

LEAPFROG VALUE-BASED PURCHASING PROGRAM

2018 SCORING METHODOLOGY

SCORING OVERVIEW

The Leapfrog Value-Based Purchasing (VBP) Program[™] is a comprehensive hospital pay-for-performance program that focuses on the most important national patient safety, quality, and resource use standards. These standards are taken directly from the Leapfrog Hospital Survey, the results of which serve as the database for this program.

Through this program, a hospital is scored for its performance on each of Leapfrog's national standards. Individual measure scores, which range from 0 (lowest performance) to 100 (highest performance), are then compared against state and national averages. Individual measure scores are rolled up into six domains (Medication Safety, Inpatient Care Management, Infections, Maternity Care, Inpatient Surgery, and Pediatric Care) and then combined into an overall composite score referred to as the Value Score.

MEASURES

The Leapfrog VBP Program uses data collected through the Leapfrog Hospital Survey each year to evaluate hospital performance in numerous clinical areas:

- Medication Safety: Medication Safety Computerized Physician Order Entry (CPOE) and Bar Code Medication Administration (BCMA)
- Inpatient Care Management: ICU Physician Staffing (IPS), NQF Safe Practices, The Leapfrog Group "Never Events" Policy, and Antibiotic Stewardship Practices
- Infections: Central-Line Associated Blood Stream Infections (CLABSI) in ICUs and select wards, Catheter-Associated Urinary Tract Infections (CAUTI) in ICUs and select wards, Methicillin-resistant Staphylococcus Aureus (MRSA) Blood Laboratory-identified Events, Facility-wide inpatient Clostridium difficile (C.Diff.) Laboratory-identified Events, and Surgical Site Infections from colon surgery (SSI Colon)
- Maternity Care: Elective Deliveries, Cesarean Birth, Episiotomy, Process Measures of Quality (including Newborn Bilirubin Screening and DVT Prophylaxis for Women Undergoing Cesarean Section), and High-Risk Deliveries (i.e. Very Low Birthweight Babies)
- Inpatient Surgery: Carotid Endarterectomy, Mitral Valve Repair and Replacement, Open Abdominal Aortic Aneurysm Repair, Lung Resection for Cancer, Esophageal Resection for Cancer, Pancreatic Resection for Cancer, Rectal Cancer Surgery, and Bariatric Surgery for Weight Loss
- **Pediatric Care:** CAHPS Child Hospital Survey, Pediatric Computed Tomography (CT) Radiation Dose for Head Scans, Pediatric Computed Tomography (CT) Radiation Dose for Abdomen/Pelvis Scans



HOW ARE LEAPFROG VBP PROGRAM SCORES CALCULATED FOR EACH MEASURE?

Each measure score from the Leapfrog Hospital Survey is converted to a 0-100 scale so the measures can be combined into an overall Value Score. Zero always denotes poor performance and 100 always denotes excellent performance. As described below, the method varies depending on whether the measure is "categorical" or "continuous."

CATEGORICAL MEASURES

A categorical measure utilizes Leapfrog's performance categories: "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," "Unable to Calculate Score," "Does Not Apply," or "Declined to Respond." These are the same performance categories used to determine the number of bars displayed on Leapfrog's public reporting website: <u>http://www.leapfroggroup.org/compare-hospitals</u>. For the Leapfrog VBP Program Scoring Methodology, however, Leapfrog converts these performance categories into numerical values (0-100).

The categorical measures are scored in two ways—using pre-determined scores for each category (i.e. CPOE or IPS) or determining scores based on peer performance.

- The pre-determined scores were assigned by Leapfrog's national, multi-stakeholder Steering Committee. CPOE is an example of a categorical measure (a hospital "Fully Meets the Standard," "Substantial Progress," etc.) that uses pre-determined scores.
- 2. The peer comparison scores were determined by analyzing all hospitals' Survey data for a particular measure. In this method, an individual hospital's score represents the percentage of other hospitals that the individual hospital scored equal to or better than. High-Risk Deliveries is an example of a categorical measure that uses peer comparison scores. In essence, these scores show a hospital's performance as a numerical percentage compared to its peers.

CONTINUOUS MEASURES

A continuous measure is quantitative and is measured through a counting process or an interval continuum. For these measures, Leapfrog takes the values produced by all reporting hospitals and then determines the cut-off points for the top decile and the bottom decile. Hospitals in the bottom decile receive a score of 0 and hospitals in the top decile receive a score of 100. For hospitals that fall in between the top and bottom deciles, Leapfrog applies the following calculation:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

CLABSI Standardized Infection Ratio (SIR) is an example of a continuous measure. SIRs may fall anywhere along a continuum (i.e., 0.02, 1.27, 2.01, etc.). To compare SIRs in a consistent manner, Leapfrog ranks SIRs using cutpoints for the top and bottom deciles. SIRs of 0.000 represent the top decile (for a point value of 100) and SIRS of 1.630 or higher represent the bottom decile (for a point value of 0). Hospitals with data results in between the



0.000 and 1.630 cut-points are ranked in the deciles between the top and the bottom. To determine the decile in which a hospital ranks, Leapfrog applies the above calculation.

UNSCORED PERFORMANCE CATEGORIES

In the Leapfrog VBP Program Scoring Methodology, hospitals are not penalized if they do not perform certain procedures, or certain measures are not applicable to the hospital, which are scored and displayed as "Does Not Apply" on the Leapfrog's <u>public reporting website</u>. When a measure "Does Not Apply" to a hospital, no measure score is assigned. As a result, the remainder of hospitals' applicable measures within that domain will receive slightly higher weights. The weights from the non-applicable measures are reallocated across the applicable measures within the domain.

If a hospital did not meet Leapfrog's minimum sample size for a measure, they are scored and displayed as "Unable to Calculate Score" on Leapfrog's <u>public reporting website</u>. Hospitals are not penalized for measures where they did not have enough volume to meet our minimum sample size. "Unable to Calculate Score" is treated as "Does Not Apply" in the Leapfrog VBP Program Scoring Methodology (see details above).

Hospitals that chose not to report on applicable measures are scored and displayed as "Declined to Respond" on Leapfrog's <u>public reporting website</u>. Hospitals are penalized for measures they declined to report in the Survey, and so are given a measure score of zero (0).

SUMMARY SCORE CRITERIA

Leapfrog is not able to calculate the overall Value Score for hospitals that have too few scored and applicable measures. Leapfrog has established the following missing measure thresholds detailed below:

	# of Expected Measures (n= 27)	Expected Measures	Missing Measure Thresholds	Leapfrog is not able to calculate the Value Score for hospitals with scores for
Adult Hospitals	18	All (at least 1 Inpatient Surgery and 1 Pediatric Care measure)	1/2 must apply	8 or fewer measures (9 or more N/A)
Children's Hospitals	11	CPOE, IPS, Safe Practices, Never Events, CLABSI, CAUTI, Antibiotic Stewardship, BCMA, CAHPS Child Hospital Survey, CT Dose Head, CT Dose Abdomen/Pelvis	1/2 must apply	5 or fewer of the expected measures (6 or more N/A)
Critical Access Hospitals	9	CPOE, Early Elective Deliveries, C- Section, Episiotomy, Maternity Care Process, Safe Practices, Never Events, Antibiotic Stewardship, BCMA	1/2 must apply	4 or fewer of the expected measures (5 or more N/A)



DOMAINS AND MEASURES

The overall Value Score is based on six domains, which include Medication Safety, Inpatient Care Management, Infections, Maternity Care, Inpatient Surgery, and Pediatric Care. Each domain contributes a prescribed percentage to the overall score, and the measures within the domain are <u>weighted</u> based on the following criteria: Volume (number of patients impacted by the measure), Harm (severity of harm being measured or resulting from hospitals not adhering to the clinical guidelines being measured), and Resource Use (excess costs related to the measure). If a score is not available for one or more measures within a domain (i.e. a measure Does Not Apply to the hospital or did not meet volume requirements) then the weight for that measure is redistributed to the other measures <u>within that domain</u>. If all measures scores within a domain are missing, the weight from that domain is proportionally redistributed to the other domains based on their standard domain weights (i.e. the Medication Safety Domain will never be weighted more than the Inpatient Care Management Domain).

Domain Domain Weights		Measures	Measure Weights		
Medication Safety	15%	Medication Safety - CPOE	7.94%		
weulcation Salety	1370	Bar Code Medication Administration	7.06%		
	18%	ICU Physician Staffing (IPS)	6.30%		
Inpatient Care		NQF Safe Practices	4.50%		
Management		Never Events Policy	2.70%		
		Antibiotic Stewardship Practices	4.50%		
		CLABSI	5.13%		
		CAUTI	5.13%		
Infections	25%	SSI Colon	3.21%		
		MRSA	5.77%		
		C. Diff.	5.77%		
		Elective Deliveries	3.21%		
		Cesarean Birth	3.21%		
Maternity Care	15%	Episiotomy	2.68%		
		Process Measures of Quality	2.68%		
		High-Risk Deliveries	3.21%		
		Carotid Endarterectomy	2.00%		
		Mitral Valve Repair and Replacement	2.00%		
		Open Abdominal Aortic Aneurysm Repair	2.00%		
Inpatient Surgery	16%	Lung Resection for Cancer	2.00%		
		Esophageal Resection for Cancer	2.00%		
		Pancreatic Resection for Cancer	2.00%		
		Rectal Cancer Surgery	2.00%		
		Bariatric Surgery for Weight Loss	2.00%		
		CAHPS Child Hospital Survey	4.23%		
Pediatric Care	11%	Pediatric CT Dose Head	3.38%		
		Pediatric CT Dose Abdomen/Pelvis	3.38%		



DOMAIN 1: MEDICATION SAFETY

MEDICATION SAFETY - COMPUTERIZED PHYSICIAN ORDER ENTRY (CPOE)

Computerized Physician Order Entry (CPOE) measures hospitals' progress toward implementing a CPOE system, which has been proven to reduce errors and therefore mortalities. CPOE is a <u>categorical measure</u> —hospitals are scored on their performance category of "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Points assigned to each performance category:

- Fully Meets the Standard receives a score of 100
- Substantial Progress receives a score of 70
- Some Progress receives a score of 40
- Willing to Report receives a score of 15
- Declined to Respond receives a score of 0

CPOE is part of the Medication Safety Domain and receives a weight of 7.94% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 7.94% and adds this value to the remaining measure scores to derive the overall Value Score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

BAR CODE MEDICATION ADMINISTRATION (BCMA)

Bar Code Medication Administration (BCMA) measures hospitals' progress toward implementing BCMA in inpatient units, including medical/surgical units, adult, pediatric, and/or neonatal ICUs, and labor and delivery units. BCMA is a <u>categorical measure</u> —hospitals are scored on their performance category of "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Points assigned to each performance category:

- Fully Meets the Standard receives a score of 100
- Substantial Progress receives a score of 75
- Some Progress receives a score of 50
- Willing to Report receives a score of 25
- Declined to Respond receives a score of 0

BCMA is part of the Medication Safety Domain and receives a weight of 7.06% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 7.06% and adds this value to the remaining measure scores to derive the overall Value Score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.



DOMAIN 2: INPATIENT CARE MANAGEMENT

ICU PHYSICIAN STAFFING (IPS)

ICU Physician Staffing (IPS) measures hospitals' intensivist coverage in adult and pediatric medical and/or surgical ICUs and neuro ICUs, which significantly reduces mortality rates when implemented. IPS is a <u>categorical measure</u> in the Survey—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond" based on their reported data.

Leapfrog's expert Steering Committee determined the score for each level of achievement:

- Fully Meets the Standard receives a score of 100
- Substantial Progress receives a score of 50
- Some Progress receives a score of 15
- Willing to Report receives a score of 5
- Declined to Respond receives a score of 0

IPS is a part of the Inpatient Care Management Domain and receives a weight of 6.30% of the Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 6.30% and adds this calculation to the remaining measure scores to derive the overall Value Score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

NQF SAFE PRACTICES

Leapfrog applied the <u>peer comparison group methodology</u>* to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 24 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 24% of all hospitals)
- Some Progress receives a score of 12 (this means that hospitals with "Some Progress" for this measure did as well or better than 12% of all hospitals)
- Willing to Report receives a score of 9 (this means that hospitals with "Willing to Report" for this measure did as well or better than 9% of all hospitals)
- Declined to Respond receives a score of 0

NQF Safe Practices is an Inpatient Care Management measure and receives a weight of 4.50% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 4.50% and adds this calculation to the remaining measure scores to derive the overall Value Score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

*For measures where hospital performance is clustered, Leapfrog applies the <u>peer comparison group methodology</u> to ensure that all hospitals that score 'Fully Meets the Standard' on the Leapfrog Hospital Survey receive the full 100 points.



THE LEAPFROG GROUP "NEVER EVENTS" POLICY

Managing Serious Errors includes Leapfrog's Never Events policy which focuses on the process of reporting serious errors when they occur in hospitals. Never Events is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond" based on their reported data.

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 31 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 31% of all hospitals)
- Some Progress receives a score of 25 (this means that hospitals with "Some Progress" for this measure did as well or better than 25% of all hospitals)
- Willing to Report receives a score of 23 (this means that hospitals with "Willing to Report" for this measure did as well or better than 23% of all hospitals)
- Declined to Respond receives a score of 0

Never Events is an Inpatient Care Management measure and receives a weight of 2.70% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.70% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

ANTIBIOTIC STEWARDSHIP PRACTICES

The Antibiotic Stewardship Practices measure asks hospitals to report on their commitment to the CDC's Seven Core Elements of Antibiotic Stewardship Programs. This is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Willing to Report," or "Declined to Respond"—and represents 4.50% of the overall Value Score.

Points assigned to each performance category:

- Fully Meets the Standard receives a score of 100
- Willing to Report receives a score of 17
- Declined to Respond receives a score of 0

Antibiotic Stewardship is an Inpatient Care Management measure and receives a weight of 4.50% of the total score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 4.50% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.



DOMAIN 3: INFECTIONS

CENTRAL-LINE ASSOCIATED BLOOD STREAM INFECTIONS (CLABSI)

Central-Line Associated Blood Stream Infections is a <u>continuous measure</u> that assesses hospitals' level of performance for minimizing this hospital-acquired infection. The Leapfrog VBP Program score is based on the hospital's Standardized Infection Ratio (SIR).

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (SIR of 0.000) receives a score of 100.
- Bottom decile (SIR of 1.620 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

Central-Line Associated Bloodstream Infections receives a weight of 5.13% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 5.13% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS (CAUTI)

Catheter-Associated Urinary Tract Infection is a <u>continuous measure</u> that assesses hospitals' level of performance for minimizing this hospital-acquired infection. The Leapfrog VBP Program score is based on the hospital's Standardized Infection Ratio (SIR).

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (SIR of 0.000) receives a score of 100
- Bottom decile (SIR of 1.780 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

Catheter-Associated Urinary Tract Infections receives a weight of 5.13% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 5.13% and adds this calculation to



the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

SURGICAL SITE INFECTIONS FROM COLON SURGERY (SSI COLON)

SSI Colon is a <u>continuous measure</u> that assesses hospitals' level of performance for minimizing this healthcareassociated infection. The Leapfrog VBP Program score is based on the hospital's Standardized Infection Ratio (SIR).

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (SIR of 0.000) receives a score of 100
- Bottom decile (SIR of 1.860 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \text{ x} \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

SSI Colon receives a weight of 3.21% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.21% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) BLOOD LABORATORY-IDENTIFIED EVENTS

MRSA is a <u>continuous measure</u> that assesses hospitals' level of performance for minimizing this healthcareassociated infection. The Leapfrog VBP Program score is based on the hospital's Standardized Infection Ratio (SIR).

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (SIR of 0.000) receives a score of 100
- Bottom decile (SIR of 1.810 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

MRSA receives a weight of 5.77% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 5.77% and adds this calculation to the remaining measure scores to



derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

FACILITY-WIDE INPATIENT CLOSTRIDIUM DIFFICILE INFECTION (C. DIFF.) LABORATORY-IDENTIFIED EVENTS

C. Diff. is a <u>continuous measure</u> that assesses hospitals' level of performance for minimizing this healthcareassociated infection. The Leapfrog VBP Program score is based on the hospital's Standardized Infection Ratio (SIR).

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (SIR of 0.310 or lower) receives a score of 100
- Bottom decile (SIR of 1.290 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

C. Diff. receives a weight of 5.77% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 5.77% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

DOMAIN 4: MATERNITY CARE

ELECTIVE DELIVERIES

Leapfrog applied the <u>peer comparison group methodology</u>* to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 19 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 19% of all hospitals)
- Some Progress receives a score of 14 (this means that hospitals with "Some Progress" for this measure did as well or better than 14% of all hospitals)
- Willing to Report receives a score of 13 (this means that hospitals with "Willing to Report" for this measure did as well or better than 13% of all hospitals)
- Declined to Respond receives a score of 0



Early elective deliveries receive a weight of 3.21% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.21% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

*For measures where hospital performance is clustered, Leapfrog applies the <u>peer comparison group methodology</u> to ensure that all hospitals that score 'Fully Meets the Standard' on the Leapfrog Hospital Survey receive the full 100 points.

CESAREAN BIRTH

Leapfrog applied the <u>continuous measure</u> methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (rate of 17% or lower) receives a score of 100
- Bottom decile (rate of 35% or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

NTSV Cesarean Section receives a weight of 3.21% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.21% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

EPISIOTOMY

Leapfrog applied the <u>continuous measure</u> methodology to derive the decile cut-point levels for this measure. The following scores correlate to each decile:

- Top decile (rate of 1% or lower) receives a score of 100
- Bottom decile (rate of 15% or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

Measure Score = $100 \times \frac{\text{hospital's score - bottom decile score}}{\text{top decile score - bottom decile score}}$

• Declined to Respond receives a score of 0

Episiotomy receives a weight of 2.68% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.68% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.



PROCESS MEASURES OF QUALITY

The Process Measures of Quality include Newborn Bilirubin Screening and Appropriate DVT Prophylaxis which are <u>categorical measures</u>—hospitals received either "Fully Meets the Standard," "Some Progress," "Willing to Report," or "Declined to Respond" based on their reported data.

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- 1. Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- 2. Substantial Progress receives a score of 26 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 26% of all hospitals)
- 3. Some Progress receives a score of 26 (this means that hospitals with "Some Progress" for this measure did as well or better than 26% of all hospitals)
- 4. Willing to Report receives a score of 17 (this means that hospitals with "Willing to Report" for this measure did as well or better than 17% of all hospitals)
- 5. Declined to Respond receives a score of 0

The Process Measures of Quality receive a weight of 2.68% of the overall Value Score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.68% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is not applicable for other measures or domains.

HIGH-RISK DELIVERIES

High-Risk Deliveries is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 81 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 81% of all hospitals)
- Some Progress receives a score of 62 (this means that hospitals with "Some Progress" for this measure did as well or better than 62% of all hospitals)
- Willing to Report receives a score of 39 (this means that hospitals with "Willing to Report" for this measure did as well or better than 39% of all hospitals)
- Declined to Respond receives a score of 0

High-Risk Deliveries receives a weight of 3.21% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.21% and adds this calculation to the remaining



measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

DOMAIN 5: INPATIENT SURGERY

CAROTID ENDARTERECTOMY

Carotid Endarterectomy is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 88 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 88% of all hospitals)
- Some Progress receives a score of 74 (this means that hospitals with "Some Progress" for this measure did as well or better than 74% of all hospitals)
- Willing to Report receives a score of 43 (this means that hospitals with "Willing to Report" for this measure did as well or better than 43% of all hospitals)
- Declined to Respond receives a score of 0

Carotid Endarterectomy receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

MITRAL VALVE REPAIR AND REPLACEMENT

Mitral Valve Repair and Replacement is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 95 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 95% of all hospitals)
- Some Progress receives a score of 89 (this means that hospitals with "Some Progress" for this measure did as well or better than 89% of all hospitals)
- Willing to Report receives a score of 73 (this means that hospitals with "Willing to Report" for this measure did as well or better than 73% of all hospitals)



• Declined to Respond receives a score of 0

Mitral Valve Repair and Replacement receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

OPEN ABDOMINAL AORTIC ANEURYSM REPAIR

Open Abdominal Aortic Aneurysm Repair is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 98 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 98% of all hospitals)
- Some Progress receives a score of 97 (this means that hospitals with "Some Progress" for this measure did as well or better than 97% of all hospitals)
- Willing to Report receives a score of 82 (this means that hospitals with "Willing to Report" for this measure did as well or better than 82% of all hospitals)
- Declined to Respond receives a score of 0

Open Abdominal Aortic Aneurysm Repair receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

LUNG RESECTION FOR CANCER

Lung Resection for Cancer is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 96 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 96% of all hospitals)
- Some Progress receives a score of 91 (this means that hospitals with "Some Progress" for this measure did as well or better than 91% of all hospitals)



- Willing to Report receives a score of 75 (this means that hospitals with "Willing to Report" for this measure did as well or better than 75% of all hospitals)
- Declined to Respond receives a score of 0

Lung Resection for Cancer receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is not applicable for other measures or domains.

ESOPHAGEAL RESECTION FOR CANCER

Esophageal Resection for Cancer is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 99 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 99% of all hospitals)
- Some Progress receives a score of 97 (this means that hospitals with "Some Progress" for this measure did as well or better than 97% of all hospitals)
- Willing to Report receives a score of 87 (this means that hospitals with "Willing to Report" for this measure did as well or better than 87% of all hospitals)
- Declined to Respond receives a score of 0

Esophageal Resection for Cancer receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

PANCREATIC RESECTION FOR CANCER

Pancreatic Resection for Cancer is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 97 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 97% of all hospitals)



- Some Progress receives a score of 92 (this means that hospitals with "Some Progress" for this measure did as well or better than 92% of all hospitals)
- Willing to Report receives a score of 80 (this means that hospitals with "Willing to Report" for this measure did as well or better than 80% of all hospitals)
- Declined to Respond receives a score of 0

Pancreatic Resection for Cancer receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

RECTAL CANCER SURGERY

Rectal Cancer Surgery is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 96 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 96% of all hospitals)
- Some Progress receives a score of 90 (this means that hospitals with "Some Progress" for this measure did as well or better than 90% of all hospitals)
- Willing to Report receives a score of 70 (this means that hospitals with "Willing to Report" for this measure did as well or better than 70% of all hospitals)
- Declined to Respond receives a score of 0

Rectal Cancer Surgery receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

BARIATRIC SURGERY FOR WEIGHT LOSS

Bariatric Surgery for Weight Loss is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

• Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)



- Substantial Progress receives a score of 73 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 73% of all hospitals)
- Some Progress receives a score of 63 (this means that hospitals with "Some Progress" for this measure did as well or better than 63% of all hospitals)
- Willing to Report receives a score of 42 (this means that hospitals with "Willing to Report" for this measure did as well or better than 42% of all hospitals)
- Declined to Respond receives a score of 0

Bariatric Surgery for Weight Loss receives a weight of 2.00% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 2.00% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

DOMAIN 6: PEDIATRIC CARE

CAHPS CHILD HOSPITAL SURVEY

CAHPS Child Hospital Survey is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 94 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 94% of all hospitals)
- Some Progress receives a score of 89 (this means that hospitals with "Some Progress" for this measure did as well or better than 89% of all hospitals)
- Willing to Report receives a score of 87 (this means that hospitals with "Willing to Report" for this measure did as well or better than 87% of all hospitals)
- Declined to Respond receives a score of 0

CAHPS Child Hospital Survey receives a weight of 4.23% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 4.23% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.

PEDIATRIC COMPUTED TOMOGRAPHY (CT) RADIATION DOSE FOR HEAD SCANS

CT Dose for Head Scans is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."



Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 66 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 66% of all hospitals)
- Some Progress receives a score of 54 (this means that hospitals with "Some Progress" for this measure did as well or better than 54% of all hospitals)
- Willing to Report receives a score of 46 (this means that hospitals with "Willing to Report" for this measure did as well or better than 46% of all hospitals)
- Declined to Respond receives a score of 0

CT Dose for Head Scans receives a weight of 3.38% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.38% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not</u> <u>applicable</u> for other measures or domains.

PEDIATRIC COMPUTED TOMOGRAPHY (CT) RADIATION DOSE FOR ABDOMEN/PELVIS SCANS

CT Dose for Abdomen/Pelvis Scans is a <u>categorical measure</u>—hospitals received either "Fully Meets the Standard," "Substantial Progress," "Some Progress," "Willing to Report," or "Declined to Respond."

Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets the Standard receives a score of 100 (this means that hospitals with "Fully Meets the Standard" for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 66 (this means that hospitals with "Substantial Progress" for this measure did as well or better than 66% of all hospitals)
- Some Progress receives a score of 49 (this means that hospitals with "Some Progress" for this measure did as well or better than 49% of all hospitals)
- Willing to Report receives a score of 42 (this means that hospitals with "Willing to Report" for this measure did as well or better than 42% of all hospitals)
- Declined to Respond receives a score of 0

CT Dose for Abdomen/Pelvis Scans receives a weight of 3.38% of the overall Value score. The Leapfrog VBP Program Scoring Methodology multiplies a hospital's score (from above) by 3.38% and adds this calculation to the remaining measure scores to derive the overall score. Note that this standard weight may differ if your hospital is <u>not applicable</u> for other measures or domains.



MEASURE AND DOMAIN WEIGHTING

The weighting framework is based on assigning a Volume, Harm, and Resource Score to each measure, on a scale from 1 to 3, with 3 being the highest impact and 1 being the lowest impact. These scores are summed to result in a measure's weight factor. Within each domain, each measure is assigned a weight based on the proportion of the overall weight factor that it contributes to the domain.

Domain	Measures	Volume Score	Harm Score	Resource Score	Weight Factor (Summed)	Domain Weights	Measure Weights
Medication	CPOE	3	3	3	9	15%	7.94%
Safety	BCMA	2	3	3	8		7.06%
Inpatient Care Management	ICU Physician Staffing	2	3	2	7	18%	6.30%
	NQF Safe Practices	3	1	1	5		4.50%
	Never Events Policy	1	1	1	3		2.70%
	Antibiotic Stewardship	3	1	1	5		4.50%
Infections	CLABSI	2	3	3	8	25%	5.13%
	CAUTI	3	3	2	8		5.13%
	SSI Colon	1	2	2	5		3.21%
	MRSA	3	3	3	9		5.77%
	C. Diff.	3	3	3	9		5.77%
Maternity Care	Elective Deliveries	1	2	3	6		3.21%
	Cesarean Birth	1	2	3	6		3.21%
	Episiotomy	1	2	2	5	15%	2.68%
	Process Measures of Quality	1	2	2	5	10/0	2.68%
	High-Risk Deliveries	1	2	3	6		3.21%
	Carotid Endarterectomy	1	2	2	5		2.00%
Inpatient Surgery	Mitral Valve Repair and Replacement	1	2	2	5		2.00%
	Open Abdominal Aortic Aneurysm Repair	1	2	2	5		2.00%
	Lung Resection for Cancer	1	2	2	5		2.00%
	Esophageal Resection for Cancer	1	2	2	5	16%	2.00%
	Pancreatic Resection for Cancer	1	2	2	5		2.00%
	Rectal Cancer Surgery	1	2	2	5		2.00%
	Bariatric Surgery for Weight Loss	1	2	2	5		2.00%
De distais	CAHPS	3	1	1	5		4.23%
Pediatric Care	CT Dose Head	1	2	1	4	11%	3.38%
	CT Dose Abdomen/Pelvis	1	2	1	4		3.38%