

Value Based Purchasing (VBP) Overview: FFY 2021 Program

Measures, Performance Standards, Evaluation Periods, and Other Program Details for the FFY 2021 VBP Program

	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴	Total Performance Score: Original Domain Weighting ⁵		
						Weight	Score	
Safety	HAI_1* [†] (CLABSIS)	Central Line-Associated Blood Stream Infection (CLABSIS) (ICU and Select Wards)	0.687	0.000	1 Predicted Infection Each	25%	90%	
	HAI_2* [†] (CAUTI)	Catheter-Associated Urinary Tract Infection (CAUTI) (ICU and Select Wards)	0.774	0.000				
	HAI_5* [†] (MRSA)	Methicillin-resistant Staphylococcus Aureus (MRSA) Blood Laboratory-identified Events	0.763	0.000				
	HAI_6* [†] (C.diff.)	Clostridium difficile (C.diff.)	0.748	0.067				
	Pooled Surgical Site Infection (SSI) Measure**:							
	HAI-3* [†] (SSI - Colon)	Surgical Site Infection - Colon	0.754	0.000	1 Predicted Infection on One of the Two Strata			
	HAI-4* [†] (SSI - Abd. Hyst.)	Surgical Site Infection - Abdominal Hysterectomy	0.726	0.000				
Removed Measures From Safety of Care: PC-01: Elective Delivery Prior to 39 completed Weeks Gestation**								
Clinical Outcomes	MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate (converted to survival rate for VBP)	86.0355%	87.9714%	25 Cases Each	25%	70%	
	MORT-30-HF	Heart Failure (HF) 30-Day Mortality Rate (converted to survival rate for VBP)	88.3803%	90.6144%				
	MORT-30-PN (EXPANDED)	Pneumonia (PN) 30-Day Mortality Rate (converted to survival rate for VBP)	83.6122%	87.0506%				
	MORT-30-COPD (NEW)	Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate (converted to survival rate for VBP)	92.3253%	93.8664%				
	COMP-HIP-KNEE*	Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) Complication Rate	3.1157%	2.2418%				
Person and Community Engagement	CTM-3	Communication with Nurses [†]	42.06%	79.06%	87.36%	25%	40%	
		Communication with Doctors [†]	41.99%	79.91%	88.10%			
		Responsiveness of Hospital Staff [†]	33.89%	65.77%	81.00%			
		Communication about Medicines [†]	33.19%	63.83%	74.75%			
		Hospital Cleanliness & Quietness [†]	30.60%	65.61%	79.58%			
		Discharge Information [†]	66.94%	87.38%	92.17%			
		Overall Rating of Hospital [†]	34.70%	71.80%	85.67%			
	CTM-3	3-Item Care Transitions Measure [†]	6.53%	51.87%	63.32%			
Efficiency and Cost Reduction	MSPB-1*	Spending Per Hospital Patient With Medicare	Median Ratio Across All Hospitals	Mean Ratio of Lowest Decile of Hospitals	25 Cases	25%	10%	

FFY 2021 VBP Program Timeframes

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
						Person and Community Engagement: Baseline Period ⁶		Person and Community Engagement: Performance Period ⁷		FFY 2021 Payment Adjustment
		Clinical Outcomes (MORT-30-AMI, MORT-30-HF, MORT-30-COPD): Baseline Period ⁶				Clinical Outcomes (MORT-30-AMI, MORT-30-HF, MORT-30-COPD): Performance Period ⁷				
		Clinical Outcomes (MORT-30-PN): Baseline Period ⁶				Clinical Outcomes (MORT-30-PN): Performance Period ⁷				
		Clinical Outcomes (COMP-HIP-KNEE): Baseline Period ⁶				Clinical Outcomes (COMP-HIP-KNEE): Performance Period ⁷				
						Safety: Baseline Period ⁶		Safety: Performance Period ⁷		
						Efficiency and Cost Reduction: Baseline Period ⁶		Efficiency and Cost Reduction: Performance Period ⁷		

The Affordable Care Act (ACA) of 2010 mandated the implementation of an inpatient hospital value-based purchasing (VBP) Program. The VBP Program is a pay-for-performance program that links Medicare payment to quality performance for acute care hospitals paid under the Inpatient Prospective Payment System (IPPS). Under the VBP Program, using quality data grouped into quality domains, hospitals can earn points towards a Total Performance Score (TPS). The TPS will serve as the basis for determining hospitals' VBP payments or gain/loss under the program. In calculating the TPS, the scoring methodology provides points to hospitals that achieve high quality standards as well as points to hospitals that improve in the quality measures evaluated. As required by the ACA, a pool of funds, to be redistributed to hospitals based on their TPS, will be funded through an across-the-board reduction to Medicare IPPS base operating payments. The reduction has been capped at 2.0%. Critical Access Hospitals (CAHs), hospitals in Maryland and Puerto Rico, and small hospitals with insufficient numbers of measures and/or cases are excluded from the program.

¹The Achievement Threshold is the minimum performance standard for each measure and reflects the median performance score (50th percentile) for all hospitals in the nation during the baseline period. The threshold is used in combination with other factors to calculate hospital-specific achievement points.

²The Benchmark is the top performance standard for each measure and reflects the average performance score for the top 10% of all hospitals in the nation during the baseline period. The benchmark is used in combination with other factors to calculate hospital-specific achievement and improvement points.

³The Floor is for Person and Community Engagement measures only and each measure reflects the lowest measure score in the nation during the baseline period. The floor is used in combination with other factors to calculate hospital-specific consistency points.

⁴Hospitals must meet minimum case and survey counts to be included in the VBP Program. In addition to the case count criteria, hospitals must have a minimum of 2 measures to obtain a Clinical Outcomes Domain score, 2 measures to obtain a Safety domain score and 1 measure to obtain an Efficiency and Cost Reduction domain score.

⁵The Domain Weight is a weight applied to each domain to calculate a hospital-specific TPS. A hospital's weighted TPS is compared to TPSs for all hospitals to determine the hospital-specific gain or loss under the program. If hospitals do not meet the minimum requirements on one or more domains, the other domains are proportionately reweighted to determine a TPS. For the FFY 2021 program, hospitals are required to be scored on 3 of the 4 domains to be eligible for the program.

⁶The Baseline Period is a specified period for which quality data will be evaluated. The baseline period data is used for determining the floors, achievement thresholds, and benchmarks (excluding the efficiency measure) and is also used in combination with other factors to calculate hospital-specific improvement points.

⁷The Performance Period is a specified period for which quality data will be evaluated. The performance period data is used in combination with other factors to calculate hospital-specific achievement and improvement points.

*For these measures, lower scores are better.

**The final SSI measure score is an aggregate of the calculated scores for HAI-3 and HAI-4, which are then weighted based on the predicted infections for each measure. For purposes of domain eligibility, CMS considers the two SSI measures as a single measure.

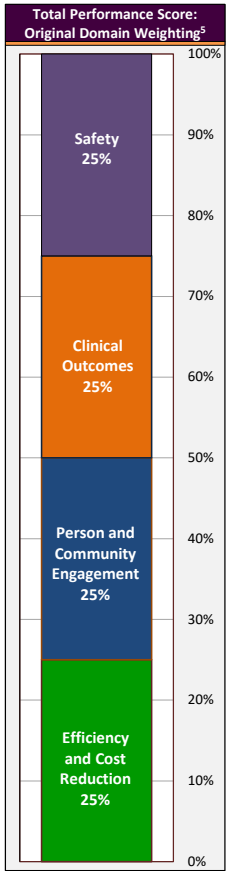
***Performance standards for the MSPB-1 measure are based on the performance period and are not released in advance of the program.

†More than Medicare Fee-For-Service patients are included in measure population.

Value Based Purchasing (VBP) Overview: FFY 2022 Program

Measures, Performance Standards, Evaluation Periods, and Other Program Details for the FFY 2022 VBP Program

	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴	Total Performance Score: Original Domain Weighting ⁵		
Safety	HAI_1* ⁺ (CLABSI)	Central Line-Associated Blood Stream Infection (CLABSI) (ICU and Select Wards)	0.633	0.000	1 Predicted Infection Each		100%	
	HAI_2* ⁺ (CAUTI)	Catheter-Associated Urinary Tract Infection (CAUTI) (ICU and Select Wards)	0.727	0.000				
	HAI_5* ⁺ (MRSA)	Methicillin-resistant Staphylococcus Aureus (MRSA) Blood Laboratory-identified Events	0.748	0.000				
	HAI_6* ⁺ (C.diff)	Clostridium difficile (C.diff.)	0.646	0.047				
	Pooled Surgical Site Infection (SSI) Measure**:							
	HAI-3* ⁺ (SSI - Colon)	Surgical Site Infection - Colon	0.749	0.000		1 Predicted Infection on One of the Two Strata		
HAI-4* ⁺ (SSI - Abd. Hyst.)	Surgical Site Infection - Abdominal Hysterectomy	0.727	0.000					
Clinical Outcomes	MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate (converted to survival rate for VBP)	86.1793%	88.1305%	25 Cases Each	70%		
	MORT-30-HF	Heart Failure (HF) 30-Day Mortality Rate (converted to survival rate for VBP)	87.9869%	90.3608%				
	MORT-30-PN	Pneumonia (PN) 30-Day Mortality Rate (converted to survival rate for VBP)	83.6122%	87.0506%				
	MORT-30-COPD	Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate (converted to survival rate for VBP)	92.0058%	93.6962%				
	MORT-30-CABG (NEW)	Coronary Artery Bypass Graft (CABG) 30-Day Mortality Rate (converted to survival rate for VBP)	96.8210%	97.9000%				
	COMP-HIP-KNEE*	Complication Rate Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)	2.9833%	2.1493%				
	Person and Community Engagement		Communication with Nurses ⁺	15.73%			79.18%	87.53%
Communication with Doctors ⁺			19.03%	79.72%	87.85%			
Responsiveness of Hospital Staff ⁺			25.71%	65.95%	81.29%			
Communication about Medicines ⁺			10.62%	63.59%	74.31%			
Hospital Cleanliness & Quietness ⁺			5.89%	65.46%	79.41%			
Discharge Information ⁺			66.78%	87.12%	91.95%			
Overall Rating of Hospital ⁺			19.09%	71.37%	85.18%			
CTM-3		3-Item Care Transitions Measure ⁺	6.84%	51.69%	63.11%			
Efficiency and Cost Reduction	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴	10%		
	MSPB-1*	Spending Per Hospital Patient With Medicare	Median Ratio Across All Hospitals ^{***}	Mean Ratio of Lowest Decile of Hospitals ^{***}	25 Cases			



2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
						Person and Community Engagement: Baseline Period ⁶		Person and Community Engagement: Performance Period ⁷		FFY 2022 Payment Adjustment
	Clinical Outcomes (MORT-30-AMI, MORT-30-HF, MORT-30-COPD, MORT-30-CABG): Baseline Period ⁶					Clinical Outcomes (MORT-30-AMI, MORT-30-HF, MORT-30-COPD, MORT-30-CABG): Performance Period ⁷				
	Clinical Outcomes (MORT-30-PN): Baseline Period ⁶					Clinical Outcomes (MORT-30-PN): Performance Period ⁷				
	Clinical Outcomes (COMP-HIP-KNEE): Baseline Period ⁶					Clinical Outcomes (COMP-HIP-KNEE): Performance Period ⁷				
						Safety: Baseline Period ⁶		Safety: Performance Period ⁷		
						Efficiency and Cost Reduction: Baseline Period ⁶		Efficiency and Cost Reduction: Performance Period ⁷		

⁶These 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 Affordable Care Act (ACA) of 2010 mandated the implementation of an inpatient hospital value-based purchasing (VBP) Program. The VBP Program is a pay-for-performance program that links Medicare payment to quality performance for acute care hospitals paid under the Inpatient Prospective Payment System (IPPS). Under the VBP Program, using quality data grouped into quality domains, hospitals can earn points towards a Total Performance Score (TPS). The TPS will serve as the basis for determining hospitals' VBP payments or gain/loss under the program. In calculating the TPS, the scoring methodology provides points to hospitals that achieve high quality standards as well as points to hospitals that improve in the quality measures evaluated. As required by the ACA, a pool of funds, to be redistributed to hospitals based on their TPS, will be funded through an across-the-board reduction to Medicare IPPS base operating payments. The reduction has been capped at 2.0%. Critical Access Hospitals (CAHs), hospitals in Maryland and Puerto Rico, and small hospitals with insufficient numbers of measures and/or cases are excluded from the program.

¹The Achievement Threshold is the minimum performance standard for each measure and reflects the median performance score (50th percentile) for all hospitals in the nation during the baseline period. The threshold is used in combination with other factors to calculate hospital-specific achievement points.

²The Benchmark is the top performance standard for each measure and reflects the average performance score for the top 10% of all hospitals in the nation during the baseline period. The benchmark is used in combination with other factors to calculate hospital-specific achievement and improvement points.

³The Floor is for Person and Community Engagement measures only and each measure reflects the lowest measure score in the nation during the baseline period. The floor is used in combination with other factors to calculate hospital-specific consistency points.

⁴Hospitals must meet minimum case and survey counts to be included in the VBP Program. In addition to the case count criteria, hospitals must have a minimum of 2 measures to obtain a Clinical Outcomes Domain score, 2 measures to obtain a Safety domain score and 1 measure to obtain an Efficiency and Cost Reduction domain score.

⁵The Domain Weight is a weight applied to each domain to calculate a hospital-specific TPS. A hospital's weighted TPS is compared to TPSs for all hospitals to determine the hospital-specific gain or loss under the program. If hospitals do not meet the minimum requirements on one or more domain, the other domains are proportionately reweighted to determine a TPS. For the FFY 2022 program, hospitals are required to be scored on 3 of the 4 domains to be eligible for the program.

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Value Based Purchasing (VBP) Overview: FFY 2023 Program

Measures, Performance Standards, Evaluation Periods, and Other Program Details for the FFY 2023 VBP Program

	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴	Total Performance Score: Original Domain Weighting ⁵	
	Safety	HAI_1* [†] (CLABS)	Central Line-Associated Blood Stream Infection (CLABS) (ICU and Select Wards)	0.596	0.000		1 Predicted Infection Each
HAI_2* [†] (CAUTI)		Catheter-Associated Urinary Tract Infection (CAUTI) (ICU and Select Wards)	0.676	0.000			
HAI_5* [†] (MRSA)		Methicillin-resistant Staphylococcus Aureus (MRSA) Blood Laboratory-identified Events	0.727	0.000			
HAI_6* [†] (C.diff)		Clostridium difficile (C.diff.)	0.544	0.010			
Pooled Surgical Site Infection (SSI) Measure**:							
HAI-3* [†] (SSI - Colon)		Surgical Site Infection - Colon	0.734	0.000	1 Predicted Infection on One of the Two Strata		
HAI-4* [†] (SSI - Abd. Hyst.)	Surgical Site Infection - Abdominal Hysterectomy	0.732	0.000				
PSI-90* (NEW)	Patient Safety and Adverse Events (Composite)	0.972658	0.760882	3 Cases			
Clinical Outcomes	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴		
	MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate (converted to survival rate for VBP)	86.6548%	88.5499%	25 Cases Each		
	MORT-30-HF	Heart Failure (HF) 30-Day Mortality Rate (converted to survival rate for VBP)	88.1939%	90.6798%			
	MORT-30-PN	Pneumonia (PN) 30-Day Mortality Rate (converted to survival rate for VBP)	84.0138%	87.1741%			
	MORT-30-COPD	Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate (converted to survival rate for VBP)	91.9769%	93.6349%			
	MORT-30-CABG	Coronary Artery Bypass Graft (CABG) 30-Day Mortality Rate (converted to survival rate for VBP)	96.8747%	97.9620%			
	COMP-HIP-KNEE*	Complication Rate Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)	2.7428%	1.9779%			
Person and Community Engagement	Measure ID	Measure Description	Floor ³	Achievement Threshold ¹		Benchmark ²	Minimum Standards ⁴
		Communication with Nurses [†]	53.50%	79.42%	87.71%	100 Surveys	
		Communication with Doctors [†]	62.41%	79.83%	87.97%		
		Responsiveness of Hospital Staff [†]	40.40%	65.52%	81.22%		
		Communication about Medicines [†]	39.82%	63.11%	74.05%		
		Hospital Cleanliness & Quietness [†]	45.94%	65.63%	79.64%		
		Discharge Information [†]	66.92%	87.23%	92.21%		
		Overall Rating of Hospital [†]	36.31%	71.66%	85.39%		
CTM-3	3-Item Care Transitions Measure [†]	25.64%	51.84%	63.57%			
Efficiency and Cost Reduction	Measure ID	Measure Description	Achievement Threshold ¹	Benchmark ²	Minimum Standards ⁴		
	MSPB-1*	Spending Per Hospital Patient With Medicare	Median Ratio Across All Hospitals ^{***}	Mean Ratio of Lowest Decile of Hospitals ^{***}	25 Cases		

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						Person and Community Engagement: Baseline Period ⁶		Person and Community Engagement: Performance Period ⁷		
						Clinical Outcomes (Mortality): Baseline Period ⁶		Clinical Outcomes (Mortality): Performance Period ⁷		
						Clinical Outcomes (COMP-HIP-KNEE): Baseline Period ⁶		Clinical Outcomes (COMP-HIP-KNEE): Performance Period ⁷		
						Safety (NSHN): Baseline Period ⁶		Safety (NSHN): Performance Period ⁷		
						Safety (PSI-90): Baseline Period ⁶		Safety (PSI-90): Performance Period ⁷		
						Efficiency and Cost Reduction: Baseline Period ⁶		Efficiency and Cost Reduction: Performance Period ⁷		
										FFY 2023 Payment Adjustment

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⁶The Baseline Period is a specified period for which quality data will be evaluated. The baseline period data is used for determining the floors, achievement thresholds, and benchmarks (excluding the efficiency measure) and is also used in combination with other factors to calculate hospital-specific improvement points.

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[†]For these measures, lower scores are better.

^{**}The final SSI measure score is an aggregate of the calculated scores for HAI-3 and HAI-4, which are then weighted based on the predicted infections for each measure. For purposes of domain eligibility, CMS considers the two SSI measures as a single measure.

^{***}Performance standards for the MSPB-1 measure are based on the performance period and are not released in advance of the program.

^{††}More than Medicare Fee-For-Service patients are included in measure population.

Value Based Purchasing (VBP) General Program Methodology

Hospital Scoring Methods and Other Program Details for the VBP Program

As required by the ACA, VBP eligible hospitals contribute a set percentage of their Medicare IPPS base operating payments to a national VBP pool of dollars. All VBP pool dollars are then paid out, in full, based on each hospital's performance under the program. Under the Program, hospitals are evaluated on a measure by measure basis and receive a score of 0-10 on each measure where they meet each measure's minimum requirement. Next, similar measures are grouped into domains and overall domain scores are calculated based on the average measure score in the domain. Domain scores are then combined to find a Total Performance Score (TPS). The TPS serves as the basis for determining hospitals' VBP payments or gain/loss under the program. Using all program-eligible hospitals' Total Performance Scores, CMS calculates a VBP slope that redistributes all VBP contributions and makes the program budget neutral nationally. Each hospital's TPS multiplied by the slope determines payout percentages. The program methodology is shown below:



Measure Score Calculation

For each measure, hospitals can receive a score of 0-10 depending on where they fall in relation to national performance standards (achievement points) and/or how much they have improved from historical rates/ratios (improvement points). After achievement and improvement points are calculated, the higher of the two determines final points for each measure.

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

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

Final Points (all program measures) = Higher of Achievement or Improvement

$$\text{Final Points (SSI Measure)} = \left[\frac{\text{Final Points}_{\text{HAI13}} \times \text{Predicted Infections}_{\text{HAI13}} + \text{Final Points}_{\text{HAI14}} \times \text{Predicted Infections}_{\text{HAI14}}}{\text{Predicted Infections}_{\text{HAI13}} + \text{Predicted Infections}_{\text{HAI14}}} \right]$$

Person and Community Engagement - Consistency Points Calculation

In addition to individual measure scores, the Person and Community Engagement domain scores hospitals based on how consistently they perform across all measures within the domain. Each hospital can receive between 0-20 consistency points based on the measure with the lowest Consistency Multiplier calculated as shown below:

$$\text{Consistency Points (person and community engagement)} = [20 \times \text{Lowest Measure Consistency Points Multiplier}] - 0.50$$

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

Domain Score and Total Performance Score (TPS) Calculation

Individual measure scores for similar measures are combined to find overall Domain scores. On each domain, a minimum number of measures must be scored in order to be eligible for the domain. Once domain scores are calculated, a total performance score is calculated, combining domain scores based on the program year's applicable domain weights. Hospitals are required to be scored on 3 of the 4 domains. Domain weights are reweighted proportionally when hospitals are not eligible for one or more domains.

$$\text{Overall Domain Score} = \left[\frac{\text{Sum of Final Points Earned on Each Scored Measure}}{\text{Maximum Possible Points on Each Scored Measure}} \right]$$

$$\text{Proportionally Reweighted Domain Weight (FFY 2015+)} = \left[\frac{\text{Original Weight of Domain}}{\text{Sum of Original Weights for all Scored Domains}} \right]$$

$$\text{Total Performance Score (TPS)} = [\text{Domain}_1 \text{ Score} \times \text{Domain}_1 \text{ Weight} + \text{Domain}_2 \text{ Score} \times \text{Domain}_2 \text{ Weight} \dots \text{Domain}_N \text{ Score} \times \text{Domain}_N \text{ Weight}]$$

VBP Slope/Linear Function, Payout Percentage, Adjustment Factor, and Program Impact Calculation

Once TPS scores are calculated for all eligible hospitals, the VBP slope is calculated such that all program contributions are paid out, making the program budget neutral nationally. The VBP slope/linear function is used to determine each hospital's payout percentage (the amount of their contribution to the VBP pool they receive back) as well as final adjustment factors, and impacts under the program.

$$\text{VBP Linear Function (Payout Percentage)} = [\text{Total Performance Score} \times \text{VBP Slope}]$$

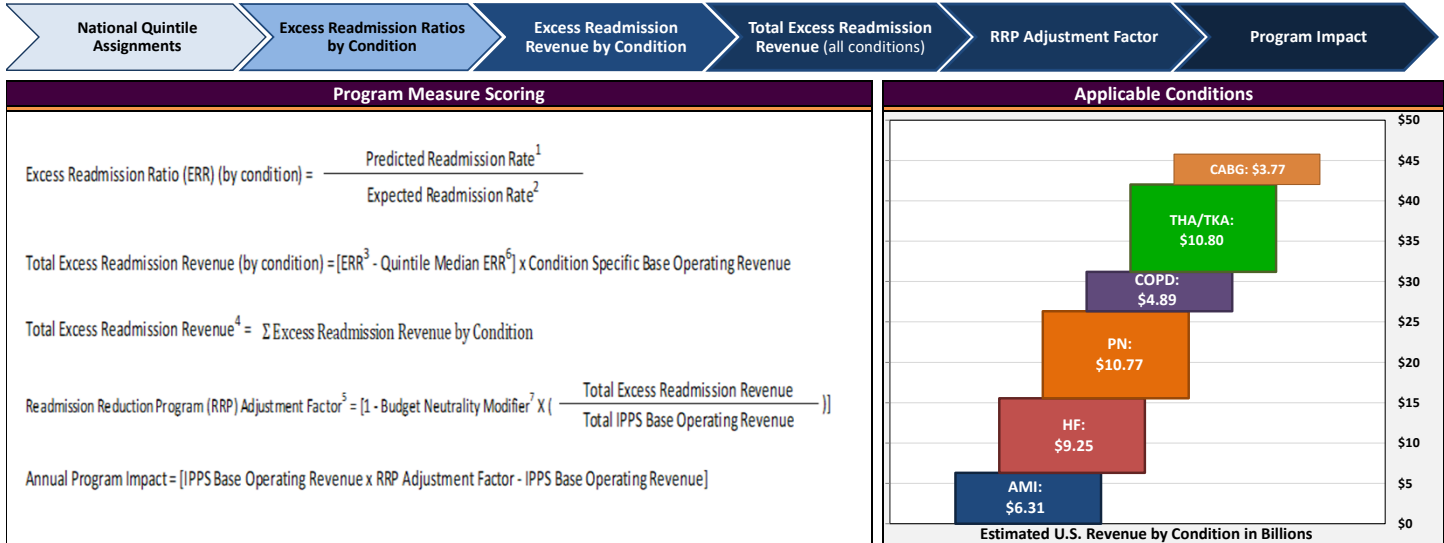
$$\text{VBP Adjustment Factor} = [1 + (\text{Program Contribution Percentage} \times \text{Payout Percentage}) - \text{Program Contribution Percentage}]$$

$$\text{Annual Program Impact} = [\text{IPPS Base Operating Dollars} \times \text{VBP Adjustment Factor} - \text{IPPS Base Operating Dollars}]$$

Readmission Reduction Program (RRP) Overview

Applicable conditions, performance timeframes, and other details for the FFY 2021, 2022, and 2023 programs

The Readmission Reduction Program (RRP) adjusts Medicare Inpatient payments based on hospital readmission rates for several conditions. This program is punitive only and does not give hospitals credit for improvement over time or lower readmission rates than the nation. First, CMS assigns hospitals to national quintiles based on their ratio of full-benefit dual eligible patients to all Medicare patients. Then, CMS compares hospital risk-adjusted readmission rates to national rates to calculate excess readmission ratios for each condition. Next, CMS compares each excess ratio to the condition specific median excess ratio of the hospital's national quintile and applies the result to aggregate payments for each condition to find excess readmission dollars by condition. The sum of all excess readmission dollars for all applicable conditions divided by all inpatient operating revenue with a budget neutrality modifier applied determines program adjustment factors/impacts under the program. CMS implemented a methodology to incorporate socio-demographic status (SDS) into the RRP program. The program methodology is shown below:



Applicable Conditions

Readmission rates, aggregate payments by condition, and excess readmission dollars by condition are all defined by a predetermined list of procedure and/or diagnoses codes specific to each condition, excluding certain planned readmissions or regular, scheduled follow up care. The following patients are also excluded from the rates/revenue estimates used to calculate program adjustments for all measures: patients who are not enrolled in Medicare fee-for-service (FFS); patients under the age of 65; patients without at least 30 days enrollment post-discharge in a Medicare FFS plan; patients who were discharged against medical advice (AMA); certain patients who were transferred to/from another inpatient hospital.

A hospital must have an applicable period of three years of discharge data and at least 25 cases in order to calculate an excess readmission ratio for each applicable condition. Each additional condition added to the program increases the revenue exposed and the potential for excess readmissions that results in penalties under the program. The total estimated revenue across all hospitals for each condition is shown in the graph above to indicate the relative magnitude of each condition under the program.

Program Timelines

2016	2017	2018	2019	2020	2021	2022	2023
FFY 2021 Program Performance Period (All Conditions)				FFY 2021 Program Payment Adjustment			
FFY 2022 Program [#] Performance Period (All Conditions)				FFY 2022 Program Payment Adjustment			
FFY 2023 Program [#] Performance Period (All Conditions)				FFY 2023 Program Payment Adjustment			

[#]These performance periods are impacted by the extraordinary circumstances exception granted by CMS in response to the public health emergency so no claims data reflecting services provided January 1, 2020 - June 30, 2020 will be used in calculations for RRP.

Notes:

¹**Predicted Readmission Rate** - Reflects the hospital's risk-adjusted, observed 30-day readmission rate following inpatient discharges for each applicable condition. Rates are risk adjusted for age, sex, comorbidities, and other patient characteristics that may contribute to higher readmission rates. These rates also exclude readmissions that are a result of planned follow up care, or unrelated readmissions that are never related to the index admission. Predicted rates reflect performance for the three year period shown above.

²**Expected Readmission Rate** - Reflects the U.S. 30-day readmission rate for each condition with hospital specific risk adjustments to estimate the expected U.S. readmission rate for each hospital's patient mix. Rates are risk adjusted for age, sex, comorbidities, and other patient characteristics that may contribute to higher readmission rates. These rates also include exclusions for readmissions that are a result of planned follow up care, or unrelated readmissions that are never related to the index admission. Expected rates reflect adjusted national performance for the three year period shown above.

³**Excess Readmission Ratio** - Calculated for each condition under the program, this ratio represents how each hospital's actual, observed readmission rate differs from the rate for all U.S. hospitals, adjusted for case-mix. An excess ratio greater than one indicates poorer performance than the country and results in payment penalties while an excess ratio less than one indicates better performance and has no effect on payment.

⁴**Excess Readmission Revenue** - Reflects the portion of revenue for each condition CMS believes was paid due to excess readmissions. Excess readmission revenue is a function of base operating revenue for the condition and the excess ratio on the condition. Base operating dollars reflect operating payments without adjustments for DSH, IME, or outlier payments.

⁵**Readmission Reduction Program Adjustment Factor** - Under the RRP program, adjustment factors are calculated by dividing total excess readmission dollars (all conditions) by total base operating dollars for all patients for the same three year performance period as measured by the readmission rates. Adjustment factors are used to reduce IPPS payments on a per-discharge basis for performance under the program. CMS currently sets an adjustment factor floor of 0.9700, or a 3.0% payment penalty.

⁶**Quintile Median Excess Readmission Ratio** - A hospital is placed into a quintile based on their ratio of full-benefit dual eligible patients to total Medicare patients (including Medicare Fee-For-Service and Medicare Advantage stays) over the three year program performance period. A median excess readmission ratio is calculated for each quintile for each condition. A hospital's own excess readmission ratio for each condition will be compared to the condition-specific quintile median excess readmission ratio to determine total excess readmission revenue.

⁷**Budget Neutrality Modifier** - A budget neutrality modifier is calculated such that the total Medicare savings using socio-demographic status adjustment methodology are equal to what the total Medicare savings would have been if the previous RRP methodology was used. This budget neutrality modifier is applied to each hospital's RRP adjustment factor.

Readmission rates, aggregate payments by condition, and excess readmission dollars by condition are all defined by a predetermined list of procedure/diagnoses codes specific to each condition. For each condition, condition-specific exclusions and adjustments may apply. Full detail on measure methodology as well as applicable ICD-10 codes for each condition are provided here: <https://www.qualitynet.org/dcs/ContentServer?c=Page&pageName=QnetPublic%2FPage%2FQnetTier4&cid=1219069855841>

Hospital Acquired Condition (HAC) Reduction Program Overview

Applicable conditions, performance timeframes, and other details for the FFY 2021, 2022, and 2023 programs

The Hospital Acquired Condition (HAC) Reduction Program sets payment penalties each year for hospitals in the top quartile (worst performance) of HAC rates for the country. The HAC reduction program is punitive only and does not give hospitals credit for improvement over time. Under the program, hospitals are compared to the nation measure by measure on their z-score. Available measure scores are equally weighted to determine a Total HAC Score. The Total HAC score is used to determine the top quartile (worst performance) for payment penalty in each year. The HAC payment penalty is 1.0% of total Medicare Fee-For-Service (FFS) inpatient revenue and does not change year to year. The program methodology is shown below:



AHRQ Claims Based Measures		CDC Chart Abstracted Measures																														
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Measure Scoring

HAC ratios for all program-eligible hospitals nationwide are assigned winsorized z-scores. A z-score represents how different a hospital performed compared to the national average, in terms of standard deviations from the mean: poor performance = positive z-score (worse than national average) and good performance = negative z-score (better than national average). Lower z-scores are better. Winsorization is intended to remove the effects of extreme outliers. CMS chose to do this by setting all z-score values below the 5th percentile to the 5th percentile value, and above the 95th percentile to the 95th percentile value.

In order to receive a score on a measure, hospitals must meet minimum requirements. For PSI-90, a hospital must have 3 or more cases in at least one of the ten component PSI measures that make up the PSI-90 composite measure. For HAI, a hospital must have 1 or more predicted infections for each measure (1 or more pooled predicted infection for SSI).

Measure z-scores are weighted equally to calculate a total HAC score and are proportionally re-weighted when a hospital is missing one or more measures.

*Measures not meeting the minimum scoring requirements are dropped from the Total HAC score calculation. Hospitals receive the maximum score for any HAI measure that is not submitted, unless provided with a waiver.

Other Program Calculations

Pooled Standardized Infection Ratio (SIR) (SSI measures only) = $\frac{(\text{Observed Infections for Abdominal Hysterectomy} + \text{Observed Infections for Colon})}{(\text{Predicted Infections for Abdominal Hysterectomy} + \text{Predicted Infections for Colon})}$

Total HAC Score³ = $\sum \text{Measure Score} \times \text{Measure Weight}$

Annual Program Impact⁴ = Total Medicare FFS Inpatient Dollars x 1.0% - Total Medicare FFS Inpatient Dollars

Z-score⁵ = $\frac{(\text{Hospital's Measure Performance} - \text{Mean Performance for All Hospitals})}{\text{Standard Deviation for All Hospitals}}$

Program Timelines

2017	2018	2019	2020	2021	2022	2023																																																																	
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
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[#]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 HAC Program.

Notes:

¹The modified PSI-90 composite measure is calculated by combining performance on 10 individual Patient Safety Indicator (PSI) measures. While hospitals are scored on the overall PSI-90 composite measure, each component PSI and their weight towards the overall composite are shown above. Weights shown are based on version 9.0 of the AHRQ Quality Indicators software.

²The pooled Surgical Site Infection (SSI) measure is made up of two individual SSI measures: SSI - Abdominal Hysterectomy and SSI - Colon. For the pooled SIR measure, observed infections for both SSI measures are divided by predicted infections to calculate a pooled SIR. Hospitals are then evaluated and assigned measure points based on their pooled SIR.

³CMS applies an equal weight to each measure for which a hospital has a measure score.

⁴Unlike the Value Based Purchasing and Readmission Reduction Program, penalties under the HAC program are applied to total Medicare inpatient fee-for-service payments, inclusive of Operating, Capital, Uncompensated Care payments, outlier payments, DSH, IME, and Value based purchasing (VBP)/Readmission Reduction Program (RRP) program adjustments.

⁵Individual measure scores are assigned a z-score that represent how different a hospital performed relative to the national average in terms of standard deviation from the mean. Z-scores are winsorized to remove extreme outliers.

[†]More than Medicare Fee-For-Service patients are included in measure population.