

## Planned Updates to the Leapfrog Hospital Safety Grade Methodology for Spring 2022 and Fall 2022: Request for Public Comments

Leapfrog is planning one update to the Leapfrog Hospital Safety Grade methodology that will be used to calculate the spring 2022 Hospital Safety Grades and two additional changes that will begin in the fall 2022 Hospital Safety Grades. These updates come under the guidance of Leapfrog's national expert panel and research team at Johns Hopkins Medicine and in response to stakeholder feedback. Leapfrog is inviting public comments on these proposed changes through December 9, 2021. Public comments can be submitted using the directions below.

The methodology updates outlined in this document include:

1. [Hand Hygiene measure](#)
  - a. [Spring 2022: Maintaining scoring for the Hand Hygiene measure from Fall 2021](#)
  - b. [Fall 2022: Update to Scoring for the Hand Hygiene measure](#)
  - c. [Fall 2022: Imputation for the Hand Hygiene measure](#)
2. [CPOE and BCMA measures: Spring 2022](#)

[Appendix A](#) on pages 6-8 include the spring 2022 measure names, data sources, and reporting periods.

### Instructions to Submit a Public Comment

To submit a public comment:

1. Visit <https://leapfroghelpdesk.zendesk.com/>
2. Click on "Submit a Request" on the top right-hand corner of the webpage
3. Select "Hospital Safety Grade" as the name of the ratings program
4. Select "Submit a Public Comment" from the Safety Grade issue drop-down list
5. Include your public comments in the "Question" field
6. Click Submit after completing all required fields

Leapfrog will publish responses to public comments received in December/January. More information can be found on the Hospital Safety Grade website at <https://www.hospitalsafetygrade.org/for-hospitals/key-dates-and-information>

# 1. Hand Hygiene measure from the Leapfrog Hospital Survey

## Spring 2022: Maintaining scoring for the Hand Hygiene measure from Fall 2021





For Spring 2022 Leapfrog will maintain the scoring for the Hand Hygiene measure from the Leapfrog Hospital Survey that was used in the fall 2021 Hospital Safety Grade. This means that hospitals achieving the top two performance categories on the 2021 Hospital Survey (Achieved the Standard or Considerable Achievement) will receive 100 points and hospitals achieving the bottom two performance categories (Some Achievement or Limited achievement) will not have the Hand Hygiene measure used to calculate the spring 2022 Safety Grade. Instead, the standard weight assigned to the Hand Hygiene measure in the Hospital Safety Grade methodology will be redistributed to the other measures in the Process/Structural Measure Domain and the measure will be reported as “Not Available.”

For hospitals that decline to respond to the 2021 Leapfrog Hospital Survey by November 30, 2021, the late Submission Deadline, the standard weight assigned to the Hand Hygiene measure in the Hospital Safety Grade methodology will be redistributed to the other measures in the Process/Structural Measure Domain and the measure will be reported as “Declined to Report.” More information is available in the [Hospital Safety Grade Scoring Methodology](#).

## Fall 2022: Update to scoring for the Hand Hygiene measure

Beginning with the **fall 2022** Hospital Safety Grade, the following Safety Grade scores will be assigned to **each** of the four performance categories from the **2022 Leapfrog Hospital Survey** for the Hand Hygiene measure:

Table 1: Safety Grade Measure Scores Assigned to Leapfrog Hospital Survey Performance Categories for the Hand Hygiene Measure

2022 Leapfrog Hospital Survey Performance Category for the Hand Hygiene Measure	Fall 2022 Safety Grade Score for the Hand Hygiene Measure
Achieved the Standard 	100
Considerable Achievement 	70
Some Achievement 	40
Limited Achievement 	15

## Fall 2022: Imputation for Hand Hygiene

Also beginning with the **fall 2022** Hospital Safety Grade, for hospitals that decline to respond to the 2022 Leapfrog Hospital Survey and are therefore publicly reported as “Declined to Respond” for the Hand Hygiene measure on Leapfrog’s [Survey Results website](#), Leapfrog will assign a score for the Hand Hygiene measure using the two-step imputation methodology currently used for Computerized Physician Order Entry (CPOE) and Bar Code Medication Administration (BCMA).

### Step 1: Use a hospital's most recent score on the measure

If the hospital has a score for the Hand Hygiene measure from the 2020 or 2021 Leapfrog Hospital Survey (the current Hand Hygiene measure was introduced on the 2020 Leapfrog Hospital Survey) in the previous four rounds of grades (i.e., spring 2022, fall 2021, spring 2021, or fall 2020), the hospital is assigned the most recent score on that measure. If the hospital was assigned “Not Available” based on their score for the Hand Hygiene measure from the 2020 or 2021 Leapfrog Hospital Survey, Step 2 will be used (see below).

Example of Step 1: The hospital declined to respond to the 2022 Leapfrog Hospital Survey. The hospital did submit a 2021 Leapfrog Hospital Survey and achieved at the performance category of “Achieved the Standard.” As a result, the hospital was assigned a Safety Grade score of 100 for Hand Hygiene for the spring 2022 Safety Grade. The Safety Grade score of 100 for the Hand Hygiene measure from spring 2022 would be assigned for fall 2022.

### Step 2: Use the mean of the scores assigned to similar hospitals eligible for a Hospital Safety Grade

If the hospital is not eligible for Step 1, the hospital is assigned to a cohort of similar hospitals using three or four hospital characteristics obtained from either the 2022 Leapfrog Hospital [Survey Results](#) or the most recent CMS Impact file: (1) urban/rural status (from the Impact File), (2) safety net status (determined by disproportionate share hospital patient percentage from the Impact File), (3) number of beds (from the Impact file), and (4) teaching status. Teaching status is obtained from the 2022 Leapfrog Hospital [Survey Results](#) if available; otherwise, it is determined from the Resident to Bed Ratio from the Impact file if available. Teaching status is only used for urban hospital cohorts.

Once assigned to a cohort, the hospital is assigned the mean score of its cohort. The mean score of the cohort is calculated based on the performance category from the Leapfrog Hospital Survey each hospital in the cohort obtained the first year they reported on Leapfrog's Hand Hygiene standard starting with the 2020 Leapfrog Hospital Survey. See Table 1 above for details on the Safety Grade Scores assigned to each of the Performance Categories from the Leapfrog Hospital Survey.

#### Example of Step 2:

The hospital declined to respond to the 2022 Leapfrog Hospital Survey. The hospital submitted a 2021 Leapfrog Hospital Survey and achieved at the performance category of “Some Progress.” As a result, the hospital was assigned a score of “Not Available” for the purposes of calculating the spring 2022 Safety Grade. In the fall 2022 Hospital Safety Grade, the hospital will be assigned a score for the Hand Hygiene measure based on the mean scores of other similar hospitals that are eligible for a Hospital Safety Grade. The mean score of the cohort is calculated based on the score each hospital in the cohort obtained the first year they reported to the Hospital Survey on the current Hand Hygiene standard.

## **2. CPOE and BCMA measures: Starting in Spring 2022**

Since implementing the imputation methodology for hospitals missing measure scores for Computerized Physician Order Entry (CPOE) and Bar Code Medication Administration (BCMA) in spring 2021, one major concern has been shared by stakeholders: hospitals that declined to report on their CPOE or BMCA performance to the Leapfrog Hospital Survey are receiving scores elevated by other hospitals that worked over several years to successfully achieve Leapfrog's high standards on these measures.

To better reflect the relevant achievements in patient safety that are highlighted in the comments by these stakeholders, Leapfrog will update the approach to Step 2 of the imputation methodology for CPOE and BCMA. Leapfrog will assign hospitals ineligible for Step 1 the **lower** of two possible mean scores for CPOE and BCMA based on their cohort's performance:

- **Mean of current and recent scores:** The mean score of the cohort is calculated based on the hospital scores in the current round (i.e., spring 2022) from either Leapfrog's publicly reported [Survey Results](#) or Step 1 of the imputation model.

- ***Mean of scores obtained in each hospital's first year of reporting on Leapfrog's CPOE and BCMA standards via the Leapfrog Hospital Survey:*** The mean score of the cohort is calculated based on the score (i.e., performance category from the Leapfrog Hospital Survey) each hospital in the cohort obtained the first year they reported on Leapfrog's CPOE and BCMA standards starting with the 2018 Leapfrog Hospital Survey (the year the CPOE and BCMA standards were last significantly updated; excluding scores from 2020 when the CPOE Test was not included on the Leapfrog Hospital Survey).

## Appendix A: Spring 2022 Leapfrog Safety Grade Measures, Reporting Periods, and Data Sources

PROCESS/STRUCTURAL MEASURES (12)				
Measure Name	Primary Data Source	Reporting Period	Secondary Data Source	Reporting Period
<b>Computerized Physician Order Entry (CPOE)</b>	2021 Leapfrog Hospital Survey	2021	Imputation Model Applied	N/A
<b>Bar Code Medication Administration (BCMA)</b>	2021 Leapfrog Hospital Survey	2021	Imputation Model Applied	N/A
<b>ICU Physician Staffing (IPS)</b>	2021 Leapfrog Hospital Survey	2021	Imputation Model Applied	N/A
<b>Safe Practice 1: Culture of Leadership Structures and Systems</b>	2021 Leapfrog Hospital Survey	2021	N/A	N/A
<b>Safe Practice 2: Culture Measurement, Feedback &amp; Intervention</b>	2021 Leapfrog Hospital Survey	2021	N/A	N/A
<b>Safe Practice 9: Nursing Workforce</b>	2021 Leapfrog Hospital Survey	2021	N/A	N/A
<b>Hand Hygiene</b>	2021 Leapfrog Hospital Survey	2021	N/A	N/A
<b>H-COMP-1: Nurse Communication</b>	CMS	07/01/2020 – 03/31/2021	N/A	N/A
<b>H-COMP-2: Doctor Communication</b>	CMS	07/01/2020 – 03/31/2021	N/A	N/A
<b>H-COMP-3: Staff Responsiveness</b>	CMS	07/01/2020 – 03/31/2021	N/A	N/A
<b>H-COMP-5: Communication about Medicines</b>	CMS	07/01/2020 – 03/31/2021	N/A	N/A
<b>H-COMP-6: Discharge Information</b>	CMS	07/01/2020 – 03/31/2021	N/A	N/A

<b>OUTCOME MEASURES (10)</b>				
<b>Measure Name</b>	<b>Primary Data Source</b>	<b>Reporting Period</b>	<b>Secondary Data Source</b>	<b>Reporting Period</b>
<b>Foreign Object Retained</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>Air Embolism</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>Falls and Trauma</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>CLABSI</b>	2021 Leapfrog Hospital Survey	10/01/2019 – 12/31/2019	CMS	10/01/2019 – 12/31/2019
		AND 07/01/2020 – 03/31/2021		AND 07/01/2020 – 03/31/2021
<b>CAUTI</b>	2021 Leapfrog Hospital Survey	10/01/2019 – 12/31/2019	CMS	10/01/2019 – 12/31/2019
		AND 07/01/2020 – 03/31/2021		AND 07/01/2020 – 03/31/2021
<b>SSI: Colon</b>	2021 Leapfrog Hospital Survey	10/01/2019 – 12/31/2019	CMS	10/01/2019 – 12/31/2019
		AND 07/01/2020 – 03/31/2021		AND 07/01/2020 – 03/31/2021
<b>MRSA</b>	2021 Leapfrog Hospital Survey	10/01/2019 – 12/31/2019	CMS	10/01/2019 – 12/31/2019
		AND 07/01/2020 – 03/31/2021		AND 07/01/2020 – 03/31/2021
<b>C. Diff.</b>	2021 Leapfrog Hospital Survey	10/01/2019 – 12/31/2019	CMS	10/01/2019 – 12/31/2019
		AND 07/01/2020 – 03/31/2021		AND 07/01/2020 – 03/31/2021
<b>PSI 4: Death rate among surgical inpatients with serious treatable conditions</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>CMS Medicare PSI 90: Patient safety and adverse events composite*</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A

**\*COMPONENT PSIs**

Component PSI	Primary Data Source	Reporting Period	Secondary Data Source	Reporting Period
<b>PSI 3: Pressure ulcer rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 6: Iatrogenic pneumothorax rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 8: In-hospital fall with hip fracture rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 9: Perioperative hemorrhage and hematoma rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 10: Postoperative acute kidney injury rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 11: Postoperative respiratory failure rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 12: Perioperative pulmonary embolism or deep vein thrombosis rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 13: Postoperative sepsis rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 14: Postoperative wound dehiscence rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A
<b>PSI 15: Unrecognized abdominopelvic accidental puncture/laceration rate</b>	CMS	07/01/2018 – 12/31/2019	N/A	N/A

Note: CMS calculates PSI 90 using the ten (10) component PSIs listed above. While scores for each of the 10 component PSIs will NOT be used to calculate spring 2022 Hospital Safety Grades, they will be publicly reported on the Hospital Safety Grade [website](#).