SUMMARY OF CHANGES TO THE 2017 LEAPFROG HOSPITAL SURVEY & RESPONSES TO PUBLIC COMMENTS

Each year, The Leapfrog Group's team of researchers, in conjunction with the Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine, reviews literature and convenes national 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 following year's survey, Leapfrog releases those changes for a 30-day public comment period. Comments are reviewed carefully and used to further refine the survey, and then pilot tested with a diverse group of hospitals around the country. Following the pilot test, the survey content and scoring are finalized for launch on April 1st.

Leapfrog received over 200 public comments to its proposed changes for the 2017 Leapfrog Hospital Survey. Those comments, as well as the results from the pilot test are incorporated into the final content and scoring algorithms for the Survey. We have summarized the changes in this document, and included summaries and responses to public comments in Appendix A.

We offer our sincere gratitude to all of the commenters for the time and thought they gave to the 2017 Leapfrog Hospital Survey. The submitted comments were invaluable to the development of a high-quality Survey that serves our many constituents, including purchasers and payers, as well as hospitals and the public at large.

The 2017 survey will open on April 1, 2017. Leapfrog has already scheduled a number of informative Town Hall Calls. Hospitals and other stakeholders can register at http://www.leapfroggroup.org/survey-materials/town-hall-calls.

2017 LEAPFROG HOSPITAL SURVEY CONTENT AND SCORING CHANGES

SECTION 1: BASIC HOSPITAL INFORMATION

Leapfrog will ask hospitals to divide total acute care admissions into total adult and total pediatric admissions for the reporting period. We will also ask hospitals to identify whether or not they have any specialty ICUs and/or NICUs. This will enhance our automated Data Review Warnings in the Online Survey Tool and help hospitals avoid time-consuming reporting errors.

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

Leapfrog will be launching an updated version of the CPOE Evaluation Tool with the 2017 Leapfrog Hospital Survey**. The updated CPOE Evaluation Tool will not be available until April 15, 2017.** Hospitals can plan to submit Sections 1 and 2 in the online survey tool so they are ready to complete a CPOE Evaluation Tool any time after April 15th.

The CPOE Evaluation Tool development team, led by Drs. David Bates and David Classen, received a grant from the Agency for Healthcare Research and Quality (AHRQ) to update the Adult Inpatient CPOE Evaluation Tool. Version 3.0 of the CPOE Evaluation Tool incorporates feedback from hospitals regarding formulary issues, lab value issues, and outdated alerts. The new CPOE Evaluation Tool will include updated test patients, updated test orders, and a redesigned user interface, as well as other enhancements such as a display timer. The new CPOE Evaluation Tool also includes updated time limits. Hospitals will now have 3 hours to complete Steps 1 and 2 (Print Test Patients and Set -up Test Patients) and 3 hours to complete Steps 3-6 (Print Test Orders, Enter Test Orders, Enter Responses, and Submit Affirmation). Lastly, the wait time between Adult Inpatient Tests has been shortened from 6 months to 120 days.

In addition, the CPOE Evaluation Tool will be scored based on an updated scoring algorithm. The principles behind the scoring algorithm for Leapfrog's CPOE Standard will not change. Hospitals will still be scored based on their implementation status (i.e., percentage of inpatient medication orders entered through the inpatient CPOE system) and their score from the CPOE Evaluation Tool. The 2017 Leapfrog Hospital Survey Scoring Algorithms will be published on April 1st at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

In January and February, Leapfrog hosted two Town Hall Calls to summarize the changes to the CPOE Evaluation Tool. Materials can be found at http://www.leapfroggroup.org/survey-materials/town-hall-calls.

SECTION 3: INPATIENT SURGERY

In 2016, Leapfrog announced that survival predictor measures would be retired at the close of the survey cycle. The original survival predictors were developed and validated using several years of ICD-9 administrative data which is no longer applicable due to the national conversion to ICD-10 administrative coding.

For 2017, Leapfrog originally proposed two new structural measures to replace the survival predictor measures. The first assessed whether hospitals and surgeons performed a minimum annual volume of procedures needed to meet basic quality standards. The second assessed whether hospitals have processes in place to ensure surgery is being performed only when medically appropriate. Based on public comments, pilot testing, and expert review, the following changes will be made for the 2017 survey, and as a result of these changes, responses from Section 3 Inpatient Surgery will not be scored or publicly reported in 2017.

SECTION 3A: HOSPITAL AND SURGEON VOLUME

Instead of assessing the ability of hospitals and surgeons to meet the minimum volume standards first published in 2015 by researchers at Dartmouth-Hitchcock, the University of Michigan, and The Johns Hopkins Hospital, Leapfrog will use 2017 as a fact finding year. The data collected from hospitals regarding total hospital volume and surgeon volume on this year's survey will be compared to published research and ultimately used by our national expert panel to inform a set of minimum volume standards that hospitals will be measured against in 2018.

In addition, three of the originally proposed surgical procedures have been updated: Carotid Artery Stenting will be replaced with Carotid Endarterectomy, Complex Abdominal Aortic Aneurysm Repair will be replaced with Open Aortic Aneurysm Repair, and Mitral Valve Repair has been replaced with Mitral Valve Repair and Replacement. The final list of surgical procedures to be included in Section 3A Hospital and Surgeon Volume are:

- Carotid endarterectomy

- Mitral valve repair and replacement
- Open aortic aneurysm repair
- Lung resection
- Esophageal resection
- Pancreatic resection
- Rectal cancer surgery
- Hip replacement
- Knee replacement
- Bariatric surgery for weight loss

Hospitals will be asked to report on the total hospital volume for a 12-month annual count or 24-month average using the definitions in Appendix B. In addition, hospitals will be asked to report on the number of surgeons who performed at each of the following volume strata (based on the same 12-month annual or 24-month average reporting time period): 1 surgery, 2 surgeries, 3 surgeries, 4 surgeries, 5 surgeries, 6-10 surgeries, 11-15 surgeries, 16-20 surgeries, 21-25 surgeries, or more than 25 surgeries. Hospitals will not report on those surgeries performed only when the patient is too unstable to transfer. Additional information is available in the Responses to Public Comments in Appendix A.

In addition, hospitals will also be asked if they have established and implemented minimum **hospital** and/or **surgeon** volume standards for any of the 10 procedures. Based on hospital responses, Leapfrog will be reaching out to survey participants to schedule voluntary key informant interviews to learn more about their volume standards and compare them to the published literature. Hospitals that would like to be included in the key informant interviews, should contact Leapfrog via the Survey Help Desk at https://leapfroghospitalsurvey.zendesk.com.

SECTION 3B: SURGICAL APPROPRIATENESS

Based on comments, pilot testing, and key informant interviews, Leapfrog has restructured the questions in this section and also limited the new set of questions on appropriateness to the 10 surgical procedures included in Section 3A Hospital and Surgeon Volume. The new questions are designed to identify what steps hospitals have taken to establish and ensure adherence to their own surgical appropriateness criteria, relying on both clinical guidelines and input from their surgeons. The data collected from hospitals this year will be used by Leapfrog and our national expert panel to inform a surgical appropriateness standard that hospitals will be measured against in 2018.

Based on hospital responses, Leapfrog will be reaching out to survey participants to schedule key informant interviews to learn more about the processes and structures they have in place to ensure surgical appropriateness. Hospitals that would like to be included in the key information interviews, should contact Leapfrog via the Survey Help Desk at https://leapfroghospitalsurvey.zendesk.com.

SECTION 4: MATERNITY CARE

The three Joint Commission (TJC) measures included in Section 4 (Early Elective Deliveries, NTSV C-sections, and Antenatal Steroids) will use TJC measure specifications v2016A1. This version no longer includes “enrolled in clinical trials” as an exclusion criterion when identifying the denominator for these measures.

The sample size for the maternity care process measures has been updated from 30 cases (in 2016) to 60 cases to reflect the 12-month reporting period we will be using in 2017. In 2016, Leapfrog used a 9-month reporting period and 30 case sample due to the ICD-10 transition.

Leapfrog will also implement two changes to the scoring algorithm for Section 4E Maternity Care Process Measures which includes Newborn Bilirubin Screening Prior to Discharge and Appropriate DVT Prophylaxis in Women Undergoing Cesarean Section. First the target for both process measures will be increased from 80% to 90%. Next, hospitals that meet the target for one of the two measures, but did not meet the minimum sample size for the other measure will be scored as "Substantial Progress."

Similar to the two maternity care process measures in Section 4E, the target rate for the Antenatal Steroid process measure in Section 4F High Risk Deliveries will be increased from 80% to 90% in 2017. The 2017 Leapfrog Hospital Survey Scoring Algorithms will be published on April 1st at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

SECTION 5: ICU PHYSICIAN STAFFING (IPS)

We are removing question #11 from Section 5 ICU Physician Staffing, which asks whether hospitals have a board approved budget to fully meet Leapfrog's standard in the next survey cycle. The scoring algorithm will be updated to account for the removal of question #11. The 2017 Leapfrog Hospital Survey Scoring Algorithms will be published on April 1st at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

SECTION 6: NQF SAFE PRACTICES SCORE

Leapfrog is reducing the number of safe practices on the survey from eight to five. The five safe practices that will remain on the survey are: Culture of Safety Leadership Structures and Systems (SP1), Culture Measurement, Feedback, and Intervention (SP2), Risks and Hazards (SP4), Nursing Workforce (SP9), and Hand Hygiene (SP19). The scoring algorithm will be updated to account for the removal of Teamwork Training and Skill Building, Medication Reconciliation, and Healthcare-associated Complications in Ventilated Patients. The 2017 Leapfrog Hospital Survey Scoring Algorithms will be published on April 1st at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

SECTION 7: MANAGING SERIOUS ERRORS

SECTION 7A NEVER EVENTS POLICY STATEMENT

Based on input from purchasers and payers, as well as new research and evidence published by AHRQ and the National Patient Safety Foundation, Leapfrog originally proposed adding several new elements to our Never Events Policy Statement. Based on additional feedback received through public comments and pilot testing, Leapfrog has made the following changes for the 2017 survey.

First, we will not ask that hospitals notify the patient and/or family that a serious reportable event **may** have occurred within 60 minutes after an event is identified. Nonetheless, Leapfrog remains committed to this humane and transparent principle and strongly believes that it is an important component of an effective Never Events Policy. However, from the public comments and expert review we recognize the challenges of reliably and consistently implementing this principle. In preparation for the 2018 Leapfrog Hospital Survey, Leapfrog's team of researchers will work with leading hospitals across

the country that have implemented the CANDOR Toolkit, developed and tested by AHRQ, to develop a revised version of this principle. We encourage hospitals to investigate the free CANDOR toolkit as they evolve their never events policy in the future.

Next, we have refined the wording of the additional elements that we will add in 2017, including:

- 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.

Lastly, hospitals will not be scored on their responses to the four new elements until 2018. In 2017, hospitals will only be scored on their responses to the original five elements of Leapfrog's Never Events Policy. The 2016 Leapfrog Hospital Survey Scoring Algorithm is available at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

Based on hospital responses, Leapfrog will be reaching out to survey participants to schedule key informant interviews to learn more about the processes and structures they have in place around these new elements of the Never Events Policy. Hospitals that would like to be included in the key information interviews, should contact Leapfrog via the Survey Help Desk at https://leapfroghospitalsurvey.zendesk.com.

SECTION 7B AND 7C HEALTHCARE-ASSOCIATED INFECTIONS

Leapfrog will combine Sections 7B and 7C into a single section: 7B Healthcare-Associated Infections. Next, Leapfrog will remove the NHSN ICU-only CLABSI and CAUTI measures and add the NHSN ICU and select wards measures for CLABSI and CAUTI.

Lastly, Leapfrog plans to remove the burden of data entry for hospitals reporting on any of the five applicable infection measures. In 2017, in order to be scored and publicly reported on Section 7B, Leapfrog will require reporting hospitals to join The Leapfrog Group's NHSN Group (at no cost). This will allow Leapfrog to obtain the hospital's standardized infection ratios for each of the five applicable infection measures directly from NHSN.

Hospitals are encouraged to join Leapfrog's NHSN group now. More information about joining Leapfrog's NHSN Group including important deadlines and instructions are available at: http://www.leapfroggroup.org/survey-materials/join-nhsn.

In 2017, in order to be scored and publicly reported on this section, pediatric hospitals will be required to perform surveillance on all applicable infection measures, including MRSA and C. Difficile, and report this information to NHSN. In addition, pediatric hospitals will be required to join Leapfrog's NHSN group in order to be scored on the section.

Due to the updated NHSN baselines and SIR methodology, Leapfrog has established updated cut-points used to assign performance categories (e.g., Fully Meets the Standard, Substantial Progress, etc.) for these five measures based on the national distribution of SIRs using the CMS national dataset released in December. The 2017 Leapfrog Hospital Survey Scoring Algorithms will be published on April 1st at http://www.leapfroggroup.org/survey-materials/scoring-and-results.

SECTION 8: MEDICATION SAFETY

Section 8 Bar Code Medication Administration will be renamed "Section 8 Medication Safety" for the 2017 Leapfrog Hospital Survey. The section will include two subsections: 8A Bar Code Medication Administration and 8B Medication Reconciliation.

CHANGES TO SECTION 8A BAR CODE MEDICATION ADMINISTRATION

Leapfrog is updating the definition of Medical and/or Surgical Units to include Telemetry Units. Additionally, based on the recommendation of Leapfrog's Maternity Care Expert Panel and BCMA Expert Panel, Leapfrog is adding Labor and Delivery Units to the types of units hospitals will be asked to report on in 2017. There will not be any changes to the scoring algorithm.

CHANGES TO SECTION 8B MEDICATION RECONCILIATION

Leapfrog is adding an NQF-endorsed medication reconciliation measure: Number of Unintentional Medication Discrepancies per Patient (NQF 2456). The measure, in use in over a dozen hospitals across the country, focuses on the quality and accuracy of the hospital's medication reconciliation process. The measure is applicable to adult patients only.

However, Leapfrog has reduced the sample size for 2017 from 25 patients to 10 patients. For those ten randomly selected patients, hospitals will be asked to have a licensed pharmacist interview the patients in line with a tested protocol, create a "gold standard" medication history, and compare that to the existing medication list from admission and discharge. Leapfrog will provide the sampling methodology to identify the patients, and calculate the number of unintentional medication discrepancies per medication per patient. Work to complete this section may be completed at any time within the three months prior to survey submission.

Instructions, sampling methodology, and a spreadsheet for data reporting will be included with the launch of the Survey. Hospitals are urged to invite their pharmacists, who will be involved in obtaining the gold standard medication history and identifying unintentional medication discrepancies, to attend one of two Town Hall Calls that will be hosted by Leapfrog and Dr. Jeffrey Schnipper from Brigham and Women's Hospital. Register at http://www.leapfroggroup.org/survey-materials/town-hall-calls.

In 2017, the Medication Reconciliation measure will not be scored or publicly reported. Based on hospital responses, Leapfrog will be reaching out to survey participants to schedule key informant interviews on this measure. Hospitals that would like to be included in the key information interviews, should contact Leapfrog via the Survey Help Desk at https://leapfroghospitalsurvey.zendesk.com.

SECTION 9: PEDIATRIC CARE

Leapfrog is removing the Readmissions for Common Acute Conditions and Procedures Section from the 2017 Survey as these data are adequately reported by CMS on their Hospital Compare website. Section 9 of the 2017 Leapfrog Hospital Survey will now consist of two new NQF-endorsed pediatric measures: CAHPS Child Hospital Survey and Pediatric Computed Tomography (CT) Radiation Dose.

9A CAHPS Child Hospital Survey

The CAHPS Child Hospital Survey instrument has been endorsed by the National Quality Forum (NQF 2548). It is used to assess the experiences of pediatric patients (17 and younger) and their parents or guardians with inpatient care. The survey covers most of the topics addressed by the adult version, as well as topics that are particularly relevant to pediatric care.

Hospitals that have had at least 1,000 pediatric acute-care admissions and administered the CAHPS Child Hospital Survey during the full 12-month reporting period will be asked to report their Top Box score for each of the 18 measures of patient experience, which include 10 composite measures and 8 single-item measures.

9B Pediatric Computed Tomography (CT) Radiation Dose

The Pediatric CT Radiation Dose measure has been endorsed by the National Quality Forum (NQF 2820). Hospitals will be asked to provide radiation dose length product (DLP) metrics among pediatric patients in various age strata, who have undergone a CT of the head, chest, abdomen/pelvis, or chest/abdomen/pelvis. The goal of the measure is to provide a framework where facilities can easily assess their doses, compare them to benchmarks, and take corrective action to lower their doses if they exceed threshold values.

In 2017, neither 9A nor 9B will be scored or publicly reported. Both of these sections will be scored and publicly reported in 2018.

APPENDIX A RESPONSES TO PUBLIC COMMENTS

Leapfrog received over 200 public comments in response to the proposed changes to the 2017 Leapfrog Hospital Survey. Comments were submitted from health care organizations, as well as patient advocates and purchasers.

Responses to the public comments are organized by survey section below. If you submitted a comment, and do not see a response, or if you have additional questions, please contact the Help Desk at: https://leapfroghosptialsurvey.zendesk.com.

GENERAL COMMENTS

Some commenters expressed concerns about the number of changes to the 2017 survey.

Leapfrog strongly considers the burden to hospitals when we propose new measures for the survey. We weigh the anticipated burden of data collection against the importance of the results to patients and purchasers. Every effort is made to remove measures where hospital performance has "topped out" or where information about hospital performance is available elsewhere and new measures are typically not scored or publicly reported in the first year. While in 2017, Leapfrog is proposing the addition of several new measures, we are also removing three NQF Safe Practices and readmission rates for six common acute conditions and procedures. We have also eliminated the burden of infections reporting through a new NHSN group.

Some commenters expressed concerns about the number of public quality "report cards."

Leapfrog, our Board of Directors, and our members make the Leapfrog Hospital Survey their dashboard for hospital safety, quality and efficiency. The survey content represents the information most requested by hundreds of the nation's largest employers, as well as health plans, and galvanized significant improvements to patient care, such as lower rates of early elective deliveries and lower mortality in intensive care units. Leapfrog and our constituents believe that patients and families are best served by the availability of healthcare ratings that are reported publicly by hospital, that show variation, and that may not be available anywhere else.

SECTION 1 BASIC HOSPITAL INFORMATION

Several commenters had questions about which patients to include when reporting on the new pediatric admissions question.

Include acute-care medical and surgical pediatric (aged 17 years or younger) admissions to your hospital. Include transfers from other hospitals as admissions to your hospital. Include any admissions directly to a pediatric ICU or NICU in your hospital, even if counted in question #9. Exclude normal newborn admissions to the nursery. Exclude admissions to adult pediatric medical and/or surgical wards or adult ICUs (e.g. if your hospital does not have any pediatric units, but does occasionally admit pediatric patients for emergency surgery or care, these admissions would not be included).

Some commenters expressed support for Leapfrog's plan to separate pediatric and adult acute care admissions and collect information on specialty ICUs as they felt it would increase opportunities for benchmarking at the unit level or that the information would be used in scoring.

This is not the intent of collecting pediatric acute care admissions separately from adult acute care admissions. These new fields will enhance our automated Data Review Warnings in the Online Survey Tool and help hospitals avoid time-consuming reporting errors.

SECTION 2 MEDICATION SAFETY – COMPUTERIZED PRESCRIBER ORDER ENTRY

Commenters expressed concern over having to take an Adult Inpatient CPOE Test each year.

CPOE systems are complex and often updated on a continual basis, including major annual updates which can alter the performance of the clinical decision support system. In fact, we do see year-to-year variation in individual hospital test scores. The only way to be sure that the system continues to keep patients safe from potential adverse drug events is to re-test the system each year.

Commenters requested that advice or information that bypasses the licensed prescriber and is sent directly to the pharmacist receives credit in the Adult Inpatient CPOE Test.

The CPOE Evaluation Tool includes test scenarios which are based on actual cases of patient harm or death from an adverse drug event that could have been prevented with the appropriate use of clinical decision support as part of the hospital's CPOE system. In virtually all of these cases, the pharmacist reviewed the order and yet the unsafe order was given to the patient anyway. Allowing hospitals to earn credit through the CPOE Evaluation Tool for alerts that bypass the prescriber and go directly to pharmacist would not be appropriate as the evidence shows that this practice does not prevent the unsafe medication order from reaching the patient. Moreover, prescribers need to be made aware of problem orders so they can avoid re-ordering them.

Commenters expressed concern over having to take separate tests for hospitals within a health system that use the same CPOE vendor.

Leapfrog's multi-campus facility policy was developed over a decade ago to account for variation in performance between multi-campus hospitals and hospitals within a system. This policy requires that each hospital within a multi-campus hospital or system, even those that share a Medicare Provider Number, complete separate surveys that unique to the services they provide at their location. The CPOE Evaluation Tool is included in this policy, meaning that each individual hospital must complete its own CPOE Evaluation Tool.

Analysis of results from hospitals that have participated in the CPOE Evaluation Tool over the last six years continue to reveal variability in individual category and overall test performance, even within health systems where each hospital reported using the same instance of a CPOE system. All such systems are very complex and dynamic, while at the same time locally configurable, so this is not unexpected; users often have the ability to customize aspects of the system. Given this analysis, the developers continue to require that hospitals test on their local system. Leapfrog continues to monitor this on an annual basis.

Commenters expressed concern over having to involve a physician in the CPOE Evaluation Tool.

As described in the hard copy of the survey and CPOE Evaluation Tool materials, the order entry step of the test must be completed by a licensed prescriber who ordinarily orders medications through the hospital's inpatient CPOE system. "Prescribers" refers to all licensed clinicians authorized by the state in which the hospital is located to order pharmaceuticals for patients.

Commenters requested that the time limit from the Adult Inpatient Test be extended.

The time limits for version 3.0 of the CPOE Evaluation Tool, Adult Inpatient Test have been updated. Hospitals will have 3 hours to complete Steps 1 (Print Test Patients) and 2 (Set Up Test Patients) and 3-hours to complete Steps 3 (Print Test Orders), 4 (Enter Test Orders and Record Advice/Information), 5 (Record Responses), and 6 (Submit Affirmation). Previously hospitals were only given 2.5 hours to complete Steps 3-6. In addition, Leapfrog has shorted the time between Adult Inpatient Tests. Previously hospitals had to wait 6-months to retake an Adult Inpatient Test. In 2017, hospitals will be able to re-take an Adult Inpatient Test after 120 days. This should allow most hospitals the opportunity to take the test twice within a survey cycle if necessary.

Commenters expressed concern that the updated CPOE Evaluation Tool could penalize smaller, community hospitals that do not have the resources to update their CPOE system or formulary.

Version 3.0 was tested in community hospitals. In addition, the test scenarios have been updated based on actual cases of patient harm or death from an adverse drug event. Leapfrog, and the CPOE Evaluation Tool developers, would encourage all hospitals to review the updated bibliography that will be included in the instructions on April 1st to ensure they have the appropriate alerts in place to reduce the incidence of adverse drug events.

A commenter noted that Leapfrog and the CPOE Evaluation Tool developers should expand the scope of the Tool to include a simulated test to evaluate clinical decision support tools used for ordering blood and blood products, tools that may reduce unnecessary diagnostic tests, and standard order sets for stroke and other common acute conditions.

We appreciate these suggestions. The CPOE Evaluation Tool developers are planning on adding additional elements in the future that evaluate not just medication ordering, but also the standard order sets and adherence to Choosing Wisely guidelines. A summary of these future enhancements were presented by the Tool Developers on the CPOE Town Hall calls in January and February. Materials can be accessed here.

Some commenters asked if Leapfrog plans to increase its target for CPOE utilization.

Leapfrog's current standard requires hospitals to order at least 75% of inpatient medications through a CPOE system. We do not plan to increase this target in 2017.

SECTION 3 INPATIENT SURGERY

Some commenters expressed concern that the surgical volume measure will incentivize hospitals to unnecessarily increase their surgical volumes.

The goal of the measure is to discourage dangerously low volumes of high-risk surgeries which a compelling body of literature suggests pose a threat to patients' safety. Nonetheless, we recognize the potential for the unintended consequence that hospitals and surgeons will be rewarded for performing inappropriate surgeries. As a result, Leapfrog added a surgical appropriateness/overuse policy to the survey to assure hospitals are monitoring to avoid this problem.

Commenters indicated they may struggle to approve changes to their credentialing processes due to contract negotiations with their surgeons and medical boards.

Leapfrog recognizes that medical boards likely will need to approve a hospital's credentialing policies and that this is not a quick process. That is why Leapfrog will provide hospitals a 12- to 24-month window to accomplish that task. In the 2017

Survey, Leapfrog is asking hospitals to make that commitment in alignment with the values and commitment to patient safety their organization and surgeons uphold.

Some commenters were unclear on when Leapfrog will be reporting and scoring these measures.

The new measures in this section will be collected in the 2017 Survey; however, they will not be scored or publicly reported until the 2018 survey. This provides hospitals the time necessary to refine their data collection and adopt any necessary policies.

Several commenters asked if they should report on the surgical volume measures for procedures they only perform on an emergency basis.

If the hospital does not perform the procedure or only performs the procedure if a patient is too unstable to transfer, the hospital should not report performing that procedure.

Several commenters asked if emergency procedures are excluded from the surgical volume measure.

For hospitals that do perform a particular procedure, the hospital should report on all cases that meet the criteria defined in Appendix B.

Several commenters requested clearer guidelines for the surgical appropriateness policy. The items most commonly referenced in the public comments were the requirements for quarterly chart audits, shared decision making, and surgeons' awareness of specialty society guidelines.

Leapfrog appreciates the thoughtful feedback on the original proposed policy, and as a result worked with national experts as well as leading hospital systems to change the content and wording of the surgical appropriateness policy. The policy now explicitly applies only to the ten procedures identified in the Survey. Additionally, as a result of these updates, the three items referenced above have been removed from the policy.

A commenter was unclear if pediatric procedures are included in the surgical volume measures.

At this time, pediatric procedures are not included in the surgical volume measures.

Some commenters expressed concern about adopting the policies outlined in the surgical volume standards.

Leapfrog appreciates the public comments on the potential hurdles to adopting the surgical volume standards. While Leapfrog understands the challenges that adopting the standards may pose, we strongly encourage hospitals to consider the risks that the standards are intended to prevent. Leapfrog's national Surgical Expert Panel supports monitoring surgical volume as a key first step toward ensuring that hospitals and surgeons are not putting patients at risk by performing dangerously low numbers of procedures each year. Hospitals' responses to the surgical volume questions in the 2017 Leapfrog Hospital Survey will not be scored or reported. Following the conclusion of the 2017 Survey cycle, Leapfrog's national Surgical Expert Panel will convene and use the results of the 2017 Survey to inform the development of Leapfrog's surgical standards. The results of Leapfrog's surgical volume questions will be scored and reported for the 2018 Survey cycle.

Some commenters asked how to count surgeon volume if a surgeon assists another surgeon during a procedure.

The procedure should count for both surgeons' procedure totals. This would apply when both surgeons are experienced, practicing surgeons. Please see below for determining credit for surgeons-in-training.

Commenters asked how to count surgeon volume when a procedure is performed by a surgeon-in-training (i.e. resident/fellow) and an experienced surgeon who is mentoring her/him.

For as long as a surgeon is "in-training," he/she should be excluded from surgeon volume reporting. The experienced surgeon should receive the credit toward her/his procedure total.

Commenters asked how to count surgeon volume for surgeons who have just finished training and are building up their experience.

Surgeons who have just finished his/her training will receive a 24-month grace period to build-up their experience. After that point, his/her volume should be tracked for the surgeon volume standard. The procedures performed by this surgeon during the reporting period should still be counted towards the hospital's volume total, as the surgical team still had the experience with the surgery.

Commenters asked how to count surgeon volume for surgeons who were not 'active' during the entire reporting period (e.g., just hired, sabbatical, illness, etc.).

If a surgeon is unable to meet the surgeon volume standards due to an extended absence during the reporting period, he/she should be excluded from the surgeon volume reporting. The procedures performed by this surgeon during the reporting period should still be counted towards the hospital's procedure total, as the surgical team still had the experience with the surgery.

Some commenters asked whether or not the hospital and surgeon volume standards will apply to critical access hospitals.

In general, critical access hospitals do not perform the types of procedures that are included in Leapfrog's surgical volume standards. In the rare instance when a critical access hospital does perform one or more of the procedures, except for patients too unstable to transfer, the hospital should report on this section.

Some commenters asked how to count hospital volume if they begin a new service line of procedures.

Hospitals will receive an 18-month grace period before having to report on the hospital and surgeon volume for a new procedure. From the day that the hospital performs the procedure for the first time, the hospital and its surgeons 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 or surgeons. However, once the hospital reaches the end of the 18-month grace period, it must report its hospital and surgeon procedure volume since the procedure was first performed.

A commenter asked how to deal with a temporary drop in volume due to losing a surgeon's service.

To accommodate fluctuations in hospital volumes, Leapfrog does offer hospitals the opportunity to report on their average case volumes over a 24-month period.

Several commenters supported Leapfrog's proposal to publicly credit hospitals that decide not to perform certain procedures due to low volume.

Though Leapfrog has decided to use 2017 as a fact finding year, meaning that we will not score or publicly report results, we will explore opportunities to publicly credit hospitals that have decided not to perform high-risk procedures due to low

volume. We agree that it serves patients to be informed about why not performing high-risk procedures can be a positive decision.

SECTION 4 MATERNITY CARE

A commenter suggested that given the increased target of 90% for the antenatal steroids process measure, the exclusion criteria of a documented "reason for not initiating antenatal steroid therapy" needs to be maintained as it may be harmful to give antenatal steroids to certain types of patients.

The antenatal steroids measure uses The Joint Commission measure specifications version 2016A1. These measure specifications continue to exclude cases from the denominator where there are certain documented reasons for not initiating antenatal steroids. The full list of appropriate reasons for not initiating antenatal steroids can be found here. These reasons must be documented and they include fetal distress, imminent delivery, or other reasons documented by a physician/advanced practice nurse (APN)/physician assistant (PA)/certified nurse midwife (CNM). Leapfrog will continue to align with The Joint Commission and will use these measure specifications in the 2017 Leapfrog Hospital Survey.

Some commenters requested that Leapfrog update its scoring algorithm for the process measures of quality (Newborn Bilirubin Screening and DVT Prophylaxis) so that hospitals unable to report on both measures due to low volume are scored differently than hospitals that decline to respond to one of the two measures (i.e. did not measure).

In previous years, hospitals that met the target for one of the two measures, but did not meet the minimum sample size for the other have been scored as "Some Progress," which did not distinguish them from hospitals that did not measure their compliance with one of the two processes. We have updated the scoring algorithm for 2017 that hospitals that meet the target for one of the two measures, but did not meet the minimum sample size for the other measure will be scored as "Substantial Progress."

SECTION 5 ICU PHYSICIAN STAFFING

Some commenters had questions about Leapfrog's definition of "co-managing" a patient.

Hospitals should refer to endnote #28 in the current 2016 Leapfrog Hospital Survey, which defines "managed or co-managed" in the following way: The intensivist, when present (whether on-site or via telemedicine), is authorized to diagnose, treat, and write orders for a patient in the ICU on his/her own authority. Mandatory consults or daily rounds by an intensivist are not sufficient to meet the managed/co-managed requirement. However, an ICU need not be close-staffed to meet this requirement." Leapfrog will continue to use this definition in the 2017 Leapfrog Hospital Survey.

Some commenters expressed concern that facilities, particularly small rural hospitals with limited resources, are penalized for not having specialty services or certified specialists, and suggested that Leapfrog use measures of mortality or outcomes to evaluate ICU care or to modify the standard for small rural hospitals.

Leapfrog has not been able to identify any nationally standardized or endorsed measures of ICU mortality or patient outcomes. In the meantime, research has shown that hospitals that staff their ICUs with doctors who have been trained in critical care medicine can reduce ICU mortality by as much as 40%. In addition, Leapfrog does provide partial credit for the use of 24/7 tele-ICU coverage. Hospitals are encouraged to review Leapfrog's ICU Physician Staffing Fact Sheet and Bibliography, which are both accessible here.

Several commenters requested that Leapfrog update the list of notification devices that can be used to complete the quantitative analysis of intensivist response time.

We have updated this language in 2017 to be clear that any notification device can be used as long as the response time can be accurately tracked included pages, texts, and calls.

One commenter noted that the quantitative analysis of response time is difficult to perform and suggested that Leapfrog allow hospitals to report "rare or no issues with unreturned pages."

It would not be possible to accurately report rare or no issues with unreturned pages without tracking and analyzing these data. Last year, Leapfrog added an option for hospitals with 24/7 intensivist coverage - only hospitals with less than 24/7 coverage need to perform the quantitative analysis. This can be done through a sampling procedure described in the endnote #31 in the current 2016 Leapfrog Hospital Survey.

SECTION 6 NQF SAFE PRACTICES

Several commenters noted the importance of Safe Practice 3 – Teamwork Training and Skill Building in their organization and asked if some of the practice elements could be continued, perhaps as additions to Safe Practice 2 – Cultural Measurement, Feedback, and Intervention.

Safe Practice 3 – Teamwork Training and Skill Building will be removed from the 2017 Leapfrog Hospital Survey, but Leapfrog will consider adding components of this Safe Practice to Safe Practice 2 – Culture Measurement, Feedback, and Intervention in future iterations of the survey. We appreciate the recommendation.

One commenter asked if Leapfrog would consider removing the safe practice elements related to budgeting and performance reviews.

The Leapfrog Safe Practice section reflects the National Quality Forum Safe Practices for Better Healthcare - 2010 Update. This update emphasized including the allocation of resources for specific patient safety efforts and holding individuals at all levels within the organization accountable for improvement in specific areas of patient safety. Thus Leapfrog is not considering removing these elements at this time.

One commenter suggested that Leapfrog look for a measure that would evaluate the use of electronic data collection to improve hand hygiene compliance.

We appreciate this recommendation. Though to date we have not identified a standardized and/or endorsed measure for this, we will continue to look for measures for future surveys.

SECTION 7 MANAGING SERIOUS ERRORS

7A NEVER EVENTS

Several commenters expressed concerns about a proposed additional element to Leapfrog's Never Events Policy Statement: notifying patients and families within 60 minutes if an adverse event may have occurred.

Leapfrog has removed this requirement for the 2017 survey, but plans to add this in the future once more precise parameters can be articulated by experts.

Leapfrog originally proposed this standard as a result of work funded by AHRQ and piloted by two health systems. We plan to update it based on the experience at leading health systems and the evidence of effectiveness. Given the concerns expressed by many commenters, we thought it would be helpful to share the following comment on successful implementation of the 60 minute notification policy, submitted by Drs. David Mayer and Tim McDonald from MedStar Health:

> *"Informed by experience and reinforced by patient and family advisors, we set a goal of responding to serious patient harm in 60 minutes or less while working at the University of Illinois at Chicago Medical Center through a program known as the 'Seven Pillars.' We have now set a similar goal at MedStar Health by adopting the recently released Agency for Healthcare Research and Quality (AHRQ) program known as CANDOR – Communication and Optimal Resolution - a program MedStar Health helped create and pilot for the AHRQ (www.AHRQ.gov/CANDOR). We believe it is critical that a hospital or health system set a goal of responding to a serious unanticipated outcome (SUO) in 60 minutes. We define a SUO as any serious change in a patient's clinical condition that none of us anticipated.*
>
> *The reason we choose serious unanticipated outcome is because:*
>
> *1. In many situations, as mentioned by others, it can take days or weeks to determine if the harm may have been preventable. For some events, it may immediately be obvious that the harm was preventable (e.g. a wrong-sided surgery, a 10 fold increased dose of an anticoagulant). Other events can take days or weeks to fully understand what may have happened. In either case, patients and families have shared it is imperative to start a conversation with them immediately and not wait for days to go by before starting that conversation.*
>
> *2. The critical, first step in any comprehensive response to patient harm must be reaching out and providing empathetic communication to the patient and family acknowledging their pain and providing "emotional first aid". This emotional first aid does not require knowledge of all the facts or causes of the event (in most initial conversations, we share that we don't know what happened) but simply acknowledging the unexpected serious harm, a promise to learn what may have caused or contributed to the harm, and a commitment to share that learning with the patient and/or family as the review process continues to conclusion. Providing such emotional first aid should occur regardless of whether it is immediately obvious mistakes were made – the existence of a serious unexpected outcome should trigger an immediate communication with our patients and families.*

3. Patients and families who experience serious unexpected harm have taught us through the years that "every hour that goes by following the serious unexpected harm is, itself, another harm" if we are not effectively communicating with them. If we are confused on why the care went in a direction we hadn't anticipated, our patients and families are equally confused on what may happened to them or their loved one. The majority of these serious harm events are good care teams doing good work without breeches in care but unfortunately we can't heal everyone. It is important that we share what we know as we know it, answer their questions honestly, and show empathy. In events where our care was substandard, the empathy also needs to include an apology and possible remedy.

4. The CANDOR program and toolkit recently released by AHRQ is founded on these concepts of immediate communication with patients and families. It also includes responding immediately to those caregivers involved in the event through a Care-for-the-caregiver program. Our colleagues are also deeply affected when harm occurs. We encourage those interested in this approach to visit the AHRQ website and learn more about CANDOR. The MedStar Institute for Quality and Safety and our Center for Open and Honest Communication [COHC] are working with a number of hospitals and health systems across the country who are implementing CANDOR at their institutions.

We have learned that responding in 60 minutes or less to our patients and families is not only the right thing to do, it is also the smart thing to do as highlighted in the recently published Health Services Research article titled The "Seven Pillars" Response to Patient Safety Incidents: Effects on Medical Liability Processes and Outcomes. Health Serv Res. 2016 Dec;51 Suppl 3:2491-2515. doi: 10.1111/1475-6773.12548. Epub 2016 Aug 24."

Some commenters were concerned about sharing the results from the RCA and actions planned for improvement with patients and/or families could have legal implications or be used in litigation.

*Leapfrog has refined the language in this section to be clear that patients and/or families, who are willing and able, should be interviewed as part of the RCA. Leapfrog will provide interview tips developed by the National Patient Safety Foundation and other resources to support hospitals in adopting and implementing this new policy element. In addition, Leapfrog has refined the language to be clear that hospitals should share **actions** they will take to prevent a future event with patients and/or families as the result of the RCA, not the results of the RCA.*

One commenter suggested that Leapfrog require all hospitals to adopt the RCA^2 protocol published by the National Patient Safety Foundation.

The National Patient Safety Foundation has put significant resources into the evidence-based protocol. Leapfrog is providing the RCA^2 as an example of a robust RCA model and will continue to encourage hospitals to utilize this resource.

One commenter asked for clarification on Leapfrog's use of the terms "Never Event" and "Serious Reportable Event."

Leapfrog's Never Events policy applies to the National Quality Forum's Serious Reportable Events. To earn credit for this question, hospitals must have a policy in place that addresses the NQF's list of Serious Reportable Events. This note is provided in the 2016 Leapfrog Hospital Survey and this definition will continue to be used in the 2017 Leapfrog Hospital Survey.

One commenter noted that per The Joint Commission's Sentinel Event policy, each accredited organization is strongly encouraged, but not required, to report sentinel events to The Joint Commission, and questioned whether hospitals

would be penalized if they chose not to report per The Joint Commission policy even though Leapfrog is indicating reporting within 10 days.

The Joint Commission is an example of an organization that meets our requirement for external reporting. Other examples include state organizations and Patient Safety Organizations (PSOs). Hospitals must report to the external agency within 10 days of becoming aware the never event occurred to meet Leapfrog's criteria.

One commenter asked for clarification regarding the new elements to Leapfrog's Never Events Policy Statement and asked whether the additional elements need to be stated in a policy or confirmed as practice/protocol.

The additional practices must be documented in a hospital policy.

Some commenters requested that public reporting on the revised Never Events measure be delayed until 2018 to allow for time to meet the requirements.

We do often delay scoring and public reporting when we add new measures to the survey. We do not typically delay scoring and public reporting when we update measures.

One commenter requested that Leapfrog replace the term "family" used throughout the Never Events Policy with "loved ones" to be more inclusive and considerate of patient preferences.

We appreciate this suggestion. Leapfrog will gather feedback from hospitals to better understand how this change would be operationalized and consider it for the 2018 survey.

7B HEALTHCARE ASSOCIATED INFECTIONS

Some commenters expressed concerns about making unit-level data available to Leapfrog via its NHSN Group.

Leapfrog is requiring hospitals to share unit-level data for CLABSI and CAUTI as it is required to generate the standardized infection ratios (SIRs) for these measures. However, Leapfrog will no longer be publicly reporting any unit-level data. Only the SIRs and overall performance category (i.e. Fully Meets the Standard, Substantial Progress, etc.) will be publicly reported for all five infection measures.

A commenter questioned whether Leapfrog would be reporting separate standardized infection ratios (SIRs) for ICU-only CLABSI and CAUTI and non-ICU CLABSI and CAUTI.

In alignment with CMS, Leapfrog is moving to the ICU and select wards measures for CLABSI and CAUTI, which include ICUs and adult/pediatric medical, surgical, and medical/surgical wards. Leapfrog will report an overall SIR for these measures consistent with the SIRs calculated for the purposes of the CMS Inpatient Quality Reporting Program. In addition to the SIR, an overall performance category (i.e. Fully Meets the Standard, Substantial Progress, etc.) will be publicly reported for each measure.

Some commenters expressed opposition to Leapfrog requiring hospitals to join their NHSN Group and share infection data for the purposes of reporting on the five infection measures to be included in Section 7B and questioned why Leapfrog could not use the data from CMS Hospital Compare.

Leapfrog is requiring access to NHSN data for the 2017 Leapfrog Hospital Survey in response to feedback received from several facilities who suggested this as a strategy to relieve some of the reporting burden. Requesting this data directly from NHSN allows Leapfrog to receive facility-specific information consistent with Leapfrog's Multi-Campus Reporting Policy, whereas the data shared on CMS Hospital Compare is aggregated by Medicare Provider Number. In addition, using the data from NHSN allows Leapfrog to publicly report hospital performance using a more recent reporting period than CMS. For the purposes of the Hospital Safety Grade, CMS Hospital Compare will continue to be used as a secondary data source for hospitals who do not submit a Leapfrog Hospital Survey.

One commenter expressed concern regarding the application of the NHSN MRSA and CDI measures to free-standing pediatric hospitals.

To address this concern, Leapfrog solicited feedback from free-standing pediatric hospitals who currently participate in the NHSN surveillance programs for these two healthcare-associated infections and also from experts at the CDC. Based on this feedback, we feel confident that these measures are not only appropriate, but will result in valid and reliable results for free-standing pediatric hospitals.

SECTION 8 MEDICATION SAFETY

8B MEDICATION RECONCILIATION

Several commenters asked Leapfrog to define a "gold standard medication history."

A gold standard medication history is one taken shortly after admission (e.g., the next morning) by a trained pharmacist. This should be in addition to the pre-admission medication list (PAML) compiled by the team as a part of usual care. A checklist will be made available on the Survey and CPOE Materials page of the survey website on April 1st.

For each gold standard medication, there may be up to two unintentional discrepancies: a discrepancy in admission orders and a discrepancy in discharge orders. For example, if a medication on the gold standard list is ordered for a patient on admission with the incorrect dose, this counts as one discrepancy. If this medication is ordered on discharge for the same incorrect dose, this counts as a second discrepancy. The number of unintentional discrepancies is a count of medication orders where an unintentional discrepancy occurred. You should not count the number of errors associated with the same medication order. Some commenters asked Leapfrog to define "unintentional medication discrepancy."

Several commenters asked if a pharmacy tech or student could stand in for a licensed pharmacist to obtain the gold standard medication history and identify unintentional medication discrepancies between the gold standard medication history and admission/discharge orders.

In accordance with the research and testing by measure developers as well as compliance with the NQF measure endorsement, only licensed pharmacists will be allowed to obtain the gold standard medication list and identify unintentional discrepancies.

Some commenters noted that their pharmacists are already responsible for obtaining pre-admission medication lists (PAML) or medication reconciliation at admission and/or discharge, and questioned what additional steps the pharmacist would need to take in order to report on this measure.

First, the measure requires hospitals use this method to sample cases over short period of time, not throughout the year. Even if a pharmacist currently creates the PAML or is currently involved in the medication reconciliation process at admission and/or discharge, they would be required to follow the instructions and measure specifications detailed in the hard copy of the survey. This may mean that if a pharmacist creates the preadmission medication list, a second pharmacist will need to create the gold standard medication list as part of medication reconciliation data collection. Or if a pharmacist is performing medication reconciliation on admission and/or discharge, a second pharmacist will need to compare the gold standard medication history to the admission and discharge orders to identify any unintentional discrepancies.

Some commenters were concerned about the sample size of 25 patients per quarter (3-month period).

In light of this concern, Leapfrog is reducing the sample size to 10 patients, and permitting hospitals to complete the sample in the three months prior to survey submission.

Some commenters were under the impression that the data collection for this measure would be retrospective.

Hospitals will not perform retrospective chart reviews or data collection to report on this measure. Once Leapfrog publishes the survey and associated materials on April 1st, hospitals will then be able to begin a prospective data collection process. Leapfrog has partnered with the measure developer to create a number of tools including sampling tools, data collection worksheets, and tips for obtaining a gold standard medication history. We will also be holding two Town Halls calls designed for pharmacists who will participate in the data collection for this measure. Register now at http://www.leapfroggroup.org/survey-materials/town-hall-calls.

Some commenters expressed concerns and questions about the data collection process, including obtaining a gold standard medication history.

Leapfrog will publish several tools and worksheets on April 1st for pharmacists to use when collecting the data. These tools include detailed instructions on how to obtain a gold standard medication list, how to compare the medication list to the admission and discharge orders, how to identify and record discrepancies, and how to calculate the responses to enter into the survey. In addition, we have created a patient sampling tool for hospitals to help them identify their 10-case random sample. We will also be holding two Town Halls calls designed for pharmacists who will participate in the data collection for this measure. Register now at http://www.leapfroggroup.org/survey-materials/town-hall-calls.

Some commenters asked whether or not this measure was applicable to pediatric patients or free-standing pediatric hospitals.

The measure is only specified for adult patients (18 years or older).

One commenter asked whether this new measure has impacted patient safety.

Medication errors are the most common errors made in hospitals. The measure developer has provided the following reference to illustrate the value of this endorsed measure to patient safety http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-13-230.

SECTION 9 PEDIATRIC CARE

Commenters had questions on what volume of pediatric admissions/discharges would trigger the new Pediatric Care section of the survey.

Each measure in Section 9 has a minimum reporting threshold. Hospitals with at least 1000 pediatric admissions during the reporting period will be asked to report on Section 9A. Hospitals with at least 10 CT scans per anatomic area and age stratum will be asked to report on Section 9B.

As a reminder, the section only applies to the care of patients 17 years or younger. Leapfrog will utilize responses from 2017 and questions submitted through the Help Desk to refine reporting requirements for 2018. These measures will not be scored or publicly reported in 2017.

As Leapfrog is the first national organizations to roll-out the CAHPS Child Hospital Survey and CT Radiation Dose measures, one commenter suggested that Leapfrog implement a program to allow hospitals to pilot the two measures before adding them to the survey.

Leapfrog has traditionally published questions and measures specifications a year before scoring and publicly reporting on the results of new measures. We will do the same in 2017 for these new pediatric measures. Rather than a small pilot, we've found it most helpful to learn from the feedback and experience of the large, national sample of hospitals who voluntarily report to the survey. In addition, both of these measures are in use by hospitals across the country through voluntarily reporting and QI initiatives.

SECTION 9A: CAHPS CHILD HOSPITAL SURVEY

Some commenters noted that because the CAHPS Child Hospital Survey is not currently mandated or required by any payer, not every pediatric hospital is currently administering it, and suggested that Leapfrog give hospitals additional time to implement the survey.

The CAHPS Child Hospital Survey has been endorsed by the National Quality Forum and is in use by hospitals across the country. Leapfrog is often in the position to be the first to put a measure takes the lead in putting endorsed measures

In 2017, this section will be optional. For those hospitals that do report, Leapfrog will not score or publicly report their results. However, the information submitted in 2017 will be important to help Leapfrog develop scoring algorithms to be used in 2018.

Some commenters asked whether or not they could report the results from the CAHPS Adult Hospital Survey if it was sent to pediatric discharges.

No, hospitals cannot submit results from the CAHPS Adult Hospital Survey in this section, even if the survey was sent out and returned by pediatric discharges.

Some commenters asked whether they could report results from patient experience surveys other than the CAHPS Child Hospital Survey.

No. When possible, Leapfrog aims to include measures that have been endorsed by the National Quality Forum on the survey. This helps ensure that the measures are tested and reliable, and appropriate for use in accountability programs such as public reporting and payment.

SECTION 9B: CT RADIATION DOSE

Some commenters questioned which dose metric would be used in this measure.

Hospitals will only be asked report on their dose length product (DLP). Hospitals have the option of using data obtained from Dose Monitoring Software.

Some commenters asked if this measure only applies to pediatric inpatients.

It does not. Hospitals should include all CT scans for patients 17 years and youngers based on the specified criteria that will be published in the hard copy of the survey on April 1st.

Some commenters expressed concern about stratifying patients by age rather than height and/or weight.

At this time not all facilities have the capability to easily report DLP by patient height and weight, based on the Dose Report outputted from the CT machine. While some facilities have this capability through dose monitoring software, at this time we can only ask hospitals to stratify by age.

Some commenters expressed concern that the measure would encourage hospitals to use doses that are too low, which would also be harmful to the patient.

It is true that doses that are too low for the procedure are also harmful to the patient; however current evidence shows that in general doses are much higher than needed. Radiologists must be responsible for ensuring doses are diagnostic.

Commenters requested clarification on which hospitals should report on this measure, and what patient population would be sampled.

Only hospitals with an inpatient pediatric medical and/or surgical unit will be asked to respond to this section of the survey. All pediatric patients who underwent a CT scan during the reporting period will be part of the patient population and should be sampled from. Note that this includes both inpatients and children scanned but never admitted to the hospital.

Commenters asked for clarification on the sampling and data collection process.

The sampling structure a hospital uses will depend on the access to dose monitoring software. Those that utilize dose monitoring software will be asked to report on all cases in the 12 month reporting period. Hospitals that do not have dose monitoring software, and therefore must collect the data manually from the Dose Reports, will be asked to report on 30 cases per anatomic structure and age stratum combination. Leapfrog will provide a workbook for these hospitals to enter the data, which will automatically calculate the responses to enter into the survey.

APPENDIX B INPATIENT SURVEY – VOLUME STANDARDS

For each of the 10 surgical procedures included in Section 3A Volume Standards, Leapfrog has provided a set of ICD-10 procedure codes and in some cases an additional set of ICD-10 diagnosis codes for counting patients. While it is expected that most procedures would be indicated as a principle procedure given their severity, if the procedure code is found in any position, the patient can be counted if the code qualifies according to the definition. Similarly, if the diagnosis code is found in any position, the patient can be counted.

Only the ICD-10 procedure and diagnosis codes provided by Leapfrog should be used to report on the hospital volume and the surgeon volume questions.

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 for that procedure in question #2.

When calculating **hospital volume**: count the number of **patients** discharged from your facility within the reporting period with any one or more of the codes specified for each procedure, subject to the other inclusion/exclusion criteria below. Age restrictions apply to all 10 procedures.

When calculating **surgeon volume**: count the number of patients discharged within the reporting period with any one or more of the specified procedure codes for each procedure performed by the individual surgeon. If the surgeon performed the procedure at more than one facility during the reporting period, hospitals should attempt to obtain total surgeon volume across all facilities for the individual surgeon during the reporting period using the list of ICD-10 codes provided by Leapfrog. Volume cannot be obtained using CPT or other codes.

When identifying **surgeons** who performed each procedure: only include those surgeons who were privileged and credentialed to perform the procedure at your facility throughout the entire reporting period. Surgeons who were only privileged and credentialed to perform the procedure for a portion of the reporting period (e.g. new surgeons, visiting fellows, retiring surgeons, etc.), should not be included. See FAQs for additional information about reporting on new service lines and new surgeons.

CAROTID ENDARTERECTOMY MEASURE REFERENCES

For Carotid Endarterectomy, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Carotid Endarterectomy Procedure Codes

ICD10 Procedure Code	Code Description
03CH0ZZ	Extirpation of Matter from Right Common Carotid Artery, Open Approach
03CJ0ZZ	Extirpation of Matter from Left Common Carotid Artery, Open Approach
03CK0ZZ	Extirpation of Matter from Right Internal Carotid Artery, Open Approach
03CL0ZZ	Extirpation of Matter from Left Internal Carotid Artery, Open Approach
03CM0ZZ	Extirpation of Matter from Right External Carotid Artery, Open Approach
03CN0ZZ	Extirpation of Matter from Left External Carotid Artery, Open Approach

ICD-10 Occlusion and Stenosis and Cerebral Infarction Diagnosis Codes

ICD10 Diagnosis Code	Code Description
I65.2	Occlusion and stenosis of carotid artery
I65.21	Occlusion and stenosis of right carotid artery
I65.22	Occlusion and stenosis of left carotid artery
I65.23	Occlusion and stenosis of bilateral carotid arteries
I65.29	Occlusion and stenosis of unspecified carotid artery
I65.8	Occlusion and stenosis of other precerebral arteries
I65.9	Occlusion and stenosis of unspecified precerebral artery
I63.23	Cerebral infarction due to unspecified occlusion or stenosis of carotid arteries
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries

MITRAL VALVE REPAIR AND REPLACEMENT MEASURE REFERENCES

For Mitral Valve Repair and Replacement, there is only one set of ICD-10 codes for counting patients. The set of codes is to identify patients who have had the procedure.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field.

ICD-10 Mitral Valve Repair and Replacement Procedure Codes

ICD10 Procedure Code	Code Description
02QG0ZZ	Repair Mitral Valve, Open Approach
02RG07Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Open Approach
02RG08Z	Replacement of Mitral Valve with Zooplastic Tissue, Open Approach
02RG0JZ	Replacement of Mitral Valve with Synthetic Substitute, Open Approach
02RG0KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Open Approach
02RG47Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
02RG48Z	Replacement of Mitral Valve with Zooplastic Tissue, Percutaneous Endoscopic Approach
02RG4JZ	Replacement of Mitral Valve with Synthetic Substitute, Percutaneous Endoscopic Approach
02RG4KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
02UG0JZ	Supplement Mitral Valve with Synthetic Substitute, Open Approach

OPEN AORTIC ANEURYSM REPAIR MEASURE REFERENCES

For Open Aortic Aneurysm Repair, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Open Aortic Aneurysm Repair Procedure Codes

ICD10 Procedure Code	Code Description
04100J8	Bypass Abdominal Aorta to Bilateral Common Iliac Arteries with Synthetic Substitute, Open Approach
04R00JZ	Replacement of Abdominal Aorta with Synthetic Substitute, Open Approach
04Q00ZZ	Repair Abdominal Aorta, Open Approach
04QC0ZZ	Repair Right Common Iliac Artery, Open Approach
04QD0ZZ	Repair Left Common Iliac Artery, Open Approach

ICD-10 Unruptured Aortic Aneurysm Diagnosis Codes

ICD10 Diagnosis Code	Code Description
I71.4	Abdominal aortic aneurysm, without rupture
I71.6	Thoracoabdominal aortic aneurysm, without rupture
I71.9	Aortic aneurysm of unspecified site, without rupture

LUNG RESECTION MEASURE REFERENCES

For Lung Resection, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Lung Resection Procedure Codes

ICD10 Procedure Code	Code Description
0BBC0ZZ	Excision of Right Upper Lung Lobe, Open Approach
0BBC3ZZ	Excision of Right Upper Lung Lobe, Percutaneous Approach
0BBC4ZZ	Excision of Right Upper Lung Lobe, Percutaneous Endoscopic Approach
0BBD0ZZ	Excision of Right Middle Lung Lobe, Open Approach
0BBD3ZZ	Excision of Right Middle Lung Lobe, Percutaneous Approach
0BBD4ZZ	Excision of Right Middle Lung Lobe, Percutaneous Endoscopic Approach
0BBF0ZZ	Excision of Right Lower Lung Lobe, Open Approach
0BBF3ZZ	Excision of Right Lower Lung Lobe, Percutaneous Approach
0BBF4ZZ	Excision of Right Lower Lung Lobe, Percutaneous Endoscopic Approach
0BBG0ZZ	Excision of Left Upper Lung Lobe, Open Approach
0BBG3ZZ	Excision of Left Upper Lung Lobe, Percutaneous Approach
0BBG4ZZ	Excision of Left Upper Lung Lobe, Percutaneous Endoscopic Approach
0BBH0ZZ	Excision of Lung Lingula, Open Approach
0BBH3ZZ	Excision of Lung Lingula, Percutaneous Approach
0BBH4ZZ	Excision of Lung Lingula, Percutaneous Endoscopic Approach
0BBJ0ZZ	Excision of Left Lower Lung Lobe, Open Approach
0BBJ3ZZ	Excision of Left Lower Lung Lobe, Percutaneous Approach
0BBJ4ZZ	Excision of Left Lower Lung Lobe, Percutaneous Endoscopic Approach
0BBK0ZZ	Excision of Right Lung, Open Approach
0BBK3ZZ	Excision of Right Lung, Percutaneous Approach
0BBK4ZZ	Excision of Right Lung, Percutaneous Endoscopic Approach
0BBL0ZZ	Excision of Left Lung, Open Approach
0BBL3ZZ	Excision of Left Lung, Percutaneous Approach
0BBL4ZZ	Excision of Left Lung, Percutaneous Endoscopic Approach
0BBL7ZZ	Excision of Left Lung, Via Natural or Artificial Opening
0BTC0ZZ	Resection of Right Upper Lung Lobe, Open Approach
0BTC4ZZ	Resection of Right Upper Lung Lobe, Percutaneous Endoscopic Approach
0BTD0ZZ	Resection of Right Middle Lung Lobe, Open Approach

0BTD4ZZ	Resection of Right Middle Lung Lobe, Percutaneous Endoscopic Approach
0BTF0ZZ	Resection of Right Lower Lung Lobe, Open Approach
0BTF4ZZ	Resection of Right Lower Lung Lobe, Percutaneous Endoscopic Approach
0BTG0ZZ	Resection of Left Upper Lung Lobe, Open Approach
0BTG4ZZ	Resection of Left Upper Lung Lobe, Percutaneous Endoscopic Approach
0BTH0ZZ	Resection of Lung Lingula, Open Approach
0BTH4ZZ	Resection of Lung Lingula, Percutaneous Endoscopic Approach
0BTJ0ZZ	Resection of Left Lower Lung Lobe, Open Approach
0BTJ4ZZ	Resection of Left Lower Lung Lobe, Percutaneous Endoscopic Approach
0BTK0ZZ	Resection of Right Lung, Open Approach
0BTK4ZZ	Resection of Right Lung, Percutaneous Endoscopic Approach
0BTL0ZZ	Resection of Left Lung, Open Approach
0BTL4ZZ	Resection of Left Lung, Percutaneous Endoscopic Approach

ICD-10 Malignant Tumor Diagnosis Codes

ICD10 Diagnosis Code	Code Description
C34.00	Malignant neoplasm of main bronchus
C34.01	Malignant neoplasm of right main bronchus
C34.02	Malignant neoplasm of left main bronchus
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung
C34.2	Malignant neoplasm of middle lobe, bronchus or lung
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung

ESOPHAGEAL RESECTION MEASURE REFERENCES

For Esophageal Resection, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Esophageal Resection Procedure Codes

ICD10 Procedure Code	Code Description
0DB10ZZ	Excision of Upper Esophagus, Open Approach
0DB13ZZ	Excision of Upper Esophagus, Percutaneous Approach
0DB20ZZ	Excision of Middle Esophagus, Open Approach
0DB23ZZ	Excision of Middle Esophagus, Percutaneous Approach
0DB30ZZ	Excision of Lower Esophagus, Open Approach
0DB33ZZ	Excision of Lower Esophagus, Percutaneous Approach
0DB50ZZ	Excision of Esophagus, Open Approach
0DB53ZZ	Excision of Esophagus, Percutaneous Approach
0DT10ZZ	Resection of Upper Esophagus, Open Approach
0DT14ZZ	Resection of Upper Esophagus, Percutaneous Endoscopic Approach
0DT20ZZ	Resection of Middle Esophagus, Open Approach
0DT24ZZ	Resection of Middle Esophagus, Percutaneous Endoscopic Approach
0DT30ZZ	Resection of Lower Esophagus, Open Approach
0DT34ZZ	Resection of Lower Esophagus, Percutaneous Endoscopic Approach
0DT50ZZ	Resection of Esophagus, Open Approach
0DT54ZZ	Resection of Esophagus, Percutaneous Endoscopic Approach
0DT60ZZ	Resection of Stomach, Open Approach
0DT64ZZ	Resection of Stomach, Percutaneous Endoscopic Approach

ICD-10 Malignant Tumor Diagnosis Codes

ICD10 Diagnosis Code	Code Description
C15.3	Malignant neoplasm of upper third of esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C15.9	Malignant neoplasm of esophagus, unspecified
C16.0	Malignancy of the cardio-esophageal junction

PANCREATIC RESECTION MEASURE REFERENCES

For Pancreatic Resection, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Pancreatic Resection Procedure Codes

ICD10 Procedure Code	Code Description
0DB90ZZ	Excision of Duodenum, Open Approach
0DB93ZZ	Excision of Duodenum, Percutaneous Approach
0DB94ZZ	Excision of Duodenum, Percutaneous Endoscopic Approach
0DT90ZZ	Resection of Duodenum, Open Approach
0DT94ZZ	Resection of Duodenum, Percutaneous Endoscopic Approach
0FBG0ZZ	Excision of Pancreas, Open Approach
0FBG3ZZ	Excision of Pancreas, Percutaneous Approach
0FBG4ZZ	Excision of Pancreas, Percutaneous Endoscopic Approach
0FTG0ZZ	Resection of Pancreas, Open Approach
0FTG4ZZ	Resection of Pancreas, Percutaneous Endoscopic Approach

ICD-10 Malignant Tumor Diagnosis Codes

ICD10 Diagnosis Code	Code Description
C17.0	Malignant neoplasm of duodenum
C24.0	Malignant neoplasm of extrahepatic bile duct
C24.1	Malignant neoplasm of ampulla of Vater
C24.8	Malignant neoplasm of overlapping sites of biliary tract
C24.9	Malignant neoplasm of biliary tract, unspecified
C25.0	Malignant neoplasm of head of pancreas
C25.1	Malignant neoplasm of body of pancreas
C25.3	Malignant neoplasm of pancreatic duct
C25.4	Malignant neoplasm of endocrine pancreas
C25.7	Malignant neoplasm of other parts of pancreas
C25.8	Malignant neoplasm of overlapping sites of pancreas
C25.9	Malignant neoplasm of pancreas, unspecified

RECTAL CANCER SURGERY MEASURE REFERENCES

For Rectal Cancer Surgery, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field

ICD-10 Rectal Cancer Surgery Procedure Codes

ICD10 Procedure Code	Code Description
0DBP0ZZ	Excision of Rectum, Open Approach
0DBP4ZZ	Excision of Rectum, Percutaneous Endoscopic Approach
0DTP0ZZ	Resection of Rectum, Open Approach
0DTP4ZZ	Resection of Rectum, Percutaneous Endoscopic Approach

ICD-10 Malignant Tumor Diagnosis Codes

ICD10 Diagnosis Code	Code Description
C20	Malignant neoplasm of rectum
C21.8	Malignant neoplasm of overlapping sites of rectum, anus and anal canal

HIP REPLACEMENT MEASURE REFERENCES

For Hip Replacement, there is only one set of ICD-10 codes for counting patients. The set of codes is to identify patients who have had the procedure.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field.

ICD-10 Hip Replacement Procedure Codes

ICD10 Procedure Code	Code Description
0SR9049	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach
0SR904A	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach
0SR904Z	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach
0SRB049	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach
0SRB04A	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach
0SRB04Z	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach

KNEE REPLACEMENT MEASURE REFERENCES

For Knee Replacement, there is only one set of ICD-10 codes for counting patients. The set of codes is to identify patients who have had the procedure.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field.

ICD-10 Knee Replacement Procedure Codes

ICD10 Procedure Code	Code Description
0SRC0J9	Replacement of Right Knee Joint with Synthetic Substitute, Cemented, Open Approach
0SRC0JA	Replacement of Right Knee Joint with Synthetic Substitute, Uncemented, Open Approach
0SRC0JZ	Replacement of Right Knee Joint with Synthetic Substitute, Open Approach
0SRD0J9	Replacement of Left Knee Joint with Synthetic Substitute, Cemented, Open Approach
0SRD0JA	Replacement of Left Knee Joint with Synthetic Substitute, Uncemented, Open Approach
0SRD0JZ	Replacement of Left Knee Joint with Synthetic Substitute, Open Approach
0SRT0J9	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach
0SRT0JA	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach
0SRT0JZ	Replacement of Right Knee Joint, Femoral Surface with Synthetic Substitute, Open Approach
0SRU0J9	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Cemented, Open Approach
0SRU0JA	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Uncemented, Open Approach
0SRU0JZ	Replacement of Left Knee Joint, Femoral Surface with Synthetic Substitute, Open Approach
0SRV0J9	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Cemented, Open Approach
0SRV0JA	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Uncemented, Open Approach
0SRV0JZ	Replacement of Right Knee Joint, Tibial Surface with Synthetic Substitute, Open Approach
0SRW0J9	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Cemented, Open Approach
0SRW0JA	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Uncemented, Open Approach
0SRW0JZ	Replacement of Left Knee Joint, Tibial Surface with Synthetic Substitute, Open Approach

BARIATRIC SURGERY FOR WEIGHT LOSS MEASURE REFERENCES

For Bariatric Surgery, there are two sets of ICD-10 codes for counting patients. The first set of codes is to identify patients who have had the procedure. The second set of codes is to identify patients with a specific diagnosis.

Source: The Leapfrog Group

Number of patients, age 18 years and older, discharged with the following ICD-10 codes in any procedure field AND any of the following ICD-10 codes in any diagnosis field.

ICD-10 Bariatric Surgery Procedure Codes

ICD10 Procedure Code	Code Description
0D16079	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Open Approach
0D1607A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Open Approach
0D1607B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Open Approach
0D160Z9	Bypass Stomach to Duodenum, Open Approach
0D160ZA	Bypass Stomach to Jejunum, Open Approach
0D160ZB	Bypass Stomach to Ileum, Open Approach
0D16479	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
0D1647A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
0D1647B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
0D164Z9	Bypass Stomach to Duodenum, Percutaneous Endoscopic Approach
0D164ZA	Bypass Stomach to Jejunum, Percutaneous Endoscopic Approach
0D164ZB	Bypass Stomach to Ileum, Percutaneous Endoscopic Approach
0DB60Z3	Excision of Stomach, Open Approach, Vertical
0DB60ZZ	Excision of Stomach, Open Approach
0DB63Z3	Excision of Stomach, Percutaneous Approach, Vertical
0DB63ZZ	Excision of Stomach, Percutaneous Approach
0DB64Z3	Excision of Stomach, Percutaneous Endoscopic Approach, Vertical

ICD-10 Morbid Obesity Diagnosis Codes

ICD10 Procedure Code	Code Description
E66.01	Morbid (severe) obesity due to excess calories
E66.09	Other obesity due to excess calories
E66.8	Other obesity
Z68.35	Body mass index (BMI) 35.0-35.9, adult

Z68.36	Body mass index (BMI) 36.0-36.9, adult
Z68.37	Body mass index (BMI) 37.0-37.9, adult
Z68.38	Body mass index (BMI) 38.0-38.9, adult
Z68.39	Body mass index (BMI) 39.0-39.9, adult
Z68.41	Body mass index (BMI) 40.0-44.9, adult
Z68.42	Body mass index (BMI) 45.0-49.9, adult
Z68.43	Body mass index (BMI) 50-59.9 , adult
Z68.44	Body mass index (BMI) 60.0-69.9, adult
Z68.45	Body mass index (BMI) 70 or greater, adult