

Final Updates to the Leapfrog Hospital Safety Grade Methodology for Fall 2023

On July 21, 2023, Leapfrog published planned updates to the Hospital Safety Grade methodology and held a public comment period through August 15, 2023. We thank commenters for their feedback that helped us finalize the methodology. This document includes responses to the comments received and summarizes the final updates that will be made to the scoring methodology. In addition, this document includes the fall 2023 Leapfrog Hospital Safety Grade measures, reporting periods, and data sources in [Appendix A](#) and the estimated standard measure weights in [Appendix B](#).

September 11, 2023 – The scoring category for hospitals that declined to complete the Leapfrog Hospital Survey was updated for the new nursing workforce measure. The reporting periods were updated for the DRA HAC measures since CMS released updated data on August 30, 2023. Please review the updates on pages 4 and 7.

Summary of Final Updates

The updates outlined in this document include:

1. [Nursing Workforce Measure](#)
Starting in fall 2023, Leapfrog will add **one** nursing workforce measure from the 2023 Leapfrog Hospital Survey into the Hospital Safety Grade. Total Nursing Care Hours per Patient Day (which includes RN, LPN/LVN, and UAP hours per patient day) will replace NQF Safe Practice #9 as the standalone measure in the Hospital Safety Grade focused on nursing workforce.
2. [ICU Physician Staffing Step 2 Imputation](#)
The ICU Physician Staffing (IPS) measure will have a new secondary data source, the CMS Cost Report. This source will only be used for hospitals that are eligible for Step 2 Imputation, meaning they do not plan to complete a 2023 Leapfrog Hospital Survey by August 31 and did not complete a 2021 or 2022 Leapfrog Hospital Survey.
3. [Key Dates](#)
Leapfrog will shorten the Letter Grade Embargo Period from 2 weeks to 1 week.

The changes come under the guidance of Leapfrog's national expert panel, the research team at Johns Hopkins Medicine, and in response to stakeholder feedback. More information can be found on the Hospital Safety Grade website at <https://www.hospitalsafetygrade.org/for-hospitals/key-dates-and-information>.

DETAIL: RESPONSES TO PUBLIC COMMENT AND FINAL UPDATES

1. Nursing Workforce Measure

Several commenters expressed concern over the addition of two new nursing workforce measures from the 2023 Leapfrog Hospital Survey and suggested that Leapfrog either delay the change or reduce the proposed standard measure weights assigned to the measures.

Leapfrog appreciates the informative comments received regarding the addition of both Total Nursing Care Hours per Patient Day and RN Hours per Patient Day to the Safety Grade methodology. In response, Leapfrog will amend the original proposed change. As described [below](#), Leapfrog will only add one new nursing workforce measure to the Safety Grade methodology for fall 2023. The Total Nursing Hours per Patient Day measure will replace NQF Safe Practice #9 Nursing Workforce.

Leapfrog will continue to monitor hospital performance nationwide on all four nurse staffing and skill level measures included on the Leapfrog Hospital Survey and evaluate the future of these measures in the Leapfrog's Hospital Safety Grade methodology to ensure the grade is of utmost utility to consumers, purchasers, and employers.

2. ICU Physician Staffing Step 2 Imputation

We did not receive any comments on the ICU Physician Staffing Step 2 Imputation and are finalizing those changes as originally proposed. Leapfrog will use the most recent CMS Cost Report as a secondary data source for the ICU Physician Staffing (IPS) measure.

3. Key Dates

We did not receive any comments on the shortened Letter Grade Embargo Period and are finalizing those changes as originally proposed. Leapfrog will shorten the Letter Grade Embargo Period from 2 weeks to 1 week.

FINAL UPDATES

1. NURSING WORKFORCE MEASURE

Beginning in fall 2023, Leapfrog will add one nursing workforce measure from the 2023 Leapfrog Hospital Survey to the Hospital Safety Grade methodology: Total Nursing Care Hours per Patient Day. Total Nursing Care Hours per Patient Day will replace NQF Safe Practice #9 in the Leapfrog Hospital Safety Grade methodology. Survey Results for this measure have been confidentially available to hospitals since July 12 on the Hospital Detail Page via the Survey Dashboard and were publicly reported starting July 25 on Leapfrog’s website (<https://ratings.leapfroggroup.org>).





ESTIMATED WEIGHT AND POINT ASSIGNMENTS

The Total Nursing Care Hours per Patient Day measure will be included in the Process and Structural measure domain and assigned the following criteria scores for calculating the standard weight:

- Evidence Score: 2
- Impact Score: 2
- Estimated Opportunity Score: 1.48
- Number of Component Measures: 1

In preliminary analyses, the estimated standard weight for the measure was 5.0%.

Table 1. Hospital Safety Grade Measure Scores Assigned to Leapfrog Hospital Survey Performance Categories for **Total Nursing Care Hours per Patient Day**, Beginning fall 2023.

Total Nursing Care Hours per Patient Day		Assigned Score in the Hospital Safety Grade
Leapfrog Hospital Survey Performance Category		
Achieved the Standard		100
Considerable Achievement		70
Some Achievement		40
Limited Achievement		15

The above Hospital Safety Grade scores will be assigned to each of the four performance categories from the 2023 Leapfrog Hospital Survey for the Total Nursing Care Hours per Patient Day measure (Table 1).

The measure will be reported as “Declined to Report” for hospitals that declined to respond to the 2023 Leapfrog Hospital Survey by August 31. Hospitals scored as “Does Not Apply” because they reported to the Leapfrog Hospital Survey that they do not operate medical, surgical, or med-surg units (i.e., hospitals only operating mixed acuity units) will be reported as “Not Available”. Hospitals reported as “Declined to Report” or “Not Available” for the measure will have the weight that was assigned to the measure redistributed to the other process/structural measures where they do have a measure score.

2. ICU PHYSICIAN STAFFING STEP 2 IMPUTATION

As announced in December 2022, beginning with the fall 2023 Hospital Safety Grade, Leapfrog will use the most recent CMS Cost Report as a secondary data source for the ICU Physician Staffing (IPS) measure. Hospitals that do not submit a 2023 Leapfrog Hospital Survey and do not have a score from the previous four rounds of the Hospital Safety Grade (i.e., spring 2023, fall 2022, spring 2022, or fall 2021), will be scored using the following Step 2 Imputation methodology.

ICU designation (i.e., operating a medical ICU, surgical ICU, or pediatric ICU) will be determined by Leapfrog based on the number of medical, surgical and/or pediatric ICU beds reported in Worksheet S-3 Part 1 of the hospital’s most recent CMS Cost Report. Hospitals that are determined to have one or more medical, surgical, and/or pediatric ICU beds will be assigned the same point value (5 points) as those hospitals that earned Limited Achievement on Leapfrog’s IPS Standard. The point value is equivalent to hospitals that report via the Leapfrog Hospital Survey that they operate an adult or pediatric medical and/or surgical ICU or neuro ICU but do not meet other aspects of Leapfrog’s [national standard for ICU staffing](#). This approach is consistent with how Leapfrog has scored hospitals on this measure using prior secondary data sources.

We announced this update last year to give hospitals adequate time to consider completing the 2023 Leapfrog Hospital Survey if they wish to report a higher level of achievement on the IPS standard prior to the fall 2023 Data Snapshot Date of August 31. Hospitals that will be affected by this change and share a CMS Certification Number (CCN) with another facility were notified of this change in June via a registered letter. Those hospitals that do not operate an ICU but share a CCN with a hospital that operates an ICU, and therefore have reported ICU beds in their CMS Cost Report, were asked to notify Leapfrog immediately.

Hospitals that did not complete a 2023 Leapfrog Hospital Survey and do not operate an ICU are urged to notify Leapfrog immediately. Please note that this may apply to your hospital if your hospital shares a CMS Certification Number (CCN) with a hospital that operates an ICU or closed an ICU recently. Hospitals that notify Leapfrog by midnight EDT on August 31, 2023, will be scored as “Not Available” for this measure. If this applies to your hospital, please contact our Help Desk at <https://leapfroghelpdesk.zendesk.com> immediately.

3. KEY DATES

The fall 2023 Fall Courtesy Review Period will open on Monday, September 25, 2023, and close on Friday, October 13, 2023. During this time, Hospitals can review data for accuracy (i.e., identify recording errors, hospital name and address changes, etc.) on a secure website and review changes to the scoring algorithm. **The Letter Grade Embargo Period will be shortened from 2 weeks to 1 week.** Hospitals will have the opportunity to view their letter grade ahead of the public release of Safety Grade. All scores are finalized by this time.

As a reminder, hospitals completing a 2023 Leapfrog Hospital Survey are encouraged to resolve all Data Verification messages and verify Survey Results prior to the Data Snapshot Date of August 31. Failure to resolve Data Verification messages by this date may result in delays or challenges finalizing your Safety Grade. Survey Results have been available on the confidential [Hospital Details Page](#) since July 12 and have been [publicly reported](#) since July 25 for hospitals that submitted a Survey by June 30.

Fall 2023 Timeline	
August 31	Fall Data Snapshot Date
September 25-October 13	Fall Courtesy Review Period
Late October/November	1 Week Fall Letter Grade Embargo Period
Early November	Fall Public Announcement

APPENDIX A: FALL 2023 LEAPFROG SAFETY GRADE MEASURES, DATA SOURCES, AND ANTICIPATED REPORTING PERIODS

PROCESS/STRUCTURAL MEASURES (12)				
Measure Name	Primary Data Source	Reporting Period	Secondary Data Source	Reporting Period
Computerized Physician Order Entry (CPOE)	2023 Leapfrog Hospital Survey	2023	Imputation Model Applied	N/A
Bar Code Medication Administration (BCMA)	2023 Leapfrog Hospital Survey	2023	Imputation Model Applied	N/A
ICU Physician Staffing (IPS)	2023 Leapfrog Hospital Survey	2023	Imputation Model Applied	N/A
Safe Practice 1: Culture of Leadership Structures and Systems	2023 Leapfrog Hospital Survey	2023	N/A	N/A
Safe Practice 2: Culture Measurement, Feedback & Intervention	2023 Leapfrog Hospital Survey	2023	N/A	N/A
Total Nursing Care Hours per Patient Day	2023 Leapfrog Hospital Survey	2023	N/A	N/A
Hand Hygiene	2023 Leapfrog Hospital Survey	2023	Imputation Model Applied	N/A
H-COMP-1: Nurse Communication	CMS	10/01/2021 - 09/30/2022	N/A	N/A
H-COMP-2: Doctor Communication	CMS	10/01/2021 - 09/30/2022	N/A	N/A
H-COMP-3: Staff Responsiveness	CMS	10/01/2021 - 09/30/2022	N/A	N/A
H-COMP-5: Communication about Medicines	CMS	10/01/2021 - 09/30/2022	N/A	N/A
H-COMP-6: Discharge Information	CMS	10/01/2021 - 09/30/2022	N/A	N/A

OUTCOME MEASURES (10)				
Measure Name	Primary Data Source	Reporting Period	Secondary Data Source	Reporting Period
Foreign Object Retained	CMS	07/01/2020 - 06/30/2022	N/A	N/A
Air Embolism	CMS	07/01/2020 - 06/30/2022	N/A	N/A
Falls and Trauma	CMS	07/01/2020 - 06/30/2022	N/A	N/A
CLABSI	2023 Leapfrog Hospital Survey	01/01/2022 - 12/31/2022	CMS	10/01/2021 - 09/30/2022
CAUTI	2023 Leapfrog Hospital Survey	01/01/2022 - 12/31/2022	CMS	10/01/2021 - 09/30/2022
SSI: Colon	2023 Leapfrog Hospital Survey	01/01/2022 - 12/31/2022	CMS	10/01/2021 - 09/30/2022
MRSA	2023 Leapfrog Hospital Survey	01/01/2022 - 12/31/2022	CMS	10/01/2021 - 09/30/2022
C. Diff.	2023 Leapfrog Hospital Survey	01/01/2022 - 12/31/2022	CMS	10/01/2021 - 09/30/2022
PSI 4: Death rate among surgical inpatients with serious treatable conditions	CMS	07/01/2019 - 12/31/2019 AND 07/01/2020 - 06/30/2021	N/A	N/A
CMS Medicare PSI 90: Patient safety and adverse events composite*	CMS	07/01/2019 - 12/31/2019 AND 07/01/2020 - 06/30/2021	N/A	N/A

*Note: CMS calculates PSI 90 using ten (10) component PSIs. While scores for each of the 10 component PSIs will NOT be used to calculate fall 2023 Hospital Safety Grades, they will be publicly reported on the Hospital Safety Grade [website](#).

APPENDIX B: FALL 2023 LEAPFROG SAFETY GRADE ESTIMATED STANDARD MEASURE WEIGHTS

Domain	Measure	Estimated Standard Measure Weight
Process/Structural Measure Domain (50%)	Computerized Physician Order Entry (CPOE)	5.6%
	Bar Code Medication Administration (BCMA)	5.4%
	ICU Physician Staffing (IPS)	7.2%
	Safe Practice 1: Culture of Leadership Structures and Systems	3.1%
	Safe Practice 2: Culture Measurement, Feedback, & Intervention	3.3%
	Total Nursing Care Hours per Patient Day	5.0%
	Hand Hygiene	4.7%
	H-COMP-1: Nurse Communication	3.1%
	H-COMP-2: Doctor Communication	3.1%
	H-COMP-3: Staff Responsiveness	3.1%
	H-COMP-5: Communication about Medicines	3.1%
	H-COMP-6: Discharge Information	3.1%
Outcome Measure Domain (50%)	Foreign Object Retained	4.3%
	Air Embolism	2.4%
	Falls and Trauma	5.0%
	CLABSI	4.5%
	CAUTI	4.6%
	SSI: Colon	3.4%
	MRSA	4.5%
	C. Diff.	4.5%
	PSI 4: Death rate among surgical inpatients with serious treatable conditions	2.0%
	CMS Medicare PSI 90: Patient safety and adverse events composite	14.9%