LEAPFROG VALUE-BASED PURCHASING PLATFORM

2016 SCORING METHODOLOGY

SCORING OVERVIEW

The Leapfrog Value-Based Purchasing (VBP) Platform™ 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 platform.

Through this platform, 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 measures scores are rolled up into five domains (Medication Safety, Inpatient Care Management, High-Risk Surgeries, Maternity Care, and Hospital-Acquired Conditions) and then combined into an overall composite score referred to as the Value Score.

MEASURES

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

- **Medication Safety**: Computerized Physician Order Entry (CPOE) and Bar Code Medication Administration (BCMA)
- **Inpatient Care Management**: ICU Physician Staffing, NQF Safe Practices, Never Events Policy, Antibiotic Stewardship, and Hospital Readmission
- **Infections and Injuries**: Central-Line Associated Blood Stream Infections (ICU only), Catheter-Associated Urinary Tract Infections (ICU only), Facility-wide Inpatient Hospital-onset MRSA, Facility-wide Inpatient Hospital-onset C.Diff., Surgical Site Infection after Colon Surgery, Hospital-Acquired Pressure Ulcers, and Hospital-Acquired Falls/Trauma
- **High-Risk Surgeries**: Aortic Valve Replacement (AVR), Abdominal Aortic Aneurysm Repair (AAA), Pancreatic Resection, and Esophageal Resection
- **Maternity Care**: Early Elective Deliveries, NTSV Cesarean Sections, Episiotomies, Maternity Care Process (including Newborn Bilirubin Screening and DVT Prophylaxis for Women Undergoing Cesarean Section), and High-Risk Deliveries (i.e. Very Low Birthweight Babies)
HOW ARE LEAPFROG VBP PLATFORM 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. Leapfrog developed methods to convert each survey measure to the 0-100 scale. 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 Standards,” “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, http://www.leapfroggroup.org/compare-hospitals. For the Leapfrog VBP Platform 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.

1. 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 standards,” “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. AAA 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:

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

CLABSI Standard 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 cut-points for the top and bottom deciles. SIRs of 0.000 represent the top decile (for a point value of 100) and SIRs of 1.240 or higher represent the bottom decile (for a point value of 0). Hospitals with data results in between the 0.000 and 1.240 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 Platform 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 public reporting website. 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 public reporting website. 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 Platform 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 public reporting website. 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:

<table>
<thead>
<tr>
<th></th>
<th># of Expected Measures (n=23)</th>
<th>Expected Measures</th>
<th>Missing Measure Thresholds</th>
<th>Leapfrog is not able to calculate the Value Score for hospitals with scores for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Hospitals</td>
<td>23</td>
<td>All</td>
<td>1/2 must apply</td>
<td>11 or fewer measures (12 or more N/A)</td>
</tr>
<tr>
<td>Children’s Hospitals</td>
<td>8</td>
<td>CPOE, IPS, Safe Practices, Never Events, CLABSI, CAUTI, Antibiotic Stewardship, BCMA</td>
<td>1/2 must apply</td>
<td>3 or fewer of the expected measures (5 or more N/A)</td>
</tr>
<tr>
<td>Critical Access Hospitals</td>
<td>9</td>
<td>CPOE, Early Elective Deliveries, C-Section, Episiotomy, Maternity Care Process, Safe Practices, Never Events, Antibiotic Stewardship, BCMA</td>
<td>1/2 must apply</td>
<td>4 or fewer of the expected measures (5 or more N/A)</td>
</tr>
</tbody>
</table>
The overall Value Score is based on 5 domains, which include Medication Safety, Inpatient Care Management, Infections and Injuries, Maternity Care, and High-Risk Surgeries. Each domain contributes a prescribed percentage to the overall score, and the measures within the domain are weighted 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 within that domain. 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).

<table>
<thead>
<tr>
<th>Domain</th>
<th>Domain Weight</th>
<th>Measures</th>
<th>Measure Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Safety</td>
<td>15%</td>
<td>CPOE</td>
<td>7.94%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BCMA</td>
<td>7.06%</td>
</tr>
<tr>
<td>Inpatient Care Management</td>
<td>20%</td>
<td>ICU Physician Staffing</td>
<td>5.38%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safe Practices</td>
<td>3.85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never Events</td>
<td>2.31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Antibiotic Stewardship</td>
<td>3.85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hospital Readmission</td>
<td>4.62%</td>
</tr>
<tr>
<td>Infections and Injuries</td>
<td>35%</td>
<td>CLABSI</td>
<td>5.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CAUTI</td>
<td>4.29%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MRSA</td>
<td>5.71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. Diff</td>
<td>6.43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SSI Colon</td>
<td>3.57%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pressure Ulcers</td>
<td>5.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Injuries</td>
<td>5.00%</td>
</tr>
<tr>
<td>Maternity Care</td>
<td>15%</td>
<td>Early Elective Deliveries</td>
<td>3.21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cesarean Section</td>
<td>3.21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Episiotomy</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maternity Care Process</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High-Risk Delivery</td>
<td>3.21%</td>
</tr>
<tr>
<td>High-Risk Surgeries</td>
<td>15%</td>
<td>AVR</td>
<td>3.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AAA</td>
<td>3.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Esophagectomy</td>
<td>3.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pancreatectomy</td>
<td>3.75%</td>
</tr>
</tbody>
</table>
DOMAIN 1: MEDICATION SAFETY

COMPUTER PHYSICIAN ORDER ENTRY (CPOE)

Computer Physician Order Entry (CPOE) measures a hospitals’ progress toward implementing a CPOE system, which has been proven to reduce errors and therefore mortalities. CPOE is a categorical measure — hospitals are scored on their performance category of “Fully Meets Standards,” “Substantial Progress,” “Some Progress,” “Willing to Report,” or “Declined to Respond.”

Points assigned to each performance category:

- Fully Meets 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

CPOE is part of the Medication Safety Domain, and receives a weight of 7.94% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score 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 not applicable for other measures or domains.

BAR CODE MEDICATION ADMINISTRATION (BCMA)

Bar Code Medication Administration (BCMA) measures hospital’s progress toward implementing BCMA in inpatient units, including medical/surgical units and adult, pediatric, and/or neonatal Intensive Care. BCMA is a categorical measure — hospitals are scored on their performance category of “Fully Meets Standards,” “Substantial Progress,” “Some Progress,” “Willing to Report,” or “Declined to Respond.”

Points assigned to each performance category:

- Fully Meets 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

BCMA is part of the Medication Safety Domain, and receives a weight of 7.06% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score 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 not applicable for other measures or domains.
DOMIAN 2: INPATIENT CARE MANAGEMENT

ICU PHYSICIAN STAFFING (IPS)

ICU Physician Staffing (IPS) is one of Leapfrog’s “leaps” and measures hospitals’ intensivist coverage, which significantly reduces mortality rates when implemented. IPS is a categorical measure in the Survey—hospitals received either “Fully Meets Standards,” “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 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 5.38% of the Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 5.38% 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 not applicable for other measures or domains.

NQF SAFE PRACTICES

The Safe Practices are treated as a continuous measure. The Leapfrog Hospital Survey contains 8 Safe Practices measures, which are part of the Inpatient Care Management Domain.

Leapfrog applied the continuous measure methodology to derive the decile cut-point levels for this measure. The maximum possible value for Safe Practices is 485 points across the 8 measures. The following scores correlate to each decile:

- Hospitals receiving 485.00 points are considered top performers for this measure and receive a score of 100.
- Hospitals receiving 404.73 points or lower are considered the bottom decile for this measure and receive a score of 0.
- Scores in-between top and bottom deciles are calculated using the following formula:

  \[
  \text{Measure Score} = 100 \times \frac{\text{hospital's score} - \text{bottom decile score}}{485.00 - \text{bottom decile score}}
  \]

- Declined to respond receives a score of 0

Safe Practices is an Inpatient Care Management measure and receives a weight of 3.85% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.85% 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 not applicable for other measures or domains.

**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 categorical measure—hospitals received either “Fully Meets Standards,” “Willing to Report,” or “Declined to Respond”—and represents 2.31% of the overall Value Score.

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

- Fully Meets Standards receives a score of 100
- Willing to Report receives a score of 23
- Declined to Respond receives a score of 0

Never Events is an Inpatient Care Management measure and receives a weight of 2.31% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 2.31% 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.

**ANTIBIOTIC STEWARDSHIP**

Antibiotic Stewardship is a new section of The Leapfrog Hospital Survey that asks hospitals to report on their commitment to the CDC’s Seven Core Elements of Antibiotic Stewardship Programs. This is a categorical measure—hospitals received either “either “Fully Meets Standards,” “Willing to Report,” or “Declined to Respond”—and represents 3.85% of the overall Value Score.

Points assigned to each performance category:

- Fully Meets Standard receives a score of 100
- Willing to Report receives a score of 25
- Declined to Respond receives a score of 0

Antibiotic Stewardship is an Inpatient Care Management measure and receives a weight of 3.85% of the total score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.85% 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.

**HOSPITAL READMISSION FOR COMMON ACUTE CONDITIONS**

The readmissions composite, which includes six common acute conditions (AMI, HF, PN, COPD, THA/TKA, and CABG) is included in the Inpatient Care Management Domain. Because these measures are already combined into
a composite score, Leapfrog applied the peer comparison group methodology for this categorical measure. The following scores correlate to each category:

- Fully Meets Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 93 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 93% of all hospitals)
- Some Progress receives a score of 52 (this means that hospitals with “Some Progress” for this measure did as well or better than 52% of all hospitals)
- Willing to Report receives a score of 16 (this means that hospitals with “Willing to Report” for this measure did as well or better than 16% of all hospitals)
- Declined to Respond receives a score of 0

The readmissions composite receives a weight of 4.62% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 4.62% 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.

**DOMAIN 3: INFECTIONS AND INJURIES**

**CENTRAL-LINE ASSOCIATED BLOOD STREAM INFECTIONS (CLABSI)**

Central-Line Associated Blood Stream Infections are reported as a Standard Infection Ratio (SIR) on the Leapfrog Hospital Survey. This is a continuous measure that assesses hospitals’ level of performance for minimizing this hospital-acquired condition. The Leapfrog VBP Platform 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. In other words, hospitals must achieve a CLABSI SIR of zero to score 100 points.
- Bottom decile (SIR of 1.080 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

Central-Line Associated Bloodstream Infection Rates receives a weight of 5.00% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 5.00% 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.
CATHETER-ASSOCIATED URINARY TRACT INFECTIONS (CAUTI)

Catheter-associated Urinary Tract Infection Rate is a continuous measure that assesses hospitals’ level of performance for minimizing this hospital-acquired condition.

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 1.240 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

Catheter-associated Urinary Tract receives a weight of 4.29% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 4.29% 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.

FACILITY-WIDE INPATIENT HOSPITAL-ONSET METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) BACTEREMIA

MRSA is a continuous measure that assesses a hospitals’ level of performance for minimizing this hospital-acquired condition.

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 1.950 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

MRSA receives a weight of 5.71% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 5.71% 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.
FACILITY-WIDE INPATIENT HOSPITAL-ONSET CLOSTRIDIUM DIFFICILE INFECTION (C. DIFF)

C. Diff is a continuous measure that assesses a hospitals’ level of performance for minimizing this hospital-acquired condition.

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 0.340 or lower) receives a score of 100
- Bottom decile (SIR of 1.480 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

C. Diff receives a weight of 6.43% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 6.43% 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.

SURGICAL SITE INFECTION: MAJOR COLON SURGERY (SSI COLON)

SSI Colon is a continuous measure that assesses a hospitals’ level of performance for minimizing this hospital-acquired condition.

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 1.960 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

SSI Colon receives a weight of 3.57% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.57% 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.
**HOSPITAL-ACQUIRED PRESSURE ULCERS**

Managing Serious Errors includes tracking Hospital-Acquired Pressure Ulcers which focus on the process of reporting serious errors when they occur in hospitals. Hospital-Acquired Pressure Ulcers is a continuous measure—and represents 5.00% of the overall score.

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 (rate of 0.00) receives a score of 100
- Bottom decile (rate of 0.26 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

Hospital-Acquired Pressure Ulcers receives a weight of 5.00% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 5.00% 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.

**HOSPITAL-ACQUIRED INJURIES**

Managing Serious Errors includes tracking Hospital-Acquired Injuries which focus on the process of reporting serious errors when they occur in hospitals. Hospital-Acquired Injuries is a continuous measure—and represents 5.00% of the overall score.

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 (rate of 0.00) receives a score of 100
- Bottom decile (rate of 0.83 or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:

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

- Declined to Respond receives a score of 0

Hospital-Acquired Injuries receives a weight of 5.00% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 5.00% 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.
DOMAIN 4: MATERNITY CARE

EARLY ELECTIVE DELIVERIES

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 (rate of 0%) receives a score of 100
- Bottom decile (rate of 6% or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:
  \[ \text{Measure Score} = 100 \times \frac{\text{hospital's score} - \text{bottom decile score}}{\text{top decile score} - \text{bottom decile score}} \]
- 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 Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.21% and adds this calculation to the remaining quality 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.

NTSV CESAREAN SECTION

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 (rate of 16%) receives a score of 100
- Bottom decile (rate of 37% or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:
  \[ \text{Measure Score} = 100 \times \frac{\text{hospital's score} - \text{bottom decile score}}{\text{top decile score} - \text{bottom decile score}} \]
- Declined to Respond receives a score of 0

NTSV C-Section receives a weight of 3.21% of the overall Value Score. The Leapfrog VBP Platform 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 not applicable for other measures or domains.
EPISIOTOMY

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 (rate of 2%) receives a score of 100
- Bottom decile (rate of 21% or higher) receives a score of 0
- Scores in-between top and bottom deciles are calculated using the following formula:
  \[
  \text{Measure Score} = 100 \times \frac{\text{hospital's score} - \text{bottom decile score}}{\text{top decile score} - \text{bottom decile score}}
  \]

- Declined to Respond receives a score of 0

Episiotomy receives a weight of 2.68% of the overall Value Score. The Leapfrog VBP Platform 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.

MATERNITY CARE QUALITY (PROCESS OF CARE)

The Processes of Care Measure include Newborn Bilirubin Screening and Appropriate DVT Prophylaxis which are categorical measures—hospitals received either “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
2. Some Progress receives a score of 24 (this means that hospitals with “Some Progress” for this measure did as well or better than 24% of all hospitals)
3. Willing to Report receives a score of 14 (this means that hospitals with “Willing to Report” for this measure did as well or better than 14% of all hospitals)
4. Declined to Respond receives a score of 0

The Processes of Care Measure receive a weight of 2.68% of the overall Value Score. The Leapfrog VBP Platform 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 NEWBORN DELIVERY

High-Risk Newborn Delivery is a categorical measure—hospitals received either “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 80 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 80% of all hospitals)
- Some Progress receives a score of 56 (this means that hospitals with “Some Progress” for this measure did as well or better than 56% of all hospitals)
- Willing to Report receives a score of 38 (this means that hospitals with “Willing to Report” for this measure did as well or better than 38% of all hospitals)
- Declined to Respond receives a score of 0

High-Risk Newborn Delivery receives a weight of 3.21% of the overall Value score. The Leapfrog VBP Platform 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 not applicable for other measures or domains.

DOMAIN 5: HIGH-RISK SURGERIES

AORTIC VALVE REPLACEMENT (AVR)

AVR is a categorical measure—hospitals received “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 82 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 82% of all hospitals)
- Some Progress receives a score of 44 (this means that hospitals with “Some Progress” for this measure did as well or better than 44% of all hospitals)
- Willing to Report receives a score of 33 (this means that hospitals with “Willing to Report” for this measure did as well or better than 33% of all hospitals)
- Declined to Respond receives a score of 0
AVR is part of the High Risk Surgeries Domain and receives a weight of 3.75% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital's score (from above) by 3.75% 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.

**ABDOMINAL AORTIC ANEURYSM REPAIR (AAA)**

AAA is a [categorical measure](#)—hospitals received either “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 70 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 70% of all hospitals)
- Some Progress receives a score of 44 (this means that hospitals with “Some Progress” for this measure did as well or better than 44% of all hospitals)
- Willing to Report receives a score of 26 (this means that hospitals with “Willing to Report” for this measure did as well or better than 26% of all hospitals)
- Declined to Respond receives a score of 0

AAA is part of the High Risk Surgeries Domain and receives a weight of 3.75% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital's score (from above) by 3.75% 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.

**PANCREATECTOMY**

Pancreatectomy is a [categorical measure](#)—hospitals received either “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 61 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 61% of all hospitals)
- Some Progress receives a score of 47 (this means that hospitals with “Some Progress” for this measure did as well or better than 47% of all hospitals)
- Willing to Report receives a score of 36 (this means that hospitals with “Willing to Report” for this measure did as well or better than 36% of all hospitals)
- Declined to Respond receives a score of 0
Pancreatectomy receives a weight of 3.75% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.75% 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.

**ESOPHAGECTOMY**

Esophagectomy is a categorical measure—hospitals received either “Fully Meets Standards,” “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 Standards receives a score of 100 (this means that hospitals with “Fully Meets Standards” for this measure did as well or better than 100% of all hospitals)
- Substantial Progress receives a score of 71 (this means that hospitals with “Substantial Progress” for this measure did as well or better than 71% of all hospitals)
- Some Progress receives a score of 53 (this means that hospitals with “Some Progress” for this measure did as well or better than 53% of all hospitals)
- Willing to Report receives a score of 36 (this means that hospitals with “Willing to Report” for this measure did as well or better than 36% of all hospitals)
- Declined to Respond receives a score of 0

Esophagectomy receives a weight of 3.75% of the overall Value Score. The Leapfrog VBP Platform Scoring Methodology multiplies a hospital’s score (from above) by 3.75% 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.

**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.
<table>
<thead>
<tr>
<th>Domain</th>
<th>Measures</th>
<th>Volume Score</th>
<th>Harm Score</th>
<th>Resource Score</th>
<th>Weight Factor (Summed)</th>
<th>Domain Weight</th>
<th>Measure Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Safety</td>
<td>CPOE</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>15%</td>
<td>7.94%</td>
</tr>
<tr>
<td></td>
<td>BCMA</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>7.06%</td>
<td></td>
</tr>
<tr>
<td>Inpatient Care Management</td>
<td>ICU Physician Staffing</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>5.38%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safe Practices</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3.85%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never Events</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2.31%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Antibiotic Stewardship</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3.85%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital Readmission</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>4.62%</td>
<td></td>
</tr>
<tr>
<td>Infections and Injuries</td>
<td>CLABS</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAUTI</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>4.29%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MRSA</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>5.71%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Diff</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>6.43%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSI Colon</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>3.57%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pressure Ulcers</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Injuries</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td>Maternity Care</td>
<td>Early Elective Deliveries</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>3.21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cesarean Section</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>3.21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Episiotomy</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>2.68%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maternity Care Process</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>2.68%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High-Risk Delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>3.21%</td>
<td></td>
</tr>
<tr>
<td>High-Risk Surgeries</td>
<td>AVR</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3.75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAA</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3.75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Esophagectomy</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3.75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pancreatectomy</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3.75%</td>
<td></td>
</tr>
</tbody>
</table>