



# 2023 LEAPFROG TOP HOSPITALS

## TOP CHILDREN'S HOSPITALS

### METHODOLOGY AND DESCRIPTION

For the purposes of determining Top Hospitals, hospitals are first placed into one of the following categories: Children's, Rural, General, Large Teaching (500 or more staffed beds), or Small Teaching (less than 500 staffed beds). Criteria for Top Hospital recognition is specific to each category but substantially similar across all categories.

Within the **Children's Hospital** category, the following criteria were applied:

#### **I. A hospital must achieve Leapfrog's Computerized Physician Order Entry (CPOE) Standard.**

To achieve Leapfrog's Computerized Physician Order Entry (CPOE) standard, prescriber must enter at least 85% of inpatient medication orders through a CPOE system *and* demonstrate via a timed evaluation that their CPOE system alerts prescribers to at least 60% of common, serious medication ordering errors.

CPOE systems can reduce the number of adverse drug events by up to 88%<sup>1</sup>, preventing three million serious medication errors in the U.S. each year<sup>2</sup>.

#### **II. A hospital must achieve Leapfrog's ICU Physician Staffing (IPS) Standard.**

To achieve Leapfrog's IPS Standard, hospitals operating adult or pediatric general medical and/or surgical ICUs and neuro ICUs must ensure that all ICU patients are managed or co-managed by physicians who are board certified in critical care medicine ("intensivists") and dedicated to the ICU for at least 8 hours a day, 7 days a week, and at other times ensures the intensivists are immediately available by phone and have another highly trained clinician able to reach the patient and carry out their orders. Alternatively, hospitals can achieve the standard using a qualified 24/7 tele-intensivist service, with some daily on-site intensivist presence.

Hospitals that do not operate adult or pediatric general medical and/or surgical ICU or neuro ICUs are not assessed on this standard for the purposes of determining Top Hospitals.

Research has shown that there is a 30% reduction in overall hospital mortality and a 40% reduction in ICU mortality in ICUs where intensivists manage or co-manage all patients<sup>3</sup>.



### **III. A hospital must achieve Leapfrog’s Never Events Policy Standard.**

To achieve Leapfrog’s Never Events Policy Standard, hospitals must have a written policy that outlines nine basic acts the hospital will take if one of the National Quality Forum’s serious reportable events, otherwise known as “never events,” occurs: apologize to the patient and family, waive all costs related to the event, report the event to an external agency, conduct a root-cause analysis, interview patients/families to inform the root cause analysis, inform patient/families of actions taken by hospital to prevent similar never events in the future, have a protocol to provide support for caregivers involved in never events, make a copy of this policy available to patients and payers, and perform an annual review to ensure compliance with the policy for each Never Event that occurred.

### **IV. A hospital must achieve, or make some or considerable progress towards achieving, Leapfrog’s Pediatric Patient Experience Standard.**

To achieve Leapfrog’s Pediatric Patient Experience Standard, hospital must score in the top quartile of reporting hospitals based on their Top Box Scores for five domains from the CAHPS Child Hospital Survey: 1) Communication with Parent – Communication about your child’s medicines, 2) Communication with Parent – Keeping you informed about your child’s care, 3) Communication with Child – How well nurses communicate with your child, 4) Communication with Child – How well doctors communicate with your child, and 5) Attention to Safety and Comfort – Preventing mistakes and helping you report concerns. Hospitals with fewer than 100 returned surveys during the reporting period, fewer than 500 pediatric admissions during the reporting period, or fewer than 100 non-NICU admissions during the reporting period are not required to administer the CAHPS Child Hospital Survey.

### **V. A hospital must achieve, or make considerable progress towards achieving, Leapfrog’s Pediatric CT Radiation Dose Standard for Head and Abdomen/Pelvis Scans.**

To achieve Leapfrog’s Pediatric CT Radiation Dose Standard for Head and Abdomen/Pelvis Scans, hospitals must ensure their average median dose for each of five pediatric age strata are at or below the national median for head scans and abdomen/pelvis scans. Hospitals that do not perform pediatric CT scans on pediatric patients are not assessed on this standard for the purposes of determining Top Hospital.

Given that doses of radiation used for Computed Tomography (CT) are far higher than conventional radiographs (x-rays), it is important for hospitals to review the dosage exposure for their patients, especially pediatric patients given their smaller size and lower body weights.

### **VI. A hospital must report on all applicable measures and achieve Leapfrog’s standards on at least 50% of applicable measures.**

Twenty-six measures from the 2023 Leapfrog Hospital Survey were used to determine Top Children’s Hospitals. See [Appendix I](#) for the list of measures.

The measures on the Survey are predicated on the latest science and are selected with guidance from scientific advisors at the Johns Hopkins’ Armstrong Institute for Patient Safety as well as Leapfrog’s volunteer [Expert Panels](#).



Hospitals are only assessed on measures related to services and procedures they perform. Reporting on all measures and achieving Leapfrog's standards on at least 50% of the measures demonstrates a strong commitment to transparency on safety and quality.

<sup>1</sup> Bates D, Teich J, Lee J, et al. The impact of computerized physician order entry on medication error prevention. *JAMIA*. 1999;6:313-321.

<sup>2</sup> Classen D, Pestotnik S, Evans R, Lloyd J, Burke J. Adverse drug events in hospitalized patients: excess length of stay, extra costs, and attributable mortality. *JAMA*. 1997;277:301-306.

<sup>3</sup> Pronovost PJ, Young T, Dorman T, Robinson K, Angus DC. Association between ICU physician staffing and outcomes: a systematic review. *Crit Care Med*. 1999; 27:A43.



**Appendix I: List of Measures from the 2023 Leapfrog Hospital Survey Included in the Top Children’s Hospitals’ Methodology**

	<b>Survey Section</b>	<b>Measure</b>
1	Section 1 Patient-Centered Care	Billing Ethics
2	Section 2 Medication Safety	CPOE
3	Section 2 Medication Safety	BCMA
4	Section 3 Adult and Pediatric Complex Surgery	Norwood Procedures
5	Section 3 Adult and Pediatric Complex Surgery	Safe Surgery Checklist for Inpatient Procedures
6	Section 4 Maternity Care	Elective Delivery
7	Section 4 Maternity Care	Cesarean Birth
8	Section 4 Maternity Care	Episiotomy
9	Section 4 Maternity Care	Newborn Bilirubin Screening Prior to Discharge
10	Section 4 Maternity Care	Appropriate DVT Prophylaxis in Women Undergoing Cesarean Section
11	Section 4 Maternity Care	High Risk Deliveries
12	Section 5 ICU Physician Staffing	ICU Physician Staffing
13	Section 6 Patient Safety Practices	NQF Safe Practice 1 Culture of Safety Leadership Structures, and Systems
14	Section 6 Patient Safety Practices	NQF Safe Practice 2 Culture Measurement, Feedback, and Interventions
15	Section 6 Patient Safety Practices	Hand Hygiene
16	Section 7 Managing Serious Errors	Never Events Policy
17	Section 7 Managing Serious Errors	Central-line Associated Blood Stream Infections (CLABSI) in ICUs and select wards
18	Section 7 Managing Serious Errors	Catheter-associated Urinary Tract Infections (CAUTI) in ICUs and select wards
19	Section 7 Managing Serious Errors	Facility-wide Inpatient Methicillin-resistant Staphylococcus aureus (MRSA) Blood Laboratory-identified Events
20	Section 7 Managing Serious Errors	Facility-wide Inpatient Clostridium difficile (CDI) Laboratory-identified Events
21	Section 8 Pediatric Care	Pediatric Patient Experience (CAHPS Child Hospital Survey)
22	Section 8 Pediatric Care	Pediatric CT Radiation Dose - Head Scans
23	Section 8 Pediatric Care	Pediatric CT Radiation Dose - Abdomen/Pelvis Scans
24	Section 9 Outpatient Procedures	Certified Clinicians Present While Pediatric Patients Are Recovering
25	Section 9 Outpatient Procedures	Safe Surgery Checklist for Outpatient Procedures
26	Section 9 Outpatient Procedures	Medication Safety for Outpatient Procedures