Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

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Purpose

This event will provide an overview of the fiscal year (FY) 2024 Hospital VBP Program Percentage Payment Summary Report (PPSR) calculations with a focus on improvement points, achievement points, and payment adjustments.
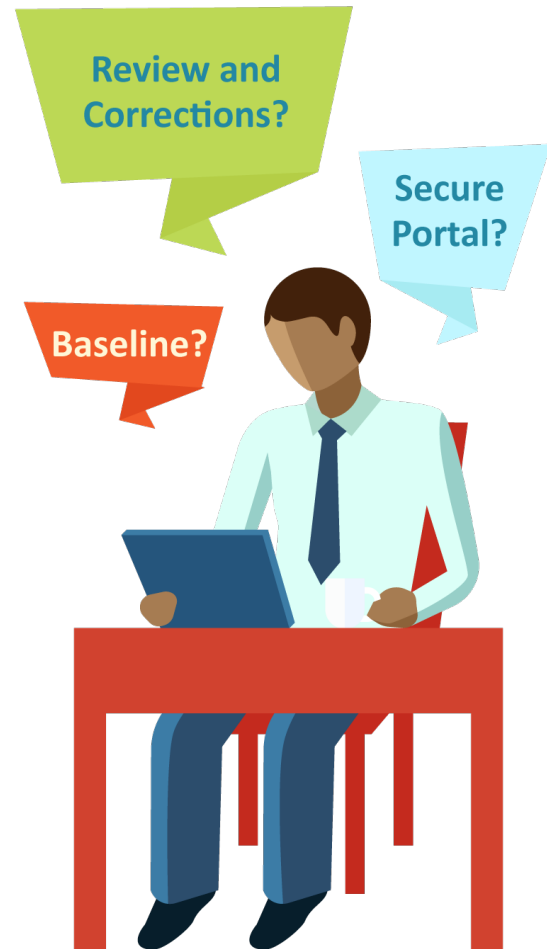
Objectives

Participants will be able to:

- Identify how hospitals will be evaluated within each domain and measure.

- Calculate their hospital's Total Performance Score (TPS).

- Use the exchange function slope to translate their hospital's TPS and payment adjustment factor.

Overview Webinar

- Have questions about the FY 2024 Hospital VBP Program?

- Watch the *Part 1: FY 2024 Hospital VBP Program's Percentage Payment Summary Report Overview* webinar.

- Watch here:
  https://www.qualityreportingcenter.com/en/inpatient-quality-reporting-programs/hospital-value-based-purchasing-vbp-program/vbp-archived-events/

Review and Corrections?

Secure Portal?

Baseline?

Acronyms

AMI	Acute Myocardial Infarction	**IPPS**	inpatient prospective payment system
CABG	Coronary Artery Bypass Graft	**IQR**	Inpatient Quality Reporting
CAUTI	Catheter-associated Urinary Tract Infection	**LTCH**	Long-Term Care Hospital
CDI	*Clostridium difficile* Infection	**MORT**	mortality
CLABSI	Central Line-associated Bloodstream Infection	**MRSA**	Methicillin-resistant *Staphylococcus aureus* Bacteremia
CMS	Centers for Medicare & Medicaid Services	**MS-DRG**	Medicare Severity Diagnosis Related Group
COMP	complications	**MSPB**	Medicare Spending per Beneficiary
COPD	Chronic Obstructive Pulmonary Disease	**PN**	pneumonia
ECE	Extraordinary Circumstances Exception	**PPS**	prospective payment system
FR	*Federal Register*	**PPSR**	Prospective Payment Summary Report
FY	fiscal year	**SSI**	Surgical Site Infection
HAI	Healthcare-associated infection	**THA/TKA**	Total Hip Arthroplasty/Total Knee Arthroplasty
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems	**TPS**	Total Performance Score
HF	heart failure	**VBP**	value-based purchasing
HQR	hospital quality reporting	**VIQR**	Value, Incentives, and Quality Reporting

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Introduction

Foundation

- Set forth under Section 1886(o) of the Social Security Act

- When selecting new measures for the Hospital VBP Program, the measure must have been originally specified under the Hospital Inpatient Quality Reporting (IQR) Program

- CMS will refrain from beginning the performance period for any new measure until the data on that measure have been posted on *Hospital Compare* for at least one year

- Ties hospital reimbursement to the quality of care, not just the quantity of inpatient acute care services provided

- Funded by a 2.00% reduction from participating hospitals' base operating Medicare Severity Diagnosis Related Group (MS-DRG) payments

Program Funding

The Hospital VBP Program:

- Is an estimated budget-neutral program.

- Is funded by a 2.00% reduction from hospitals' base operating MS-DRG payments.

Resulting funds are redistributed to hospitals, based on their TPS.

- The actual amount earned will depend on the range and distribution of all eligible/participating hospitals' TPS scores for a fiscal year.

- A hospital may earn back a value-based incentive payment percentage that can range from incurring the withhold for the fiscal year to receiving a positive net change in base operating DRG payments.

Eligibility

- **Eligible hospitals include** subsection (d) hospitals as defined in Social Security Act section 1886(d)(1)(B).
- **Ineligible hospitals include those** excluded from the Inpatient Prospective Payment System (IPPS):
  - Psychiatric
  - Rehabilitation
  - Long-term care
  - Children's
  - 11 Prospective Payment System (PPS)-exempt Cancer Hospitals
  - Critical Access Hospitals

Eligibility

Excluded hospitals include those:

- Subject to payment reductions under the Hospital IQR Program.

- Cited for three or more deficiencies during the performance period that pose immediate jeopardy to the health or safety of patients.

- With an approved disaster/extraordinary circumstance exception specific to the Hospital VBP Program.

- Without the minimum number of domains calculated for the applicable fiscal year.

- Short-term acute care hospitals in Maryland.

Note: Hospitals **excluded** from the Hospital VBP Program **will not** have their base operating MS-DRG payments reduced by 2.00 percent.

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

How to Run Your Report

PPSRs Available Now

- Notifications announcing the PPSR release were sent to hospitals on August 11, 2023.

- Notifications were sent through the **Hospital Inpatient Value-Based Purchasing (HVBP) and Improvement and Hospital IQR (Inpatient Quality Reporting) and Improvement** QualityNet Program Notification Groups.

- Signup for the Email Program Notification Groups here: https://qualitynet.cms.gov/listserv-signup

- Reports are available to users associated with a hospital that have the Performance Reports permission for HVBP Program Access.

Accessing the PPSR

1. Navigate to the *Hospital Quality Reporting (HQR) Secure Portal* login page: https://hqr.cms.gov/hqrng/login

2. Enter your Health Care Quality Information Systems Access Roles and Profile User ID and Password. Then, select **Log In**.

3. You will see the Two-Factor Authorization page. Select the device you would like to use to retrieve the verification code. Select **Continue**.

4. Once you receive the code, enter it. Select **Continue**.

5. Read the terms and conditions statement. Select **Accept** to proceed. You will see the **HQR landing page**. (If Cancel is selected, the program closes.

Contact the Centers for Clinical Standards and Quality Service Center at QNetSupport@cms.hhs.gov or call (866) 288-8912 (TTY: 877.715.6222), weekdays from 8 a.m. to 8 p.m. Eastern Time.

Accessing the PPSR

7. On the HQR Landing page, select **Program Reporting** from the left-navigation menu to expand the menu options.

8. From the expanded Program Reporting drop-down menu, select **Performance Reports**.

9. Select **HVBP** from the Program selection menu.

10. Select **2024** from the Fiscal Year selection menu.

11. Select your hospital from the Provider selection menu.

12. Select **Display Results**.

Contact the Centers for Clinical Standards and Quality Service Center at QNetSupport@cms.hhs.gov or call (866) 288-8912 (TTY: 877.715.6222), weekdays from 8 a.m. to 8 p.m. Eastern Time.

Polling Question 1

Have you downloaded your report?

- Yes.

- No, but I will soon.

- No, I don't plan to download it.

- This is not applicable to me.

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

Evaluating Hospitals

FY 2024 Domain Weights and Measures

Clinical Outcomes (25%)

MORT-30-AMI: Acute Myocardial Infarction (AMI) 30-Day Mortality Rate

MORT-30-CABG: Coronary Artery Bypass Graft (CABG) Surgery 30-Day Mortality Rate

MORT-30-COPD: Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate

MORT-30-HF: Heart Failure (HF) 30-Day Mortality Rate

MORT-30-PN: Pneumonia (PN) 30-Day Mortality Rate

COMP-HIP-KNEE: Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) Complication Rate

Efficiency and Cost Reduction (25%)

MSPB: Medicare Spending per Beneficiary

FY 2024 Domain Weights and Measures

Person and Community Engagement (25%)

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey Dimensions

Communication with Nurses

Communication with Doctors

Responsiveness of Hospital Staff

Communication about Medicines

Cleanliness and Quietness of Hospital Environment

Discharge Information

Care Transition

Overall rating of Hospital

Safety (25%)

CAUTI: Catheter-associated Urinary Tract Infection

CDI: *Clostridium difficile Infection*

CLABSI: Central Line-associated Bloodstream Infection

MRSA: Methicillin-resistant Staphylococcus aureus Bacteremia

SSI: Surgical Site Infection- Colon Surgery and Abdominal Hysterectomy

FY 2024 Baseline and Performance Periods

Domain	Measure	Baseline Period	Performance Period
Clinical Outcomes	Mortality Measures (AMI, COPD, HF, CABG, PN)	July 1, 2014–June 30, 2017	July 1, 2019–June 30, 2022*
Clinical Outcomes	Complication Measure	April 1, 2014–March 31, 2017	April 1, 2019–March 31, 2022*
Person and Community Engagement	HCAHPS Survey	January 1, 2019–December 31, 2019**	January 1, 2022–December 31, 2022
Safety	Healthcare-Associated Infection (HAI) Measures	January 1, 2019–December 31, 2019**	January 1, 2022–December 31, 2022
Efficiency and Cost Reduction	MSPB	January 1, 2019–December 31, 2019**	January 1, 2022-December 31, 2022

*As finalized in the interim rule with comment period (CMS-3401-IFC), published on September 2, 2020, CMS will not use claims reflecting services provided January 1, 2020–June 30, 2020 (Q1 and Q2 2020) in its calculations for the Medicare quality reporting and value-based purchasing programs. The discharge period in this report has been updated to reflect this policy. The AMI, COPD, HF, pneumonia, and CABG measures identify deaths within 30 days of each index stay. **In addition, CMS also finalized these baseline periods due to the COVID-19 public health emergency.

FY 2024 Minimum Data Requirements

Domain/Measure/TPS	Minimum Requirement
Clinical Outcomes	Minimum of two measure scores: • 30-Day Mortality Measures: 25 cases • COMP-HIP-KNEE: 25 cases
Person and Community Engagement	100 HCAHPS Surveys
Safety	Minimum of two measure scores: • HAI measures: One predicted infection
Efficiency and Cost Reduction	25 episodes of care in the MSPB measure
TPS	A minimum of three of the four domains receiving domain scores

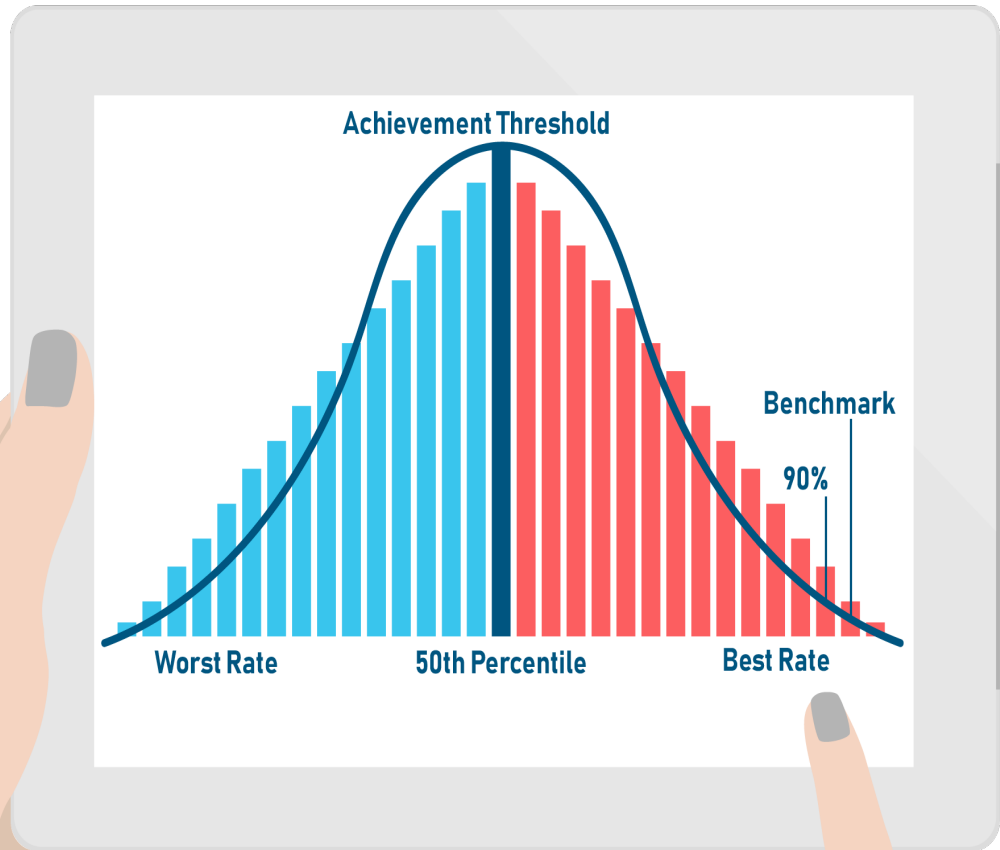# Performance Standards

Benchmark:

Average (mean) performance of the top decile (10%) of hospitals

Achievement Threshold:

Performance at the 50th percentile (median) of hospitals during the baseline period

Note: MSPB uses Performance Period data to calculate the benchmark and achievement threshold, not Baseline Period data like other measures.
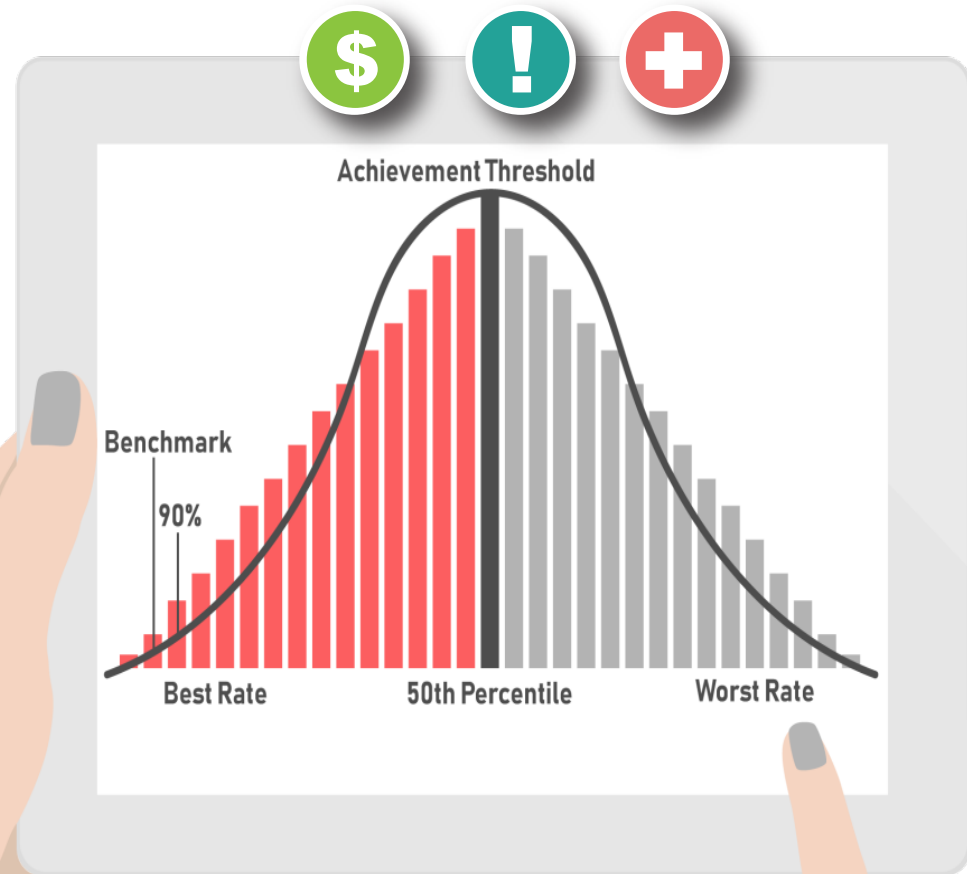
Performance Standards

A **higher** rate is better for the Person and Community Engagement domain and the Clinical Outcomes domain's mortality measures. The 30-day mortality measures are reported as survival rates; therefore, higher values represent a better outcome.
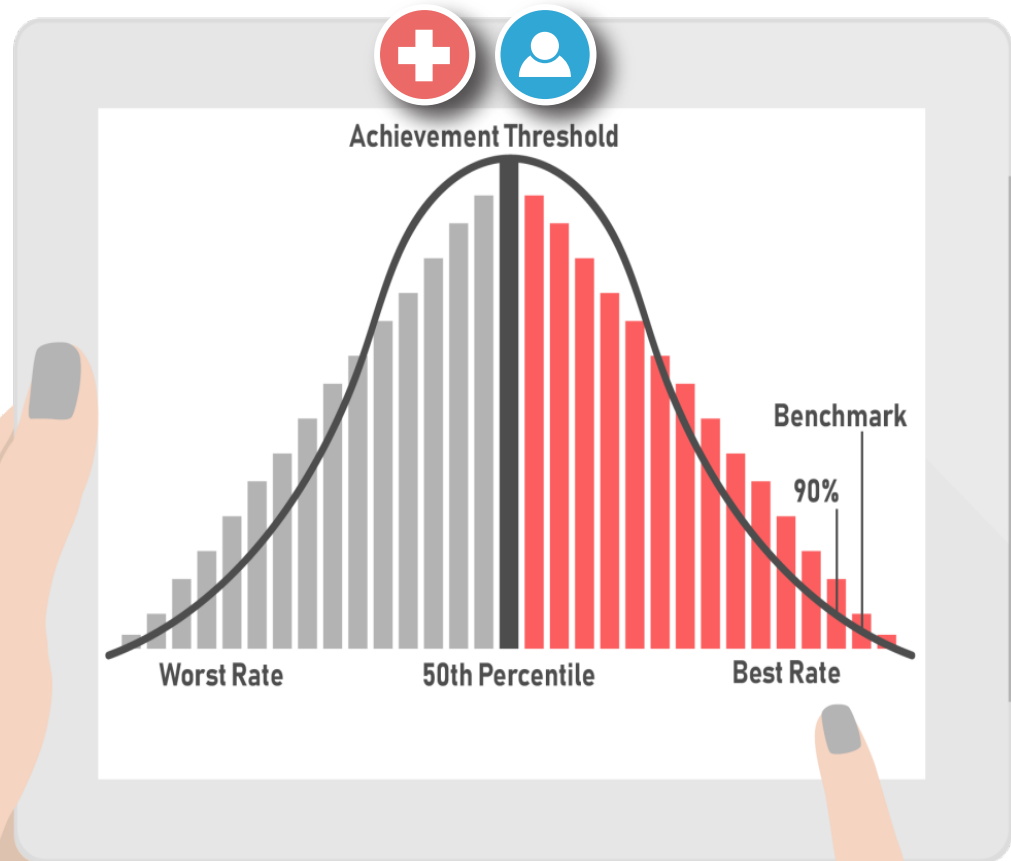
Performance Standards

A **lower** rate is better for the Clinical Outcomes domain's Complication measure, the Safety domain's HAI measures, and the Efficiency and Cost Reduction domain's MSPB. Unlike other measures, MSPB, utilizes data from the performance period to calculate the benchmark and achievement threshold instead of data from the baseline period.

FY 2024 Performance Standards

Mortality Measures

Clinical Outcomes

	Baseline Period July 1, 2014–June 30, 2017		Performance Period July 1, 2019–June 30, 2022*	
Measure ID	**Measure Name**		**Achievement Threshold**	**Benchmark**
MORT-30-AMI	Acute Myocardial Infarction 30-Day Mortality		0.869247	0.887868
MORT-30-CABG	Coronary Artery Bypass Graft Surgery 30-Day Mortality		0.969499	0.980319
MORT-30-COPD	Chronic Obstructive Pulmonary Disease 30-Day Mortality		0.916491	0.934002
MORT-30-HF	Heart Failure 30-Day Mortality		0.882308	0.907733
MORT-30-PN	Pneumonia 30-Day Mortality		0.840281	0.872976

25%

Complication Measure

	Baseline Period April 1, 2014–March 31, 2017		Performance Period April 1, 2019–March 31, 2022*	
Measure ID	**Measure Name**		**Achievement Threshold**	**Benchmark**
↓ COMP-HIP-KNEE	Total Hip Arthroplasty/Total Knee Arthroplasty Complication		0.025396	0.018159

Person and Community Engagement

	Baseline Period Jan. 1, 2019–Dec. 31, 2019		Performance Period Jan. 1, 2022–Dec. 31, 2022	
HCAHPS Survey Dimensions	**Floor (%)**		**Achievement Threshold (%)**	**Benchmark (%)**
Communication with Nurses	53.50		79.42	87.71
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 and Quietness	45.94		65.63	79.64
Discharge Information	66.92		87.23	92.21
Care Transition	25.64		51.84	63.57
Overall Rating of Hospital	36.31		71.66	85.39

25%

*As finalized in the interim rule with comment period (CMS-3401-IFC), published September 2, 2020, CMS will not use claims reflecting services provided January 1, 2020–June 30, 2020 (Q1 and Q2 2020) in its calculations for the Medicare quality reporting and value-based purchasing programs. The discharge period in this report has been updated to reflect this policy. The AMI, COPD, HF, pneumonia, and CABG measures identify deaths within 30 days of each index stay. **CMS also finalized these baseline periods due to the COVID-19 public health emergency. ↓ Indicates lower values are better for the measure.

FY 2024 Performance Standards

Healthcare-Associated Infections				
Baseline Period Jan. 1, 2019–Dec. 31, 2019			**Performance Period** Jan. 1, 2022–Dec. 31, 2022	
Measure ID	**Measure Name**		**Achievement Threshold**	**Benchmark**
⬇ CAUTI	Catheter-Associated Urinary Tract Infection		0.650	0.000
⬇ CDI	Clostridium *difficile* Infection		0.520	0.014
⬇ CLABSI	Central Line-Associated Bloodstream Infection		0.589	0.000
⬇ MRSA	Methicillin-Resistant Staphylococcus *aureus*		0.726	0.000
⬇ SSI	Colon Surgery Abdominal Hysterectomy		0.717 0.738	0.000 0.000

Safety — 25%

Baseline Period Jan. 1, 2019–Dec. 31, 2019			**Performance Period** Jan. 1, 2022–Dec. 31, 2022	
Measure ID	**Measure Name**		**Achievement Threshold**	**Benchmark**
⬇ MSPB	Medicare Spending per Beneficiary		Median MSPB ratio across all hospitals during the performance period	Mean of lowest decile of MSPB ratios across all hospitals during the performance period

Efficiency and Cost Reduction — 25%

CMS finalized the proposal to update the baseline periods for the measures included in the Person and Community Engagement, Safety, and Efficiency and Cost Reduction domains.
⬇ Indicates lower values are better for the measure.

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

Scoring Examples

Achievement Points

Achievement points are awarded by comparing an individual hospital's rates during the performance period with all hospitals' rates from the baseline period*:

- Rate at or better than the benchmark - 10 points
- Rate worse than the achievement threshold - 0 points
- Rate somewhere at or better than the threshold but worse than the benchmark - 1–9 points

* The Efficiency and Cost Reduction measure, MSPB, utilizes data from the performance period to calculate the benchmark and achievement threshold instead of data from the baseline period.

Achievement Point Example 1

CAUTI Example

<div>

0.650

Achievement Threshold

0.000

Benchmark

0.000

Performance Period Rate

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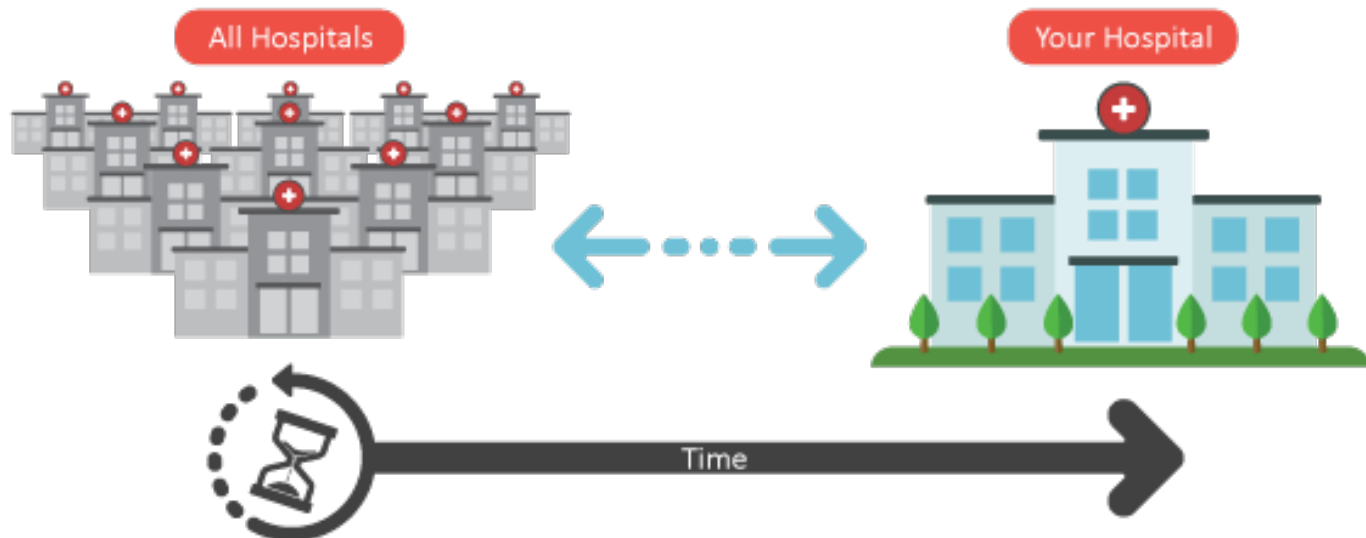
$$\left(9 \times \frac{(\text{Performance Period Rate} - \text{Achievement Threshold})}{(\text{Benchmark} - \text{Achievement Threshold})}\right) + 0.5$$

Achievement Point Example 1
Polling Question 2

How many achievement points will be awarded?

- 10: Better than or at benchmark

- 0: Worse than achievement threshold

- 1–9: Between threshold and benchmark

- Unsure

Achievement Point Example 1

0.650
Achievement Threshold

0.000
Benchmark

0.000
Performance Period Rate

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

$$\left(9 \ x \ \frac{(\ 0\ -\ 0.650)}{(\ 0\ -\ 0.650)}\right) + 0.5 = \left(9\ x\ \frac{-0.650}{-0.650}\right) + 0.5 = (9\ x\ 1) + 0.5 = 9.5 = \boxed{10}$$

Achievement Point Example 2

CAUTI Example

0.650	0.000	1.010
Achievement Threshold	Benchmark	Performance Period Rate

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

Achievement Point Example 2 Polling Question 3

How many achievement points will be awarded?

- 10: Better than or at benchmark

- 0: Worse than achievement threshold

- 1–9: Between threshold and benchmark

- Unsure

Achievement Point Example 2

0.650
Achievement Threshold

0.000
Benchmark

1.010
Performance Period Rate

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

$$\left(9 \ x \ \frac{(1.01 - 0.650)}{(0 - 0.650)}\right) + 0.5 = \left(9 \ x \ \frac{0.36}{-0.65}\right) + 0.5 = \left(9 \ x \ {}^{-}0.55\right) + 0.5 = \boxed{0}$$

Achievement Point Example 3

CAUTI Example

0.650	**0.000**	**0.450**
Achievement Threshold	Benchmark	Performance Period Rate

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

Achievement Point Example 3
Polling Question 4

How many achievement points will be awarded?

- 10: Better than or at benchmark

- 0: Worse than achievement threshold

- 1–9: Between threshold and benchmark

- Unsure

Achievement Point Example 3

0.650
Achievement Threshold

0.000
Benchmark

0.450
Performance Period Rate

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

$$\left(9 \ x \ \frac{(0.450 - 0.650)}{(0 - 0.650)}\right) + 0.5 = \left(9 \ x \ \frac{-0.2}{-0.65}\right) + 0.5 = (9 \ x \ 0.3) + 0.5 = 3$$

Improvement Points

Improvement points are awarded by comparing a hospital's rates during the performance period to that same hospital's rates from the baseline period*:

- Rate at or better than the benchmark - 9 points**

- Rate worse than or equal to baseline period rate - 0 points

- Rate between the baseline period rate and the benchmark - 0–9 points

*The Efficiency and Cost Reduction measure, MSPB, utilizes data from the performance period to calculate the benchmark and achievement threshold instead of data from the baseline period.

**Hospitals that have rates at or better than the benchmark but do not improve from their baseline period rate (i.e., have a performance period rate worse than the baseline period rate) will receive 0 improvement points as no improvement was actually observed.
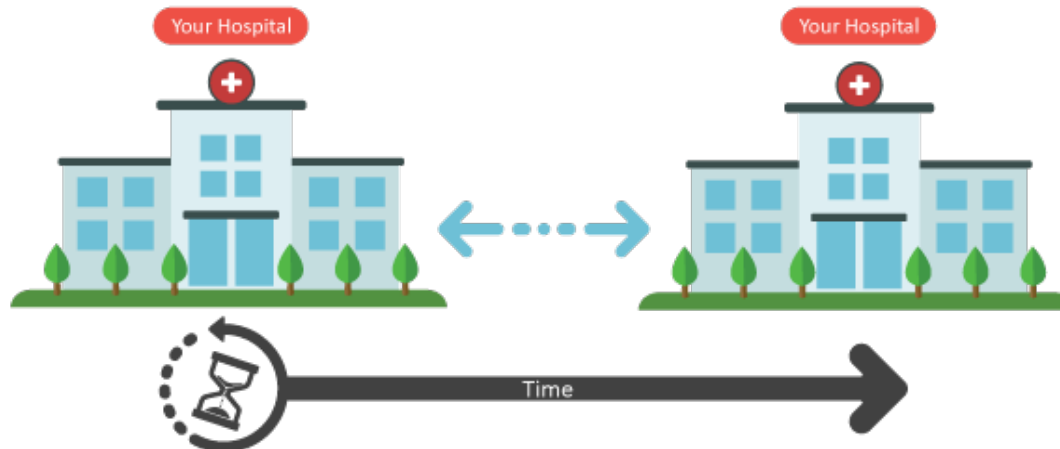
Improvement Point Example 1

CAUTI Example

1.010	**0.000**	**0.400**
Performance Period Rate	Benchmark	Baseline Period Rate

$$\left(10 \times \frac{(\text{Performance Period Rate} - \text{Baseline Period Rate})}{(\text{Benchmark} - \text{Baseline Period Rate})}\right) - 0.5$$
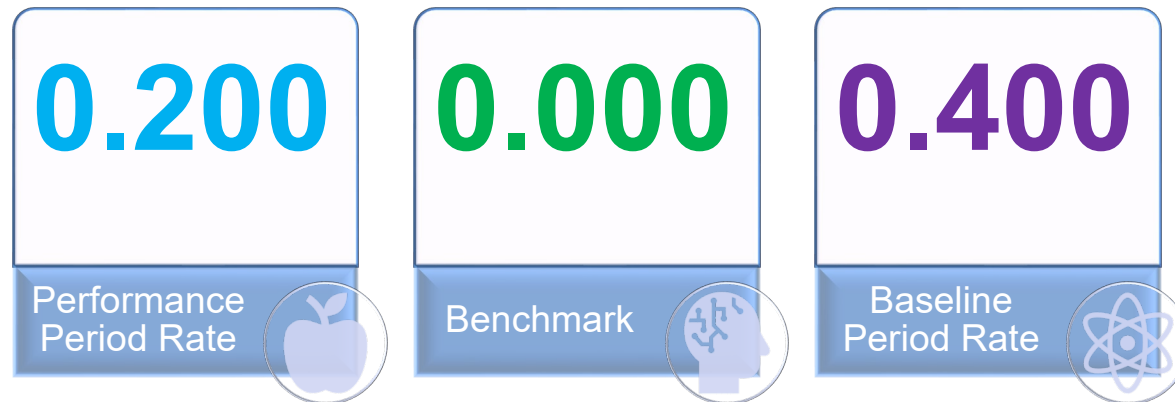
Improvement Point Example 1 Polling Question 5

How many improvement points will be awarded?

- 9: Better than or at benchmark
- 0: Worse than or equal to baseline
- 0–9: Between baseline and benchmark
- Unsure

Improvement Point Example 1

CAUTI Example

1.010	**0.000**	**0.400**
Performance Period Rate	Benchmark	Baseline Period Rate

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

$$\left(10 \times \frac{(1.010 - 0.400)}{(0 - 0.400)}\right) - 0.5 = \left(10 \times \frac{(0.61)}{(-0.4)}\right) - 0.5 = (10\ x\ \text{-}1.525) - 0.5 = \text{-}15.75 = \boxed{0}$$

Improvement Point Example 2

CAUTI Example

0.200	0.000	0.400
Performance Period Rate	Benchmark	Baseline Period Rate

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

Improvement Point Example 2
Polling Question 6

How many improvement points will be awarded?

- 9: Better than or at benchmark
- 0: Worse than or equal to baseline
- 0–9: Between baseline and benchmark
- Unsure

Improvement Point Example 2

CAUTI Example

0.200	0.000	0.400
Performance Period Rate	Benchmark	Baseline Period Rate

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

$$\left(10 \times \frac{(0.200 - 0.400)}{(0 - 0.400)}\right) - 0.5 = \left(10 \times \frac{(-0.2)}{(-0.4)}\right) - 0.5 = (10 \; x \; 0.5) - 0.5 = 4.5 \qquad 5$$

Improvement Point Example 3

CAUTI Example

0.375	0.000	0.400
Performance Period Rate	Benchmark	Baseline Period Rate

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

Improvement Point Example 3
Polling Question 7

How many improvement points will
be awarded?

- 9: Better than or at benchmark

- 0: Worse than or equal to baseline

- 0–9: Between baseline and benchmark

- Unsure

Improvement Point Example 3

CAUTI Example

0.375	**0.000**	**0.400**
Performance Period Rate	Benchmark	Baseline Period Rate
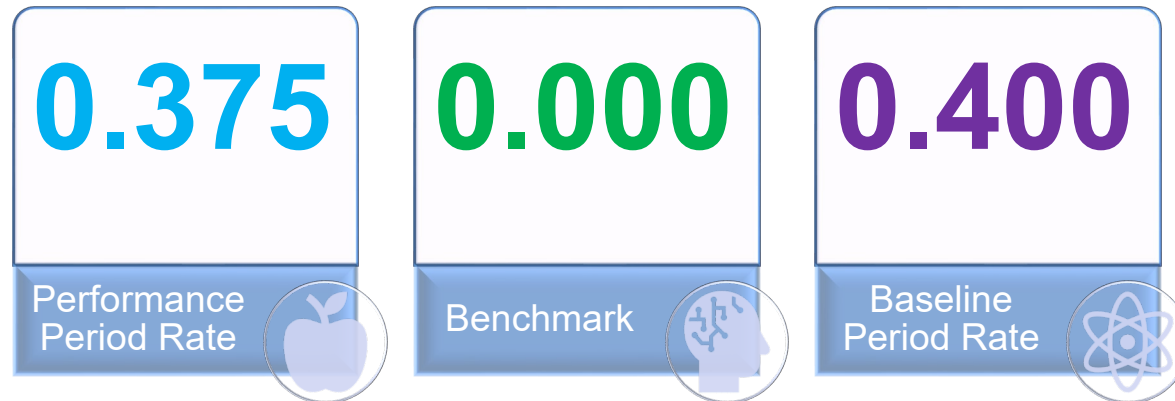
$$\left(10 \times \frac{(\text{Performance Period Rate} - \text{Baseline Period Rate})}{(\text{Benchmark} - \text{Baseline Period Rate})}\right) - 0.5$$

$$\left(10 \times \frac{(0.375 - 0.400)}{(0 - 0.400)}\right) - 0.5 = \left(10 \times \frac{(-0.025)}{(-0.4)}\right) - 0.5 = (10 \; x \; 0.0625) - 0.5 = 0.125 =$$

0

Clinical Outcomes: Measure Score

A measure score is the greater of the achievement points and improvement points for a measure.

Example FY 2024 Clinical Outcomes Score Calculations

Measure ID	Achievement Points	Improvement Points	Measure Score
MORT-30-AMI	10	9	10
MORT-30-HF	5	-	5
MORT-30-COPD	-	-	-
MORT-30-PN	4	6	**?**
COMP-HIP-KNEE	-	-	-

What measure score will be awarded for MORT-30-PN?
- 4
- 5
- 6
- Unsure

Polling Question 8

What measure score will be awarded for MORT-30-PN?

- 4
- 5
- 6
- Unsure

Clinical Outcomes: Unweighted Domain Score

- For reliability, CMS requires hospitals to meet a minimum requirement of cases for each measure to receive a measure score and a minimum number of those measures to receive a domain score.

- 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.

Measure ID	Measure Score
MORT-30-AMI	10
MORT-30-HF	5
MORT-30-COPD	-
MORT-30-PN	6
COMP-HIP-KNEE	-

Domain Normalization Steps

1. Sum the measure scores in the domain.

$$(10 + 5 + 6) = 21$$

2. Multiply the eligible measures by the maximum point value per measure (10 points).

$$(3 \text{ measures} \times 10 \text{ points}) = 30$$

3. Divide the sum of the measure scores (result of step 1) by the maximum points possible (result of step 2).

$$(21 \div 30) = 0.70$$

4. Multiply the result of step 3 by 100.

$$(0.70 \times 100) = \mathbf{70.000000000000}$$

Clinical Outcomes: Unweighted Domain Score

- For reliability, CMS requires hospitals to meet a minimum requirement of cases for each measure to receive a measure score and a minimum number of those measures to receive a domain score.

- 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.

Measure ID	Measure Score
MORT-30-AMI	8
MORT-30-HF	7
MORT-30-COPD	0
MORT-30-PN	-
COMP-HIP-KNEE	10

Domain Normalization Steps

1. Sum the measure scores in the domain.
2. Multiply the eligible measures by the maximum point value per measure (10 points).
3. Divide the sum of the measure scores (result of step 1) by the maximum points possible (result of step 2).
4. Multiply the result of step 3 by 100.

What is the Unweighted Clinical Outcomes Domain Score?
- 50.0
- 62.5
- 83.3

Clinical Outcomes: Unweighted Domain Score

- For reliability, CMS requires hospitals to meet a minimum requirement of cases for each measure to receive a measure score and a minimum number of those measures to receive a domain score.

- 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.

Measure ID	Measure Score
MORT-30-AMI	8
MORT-30-HF	7
MORT-30-COPD	0
MORT-30-PN	-
COMP-HIP-KNEE	10

Domain Normalization Steps

1. Sum the measure scores in the domain.

$$(8 + 7 + 0 + 10) = 25$$

2. Multiply the eligible measures by the maximum point value per measure (10 points).

$$(4 \text{ measures} \times 10 \text{ points}) = 40$$

3. Divide the sum of the measure scores (result of step 1) by the maximum points possible (result of step 2).

$$(25 \div 40) = 0.625$$

4. Multiply the result of step 3 by 100.

$$(0.625 \times 100) = \mathbf{62.500000000000}$$

Person and Community Engagement: Dimension Scores

A dimension score is the greater of the achievement points and improvement points for a measure.

Example FY 2024 Person and Community Engagement Dimension Score Calculations

Dimension	Achievement Points	Improvement Points	Dimension Score
Communication with Nurses	6	2	6
Communication with Doctors	8	0	8
Responsiveness of Hospital Staff	6	1	6
Communication about Medicines	3	7	7
Cleanliness and Quietness of Hospital Environment	4	0	4
Discharge Information	0	1	1
Care Transition	6	3	6
Overall Rating of Hospital	4	0	4

Person and Community Engagement: Unweighted Domain Score

- CMS calculates two scores for the Person and Community Engagement Domain.

  o A base score and a consistency score.

- Base score is the sum of the eight-dimension scores.

  o Maximum point value for the base score is 80 (8 dimensions X 10 maximum point value).

- Consistency points are calculated from your hospital's lowest dimension score.

  o Maximum point value for the consistency points is 20.

- Unweighted domain score is the sum of the base score and consistency score.

  o Maximum point value is 100 (80 base + 20 consistency).

Person and Community Engagement: Unweighted Domain Score

Dimension	Dimension Score
Communication with Nurses	6
Communication with Doctors	8
Responsiveness of Hospital Staff	6
Communication about Medicines	7
Cleanliness and Quietness of Hospital Environment	4
Discharge Information	1
Care Transition	6
Overall Rating of Hospital	4

Person and Community Engagement Domain Score

1. Sum the dimension scores in the domain to calculate HCAHPS base score.

   (6 + 8 + 6 + 7 + 4 + 1 + 6 + 4) = 42

2. Determine your hospital's consistency points.

   Consistency Points = 20

3. Add the base score (result of step 1) to the consistency score (result of step 2).

   42 + 20 = **62.000000000000**

Person and Community Engagement: Consistency Points

How are HCAHPS consistency points calculated?

- **If all dimension rates are greater than or equal to the achievement thresholds:**

    o 20 consistency points

- **If any individual dimension rate is less than or equal to the floor (worst-performing hospital dimension rate from the baseline period):**

    o 0 consistency points

- **If the lowest dimension rate is greater than the floor (worst-performing hospital's rate from the baseline period) but less than the achievement threshold:**

    o 0–20 consistency points awarded based on your hospital's lowest dimension rate in the consistency point formula

Person and Community Engagement: Consistency Points Example 1

Dimension	Performance Period Rate (%)	Floor (%)	Achievement Threshold
Communication with Nurses	80.2000	53.50	79.42
Communication with Doctors	89.7689	62.41	79.83
Responsiveness of Hospital Staff	72.5876	40.40	65.52
Communication about Medicines	68.4645	39.82	63.11
Cleanliness and Quietness of Hospital Environment	69.0432	45.94	65.63
Discharge Information	92.4598	66.92	87.23
Care Transition	64.8742	25.64	51.84
Overall Rating of Hospital	72.9811	36.31	71.66

How are HCAHPS consistency points calculated?

- **If all dimension rates are greater than or equal to the achievement thresholds:**
  - 20 consistency points

Person and Community Engagement: Consistency Points Example 2

Dimension	Performance Period Rate (%)	Floor (%)	Achievement Threshold
Communication with Nurses	80.2000	53.50	79.42
Communication with Doctors	89.7689	62.41	79.83
Responsiveness of Hospital Staff	72.5876	40.40	65.52
Communication about Medicines	68.4645	39.82	63.11
Cleanliness and Quietness of Hospital Environment	69.0432	45.94	65.63
Discharge Information	92.4598	66.92	87.23
Care Transition	64.8742	25.64	51.84
Overall Rating of Hospital	32.8600	36.31	71.66

How are HCAHPS consistency points calculated?

- If any individual dimension rate is less than or equal to the floor (worst-performing hospital dimension rate from the baseline period):
  - 0 consistency points

Person and Community Engagement: Consistency Points Example 3

Dimension	Performance Period Rate (%)	Floor (%)	Achievement Threshold
Communication with Nurses	78.4500	42.06	79.06
Communication with Doctors	89.7689	62.41	79.83
Responsiveness of Hospital Staff	72.5876	40.40	65.52
Communication about Medicines	61.8786	33.19	63.83
Cleanliness and Quietness of Hospital Environment	69.0432	45.94	65.63
Discharge Information	86.5954	66.94	87.38
Care Transition	50.9788	6.53	51.87
Overall Rating of Hospital	61.5675	34.70	71.80

How are HCAHPS consistency points calculated?

- If the lowest dimension rate is greater than the floor (worst-performing hospital's rate from the baseline period) but less than the achievement threshold:
  - 0–20 consistency points awarded based on your hospital's lowest dimension rate in the consistency point formula

Person and Community Engagement: Lowest Dimension Score

$$\text{Lowest Dimension Score} = \frac{(Performance\ Period\ Rate\ -Floor)}{(Achievement\ Threshold\ -Floor)}$$

$$\text{Communication with Nurses} = \frac{(78.4500\% -42.06\%)}{(79.06\% -42.06\%)} = \mathbf{0.984}$$

$$\text{Communication about Medicines} = \frac{(61.8786\% -33.19\%)}{(63.83\% -33.19\%)} = \mathbf{0.936}$$

$$\text{Discharge Information} = \frac{(86.5954\% -66.94\%)}{(87.38\% -66.94\%)} = \mathbf{0.962}$$

$$\text{Care Transition} = \frac{(50.9788\% -6.53\%)}{(51.87\% -6.53\%)} = \mathbf{0.980}$$

$$\text{Overall Rating} = \frac{(61.5675\% -34.70\%)}{(71.80\% -34.70\%)} = \mathbf{0.724}$$

Person and Community Engagement: Consistency Points Formula

Formula: $Consistency\ Score = (20\ \times Lowest\ Dimension\ Score\ ) - 0.5$

$$Overall\ Rating = \frac{(61.5675\% - 34.70\%)}{(71.80\% - 34.70\%)} = \mathbf{0.724}$$

$$Consistency\ Score = (20\ \times 0.724)\ - 0.5 = \mathbf{13.98}$$

14

Safety:
Combined SSI Score

"…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."

– FY 2014 IPPS/LTCH PPS Final Rule (78 FR 50684)

Safety:
Combined SSI Score

Example:

A hospital that received 5 improvement points for the SSI-Colon stratum with 1.000 predicted SSI-Colon infections and 8 achievement points for the SSI-Abdominal Hysterectomy stratum, with 2.000 predicted SSI Abdominal Hysterectomy infections, would receive a composite SSI measure score as follows:

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

$$\left(\frac{(5 \times 1) + (8 \times 2)}{(1 + 2)} \right) = 7$$

Safety:
Combined SSI Score Example

Baseline Period: January 1-December 31, 2019 Performance Period: January 1- December 31, 2022	FY 2024 Baseline Period Totals			FY 2024 Performance Period Totals			Performance Standards and Measure Scores				
Healthcare Associated Infections	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infection Ratios (SIR)	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infections Ratio (SIR)	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	Measure Score
Surgical Site Infection (SSI)	N/A	N/A	-	N/A	N/A	-	N/A	N/A	N/A	N/A	?
SSI-Abdominal Hysterectomy	1	0.599	-	1	1.681	0.595	0.726	0.000	-	2	2
SSI-Colon Surgery	1	2.002	0.500	1	3.884	0.257	0.754	0.000	4	6	6

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

What SSI Measure Score value will be awarded?
- 0
- 3
- 5
- 7
- 10

Safety:
Combined SSI Score Example

Baseline Period: January 1-December 31, 2019 Performance Period: January 1- December 31, 2022	FY 2024 Baseline Period Totals			FY 2024 Performance Period Totals			Performance Standards and Measure Scores				
Healthcare Associated Infections	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infection Ratios (SIR)	Number of Observed Infections (Numerator)	Number of Predicted Infections (Denominator)	Standardized Infections Ratio (SIR)	Achievement Threshold	Benchmark	Improvement Points	Achievement Points	Measure Score
Surgical Site Infection (SSI)	N/A	N/A	-	N/A	N/A	-	N/A	N/A	N/A	N/A	5
SSI-Abdominal Hysterectomy	1	0.599	-	1	1.681	0.595	0.726	0.000	-	2	2
SSI-Colon Surgery	1	2.002	0.500	1	3.884	0.257	0.754	0.000	4	6	6

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

$$\left(\frac{(6 \times 3.884) + (2 \times 1.681)}{(3.884 + 1.681)} \right) = 5$$

Safety: Combined SSI Score

Examples:

- A hospital that received 5 improvement points for the SSI-Colon stratum, with 1.000 predicted SSI-Colon infections, and did not meet the minimum calculated predicted infections for the SSI-Abdominal Hysterectomy stratum would receive a composite SSI measure score that was weighted to 100% of the SSI-Colon stratum, equaling a measure score of 5.

- If a hospital did not meet the minimum calculated predicted infections of 1.000 on both the SSI-Colon stratum and the SSI-Abdominal Hysterectomy stratum, the hospital would not receive a composite SSI measure score.

SSI - Abdominal Hysterectomy	SSI - Colon Surgery	Scored
✔	✔	Yes
✔	✘	Yes
✘	✔	Yes
✘	✘	No

Safety:
Measure Scores

A measure score is the greater of the achievement points and improvement points for a measure.

Example FY 2024 Safety Measure Score Calculations

Measure ID	Achievement Points	Improvement Points	Measure Score
CLABSI	0	4	4
CDI	5	9	9
CAUTI	3	-	3
MRSA	-	-	-
SSI	Colon Surgery Measure Score = 6	Abdominal Hysterectomy Measure Score = 2	5

Safety:
Unweighted Domain Score

- For reliability, CMS requires hospitals to meet a minimum requirement of cases for each measure to receive a measure score and a minimum number of those measures to receive a domain score.

- 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.

Safety:
Unweighted Domain Score

Measure ID	Measure Score
CLABSI	4
CDI	9
CAUTI	3
MRSA	-
SSI	5

Domain Normalization Steps

1. Sum the measure scores in the domain.
   (4 + 9 + 3 + 7) = 21

2. Multiply the eligible measures by the maximum point value per measure (10 points).
   (4 measures x 10 points) = 40

3. Divide the sum of the measure scores (result of step 1) by the maximum points possible (result of step 2).
   (21 ÷ 40) = 0.525

4. Multiply the result of step 3 by 100.
   (0.525 x 100) = **52.5**

Efficiency and Cost Reduction: Measure Scores

A measure score is the greater of the achievement points and improvement points for a measure.

Example FY 2024 Efficiency and Cost Reduction Measure Score Calculations

Measure ID	Achievement Points	Improvement Points	Measure Score
MSPB	10	0	10

Efficiency and Cost Reduction: Unweighted Domain Score

- For reliability, CMS requires hospitals to meet a minimum requirement of cases for each measure to receive a measure score and a minimum number of those measures to receive a domain score.

- 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.

Measure ID	Measure Score
MSPB	10

Domain Normalization Steps

1. Sum the measure scores in the domain.

   (10) = 10

2. Multiply the eligible measures by the maximum point value per measure (10 points).

   (1 measure x 10 points) = 10

3. Divide the sum of the measure scores (result of step 1) by the maximum points possible (result of step 2).

   (10 ÷ 10) = 1.000

4. Multiply the result of step 3 by 100.

   (1.000 x 100) = **100.000000000000**

Domain Weighting
Original Weights

Clinical Outcomes

Efficiency and Cost Reduction

25% 25%
25% 25%

Safety

Person and Community Engagement
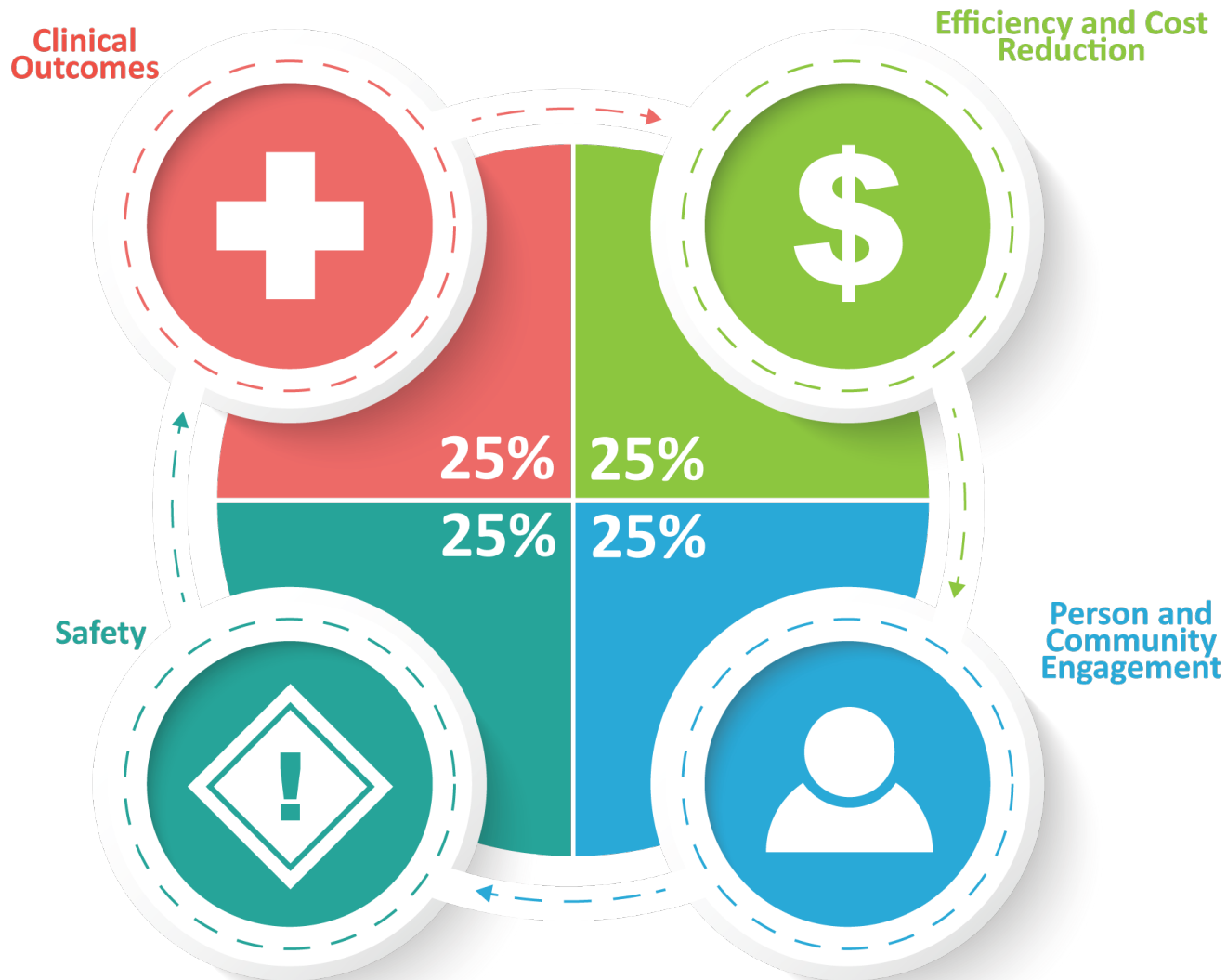
Domain Weighting Proportionate Reweighting

A TPS requires scores from at least **three out of the four domains in FY 2024**. The unscored domain weight is proportionately distributed to the remaining domains to equal 100%.

In this example, a hospital meets minimum case and measure requirements for the Clinical Outcomes Domain, as well as the Safety and Efficiency and Cost Reduction Domains, but does not meet the minimum number of cases/surveys required for the Person and Community Engagement Domain score.

A Sum eligible measure weights (25% + 25% + 25% - 25%) =

25% + 25% + 25% - 25% = **75%**

B Divide the original Domain Weights by the sum of the result listed in A, then sum the total of the Weighted Domain Scores (33.3% + 33.3% + 33.3%) =

25% ÷ 75% = 33.3% + 25% ÷ 75% = 33.3% + 25% ÷ 75% = 33.3% = **TPS 100%**

Weighted Domain Score and TPS

Domain	Unweighted Domain Score		Domain Weight		Weighted Domain Score
➕ Clinical Outcomes	75.00	✖	25%	=	18.750
👤 Person and Community Engagement	62.00	✖	25%	=	15.500
◈ Safety	55.00	✖	25%	=	13.750
💲 Efficiency and Cost Reduction	100.00	✖	25%	=	25.000

} 73

Exchange Function Slope

- Each hospital's value-based incentive payment amount is dependent on the following:
  - Range and distribution of TPSs of all participating hospitals
  - The distribution and amount of total estimated base operating MS-DRG payment amounts available for redistribution of all participating hospitals
  - Amount of the individual hospital's base operating MS-DRG payment amounts and TPS

Value-Based Incentive Payment Percentage

Total Performance Score

0   100
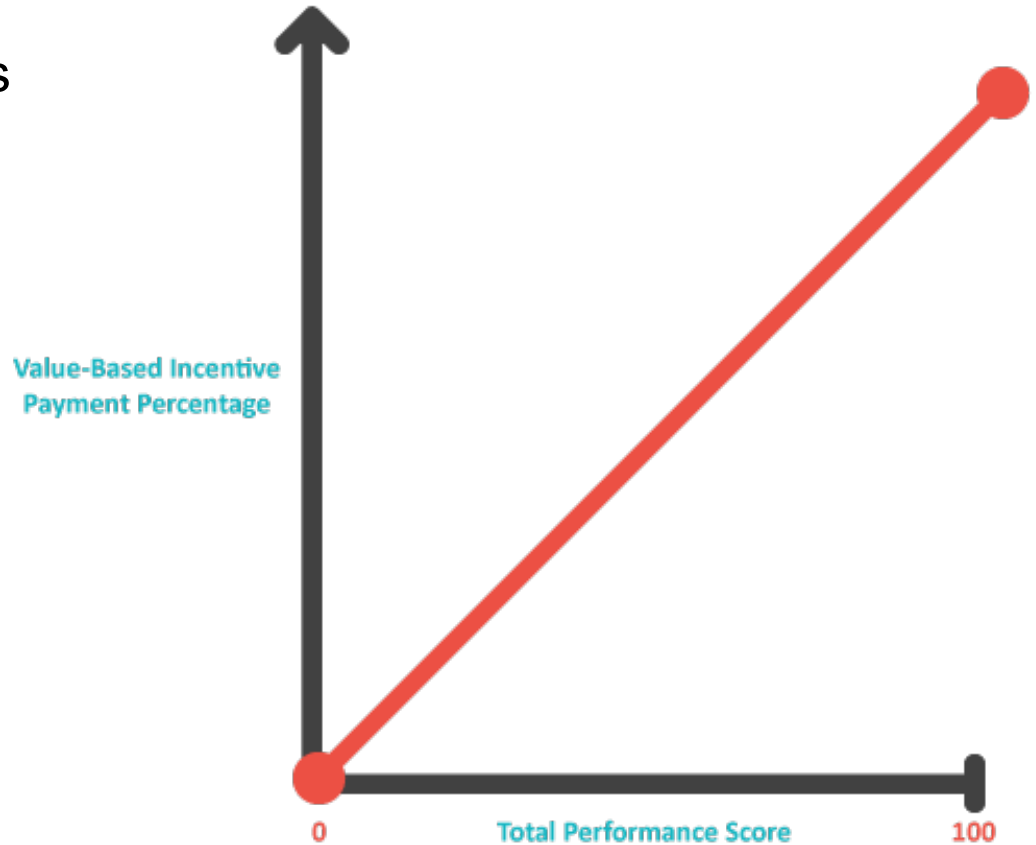
Value-Based Incentive Payment Percentage

Value-Based Incentive Payment Percentage

$2.00 \times \left(\dfrac{TPS}{100} \right) \times$ **Exchange Function Slope**

$2.00 \times \left(\dfrac{73}{100} \right) \times 3.0000000000 = \textbf{4.3800000000\%}$

Net Change in Base Operating MS-DRG Payment

Value-Based Incentive Payment Percentage

$$2.00 \times \left(\frac{TPS}{100} \right) \times \text{Exchange Function Slope}$$

$$2.00 \times \left(\frac{73}{100} \right) \times 3.0000000000 = 4.3800000000\%$$

⬇

Net Change in Base Operating MS-DRG Payment

Value-Based Incentive Payment Percentage - 2.00%

$$4.3800000000\% - 2.00\% = 2.3800000000\%$$

Value-Based Incentive Payment Adjustment Factor

Value-Based Incentive Payment Percentage

$$2.00 \times \left(\frac{TPS}{100} \right) \times \text{Exchange Function Slope}$$

$$2.00 \times \left(\frac{73}{100} \right) \times 3.0000000000 = 4.3800000000\%$$

Net Change in Base Operating MS-DRG Payment

Value-Based Incentive Payment Percentage - 2.00%

$$4.3800000000\% - 2.00\% = 2.3800000000\%$$

Value-Based Incentive Payment Adjustment Factor

$$1 + \left(\frac{\text{Net Change in Base Operating MS-DRG Payment Amount}}{100} \right)$$

$$1 + .0238000000 = 1.0238000000$$

Payment Calculation Example

> TPS: 30
> Exchange Function Slope: 3.0000000000

Value-Based Incentive Payment Percentage

$$2.00 \text{ x } \left(\frac{TPS}{100} \right) \text{ x Exchange Function Slope}$$

⬇

Net Change in Base Operating MS-DRG Payment

Value-Based Incentive Payment Percentage **-** 2.00%

⬇

Value-Based Incentive Payment Adjustment Factor

$$1 + \left(\frac{\text{Net Change in Base Operating MS-DRG Payment Amount}}{100} \right)$$

> What is the value-based incentive payment adjustment factor?
> - 1.2000000000
> - 1.0000000000
> - 0.9980000000
> - 0.8000000000

Payment Calculation Example

Value-Based Incentive Payment Percentage

$$2.00 \times \left(\frac{TPS}{100} \right) \times \text{Exchange Function Slope}$$

$$2.00 \times \left(\frac{30}{100} \right) \times 3.0000000000 = 1.8000000000\%$$

⬇

Net Change in Base Operating MS-DRG Payment

Value-Based Incentive Payment Percentage - 2.00%

$$1.8000000000\% - 2.00\% = -0.2000000000\%$$

⬇

Value-Based Incentive Payment Adjustment Factor

$$1 + \left(\frac{\text{Net Change in Base Operating MS-DRG Payment Amount}}{100} \right)$$

$$1 + -0.2000000000\% = 0.9980000000$$

Calculating Change in Payments

Example #1
Net Change in a Base Operating MS-DRG Claim of $20,000

Base Operating MS-DRG Payment Amount x Incentive Payment Adjustment

($20,000 x 1.0238000000 = $20,476)

Adjusted Base Operating MS-DRG Payment - Base Operating MS-DRG Payment

($20,476 - $20,000 = $476)

Example #2
Net Change in a Base Operating MS-DRG Claim of $20,000

Annual Base Operating MS-DRG Payment Amounts x Incentive Payment Adjustment

($20,000 x 0.9980000000 = $19,960)

Adjusted Base Operating MS-DRG Payment - Base Operating MS-DRG Payment

($19,960 - $20,000 = -$40)

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

Review and Corrections

Overview

- Hospitals may **review and request recalculation of scores** on each condition, domain, and TPS.

- Hospitals may submit a review and corrections request regarding their reports no later than **11:59 p.m. Pacific Time, September 11, 2023**.

- Submit the completed form through the following methods:
  - Secure Message to QRFormsSubmission@hsag.com through [Managed File Transfer](#) in the *HQR Secure Portal*
  - Secure Fax to (877) 789-4443
  - Email to QRFormsSubmission@hsag.com
  - **Note:** Please ensure that data containing personally identifiable information or protected health information are not submitted when emailing the form, as this is not a secured method and would be a security violation.

Access
Review & Correction Request Form

1. Visit https://qualitynet.cms.gov/.

2. From the **[Hospitals – Inpatient]** box**,** select **[Hospital Value-Based Purchasing(HVBP) Learn more].**

3. When the screen refreshes, select **[Payment]** from the top navigation pane and **[Review and Corrections/Appeals]** on the left-hand navigation pane. Then, select **[Review and Corrections Request Form]** toward the bottom of the page.

Direct link: https://www.qualitynet.org/inpatient/hvbp/payment#tab2

Forms and Additional Reference Material

For assistance in completing and submitting the Review and Corrections, Appeals, or CMS Independent Review forms, refer to the following:

File Name	File Type	File Size	
Review and Corrections Quick Reference Guide (11/2021)	PDF	42 KB	Download
Review and Corrections Request Form (02/2023)	PDF	100 KB	Download
Appeal Quick Reference Guide (11/2021)	PDF	42 KB	Download
Appeal Request Form (02/2023)	PDF	100 KB	Download
Independent CMS Review Quick Reference Guide (11/2021)	PDF	42 KB	Download
Independent CMS Review Request Form (02/2023)	PDF	97 KB	Download
Review and Corrections, Appeal, and Independent CMS Review User Guide (11/2021)	PDF	600 KB	Download

Request Form

Complete the request form with the following information:

- Date of review and corrections request
- Hospital CMS Certification Number
- Hospital contact information
    - Hospital name/address (must include physical street address)
    - Hospital chief executive officer and QualityNet Security Administrator/Security Official (name, address, telephone, and email)
- Specify reason(s) for request
    - Condition-specific score
    - Domain-specific score
    - TPS
- Detailed description for each of the reason(s) identified

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

Resources

Available on QualityNet

- Webinars/Calls/Educational Materials
  - From **[Hospitals – Inpatient],** select the **[Hospital Value-Based Purchasing (HVBP) Program Learn More]** option. Then, select **[Webinars]** from the top navigation pane.
  - https://www.qualityreportingcenter.com/en/inpatient-quality-reporting-programs/hospital-value-based-purchasing-vbp-program/vbp-archived-events/
- Hospital VBP Program General Information
  - From the **[Hospitals – Inpatient]** menu, select **[Hospital Value-Based Purchasing (HVBP) Program Learn More].**
- Frequently Asked Questions
  - From the home page, select **[Help]** on the upper right-hand side, and then select **[Hospitals – Inpatient].**
  - https://cmsqualitysupport.service-now.com/qnet_qa?id=ask_a_question

FY 2024 Help Guides and Quick Reference Guides

Reference these FY 2024 resources on QualityNet:
https://qualitynet.cms.gov/inpatient/hvbp/resources#tab2

- How to Read Your Report Help Guide

- Program Summary

- Scoring Quick Reference Guide

- Domain Weighting Quick Reference Guide

Part 2: FY 2024 Hospital VBP Program Percentage Payment Summary Report Calculations

Q&A Session

Continuing Education Approval

This program has been approved for [credit](#) for the following boards:

- **National credit**
  - Board of Registered Nursing (Provider #16578)
- **Florida-only credit**
  - Board of Clinical Social Work, Marriage & Family Therapy and Mental Health Counseling
  - Board of Registered Nursing
  - Board of Nursing Home Administrators
  - Board of Dietetics and Nutrition Practice Council
  - Board of Pharmacy

Note: To verify approval for any other state, license, or certification, please check with your licensing or certification board.

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