The Leapfrog Hospital Survey Scoring Algorithms

**Scoring Details for Sections 1 – 9 of the
2023 Leapfrog Hospital Survey**

LEAPFROG
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SURVEY

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2023 Leapfrog Hospital Survey Scoring Algorithms

http://leapfroggroup.org/hospital

This document includes the scoring algorithms for the 2023 Leapfrog Hospital Survey. The scoring algorithms are organized by section:

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For a hard copy of the Leapfrog Hospital Survey, which includes measure specifications, endnotes, 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 the Data Accuracy webpage.

Scoring and Public Reporting Overview

Once a hospital submits a Leapfrog Hospital Survey via the Online Hospital Survey Tool, the submitted responses will be scored using the algorithms detailed in this document. Only those responses that have been submitted will be scored and publicly reported; saved responses will not be scored or publicly reported.

Hospitals that submit by the June 30 Submission Deadline will be able to view their Survey Results on Leapfrog's public reporting website on **July 25**. In addition, those hospitals will be able to preview their Survey Results, including their VON data for Section 4F High Risk Deliveries (if applicable), NHSN data for Section 7B Healthcare-Associated Infections, and CMS Outpatient data for Section 9D Safety of Procedures (if applicable) 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 five business days of each month to reflect Surveys submitted or resubmitted between July 1 and November 30 and previously submitted Surveys that were corrected before January 31. Survey Results are frozen from February to July 25. More information about Survey submission deadlines is available on our website.

Hospitals should review their Survey Results following their submission to ensure accuracy and completeness.

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

- **Achieved the Standard** (displayed as four filled bars)
- **Considerable Achievement** (displayed as three filled bars)
- **Some Achievement** (displayed as two filled bars)
- **Limited Achievement** (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), not having a particular unit (e.g., ICU), or are not applicable for a particular measure (e.g., hospital does not deliver newborns).
- **Unable to Calculate Score**: This term is used for hospitals that report a sample size that does not meet Leapfrog's minimum reporting requirements. For the healthcare-associated infections, this term is used if the hospital reported too small of a sample size to calculate their results reliably (i.e., the number of predicted infections across all locations is <1) or the number of observed MRSA or CDI infections present on admission (community-onset prevalence) was above a pre-determined cut-point. For the CMS outpatient measure (OP-32), the term is used for hospitals that do not participate with CMS or do not have a measure score published by CMS.
- **Declined to Respond:** This term is used for hospitals that do not submit a Survey or a section of the Survey.
- **Pending Leapfrog Verification:** This term is used for hospitals that have Survey responses that are undergoing Leapfrog's standard verification process.

Figure 1: Legend from Leapfrog's public reporting website.

Progress towards meeting Leapfrog standards:

▮▮▮▮	Achieved the Standard
▮▮▮▯	Considerable Achievement
▮▮▯▯	Some Achievement
▮▯▯▯	Limited Achievement
▯▯▯▯ **DECLINED TO RESPOND**	Did not respond to this measure
DOES NOT APPLY	This measure is not applicable to this facility
UNABLE TO CALCULATE	Sample size too small to calculate score
PENDING LEAPFROG VERIFICATION	This facility's responses are undergoing Leapfrog's standard data verification process

For the purposes of public reporting, measures are organized into twelve groups. The following measures are included in each group:

Group Name	Section/Subsection	Measure Name	Shown on public reporting website as:
Patient-Centered Care	Subsection 1B	Billing Ethics	*Billing Ethics*
	Subsection 1C	Informed Consent	*Informed Consent*
	Subsection 7A	Never Events	*Responding to Never Events*
Preventing Patient Harm	Subsection 6A	NQF Safe Practice #1 – Culture of Safety Leadership Structures and Systems	*Effective Leadership to Prevent Errors*
	Subsection 6B	NQF Safe Practice #2 – Culture Measurement, Feedback, and Intervention	*Staff Work Together to Prevent Errors*
	Subsection 6C	Total Nursing Care Hours per Patient Day	*Amount of Time Nurses Spend Caring for Patients Each Day*
	Subsection 6C	RN Hours per Patient Day	*Amount of Time Registered Nurses (RNs) Spend Caring for Patients Each Day*
	Subsection 6C	Nursing Skill Mix	*Percentage of Nursing Staff who are Registered Nurses (RNs)*
	Subsection 6C	Percentage of RNs who are BSN-Prepared	*Percentage of Registered Nurses (RNs) who have a Bachelor's Degree in Nursing*
	Subsection 6D	Hand Hygiene	*Handwashing*
Critical Care	Section 5	ICU Physician Staffing	*Specially Trained Doctors Care for Critical Care Patients*
Healthcare-Associated Infections	Subsection 7B	Facility-wide inpatient C. Diff. Laboratory-identified Events	*C. difficile Infection*
	Subsection 7B	Central Line-Associated Blood Stream Infections (CLABSI) in ICUs and Select Wards	*Infection in the Blood*
	Subsection 7B	Catheter-Associated Urinary Tract Infections (CAUTI) in ICUs and Select Wards	*Infection in the Urinary Tract*
	Subsection 7B	Facility-wide inpatient MRSA Blood Laboratory-identified Events	*MRSA Infection*
	Subsection 7B	Surgical Site Infection: Colon	*Surgical Site Infection after Colon Surgery*
Maternity Care	Subsection 4A*	Number of Deliveries	*Number of Live Births*
	Subsection 4A*	Maternity Care Services	*Maternity Care Services*
	Subsection 4F	High-Risk Deliveries	*High-Risk Deliveries*
	Subsection 4C	Cesarean Birth	*Cesarean Sections*

Group Name	Section/ Subsection	Measure Name	Shown on public reporting website as:
	Subsection 4B	Elective Deliveries	*Early Elective Deliveries*
	Subsection 4D	Episiotomy	*Episiotomies*
	Subsection 4E	Newborn Bilirubin Screening Prior to Discharge	*Screening Newborns for Jaundice before Discharge*
	Subsection 4E	Appropriate DVT Prophylaxis in Women Undergoing Cesarean Delivery	*Preventing Blood Clots in Women Undergoing Cesarean Section*
Medication Safety	Subsection 2A	Computerized Physician Order Entry (CPOE)	*Safe Medication Ordering*
	Subsection 2D	Medication Reconciliation	*Medication Reconciliation*
	Subsection 2C	Bar Code Medication Administration (BMCA)	*Safe Medication Administration*
	Subsection 9E	Medication Safety for Outpatient Procedures – Medication and Allergy Documentation	*Medication Documentation for Elective Outpatient Surgery Patients*
Pediatric Care	Subsection 8A	Patient Experience (CAHPS Child Hospital Survey)	*Experience of Children and Their Parents*
	Subsection 8B	Pediatric Computed Tomography (CT) Radiation Dose – Abdomen/Pelvis Scans	*Radiation Dose for Abdomen/Pelvis Scans*
	Subsection 8B	Pediatric Computed Tomography (CT) Radiation Dose – Head Scans	*Radiation Dose for Head Scans*
Complex Adult and Pediatric Surgery	Subsection 3A Subsection 3B*	Carotid Endarterectomy	*Carotid Endarterectomy*
	Subsection 3A Subsection 3B*	Mitral Valve Repair and Replacement	*Mitral Valve Repair and Replacement*
	Subsection 3A	Open Aortic Procedures	*Open Aortic Procedures*
	Subsection 3A Subsection 3B*	Bariatric Surgery for Weight Loss	*Bariatric Surgery for Weight Loss*
	Subsection 3A Subsection 3B*	Esophageal Resection for Cancer	*Esophageal Resection for Cancer*
	Subsection 3A Subsection 3B*	Lung Resection for Cancer	*Lung Resection for Cancer*
	Subsection 3A Subsection 3B*	Pancreatic Resection for Cancer	*Pancreatic Resection for Cancer*
	Subsection 3A Subsection 3B*	Rectal Cancer Surgery	*Rectal Cancer Surgery*
	Subsection 3A	Norwood Procedure	*Congenital Heart Surgery for Infants (Norwood Procedure)*
	Subsection 3C	Safe Surgery Checklist for Adult and Pediatric Complex Surgery	*Safe Surgery Checklist –Complex Surgery*
Total Joint Replacement	Subsection 3A Subsection 3B*	Total Knee Replacement	*Total Knee Replacement Surgery*

Group Name	Section/ Subsection	Measure Name	Shown on public reporting website as:
Total Hip Replacement Group	Subsection 3A Subsection 3B*	Total Hip Replacement	*Total Hip Replacement Surgery*
Care for Elective Outpatient Surgery Patients	Subsection 9B	Clinicians Present While Adult Patients are Recovering	*Elective Outpatient Surgery Recovery Staffing – Adult*
	Subsection 9B	Clinicians Present While Pediatric Patients are Recovering	*Elective Outpatient Surgery Recovery Staffing – Pediatric*
	Subsection 9D	Safe Surgery Checklist for Adult and Pediatric Outpatient Procedures	*Safe Surgery Checklist – Elective Outpatient Surgery*
	Subsection 9F	Patient Experience (OAS CAHPS)	*Experience of Patients Undergoing Elective Outpatient Surgery*
	Subsection 9D	Rate of Unplanned Hospital Visits After an Outpatient Colonoscopy	*Unplanned Hospital Visits After Colonoscopy*
	Subsection 9D*	Patient Selection	*Patient Selection*
Elective Outpatient Surgery – Adult*	Subsection 9C*	Gastroenterology	*Gastroenterology (Stomach and Digestive)*
	Subsection 9C*	General Surgery	*General Surgery*
	Subsection 9C*	Ophthalmology	*Ophthalmology (Eyes)*
	Subsection 9C*	Orthopedic	*Orthopedic (Bones and Joints)*
	Subsection 9C*	Otolaryngology	*Otolaryngology (Ear, Nose, Mouth, and Throat)*
	Subsection 9C*	Urology	*Urology (Urinary Tract, Male Reproductive)*
	Subsection 9C*	Neurological Surgery	*Neurosurgery*
	Subsection 9C*	Obstetrics and Gynecology	*Obstetrics and Gynecology*
	Subsection 9C*	Plastic and Reconstructive Surgery	*Plastic and Reconstructive Surgery*
Elective Outpatient Surgery – Pediatric*	Subsection 9C*	Gastroenterology	*Gastroenterology (Stomach and Digestive)*
	Subsection 9C*	General Surgery	*General Surgery*
	Subsection 9C*	Ophthalmology	*Ophthalmology (Eyes)*
	Subsection 9C*	Orthopedic	*Orthopedic (Bones and Joints)*
	Subsection 9C*	Otolaryngology	*Otolaryngology (Ear, Nose, Mouth, and Throat)*

*Note: These data will not be scored but are displayed on Leapfrog's public reporting website.

<table>
<tr><td>Summary of Changes to the 2023 Leapfrog Hospital Survey</td></tr>
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For details on all changes to the 2023 Leapfrog Hospital Survey, visit the <u>Survey and CPOE Materials webpage</u>. Changes to scoring and public reporting for the 2023 Leapfrog Hospital Survey are highlighted below:

- **Section 1B – Billing Ethics**
  - o Leapfrog updated several questions in Section 1B Billing Ethics regarding hospitals' practices around billing statements and their policies for billing representatives. Billing Ethics will continue to be scored and publicly reported in 2023.
- **Section 1C - Informed Consent**
  - o Leapfrog will score and publicly report the responses in Section 1C Informed Consent based on hospitals' policies and training, content of informed consent forms, and process for gaining informed consent.
- **Section 2A – Computerized Physician Order Entry (CPOE)**
  - o Leapfrog removed the Drug Allergy Order Checking Category and combined the Drug Dose (Single) and Drug Dose (Daily) Order Checking Category into one category called Excessive Dosing in the Adult Inpatient Test.
- **Section 3A - Hospital and Surgeon Volume**
  - o Leapfrog removed questions regarding the STS Congenital Heart Surgery Database (CHSD) Participant Postoperative Length of Stay and Participant Operative Mortality measures referenced in relation to Norwood Procedures. We will continue to ask about participation in the STS CHSD. Hospitals that perform the Norwood procedure will be scored using three criteria: total hospital volume, whether a hospital's processes for privileging surgeons incorporates Leapfrog's minimum surgeon volume standards, and participation in the STS CHSD.
- **Section 3B - Surgical Appropriateness**
  - o Leapfrog removed questions regarding surgical appropriateness for Open Aortic Procedures since these procedures are performed as part of life-saving efforts. The questions in Section 3B will continue to be publicly reported but not scored.
- **Section 4A – Maternity Care Volume and Services**
  - o Leapfrog added new questions regarding the availability of midwives and doulas, breastfeeding support, vaginal delivery after cesarean section, and postpartum tubal litigation. The questions will not be scored but will be publicly reported.
- **Section 5 – ICU Physician Staffing**
  - o Leapfrog revised questions in Section 5 ICU Physician Staffing to increase clarity; question #3 from the 2022 Leapfrog Hospital Survey has been separated into two questions. Section 5 will continue to be scored and publicly reported in 2023.
- **Section 6C Nursing Workforce**
  - o Leapfrog will score and publicly report results for four Nurse Staffing and Skill Level measures: Total Nursing Care Hours per Patient Day, RN Hours per Patient Day, Nursing Skill Mix, and Percentage of RNs who are BSN-Prepared.
  - o We have only maintained 5 of the 17 practice elements in NQF Safe Practice #9 – Nursing Workforce that are not directly captured through the Nurse Staffing and Skill Level measures. Hospitals recognized as an American Nurses Credentialing Center (ANCC) Magnet® hospital or a 2020 Pathway to Excellence® hospital will continue receive full credit for the five practice elements. However, NQF Safe Practice #9 will no longer be scored and publicly reported as a stand-alone measure; instead, the NQF Safe Practice #9 measure score will only be used for hospitals that score in the bottom performance category (Limited Achievement) on the Total Nursing Care Hours per Patient Day, RN Hours Per Patient Day, and Nursing Skill Mix measures to place the hospital in the Some Achievement performance category.

- **Section 9D - Patient Follow-Up**
  - Leapfrog removed OP-31 Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery, since CMS has made this measure voluntary through the 2023 Hospital Outpatient Reporting (OQR) Final Rule.

Change Summary Since Release

This section will be updated if changes are made to scoring after this document's initial release on April 1, 2023.

Section 1: 2023 Basic Hospital Information

Basic Hospital Information

This section will not be scored in 2023. However, the responses will be shown on Leapfrog's public reporting [website](). For example, Leapfrog will display the number of ICU beds.

Patient-Centered Care: Billing Ethics and Health Equity

Billing Ethics
Hospitals are scored on three aspects of their billing practices, including the quality of the billing statement or master itemized bill, the availability of a billing representative to negotiate a patient's bill, and frequency of taking legal actions against patients for late or insufficient payment of a medical bill in cases where the hospital did not have a written agreement in place specifying a good faith estimate for a medical service.

Billing Ethics Score (Performance Category)	Meaning that…
Achieved the Standard	• The hospital provides **every** patient with a billing statement and/or master itemized bill within 30 days of final claims adjudication that includes all 10 required elements listed in question #1 **and** • The hospital gives patients instructions for contacting a billing representative who has access to an interpretation service and has the authority to do all three required elements in question #2 within 10 business days **and** • The hospital does **not** take legal action against patients for late or insufficient payment of a medical bill
Considerable Achievement	• **Upon request**, the hospital provides patients with a billing statement and/or master itemized bill within 30 days of final claims adjudication that includes all 10 required elements listed in question #1 **and** • The hospital gives patients instructions for contacting a billing representative who has access to an interpretation service and has the authority to do all three required elements in question #2 within 10 business days **and** • The hospital does **not** take legal action against patients for late or insufficient payment of a medical bill
Some Achievement	• The hospital does **not** provide patients with a billing statement and/or master itemized bill within 30 days of final claims adjudication that includes all 10 required elements listed in question #1 **and** • The hospital gives patients instructions for contacting a billing representative who has access to an interpretation service and has the authority to do all three required elements in question #2 within 10 business days **and** • The hospital does **not** take legal action against patients for late or insufficient payment of a medical bill
Limited Achievement	The hospital responded to all the questions in this section but does not yet meet the criteria for Some Achievement.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Health Equity

This section is required for all hospitals, but in 2023, responses will not be scored or publicly reported.

Informed Consent

Hospitals are scored on whether they meet the requirements for their informed consent policies and training, the content of their informed consent forms, and their processes for gaining informed consent.

Informed Consent Score (Performance Category)	Meaning that…

Achieved the Standard	• The hospital responded "yes, **all** forms are written at a 6th grade reading level or lower" to question #4, **and**
	• The hospital responded "yes" to the remaining **five** questions in
	   ○ Policies and Training (question #1),
	   ○ Content of Informed Consent Forms (questions #2-3), and
	   ○ Process for Gaining Informed Consent (questions #5-6).

Considerable Achievement	• The hospital responded "yes, **all** forms are written at a 6th grade reading level or lower" **and**
	• The hospital responded "yes" to at least **four** additional questions in
	   ○ Policies and Training (question #1),
	   ○ Content of Informed Consent Forms (questions #2-3), and
	   ○ Process for Gaining Informed Consent (questions #5-6).
	
	OR
	
	• The hospital responded that "at least **one** form is written at a 6th grade reading level or lower" **and**
	• The hospital responded "yes" to the **five** remaining questions in
	   ○ Policies and Training (question #1),
	   ○ Content of Informed Consent Forms (questions #2-3), and
	   ○ Process for Gaining Informed Consent (questions #5-6).

Some Achievement	• The hospital responded "yes, **all** forms are written at a 6th grade reading level or lower" **OR** "at least **one** form is written at a 6th grade reading level or lower" **and**
	• The hospital responded "yes" to at least **three** additional questions in
	   ○ Policies and Training (question #1),
	   ○ Content of Informed Consent Forms (questions #2-3), and
	   ○ Process for Gaining Informed Consent (questions #5-6).
	
	OR
	
	• The hospital responded "no forms are written at a 6th grade reading level or lower" **and**
	• The hospital responded "yes" to **at least four** questions in
	   ○ Policies and Training (question #1),
	   ○ Content of Informed Consent Forms (questions #2-4), and
	   ○ Process for Gaining Informed Consent (questions #5-6).

Limited Achievement	The hospital responded to all the questions in this section, but it does not yet meet the criteria for Some Achievement.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 2: 2023 Medication Safety

CPOE Scoring Algorithm for Adult/General Hospitals

Adult and general hospitals are scored on both their implementation and the efficacy of an inpatient CPOE system.

Implementation Status (from Leapfrog Hospital Survey Questions #3-4)	**Score on Adult Inpatient Test via the CPOE Evaluation Tool** (see Appendix I for details on the CPOE Evaluation Tool Scoring Algorithm)					
	Full Demonstration of National Safety Standard for Decision Support (60% or greater of test orders correct)	*Substantial Demonstration of National Safety Standard for Decision Support* (50-59% of test orders correct)	*Some Demonstration of National Safety Standard for Decision Support* (40-49% of test orders correct)	*Completed the Evaluation* (Less than 40% of test orders correct)	*Insufficient Evaluation* (Hospital was not able to test at least 50% of test orders)	*Incomplete Evaluation* (Failed deception analysis or timed out) -or- Did not complete an evaluation
85% or greater of all inpatient medication orders entered through CPOE System	**Achieved the Standard**	**Considerable Achievement**	**Considerable Achievement**	**Some Achievement**	**Unable to Calculate Score**	**Limited Achievement**
75-84% of all inpatient medication orders entered through CPOE System	**Achieved the Standard**	**Considerable Achievement**	**Some Achievement**	**Some Achievement**	**Unable to Calculate Score**	**Limited Achievement**
50-74% of all inpatient medication orders entered through CPOE System	**Considerable Achievement**	**Considerable Achievement**	**Some Achievement**	**Limited Achievement**	**Unable to Calculate Score**	**Limited Achievement**
CPOE implemented in at least one inpatient unit but **<50%** of all inpatient medication orders entered through CPOE System	**Considerable Achievement**	**Some Achievement**	**Some Achievement**	**Limited Achievement**	**Unable to Calculate Score**	**Limited Achievement**
CPOE not implemented in at least one inpatient unit	Cannot take CPOE Evaluation Tool; hospital will be scored as "Limited Achievement"					

Declined to respond:
The hospital did not submit a Survey.

Pending Leapfrog Verification:
The hospital's responses are undergoing Leapfrog's standard verification process.

CPOE Scoring Algorithm for Pediatric Hospitals

Pediatric hospitals are scored on their implementation of an inpatient CPOE system.

CPOE Score (Performance category)	Implementation Status (from Leapfrog Hospital Survey Questions #3-4)
Achieved the Standard	**85% or greater** of all inpatient medication orders entered through CPOE System
Considerable Achievement	**75-84%** of all inpatient medication orders entered through CPOE System
Some Achievement	**50-74%** of all inpatient medication orders entered through CPOE System
Limited Achievement	CPOE implemented in at least one inpatient unit but **<50%** of all inpatient medication orders entered through CPOE System OR CPOE not implemented in at least one inpatient unit
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's reported responses are undergoing Leapfrog's standard verification process.

Bar Code Medication Administration (BCMA)

Hospitals are scored on their performance 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 scanning the patient and medication during the administration in applicable units where BCMA is implemented.
- **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. Second nurse check needed
- **Workarounds**: A hospital's structures to monitor and reduce workarounds, including:
    1. Having a formal committee that meets routinely to review data reports on BCMA system use
    2. Having back-up systems for hardware failures
    3. Having a help desk that provides timely responses to urgent BCMA issues in real-time
    4. Conducting real-time observations of users at the unit level using the BCMA system
    5. Engaging nursing leadership at the unit level on BCMA use
    6. In the past 12 months, used the data and information obtained through items 1-5 to implement quality improvement projects that have focused on improving the hospital's BCMA performance
    OR
    In the past 12 months, used the data and information obtained through items 1-5 to monitor a previously implemented quality improvement project focused on improving the hospital's BCMA performance
    7. In the past 12 months, evaluated the results of the quality improvement projects (from 6) and demonstrated that these projects have resulted in higher adherence to the hospital's standard medication administration process
    OR
    In the past 12 months, evaluated the results of the quality improvement projects (from 6) and demonstrated continued adherence to the hospital's standard medication administration process
    8. Communicated to end users the resolution of any system deficiencies and/or problems that may have contributed to the workarounds

BCMA Score (Performance Category)	% Units	% Compliance	Decision Support	Processes & Structures to Prevent Workarounds
Achieved the Standard	100%	95%	5 out of 5	6 out of 8
Considerable Achievement	The hospital meets **three of the four** standards			
Some Achievement	The hospital meets **two of the four** standards			
Limited Achievement	The hospital meets **one or zero of the four** standards			
Does Not Apply	The hospital does not operate an ICU, medical/surgical unit, or labor and delivery unit.			
Declined to Respond	The hospital did not submit a Survey.			
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.			

Medication Reconciliation

Hospitals are scored on their use of a nationally endorsed protocol to collect data on the accuracy of their medication reconciliation process and the rate of unintentional medication discrepancies per medication based on a sample of at least 30 patients.

The 50th and 75th percentiles are based on the distribution of hospital performance from 2021 Leapfrog Hospital Surveys submitted as of July 31, 2021. These cut-points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Rate of Unintentional Medication Discrepancies Per Medication	2021 Survey Results
Minimum	0
50th percentile	0.119
75th percentile	0.213
Maximum	1.065

Medication Reconciliation Score (Performance Category)	Meaning that…
Achieved the Standard	• The hospital uses a nationally endorsed protocol to collect data on the accuracy of its medication reconciliation process, • The hospital sampled at least 30 patients, and • The hospital's rate of unintentional medication discrepancies per medication is **lower than or equal to the 50th percentile** (where lower performance is better).
Considerable Achievement	• The hospital uses a nationally endorsed protocol to collect data on the accuracy of its medication reconciliation process, • The hospital sampled at least 30 patients, and • The hospital's rate of unintentional medication discrepancies per medication is **higher than the 50th percentile, but lower than or equal to the 75th percentile** (where lower performance is better).
Some Achievement	• The hospital uses a nationally endorsed protocol to collect data on the accuracy of its medication reconciliation process, but • The hospital did not sample at least 30 patients **OR** • The hospital uses a nationally endorsed protocol to collect data on the accuracy of its medication reconciliation process, • The hospital sampled 30 patients, but • The hospital's rate of unintentional medication discrepancies per medication is **higher than the 75th percentile** (where lower performance is better) **OR** • The hospital's responses did not pass Leapfrog's Extensive Monthly Data Verification Process
Limited Achievement	The hospital did not measure.
Unable to Calculate Score	More than 10 out of 30 patients (or one-third) included in the sample had zero Gold Standard Medications.
Does Not Apply	The hospital is a pediatric facility or had too few adult admissions to medical or medical/surgical units.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 3: 2023 Adult and Pediatric Complex Surgery Scoring Algorithms

Hospital and Surgeon Volume

Leapfrog's minimum hospital and surgeon volume standards:

Procedure	Hospital Volume	Surgeon Volume
Carotid endarterectomy	20	10
Mitral valve repair and replacement	40	20
Open aortic procedures	10	7
Lung resection for cancer	40	15
Esophageal resection for cancer	20	7
Pancreatic resection for cancer	20	10
Rectal cancer surgery	16	6
Bariatric surgery for weight loss	50	20
Total knee replacement surgery	50	25
Total hip replacement surgery	50	25
Norwood Procedure	8	5

For the procedures listed above, other than mitral value repair and replacement and Norwood procedures, hospitals are scored on whether they met the minimum hospital volume standards and whether the hospital's process for privileging its surgeons includes meeting or exceeding the minimum annual surgeon volume standards in the table above.

Hospital and Surgeon Volume Standard Score (Performance Category)	For each of the procedures performed by the hospital…
Achieved the Standard	• The hospital **met** the minimum hospital volume standard for the procedure, **and** • The hospital's process for privileging surgeons **does** include meeting or exceeding the minimum annual surgeon volume standard.
Considerable Achievement	• The hospital **met** the minimum hospital volume standard for the procedure, **but** • The hospital's process for privileging surgeons **does not** include meeting or exceeding the minimum annual surgeon volume standard.
Some Achievement	• The hospital **did not** meet the minimum hospital volume standard for the procedure, **but** • The hospital's process for privileging surgeons **does** include meeting or exceeding the minimum annual surgeon volume standard.
Limited Achievement	• The hospital **did not** meet the minimum hospital volume standard for the procedure, **and** • The hospital **does not** include the minimum annual surgeon volume standard in its privileging process.
Does Not Apply	The hospital does not perform the procedure or is a pediatric facility.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not Submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

For mitral valve repair and replacement:

Hospitals that perform mitral valve repair and replacements will be scored using four criteria: total hospital volume, whether their surgeon privileging process incorporates Leapfrog's minimum annual surgeon volume standards, participation in The Society of Thoracic Surgeons' (STS) Adult Cardiac Surgery Database (ACSD), and outcomes from the STS ACSD.

First, hospitals are assigned points based on whether they meet each of the four criteria:

Mitral Valve Repair and Replacement Criteria	Leapfrog's Standard	Points Assigned
The hospital met the minimum hospital volume standard	Hospital has experience with 40 cases per year	• 50 points, if met • 0 points, if not met
The hospital's process for privileging surgeons includes meeting or exceeding the minimum annual surgeon volume standard	Hospital's privileging process requires a surgeon to have experience with at least 20 cases per year	• 25 points, if met • 0 points, if not met
The hospital participates in the Society of Thoracic Surgeons (STS) Adult Cardiac Surgery Database (ACSD)	Hospital participates in STS ACSD	• 25 points, if participates • 0 points, if does not participate
The hospital's Mitral Valve Repair/Replacement Composite Score	The hospital's performance on the STS mitral valve repair/replacement composite score that looks at both mortality and absence of mortality	• 75 points for 3 Stars • 25 points for 2 Stars OR did not meet the data completeness requirement • 0 points for 1 star OR did not choose to report performance

Then points on each criterion are totaled together to assign an overall Performance Category for public reporting:

Mitral Valve Repair and Replacement Score (Performance Category)	Total Points
Achieved the Standard	100 or more points
Considerable Achievement	75 points
Some Achievement	50 points
Limited Achievement	25 or fewer points
Does Not Apply	The hospital does not perform the procedure or is a pediatric facility.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

For the Norwood procedure:

Hospitals that perform the Norwood procedure will be scored using three criteria: total hospital volume, whether their surgeon privileging process incorporates Leapfrog's minimum annual surgeon volume standards, and participation in The Society of Thoracic Surgeons' (STS) Congenital Heart Surgery Database (CHSD).

First, hospitals are assigned points based on whether they meet each of the three criteria:

Norwood Procedure Criteria	Leapfrog's Standard	Points Assigned
The hospital met the minimum hospital volume standard	Hospital has experience with eight cases per year	• 50 points, if met • 0 points, if not met
The hospital's process for privileging surgeons includes meeting or exceeding the minimum annual surgeon volume standard	Hospital's privileging process requires a surgeon to have experience with at least five cases per year	• 25 points, if met • 0 points, if not met
The hospital participates in the Society of Thoracic Surgeons (STS) Congenital Heart Surgery Database (CHSD)	Hospital participates in STS CHSD	• 50 points, if participates • 0 points, if does not participate

Then points on each criterion are totaled together to assign an overall Performance Category for public reporting:

Norwood Procedure Score (Performance Category)	Total Points
Achieved the Standard	100 or more points
Considerable Achievement	75 points
Some Achievement	50 points
Limited Achievement	25 or fewer points
Does Not Apply	The hospital does not perform the procedure.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Surgical Appropriateness

Responses to this subsection are not scored. However, the responses are used in public reporting. For each procedure performed by the hospital, Leapfrog displays the hospital's overall score, which is based on the hospital's ability to meet the hospital volume standard and inclusion of the minimum annual surgeon volume standard in its privileging process. For mitral valve repair and replacement only, hospitals are also scored on their participation and outcomes from The Society of Thoracic Surgeons' (STS) Adult Cardiac Surgery Database (ACSD). Similarly for Norwood Procedures, scores are based on a hospital's participation in STS CHSD.

When visitors to Leapfrog's public reporting [website](#) click "Show More on This Hospital's Performance" below the score icon (i.e. four filled bars, three filled bars, etc.) indicating the performance category for the procedure, they will see a statement indicating whether the hospital "does" or "does not" have protocols in place to ensure surgeries are only performed on patients that meet defined criteria for the following five high-risk procedures: **carotid endarterectomy, mitral valve repair and replacement, bariatric surgery for weight loss, total knee replacement surgery, and total hip replacement surgery**.

Surgical Appropriateness	For each of the procedures performed by the hospital…
Does	Hospital indicates having **all five** of the following in place regarding surgical appropriateness (questions #1-5): • Appropriateness criteria for the procedure • Processes or structures in place to promote ongoing adherence to the appropriateness criteria • Regular retrospective reviews of surgical cases to evaluate the extent to which the appropriateness criteria are met or not met by each surgeon • A process in place for communicating with surgeons, surgical leadership, and administrative leadership when a surgeon's trend or pattern suggests challenges to adhering to the hospital's appropriateness criteria and works to understand potential barriers to meeting the criteria • Reports annually to its Board the findings from the retrospective reviews and plans to improve adherence to the appropriateness criteria
Does Not	Hospital **does not** indicate having **all five** of the above (does not select a box in questions #1-5).

When visitors to Leapfrog's public reporting [website](#) click "Show More on This Hospital's Performance" below the score icon (i.e. four filled bars, three filled bars, etc.) indicating the performance category for the procedure, they will see a statement indicating whether the hospital "does" or "does not" have national accreditation from the American College of Surgeons (rectal cancer surgery only) or a multidisciplinary tumor board that prospectively reviews cancer cases to ensure that procedures for the following four cancer procedures are only performed on patients that meet defined criteria: **lung resection for cancer, esophageal resection for cancer, pancreatic resection for cancer, and rectal cancer surgery**.

Surgical Appropriateness	For each of the procedures performed by the hospital…
Does	Hospital indicates having national accreditation from the American College of Surgeons (rectal cancer surgery only) or a multidisciplinary tumor board that prospectively reviews cancer cases to ensure surgical appropriateness.
Does Not	Hospital indicates that they do not have national accreditation from the American College of Surgeons (rectal cancer surgery only) or a multidisciplinary tumor board that prospectively reviews cancer cases to ensure surgical appropriateness.

Safe Surgery Checklist for Adult and Pediatric Complex Surgery

Hospitals are scored on their use of a safe surgery checklist and whether all elements of the checklist are verbalized in the presence of the appropriate personnel for every patient undergoing an applicable procedure based on an audit of a sample of patients.

Safe Surgery Checklist Score (Performance Category)	Meaning that…
Achieved the Standard	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #3, #4, and #5). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 90%** of the patients included in the audit.
Considerable Achievement	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #3, #4, and #5). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 75%** of the patients included in the audit.
Some Achievement	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #3, #4, and #5). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 50%** of the patients included in the audit.
Limited Achievement	The hospital responded to this section but does not yet meet the criteria for Some Achievement.
Does Not Apply	The hospital does not perform any of the adult or pediatric complex procedures.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 4: 2023 Maternity Care Scoring Algorithms

Maternity Care Volume and Services

Responses to this subsection are not scored but are publicly reported. Leapfrog will report on volume of deliveries, as well as the availability of midwives and doulas, breastfeeding support, vaginal delivery after cesarean section, and postpartum tubal litigation.

Elective Deliveries

Hospitals are scored on their early elective deliveries rate prior to 39 weeks completed gestation.

Early Elective Deliveries Score (Performance Category)	Early Elective Deliveries Rate
Achieved the Standard	<= 5%
Considerable Achievement	> 5% and <= 10%
Some Achievement	> 10% and <= 15%
Limited Achievement	> 15%
Unable to Calculate Score	The hospital did not meet the minimum reporting size (n < 10).
Does Not Apply	The hospital did not deliver newborns during the reporting period, or the labor and delivery unit is now closed.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Cesarean Birth

Hospitals are scored on their nulliparous, term, singleton, vertex (NTSV) cesarean section rate.

NTSV Cesarean Section Score (Performance Category)	NTSV Cesarean Section Rate
Achieved the Standard	<= 23.6%
Considerable Achievement	> 23.6% and <= 25.2%
Some Achievement	> 25.2% and <= 29.5%
Limited Achievement	> 29.5%
Unable to Calculate Score	The hospital did not meet the minimum reporting size (n < 10).
Does Not Apply	The hospital did not deliver newborns during the reporting period, or the labor and delivery unit is now closed.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Episiotomy

Hospitals are scored on their rate of episiotomy.

Episiotomy Score (Performance Category)	Episiotomy Rate
Achieved the Standard	<= 5%
Considerable Achievement	> 5% and <= 10%
Some Achievement	> 10% and <= 15%
Limited Achievement	> 15%
Unable to Calculate Score	The hospital did not meet the minimum reporting size (n < 10).
Does Not Apply	The hospital did not deliver newborns during the reporting period, or the labor and delivery unit is now closed.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Newborn Bilirubin Screening Prior to Discharge

Hospitals are scored on their adherence to the newborn bilirubin screening prior to discharge clinical guideline.

Newborn Bilirubin Screening Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital **met** the 90% target for Newborn Bilirubin Screening Prior to Discharge.
Limited Achievement	The hospital **did not meet** the 90% target for Newborn Bilirubin Screening Prior to Discharge **or** the hospital did not measure.
Unable to Calculate Score	The hospital did not meet the minimum reporting size (n < 10).
Does Not Apply	The hospital did not deliver newborns during the reporting period, or the labor and delivery unit is now closed.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Appropriate DVT Prophylaxis in Women Undergoing Cesarean Delivery

Hospitals are scored on their adherence to the appropriate deep vein thrombosis (DVT) prophylaxis in women undergoing cesarean delivery clinical guideline.

DVT Prophylaxis Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital **met** the 90% target for Appropriate DVT Prophylaxis in Women Undergoing Cesarean Delivery.
Limited Achievement	The hospital **did not meet** the 90% target for Appropriate DVT Prophylaxis in Women Undergoing Cesarean Delivery **or** the hospital did not measure.
Unable to Calculate Score	The hospital did not meet the minimum reporting size (n < 10).
Does Not Apply	The hospital did not deliver newborns during the reporting period, or the labor and delivery unit is now closed.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

High-Risk Deliveries

Hospitals are scored on either (a) their annual volume of very-low birth weight (VLBW) infants **or** (b) their performance on the VON's Death or Morbidity outcome measure.

For hospitals reporting on Volume:

High-Risk Deliveries Score (Performance Category)	NICU annual patient count (volume)
Achieved the Standard	>= 50 VLBW infants
Considerable Achievement	25-49 VLBW infants
Some Achievement	10-24 VLBW infants
Limited Achievement	< 10 VLBW infants or No NICU
Does Not Apply	The hospital does not electively admit high-risk deliveries.
Declined to Respond	The hospital did not report on volume and did not elect to share their VON data with Leapfrog, did not provide a valid VON Transfer Code, or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

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

If the **upper bound** of the shrunken standardized mortality ratios (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)
Achieved the Standard	Hospital's outcomes are **better** than expected.
Considerable Achievement	Hospital's outcomes are **equal** to what is expected.
Limited Achievement	Hospital's outcomes are **worse** than expected or No NICU.
Does Not Apply	The hospital does not electively admit high-risk deliveries.
Declined to Respond	The hospital did not report on volume and did not elect to share their VON data with Leapfrog, or did not provide a valid VON Transfer Code, or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 5: 2023 ICU Physician Staffing (IPS) Scoring Algorithm

ICU Physician Staffing (IPS)

Hospitals are scored on the staffing 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.

If your hospital has more than one applicable ICU, respond to all questions within the section based on the ICU that has the least intensive staffing structure (refer to endnote #34 in the hard copy of the 2023 Leapfrog Hospital Survey).

The term "intensivist" is used to describe physicians who are certified in critical care medicine or who meet Leapfrog's expanded definition for certified in critical care medicine.

IPS Score (Performance Category)	Meaning that…

Achieved the Standard	The hospital responded "yes" or "not applicable, intensivists are present 24/7" to **all** the following questions:
	
	• **Question #3:**
	The ICU is staffed with physicians either present on-site or via telemedicine who are either certified in critical care medicine or who meet Leapfrog's expanded definition for certification in critical care medicine
	• **Question #4:**
	All critical care patients in the ICU are managed or co-managed by physicians certified in critical care medicine (when present on-site or via telemedicine)
	
	• **Question #5 or #**6:
	One or more intensivists are
	   ○ Ordinarily present on-site in the ICU during daytime hours for at least eight hours per day, seven days per week, providing clinical care exclusively in the ICU during these hours
	   ○ Present via telemedicine, in combination with on-site intensivist coverage, for a total of 24 hours per day, seven days per week; meet all of Leapfrog's ICU requirements for intensivist presence in the ICU via telemedicine; and supported by an on-site intensivist who establishes and revises the daily care plan for each ICU patient
	• **Question #7:**
	When physicians (from question #3) are not present (on-site or via telemedicine) in the ICU, one of them returns more than 95% of calls/pages/texts from these units within five minutes
	• **Question #8:**
	When physicians (from question #3) are not present (on-site or via telemedicine) in the ICU or not able to physically reach an ICU patient within five minutes, 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
	
	Note: When telemedicine is employed as a substitute for on-site intensivist coverage, it must meet all 10 requirements detailed in endnote #38 (in the hard copy of the Survey), which includes some on-site intensivist time to manage the ICU patients' admissions, discharges, and care planning.

IPS Score (Performance Category)	Meaning that…

Considerable Achievement	The hospital responded "yes" or "clinical pharmacist rounds seven days per week" to **all** the following questions:
	
	• **Question #3:**
	The ICU is staffed with physicians either present on-site or via telemedicine who are either certified in critical care medicine or meet Leapfrog's expanded definition for certification in critical care medicine
	• **Question #4:**
	All critical care patients in the ICU are managed or co-managed by physicians certified in critical care medicine (when present on-site or via telemedicine)
	
	• **Question #9 or #13**:
	    o One or more intensivists are ordinarily present in the ICU during daytime hours for at least eight hours per day, four days per week, OR four hours per day, seven days per week; providing clinical care exclusively in the ICU during these hours
	    o An on-site clinical pharmacist makes daily rounds on all critical care patients the ICU at least five days/week, and on the other two days/week, a clinical pharmacist returns more than 95% of calls/pages/texts from the unit within five minutes; or the on-site clinical pharmacist rounds on all critical care patients in the ICU seven days per week
	• **Question #14 or #15:**
	    o An on-site intensivist leads daily, interprofessional rounds on all critical care patients the ICU seven days per week
	    o When intensivists are on-site in the ICU, for at least eight hours per day, four days per week OR four hours per day, seven days a week, they make all admission and discharge decisions

Considerable Achievement (alternative)	The hospital responded "yes" to **all** the following questions: • **Question #3:** The ICU is staffed with physicians either present on-site or via telemedicine who are either certified in critical care medicine or meet Leapfrog's expanded definition for certification in critical care medicine • **Question #4:** All critical care patients are being managed or co-managed by physicians certified in critical care medicine (when present on-site or via telemedicine) • **Question #10:** One or more intensivists are present via telemedicine 24 hours per day, seven days per week, meet all of Leapfrog's modified ICU requirements, with on-site care planning done by an intensivist, hospitalist, anesthesiologist, or a physician trained in emergency medicine Note: When telemedicine is employed as a substitute for on-site intensivist coverage, it must meet all nine requirements detailed in endnote #38 (in the [hard copy of the Survey](#)).

IPS Score (Performance Category)	Meaning that…

Some Achievement	The hospital responded "yes" to **all** the following questions:
	
	• **Question #3:**
	The ICU is staffed with physicians either present on-site or via telemedicine who are either certified in critical care medicine or meet Leapfrog's expanded definition for certification in critical care medicine
	• **Question #4:**
	All critical care patients in the ICU are managed or co-managed by physicians certified in critical care medicine (when present on-site or via telemedicine)
	
	• **Question #11:**
	One or more intensivists are present on-site at least four days per week to establish or revise daily care plans for all critical care patients
	• **Question #14 <u>or</u> #15:**
	    o An on-site intensivist leads daily, interprofessional rounds on all critical care patients in the ICU seven days per week
	    o When intensivists are on-site in the ICU, at least eight hours per day, four days per week OR four hours per day, seven days a week, they make all admission and discharge decisions
	Or the hospital responded "yes" to **all** the following questions:
	
	• **Question #12:**
	If not all, at least <u>some</u> critical care patients are managed or co-managed by physicians who are certified in critical care medicine, either on-site or via telemedicine for at least eight hours per day, four days per week OR four hours per day, seven days per week
	• **Question #14 <u>or</u> #15:**
	    o An on-site intensivist leads daily, interprofessional rounds on all critical care patients in the ICU seven days per week
	    o When intensivist are on-site in the ICU, at least eight hours per day, four days per week OR four hours per day, seven days a week, they make all admissions and discharge decisions
	
	Note: When telemedicine is employed as a substitute for on-site intensivist coverage, it must meet all nine requirements detailed in endnote #38 (in the hard copy of the Survey).

Limited Achievement	The hospital responded to all the questions in this section, but it does not yet meet the criteria for Some Achievement.
Does Not Apply	The hospital does not operate an adult or pediatric general medical or surgical intensive care unit or a neuro intensive care unit.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 6: 2023 Patient Safety Practices Scoring Algorithms

National Quality Forum (NQF) - Safe Practice #1

Hospitals are scored on their progress in implementing elements of the National Quality Forum's (NQF) Safe Practice #1 – Culture of Safety Leadership Structures and Systems.

NQF Safe Practice #1 Score (Performance Category)	Overall Points Earned
Achieved the Standard	100% of Points
Considerable Achievement	80% to 99% of Points
Some Achievement	50% to 79% of Points
Limited Achievement	0% to 49% of Points
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Scoring details are described below.

1. **Maximum Points:** NQF Safe Practice #1 – Culture of Safety Leadership Structures and Systems has a maximum number of points of 120.

2. **Point Values per Checkbox:** Each question has an equal point value, computed as the Maximum Points for this NQF Safe Practice divided by the number of checkboxes within this NQF Safe Practice.

3. **Points Earned:** Total points earned for this NQF Safe Practice is the sum of the points for each checkbox marked for this NQF Safe Practice.

4. **Performance Category Cut Points** are based on a percentage of the Maximum Points achievable for this NQF Safe Practice. 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. However, there are no current plans or commitments to change the cut-points during the 2023 Survey Cycle.

5. **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 up until **November 30.** Updates made to reflect a change in performance after November 30 will not be scored or publicly reported.

National Quality Forum (NQF) - Safe Practice #2

Hospitals are scored on their progress in implementing elements of the National Quality Forum's (NQF) Safe Practice #2 – Culture Measurement, Feedback, and Intervention.

NQF Safe Practice #2 Score (Performance Category)	Overall Points Earned
Achieved the Standard	100% of Points
Considerable Achievement	80% to 99% of Points
Some Achievement	50% to 79% of Points
Limited Achievement	0% to 49% of Points
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Scoring details are described below.

1. **Maximum Points:** NQF Safe Practice #2 - Culture Measurement, Feedback, and Intervention has a maximum number of points of 120.

2. **Point Values per Checkbox:** Each question has an equal point value, computed as the Maximum Points for this NQF Safe Practice divided by the number of checkboxes within this NQF Safe Practice.

3. **Points Earned:** Total points earned for this NQF Safe Practice is the sum of the points for each checkbox marked for this NQF Safe Practice.

4. **Performance Category Cut Points** are based on a percentage of the Maximum Points achievable for this NQF Safe Practice. 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. However, there are no current plans or commitments to change the cut-points during the 2023 Survey Cycle.

6. **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 up until **November 30.** Updates made to reflect a change in performance after November 30 will not be scored or publicly reported.

Nursing Workforce

Total Nursing Care Hours per Patient Day

A hospital's performance on the **Total Nursing Care Hours per Patient Day** measure is calculated by adding together the "Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities" across all three unit types (medical, surgical, and med/surg) and all four quarters, and then dividing by the sum of the "Total number of patient days" across all three unit types (medical, surgical, and med/surg) and all four quarters. See Appendix II for an example of this calculation.

To calculate the 50th, 25th, and 10th percentiles used in scoring, Leapfrog places hospitals into one of five cohorts based on Teaching Designation reported on the 2022 Patient Safety Component - Annual Hospital Survey in NHSN and the number of staffed beds reported in Section 1A Basic Hospital Information of the 2023 Leapfrog Hospital Survey:
- Small Teaching (< 500 staffed beds)
- Large Teaching (>= 500 staffed beds)
- Non-teaching (includes hospitals that do not join Leapfrog's NHSN Group)
- Pediatric
- Critical access hospital

For the purposes of scoring, hospitals are only compared to other hospitals within the same cohort.

Percentiles will be calculated based on the results from 2023 Leapfrog Hospital Surveys submitted as of June 30, 2023. Leapfrog will update this document and publish the cut points on July 12th. These cut points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Total Nursing Care Hours per Patient Day	Small Teaching Hospitals	Large Teaching Hospitals	Non-Teaching Hospitals	Pediatric Hospitals	CAH Hospitals
10th percentile	TBD	TBD	TBD	TBD	TBD
25th percentile	TBD	TBD	TBD	TBD	TBD
50th percentile	TBD	TBD	TBD	TBD	TBD

Total Nursing Care Hours per Patient Day Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital's total nursing care hours per patient day is **greater than or equal to the 50th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Considerable Achievement	The hospital's total nursing care hours per patient day **is less than the 50th percentile but greater than or equal to the 25th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Some Achievement	The hospital's total nursing care hours per patient day is **less than the 25th percentile but greater than or equal to the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital). **OR** The hospital's responses did not pass Leapfrog's Extensive Monthly Data Verification Process.
Some Achievement (alternative)	The hospital's total nursing care hours per patient day is **less than the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital). **AND** The hospital achieved Leapfrog's standard for National Quality Forum (NQF) Safe Practice #9 – Nursing Workforce.
Limited Achievement	The hospital's total nursing care hours per patient day is **less than the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital). **OR** The hospital did not measure.
Does Not Apply	The hospital does not have any Medical, Surgical, or Med-Surg Units.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

RN Hours per Patient Day

A hospital's performance on **the RN Hours per Patient Day** measure is calculated by adding together the "Total number of productive hours worked by RN nursing staff with direct patient care responsibilities" across all three unit types (medical, surgical, and med/surg) and all four quarters and dividing by the sum of the "Total number of inpatient days" across all three unit types (medical, surgical, and med/surg) and all four quarters. See Appendix II for an example of this calculation.

To calculate the 50th, 25th, and 10th percentiles used in scoring, Leapfrog places hospitals into one of five cohorts based on teaching designation reported on the 2022 Patient Safety Component – Annual Hospital Survey in NHSN and the number of staffed beds reported in Section 1A Basic Hospital Information of the 2023 Leapfrog Hospital Survey:
- Small Teaching (< 500 staffed beds)
- Large Teaching (>= 500 staffed beds)
- Non-teaching (includes hospitals that do not join Leapfrog's NHSN Group)
- Pediatric
- Critical access hospital

Hospitals are only compared to hospitals within the same cohort.

Percentiles will be calculated based on the results from 2023 Leapfrog Hospital Surveys submitted as of June 30, 2023. Leapfrog will update this document and publish the cut points on July 12th. These cut points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

RN Hours per Patient Day	Small Teaching Hospitals	Large Teaching Hospitals	Non-Teaching Hospitals	Pediatric Hospitals	CAH Hospitals
10th percentile	TBD	TBD	TBD	TBD	TBD
25th percentile	TBD	TBD	TBD	TBD	TBD
50th percentile	TBD	TBD	TBD	TBD	TBD

RN Hours per Patient Day Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital's RN hours per patient day is **greater than or equal to the 50th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Considerable Achievement	The hospital's RN hours per patient day is **less than the 50th percentile but greater than or equal to the 25th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Some Achievement	The hospital's RN hours per patient day **is less than the 25th percentile but greater than or equal to the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).

OR

The hospital's responses did not pass Leapfrog's Extensive Monthly Data Verification Process. |
| **Some Achievement (alternative)** | The hospital's RN hours per patient day is **less than the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).

 AND

The hospital achieved Leapfrog's standard for National Quality Forum (NQF) Safe Practice #9 – Nursing Workforce. |
| **Limited Achievement** | The hospital's RN hours per patient day is **less than the 10th percentile** (where higher is better) for that's hospital cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).

OR

The hospital did not measure. |
Does Not Apply	The hospital does not have any Medical, Surgical, or Med-Surg Units.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Nursing Skill Mix

A hospital's performance on the **Nursing Skill Mix** measure is calculated by adding together the "Total number of productive hours worked by RN nursing staff with direct patient care responsibilities" across all three unit types (medical, surgical, and med/surg) and all four quarters and dividing by the sum of the "Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities" across all three unit types (medical, surgical, and med/surg) and all four quarters.

The result is the percentage of total productive nursing hours worked by RN (employee and contract) nursing staff with direct patient care responsibilities in all inpatient medical, surgical, or med-surgical units.

To calculate the 50th, 25th, and 10th percentiles used in scoring, Leapfrog places hospitals into one of five cohorts based on teaching designation reported in the 2022 Patient Safety Component - Annual Hospital Survey in NHSN and number of staffed beds reported in Section 1A Basic Hospital Information of the 2023 Leapfrog Hospital Survey:
- Small Teaching (< 500 staffed beds)
- Large Teaching (>= 500 staffed beds)
- Non-teaching (includes hospitals that do not join Leapfrog's NHSN Group)
- Pediatric
- Critical access hospital

Hospitals are only compared to hospitals within the same cohort.

Percentiles will be calculated based on the results from 2023 Leapfrog Hospital Surveys submitted as of June 30, 2023. Leapfrog will update this document and publish the cut points on July 12th. These cut points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Nursing Skill Mix	Small Teaching Hospitals	Large Teaching Hospitals	Non-Teaching Hospitals	Pediatric Hospitals	CAH Hospitals
10th percentile	TBD	TBD	TBD	TBD	TBD
25th percentile	TBD	TBD	TBD	TBD	TBD
50th percentile	TBD	TBD	TBD	TBD	TBD

Nursing Skill Mix Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital's percentage of total productive nursing hours worked by RN nursing staff is **greater than or equal to the 50th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Considerable Achievement	The hospital's percentage of total productive nursing hours worked by RN nursing staff is **less than the 50th percentile but greater than or equal to the 25th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital).
Some Achievement	The hospital's percentage of total productive nursing hours worked by RN nursing staff is **less than the 25th percentile but greater than or equal to the 10th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital). **OR** The hospital's responses did not pass Leapfrog's Extensive Monthly Data Verification Process.
Some Achievement (alternative)	The hospital's percentage of total productive nursing hours worked by RN nursing staff is **less than the 10th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital) **AND** The hospital achieved Leapfrog's standard for National Quality Forum (NQF) Safe Practice #9 - Nursing Workforce.
Limited Achievement	The hospital's percentage of total productive nursing hours worked by RN nursing staff is **less than the 10th percentile** (where higher is better) for that hospital's cohort (small teaching, large teaching, non-teaching, pediatric, or critical access hospital). **OR** The hospital did not measure.
Does Not Apply	The hospital does not have any Medical, Surgical, or Med-Surg Units.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Percentage of RNs who are BSN-Prepared

Hospitals are scored on the percentage of RNs who are BSN-prepared.

Percentage of RNs who are BSN-prepared Score (Performance Category)	Percentage of BSN-prepared RNs
Achieved the Standard	>= 80%
Considerable Achievement	>= 50% and < 80%
Some Achievement	>= 20% and < 50%
Limited Achievement	< 20% or the hospital did not measure
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

National Quality Forum (NQF) - Safe Practice #9

A hospital's performance on the NQF Safe Practice #9 - Nursing Workforce measure is only used if the hospital scores in the bottom performance category (Limited Achievement) on the Total Nursing Care Hours per Patient Day measure, RN Hours per Patient Day measure, or Nursing Skill Mix measure. See above for more information.

NQF Safe Practice #9 Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital responded "yes" to all five elements, or the hospital is currently recognized as an American Nurses Credentialing Center (ANCC) Magnet® organization, or the hospital is currently recognized as a 2020 Pathway to Excellence® organization.

Hand Hygiene

Hospitals are scored on their performance in five domains of hand hygiene. To meet the requirements of each domain, the hospital must respond in the affirmative to all applicable questions.

1. Monitoring: questions #8-11
   a. Electronic: questions #12-13
   b. Direct Observation: questions #14-15
2. Feedback*: questions #16-19
3. Training and Education: questions #1-3
4. Infrastructure: questions #4-7
5. Culture: questions #20-21

*Hospitals must respond "yes" to question #8, #9, or #10 in the Monitoring Domain in order to access the questions in the Feedback Domain.

Hand Hygiene Score (Performance Category)	Meaning that…

Achieved the Standard	The hospital responded "yes" to **all** applicable questions in the Monitoring and Feedback Domains and meets the **monthly** sample size of **200** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 1-3 of the 2023 Hospital Survey (measure specifications, Section 6), for monitoring hand hygiene opportunities, **each month in each patient care unit:**
	
	• **Monitoring Domain**:
	   ○ Question #8:
	     Hospital collects hand hygiene compliance data on at least **200** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 1-3 of the 2023 Hospital Survey (measure specifications, Section 6), **each month in each patient care unit**
	   ○ Question #11:
	     Hospital uses hand hygiene coaches or compliance observers to provide individuals who touch patients or who touch items that will be used by patients with feedback on both when they are and are not compliant with performing hand hygiene
	   ○ The hospital responded "yes" to all questions pertaining to the monitoring method used (as indicated in question #8):
	     ▪ *Electronic Compliance Monitoring*: questions #12-13
	     ▪ *Direct Observation:* questions #14-15
	• **Feedback Domain:** questions #16-19
	
	AND
	
	The hospital responded "yes" to **all** questions in any **two** of the following domains:
	• **Training and Education Domain:** questions #1-3
	• **Infrastructure Domain:** questions #4-7
	• **Culture Domain:** questions #20-21

Hand Hygiene Score (Performance Category)	Meaning that…

Achieved the Standard (alternative)	Hospitals that collect hand hygiene compliance data on a **monthly** sample size of **100** hand hygiene opportunities per unit per month, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 4-6 of the [2023 Hospital Survey](#) (measure specifications, Section 6), can achieve the standard if they meet the following:
	
	• **Monitoring Domain**:
	   o Question #9:
	     Hospital collects hand hygiene compliance data on at least **100** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 4-6 of the 2023 Hospital Survey (measure specifications, Section 6), **each <u>month</u> in each patient care unit**
	   o Question #11:
	     Hospital uses hand hygiene coaches or compliance observers to provide individuals who touch patients or who touch items that will be used by patients with feedback on both when they are and are not compliant with performing hand hygiene
	   o The hospital responded "yes" to all questions pertaining to the monitoring method used (as indicated in question #9):
	     ▪ *Electronic Compliance Monitoring*: questions #12-13
	     ▪ *Direct Observation:* questions #14-15
	
	AND
	
	The hospital responded "yes" to <u>**all**</u> questions in the other four domains:
	• **Feedback Domain:** questions #16-19
	• **Training and Education Domain:** questions #1-3
	• **Infrastructure Domain:** questions #4-7
	• **Culture Domain:** questions #20-21

Considerable Achievement	The hospital responded "yes" to <u>**all**</u> applicable questions in the Monitoring and Feedback Domains and meets the **monthly or quarterly** sample size of **100** for monitoring hand hygiene opportunities, **each <u>month or quarter</u> in each patient care unit**:
	
	• **Monitoring Domain**:
	   o Question #9 or #10:
	     ▪ Hospital collects hand hygiene compliance data on at least **100** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 4-6 of the [2023 Hospital Survey](#) (measure specifications, Section 6), **each <u>month</u> in each patient care unit**
	     ▪ Hospital collects hand hygiene compliance data on at least 100 hand hygiene opportunities **each <u>quarter</u> in each patient care unit**
	   o Question #11:
	     Hospital uses hand hygiene coaches or compliance observers to provide individuals who touch patients or who touch items that will

Hand Hygiene Score (Performance Category)	Meaning that…

	be used by patients with feedback on both when they are and are not compliant with performing hand hygiene
	  o The hospital responded "yes" to all questions pertaining to the monitoring method used (as indicated in question #10):
	    ▪ *Electronic Compliance Monitoring*: questions #12-13
	    ▪ *Direct Observation:* questions #14-15
	• **Feedback Domain:** questions #16-19
	
	AND
	
	The hospital responded "yes" to **all** questions in any **two** of the following domains:
	• **Training and Education Domain:** questions #1-3
	• **Infrastructure Domain:** questions #4-7
	• **Culture Domain:** questions #20-21

Some Achievement	The hospital responded "yes" to **all** applicable questions in any **two** of the following domains:
	• **Monitoring Domain:**
	  o Question #8, #9, or #10:
	    ▪ Hospital collects hand hygiene compliance data on at least **200** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 1-3 of the 2023 Hospital Survey (measure specifications, Section 6), **each month in each patient care unit**
	    ▪ Hospital collects hand hygiene compliance data on at least **100** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 4-6 of the 2023 Hospital Survey (measure specifications, Section 6), **each month in each patient care unit**
	    ▪ Hospital collects hand hygiene compliance data on at least 100 hand hygiene opportunities **each quarter in each patient care unit**
	  o Question #11:
	    Hospital uses hand hygiene coaches or compliance observers to provide individuals who touch patients or who touch items that will be used by patients with feedback on both when they are and are not compliant with performing hand hygiene
	  o The hospital responded "yes" to all questions pertaining to the monitoring method used (as indicated in question #8, #9, or #10):
	    ▪ *Electronic Compliance Monitoring*: questions #12-13
	    ▪ *Direct Observation:* questions #14-15
	• **Feedback Domain:** questions #16-19
	• **Training and Education Domain:** questions #1-3
	• **Infrastructure Domain:** questions #4-7
	• **Culture Domain:** questions #20-21

Hand Hygiene Score (Performance Category)	Meaning that…

Limited Achievement	The hospital responded "yes" to **all** applicable questions in any **one** of the following domains:
	
	• **Monitoring Domain:**
	   o Question #8, #9, or #10:
	      ▪ Hospital collects hand hygiene compliance data on at least **200** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 1-3 of the 2023 Hospital Survey (measure specifications, Section 6), **each month in each patient care unit**
	      ▪ Hospital collects hand hygiene compliance data on at least **100** hand hygiene opportunities, or at least the number of hand hygiene opportunities outlined based on the unit type in Tables 4-6 of the 2023 Hospital Survey (measure specifications, Section 6), **each month in each patient care unit**
	      ▪ Hospital collects hand hygiene compliance data on at least **100** hand hygiene opportunities **each quarter in each patient care unit**
	   o Question #11:
	     Hospital uses hand hygiene coaches or compliance observers to provide individuals who touch patients or who touch items that will be used by patients with feedback on both when they are and are not compliant with performing hand hygiene
	   o The hospital responded "yes" to all questions pertaining to the monitoring method used (as indicated in question #8, #9, or #10):
	      ▪ *Electronic Compliance Monitoring*: questions #12-13
	      ▪ *Direct Observation:* questions #14-15
	• **Feedback Domain:** questions #16-19
	• **Training and Education Domain:** questions #1-3
	• **Infrastructure Domain:** questions #4-7
	• **Culture Domain:** questions #20-21
	
	 OR
	 The hospital met **0** domains.

Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Section 7: 2023 Managing Serious Errors Scoring Algorithms

Never Events

Hospitals are scored on their adoption of the nine principles of The Leapfrog Group's Never Events Policy.

Never Events Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital has implemented a policy that adheres to **all nine principles** of The Leapfrog Group's Never Events Policy.
Considerable Achievement	The hospital has implemented a policy that adheres to all the **original five principles*** of The Leapfrog Group's Never Events Policy, as well as **at least two additional principles**.
Some Achievement	The hospital has implemented a policy that adheres to all the **original five principles*** of The Leapfrog Group's Never Events Policy.
Limited Achievement	The hospital responded to all the questions in this section, but it does not yet meet the criteria for Some Achievement.
Declined to Respond	The hospital did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

*The Leapfrog Group's original five principles include: apologizing to the patient, performing a root cause analysis, reporting to an external agency within 15 days, waiving all associated costs, and making a copy of the policy available to patients and payors upon request. More information is available at http://www.leapfroggroup.org/ratings-reports/never-events-management.

Healthcare-Associated Infections (HAIs)

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, provides a valid NHSN ID in their Leapfrog Survey Profile, and submits Section 7 of the 2023 Leapfrog Hospital Survey. Hospitals that submitted a Survey by the June 30 Submission Deadline are able to review these data on the Hospital Details Page as of July 12, 2023.

As described in the hard copy of the Survey, all hospitals in Leapfrog's NHSN Group are required to (a) generate datasets within NHSN, (b) download CMS IQR reports, and (c) and download a copy of your 2022 Patient Safety Component - Annual Hospital Survey from NHSN on the **same day** that Leapfrog will be downloading the data from NHSN for all current group members.

By generating datasets and downloading reports within NHSN on the same day as Leapfrog, hospitals can ensure that the data matches what Leapfrog has obtained. If hospitals do not generate datasets and download reports on the same day as Leapfrog, the Help Desk will not review any discrepancies. Leapfrog will provide hospitals with step-by-step instructions on how to download the same reports as Leapfrog will be using and to calculate the SIR.

Hospitals are scored on their standardized infection ratios for each of the applicable healthcare-associated infection measures.

HAI Score (Performance Category)	CLABSI SIR	CAUTI SIR	MRSA SIR	CDI SIR	SSI Colon SIR
Achieved the Standard	<= 0.413	<= 0.427	<= 0.496	<= 0.621	<= 0.349
Considerable Achievement	> 0.413 and <=0.788	> 0.427 and <=0.823	> 0.496 and <=0.901	> 0.621 and <=0.885	> 0.349 and <=0.783
Some Achievement	> 0.788 and <=1.184	> 0.823 and <=1.281	> 0.901 and <=1.516	> 0.885 and <=1.161	> 0.783 and <=1.302
Limited Achievement	> 1.184	> 1.281	> 1.516	> 1.161	> 1.302
Unable to Calculate Score	The hospital reported too small of a sample size to calculate their results reliably (i.e., the number of predicted infections across all locations is <1) or the number of observed MRSA or CDI infections present on admission (community-onset prevalence) was above a pre-determined cut point.				
Does Not Apply	The measure did not apply to the hospital during the reporting period (e.g., zero device days or procedures, no applicable locations, etc.) or the hospital is a PPS-Exempt Cancer Hospital as classified by CMS (only applies to CLABSI and CAUTI).				
Declined to Respond	The hospital did not join Leapfrog's NHSN group, did not provide a valid NHSN ID, did not complete the 2022 Patient Safety Component - Annual Hospital Survey in NHSN, or did not submit a Leapfrog Hospital Survey.				
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.				

Note: Cut points are based on the distribution of results from 2017 Leapfrog Hospital Surveys submitted as of July 31, 2017, which included data downloaded from NHSN on July 25, 2017. These cut-points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Section 8: 2023 Pediatric Care Scoring Algorithms

Patient Experience (CAHPS Child Hospital Survey)

Hospitals are scored on their Top Box Scores from a subset of the domains (5 out of 13) included on the CAHPS Child Hospital Survey. These domains were selected for use in scoring due to having the lowest median performance and the largest variation in performance across hospitals:

- Communication with Parent – Communication about your child's medicines
- Communication with Parent – Keeping you informed about your child's care
- Communication with Child – How well nurses communicate with your child
- Communication with Child – How well doctors communicate with your child
- Attention to Safety and Comfort – Preventing mistakes and helping you report concerns

Hospitals are scored based on the number of domains where the hospital is performing in the top quartile.

Top Quartile for CAHPS Child Hospital Survey Domains (Quartiles [Q])	Communication about child's medicines (%)	Keeping you informed about child's care (%)	Child Communication with nurses (%)	Child Communication with doctors (%)	Preventing mistakes and reporting concerns (%)
Top Quartile (>= Q3)	>= 83	>= 80	>= 82	>= 78	>= 66

Patient Experience (CAHPS Child Hospital Survey) Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital scored in top quartile of hospitals on at least **four out of five** Child CAHPS domains
Considerable Achievement	The hospital scored in top quartile of hospitals on **three out of five** Child CAHPS domains
Some Achievement	The hospital scored in top quartile of hospitals on **two out of five** Child CAHPS domains
Limited Achievement	The hospital scored in top quartile of hospitals on **one or fewer** Child CAHPS domains or the hospital did not measure.
Unable to Calculate Score	The hospital did not meet the minimum reporting requirements for the measure (<100 returned CAHPS Child Hospital Surveys).
Does Not Apply	The hospital had too few pediatric inpatient admissions (n < 500) to administer the CAHPS Child Hospital Survey, or had fewer than 100 non-NICU pediatric inpatient admissions
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Note: The top quartiles are based on the distribution of performance reported from 2019 Leapfrog Hospital Surveys and 2020 Leapfrog Hospital Surveys submitted by August 31, 2020. These cut-points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Pediatric Computed Tomography (CT) Radiation Dose

Hospitals are scored on their performance for head scans and abdomen/pelvis scans separately, by comparing the median radiation dose length product (DLP) for each anatomic region and age stratum by phantom dose to two benchmarks. The first benchmark is the Median Benchmark, which is the median of the median doses reported across all Leapfrog-reporting hospitals. * The second benchmark is the 75th Percentile Benchmark, which is the median of the 75th percentile doses reported across all Leapfrog-reporting hospitals.*

Hospitals receive points based on their reported median dose (50th percentile) compared to the benchmarks. If the hospital's reported median dose is less than the Median Benchmark, then it receives two points. If the hospital's reported median dose is greater than or equal to the Median Benchmark and less than the 75th Percentile Benchmark, then it receives one point. Otherwise, if the hospital's reported median dose is greater than or equal to the 75th Percentile Benchmark, it receives no points for that category.

Therefore, for each anatomic region, there are at most 10 possible points. If a hospital had less than 10 CT scans for an age stratum, then the age stratum is not included in scoring.

HEAD SCANS					
Point Assignment (Benchmarks)	**< 1 year**	**1 - 4**	**5 - 9**	**10-14**	**15-17**
2 Points (Median Dose < Median Benchmark)	< 265	< 338	< 479	< 615	< 736
1 Point (Median Dose >= Median Benchmark and < 75th Percentile Benchmark)	>= 265 and < 318	>= 338 and < 441	>= 479 and < 602	>= 615 and < 758	>= 736 and < 862
0 Points (Median Dose >= 75th Percentile Benchmark)	>= 318	>= 441	>= 602	>= 758	>= 862

ABDOMEN/PELVIS SCANS					
Point Assignment (Benchmarks)	**< 1 year**	**1 - 4**	**5 - 9**	**10-14**	**15-17**
2 Points (Median Dose < Median Benchmark)	< 48	< 82	< 127	< 274	< 388
1 Point (Median Dose >= Median Benchmark and < 75th Percentile Benchmark)	>= 48 and < 73	>= 82 and < 110	>= 127 and <176	>= 274 and < 394	>= 388 and < 565
0 Points (Median Dose >= 75th Percentile Benchmark)	>= 73	>= 110	>= 176	>= 394	>= 565

*Note: Cut-points are based on the distribution of median doses from 2020 Leapfrog Hospital Surveys submitted by January 31, 2021. These cut-points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

For each anatomic region, the percentage of points awarded is calculated by summing the points earned and dividing by the total number of possible points (i.e., two times the number of age strata with at least 10 CT scans). This percentage of points earned is used to assign a performance category according to the table below:

Pediatric CT Dose Score (Performance Category)	Head Scans	Abdomen/Pelvis Scans
Achieved the Standard	>= 75% of total possible points	>= 75% of total possible points
Considerable Achievement	>= 50% and < 75% of total possible points	>= 50% and < 75% of total possible points
Some Achievement	>=25% and < 50% of total possible points	>=25% and < 50% of total possible points
Limited Achievement	< 25% of total possible points or the hospital did not measure	< 25% of total possible points or the hospital did not measure
Unable to Calculate Score	Fewer than 10 CT scans for all age ranges	Fewer than 10 CT scans for all age ranges
Does Not Apply	The hospital does not perform CT scans on pediatric patients.	
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.	
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.	

Section 9: 2023 Outpatient Procedures Scoring Algorithms

Basic Outpatient Department Information

This section will not be scored in 2023. However, responses will be shown on Leapfrog's public reporting website. For example, Leapfrog will display the number of operating and/or procedure rooms.

Medical, Surgical, and Clinical Staff

Certified Clinicians Present While Patients Are Recovering

Hospitals are scored on whether an Advanced Cardiac Life Support (ACLS) trained clinician, plus a second clinician, are always present and immediately available while adult patients are recovering and whether a Pediatric Advanced Life Support (PALS) trained clinician, plus a second clinician, are always present and immediately available while pediatric patients are recovering.

Note: Facilities that have a physician or CRNA serving as their ACLS or PALS trained clinician are not required to have a third clinician present while patients are recovering.

Clinicians Present While Patients are Recovering Score (Performance Category)	Meaning that…	Meaning that…
Achieved the Standard	While **adult** patients are recovering from an outpatient procedure, the hospital ensures: • An ACLS trained clinician, as well as a second clinician (regardless of ACLS training), are present at all times and immediately available in the building while an adult patient (13 years and older) is present in the hospital outpatient department; **AND** • A physician or CRNA is present at all times and immediately available in the building until **all** adult patients are physically discharged from the hospital outpatient department	While **pediatric** patients are recovering from an outpatient procedure, the hospital ensures: • A PALS trained clinician, as well as a second clinician (regardless of PALS training), are present at all times and immediately available in the building while a pediatric patient (infant through 12 years) is present in the hospital outpatient department; **AND** • A physician or CRNA is present at all times and immediately available in the building until **all** pediatric patients are physically discharged from the hospital outpatient department

Some Achievement	While **adult** patients are recovering from an outpatient procedure, the hospital ensures: • An ACLS trained clinician, as well as a second clinician (regardless of ACLS training), are present at all times and immediately available in the building while an adult patient (13 years and older) is present in the hospital outpatient department; **OR** • A physician or CRNA is present at all times and immediately available in the building until **all** adult patients are physically discharged from the hospital outpatient department	While **pediatric** patients are recovering from an outpatient procedure, the hospital ensures: • A PALS trained clinician, as well as a second clinician (regardless of PALS training), are present at all times and immediately available in the building while a pediatric patient (infant through 12 years) is present in the hospital outpatient department; **OR** • A physician or CRNA is present at all times and immediately available in the building until **all** pediatric patients are physically discharged from the hospital outpatient department
Limited Achievement	While **adult** patients are recovering from an outpatient procedure, the hospital ensures: • An ACLS trained clinician, as well as a second clinician (regardless of ACLS training), are **NOT** present at all times and immediately available in the building while an adult patient (13 years and older) is present in the hospital outpatient department; **AND** • A physician or CRNA is **NOT** present at all times and immediately available in the building until **all** adult patients are physically discharged from the hospital outpatient department	While **pediatric** patients are recovering from an outpatient procedure, the hospital ensures: • A PALS trained clinician, as well as a second clinician (regardless of PALS training), are **NOT** present at all times and immediately available in the building while a pediatric patient (infant through 12 years) is present in the hospital outpatient department; **AND** • A physician or CRNA is **NOT** present at all times and immediately available in the building until **all** pediatric patients are physically discharged from the hospital outpatient department
Does Not Apply	The hospital does not perform outpatient procedures on adult patients.	The hospital does not perform outpatient procedures on pediatric patients.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.	
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.	

Volume of Procedures

Volume of Procedures

In 2023, responses to the annual volume of each procedure performed will not be scored. However, responses will be used to facilitate the search functionality on Leapfrog's public reporting website (e.g., allowing users to search for facilities that perform the procedure they need) and the information will be publicly reported to inform purchasers and consumers about the facility's experience with the procedure.

Safety of Procedures

Patient Follow-up

Hospitals are scored based on their performance on an outcome measure collected and published by the Centers for Medicare and Medicaid Services (CMS): OP-32 Rate of Unplanned Hospital Visits After an Outpatient Colonoscopy.

Leapfrog will download the CMS data on the dates indicated on page 291 in the hard copy of the Survey and match it with the CMS Certification Number (CCN) provided in the Hospital Profile. The CMS data will only be scored and publicly reported for hospitals that have provided an accurate CMS Certification Number in the Hospital Profile, reported volume for colonoscopy procedures, and submitted the Section 9 Outpatient Procedures of the Leapfrog Hospital Survey. Hospitals that submitted a Survey by the June 30 Submission Deadline can review these data on the Hospital Details Page as of July 12, 2023.

Hospitals' performance is divided into quartiles. The quartiles are based on the distribution of hospital and ambulatory surgery center performance from 2022 Leapfrog Hospital Surveys and 2022 Leapfrog ASC Surveys submitted as of June 30, 2022. These cut-points will remain in place for the entire 2023 Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Rate of Unplanned Hospital Visits After Colonoscopy	2022 Survey Results
Minimum	9.2
75th percentile	13.0
50th percentile	13.7
25th percentile	14.6
Maximum	18.5

Scoring Algorithm for OP-32: Rate of Unplanned Hospital Visits After Colonoscopy

Rate of Unplanned Hospital Visits After Colonoscopy Score (Performance Category)	Meaning that…
Achieved the Standard	The hospital: • Provided an accurate CCN in the Hospital Profile, • Reported volume for lower GI endoscopy in Section 9C, and • Is in the top quartile of performance (where lower scores are better)
Considerable Achievement	The hospital: • Provided an accurate CCN in the Hospital Profile, • Reported volume for lower GI endoscopy in Section 9C, and • Is in the second quartile of performance
Some Achievement	The hospital: • Provided an accurate CCN in the Hospital Profile, • Reported volume for lower GI endoscopy in Section 9C, and • Is in the third quartile of performance
Limited Achievement	The hospital: • Provided an accurate CCN in the Hospital Profile, • Reported volume for lower GI endoscopy in Section 9C, and • Is in the bottom quartile of performance
Does Not Apply	The hospital does not perform adult lower GI endoscopy or the hospital is a pediatric facility.
Unable to Calculate Score	The hospital is not participating with CMS, is scored as 'not available' by CMS, or did not provide an accurate CCN in the Hospital Profile.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Patient Selection

This section will not be scored in 2023. However, responses will be shown on Leapfrog's public reporting website. Leapfrog will display the components of a facility's patient screening tool.

Safe Surgery Checklist for Adult and Pediatric Outpatient Procedures

Hospitals are scored on their use of a safe surgery checklist and whether elements of the checklist are verbalized in the presence of the appropriate personnel for every patient undergoing an applicable procedure based on an audit of a sample of patients.

Safe Surgery Checklist Score (Performance Category)	Meaning that…
Achieved the Standard	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #7, #8, and #9). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 90%** of the patients included in the audit.
Considerable Achievement	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #7, #8, and #9). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 75%** of the patients included in the audit.
Some Achievement	• The hospital uses a safe surgery checklist on **all** patients undergoing an applicable procedure. • The hospital's checklist includes **all** safe surgery checklist elements, and these elements were verbalized in the presence of the appropriate personnel (i.e., hospital responded "yes" to questions #7, #8, and #9). • The hospital completed an audit of 15 or 30 patients, as applicable, and documented adherence to the checklist. • The hospital has documented adherence to the checklist for **at least 50%** of the patients included in the audit.
Limited Achievement	The hospital responded to this section but does not yet meet the criteria for Some Achievement.
Does Not Apply	The hospital does not perform outpatient procedures on adult or pediatric patients.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

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Medication Safety for Outpatient Procedures

Hospitals are scored based on their rates of documentation for home medications, visit medications, and allergies/adverse reaction(s).

Medication and Allergy Documentation Score (Performance Category)	Meaning that …
Achieved the Standard	The hospital met the 90% target for documenting **all three components**: home medications, visit medications, and medication allergies/ adverse reaction(s) in the clinical record.
Considerable Achievement	The hospital met the 90% target for documenting **two of the three** components.
Some Achievement	The hospital met the 90% target for documenting **one of the three** components.
Limited Achievement	The hospital **did not meet** the 90% target for documenting any of the three components or the hospital did not measure.
Unable to Calculate Score	The hospital did not meet the minimum reporting requirements for clinical record documentation (n < 30).
Does Not Apply	The hospital does not perform outpatient procedures on adult/pediatric patients.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Patient Experience (OAS CAHPS)

Hospitals are scored on their Top Box Scores from four domains included on the Outpatient and Ambulatory Surgery (OAS) CAHPS Survey:
- Facilities and Staff
- Communication About Your Procedure
- Patients' Rating of the Facility
- Patients Recommending the Facility

Hospitals are scored based on the number of domains where the hospital is performing in the top quartile.

Top Quartile for OAS CAHPS Domains (Quartiles [Q])	Facilities and Staff (%)	Communication About Your Procedure (%)	Patients' Rating of the Facility (%)	Patients Recommending the Facility (%)
Top Quartile (>= Q3)	>= 97	>= 93	>= 88	>= 87

Patient Experience (OAS CAHPS) Score (Performance Category)	Meaning that the hospital…
Achieved the Standard	Scored in top quartile of facilities on **4 out of 4** OAS CAHPS domains.
Considerable Achievement	Scored in top quartile of facilities on **3 out of 4** OAS CAHPS domains.
Some Achievement	Scored in top quartile of facilities on **2 out of 4** OAS CAHPS domains.
Limited Achievement	Scored in top quartile of facilities on **1 or fewer** OAS CAHPS domains or the hospital did not measure.
Unable to Calculate Score	The hospital did not meet the minimum reporting requirements for the measure (<100 returned OAS CAHPS Surveys).
Does Not Apply	The hospital had too few eligible discharges (n < 300) to administer the OAS CAHPS Survey or does not perform outpatient procedures on adult patients.
Declined to Respond	The hospital did not respond to the questions in this section of the Survey or did not submit a Survey.
Pending Leapfrog Verification	The hospital's responses are undergoing Leapfrog's standard verification process.

Note: The top quartiles are based on the distribution of hospital and ASC performance from 2020 Leapfrog Hospital Surveys and 2020 Leapfrog ASC Surveys submitted by August 31, 2020. These cut-points will remain in place for the entire Survey Cycle, unless it is determined that there are compelling reasons to make revisions.

Appendix I: CPOE Evaluation Tool Scoring Algorithm

<u>CPOE Evaluation Tool Scoring</u>
(For Adult and General Hospitals Only)

To achieve Leapfrog's CPOE Standard, each adult and general hospital must (1) ensure that licensed prescribers enter at least 85% of inpatient medication orders via a computer system that includes decision support software to reduce prescribing errors, and (2) demonstrate, via a test, that its inpatient CPOE system can alert physicians to at least 60% of frequent serious medication errors known to cause harm to patients.

Hospitals are asked to use Leapfrog's CPOE Evaluation Tool to complete an Adult Inpatient Test to fulfill the second requirement of our standard. Upon successful completion of an Adult Inpatient Test, a hospital's responses are immediately scored and available to be viewed and printed. Results from prior year's tests are also archived and can be accessed at any time by logging back into the CPOE Evaluation Tool from the Hospital Survey Dashboard.

See Section 2 for more information.

Results from the Adult Inpatient Test

The CPOE Evaluation Tool calculates the results from the Adult Inpatient Test and displays a report that includes eight individual category scores and an overall score using the criteria described below.

Category Scores

- Seven of the eight Order Checking Categories included in the CPOE Evaluation Tool represent an area where a serious adverse drug event (ADE) could occur if the CPOE system's clinical decision support fails to alert the prescriber. The eighth order checking category includes Test Orders that, if presented interruptedly, could contribute to alert fatigue and physician burnout.
- Results are calculated for each category and are displayed as a percent correct (e.g., 80% in the Drug-Age category means that the hospital responded to 80% of the test orders in this category correctly).
- Test Orders that include medications that could not be electronically entered in any formulation are excluded from the overall score calculation. For some categories, orders that could not be entered with the specified dose, frequency, or route are also excluded.
- For any category for which too few orders were entered to reliably calculate a category score, "insufficient responses to evaluate performance in this category" appears instead of a percentage score. Individual orders that were able to be tested within a category are included in the overall score.

Order Checking Category	Description	Example	Type of Clinical Decision Support
Inappropriate Medication Combinations	Medication combinations to avoid ordering together or ones to use with caution	Using clonazepam and lorazepam together	Scenario-specific advice/information
Excessive Dosing	Specified dose of medication or frequency of administration exceeds safe range for single or daily dose	Tenfold overdose of digoxin	Scenario-specific advice/information
Drug Route	Specified route of administration is inappropriate and potentially harmful	Use of hydroxyzine intravenously	Scenario-specific advice/information
Drug Diagnosis	Medication dose inappropriate/contraindicated based on documented problem/diagnosis	Non-selective beta-blocker in patient with asthma	Scenario-specific advice/information
Drug Age	Medication dose inappropriate/contraindicated based on patient age	Prescribing diazepam for a patient over 65 years old	Scenario-specific advice/information
Drug Laboratory	Medication dose inappropriate/contraindicated based on documented laboratory test results (includes renal status)	Use of nitrofurantoin in patient with severe renal failure or ordering digoxin for a patient with hypokalemia	Scenario-specific advice/information
Drug Monitoring	Medication for which the standard of care includes subsequent monitoring of the drug level or lab value to avoid harm	Prompt to monitor drug levels when ordering aminoglycosides or INR/PT when ordering warfarin or checking baseline LFTs when starting a statin	Medication-specification advice/information
Excessive Alerts	Low-priority medication combinations, such as drug interactions or therapeutic duplications, that should not trigger decision support warnings.	Concurrent use of hydrochlorothiazide and captopril	Scenario-specific advice/information

The Adult Inpatient Test also includes a "Deception Analysis" test category, which checks for "false positives" (e.g., hospitals reporting advice/information for Test Orders that should not generate any warning in the hospital's CPOE system). Hospitals that "fail" the Deception Analysis are scored as "Incomplete Evaluation" and will not be able to retake an Adult Inpatient Test for 120 days.

Overall Score

In addition to individual category scores for each of the eight categories for which hospitals were able to test a sufficient number of orders, the results also include an overall score based on all scored orders across all categories. The overall score is used as part of Leapfrog's CPOE Standard Scoring Algorithm.

The overall score is based on the performance of the hospital's CPOE clinical decision support to alert prescribers to frequent serious medication errors known to cause harm to patients. The test includes a number of orders that could result in a fatal adverse drug event. Any of these potentially fatal orders not flagged by the clinical decision support are listed on the results page of the CPOE Evaluation Tool. In addition, the test includes a number of orders that, if alerted on, could contribute to over-alerting. Any Excessive Alerts orders for which advice or information was reported are also listed on the results page of the CPOE Evaluation Tool.

Overall Score (Combined with the hospital's % of inpatient medication orders entered via CPOE and publicly reported)	Description
Full Demonstration of National Safety Standard for Decision Support	This hospital's CPOE system alerts prescribers to most common serious prescribing errors. Meaning that: • The hospital responded to ≥20 test orders • The hospital responded correctly to ≥60% of test orders across all categories
Substantial Demonstration of National Safety Standard for Decision Support	This hospital's CPOE system alerts prescribers to many common serious prescribing errors. Meaning that: • The hospital responded to ≥20 test orders • The hospital responded correctly to ≥50%, but less than 60% of test orders across all categories
Some Demonstration of National Safety Standard for Decision Support	This hospital's CPOE system alerts prescribers to some common serious prescribing errors. Meaning that: • The hospital responded to ≥20 test orders • The hospital responded correctly to ≥40%, but less than 50% of test orders across all categories
Completed the Evaluation	This hospital's CPOE system alerts prescribers to few common serious prescribing errors. Meaning that: • The hospital responded to ≥20 test orders • The hospital responded correctly to less than 40% of test orders across all categories
Insufficient Evaluation	This hospital was not able to test a sufficient number of orders (<20) to receive an overall score. However, the hospital may use the category scores for local hospital quality improvement efforts. The hospital is eligible to retake the test in 120 days.
Incomplete Evaluation	This hospital did not complete the CPOE Evaluation Tool within the allotted time. The hospital is eligible to retake the test in 120 days. Note: Hospital will not be able to view results within the CPOE Evaluation Tool. The test is not scored.
Failed Deception Analysis *(Publicly reported as Incomplete Evaluation)*	This hospital submitted responses that included potentially inaccurate results. The hospital is eligible to retake the test in 120 days.

Appendix II: Nursing Workforce Scoring Algorithm

Details on how the "Total Nursing Hours per Patient Day" and "RN Nursing Hours per Patient Day" measures are calculated are available below.

Example 1: Calculating Total Nursing Care Hours and RN Hours per Patient Day

Step 1: Sum the number of patient days, total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities, and total number of productive hours worked by RN nursing staff with direct patient care responsibilities from all four quarters for all applicable medical units, surgical units, and med-surg units.

Question #4: Enter your hospital's responses below by quarter across all adults and/or pediatric <mark>Medical Units</mark> (excluding step-down/progressive units):			
	(a) Total number of patient days	**(b)** Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities (RN, LPN/LVN, and UAP)	**(c)** Total number of productive hours worked by RN nursing staff with direct patient care responsibilities
Quarter 1	7,000	58,000	45,000
Quarter 2	5,000	60,000	45,000
Quarter 3	8,000	58,000	45,000
Quarter 4	7,000	60,000	45,000
TOTAL	**27,000**	**236,000**	**180,000**

Question #6: Enter your hospital's responses below by quarter across all adult and/or pediatric <mark>Surgical Units</mark> (excluding step-down/progressive units):			
	(a) Total number of patient days	**(b)** Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities (RN, LPN/LVN, and UAP)	**(c)** Total number of productive hours worked by RN nursing staff with direct patient care responsibilities
Quarter 1	5,000	58,000	45,000
Quarter 2	6,000	60,000	45,000
Quarter 3	6,000	58,000	45,000
Quarter 4	6,000	60,000	45,000
TOTAL	**23,000**	**236,000**	**180,000**

Question #8: Enter your hospital's responses below by quarter across all adult and/or pediatric **Med-Surg Units** (excluding step-down/progressive units):

	(a) Total number of patient days	**(b)** Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities (RN, LPN/LVN, and UAP)	**(c)** Total number of productive hours worked by RN nursing staff with direct patient care responsibilities
Quarter 1	6,300	80,000	60,000
Quarter 2	6,700	80,000	65,000
Quarter 3	7,000	78,000	60,000
Quarter 4	6,400	80,000	64,000
TOTAL	**26,400**	**318,000**	**249,000**

Step 2: Then sum the total number of patient days, total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities, and total number of productive hours worked by RN nursing staff with direct patient care responsibilities across <u>all units</u>.

	(a) Total number of patient days	**(b)** Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities (RN, LPN/LVN, and UAP)	**(c)** Total number of productive hours worked by RN nursing staff with direct patient care responsibilities
Medical Units	27,000	236,000	180,000
Surgical Units	23,000	236,000	180,000
Med-Surg Units	26,400	318,000	249,000
TOTAL	**76,400**	**790,000**	**609,000**

Step 3: Next divide the total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities by the total number of patient days from Step 2 to calculate the total nursing care hours per patient day.

Total number of patient days	**Total number of productive hours worked by employee or contract nursing staff with direct patient care responsibilities (RN, LPN/LVN, and UAP)**	**Total Nursing Care Hours per Patient Day**
76,400	790,000	790,000 / 76,400 = **10.34**

Step 4: Lastly, divide the total number of productive hours worked by RN nursing staff with direct patient care responsibilities by the total number of patient days from Step 2 to calculate the RN hours per patient day.

Total number of patient days	**Total number of productive hours worked by RN nursing staff with direct patient care responsibilities**	**RN Hours per Patient Day**
76,400	609,000	609,000 / 76,400= **7.97**

Results from the 2023 Leapfrog Hospital Survey will be available at http://ratings.leapfroggroup.org/ on July 25, 2023.

Beginning in August, results are updated within the first five business days of each month to reflect new Survey submissions and resubmissions.

Find more information about the 2023 Leapfrog Hospital Survey at: http://leapfroggroup.org/hospital.