcomes domain score by 0.25.

Person and Community Engagement Detail Report

Section 3. Person and Community Engagement Detail Report

This section displays a hospital's performance on the eight HCAHPS dimensions of the Person and Community Engagement domain. Each dimension is listed by the dimension title.

Image 3. Person and Community Engagement Detail Report

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Hospital Value-Based Purchasing – Value-Based Percentage Payment Summary Report
Person and Community Engagement Detail Report
Provider:
Reporting Period: Fiscal Year 2021

3.1 HCAHPS Dimensions	3.2 Baseline Period Rate	3.3 Performance Period Rate	Floor	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	3.5 Dimension Score
Communication with Nurses ¹	79.25%	80.2000%	42.06%	79.06%	87.36%	1	2	2
Communication with Doctors	85.45%	89.7689%	41.99%	79.91%	88.10%	9	10	10
Responsiveness of Hospital Staff	73.28%	72.5876%	33.89%	65.77%	81.00%	0	5	5
Communication about Medicines	70.86%	68.4645%	33.19%	63.83%	74.75%	0	4	4
Cleanliness and Quietness of Hospital Environment	68.49%	69.0432%	30.60%	65.61%	79.58%	0	3	3
Discharge Information	90.19%	92.4598%	66.94%	87.38%	92.17%	9	10	10
Care Transition	52.98%	64.8742%	6.53%	51.87%	63.32%	9	10	10
Overall Rating of Hospital	75.87%	72.9811%	34.70%	71.80%	85.67%	0	1	1

3.6
HCAHPS Base Score: 45
HCAHPS Consistency Score: 20
Unweighted Person and Community Engagement Domain Score: 65
Weighted Person and Community Engagement Domain Score: 16.250000000000
HCAHPS Surveys Completed during the Performance period: 268

Calculated values were subject to rounding.
¹The Communication with Nurses HCAHPS Dimension in bold italic font was used to calculate the HCAHPS Consistency Score.

3.1 Baseline and Performance Periods (Person and Community Engagement)

This section displays the baseline period and performance period used to compute a hospital's scores for the HCAHPS dimensions. The PPSR uses the following time periods, as published in the FY 2019 IPPS Final Rule:

- Baseline period: January 1–December 31, 2017
- Performance period: January 1 –December 31, 2019*

*In a guidance [memo](#) dated March 27, 2020, CMS announced that it was excepting all hospitals from CMS's requirements for submission of HCAHPS survey measure data for Q4 2019 discharges because of the COVID-19 public health emergency to assist health care providers while they direct their resources toward caring for their patients and ensuring the health and safety of patients and staff. This memo also stated that data from the impacted quarters for the HCAHPS survey measure will be used in the Hospital VBP Program if submitted, but that data submission is optional. If hospitals did not submit data for Q4 2019, the FY 2021 Hospital VBP Program measure results for the HCAHPS survey measure rely on a performance period of Q1 2019 through Q3 2019 (that is, January 1, 2019, through September 30, 2019).



Person and Community Engagement Detail Report

3.2 FY 2021 Baseline Period Totals

Baseline Period Rate

The baseline period rate is a hospital's rate for each HCAHPS dimension during the baseline period. If a field shows "N/A," it is not applicable, or no data are available.

3.3 FY 2021 Performance Period Totals

Performance Period Rate

The performance period rate is a hospital's rate for each HCAHPS dimension during the performance period. "N/A" in a field indicates not applicable or no data are available.

3.4 HVBP Metrics

This section displays your hospital's metrics. The metrics section displays calculation results, including floor value, achievement threshold, benchmark, and improvement and achievement points for each HCAHPS dimension score in the Person and Community Engagement domain.

Floor

The "floor" is the performance rate for the worst performing hospital during the baseline period, which defines the 0 percentile for this dimension. To calculate consistency points, a hospital's performance on its lowest dimension is compared to the "floor."

Achievement Threshold and Benchmark

This is the 50th percentile of all hospitals' performance on each dimension during the baseline period. The benchmark is the mean of the top decile of all hospitals' performance on each dimension during the baseline period.

Improvement Points

Improvement points are awarded by comparing a hospital's performance on a dimension during the performance period with its own performance on the same dimension during the baseline period. Points are awarded as follows:

- **Nine improvement points** are awarded if a hospital's performance period rate is equal to or better than the benchmark and is better than the baseline period rate.
- **Zero improvement points** are awarded if a hospital's performance period rate is worse than or equal to its baseline period rate.
- **Zero to nine improvement points** are awarded if a hospital's performance period rate is between its baseline period rate and the benchmark

A dash appears if a hospital does not have a baseline period rate and/or performance period rate.



Person and Community Engagement Detail Report

Achievement Points

Achievement points are awarded by comparing a hospital's performance on a dimension during the performance period with all hospitals' performance during the baseline period. Points are awarded as follows:

- **Ten achievement points** are awarded if your hospital's performance period rate is equal to or better than the benchmark.
- **Zero achievement points** are awarded if your hospital's performance period rate is worse than the achievement threshold.
- **One to nine achievement points** are awarded if your hospital's performance period rate is equal to or better than the achievement threshold and worse than the benchmark.

A dash appears if a hospital does not have a baseline period rate and/or performance period rate.

3.5 Dimension Score

The HCAHPS Dimension Score is awarded for each HCAHPS dimension, based on the greater of the improvement or achievement points. A dash in a field appears if a hospital received neither achievement nor improvement points.

Note: Hospitals earn consistency points only on their lowest scored HCAHPS dimension.

3.6 HCAHPS Dimensions Summary Totals

This section displays HCAHPS dimensions summary totals.

HCAHPS Base Score

The HCAHPS Base Score is the sum of all dimension scores a hospital was awarded based on the greater of the improvement or achievement points. "Hospital VBP Ineligible" in a field indicates that the minimum survey count required for the Hospital VBP Program was not met.

HCAHPS Consistency Score

The HCAHPS Consistency Score is determined based on a hospital's lowest dimension score (in ***Bold Italic***) from the performance used to calculate a hospital's HCAHPS consistency score.

The HCAHPS consistency score reflects points that were awarded based on a hospital's lowest HCAHPS dimension score during the performance period. The higher a hospital's lowest dimension score is above the "floor" (i.e., the worst performing hospital's dimension rate from the baseline period), the more consistency points the hospital will receive. A hospital can earn between 0 and 20 points towards its Person and Community Engagement domain as follows:



Person and Community Engagement Detail Report

- **Twenty points** are awarded if all of a hospital's dimension rates during the performance period are greater than or equal to each dimension's respective achievement thresholds.
- **Zero points** are awarded if the hospital's lowest dimension rate during the performance period is less than or equal to the worst-performing hospital's dimension rate (floor) from the baseline period.
- **Zero to 20 points** are awarded if any of a hospital's dimension rates are greater than the worst performing hospital's rate (floor) but less than the achievement threshold from the baseline period.

A dash appears if a hospital does not have a baseline period rate and/or performance period rate.

Unweighted Person and Community Engagement Domain Score

This is the unweighted score a hospital would receive for the Person and Community Engagement domain, which is the sum of the hospital's HCAHPS base score and consistency score. A dash indicates the survey minimums were not met for scoring the domain.

Weighted Person and Community Engagement Domain Score

This reflects a hospital's weighted score for the Person and Community Engagement domain, which accounts for 25 percent of a hospital's TPS and comprises a hospital's HCAHPS base score and consistency score. A dash indicates the survey minimums were not met for scoring the domain.

Performance Period HCAHPS Surveys Completed

This field reflects a hospital's total number of completed surveys during the performance period. At least 100 completed surveys during the performance period are required to receive a Person and Community Engagement domain score. "N/A" in a field indicates not applicable or no data are available.

Approximate Calculation of Person and Community Engagement Domain Score

A hospital may elect to perform an independent calculation of its TPS using data displayed on the report.

- A hospital can approximate its Person and Community Engagement domain score for the FY 2021 Hospital VBP Program by using the same steps CMS and the HCAHPS Project Team followed to calculate the score. The direct link to the document outlining this process is:
https://hcahpsonline.org/globalassets/hcahps/vbp/hospital-vbp-domain-score-calculation-step-by-step-guide_v2.pdf
- The PPSR only displays a precision of two decimal places (x.xx) for the baseline period rate and a precision four decimal places (x.xxxx) for the performance period rate, although a greater precision is used when calculating achievement and improvement points.
- To perform an independent calculation of the weighted Person and Community Engagement domain score and TPS, multiply the unrounded unweighted Person and Community Engagement domain score by 0.25.



Safety Detail Report

Section 4. Safety Measures Detail Report

This section displays a hospital's performance on the six Safety domain measures. Each measure is listed by the measure title. "N/A" in a field indicates not applicable or no data are available.

Image 4. Safety Measures Detail Report

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Report Run Date: 07/30/2020

Hospital Value-Based Purchasing – Value-Based Percentage Payment Summary Report
Safety Measures Detail Report
Provider:
Reporting Period: Fiscal Year 2021

4.1 Baseline Period: 01/01/2017 - 12/31/2017 Performance Period: 01/01/2019 - 12/31/2019		4.2 FY 2021 Baseline Period Totals			4.3 FY 2021 Performance Period Totals			4.4 HVBP Metrics			
Healthcare Associated Infections	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infections Ratio (SIR)	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infections Ratio (SIR)	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	Measure Score
Catheter-Associated Urinary Tract Infection	24	20.063	1.196	0	13.862	0.000	0.774	0.000	9	10	10
Central Line-Associated Blood Stream Infection	12	12.479	0.962	3	4.367	0.687	0.687	0.000	2	1	2
Clostridium difficile Infection	49	108.469	0.452	1	14.925	0.067	0.748	0.067	9	10	10
Methicillin-Resistant Staphylococcus aureus Bacteremia	5	9.203	0.543	5	6.553	0.763	0.763	0.000	0	1	1
Surgical Site Infection (SSI)	N/A	N/A	-	N/A	N/A	-	N/A	N/A	N/A	N/A	1
SSI-Abdominal Hysterectomy	1	0.881	-	1	1.377	0.726	0.726	0.000	-	1	1
SSI-Colon Surgery	0	4.300	0.000	2	2.653	0.754	0.754	0.000	0	1	1

4.5 Eligible Safety Measures: 5 out of 5
Unweighted Safety Domain Score: 48.000000000000
Weighted Safety Domain Score: 12.000000000000

Calculated values were subject to rounding.
* "N/A" indicates no data were available or submitted for this measure.
* A dash (-) indicates that the minimum requirements were not met for calculation.

4.1 Baseline and Performance Periods (Safety)

This section displays the baseline period and performance period used to compute a hospital's scores for the Safety domain measures. The PPSR uses the following time periods, as published in the FY 2019 IPPS Final Rule:

- Baseline period: January 1–December 31, 2017
- Performance period: January 1–December 31, 2019*

*In a guidance [memo](#) dated March 27, 2020, CMS announced it was excepting all hospitals from CMS's requirements for submission of HAI measure data for Q4 2019 discharges because of the COVID-19 public health emergency to assist health care providers while they direct their resources toward caring for their patients and ensuring the health and safety of patients and staff. This memo also stated data from the impacted quarters for the HAI measures will be used in the Hospital VBP Program if submitted, but data submission is optional. If hospitals did not submit data for Q4 2019, the FY 2021 Hospital VBP Program measure results for the HAI measures rely on a performance period of Q1 2019 through Q3 2019 (that is, January 1, 2019, through September 30, 2019)

4.2 FY 2021 Baseline Period Totals

This section displays FY 2021 baseline period totals.

Explanation of Report Fields for 4.2 – Healthcare-Associated Infection Measures

Number of Observed Infections (Numerator) Report Fields for Healthcare-Associated Infection Measures

This is the observed number of infections for the specified locations within a hospital.



Safety Detail Report

Number of Predicted Infections (Denominator) Report Fields for Healthcare-Associated Infection Measures

This is the number of infections predicted in hospital locations in scope for quality reporting as the denominator for multiple submission quarters.

Standardized Infection Ratio (SIR) Report Fields for Healthcare-Associated Infection Measures

The SIR is calculated as numerator/denominator. A dash in a field indicates not applicable or that no data are available.

4.3 FY 2021 Performance Period Totals

This section displays the information in the FY 2021 performance period totals.

Explanation of Report Fields for 4.3 – Healthcare-Associated Infection Measures

Number of Observed Infections (Numerator) Report Fields – Healthcare-Associated Infection Measures

This field reflects the observed number of infections for specified locations within a hospital.

Number of Predicted Infections (Denominator) Report Fields – Healthcare-Associated Infection Measures

This reflects the number of infections expected in hospital locations in scope for quality reporting as the denominator for multiple submission quarters.

Standardized Infection Ratio (SIR) Report Fields – Healthcare-Associated Infection Measures

The SIR is calculated as numerator/denominator. A dash in a field indicates not applicable or that no data are available.

4.4 HVBP Metrics

This section displays a hospital's metrics. The metrics section displays calculation results, including achievement threshold, benchmark, and improvement and achievement points, for each measure score in the Safety domain.

Achievement Threshold

The achievement threshold reflects the 50th percentile of all hospitals' performance during the baseline period for each measure.

Benchmark

The benchmark is the mean of the top decile of all hospitals' performance during the baseline period for each measure.

Improvement Points

These points are awarded to a hospital and calculated by comparing a hospital's performance on a measure during the performance period with its performance on the same measure during the baseline period. Points are awarded as follows:

- **Nine improvement points** are awarded if a hospital's performance period rate is equal to or better than the benchmark and is better than the baseline period rate.



Safety Detail Report

- **Zero improvement points** are awarded if a hospital's performance period rate is worse than or equal to its baseline period rate.
- **Zero to nine improvement points** are awarded if a hospital's performance period rate is between its baseline period rate and the benchmark

A dash indicates not applicable or that no data are available.

Achievement Points

These points are awarded to your hospital and calculated by comparing your hospital's performance on a measure during the performance period with all hospitals' performance during the baseline period. Points are awarded as follows:

- **Ten achievement points** are awarded if your hospital's performance period rate is equal to or better than the benchmark.
- **Zero achievement points** are awarded if your hospital's performance period rate is worse than the achievement threshold.
- **One to nine achievement points** are awarded if your hospital's performance period rate is equal to or better than the achievement threshold and worse than the benchmark.

A dash indicates not applicable or no data are available

Measure Score

The measure score is awarded to a hospital for each Safety measure based on the greater of the improvement or achievement points. A dash appears if a hospital received neither achievement nor improvement points.

Note: Surgical Site Infection (SSI) Measure Score

The SSI measure score is a combined score of the two SSI strata of Abdominal Hysterectomy and Colon Surgery. The combined score is weighted by the stratum's predicted number of infections during the performance period. The formula of the SSI measure score may be found in the Appendix.

FY 2014 IPPS Final Rule (78 FR 50684)

"...we will award achievement and improvement points to each stratum of the SSI measure, then compute a weighted average of the points awarded to each stratum by predicted infections. The weighted average of the points awarded will be the hospital's SSI measure score. As an example, a hospital that received 5 improvement points for the SSI-Colon stratum, with 1.0 predicted SSI-Colon infections, and 8 achievement points for the SSI-Abdominal Hysterectomy stratum, with 2.0 predicted SSI-Abdominal Hysterectomy infections, would receive a composite SSI measure score as follows:

$$((5 * 1.0) + (8 * 2.0)) / (1.0 + 2.0) = 7 \text{ points}"$$



Safety Detail Report

4.5 Safety Summary Totals

This section displays Safety domain summary totals.

Explanation of Report Fields for 4.5

Eligible Safety Measures Report Fields and Unweighted Safety Domain Score Report Fields

This first field reflects the number of measures used to compute a hospital's Safety domain score. A minimum of three measures is required to compute a hospital's Safety domain score. The unweighted Safety domain score reflects a hospital's total earned points for the Safety domain divided by the total possible points, multiplied by 100. A dash indicates the minimums were not met for scoring the domain.

Weighted Safety Domain Score Report Fields

The weighted Safety domain score reflects the weighted score a hospital would receive for the Safety domain, which accounts for 25 percent of a hospital's TPS and comprises a hospital's scores from the eligible Safety domain measures. A dash indicates the minimums were not met for scoring the domain.

Independent Calculation of TPS

- A hospital may elect to perform an independent calculation of its TPS using data displayed on the report. To perform an independent calculation of the HAI measures, a hospital can divide the number of observed infections (numerator) by the number of predicted infections (denominator) to replicate the SIR.
- The PPSR only displays a precision of three decimal places (x.xxx) for the number of predicted infections (denominator) and SIR, although a greater precision is used by the CDC to calculate the SIR.
- In order to perform an independent calculation of the weighted Safety domain score and TPS, a hospital can manually normalize the Safety domain by first calculating the total possible points by multiplying by 10 the number of Safety measures for which the hospital met the minimum data requirements. The hospital should then divide the total earned points for the Safety domain by the total possible points and multiply the result by 100, to achieve the unweighted Safety domain score. The weighed Safety domain score is then calculated by multiplying the unrounded unweighted Safety domain score by 0.25.

Efficiency and Cost Reduction Detail Report

Section 5. Efficiency and Cost Reduction Detail Report

This section displays your hospital's performance on the Efficiency and Cost Reduction domain, which is comprised of the MSPB measure.

Image 5. Efficiency and Cost Reduction Detail Report

Report Run Date: 07/30/2020 Page 5 of 5

Hospital Value-Based Purchasing – Value-Based Percentage Payment Summary Report
Efficiency and Cost Reduction Detail Report
Provider:
Reporting Period: Fiscal Year 2021

5.1	Baseline Period: 01/01/2017 - 12/31/2017 Performance Period: 01/01/2019 - 12/31/2019	5.2	FY 2021 Baseline Period Totals	FY 2021 Performance Period Totals	5.3	FY 2021 Performance Period Totals	5.4	HVBP Metrics
	Efficiency Measures		MSPB Amount (Numerator) Median MSPB Amount (Denominator) MSPB Measure	MSPB Amount (Numerator) Median MSPB Amount (Denominator) MSPB Measure		Achievement Threshold Benchmark Improvement Points Achievement Points Measure Score		
	Medicare Spending per Beneficiary (MSPB)		\$22,159.42 \$21,127.95 1.048820	\$16,853.38 \$20,412.50 0.825640		0.987450 0.825640 9 10 10		

Eligible Efficiency and Cost Reduction Measure: 1 out of 1
Unweighted Efficiency and Cost Reduction Domain Score: 100.000000000000
Weighted Efficiency and Cost Reduction Domain Score: 25.000000000000
of Episodes: 1347

Calculated values were subject to rounding.

5.1 Baseline and Performance Periods (Efficiency and Cost Reduction)

This section displays the baseline period and performance period used to compute a hospital's scores for the Efficiency and Cost Reduction domain. The PPSR uses the following time periods, as published in the FY 2018 IPPS Final Rule:

- Baseline period: January 1–December 31, 2017
- Performance period: January 1–December 31, 2019

5.2 FY 2021 Baseline Period Totals

This section displays FY 2021 baseline period totals.

Explanation of Report Fields for 5.2

MSPB Amount (Numerator) Report Fields

The MSPB Amount (Numerator) reflects a hospital's risk-adjusted per-episode spending level. A minimum of 25 episodes of care is required during the baseline period to compute improvement points. A dash in a field indicates not applicable or that no data are available.

Median MSPB Amount (Denominator) Report Fields

This figure reflects the median MSPB amount across all hospitals nationwide during the baseline period.

MSPB Measure Report Fields

This is the ratio of a hospital's average MSPB Amount to the median MSPB Amount across all hospitals during the baseline period.

Efficiency and Cost Reduction Detail Report

5.3 FY 2021 Performance Period Totals

This section displays the information in the FY 2021 performance period totals.

Explanation of Report Fields for 5.3

MSPB Amount (Numerator) Report Fields

The MSPB Amount (Numerator) is a hospital's risk-adjusted per-episode spending level. A minimum of 25 episodes of care is required to compute improvement and achievement points. A dash in a field indicates not applicable or no data are available.

Median MSPB Amount (Denominator) Report Fields

This figure reflects the median MSPB amount across all hospitals nationwide during the performance period.

MSPB Measure Report Fields

This is the ratio of a hospital's average MSPB Amount to the median MSPB Amount across all hospitals during the performance period.

5.4 HVBP Metrics

This section displays your hospital's metrics. The metrics section displays calculation results, including achievement threshold, benchmark, and improvement and achievement points for the MSPB measure score.

Explanation of Report Fields for 5.4

Achievement Threshold Report Fields

The achievement threshold reflects the median MSPB ratio across all hospitals during the performance period.

Benchmark Report Fields

The benchmark is the mean of the lowest decile MSPB ratios across all hospitals during the performance period.

Improvement Points Report Fields

These points are awarded to a hospital and calculated by comparing the hospital's performance on a measure during the performance period with its performance on the same measure during the baseline period.

- **Nine improvement points** are awarded if a hospital's performance period rate is equal to or better than the benchmark and is better than the baseline period rate.
- **Zero improvement points** are awarded if a hospital's performance period rate is worse than or equal to its baseline period rate.
- **Zero to nine improvement points** are awarded if a hospital's performance period rate is between its baseline period rate and the benchmark.



Efficiency and Cost Reduction Detail Report

A dash indicates not applicable or no data are available.

Achievement Points Report Fields

These points are awarded to a hospital and calculated by comparing the hospital's performance on a measure during the performance period with all hospitals' performance during the performance period. Points are awarded as follows:

- **Ten achievement points** are awarded if your hospital's performance period rate is equal to or better than the benchmark.
- **Zero achievement points** are awarded if your hospital's performance period rate is worse than the achievement threshold.
- **One to nine achievement points** are awarded if your hospital's performance period rate is equal to or better than the achievement threshold and worse than the benchmark.

A dash indicates not applicable or no data are available.

Measure Score Report Fields

The measure score is awarded to a hospital for the MSPB measure based on the greater value of either the improvement or achievement points. A dash appears if a hospital received neither achievement nor improvement points.

5.5 Efficiency and Cost Reduction Summary Totals

This section displays Efficiency and Cost Reduction domain summary totals.

Explanation of Report Fields for 5.5

Eligible Efficiency and Cost Reduction Measure Report Fields

This field reflects the number of measures used to compute a hospital's Efficiency and Cost Reduction domain score. A minimum of one measure (with 25 episodes of care) is required to compute a hospital's Efficiency and Cost Reduction domain score.

Unweighted Efficiency and Cost Reduction Domain Score Report Fields

The unweighted Efficiency and Cost Reduction domain score reflects a hospital's total earned points for the Efficiency and Cost Reduction domain divided by the total possible points, multiplied by 100. A dash indicates the minimum number of episodes of care was not met for scoring the domain.

Weighted Efficiency and Cost Reduction Domain Score Report Fields

The weighted Efficiency and Cost Reduction domain score reflects the weighted score a hospital would receive for the Efficiency and Cost Reduction domain, which accounts for 25 percent of a hospital's TPS and comprises a hospital's scores from the MSPB measure. A dash indicates the minimums were not met for scoring the domain.

Efficiency and Cost Reduction Detail Report

Independent Calculation of TPS

A hospital may elect to perform an independent calculation of its TPS using data displayed on the Report.

- To perform an independent calculation of the MSPB measure, a hospital can reference their Hospital VBP Program HSR for MSPB provided on QualityNet. For more information on the HSR, reference the news article, [Medicare Spending per Beneficiary Hospital-Specific Reports Now Available](#), from May 22, 2020.
- The PPSR only displays a precision of six decimal places (x.xxxxxx) for the baseline and performance period MSPB measure ratios.
- A hospital can perform an independent calculation of the weighted Efficiency and Cost Reduction domain score and TPS. First, calculate the unweighted Efficiency and Cost Reduction domain score by manually normalizing the Efficiency and Cost Reduction domain by dividing the total earned points for the MSPB measure by 10 possible points and multiply the result by 100. The weighed Efficiency and Cost Reduction domain score is calculated by multiplying the unrounded unweighted Efficiency and Cost Reduction domain score by 0.25.



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Resources

For Hospital VBP Program general information: <https://www.qualitynet.org/inpatient/hvbp>

To register for Hospital VBP Program Notifications: <https://www.qualitynet.org/listserv-signup>

To access the How to Read Your FY 2021 Percentage Payment Summary Report, Program Summary for FY 2021, FY 2021 Value-Based Purchasing Quick Reference Guide, and the FY 2021 Scoring Quick Reference Guide: <https://qualitynet.org/inpatient/hvbp/resources#tab2>

Additional information about the Hospital VBP Program is also available on *CMS.gov* by selecting the **[Medicare]** tab, then selecting the **Value-Based Programs** link under the “Quality Initiatives/Patient Assessment Instruments” section, then select the **Hospital Value-Based Purchasing** on the top navigational bar. The direct link is <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing.html>.

For further assistance regarding the Hospital VBP Program, contact the Inpatient Value, Incentives, and Quality Reporting (VIQR) Outreach and Education Support Contractor through the Inpatient Questions and Answers (Q&A) tool at https://cmsqualitysupport.servicenowservices.com/qnet_qa, or by calling, toll-free, (844) 472-4477 or (866) 800-8765, weekdays from 8 a.m. to 8 p.m. ET.

For technical questions or issues related to accessing the PPSR, contact the *QualityNet* Help Desk at: qnetsupport@hcqis.org.



Appendix - Resources

Formulas

Formulas used to create the Hospital VBP Program PPSR are displayed below.

Figure 1: Improvement Point Formula

$$\left(10 \times \frac{(\text{Performance Period Rate} - \text{Baseline Period Rate})}{(\text{Benchmark} - \text{Baseline Period Rate})} \right) - 0.5$$

Improvement Point calculation: (Performance Period Rate minus Baseline Period Rate) divided by (Benchmark minus Baseline Period Rate) multiplied by 10 with 0.5 subtracted from the product.

Figure 2: Achievement Point Formula

$$\left(9 \times \frac{(\text{Performance Period Rate} - \text{Achievement Threshold})}{(\text{Benchmark} - \text{Achievement Threshold})} \right) + 0.5$$

Achievement Point calculation: (Performance Period Rate minus Achievement Threshold divided by (Benchmark minus Achievement Threshold) multiplied by 9 with 0.5 added to the product.

Figure 3: Clinical Outcomes Unweighted Domain Score Formula

$$\left(\frac{\text{Sum of Measure Scores}}{\text{Total Points Possible}} \right) \times 100$$

Clinical Outcomes Unweighted Domain Score Formula: (Sum of Measure Scores divided by Total Points Possible) and multiplied by 100.

Note: This formula normalizes the domain to take into account only the measures a hospital met the minimum measure requirements for during the performance period.

Figure 4: Person and Community Engagement Domain Score Formula

$$\text{Base Score} + \text{Consistency Score}$$

Person and Community Engagement Domain Score Formula: Sum of Base Score plus Consistency Score.

Figure 5: Base Score Formula

$$\sum \text{Dimension Scores for the Eight HCAHPS Dimensions}$$

Base Score Formula: Sum of the dimension scores for the eight HCAHPS dimensions.

Figure 6: Lowest Dimension Score Formula

$$\frac{(\text{Performance Period Rate} - \text{Floor})}{(\text{Achievement Threshold} - \text{Floor})}$$

Lowest Dimension Score Formula: (Performance Period Rate minus the Floor) divided by (Achievement Threshold minus the Floor).



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Figure 7: Consistency Score Formula

$$(20 \times \text{Lowest Dimension Score}) - 0.5$$

Consistency Score Formula: (20 multiplied by the Lowest Dimension Score) minus 0.5.

Figure 8: Safety Domain Score Formula

$$\left(\frac{\text{Sum of Measure Scores}}{\text{Total Points Possible}} \right) \times 100$$

Safety Domain Score Formula: (Sum of Measure Scores divided by Total Points Possible) multiplied by 100.

Note: This formula normalizes the domain to take into account only the measures a hospital met the minimum measure requirements for during the performance period.

Figure 9: Surgical Site Infection (SSI) Measure Score

$$\frac{(\text{Colon Surgery Measure Score} \times \text{Colon Surgery Predicted Infections}) + (\text{Abdominal Hysterectomy Measure Score} \times \text{Abdominal Hysterectomy Predicted Infections})}{(\text{Colon Surgery Predicted Infections} + \text{Abdominal Hysterectomy Predicted Infections})}$$

Surgical Site Infection (SSI) Measure Score: Sum of the products of (Colon Surgery Measure Score multiplied by Colon Surgery Predicted Infections) and (Abdominal Hysterectomy Measure Score multiplied by Abdominal Hysterectomy Predicted Infections) divided by the sum of (Colon Surgery Predicted Infections and Abdominal Hysterectomy Predicted Infections).

Note: When only one of the strata meets the minimum of at least 1,000 predicted infections during the performance period, the full weight will be allocated to the eligible stratum.

Figure 10: Efficiency and Cost Reduction Domain Score Formula

$$\left(\frac{\text{Measure Score}}{10} \right) \times 100$$

Efficiency and Cost Reduction Domain Score Formula: (Measure Score divided by 10) multiplied by 100.

Figure 11: Total Performance Score (TPS) Formula

$$\begin{aligned} & \text{Weighted Clinical Care Domain Score} \\ & + \text{Weighted Person and Community Engagement Domain Score} \\ & + \text{Weighted Safety Domain Score} \\ & + \text{Weighted Efficiency and Cost Reduction Domain Score} \end{aligned}$$

Total Performance Score (TPS) Formula: The sum of Weighted Clinical Outcomes Domain Score plus Weighted Person and Community Engagement Domain Score plus Weighted Safety Domain Score plus Weighted Efficiency and Cost Reduction Domain Score.



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Figure 12: Proportionate Weighting of Domains Formula

$$\text{Domain Weight} = \frac{\text{Original Weight}}{\text{Sum of Eligible Domain Weights}}$$

Proportionate Weighting of Domains Formula: The original weight divided by the sum of the eligible domain weights.

Note: CMS requires scores from at least three out of the four domains to receive a TPS. Excluded domain weights are proportionately distributed to the remaining domains through the Proportionate Weighting of Domains Formula.

Figure 13: Value-Based Incentive Payment Percentage Formula

$$2.00\% \times \left(\frac{\text{Total Performance Score}}{100} \right) \times \text{Exchange Function Slope}$$

Value-Based Incentive Payment Percentage Formula: The product of the Base Operating MS-DRG Payment Amount Reduction, the quotient of the (Total Performance Score divided by 100, and the Exchange Function Slope.

Note: The Base Operating MS-DRG Payment Amount Reduction for FY 2021 is 2.00 percent and the Exchange Function Slope for FY 2021 may be found on a hospital's PPSR. The Value-Based Incentive Payment Percentage is calculated as a decimal value instead of a percentage value. In order to convert the calculated decimal value to a percentage value matching the PPSR, multiply the value by 100 and round to ten (10) digits to the right of the decimal.

Figure 14: Net Change in Base Operating MS-DRG Payment Amount Formula

$$\text{Value-Based Incentive Payment Percentage} - 2.00\%$$

Net Change in Base Operating MS-DRG Payment Amount Formula: The percentage of (Value-Based Incentive Payment Percentage less Base Operating MS-DRG Payment Amount Reduction). **Note:** The Base Operating MS-DRG Payment Amount Reduction is 2.00 percent for FY 2021. The Net Change in Base Operating MS-DRG Payment Amount is calculated as a decimal value instead of a percentage value. In order to convert the calculated decimal value to a percentage value matching the PPSR, multiply the value by 100 and round to ten (10) digits to the right of the decimal.

Figure 15: Value-Based Incentive Payment Adjustment Factor

$$1 + \text{Net Change in Base Operating DRG Payment Amount}$$

Value-Based Incentive Payment Adjustment Factor: The sum of 1 plus the Net Change in Base Operating MS-DRG Payment Amount in decimal form.



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Figure 16: Exchange Function Slope

Step 1: Each eligible and included hospitals' Total Performance Score \div 100

Step 2: Each eligible and included hospitals' Estimated Total Annual Base Operating MS-DRG Payment Amount 2.00 percent

Step 3: Individual Results from Step 1 x Individual Results from Step 2

Step 4: Sum Results of Step 3 to form an aggregate value (denominator)

Step 5: Sum Results of Step 2 to form an aggregate value (numerator)

Step 6: Result from Step 5 (numerator) \div Result from Step 4 (denominator)

Exchange Function Slope: Exchange Function Slope: The exchange function slope was calculated by using all eligible and included hospitals' TPS values, those hospitals' Estimated Total Annual Base Operating MS-DRG Payment Amount, and the 2.00 percent withhold for FY 2021. The above steps illustrate how CMS calculated the FY 2021 exchange function slope.