# 2018 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.

All hospitals considered for any Top Hospital Award must rank in the top 10% of all hospitals for their overall Value Score calculated in the Leapfrog Value-Based Purchasing Program. The Value Score is a weighted, composite score of the most important national patient safety, quality, and resource use standards, as assessed through the Leapfrog Hospital Survey.

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

**I. Value Score in the top 10% of Teaching (500 or more Staffed Beds) hospitals.**

The Value Score is calculated using the Leapfrog Value-Based Purchasing (VBP) Program™ scoring methodology. The VBP Program is a comprehensive hospital pay-for-performance program that focuses on the most important national patient safety, quality, and resource use standards. These standards are taken directly from the Leapfrog Hospital Survey.

Through this program, a hospital is scored for its performance on each of Leapfrog's national standards. Individual measure scores are rolled up into six domains (Medication Safety, Inpatient Care Management, Infections, Maternity Care, Inpatient Surgery, and Pediatric Care) and then combined into an overall composite score referred to as the Value Score.

**II. A hospital must fully meet or achieve substantial progress on Leapfrog's standard for Computerized Physician Order Entry (CPOE).**

Research estimates that more than one million serious medication errors occur each year in U.S. hospitals, with 7,000 deaths annually from adverse drug events (ADEs)[1]. In addition to the human price paid, each ADE adds $2,000 on average to the cost of a hospitalization[2]. This translates to more than $7.5 billion per year nationwide in hospital costs alone[3]. CPOE systems can reduce the number of ADEs by up to 88%[4], preventing three million serious medication errors in the U.S. each year[2].

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. To fully meet this standard, physicians must enter at least 85% 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.

**III. A hospital must fully meet Leapfrog's standard for ICU Physician Staffing (IPS).**

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[5].

Hospitals fulfilling 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 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.

**IV. A hospital must, at minimum, comply with the elements of Leapfrog's original 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 original Never Events policy asked hospital to commit to four 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, and conduct a root-cause analysis of how and why the event occurred. The hospital must also make a copy of this policy available to patients. Four additional elements have been added to Leapfrog's Never Events policy in 2018: 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 fully meet 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. Hospitals that have achieved some progress towards meeting Leapfrog's standard have the original five elements of the policy in place, while hospitals that have achieved substantial progress towards meeting Leapfrog's standard have the original five elements, plus, at least, 2 of the additional policies in place.

**V. A hospital must report on all applicable measures.**

The Leapfrog Hospital Survey uses 28 national performance measures to evaluate individual facilities in six domains: inpatient care management, inpatient surgeries, pediatric care, medication safety, maternity care, 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 demonstrates a strong commitment to transparency on safety and quality. Consequently, facilities must report on all measures, with the exception of either Medication Reconciliation or Pediatric CAHPS. As these two measures are newly added to the Leapfrog Survey, many facilities are still developing a policy around implementation of these processes. Next year, this criteria exception will not be considered in determining Top Hospitals.

**VI. 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 2018) in order to qualify for Top Hospitals.

**VII. 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, CABG, or stroke are excluded from receiving a Top Hospital award.

[1] Birkmeyer J, Dimick J. Leapfrog safety standards: potential benefits of universal adoption. The Leapfrog Group. Washington, DC: 2004.
[2] 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.
[3] Bates D, Spell N, Cullen D, et al. The costs of adverse drug events in hospitalized patients. Adverse Drug Events Prevention Study Group. JAMA. 1997;277(4):307-311.
[4] Bates D, Teich J, Lee J, et al. The impact of computerized physician order entry on medication error prevention. JAMIA. 1999;6:313-321.
[5] 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.