

The Leapfrog Hospital Survey Scoring Algorithms

**Scoring Details for Sections 2 – 9 of the
2017 Leapfrog Hospital Survey**



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2017 Leapfrog Hospital Survey Scoring Algorithms

<http://leapfroggroup.org/survey>

This document includes the scoring algorithms for the 2017 Leapfrog Hospital Survey. The scoring algorithms are organized by section:

- Section 2 Medication Safety - Computerized Physician Order Entry (CPOE)
- Section 3 Inpatient Surgery
- Section 4 Maternity Care
- Section 5 ICU Physician Staffing
- Section 6 Safe Practices Score
- Section 7 Managing Serious Errors
- Section 8 Medication Safety
- Section 9 Pediatric Care

For a hard copy of the Leapfrog Hospital Survey, which includes measure specifications, end notes, and FAQs, please visit the [Survey and CPOE Materials webpage](#).

Leapfrog is committed to data accuracy. Please carefully review Leapfrog's data accuracy protocols on our [website](#).

Scoring and Public Reporting Overview

Once a hospital submits a Leapfrog Hospital Survey via the [online survey tool](#), the submitted responses are scored using the algorithms detailed in this document. Only those responses that have been submitted are scored and publicly reported; saved responses are not scored or publicly reported.

Those hospitals that meet Leapfrog's June 30 reporting deadline will be able to view their survey results on Leapfrog's public [website](#) on **July 25**. In addition, those hospitals will be able to preview their survey results, including their [NHSN infection data](#) on the [Hospital Details Page](#) on **July 12**, about two weeks prior to the public release.

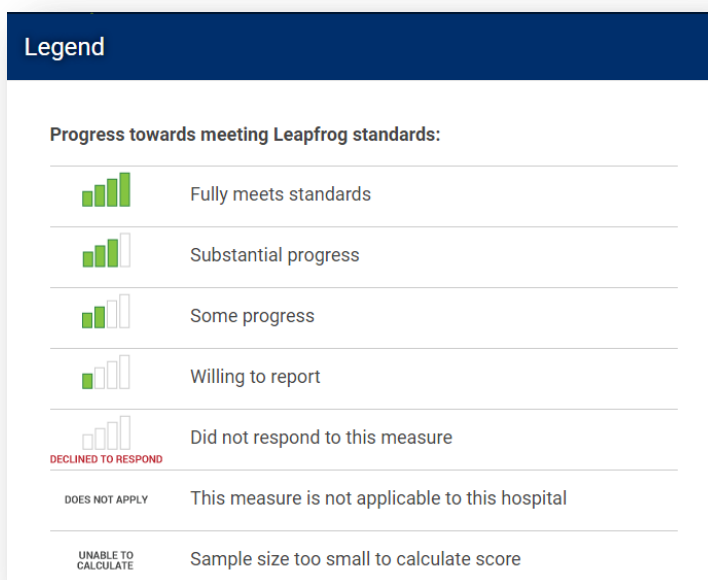
After July 25, the Hospital Details page and public reporting website will be refreshed monthly within the first 5 business days of each month to reflect new and updated survey submissions until the survey closes for the year on December 31, 2017. More information about survey submission deadlines is available on our [website](#).

For the purposes of public reporting, performance on each measure on the Leapfrog Hospital Survey is placed into one of four performance categories:

- **Fully Meets the Standard** (displayed as four-filled bars)
- **Substantial Progress** (displayed as three-filled bars)
- **Some Progress** (displayed as two-filled bars)
- **Willing to Report** (displayed as one-filled bar)

Additional scoring terms include:

- **Does Not Apply:** This term is used for hospitals that report not performing a particular procedure (e.g., SSI Colon) or not having a particular unit (e.g., ICU).
- **Unable to Calculate Score:** This term is used for hospitals that report a sample size that does not meet Leapfrog's minimum reporting requirements.
- **Declined to Respond:** This term is used for hospitals that do not submit a survey or a particular section of the survey.



For the purposes of [public reporting](#), measures are grouped together under four main tabs. The following measures are included in each tab:

Tab Name	Section/Subsection	Measure Name	Shown on public reporting website as:
Inpatient Care Management	Section 6	NQF Safe Practices	<i>Steps to Avoid Harm</i>
	Subsection 7A	Never Events Policy	<i>Never Events Management</i>
	Subsection 7D	Antibiotic Stewardship Practices	<i>Appropriate Use of Antibiotics in Hospitals</i>
	Section 5	ICU Physician Staffing	<i>Specially Trained Doctors Care for ICU Patients</i>
Medication Safety	Section 2	Medication Safety - Computerized Physician Order Entry (CPOE)	<i>Doctors Order Medications Through a Computer</i>
	Section 8A	Bar Code Medication Administration (BMCA)	<i>Safe Medication Administration</i>
Maternity Care	Subsection 4B	Elective Delivery	<i>Early Elective Deliveries</i>
	Subsection 4C	Cesarean Birth	<i>Cesarean Sections</i>
	Subsection 4D	Episiotomy	<i>Episiotomies</i>
	Subsection 4E	Maternity Care Processes	<i>Maternity Care Processes</i>
	Subsection 4F	High-Risk Deliveries	<i>High-Risk Deliveries</i>
Injuries and Infections	Subsection 7B	Central Line-Associated Blood Stream Infections (CLABSI) in ICUs and Select Wards	<i>Central Line Infections</i>
	Subsection 7B	Catheter-Associated Urinary Tract Infections (CAUTI) in ICUs and Select Wards	<i>Urinary Catheter Infections</i>
	Subsection 7B	Facility-wide inpatient MRSA Blood Laboratory-identified Events	<i>MRSA Infections</i>
	Subsection 7B	Facility-wide inpatient C. Diff. Laboratory-identified Events	<i>C. Difficile Infections</i>
	Subsection 7B	Surgical Site Infection: Colon	<i>Surgical Site Infections Following Major Colon Surgery</i>
	Subsection 7C	Pressure Ulcers	<i>Hospital-Acquired Pressure Ulcers</i>
	Subsection 7C	Injuries	<i>Hospital-Acquired Injuries</i>

As a reminder, Section 3 Inpatient Surgery, Section 8B Medication Reconciliation, and Section 9 Pediatric Care will not be scored or publicly reported in 2017.

Section 2: 2017 Medication Safety - Computerized Physician Order Entry (CPOE) Scoring Algorithms
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CPOE Scoring Algorithm for Adult/General Hospitals

Implementation Status (from Leapfrog Hospital Survey Questions #3-4)	Score on CPOE Evaluation Tool					
	Full Demonstration of National Safety Standard for Decision Support	Substantial Demonstration of National Safety Standard for Decision Support	Some Demonstration of National Safety Standard for Decision Support	Completed The Evaluation	Insufficient Evaluation	Incomplete Evaluation (Failed deception analysis or timed out) -or- Did not complete an evaluation
75% or greater of all inpatient medication orders entered through CPOE System	Fully Meets the Standard	Fully Meets the Standard	Substantial Progress	Substantial Progress	Unable to Calculate Score	Willing to Report
50-74% of all inpatient medication orders entered through CPOE System	Substantial Progress	Substantial Progress	Substantial Progress	Some Progress	Unable to Calculate Score	Willing to Report
25-49% of all inpatient medication orders entered through CPOE System	Substantial Progress	Some Progress	Some Progress	Some Progress	Unable to Calculate Score	Willing to Report
CPOE implemented in at least one inpatient unit but <25% of all inpatient medication orders entered through CPOE System	Some Progress	Some Progress	Willing to Report	Willing to Report	Unable to Calculate Score	Willing to Report
CPOE not implemented in at least one inpatient unit	Cannot take CPOE Evaluation Tool; hospital will be scored as "Willing to Report"					

Declined to respond:

The hospital did not respond to this section of the survey or did not complete the survey.

Additional information about the criteria for scoring the CPOE Evaluation Tool can be found on the [Scoring and Results](#) webpage.

CPOE Scoring Algorithm for Pediatric Hospitals

CPOE Score (Performance category)	Implementation Status (from Leapfrog Hospital Survey Questions #3-4)
Fully Meets the Standard	<i>75% or greater of all inpatient medication orders entered through CPOE System</i>
Substantial Progress	<i>50-74% of all inpatient medication orders entered through CPOE System</i>
Some Progress	<i>25-49% of all inpatient medication orders entered through CPOE System</i>
Willing to Report	<i>CPOE implemented in at least one inpatient unit but <25% of all inpatient medication orders entered through CPOE System OR CPOE not implemented in at least one inpatient unit</i>
Declined to Respond	The hospital did not respond to this section of the survey, or did not complete the survey.

Section 3: 2017 Inpatient Surgery Scoring Algorithms

This section will not be scored in 2017 and results will not be shown on Leapfrog's public reporting [website](#).

Section 4: 2017 Maternity Care Scoring Algorithms
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Elective Deliveries

A hospital's early elective deliveries rate prior to 39 weeks completed gestation is used to determine which performance category a hospital is placed:

Early Elective Deliveries Score (Performance Category)	Early Elective Deliveries Rate
Fully Meets the Standard	≤ 5%
Substantial Progress	> 5% and ≤ 10%
Some Progress	> 10% and ≤ 15%
Willing to Report	> 15%
Unable to Calculate Score	Means the hospital did not meet the minimum reporting size (n < 10)
Does Not Apply	Means the hospital did not deliver newborns during the reporting period
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey

Cesarean Birth

A hospital's unadjusted NTSV cesarean section rate is used to determine which performance category a hospital is placed:

NTSV Cesarean Section Score (Performance Category)	NTSV Cesarean Section Rate
Fully Meets the Standard	≤ 23.9%
Substantial Progress	> 23.9% and ≤ 27.0%
Some Progress	> 27.0% and ≤ 33.3%
Willing to Report	> 33.3%
Unable to Calculate Score	Means the hospital did not meet the minimum reporting size (n < 10)
Does Not Apply	Means the hospital did not deliver newborns during the reporting period
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey

Episiotomy

A hospital's rate of episiotomy is used to determine which category a hospital is placed:

Episiotomy Score (Performance Category)	Episiotomy Rate
Fully Meets the Standard	$\leq 5\%$
Substantial Progress	$> 5\%$ and $\leq 10\%$
Some Progress	$> 10\%$ and $\leq 15\%$
Willing to Report	$> 15\%$
Unable to Calculate Score	Means the hospital did not meet the minimum reporting size ($n < 10$)
Does Not Apply	Means the hospital did not deliver newborns during the reporting period
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey

Maternity Care Process Measures Score

A hospital's adherence to the two maternity care process measures is used to determine which performance category the hospital is placed. Leapfrog's target for each process measure is $\geq 90\%$.

Maternity Care Process Measures Score (Performance Category)	Meaning that:
Fully Meets the Standard	The hospital met the 90% target for both Newborn Bilirubin Screening Prior to Discharge and Appropriate DVT Prophylaxis in Women Undergoing Cesarean Section
Substantial Progress	The hospital met the 90% target for one of the process measures and did not meet the minimum reporting requirement for the other process measure ($n < 10$)
Some Progress	The hospital met the 90% target for one of the process measures and did not perform a medical record audit of all cases or did not meet the 90% target for the other process measure
Willing to Report	The hospital did not meet the 90% target on either process measure
Unable to Calculate Score	The hospital did not meet the minimum reporting requirements for either process measure ($n < 10$)
Does Not Apply	The hospital did not deliver newborns during the reporting period
Declined to Respond	Means the hospital did not measure or did not respond to the questions in this section of the survey

High-Risk Deliveries Scoring Algorithm

Scoring for this measure is based on a combination of either (a) a hospital's annual volume of very-low birth weight (VLBW) infants **and** adherence to the antenatal steroids process measure **or** (b) a hospital's performance on the VON outcome measure and adherence to the antenatal steroids process measure. Leapfrog's target for the antenatal steroids process measure is $\geq 90\%$.

For hospitals reporting on Volume

High-Risk Deliveries Score (Performance Category)	NICU annual patient count (volume)	Antenatal steroids process measure
Fully Meets the Standard	≥ 50 VLBW infants	Met target
Substantial Progress	≥ 50 VLBW infants	Did not meet target or did not measure or unable to calculate score (n<10)
Some Progress	< 50 VLBW infants or No NICU	Met target
Willing to Report	< 50 VLBW infants or No NICU	Did not meet target or did not measure or unable to calculate score (n<10)

For hospitals reporting on VON's Death or Morbidity Outcome Measure:

If the **upper bound** of the shrunken SMR is less than 1, the center is performing **better than expected**. (e.g., SMR: 0.7; lower bound: 0.3; upper bound: 0.9)

If the **lower bound** of the shrunken SMR is greater than 1, the center is performing **worse than expected**. (e.g., SMR: 1.6; lower bound: 1.2; upper bound: 2.1)

If the **lower and upper bounds include 1**, then the center is performing **as expected**. (e.g., SMR: 1.0; lower bound: 0.8; upper bound: 1.2)

High-Risk Deliveries Score (Performance Category)	Death or Morbidity (VON Outcome Measure)	Antenatal steroids process measure
Fully Meets the Standard	Hospital's outcomes are better than expected	Met target
Substantial Progress	Hospital's outcomes are better than expected	Did not meet target or did not measure or unable to calculate score (n<10)
	Hospital's outcomes are equal to what is expected	Met target
Some Progress	Hospital's outcomes are equal to what is expected	Did not meet target or did not measure or unable to calculate score (n<10)
Willing to Report	Hospital's outcomes are worse than expected	Whether a hospital met target or did not meet target

Declined to respond means the hospital did not respond to this section of the survey, or the hospital did not submit a survey.

Does not apply means the hospital does not electively admit high-risk deliveries.

Section 5: 2017 ICU Physician Staffing (IPS) Scoring Algorithm

Hospitals are scored for the ICU Physician Staffing section of the survey based on their answers to a set of 13 questions related to the structures they have in place to care for ICU patients in adult and pediatric general medical and/or surgical intensive care units and neuro intensive care units.

IPS Score (Performance Category)	Meaning that:
Fully Meets the Standard	<ul style="list-style-type: none"> • All patients in adult and pediatric general medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists) (answered “Yes” to # 3); and • One or more intensivist(s) is/are present in each ICU during daytime hours for at least 8 hours per day, 7 days per week OR via telemedicine 24 hours per day, 7 days per week, with some on-site intensivist time AND provide(s) clinical care exclusively in each ICU during these hours (answered “Yes” to #4); and • When intensivists are not present (on-site or via telemedicine) in these ICUs, one of them returns more than 95% of calls/pages/texts from these units within five minutes. (answered “Yes” or “Not applicable, Intensivists are present 24/7” to #5); and • When an intensivist is not present (on-site or via telemedicine) in the ICU, another physician, physician assistant, nurse practitioner or FCCS-certified nurse “effector” is on-site at the hospital and able to reach ICU patients within five minutes in more than 95% of the cases (answered “Yes” or ‘Not applicable, Intensivists are present 24/7” to #6). <p>Note: When telemedicine is employed as a substitute for on-site time, it must meet the ten requirements (see endnote #28 in the hard copy of the survey) including some on-site intensivist time to manage the ICU patients’ admission, discharge, and care planning.</p>
Substantial Progress	<ul style="list-style-type: none"> • All patients in adult and pediatric medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists), whether on-site or via telemedicine (answered “Yes” to #3); and • The hospital has implemented <u>any one or more</u> of the following practices: <ul style="list-style-type: none"> a. Intensivists are present and manage or co-manage all patients in all ICUs on-site at least 8 hours per day, 4 days per week or 4 hours per day, 7 days per week (answered “Yes” to #7); b. Intensivists are present and manage or co-manage all patients in all ICUs via telemedicine 24 hours per day, 7 days per week (answered “Yes” to #8) with on-site daily care planning at least 4 days per week (answered “Yes” to #9); use of telemedicine requires that additional Leapfrog telemedicine specifications are met (see endnote #28 in the hard copy of the survey); or c. Clinical pharmacists make daily rounds on adult and pediatric medical and/or surgical and neuro ICU patients (answered “Yes” to #11). And • An intensivist: <ul style="list-style-type: none"> a. leads daily, multi-disciplinary team rounds on-site (answered “Yes” to #12), or b. makes admission and discharge decisions when on-site (answered “Yes” to #13).

<p>Substantial Progress (alternative for hospitals)</p>	<ul style="list-style-type: none"> • All patients in adult and pediatric medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists), whether on-site or via telemedicine (answered “Yes” to #3); and • Intensivists are present and manage or co-manage all patients in all ICUs via telemedicine that is functional 24 hours per day, 7 days per week with onsite care planning done by an intensivist, hospitalist, anesthesiologist, or a physician trained in emergency medicine (answered “Yes” to #8); use of telemedicine requires that additional Leapfrog telemedicine specifications are met (see endnote #29 in the hard copy of the survey).
<p>Some Progress</p>	<ul style="list-style-type: none"> • Some patients in the ICU(s) are managed or co-managed by an intensivist when present on-site or via telemedicine (answered “Yes” to #7, or #8, or #9, or #10). Use of telemedicine requires that additional Leapfrog telemedicine specifications are met ; and • An intensivist: <ol style="list-style-type: none"> a. leads daily, multi-disciplinary team rounds on-site (answered “Yes” to #12), or b. makes admission and discharge decisions when on-site (answered “Yes” to #13)
<p>Willing to Report</p>	<p>The hospital responded to all the Leapfrog survey questions, but it does not yet meet the criteria for Some progress.</p>
<p>Does Not Apply</p>	<p>The hospital does not operate an adult or pediatric general medical or surgical intensive care unit or a neuro intensive care unit.</p>
<p>Declined to Respond</p>	<p>The hospital did not respond to this section of the survey, or has not submitted a survey.</p>

Section 6: 2017 NQF Safe Practices Scoring Algorithm

The Leapfrog Safe Practices Score (SPS) measures hospitals' progress on five of the National Quality Forum's Safe Practice areas. Each practice area is assigned an individual weight, which is factored into the overall score. Hospitals are then put into one of four performance categories based on their relative progress out of the total number of possible points.

SPS Score (Performance Category)	Description
Fully Meets the Standard	Grand Total \geq 475 Points
Substantial Progress	Grand Total \geq 425 and $<$ 475 Points
Some Progress	Grand Total \geq 375 and $<$ 425 Points
Willing to Report	Grand Total $<$ 325 Points
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey

Note: Cut-points for 2017 are based on a percentage of the Maximum Points achievable across all Safe Practices (500). Hospitals earning greater than or equal to 95% of the Maximum Points are assigned "Fully Meets the Standard", hospitals earning greater than or equal to 85% of the Maximum Points are assigned "Substantial Progress", hospitals earning greater than or equal to 75% of the Maximum Points are assigned "Some Progress", and hospitals earning less than 75% of the Maximum Points are assigned "Willing to Report". This is comparable to the percentages used in previous survey cycles. These cut-points will remain in place for the entire survey reporting cycle, unless it is determined that there are compelling reasons to make revisions.

Scoring and ranking details are described below.

- Maximum Points:** Each of the five Safe Practices has a number of points, or Maximum Points, based on the relative impact of the safe practice. Maximum Points for all Practices total 500. See below for a list of Safe Practices/Elements and their respective Maximum Point values.

Safe Practice	Weighting (pts)
1 Culture of Safety Leadership Structures and Systems	120
2 Culture Measurement, Feedback, and Intervention	120
4 Risks and Hazards	100
9 Nursing Workforce ^a	100
19 Hand Hygiene	60
GRAND TOTAL	500

^a Hospitals indicating in Safe Practice #9 that they have current Magnet status designation, as determined by the American Nurses Credentialing Center (ANCC), will receive full points for this Safe Practice.

- Point values per checkbox:** Within a Practice or Element, each question has an equal point value, computed as the Maximum Points for that Practice/Element divided by the number of checkboxes within that Practice/Element.
- Points earned:** Total points earned for each Safe Practice/Element is the sum of the points for each checkbox marked in that respective Safe Practice/Element (the exception being Safe Practice #9, whereby hospitals indicating that they have current Magnet status designation, as determined by the American Nurses Credentialing Center (ANCC), will automatically receive full credit).

4. **Overall points:** The overall score for this section of the survey is the sum of all Points Earned for each Safe Practice/Element.
5. **Final scoring:** All responding hospitals are stratified into performance categories based on Overall Points.
6. **Performance Category cut-points** are based on the distribution of surveys submitted as of June 30, 2017. The distribution of scores, including new or updated survey results, will be reviewed periodically to determine if there are compelling reasons to revise these performance category cut-points further, but there are no current plans or commitments to change the cut-points again during the 2017 survey cycle.
7. **Updated submissions:** Hospitals may update and resubmit their surveys as often as needed to reflect actual progress achieved or additional commitments undertaken in these patient safety areas. Hospitals submitting new information will have new results replace the posted results from the prior submission to reflect this progress, consistent with Leapfrog's monthly update of survey results.

Section 7: 2017 Managing Serious Errors Scoring Algorithms

Never Events Scoring Algorithm

A hospital's results are publicly released and displayed on the Leapfrog Group Website in one of three categories:

Never Events Score (Performance Category)	Description
Fully Meets the Standard	Means the hospital has implemented a policy that adheres to all of the original 5 principles* of the Leapfrog Group Policy Statement on Serious Reportable Events/ "Never Events."
Willing to Report	Means the hospital responded to the Leapfrog survey questions pertaining to adoption of this policy, but does not yet meet the criteria to "fully meet the standard."
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey.

*The Leapfrog Group's original five principles include: apologizing to the patient, performing a root cause analysis, reporting to an external agency within 10 days, waiving all associated costs, and making a copy of the policy available to patients and payers upon request. More information is available at <http://www.leapfroggroup.org/ratings-reports/never-events-management>.

Healthcare-Associated Infections Scoring Algorithm

The **standardized infection ratios (SIRs)** for CLABSI, CAUTI, MRSA, C. Diff., and SSI Colon are calculated by NHSN, and will be scored and publicly reported for each hospital that joins Leapfrog's NHSN group. Due to the updated NHSN baselines and SIR methodology, Leapfrog has established updated cut-points used to assign performance categories (e.g., Fully Meets the Standard, Substantial Progress, etc.) for these five measures based on the national distribution of SIRs using the CMS national dataset released in December. These cut-points will remain in place for the entire survey reporting cycle, unless it is determined that there are compelling reasons to make revisions.

A hospital's standardized infection ratio is used to determine in which performance category a hospital is placed for each healthcare-associated infection. Note that the MRSA and C. Diff. measures apply to all hospitals:

Score (Performance Category)	Standardized Infection Ratio (SIR) or score description
Fully Meets the Standard	SIR >= 0.000 and <=0.250
Substantial Progress	SIR > 0.250 and <= 0.750
Some Progress	SIR > 0.750 and <= 1.250
Willing to Report	SIR > 1.250
Unable to Calculate Score	Means the hospital reported too small of a sample size to calculate their results reliably (i.e. the number of expected infections across all locations is <1).
Does Not Apply	Means the measure did not apply to the hospital during the reporting period.
Declined to Respond	Means the hospital did not join Leapfrog's NHSN group or did not submit a survey

Pressure Ulcers and Injuries Scoring Algorithm

The rate of each hospital-acquired condition is calculated by dividing the number of discharges with the condition, which was not present on admission, by the total number of adult inpatient discharges (including deaths).

Rates for hospital-acquired pressure ulcers and hospital-acquired injuries will be reported as a rate of occurrence per 1,000 inpatient discharges. All responding hospitals are stratified into performance categories based on their calculated rates:

Pressure Ulcers & Injuries Score (Performance Category)	Hospital-Acquired Pressure Ulcer Rate (per 1000 inpatient discharges)	Hospital-Acquired Injury Rate (per 1000 inpatient discharges)
Fully Meets the Standard	Rate = 0.000	Rate <= 0.180
Some Progress	Rate > 0.00 and <= 0.128	Rate > 0.180 and <= 0.373
Willing to Report	Rate > 0.128	Rate > 0.373
Does Not Apply	This standard does not apply to pediatric hospitals or critical access hospitals.	
Unable to Calculate Score	The hospital reported fewer than 30 cases for the reporting period.	
Declined to Respond	The hospital did not respond to this section of the survey or did not submit a survey.	

Note: Cut-points for 2017 are based on the distribution of results from surveys submitted as of June 30, 2017. A quartile methodology was used where hospitals with rates less than or equal to the second quartile are assigned “Fully Meets the Standard”, hospitals with rates less than or equal to the third quartile are assigned “Some Progress”, and hospitals with rates greater than the third quartile are assigned “Willing to Report”. These cut-points will remain in place for the entire survey reporting cycle, unless it is determined that there are compelling reasons to make revisions.

Antibiotic Stewardship Practices Scoring Algorithm

In this section of the survey, hospitals are scored on their adoption and implementation of the [CDC's Core Elements of Antibiotic Stewardship Programs](#). See how each question in Section 7E Antibiotic Stewardship Practices maps to one of the seven core elements.

CDC's Seven Core Elements of Antibiotic Stewardship Programs	Antibiotic Stewardship Question from Section 7D
1. Leadership commitment: Dedicate necessary human, financial, and IT resources.	#1 or #4
2. Accountability: Appoint a single leader responsible for program outcomes. Physicians have proven successful in this role.	#2
3. Drug expertise: Appoint a single pharmacist leader to support improved prescribing.	#3
4. Act: Take at least one prescribing improvement action, such as requiring reassessment after 48 hours to check drug choice, dose, and duration.	#5, #6, #7, #8, or #9
5. Track: Monitor prescribing and antibiotic resistance patterns.	#5a, #6a, or #10
6. Report: Regularly report to staff prescribing and resistance patterns, and steps to improve.	#9 or #10b
7. Educate: Offer education about antibiotic resistance and improving prescribing practices.	#11

Hospitals that have adopted all seven of the Core Elements will be scored as “Fully Meets the Standard.” Hospitals that have adopted fewer than seven of the Core Elements will be scored as “Willing to Report.”

Antibiotic Stewardship Practices Score (Performance Category)	Description
Fully Meets the Standard	Means the hospital has implemented all seven Core Elements identified by the CDC for a successful Antibiotic Stewardship Program.
Willing to Report	Means the hospital has implemented fewer than seven Core Elements identified by the CDC for a successful Antibiotic Stewardship Program.
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey.

Section 8: 2017 Medication Safety Scoring Algorithms

Bar Code Medication Administration Scoring Algorithm

In this section of the survey, hospitals are scored on four components of BCMA use:

- **% Units:** A hospital's implementation of BCMA throughout the hospital, as measured by the percentage of units with a focus on adult and pediatric medical and/or surgical units, intensive care units (adult, pediatric, and neonatal), and labor and delivery units.
- **% Compliance:** A hospital's compliance with patient and medication scans during administration.
- **Decision Support:** The types of decision support that the hospital's BCMA system offers, including:
 1. Wrong patient
 2. Wrong medication
 3. Wrong dose
 4. Wrong time (e.g., early/late warning; warning that medication cannot be administered twice within a given window of time)
 5. Vital sign check
 6. Patient-specific allergy check
 7. Second nurse check needed
- **Workarounds:** A hospital's structures to monitor and reduce workarounds, including:
 1. Has a formal committee that meets routinely to review data reports on BCMA system use
 2. Has back-up systems for hardware failures
 3. Has a help desk that provides timely responses to urgent BCMA issues in real-time
 4. Conducts real-time observations of users using the BCMA system
 5. Engages nursing leadership at the unit level on BCMA use

BCMA Score (Performance Category)	% Units	% Compliance	Decision Support	Processes & Structures to Prevent Workarounds
Fully Meets the Standard	100%	95%	7 out of 7	5 out of 5
Substantial Progress	Hospital meets 3 of the 4 standards			
Some Progress	Hospital meets 2 out of 4 standards			
Willing to Report	Hospital meets 1 or 0 out of 4 standards			
Declined to Respond	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey.			
Does Not Apply	Means the hospital does not operate an ICU, medical/surgical unit, or labor and delivery unit.			

Medication Reconciliation Scoring Algorithm

This section will not be scored in 2017 and results will not be shown on Leapfrog's public reporting [website](#).

Section 9: 2017 Pediatric Care Scoring Algorithm

This section will not be scored in 2017 and results will not be shown on Leapfrog’s public reporting [website](#)

Results from the 2017 Leapfrog Hospital Survey will be available at <http://leapfroggroup.org/compare-hospitals> on July 25, 2017.

Results are then updated within the first 5 business days of each month to reflect new survey submissions and resubmissions.

The 2017 Leapfrog Hospital Survey closes on December 31, 2017.

Find more information about the 2017 Leapfrog Hospital Survey at: <http://leapfroggroup.org/survey>.