



# 2021 LEAPFROG TOP HOSPITALS

## TOP TEACHING (500 OR MORE STAFFED BEDS) HOSPITALS

### METHODOLOGY AND DESCRIPTION

In order to compare hospitals to their peers, Leapfrog first placed each reporting hospital in one of the following categories: Children's, Rural, General, Teaching (500 or More Staffed Beds), or Teaching (Below 500 Staffed Beds). Though the criteria for Top Hospital status is customized to each category of hospitals, across the board the criteria are substantially similar.



*Within the Teaching (500 or More Staffed Beds) hospital category, the following criteria were applied:*

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

Leapfrog's standard for Computerized Physician Order Entry (CPOE) measures the extent to which a hospital has adopted CPOE, and whether decision-support tools in the CPOE system are working effectively. On the 2021 Leapfrog Hospital Survey, hospitals had the option to report on implementation of CPOE only or to report on CPOE implementation status and participate in the Adult Inpatient Test via the CPOE Evaluation Tool. To achieve this standard based on implementation only, physicians must enter at least 85% of medication orders through a CPOE system. To achieve the standard based on implementation and score on the CPOE Evaluation Tool, physicians must enter at least 75% of medication orders through a CPOE system *and* demonstrate via an online, timed evaluation, that their inpatient CPOE system can alert physicians to at least 60% of common, serious prescribing errors.

CPOE systems can reduce the number of ADEs 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 standard for ICU Physician Staffing (IPS).**

Hospitals achieving Leapfrog's standard for ICU Physician Staffing must operate adult and/or pediatric ICUs that are managed or co-managed by intensivists who: a) Are present during daytime hours and provide clinical care exclusively in the ICU OR are present via telemedicine 24/7, with some on-site intensivist presence, and, b) When not present on site or via telemedicine, return pages at least 95% of the time (i) within five minutes and (ii) arrange for a certified physician or physician extender to reach ICU patients within five minutes. Hospitals that do not have an ICU are not assessed on this standard in the evaluation of Top Hospitals.

Mortality rates are significantly lower in hospitals with ICUs managed exclusively by board-certified intensivists (physicians trained in critical care medicine). 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 fully comply with the elements of Leapfrog's Never Events policy.**

Leapfrog utilizes the National Quality Forum's list of serious reportable events in asking hospitals to adopt a Never Events policy. Leapfrog's Never Events policy asks hospitals to commit to nine basic acts if a Never Event does occur: apologize to the patient and family, waive all costs related to the event and follow-up care, report the event to an external agency, conduct a root-cause analysis of how and why the event occurred, make a copy of this policy available to patients, interview patients/families to inform 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, and perform an annual review to ensure compliance with Leapfrog's Never Events Policy for each Never Event that occurred. Hospitals that achieve Leapfrog's standard have all nine elements of the policy in place and are demonstrating their commitment to treating patients, purchasers, and payers with respect when a Never Event occurs.



**IV. A hospital must report on all applicable measures and achieve Leapfrog’s standard on at least 40% of applicable measures.**

The Leapfrog Hospital Survey uses 39 national performance measures to evaluate individual facilities in seven domains: inpatient care management, inpatient surgeries, pediatric care, medication safety, maternity care, outpatient procedures, and infections. The measures included on the Survey are predicated on the latest science and are selected with guidance from scientific advisors at the Armstrong Institute for Patient Safety as well as Leapfrog's volunteer Expert Panels. Hospitals are evaluated only on the services or procedures performed in their facility. Reporting on all measures and achieving Leapfrog’s standards on at least 40% of the measures demonstrates a strong commitment to transparency on safety and quality. Large teaching hospitals that did not report on pediatric care were eligible to be selected as a Top Hospital in 2021.

**V. Hospitals eligible for a Leapfrog Hospital Safety Grade must receive an A on the letter grades publicly reported at the time of the Top Hospital public announcement.**

The Leapfrog Hospital Safety Grade assesses how safe hospitals are for patients. Each A, B, C, D or F score comes from expert analysis of publicly available data consumers can use to protect their families from harm or death during a hospital stay. Some hospitals are exempted from receiving a Safety Grade, including specialty hospitals like children’s or surgical, and Critical Access Hospitals. Hospitals that are eligible for a grade, which includes general acute-care hospitals, must receive an A on the current Leapfrog Hospital Safety Grade (Fall 2021) in order to qualify for Top Hospitals.

**VI. Hospitals must satisfy the Top Hospital Selection Committee that in general the hospital embodies the highest standards of excellence worthy of the Leapfrog Top Hospital designation.**

Hospitals that satisfy the quantitative criteria outlined above must also meet the Committee’s qualitative requirements for overall excellence, which includes a review of data from the Centers for Medicare & Medicaid Services (CMS) and other publicly available information pertaining to the hospital. Among those requirements: hospitals that perform worse than the national rate on CMS’ mortality measures for heart attack, heart failure, pneumonia, COPD, or CABG are excluded from receiving a Top Hospital award.

**VII. A hospital must achieve Leapfrog’s standards for high-risk surgeries and procedures**  
*(Hospitals must “achieve the standard” for more than 50% of the surgeries or procedures that apply)*

Research indicates that a patient’s risk of dying is reduced by approximately two to four times, depending on the high-risk procedure, if care is obtained in hospitals that meet Leapfrog’s standards. Hospitals fulfilling Leapfrog’s standards for high-risk surgeries and procedures (carotid endarterectomy, mitral valve repair and replacement, open aortic procedures, lung resection for cancer, esophageal resection for cancer, pancreatic resection for cancer,



rectal cancer surgery, bariatric surgery for weight loss, total hip replacement surgery, total knee replacement surgery, and Norwood procedure) have met Leapfrog's robust volume, processes of care, and outcomes standards.

<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.