



# PROPOSED CHANGES TO THE 2018 LEAPFROG HOSPITAL SURVEY

## OPEN FOR PUBLIC COMMENT

Each year, The Leapfrog Group's team of researchers reviews the literature and convenes expert panels to ensure the Leapfrog Hospital Survey aligns with the latest science as well the public reporting needs of purchasers and consumers. Once a list of proposed changes is assembled for the next year's survey, Leapfrog releases those changes for public comment. The comments are then reviewed by Leapfrog's team of researchers and used to further refine the survey before it is finalized.

The proposed changes to the 2018 Leapfrog Hospital Survey are outlined below. To provide public comment, please respond by completing the public comment form [here](#). Comments will be accepted until COB on **December 27**.

We are grateful to those who take the time to submit comments each year. These comments bring enormous value to Leapfrog's team and help ensure the survey is valuable to hospitals, purchasers, and consumers.

For information on the 2017 Leapfrog Hospital Survey, visit [www.leapfroggroup.org/survey](http://www.leapfroggroup.org/survey).

## PROPOSED CONTENT CHANGES

### SECTION 1: BASIC HOSPITAL INFORMATION

To ensure accurate reporting of pediatric admissions, Leapfrog will update the endnote describing the criteria for pediatric admissions to include pediatric admissions (i.e. <18 years of age) to any inpatient unit, not just dedicated pediatric units.

To ensure consistency with other national data sources, hospitals will no longer be asked to report on teaching status. Leapfrog will obtain this information directly from the 2017 NHSN Annual Hospital Survey - Patient Safety Component for those hospitals that [join Leapfrog's NHSN Group](#) and provide a valid NHSN ID in the Profile. Hospitals that are designated as "Major Teaching" or "Graduate" will be designated as teaching hospitals for the purposes of the Leapfrog Hospital Survey. As a reminder, this designation is not used in scoring, but is used to designate hospitals for the purposes of the [Top Hospital Program](#).

Find instructions on how to join Leapfrog's NHSN Group and deadlines for the 2018 Survey in Appendix I.

### SECTION 2: MEDICATION SAFETY - COMPUTERIZED PHYSICIAN ORDER ENTRY (CPOE)

Hospitals will no longer be able to use their CMS Meaningful Use Reports to respond to Questions 3 and 4 as Leapfrog has received information that hospitals are not able to remove observation patients from these reports, and responses to



Questions 3 and 4 must be limited to inpatients only. There are no proposed changes to the questions or measure specifications.

Leapfrog is proposing three updates to the CPOE Scoring Algorithm. First, we are proposing to increase the target for implementation status (i.e. percentage of inpatient orders entered through an inpatient CPOE system) from 75% to 85%. This increase will be applied to both adult/general hospitals and pediatric hospitals. We welcome feedback from hospitals on what barriers might prevent them from reaching this implementation status among their inpatient units.

Next, we are proposing to increase the target for the score on the Adult Inpatient Test via the CPOE Evaluation Tool from 50% to 60%. To achieve “Full Demonstration of National Safety Standard for Decision Support” in 2018, hospitals must demonstrate that its inpatient CPOE system alerts prescribers to at least 60% of common serious ordering errors.

Lastly, we are proposing to update the way in which the two elements of the standard (i.e. implementation status and Adult Inpatient Test score from the CPOE Evaluation Tool) are combined together to result in an overall CPOE Score for adult/general hospitals. Previously, Leapfrog’s CPOE standard required hospitals to have the top implementation status (i.e. 75% in 2017) and to have scored in one of the top two CPOE test score categories (i.e. full or substantial demonstration) to achieve an overall CPOE Score of “Fully Meets the Standard” (i.e. four-filled bars). This scoring algorithm emphasized implementation status over the ability of the CPOE system to alert prescribers to common serious ordering errors. Leapfrog is proposing to update the standard to reverse that emphasis and emphasize the efficacy of the CPOE system in alerting prescribers to ordering errors over implementation status. Therefore, in order to be scored as “Fully Meets the Standard” in 2018, hospitals will need to have the top CPOE test score (i.e. “Full Demonstration of National Safety Standard for Decision Support”) and have one of the top two implementation statuses (i.e. 85% or greater or 75-84%). Please see Appendix II for additional updates to the Adult CPOE Scoring Algorithm.

Currently, there is no CPOE test available for pediatric hospitals. Therefore, pediatric hospitals will need to have the top implementation status (i.e. 85% or greater) in order to be scored as “Fully Meets the Standard.”

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### SECTION 3: INPATIENT SURGERY (APPLICABLE TO ADULT/GENERAL HOSPITALS ONLY)

For 2017, Leapfrog introduced two new sets of questions to the survey. The first set of questions asked hospitals to report on hospital and surgeon volume for 10 high-risk surgical procedures. The second set of questions asked hospitals to report on processes they have in place to ensure surgical appropriateness. The two sets of questions were designed to assist Leapfrog’s national expert panel in finalizing recommendations for new standards focused on inpatient surgery.

Leapfrog would like to thank the over 1,500 hospitals that responded to Section 3 in 2017. We would also like to thank those hospitals that provided recommendations on the diagnosis and procedure codes used in the hospital and surgeon volume subsection, and that participated in key informant interviews. All of the information received during 2017 was taken into consideration and helped to inform the panel’s final recommendations for 2018 detailed below.

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#### SECTION 3A: HOSPITAL AND SURGEON VOLUME STANDARD

The proposed standard challenges hospitals and health systems across the country to hold themselves accountable for meeting minimum hospital and surgeon volume standards that are known to improve the odds of a safer surgery for their patients.



Based on minimum hospital and surgeon volume standards first published in 2015 by researchers at Dartmouth-Hitchcock, the University of Michigan, and The Johns Hopkins Hospital, as well as information collected in 2017 from the Leapfrog Hospital Survey, peer-reviewed literature, and consultation with national experts, Leapfrog is proposing the following hospital and surgeon volume standards for 2018:

Procedure	Hospital Volume (minimum per 12-months or 24-month average)	Surgeon Volume (minimum per 12-months or 24-month average)
Bariatric surgery for weight loss	50	20
Esophageal resection	20	7
Lung resection	40	15
Pancreatic resection	20	10
Rectal cancer surgery	16	6
Carotid endarterectomy	20	10
Open abdominal aortic aneurysm repair	15	10
Mitral valve repair and replacement	40	20

Hospitals will be asked to report on their total hospital volume over a 12-month period or their annual average over a 24-month period based on updated procedures and diagnosis codes that include several recommendations from participating hospitals and health systems.

In addition, the list of high-risk procedures has been reduced from ten to eight. Leapfrog has eliminated total hip and total knee replacement for the 2018 Survey to allow additional time in finalizing the recommended hospital and surgeon volume standards.

We are also proposing to remove the individual surgeon volume questions, based on the challenges hospitals reported in obtaining accurate volume data on surgeons that are privileged to perform that surgery at multiple facilities. Instead, hospitals will be asked whether their process to privilege surgeons includes the surgeon meeting or exceeding the recommended minimum volume standards listed in the table above. See an example of the updated questions below:

<p><b>1) Check all procedures that your hospital performs as defined in the Inpatient Surgery Reference Information.</b></p> <p><i>If your hospital does not perform the procedure or ONLY does so when a patient is too unstable for safe transfer, do not check the box next to that procedure.</i></p> <p><i>If "None of the above," please skip remaining questions in Section 3A and 3B, and go to the Affirmation of Accuracy.</i></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Carotid endarterectomy</li> <li><input type="checkbox"/> Mitral valve repair and replacement</li> <li><input type="checkbox"/> Open abdominal aortic aneurysm repair</li> <li><input type="checkbox"/> Lung resection</li> <li><input type="checkbox"/> Esophageal resection</li> <li><input type="checkbox"/> Pancreatic resection</li> <li><input type="checkbox"/> Rectal cancer surgery</li> <li><input type="checkbox"/> Bariatric surgery for weight loss</li> <li><input type="checkbox"/> None of the above</li> </ul>
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Hospitals will only respond to questions #2 and #3 based on the procedures selected in question #1.

<p><b>2) Total hospital volume for each selected procedure during the reporting period:</b></p>
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<i>Procedure</i>	<i>Number of Procedures Performed (12-month count or 24-month annual average)</i>
Carotid endarterectomy	
Mitral valve repair and replacement	
Open abdominal aortic aneurysm repair	
Lung resection	
Esophageal resection	
Pancreatic resection	
Rectal cancer surgery	
Bariatric surgery for weight loss	

<b>3) Does your hospital's process for privileging surgeons include the surgeon meeting or exceeding the minimum surgeon volume standard listed below?</b>		
<i>Procedure</i>	<i>Surgeon Volume Standard</i>	
Carotid endarterectomy	10	Yes No <i>Plan to implement within 12 months</i>
Mitral valve repair and replacement	20	Yes No <i>Plan to implement within 12 months</i>
Open abdominal aortic aneurysm repair	10	Yes No <i>Plan to implement within 12 months</i>
Lung resection	15	Yes No <i>Plan to implement within 12 months</i>
Esophageal resection	7	Yes No <i>Plan to implement within 12 months</i>
Pancreatic resection	10	Yes No <i>Plan to implement within 12 months</i>
Rectal cancer surgery	6	Yes No <i>Plan to implement within 12 months</i>
Bariatric surgery for weight loss	20	Yes No <i>Plan to implement within 12 months</i>

Some hospitals and health systems have made the strategic decision not to perform particular surgeries and instead direct patients to other hospitals where the hospital and surgeon volume are at a safe level. Leapfrog supports this practice and requests comments on how to recognize this practice through scoring or public reporting.

See FAQs in Appendix III.



Proposed Scoring Algorithm for the Minimum Hospital and Surgeon Volume Standard

Hospital and Surgeon Volume Standard Score (Performance Category)	For each of the surgeries performed by the hospital...
<b>Fully Meets the Standard (four-filled bars)</b>	<ul style="list-style-type: none"> <li>The hospital met the minimum hospital volume standard for the surgery</li> <li>The hospital’s process for privileging surgeons includes meeting or exceeding the minimum surgeon volume standard</li> </ul>
<b>Substantial Progress (three-filled bars)</b>	<ul style="list-style-type: none"> <li>The hospital met the minimum hospital volume standard for the surgery</li> <li>The hospital’s process for privileging surgeons does not include meeting or exceeding the minimum surgeon volume standard, but the hospital is committed to doing so within the next 12 months</li> </ul>
<b>Some Progress (two-filled bars)</b>	<ul style="list-style-type: none"> <li>The hospital did not meet the minimum hospital volume standard for the surgery, but the hospital’s process for privileging surgeons includes meeting or exceeding the minimum surgeon volume standard</li> <li>OR</li> <li>The hospital met the minimum hospital volume standard for the surgery, but the hospital’s process for privileging surgeons does not include the minimum surgeon volume standard, and the hospital is not committed to doing so within the next 12 months</li> </ul>
<b>Willing to Report (one-filled bar)</b>	<ul style="list-style-type: none"> <li>The hospital did not meet the minimum hospital volume standard for the surgery</li> <li>The hospital does not include the minimum surgeon volume standard in its privileging policy, whether or not they are committed to doing so in the next 12 months</li> </ul>
<b>Does Not Apply</b>	Means the hospital does not perform the surgery.
<b>Declined to Respond</b>	Means the hospital did not respond to the questions in this section of the survey or did not submit a survey.

**SECTION 3B: SURGICAL APPROPRIATENESS**

In 2017, in addition to reporting on new hospital and surgeon volume questions, hospitals were asked to report on their implementation of processes aimed at monitoring surgical appropriateness and preventing overuse of surgical procedures. Leapfrog has expanded its national advisory committee to refine and specify the questions in this subsection of the survey.

In 2018, hospitals responses to this subsection will not be scored. However, the responses will be used in public reporting. For each surgery performed, Leapfrog will display a hospital’s overall score which will be based on the hospital’s ability to meet the hospital volume standard and including the minimum surgeon volume standard in its privileging process. When visitors to Leapfrog’s public reporting website click into the score icon (i.e. four filled bars, three filled bars, etc.), they will see a statement indicating whether the hospital has processes and protocols in place to ensure surgical appropriateness. Hospitals that respond “Yes” to all five questions specific to that surgery will be reported as “Yes” and hospitals that respond “No” to any one of the five questions will be reported as “Not Yet.”

Questions in this section focus on the hospital’s progress in developing appropriateness criteria based on published guidelines as well as input from local surgeons, supporting and monitoring adherence, as well as communicating with surgeons, hospital leaders, and board members about adherence to the criteria. This approach is aimed to encourage



hospitals to continue implementing processes and protocols to ensure surgical appropriateness while giving them additional time before the responses are used in scoring.

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## SECTION 4: MATERNITY CARE

There are no proposed changes to this section.

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## SECTION 5: ICU PHYSICIAN STAFFING (IPS)

Leapfrog is proposing to make minor updates to the wording of some of the questions and response options in Section 5 ICU Physician Staffing to better understand hospitals' use of tele-intensivists.

In addition, Leapfrog is proposing to make a minor update to the scoring algorithm for hospitals to earn "Some Progress" (i.e. two-filled bars). It is not possible for hospitals to respond "No" to Question #3, which asks if all patients in these ICUs are managed or co-managed by one or more physicians certified in critical care medicine, while also responding "Yes" to Questions #7 and/or #8 which requires that all patients are managed or co-managed by intensivists either on-site or via telemedicine. Therefore, Questions #7 and #8 will be removed from the scoring algorithm for "Some Progress."

Please see Appendix IV for additional updates to the IPS Scoring Algorithm.

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## SECTION 6: NQF SAFE PRACTICES SCORE

Due to the absence of national training/educational opportunities to support managers in integrating risk and hazard information, Leapfrog is proposing the removal of Safe Practice element 4.3.c, which is listed below, from Safe Practice 4 Risks and Hazards. No updates to the scoring or weight for Safe Practice 4 Risks and Hazards are proposed.

In regard to developing the ability to appropriately assess risk and hazards to patients, the organization has done the following or had in place during the last 12 months:

- Senior managers have received training in the integration of risk and hazard information across the organization. Training was documented. (pp. 107-108)

In addition, Leapfrog is considering the addition of two unscored, fact-finding questions in Safe Practice 19 Hand Hygiene related to the use of electronic hand hygiene and/or video monitoring systems. Leapfrog requests comments on this addition and any information hospitals would like to provide on the value of electronic hand hygiene and/or video monitoring systems in improving hand hygiene compliance to reduce hospital-acquired infections.

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## SECTION 7: MANAGING SERIOUS ERRORS

### SECTION 7A: NEVER EVENTS POLICY STATEMENT

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Since 2008, Leapfrog has asked hospitals to agree to all of the following principles if a [never event](#) occurs within their facility:

- We will apologize to the patient and/or family affected by the never event



- We will report the event to at least one of the following external agencies within 10 days of becoming aware that the never event has occurred:
  - Joint Commission, as part of its Sentinel Events policy
  - State reporting program for medical errors
  - Patient Safety Organization (as defined in The Patient Safety and Quality Improvement Act of 2005)
- We agree to perform a root cause analysis, consistent with instructions from the chosen reporting agency
- We will waive all costs directly related to a serious reportable adverse event
- We will make a copy of this policy available to patients, patients’ family members, and payers upon request

Since Leapfrog declared these principles as our standard, new research and experience have further informed evidence on best practices for addressing never events. In particular, AHRQ developed, tested, and launched the [CANDOR](#) Toolkit, and the National Patient Safety Foundation gathered stakeholders to propose [new approaches](#) to performing a root cause analysis. After reviewing the latest hospital resources and national report, Leapfrog added four principles to the 2017 Survey, listed below. Hospitals’ adherence to these principles were not scored or publicly reported in 2017.

- We will interview patients and/or families who are willing and able, to gather evidence for the root cause analysis.
- We will inform the patient and/or his/her family of the action(s) that our hospital will take to prevent future recurrences of similar events based on the findings from the root cause analysis.
- We will have a protocol in place to provide support for caregivers involved in never events, and make that protocol known to all caregivers and affiliated clinicians.
- We will perform an annual review to ensure compliance with each element of Leapfrog’s Never Events Policy for each never event that occurred.

Leapfrog is proposing to update the scoring algorithm for Section 7A Never Events to include the principles added to the 2017 Survey, according to the table below:

Never Events Score (Performance Category)	Description
<b>Fully Meets the Standard (four-filled bars)</b>	The hospital has implemented a policy that adheres to all 9 principles of the Leapfrog Group Policy Statement on Serious Reportable Events/ “Never Events.”
<b>Substantial Progress (three-filled bars)</b>	The hospital has implemented a policy that adheres to all of the original 5 principles of the Leapfrog Group Policy Statement on Serious Reportable Events/ “Never Events”, as well as at least 2 additional principles.
<b>Some Progress (two-filled bars)</b>	The hospital has implemented a policy that adheres to all of the original 5 principles of the Leapfrog Group Policy Statement on Serious Reportable Events/ “Never Events.”
<b>Willing to Report (one-filled bar)</b>	The hospital responded to the Leapfrog survey questions pertaining to adoption of this policy, but does not yet meet the criteria for “Some Progress.”
<b>Declined to Respond</b>	The hospital did not respond to the questions in this section of the survey or did not submit a survey.



## SECTION 7B: HEALTHCARE-ASSOCIATED INFECTIONS

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There are no proposed changes to this subsection.

Hospitals that joined Leapfrog's NHSN Group, provided a valid NHSN ID, and submitted Section 7 of the 2017 Leapfrog Hospital Survey will not need to re-join Leapfrog's NHSN Group. They will find their NHSN ID prepopulated in their Hospital Profile when they log into the 2018 Survey. They will need to submit Section 7 on the 2018 Leapfrog Hospital Survey in order to be scored and publicly reported on these five infection measures: CLABSI, CAUTI, MRSA, C. Diff. and SSI Colon.

Hospitals that did not join Leapfrog's NHSN Group, provide a valid NHSN ID, or submit Section 7 of the 2017 Leapfrog Hospital Survey, will need to complete these three steps by the designated deadlines in 2018 to be scored and publicly reported on these five measures: CLABSI, CAUTI, MRSA, C. Diff. and SSI Colon.

Find instructions on how to join Leapfrog's NHSN Group and deadlines for the 2018 Survey in Appendix I.

There are no proposed changes to the scoring algorithm for this section. Hospitals that join Leapfrog's NHSN Group, provide a valid NHSN ID, and submit Section 7 by June 30 will be able to review their NHSN data by accessing their Hospital Details Page prior to the first publication of 2018 Leapfrog Hospital Survey Results.

## SECTION 7C: HOSPITAL-ACQUIRED CONDITIONS – PRESSURE ULCERS AND INJURIES

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Due to feedback Leapfrog received from hospitals in 2017 regarding the feasibility of using the updated ICD-10 measure specifications to report on the hospital-acquired pressure ulcers and injuries measures, Leapfrog is proposing the removal of Section 7C Hospital-Acquired Conditions – Pressure Ulcers and Injuries from the 2018 Survey.

## SECTION 7D: ANTIBIOTIC STEWARDSHIP PRACTICES

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Currently, in Section 7D hospitals are asked to report on their antibiotic stewardship practices. Questions in this section come directly from the NHSN Annual Hospital Survey - Patient Safety Component. In 2018, Leapfrog plans to remove the questions from Section 7D from the online survey and instead obtain the responses to these questions directly from CDC's National Healthcare Safety Network (NHSN).

Hospitals that joined Leapfrog's NHSN Group, provided a valid NHSN ID, and submitted Section 7 of the 2017 Leapfrog Hospital Survey will not need to re-join Leapfrog's NHSN Group. They will find their NHSN ID prepopulated in their Hospital Profile when they log into the 2018 Survey. They will need to submit Section 7 on the 2018 Leapfrog Hospital Survey in order to be scored and publicly reported on this measure.

Hospitals that did not join Leapfrog's NHSN Group, provide a valid NHSN ID, or submit Section 7 of the 2017 Leapfrog Hospital Survey will need to complete these three steps by the designated deadlines in 2018 if they would like to be scored and publicly reported on the Antibiotic Stewardship Practices measure.

Find instructions on how to join Leapfrog's NHSN Group and deadlines for the 2018 Survey in Appendix I.

There are no proposed changes to the scoring algorithm for this section. Hospitals that join Leapfrog's NHSN Group, provide a valid NHSN ID, and submit Section 7 by June 30 will be able to review their NHSN data by accessing their Hospital Details Page prior to the first publication of 2018 Leapfrog Hospital Survey Results.



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## SECTION 8: MEDICATION SAFETY

### PROPOSED CHANGES TO SECTION 8A BAR CODE MEDICATION ADMINISTRATION

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In Section 8A BCMA, Question #15a – 15e, hospitals currently report if they have any of five Processes and Structures to Prevent Workarounds:

- a. Has a formal committee that meets routinely to review data reports on BCMA system use
- b. Has back-up systems for BCMA hardware failures
- c. Has a Help Desk that provides timely responses to urgent BCMA issues in real-time
- d. Conducts real-time observations of users using the BCMA system
- e. Engages nursing leadership at the unit level on BCMA use

Leapfrog is proposing the three additional processes to this question in the 2018 Survey:

Which of the following has your hospital done with the data and information identified through items a-e above:

- f. Used the data and information obtained through items a-e to implement quality improvement projects that have focused on improving the hospital's BCMA performance.
- g. Evaluated the results of the quality improvement projects (from f) and demonstrated that these projects have resulted in higher adherence to our hospital's standard medication administration process.
- h. Communicated back to end users the resolution of system deficiencies and/or problems that may have contributed to the workaround.

To meet the Processes and Structures to Prevent Workarounds component of the BCMA standard, hospitals would need to respond "yes" to all 8 questions above. No other updates are proposed for Section 8A BCMA.

### PROPOSED CHANGES TO SECTION 8B MEDICATION RECONCILIATION (APPLICABLE TO ADULT/GENERAL HOSPITALS ONLY)

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Medication discrepancies (i.e. discrepancies between a patient's home medications and what they were prescribed on admission to or discharge from a hospital) occur in up to 70% of patients at hospital admission or discharge.<sup>1,2,3,4,5</sup> Almost one-third of these discrepancies have the potential to cause patient harm (i.e. potential adverse drug events).<sup>5</sup> Adverse

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<sup>1</sup> Cornish PL, Knowles SR, Marchesano R, et al. Unintended medication discrepancies at the time of hospital admission. *Arch Intern Med.* 2005;165(4):424-429.

<sup>2</sup> Gleason KM, Groszek JM, Sullivan C, Rooney D, Barnard C, Noskin GA. Reconciliation of discrepancies in medication histories and admission orders of newly hospitalized patients. *Am J Health Syst Pharm.* 2004;61(16):1689-1695.

<sup>3</sup> Pippins JR, Gandhi TK, Hamann C, et al. Classifying and predicting errors of inpatient medication reconciliation. *J Gen Intern Med.* 2008;23(9):1414-1422.

<sup>4</sup> Tam VC, Knowles SR, Cornish PL, Fine N, Marchesano R, Etchells EE. Frequency, type and clinical importance of medication history errors at admission to hospital: a systematic review. *CMAJ.* 2005;173(5):510-515.

<sup>5</sup> Wong JD, Bajcar JM, Wong GG, et al. Medication reconciliation at hospital discharge: evaluating discrepancies. *Ann Pharmacother.* 2008;42(10):1373- 1379.



drug events associated with medication discrepancies can prolong hospital stays and may lead to subsequent emergency department visits, hospital readmissions, and use of other health care resources.<sup>6,7</sup> More information about the impact of poor medication reconciliation is available on Leapfrog's [website](#).

Medication reconciliation interventions have been shown to improve important outcomes such as medication discrepancies, potential adverse drug events, and adverse drug events.<sup>8</sup> In 2017, Leapfrog added a new NQF-endorsed medication reconciliation measure: Number of Unintentional Medication Discrepancies per Patient (NQF 2456). The measure focuses on the quality and accuracy of the hospital's medication reconciliation process and is applicable to adult patients only. Hospitals were not scored or publicly reported on this measure in 2017.

In 2018, Leapfrog is proposing several changes to address feedback received from hospitals in 2017. First, Leapfrog is proposing to give hospitals the option of reporting on 20 adult inpatients from the most recent three-month period prior to survey submission or 30 adult inpatients from the most recent six-month period prior to survey submission. Next, we are proposing to limit sampling to medical/surgical units only. Lastly, we are proposing the following updates to the data collection instructions:

- Leapfrog will provide hospitals with standard language that pharmacists can use to inform patients selected for the measure that the pharmacist is not normally part of the patient's care team, but interviewing the patient to ensure that the hospital's medication reconciliation process is accurate.
- Leapfrog will provide hospitals with instructions on how to record unintentional discrepancies that have been corrected prior to the patient's discharge. This will ensure that pharmacists are able to intervene if and when they identify an error on the admission or discharge orders (i.e. discrepancy between the Gold Standard Medication History the pharmacist obtained from the patient and the admission or discharge orders), but also record these interventions as discrepancies as appropriate.

Hospitals will continue to report the number of unintentional medication discrepancies identified between the Gold Standard Medication History obtained by a trained pharmacist and the admission and discharge orders, including the number of additional unintentional medications.

Hospitals who submit this section of the 2018 Leapfrog Hospital Survey, and whose responses are not flagged during Leapfrog's [monthly data review](#), will be scored as "Fully Meets the Standard" for having a protocol in place to collect data on the accuracy of the hospital's medication reconciliation process. Hospitals who submit this section, but whose responses are flagged during Leapfrog's [monthly data review](#) for potential data entry errors, will be scored as "Willing to Report" for beginning to put a protocol in place to collect data on the accuracy of the hospital's medication reconciliation process. Hospitals that do not submit this section will be scored as "Declined to Respond." In 2018, Leapfrog does not intend to

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<sup>6</sup> Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. Adverse drug events occurring following hospital discharge. *J Gen Intern Med.* 2005;20(4):317-323.

<sup>7</sup> Johnson JA, Bootman JL. Drug-related morbidity and mortality: a cost-of-illness model. *Arch Intern Med.* 1995;155(18):1949-1956.

<sup>8</sup> Mueller SK, Sponsler KC, Kripalani S, Schnipper JL. Hospital-based medication reconciliation practices: a systematic review hospital-based medication reconciliation practices. *Arch Intern Med.* 2012:1-13.



publicly report a hospital's rate of unintentional medication discrepancies per patient or measure that rate against a national benchmark.

However, in 2019, Leapfrog does intend to score and publicly report a hospital's rate of unintentional medication discrepancies per patient measured against a national benchmark. This offers hospitals an additional year to refine or implement data collection protocols based on the updated instructions.

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## SECTION 9: PEDIATRIC CARE

### SECTION 9A: CAHPS CHILD HOSPITAL SURVEY

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In the 2017 Leapfrog Hospital Survey, hospitals with at least 1,000 pediatric admissions were asked to report their top box scores for each of the 10 composite measures and 8 single-item measures on the [CAHPS Child Hospital Survey](#) instrument. Hospitals were not scored or publicly reported on this measure in 2017.

In 2018, Leapfrog is proposing the following changes. First, hospitals with at least 500 annual pediatric inpatient admissions (patients <18 years of age) to any unit (adult or pediatric, including any level ICU) will be asked to administer the CAHPS Child Hospital Survey or be publicly reported as "Declined to Respond." Next, hospitals with at least 100 returned CAHPS Child Hospital Surveys will be asked to report their Top Box Score for each of the 18 domains of patient experience. Hospitals that are administering the survey, but had fewer than 100 returned surveys will be reported as "Unable to Calculate Score."

Results from this section will be scored and publicly reported in 2018. Based on feedback from Leapfrog's Pediatric Expert Panel, we are proposing to publicly report the Top Box Scores for all 18 domains, but calculate the performance category based on a subset of the domains, listed below. These are the domains that have the lowest median performance and the largest variation in performance across hospitals.

- Communication with Parents – Communication about your child's medicines
- Communication with Parents – Keeping you informed about your child's care
- Communication with Children – How well nurses communicate with your child
- Communication with Children – How well doctors communicate with your child
- Communication with Children – Involving teens in their care
- Attention to Safety and Comfort – Responsiveness to the call button
- Attention to Safety and Comfort – Preventing mistakes and helping you report concerns
- Attention to Safety and Comfort – Helping your child feel comfortable
- Attention to Safety and Comfort – Paying attention to your child's pain

Quartile values for each of the 9 domains listed above will be calculated based on the range of hospital performance reported in 2018 Leapfrog Hospital Surveys submitted by June 30. Hospitals will receive points for each of the 9 domains based on how they compare to the quartile cut-points. Hospitals that perform in the top quartile will receive 4 points for that domain; those that perform in the 2nd quartile receive 3 points, etc. Then the percentage of points earned over all domains is calculated to determine the overall performance category. The percentage of points required for each of the four performance categories (i.e. "Fully Meets the Standard," "Substantial Progress," etc.) will be determined by the distribution of total points earned using Surveys submitted by June 30.



## SECTION 9B: PEDIATRIC COMPUTED TOMOGRAPHY (CT) RADIATION DOSE

In 2017 Leapfrog added the National Quality Forum-endorsed Pediatric CT Radiation Dose measure (NQF 2820) to the Survey and asked hospitals to report radiation dose (DLP) among consecutive pediatric patients, who have undergone a CT of the head, chest, abdomen/pelvis, or chest/abdomen/pelvis. Hospitals were not scored or publicly reported on this measure in the 2017 Survey.

In 2018, Leapfrog is proposing several changes. First, we are proposing to limit reporting to head scans and abdomen/pelvis scans given the low frequency of chest and chest/abdomen/pelvis scans observed in the 2017 Survey. Next, Leapfrog will only ask hospitals to report their 50<sup>th</sup> and 75<sup>th</sup> percentile dose values (DLP) for head scans and abdomen/pelvis scans in the five age ranges. Hospitals will no longer be asked to report the 25<sup>th</sup> percentile dose values.

Lastly, hospital responses will be scored and publicly reported for head scans and abdomen/pelvis scans separately. Leapfrog is proposing to score this section of the Survey by comparing the hospital's median dose for each anatomic region and age strata to two benchmarks. The first benchmark is the Median Benchmark, which will be the median of the median doses reported across all Leapfrog-reporting hospitals as of June 30, 2018. The second benchmark is the median of the 75<sup>th</sup> percentile doses reported across all Leapfrog-reporting hospitals as of June 30, 2018.

Hospitals will receive points based on their median dose compared to the benchmarks. If the hospital's reported median dose is less than the Median Benchmark, then it receives 2 points. If the hospital's reported median is greater than the Median Benchmark and less than the 75<sup>th</sup> Percentile Benchmark, then it receives 1 point. Otherwise, if the hospital's reported median dose is greater than the 75<sup>th</sup> Percentile Benchmark it receives no points for that category.

Therefore, for each anatomic region, there are at most 10 possible points. If a hospital had less than 10 CT scans for an age stratum, then the age stratum is not included in scoring. For each anatomic region, the percentage of points awarded is calculated by summing the points earned and dividing by the total number of possible points (i.e. 2 times the number of age strata with at least 10 CT scans). This percentage of points earned will be used to assign a performance category according to the table below:

Pediatric CT Dose Score (Performance Category)	Description
<b>Fully Meets the Standard (four-filled bars)</b>	$\geq 75\%$ of total possible points
<b>Substantial Progress (three-filled bars)</b>	$\geq 50\%$ and $< 75\%$ of total possible points
<b>Some Progress (two-filled bars)</b>	$\geq 25\%$ and $< 50\%$ of total possible points
<b>Willing to Report (one-filled bar)</b>	$< 25\%$ of total possible points
<b>Unable to Calculate Score</b>	Fewer than 10 CT scans for all age ranges
<b>Does Not Apply</b>	Does not perform CT scans on pediatric patients
<b>Declined to Respond</b>	Did not measure pediatric scan doses or did not submit a survey



To provide public comment, please respond by completing the public comment [here](#). Comments will be accepted until **COB December 27**. Thank you for your interest in the Leapfrog Hospital Survey. The Leapfrog Group and our experts will consider comments carefully in testing and finalizing the 2018 Leapfrog Hospital Survey. Leapfrog will publish a summary of comments and final changes the month prior to the April 2018 launch of the survey.



## APPENDIX I

### Deadlines for joining Leapfrog's NHSN Group:

Join by	Leapfrog will download data from NHSN for all current group members	Data downloaded from NHSN will be scored and publicly reported for hospitals that have submitted Section 7 by	HAI Reporting Period	Antibiotic Stewardship Reporting Period	Available on Hospital Details Page
June 21	June 22	June 30	01/01/2017 – 12/31/2017	NHSN 2017 Patient Safety Component - Annual Survey	July 12
August 23	August 24	August 31	01/01/2017 – 12/31/2017	NHSN 2017 Patient Safety Component - Annual Survey	September 10
October 23	October 24	October 31	07/01/2017 – 06/30/2018	NHSN 2017 Patient Safety Component - Annual Survey	November 7
December 20	December 21	December 31	07/01/2017 – 06/30/2018	NHSN 2017 Patient Safety Component - Annual Survey	January 8

### Instructions for joining Leapfrog's NHSN Group:

Detailed instructions on joining the group and accepting the data requested are available here:

<http://www.cdc.gov/nhsn/pdfs/groups-startup/joining-current.pdf>

**APPENDIX II**

CPOE Scoring Algorithm for Adult/General Hospitals

<b>Implementation Status</b> (from Leapfrog Hospital Survey Questions #3-4)	<b>Score on Adult Inpatient Test via the CPOE Evaluation Tool</b>					
	<i>Full Demonstration of National Safety Standard for Decision Support</i> (60% or greater of test orders correct)	<i>Substantial Demonstration of National Safety Standard for Decision Support</i> (50-59% of test orders correct)	<i>Some Demonstration of National Safety Standard for Decision Support</i> (40-49% of test orders correct)	<i>Completed The Evaluation</i> (Less than 40% of test orders correct)	<i>Insufficient Evaluation</i> (Hospital was not able to test at least 50% of test orders)	<i>Incomplete Evaluation</i> (Failed deception analysis or timed out) <b>-or-</b> <b>Did not complete an evaluation</b>
<b>85% or greater</b> of all inpatient medication orders entered through CPOE System	<b>Fully Meets the Standard</b>	<b>Substantial Progress</b> (Previously "Fully Meets the Standard")	<b>Substantial Progress</b>	<b>Some Progress</b> (Previously "Substantial Progress")	<b>Unable to Calculate Score</b>	<b>Willing to Report</b>
<b>75-84%</b> of all inpatient medication orders entered through CPOE System	<b>Fully Meets Standard</b> (Previously "Substantial Progress")	<b>Substantial Progress</b>	<b>Some Progress</b> (Previously "Substantial Progress")	<b>Some Progress</b>	<b>Unable to Calculate Score</b>	<b>Willing to Report</b>
<b>50-74%</b> of all inpatient medication orders entered through CPOE System	<b>Substantial Progress</b>	<b>Substantial Progress</b> (Previously "Some Progress")	<b>Some Progress</b>	<b>Willing to Report</b> (Previously "Some Progress")	<b>Unable to Calculate Score</b>	<b>Willing to Report</b>
CPOE implemented in at least one inpatient unit but <b>&lt;50%</b> of all inpatient medication orders entered through CPOE System	<b>Substantial Progress</b> (Previously "Some Progress")	<b>Some Progress</b>	<b>Some Progress</b> (Previously "Willing to Report")	<b>Willing to Report</b>	<b>Unable to Calculate Score</b>	<b>Willing to Report</b>
CPOE not implemented in at least one inpatient unit	Cannot take CPOE Evaluation Tool; hospital will be scored as "Willing to Report"					

**Declined to Respond:** The hospital did not respond to this section of the survey or did not complete the survey.

## APPENDIX III

### Inpatient Surgery Frequently Asked Questions (FAQs)

- 1. When counting patients, should we only include those who had the procedure performed electively? Can we also include those patients who had the procedure performed urgently?**

Hospitals should count all patients with the relevant procedure or diagnosis.
- 2. If a hospital elects to begin a new service line of procedures, how should the hospital report its volume while establishing the new line?**

To not penalize hospitals that start new service lines, hospitals will receive an 18-month grace period before having to report on the hospital volume for a new procedure. From the day that the hospital performs the procedure for the first time, the hospital will have 18 months to reach the annual volume standard. During this period, the hospital does not have to report its procedure volumes for the hospital. However, once the hospital reaches the end of the 18-month grace period, it must report its hospital volume.
- 3. How should we deal with a temporary drop in volume due to losing a surgeon's service?**

To accommodate fluctuations in hospital volumes, hospitals have the option of reporting on their average case volumes over a 24 month period in 2018.
- 4. For determining surgeon volume for the purposes of our hospital's privileging policy, how should we count procedures that involve surgeons who have just finished training and are building up their experience?**

Surgeons who have just finished his/her training should receive a 24-month grace period to build up their experience. After that point, his/her volume should be tracked and included in privileging decisions. The procedures performed by this surgeon during the grace period should still be counted towards the hospital's volume total, as the broader staff still had the experience with the surgery.
- 5. If a surgeon was not 'active' during the entire reporting period (e.g., just hired, sabbatical, illness, etc.), should this surgeon's procedures be included in the total hospital volume reported?**

If a surgeon was absent for an extended time during the reporting period, the procedures performed by this surgeon during the reporting period should still be counted towards the hospital's procedure total.
- 6. Does this section apply to critical access hospitals?**

Leapfrog recognizes the important role that critical access hospitals play in serving their communities. In general, critical access hospitals do not perform the types of procedures that are included in this section, but if the critical access hospital does perform the procedure, the standards still apply.
- 7. Why is Leapfrog only including open repairs of abdominal aortic aneurysms (AAAs) in its surgical volume standard and not endovascular repairs?**

Leapfrog and its expert panel recognize that more AAA repairs are being done endovascularly. In general, the repairs being done endovascularly tend to be less complicated cases and the evidence linking volume and outcome is not as strong for endovascular repairs. The more complicated and higher-risk repairs are still being done through an open approach, making surgeon and hospital experience even more important. Leapfrog and its expert panel continue to review this issue and may decide for future surveys to broaden the definition to include both types of approaches or to simply measure endovascular repairs separately.



APPENDIX IV

ICU Physician Staffing Scoring (IPS) Algorithm

IPS Score (Performance Category)	Meaning that:
<p><b>Fully Meets the Standard</b> (four-filled bars)</p>	<ul style="list-style-type: none"> <li>All patients in adult and pediatric general medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists) (answered “Yes” to # 3); <b>and</b></li> <li>One or more intensivist(s) is/are present in each ICU during daytime hours for at least 8 hours per day, 7 days per week OR via telemedicine 24 hours per day, 7 days per week, with some on-site intensivist time AND provide(s) clinical care exclusively in each ICU during these hours (answered “Yes” to #4); <b>and</b></li> <li>When intensivists are not present (on-site or via telemedicine) in these ICUs, one of them returns more than 95% of calls/pages/texts from these units within five minutes. (answered “Yes” or “Not applicable, Intensivists are present 24/7” to #5); <b>and</b></li> <li>When an intensivist is not present (on-site or via telemedicine) in the ICU, another physician, physician assistant, nurse practitioner or FCCS-certified nurse “effector” is on-site at the hospital and able to reach ICU patients within five minutes in more than 95% of the cases (answered “Yes” or ‘Not applicable, Intensivists are present 24/7” to #6).</li> </ul> <p>Note: When telemedicine is employed as a substitute for on-site time, it must meet the ten requirements (see endnote #28 in the <a href="#">hard copy of the survey</a>) including some on-site intensivist time to manage the ICU patients’ admission, discharge, and care planning.</p>
<p><b>Substantial Progress</b> (three-filled bars)</p>	<ul style="list-style-type: none"> <li>All patients in adult and pediatric medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists), whether on-site or via telemedicine (answered “Yes” to #3); <b>and</b></li> <li>Intensivists are present and manage or co-manage all patients in all ICUs on-site at least 8 hours per day, 4 days per week or 4 hours per day, 7 days per week (answered “Yes” to #7), <b>or</b></li> <li>Clinical pharmacists make daily rounds on adult and pediatric medical and/or surgical and neuro ICU patients (answered “Yes” to #11).</li> </ul> <p><b>and</b></p> <p>An intensivist:</p> <ul style="list-style-type: none"> <li>leads daily, multi-disciplinary team rounds on-site (answered “Yes” to #12), <b>or</b></li> <li>makes admission and discharge decisions when on-site (answered “Yes” to #13).</li> </ul>
<p><b>Substantial Progress</b> (alternative for hospitals)</p>	<ul style="list-style-type: none"> <li>All patients in adult and pediatric medical and/or surgical ICU(s) and neuro ICUs are managed or co-managed by one or more physicians who are certified in critical care medicine (intensivists), whether on-site or via telemedicine (answered “Yes” to #3); <b>and</b></li> <li>Intensivists are present and manage or co-manage all patients in all ICUs via telemedicine that is functional 24 hours per day, 7 days per week with onsite care planning done by an intensivist, hospitalist, anesthesiologist, or a physician trained in emergency medicine (answered “Yes” to #8)</li> </ul> <p>Note: Use of telemedicine requires that additional Leapfrog telemedicine specifications are met (see endnote #29 in the <a href="#">hard copy of the survey</a>).</p>



<p><b>Some Progress (two-filled bars)</b></p>	<ul style="list-style-type: none"> <li>Some patients in the ICU(s) are managed or co-managed by an intensivist when present on-site or via telemedicine (answered “Yes” #9 or #10). Use of telemedicine requires that additional Leapfrog telemedicine specifications are met ; <b>and</b></li> </ul> <p>An Intensivist:</p> <ul style="list-style-type: none"> <li>leads daily, multi-disciplinary team rounds on-site (answered “Yes” to #12), <b>or</b></li> <li>makes admission and discharge decisions when on-site (answered “Yes” to #13)</li> </ul>
<p><b>Willing to Report (one-filled bar)</b></p>	<p>The hospital responded to all the Leapfrog survey questions, but it does not yet meet the criteria for <i>Some progress</i>.</p>
<p><b>Does Not Apply</b></p>	<p>The hospital does not operate an adult or pediatric general medical or surgical intensive care unit or a neuro intensive care unit.</p>
<p><b>Declined to Respond</b></p>	<p>The hospital did not respond to this section of the survey, or has not submitted a survey.</p>