NQF

NATIONAL QUALITY FORUM

SURGERY AND ANESTHESIA

National Voluntary Consensus Standards for Surgery and Anesthesia—Additional Performance Measures 2008

A CONSENSUS REPORT

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Foreword

PERIOPERATIVE CARE, WHICH INCLUDES preoperative preparation, intraoperative management, and postoperative care, is a critical function within surgical facilities. With nearly 30 million operations performed in the United States each year, the timeliness and efficiency of the perioperative care systems within surgical facilities contribute to patient outcomes and the overall quality of care delivered. More information on the overall performance of perioperative services will provide stakeholders with a robust picture of the quality of surgical services delivered in the United States.

This report presents five performance measures for facilities providing surgery and anesthesia care. These measures supplement those that the National Quality Forum (NQF) already has endorsed for hospitals, ambulatory surgical centers, and clinicians in the areas of surgery and anesthesia.

NQF thanks the Surgery and Anesthesia Steering Committee members for their efforts to ensure that the quality of healthcare is improved by standardizing quality measurement in all surgical care settings.

Janet M. Corrigan, PhD, MBA
President and Chief Executive Officer

The mission of the National Quality Forum is to improve the quality of American healthcare by setting national priorities and goals for performance improvement, endorsing national consensus standards for measuring and publicly reporting on performance, and promoting the attainment of national goals through education and outreach programs.

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Executive Summary

ALMOST 30 MILLION OPERATIONS are performed in the United States every year. Perioperative care—including preoperative preparation, intraoperative management, and postoperative care—is a critical function within surgical facilities that requires coordination among providers within the facility as well as externally. The timeliness and efficiency of the perioperative care systems within surgical facilities contribute to patient outcomes and the overall quality of care delivered. However, numerous reports, including the Institute of Medicine's *To Err Is Human: Building a Safer Health System,* have noted that significant numbers of patients undergoing surgery experience complications and less-than-optimal patient outcomes.

To date, the National Quality Forum has endorsed more than 50 measures for hospitals, for clinicians in the areas of surgery and anesthesia, and for ambulatory surgical centers. This report presents five additional performance measures for facilities providing surgery and anesthesia care. The purpose of these consensus standards is to improve the quality of healthcare—via accountability and public reporting—by standardizing quality measurement in all care settings.

National Voluntary Consensus Standards for Surgery and Anesthesia—Additional Performance Measures 2008

- Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP Inf 9)
- Surgery patients with perioperative temperature management (SCIP Inf 7)
- Protocol for glycemic control with intravenous insulin implementation
- Postoperative DVT or PE (PSI 12)
- Ambulatory surgery patients with appropriate method of hair removal

National Voluntary Consensus Standards for Surgery and Anesthesia—Additional Performance Measures 2008: A Consensus Report

Background

ALMOST 30 MILLION OPERATIONS are performed in the United States every year. Perioperative care—including preoperative preparation, intraoperative management, and postoperative care—is a critical function within surgical facilities that requires coordination among providers within the facility as well as externally. The timeliness and efficiency of the perioperative care systems within surgical facilities contribute to patient outcomes and overall quality of care delivered. However, numerous reports, including the Institute of Medicine's *To Err Is Human: Building a Safer Health System,*[1] have noted that significant numbers of patients undergoing surgery suffer complications and less-than-optimal patient outcomes.

To date, the National Quality Forum (NQF) has endorsed more than 50 measures for hospitals, for ambulatory surgical centers (ASCs), and for clinicians in the areas of surgery and anesthesia. Additional measures are needed, particularly in the areas of timeliness, efficiency, care coordination, patient safety, transitions of care, and outcomes of care. More information on the overall performance of perioperative services would provide stakeholders with a robust picture of the quality of surgical services delivered in the United States.

Strategic Directions for NQF

As NQF nears completion of its first decade, consideration of strategic issues to guide current and future activities has resulted in an expansion of NQF's mission to include three parts: 1) setting national priorities and goals for performance improvement; 2) endorsing national consensus standards for measuring and publicly reporting on performance; and 3) promoting the attainment of national goals through education and outreach programs. As greater numbers of quality measures are developed and brought to NQF for consideration, NQF must assist stakeholders in measuring "what makes a difference" and addressing what is important to achieve the best outcomes for patients and populations. An updated Measurement Framework, reviewed by NQF Members in December 2007, promotes shared accountability and measurement across episodes of care with a focus on outcomes

and patient engagement in decisionmaking coupled with measures of the healthcare process and cost/resource use.

Several strategic directions have been identified to guide the consideration of candidate consensus standards:

DRIVE TOWARD HIGH PERFORMANCE. Over time, the bar of performance expectations should be raised to encourage achievement of higher levels of system performance.

EMPHASIZE COMPOSITE MEASURES. Composite measures provide much-needed summary information pertaining to multiple dimensions of performance and are more comprehensible to patients and consumers.

MOVE TOWARD OUTCOME MEASUREMENT. Outcome measures provide information of keen interest to consumers and purchasers, and, when coupled with healthcare process measures, they provide useful and actionable information to providers. Outcome measures also focus attention on much-needed system-level improvements, because achieving the best patient outcomes often requires carefully designed care processes, teamwork, and coordinated action on the part of many providers.

FOCUS ON DISPARITIES IN ALL THAT WE DO. Some of the greatest performance gaps relate to care of minority populations. Particular attention should be focused on the most relevant race/ethnicity/language/socioeconomic strata to identify relevant measures for reporting.

Scope

The quality of surgical care, including preoperative, intraoperative, and postoperative management, reflects the efficiency and coordination of the various providers within the facility, as well as coordination with appropriate external providers. NQF seeks to endorse facility-level performance measures that evaluate significant clinical, systems, and care coordination aspects of inpatient surgical care. Performance measures that address timeliness, efficiency, and coordination of perioperative care, patient safety, prevention or reduction of complications, transitions of care before and after surgery, as well as outcomes of surgery are of particular interest.

Evaluating Candidate Consensus Standards

Candidate consensus standards were solicited though a Call for Measures in November 2007 and through a search of the National Quality Measures Clearinghouse. All candidate consensus standards were evaluated by the Steering Committee using standardized criteria derived from the work of the NQF Strategic Framework Board and endorsed by NQF[2,3]:

1. Importance—the extent to which a measure reflects a variation in quality, low levels of overall performance, and the extent to which it captures key aspects of the flow of care.

2. Scientifically acceptable—the extent to which the measure is evidence based and will produce consistent and credible results when implemented.
3. Usable—the extent to which intended audiences (e.g., consumers, purchasers) can understand the results of the measure and are likely to find them useful for decisionmaking.
4. Feasible—the extent to which data can be obtained within the normal flow of clinical care and the extent to which an implementation plan can be achieved.

Relationship to Other NQF-Endorsed Consensus Standards

This report does not represent the entire scope of NQF work relevant to the quality of surgery and anesthesia care. The full constellation of NQF-endorsed voluntary consensus standards, along with those presented in this report, provide a growing number of consensus standards that directly and indirectly reflect the importance of measuring and improving quality of care. Appendix B provides a list of previously endorsed consensus standards applicable to surgery and anesthesia. Organizations that adopt these standards will promote the development of safer and higher-quality surgery and anesthesia care for patients throughout the nation.

NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia

This report presents five additional performance measures for facilities providing surgery and anesthesia care (see Table 1). The measure specifications are provided in Appendix A. The purpose of these consensus standards is to improve the quality of healthcare—through accountability and public reporting—by standardizing quality measurement in all care settings. All NQF-endorsed® measures are fully open source. See www.qualityforum.org for more information.

Table 1: National Voluntary Consensus Standards for Surgery and Anesthesia 2008

MEASURE TITLE	MEASURE ID[a]	MEASURE DESCRIPTION AND REVIEW NUMBER[b]	IP OWNER(S)[c]
Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP Inf 9)	0453	Percentage of surgery patients with urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (POF-016-08)	CMS
Surgery patients with perioperative temperature management (SCIP Inf 7)	0452	Percentage of surgery patients for whom either active warming was used intraoperatively for the purpose of maintaining normothermia or who had at least one body temperature equal to or greater than 96.8°F/36°C recorded within the 15 minutes immediately prior to or the 15 minutes immediately after Surgery End Time (POF-017-08)	CMS
Protocol for glycemic control with intravenous insulin implementation	0451	Administration of an established protocol for tight glycemic control protocol implemented for patients: (a) with diabetes or hyperglycemia admitted for cardiac surgery; and (b) with diabetes or hyperglycemia admitted into an intensive care unit (POF-004-08)	LifeScan, a Johnson & Johnson Company/ STS
Postoperative DVT or PE (PSI 12)	0450	Percentage of adult surgical discharges with a secondary diagnosis code of deep vein thrombosis or pulmonary embolism (POF-001-08)	AHRQ
Ambulatory surgery patients with appropriate method of hair removal	0515	Percentage of ASC admissions with appropriate surgical site hair removal (POF-005-08)	ASCQC

[a] Upon NQF endorsement, each measure receives a unique NQF measure ID number.

[b] Review number.

[c] IP owner(s)—intellectual property owner and copyright holder(s). For the most current specifications and supporting information, please refer to the IP owner(s).

AHRQ - Agency for Healthcare Research and Quality (www.ahrq.gov)

ASCQC - Ambulatory Surgery Centers Quality Collaboration (www.ascquality.org/about.html)

CMS - Centers for Medicare & Medicaid Services (www.cms.hhs.gov)

LifeScan, a Johnson & Johnson Company (www.lifescan.com/company)

STS - The Society of Thoracic Surgeons (www.sts.org)

Measures Endorsed

0453[i] Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP Inf 9)

(CMS) *POF-016-08*[ii]

The Steering Committee liked the measure because it was perceived to be an effective strategy to reduce urinary tract infections (UTIs), which are costly healthcare-acquired infections.[4,5,6] Some Steering Committee members were concerned about the data collection burden, and some were also concerned about the reliability of data collection because billing coders use only documentation from licensed independent practitioners and the documentation regarding catheter use is generally found in the nursing notes.

A few members expressed concern with possible unintended consequences, such as forcing elderly patients or patients using narcotics to ambulate, risking falls and injuries such as hip fracture. The Committee discussed an anecdotal report about a large academic center that, upon institution of a requirement that physicians document the reasons for keeping a catheter in for more than two days, noted a decrease in catheter use and occurrence of UTIs. The Committee approved the measure, recommending that an exclusion be added to allow for physician documentation explaining the reasons for longer catheter use. The measure developers agreed to add an exclusion for physician documentation.

0452 Surgery patients with perioperative temperature management (SCIP Inf 7)

(CMS) *POF-017-08*

The Steering Committee considered this measure and the clinician-level measure together as "prevention of hypothermia" measures to facilitate their harmonization. The consequences of even mild hypothermia (1°C to 2°C below normal) are important in a wide range of patient populations and have been associated in randomized trials with a number of adverse consequences, including prolonged drug action, delayed recovery, and hospital discharge[7]; postanesthetic shivering and thermal discomfort[8]; increased susceptibility to infection[9]; impaired coagulation and increased transfusion requirements[10]; and cardiovascular stress and cardiac complications.[11] An observational study assessing physician practice patterns during neuraxial anesthesia found that temperature monitoring and thermal management were not used appropriately: Initial temperatures were <36°C in 77 percent of patients and <35°C in 22 percent; body temperature was monitored intraoperatively in only 27 percent of the patients, and forced-air warming was used in 31 percent.[12]

[i] NQF measure ID number.

[ii] Review number.

When the measures were compared, the following differences were noted:

- surgery end time versus anesthesia end time (when the anesthesiologist/certified registered nurse anesthetist transfers care to postacute care unit nurse);
- 30 versus 15 minutes prior to end time;
- an extensive list of surgery ICD-9 codes are used for the Surgical Care Improvement Project (SCIP) denominator;
- the clinician measure uses anesthesia CPT codes;
- there is an exclusion for infection in the SCIP, but not in the clinician measure;
- age <18 is included in the clinician measure but not in the SCIP measure; and
- laparoscopic procedures are excluded in the SCIP measure without a good rationale.

Both measures use the same definition for active warming. The Steering Committee discussed the harmonization concerns with both measure developers—both in person and on the phone— and emphasized that further harmonization was possible and urgently needed. The Steering Committee acknowledged that some differences may be unavoidable, such as the coding (i.e., whether ICD-9 or CPT is used). The measure developers indicated that they were willing to continue harmonization efforts. In response to reviewers' comments, the measure developer for the clinician-level measure removed the reference to "anesthesiologist" in the specification in order to not designate any specific provider type or specialty. The NQF Consensus Standards Approval Committee (CSAC) required that the measures be completely harmonized; the facility-level measure was modified, and the measure was endorsed.

0451 **Protocol for glycemic control with intravenous insulin implementation**

(LifeScan, a Johnson & Johnson Company/STS) *POF-017-08*

Hyperglycemia in cardiac surgery patients and in patients admitted into intensive care is a common, serious, and costly healthcare problem with profound medical consequences. Data from multiple studies confirm that these patients suffer significant excess mortality and morbidity, prolonged length of stay, unfavorable postdischarge outcomes, and significant healthcare costs. Randomized, controlled inpatient clinical trials, as well as prospective observational and retrospective studies, have demonstrated improved outcomes when hyperglycemia is more aggressively managed.[13,14,15] During the meeting, the measure developer agreed to modify the measure. The title, description, and numerator were clarified to include use of intravenous (IV) insulin for cardiac surgery patients, and research study patients were excluded. The Committee supported the redesigned measure.

Several reviewers suggested that the measure specifications are too vague, that the evidence does not support a gap in care, and that the measure duplicates a previously endorsed measure (0300 Cardiac Patients with Controlled 6AM Postoperative Serum Glucose). The Steering Committee had discussed these issues previously and affirmed its position that the evidence is solid that glucose control reduces surgical site infection in cardiac surgery and that the measure focuses on the use of an IV insulin protocol for glycemic control. The measure developer clarified the measure title and description.

0450 **Postoperative DVT or PE (PSI 12)**

(AHRQ) *P0F-001-08*

The Steering Committee concluded that regardless of the method of prophylaxis, the real treatment goal is reduction of deep vein thrombosis/pulmonary embolism (DVT/PE); therefore, this outcome measure is important. Committee members noted that there is a growing number of process measures addressing venous thromboembolism that should be examined as a group, then consolidated and harmonized. The Committee recommended this outcome measure, noting that some patients will be missed (readmissions are not counted), although evidence suggests that a majority of patients (almost 70 percent) are captured by the measure. Some Committee members expressed concern about case mix and risk adjustment, because there is expected to be a higher incidence of DVT/PE among certain cases, such as orthopedic and trauma. The results should be stratified for DVT and PE. The Committee noted that the measure includes present on admission codes.

0515 **Ambulatory surgery patients with appropriate method of hair removal**

(ASCQC) *P0F-005-08*

Centers for Disease Control and Prevention guidelines do not recommend hair removal prior to surgery, but do suggest that if it is done, it should be done by clipping or depilatories rather than by shaving. This measure was designed for use in ASCs to complement the NQF-endorsed measure for hospitals (0301 Surgery Patients with Appropriate Hair Removal).

Because ASCs generally have very low infection rates, the impact of this measure is limited, although it represents appropriate adherence to guidelines. The Committee noted that the two measures differ because cases with no hair removal are not included in the numerator of the endorsed hospital measure. According to the measure developer, in more than 75 percent of ASC cases, hair removal is not a concern (e.g., cataract surgery, gastrointestinal endoscopy, pain control, cystoscopy); thus, the measure only collects data on cases if hair removal was performed. Steering Committee members wondered about the possible unintended consequences of the measure, such as the potential to increase hair removal in measurement programs in which a minimum number of cases is needed to qualify, or alternatively, the discontinuation of hair removal programs to avoid being captured in the measure. Because pilot testing has not been conducted on the measure, the Committee decided that a time-limited endorsement would provide an opportunity to evaluate the performance of the measure.

Initially, the CSAC decided that this measure did not achieve strategic importance for endorsement. During its appeal of the decision, the measure developer submitted the results of pilot testing of the measures in multiple ASCs. The test results demonstrated a wide range of performance and very low performance in some centers. The measure developer reiterated that the measure is harmonized with the endorsed hospital SCIP measure. Because of the pilot testing results, the CSAC recommended the measure for endorsement.

Measures Not Endorsed

POF-014-08 SURGERY PATIENTS ON BETA BLOCKER THERAPY PRIOR TO ADMISSION WHO RECEIVED A BETA BLOCKER DURING THE POSTOPERATIVE PERIOD (SCIP CARD-3)

The 2007 American College of Cardiology/ American Heart Association (ACC/AHA) guidelines on perioperative cardiovascular evaluation and care for noncardiac surgery recommend that "beta blockers should be continued in patients undergoing surgery who are receiving beta blockers to treat angina, symptomatic arrhythmias, hypertension, or other ACC/AHA class I guideline indications"[16] to reduce mortality.[17] In 2007, NQF endorsed the perioperative beta blocker measure (SCIP Card-2), which includes only six hours after surgery. The new measure follows the guidelines that indicate that patients on beta blocker therapy prior to admission should continue the medication during the postoperative period. The Steering Committee suggested that these two measures should be combined as a single measure for medication reconciliation for patients undergoing surgery.

Committee members noted that the perioperative measure would also apply to ASC patients, but the postoperative measure would not. However, because ASCs use CPT codes rather than ICD-9 codes, the perioperative measure is not used in ASCs. The Committee asked why laparoscopic surgeries were excluded, and the measure developer responded that all of the SCIP measures have the same exclusions for consistency, and the developer had originally desired to focus on the "major" surgeries. Committee members advised that many major surgeries (e.g., hysterectomy, colon resection, cholecystectomy) are performed via laparoscope, and SCIP should reconsider this exclusion.

A reviewer cautioned about perioperative beta blocker use because of the findings of the recent POISE study.[18] The Steering Committee noted that the POISE study did not address the same patient population included in this measure, but focused on the initiation of high-dose beta blocker use in surgical patients. Patients receiving beta blockers prior to admission were specifically excluded from the POISE trial.

The Steering Committee maintained its recommendation of the measure for endorsement, citing it as a medication reconciliation measure, which evaluates whether patients on beta blockers prior to admission were continued on their medication during the surgical admission.

The CSAC recommended that this measure be combined with a previously endorsed measure (0300 Surgery Patients on Beta Blocker Therapy Prior To Admission Who Received a Beta Blocker During the Preoperative Period [SCIP-Card 2]). Rather than endorse an additional measure, the CSAC recommended the measure developer create a single measure addressing medication reconciliation while a patient is in a facility for surgery.

PO-024-07 HOSPITAL PARTICIPATION IN A PUBLICLY AVAILABLE STANDARDIZED, CLINICAL, RISK-ADJUSTED AND AUDITED MULTICENTER SURGICAL DATABASE

The relationship of database participation to improved processes and outcomes has been

demonstrated by the National Surgical Quality Improvement Program (NSQIP), the Department of Veterans Affairs (VA), and the Society of Thoracic Surgeons National Cardiac Surgery database.[19,20] NSQIP participants have demonstrated the benefits of local quality improvement activities based on the NSQIP feedback to reduce wound complications by 47 percent, surgical site infections by 36 percent, and urinary tract infections by 74 percent.[21] Prior to expansion into the private sector, VA hospitals found that, since the inception of the NSQIP data collection process, the 30-day postoperative mortality after major surgery in VA facilities has decreased by 27 percent and the 30-day morbidity by 45 percent.[22]

POF-015-08 SHORT HALF-LIFE PROPHYLACTIC ANTIBIOTIC ADMINISTERED PREOPERATIVELY IS RE-DOSED WITHIN FOUR HOURS AFTER PREOPERATIVE DOSE (SCIP INF 9)

The Steering Committee did not recommend this measure because of its minimal scientific acceptability. The evidence for the benefit of re-dosing exists for cardiac, colorectal, and biliary surgeries only, not for all of the numerous surgeries included in the denominator. The Committee noted that because the measure has not been implemented to date, there are no performance data available for the measure. The Committee also stated that there are already multiple performance measures addressing this topic.

POF-002-08 POSTOPERATIVE SEPSIS (PSI 13)

POF-003-08 POSTOPERATIVE SEPSIS (CHILD) (PDI 10)

The Steering Committee did not recommend these measures because of several methodological concerns:

- the denominator excludes any length of stay (LOS) of fewer than four days—but, now there are many more closed cases such that LOS is commonly fewer than four days;
- there are no means to capture readmissions;
- there is no uniform wording to identify "sepsis" in the medical record; thus, the Steering Committee was concerned with the reliability of the data captured; and
- the definition of sepsis in the ICD-9 code on which the measure is based is problematic.

Ultimately, the Committee asked whether an all-inclusive measure for sepsis is needed. The Committee was unclear on what information the measure would provide to various stakeholders.

POF-006-08 RATE OF UNINTENTIONALLY RETAINED FOREIGN OBJECTS IN SURGERY PER N SURGICAL PROCEDURES

In May 2008, NQF endorsed the measure 0363 Foreign Body Left in During Procedure (AHRQ PSI 5). Therefore, the Steering Committee did not discuss this measure, except to comment on the following:

- a rate is not a good reporting format for these low-incidence patient safety measures, unless it is accompanied by a confidence interval (which will be large). Instead of reporting an incidence rate, the Committee recommended simply reporting the numerator and the denominator—that is, 2 events in 73 cases or 7 events in 390 cases; and
- using a rate diminishes the impact of each event.

POF-007-08 RATE OF WRONG SURGERY EVENTS IN THE OPERATING ROOM PER N SURGICAL PROCEDURES

The Steering Committee did not recommend the measure for the following reasons:

- the calculation algorithm is not robust, and there is a loss of information;
- the numerator needs more rigorous definition—particularly "wrong site." Does this include "wrong level"?;
- it is redundant to The Joint Commission reports; and
- the denominator excludes important procedures.

In November 2007, NQF endorsed a measure in this area: 0267 Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant.

POF-008-08 PERCENTAGE OF APPROPRIATE PATIENTS WHO HAVE THEIR SITE MARKED BY THE SURGEON IN PRE-OP WITH HIS/HER INITIALS

POF-009-08 PERCENTAGE OF PATIENTS WITH DOCUMENTATION OF VERIFICATION OF CORRECT PATIENT, SITE/SIDE, AND PROCEDURE

POF-010-08 PERCENTAGE OF SURGICAL CASES IN WHICH A VERBAL, ACTIVE TIME-OUT IS CONDUCTED BY ALL MEMBERS OF THE SURGICAL TEAM PRIOR TO INCISION

The Steering Committee did not recommend these as individual measures and instead evaluated a composite of the three–POF-011-08.

POF-011-08 PERCENTAGE OF PATIENTS WHO MEET ALL THREE OF THE FOLLOWING: A) SITE MARKED BY SURGEON PRE-OP, B) DOCUMENTATION VERIFYING CORRECT PATIENT, SITE OR SIDE, AND PROCEDURE, AND C) VERBAL, ACTIVE TIME-OUT CONDUCTED BY ALL MEMBERS

The Steering Committee initially supported the composite measure because it is congruent with The Joint Commission standards, despite some concerns that marking a surgical site with the surgeon's initials could be problematic for a surgeon with initials such as "N.O." The measure developers agreed that the site marking protocol is "evolving" and that indicating congruence with The Joint Commission regulations would suffice. Further discussion clarified the definition of "observed" active time-out to include observation by a person not on the surgical team, such as a quality manager, a safety advocate, or a "secret shopper." The Steering Committee believed that this requirement would be very burdensome and not feasible in many institutions, and it could also introduce observation bias issues. The Committee agreed that this measure would serve as a good process indicator but not as a good performance measure.

POF-012-08 PERCENTAGE OF SURGICAL PATIENTS WITH ANTIBIOTIC ADMINISTRATION WITHIN 60 MINUTES PRIOR TO SURGICAL INCISION

The Steering Committee did not recommend the measure, because it is not aligned with currently endorsed SCIP measures, the denominator is poorly specified, and there does not seem to be a need for another measure that addresses this topic.

POF-013-08 **PERCENTAGE OF SURGICAL PATIENTS RECEIVING ANTIBIOTIC CONSISTENT WITH GUIDELINES FOR SPECIFIC SURGICAL TYPES**

The Steering Committee did not recommend the measure, because it is not aligned with currently endorsed SCIP measures, the denominator is poorly specified regarding "selected surgeries," the measure is based on Institute for Clinical Systems Improvement (ICSI) guidelines rather than nationally accepted guidelines, and review of further specifications from the ICSI website uses a proprietary checklist that varies significantly from other guidelines for antibiotic use.

Recommendations

NQF should explore options for reporting low-incidence patient safety events and should provide guidance on an optimal reporting format. Volume information should be provided along with a count.

Notes

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Appendix A
Specifications of the National Voluntary Consensus Standards for Surgery and Anesthesia—Additional Performance Measures 2008

THE FOLLOWING TABLE PRESENTS the detailed specifications for each of the National Quality Forum (NQF)-endorsed® *National Voluntary Consensus Standards for Surgery and Anesthesia—Additional Performance Measures 2008*. All information presented has been derived directly from measure sources/developers without modification or alteration (except when the measure developer agreed to such modification during the NQF Consensus Development Process). All NQF-endorsed voluntary consensus standards are open source, meaning they are fully accessible and disclosed. All specifications are confirmed by measure developers as of August 28, 2008.

MEASURE TITLE	MEASURE NUMBERS	IP OWNER(S)[a]	NUMERATOR	DENOMINATOR	EXCLUSIONS	DATA SOURCE
Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP Inf 9)	Measure ID #: 0453 Review #: POF-016-08	CMS	Number of surgical patients whose urinary catheter is removed on POD1 or POD2 with day of surgery being day zero.	All selected surgical patients with a catheter in place postoperatively. See Attachment A, Table 5.10 for ICD-9-CM codes.	▌Patients less than 18 years of age ▌Patients who have a length of stay >120 days ▌Patients who had a principal diagnosis suggestive of preoperative infectious diseases (refer to Appendix A, Table 5.09 for ICD-9-CM codes) ▌Patients with physician/advanced practice nurse/physician assistant (physician/APN/PA) documented infection prior to surgical procedure of interest ▌Patients whose ICD-9-CM principal procedure was performed entirely by laparoscope ▌Patients enrolled in clinical trials ▌Patients whose ICD-9-CM principal procedure occurred prior to the date of admission	Medical records.

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MEASURE TITLE	MEASURE NUMBERS	IP OWNER(S)[a]	NUMERATOR	DENOMINATOR	EXCLUSIONS	DATA SOURCE
Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP Inf 9) *(continued)*					▮ Patients who had other procedures requiring general or spinal anesthesia that occurred within 3 days (4 days for CABG or Other Cardiac Surgery) prior to or after the procedure of interest (during separate surgical episodes) during this hospital stay ▮ Patients who had a suprapubic catheter or had intermittent catheterization preoperatively ▮ Patients who did not have a catheter in place postoperatively ▮ Patients who had a urological, gynecological or perineal procedure performed (refer to Appendix A, Table 5.16 for ICD-9-CM codes) • Patients who expired perioperatively • Patients whose length of stay was less than two days postoperatively • Patients who had physician/APN/PA documentation of a reason for not removing the urinary catheter postoperatively.	

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MEASURE TITLE	MEASURE NUMBERS	IP OWNER(S)[a]	NUMERATOR	DENOMINATOR	EXCLUSIONS	DATA SOURCE
Surgery patients with perioperative temperature management (SCIP Inf 7)	Measure ID #: 0452 Review #: POF-017-08	CMS	Surgery patients for whom either active warming was used intraoperatively for the purpose of maintaining normothermia or who had at least one body temperature equal to or greater than 96.8°F/36°C recorded within the 30 minutes immediately prior to or the fifteen minutes immediately after Anesthesia End Time.	All patients, regardless of age, undergoing surgical procedures under general or neuraxial anesthesia of 60 minutes duration or greater.	▌Patients who have a length of stay >120 days ▌Patients whose ICD-9-CM principal procedure occurred prior to the date of admission ▌Patients whose length of anesthesia was less than 60 minutes ▌Patients who did not have general or neuraxial anesthesia ▌Patients with physician/APN/PA documentation of intentional hypothermia for the procedure performed.	Medical record.

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MEASURE TITLE	MEASURE NUMBERS	IP OWNER(S)[a]	NUMERATOR	DENOMINATOR	EXCLUSIONS	DATA SOURCE
Protocol for glycemic control with intravenous insulin implementation	Measure ID #: 0451 Review #: POF-004-08	LifeScan, A Johnson & Johnson Company STS	Cardiac surgery patients with diabetes or hyperglycemia admitted into an intensive care unit for whom an established glycemic control protocol with intravenous insulin was administered.	Cardiac surgery patients with diabetes or hyperglycemia admitted into an intensive care unit. Number of patients to include: (a) patients with ICD-9-CM diagnosis codes 250.XX (all diagnosis codes with 250 as the prefix) or 790.29 and ICD-9-CM procedures ICD-9 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24 35.25, 35.26, 35.27, 35.28, 35.31, 35.32, 35.33, 35.34, 35.35, 35.39, 35.53, 35.54, 35.55, 35.60, 35.61, 35.62, 35.63, 35.70, 35.71, 35.72, 35.98, 35.99, 36.03, 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 36.2, 36.31, 36.32, 36.33, 36.34, 36.39, 36.91, 36.99, 37.10, 37.11, 37.12, 37.31, 37.32, 37.33, 37.35, 37.41, 37.49, 37.51, 37.52, 37.53, 37.54, 37.62, 37.64, 37.65, 37.66, 37.99; and (b) patients with ICD-9-CM diagnosis codes 250.XX (all diagnosis codes with 250 as the prefix) or 790.29 during an intensive care unit stay.	Approved research study for glycemic control.	Medical record, electronic health record, observational data.

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MEASURE TITLE	MEASURE NUMBERS	IP OWNER(S)[a]	NUMERATOR	DENOMINATOR	EXCLUSIONS	DATA SOURCE
Postoperative DVT or PE (PSI 12)	Measure ID #: 0450 Review #: POF-001-08	AHRQ	Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM code for deep vein thrombosis or pulmonary embolism in any secondary diagnosis field. Coding available for Patient Safety Indicator 12 at: www.qualityindicators.ahrq.gov/psi_download.htm.	All surgical discharges age 18 and older defined by specific DRGs and an ICD-9-CM code for an operating room procedure.	Excluded discharges with preexisting (principal diagnosis or secondary diagnosis present on admission, if known) deep vein thrombosis or pulmonary embolism, where a procedure for interruption of vena cava is the only operating room procedure, where a procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure or MDC 14 (pregnancy, childbirth, and puerperium).	Claims.
Ambulatory surgery patients with appropriate hair removal	Measure ID #: 0515 Review #: POF-005-08	ASCQC	ASC admissions with surgical site hair removal with clippers or depilatory cream.	All ASC admissions with surgical site hair removal; admission is completion of registration upon entry into the facility.	ASC admissions who perform their own hair removal.	Medical record and other (clinical logs).

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ATTACHMENT A: Joint Commission ICD-9 Codes for Major Surgery (Table 5.10, Version 2.5)

Measure: 0453

Code	ICD-9-CM Description	Shortened Description
00.70	Revision of hip replacement, both acetabular and femoral components	REV HIP REPL-ACETAB/FEM
00.71	Revision of hip replacement, acetabular component	REV HIP REPL-ACETAB COMP
00.72	Revision of hip replacement, femoral component	REV HIP REPL-FEM COMP
00.73	Revision of hip replacement, acetabular liner and/or femoral head only	REV HIP REPL-LINER/HEAD
00.77	Hip bearing surface, ceramic-on-polyethylene	HIP SURFACE, CERMC/POLY
00.80	Revision of knee replacement, total (all components)	REV KNEE REPLACEMT-TOTAL
00.81	Revision of knee replacement, tibial component	REV KNEE REPL-TIBIA COMP
00.82	Revision of knee replacement, femoral component	REV KNEE REPL-FEMUR COMP
00.83	Revision of knee replacement, patellar component	REV KNEE REPLACE-PATELLA
00.84	Revision of knee replacement, tibial insert (liner)	REV KNEE REPL-TIBIA LIN
00.85	Resurfacing hip, total, acetabulum and femoral head	RESRF HIP,TOTAL-ACET/FEM
00.86	Resurfacing hip, partial, femoral head	RESRF HIP,PART-FEM HEAD
00.87	Resurfacing hip, partial, acetabulum	RESRF HIP,PART-ACETABLUM
01.21	Incision and drainage of cranial sinus	CRANIAL SINUS I & D
01.23	Reopening of craniotomy site	REOPEN CRANIOTOMY SITE
01.24	Other craniotomy	OTHER CRANIOTOMY
01.25	Other craniectomy	OTHER CRANIECTOMY
01.31	Incision of cerebral meninges	INCISE CEREBRAL MENINGES
01.32	Lobotomy and tractotomy	LOBOTOMY & TRACTOTOMY
01.39	Other incision of brain	OTHER BRAIN INCISION
01.41	Operations on thalamus	THALAMUS OPERATIONS
01.42	Operations on globus pallidus	GLOBUS PALLIDUS OPS
01.51	Excision of lesion or tissue of cerebral meninges	EX CEREB MENINGEAL LES
01.52	Hemispherectomy	HEMISPHERECTOMY
01.53	Lobectomy of brain	BRAIN LOBECTOMY
01.59	Other excision or destruction of lesion or tissue of brain	OTHER BRAIN EXCISION
32.39	Other and unspecified segmental resection of lung	OTH SEG LUNG RESECT NOS
32.49	Other lobectomy of lung	LOBECTOMY OF LUNG NEC
32.59	Other and unspecified pneumonectomy	OTHER PNEUMONECTOMY NOS
34.51	Decortication of lung	DECORTICATION OF LUNG
34.59	Other excision of pleura	OTHER PLEURAL EXCISION
34.81	Excision of lesion or tissue of diaphragm	EXCISE DIAPHRAGM LESION

34.82	Suture of laceration of diaphragm	SUTURE DIAPHRAGM LACERAT
34.83	Closure of fistula of diaphragm	CLOSE DIAPHRAGM FISTULA
34.84	Other repair of diaphragm	OTHER DIAPHRAGM REPAIR
34.89	Other operations on diaphragm	DIAPHRAGM OPERATION REPAIR
35.10	Open heart valvuloplasty without replacement, unspecified valve	OPEN VALVULOPLASTY NOS
35.11	Open heart valvuloplasty of aortic valve without replacement	OPN AORTIC VALVULOPLASTY
35.12	Open heart valvuloplasty of mitral valve without replacement	OPN MITRAL VALVULOPLASTY
35.13	Open heart valvuloplasty of pulmonary valve without replacement	OPN PULMON VALVULOPLASTY
35.14	Open heart valvuloplasty of tricuspid valve without replacement	OPN TRICUS VALVULOPLASTY
35.20	Replacement of unspecified heart valve	REPLACE HEART VALVE NOS
35.21	Replacement of aortic valve with tissue graft	REPLACE AORT VALV-TISSUE
35.22	Other replacement of aortic valve	REPLACE AORTIC VALVE NEC
35.23	Replacement of mitral valve with tissue graft	REPLACE MITR VALV-TISSUE
35.24	Other replacement of mitral valve	REPLACE MITRAL VALVE NEC
35.25	Replacement of pulmonary valve with tissue graft	REPLACE PULM VALV-TISSUE
35.26	Other replacement of pulmonary valve	REPLACE PULMON VALVE NEC
35.27	Replacement of tricuspid valve with tissue graft	REPLACE TRIC VALV-TISSUE
35.28	Other replacement of tricuspid valve	REPLACE TRICUSP VALV NEC
35.31	Operations on papillary muscle	PAPILLARY MUSCLE OPS
35.32	Operations on chordae tendineae	CHORDAE TENDINEAE OPS
35.33	Annuloplasty	ANNULOPLASTY
35.34	Infundibulectomy	INFUNDIBULECTOMY
35.35	Operations on trabeculae carneae cordis	TRABECUL CARNEAE CORD OP
35.39	Operations on other structures adjacent to valves of heart	TISS ADJ TO VALV OPS NEC
35.42	Creation of septal defect in heart	CREATE SEPTAL DEFECT
35.50	Repair of unspecified septal defect of heart with prosthesis	PROSTH REP HRT SEPTA NOS
35.51	Repair of atrial septal defect with prosthesis, open technique	PROS REP ATRIAL DEF-OPN
35.53	Repair of ventricular septal defect with prosthesis, open technique	PROS REP VENTRIC DEF-OPN
35.54	Repair of endocardial cushion defect with prosthesis	PROS REP ENDOCAR CUSHION
35.60	Repair of unspecified septal defect of heart with tissue graft	GRFT REPAIR HRT SEPT NOS
35.61	Repair of atrial septal defect with tissue graft	GRAFT REPAIR ATRIAL DEF
35.62	Repair of ventricular septal defect with tissue graft	GRAFT REPAIR VENTRIC DEF
35.63	Repair of endocardial cushion defect with tissue graft	GRFT REP ENDOCAR CUSHION
35.70	Other and unspecified repair of unspecified septal defect of heart	HEART SEPTA REPAIR NOS
35.71	Other and unspecified repair of atrial septal defect	ATRIA SEPTA DEF REP NEC

35.72	Other and unspecified repair of ventricular septal defect	VENTR SEPTA DEF REP NEC
35.73	Other and unspecified repair of endocardial cushion defect	ENDOCAR CUSHION REP NEC
35.81	Total repair of tetralogy of Fallot	TOT REPAIR TETRAL FALLOT
35.82	Total repair of total anomalous pulmonary venous connection	TOTAL REPAIR OF TAPVC
35.83	Total repair of truncus arteriosus	TOT REP TRUNCUS ARTERIOS
35.84	Total correction of transposition of great vessels, not elsewhere classified	TOT COR TRANSPOS GRT VES
35.91	Interatrial transposition of venous return	INTERAT VEN RETRN TRANSP
35.92	Creation of conduit between right ventricle and pulmonary artery	CONDUIT RT VENT-PUL ART
35.93	Creation of conduit between left ventricle and aorta	CONDUIT LEFT VENTR-AORTA
35.94	Creation of conduit between atrium and pulmonary artery	CONDUIT ARTIUM-PULM ART
35.98	Other operations on septa of heart	OTHER HEART SEPTA OPS
35.99	Other operations on valves of heart	OTHER HEART VALVE OPS
36.03	Open chest coronary artery angioplasty	OPEN CORONRY ANGIOPLASTY
36.10	(Aorto)coronary bypass for heart revascularization, not otherwise specified	AORTOCORONARY BYPASS NOS
36.11	(Aorto)coronary bypass of one coronary artery	AORTOCOR BYPAS-1 COR ART
36.12	(Aorto)coronary bypass of two coronary arteries	AORTOCOR BYPAS-2 COR ART
36.13	(Aorto)coronary bypass of three coronary arteries	AORTOCOR BYPAS-3 COR ART
36.14	(Aorto)coronary bypass of four or more coronary arteries	AORTCOR BYPAS-4+ COR ART
36.15	Single internal mammary-coronary artery bypass	1 INT MAM-COR ART BYPASS
36.16	Double internal mammary-coronary artery bypass	2 INT MAM-COR ART BYPASS
36.17	Abdominal - coronary artery bypass	ABD-CORON ARTERY BYPASS
36.19	Other bypass anastomosis for heart revascularization	HRT REVAS BYPS ANAS NEC
36.31	Open chest transmyocardial revascularization	OPEN CHEST TRANS REVASC
36.32	Other transmyocardial revascularization	OTH TRANSMYO REVASCULAR
36.39	Other heart revascularization	OTH HEART REVASCULAR
36.91	Repair of aneurysm of coronary vessel	CORON VESS ANEURYSM REP
36.99	Other operations on vessels of heart	HEART VESSEL OP NEC
37.10	Incision of heart, not otherwise specified	INCISION OF HEART NOS
37.11	Cardiotomy	CARDIOTOMY
37.31	Pericardiectomy	PERICARDIECTOMY
37.32	Excision of aneurysm of heart	HEART ANEURYSM EXCISION
37.33	Excision or destruction of other lesion or tissue of heart, open approach	EXC/DEST HRT LESION OPEN
37.35	Partial ventriculectomy	PARTIAL VENTRICULECTOMY
37.41	Implantation of prosthetic cardiac support device around the heart	IMPL CARDIAC SUPPORT DEV
37.49	Other repair of heart and pericardium	HEART/PERICARD REPR NEC

37.51	Heart transplantation	HEART TRANSPLANTATION
37.52	Implantation of total replacement heart system	IMPLANT TOT REP HRT SYS
37.53	Replacement or repair of thoracic unit of total replacement heart system	REPL/REP THORAC UNIT HRT
37.54	Replacement or repair of other implantable component of total replacement heart system	REPL/REP OTH TOT HRT SYS
37.62	Insertion of non-implantable heart assist system	INS NON-IMPL HRT ASSIST
37.63	Repair of heart assist system	REPAIR HEART ASSIST SYS
37.64	Removal of heart assist system	REMOVE HEART ASSIST SYS
37.66	Insertion of implantable heart assist system	IMPLANTABLE HRT ASSIST
37.67	Implantation of cardiomyostimulation system	IMP CARDIOMYOSTIMUL SYS
38.14	Endarterectomy, aorta	ENDARTERECTOMY OF AORTA
38.16	Endarterectomy, abdominal arteries	ABDOMINAL ENDARTERECTOMY
38.18	Endarterectomy, lower limb arteries	LOWER LIMB ENDARTERECT
38.34	Resection of vessel with anastomosis, aorta	AORTA RESECTION & ANAST
38.36	Resection of vessel with anastomosis, abdominal arteries	ABD VESSEL RESECT & ANAST
38.37	Resection of vessel with anastomosis, abdominal veins	ABD VEIN RESECT & ANAST
38.44	Resection of vessel with replacement, aorta, abdominal	RESECT ABDM AORTA W REPL
38.48	Resection of vessel with replacement, lower limb arteries	LEG ARTERY RESEC W REPLA
38.49	Resection of vessel with replacement, lower limb veins	LEG VEIN RESECT W REPLAC
38.64	Other excision of vessels, aorta, abdominal	EXCISION OF AORTA
39.25	Aorta-iliac-femoral bypass	AORTA-ILIAC-FEMOR BYPASS
39.26	Other intra-abdominal vascular shunt or bypass	INTRA-ABDOMIN SHUNT NEC
39.29	Other (peripheral) vascular shunt or bypass	VASC SHUNT & BYPASS NEC
41.5	Total splenectomy	TOTAL SPLENECTOMY
42.01	Incision of esophageal web	ESOPHAGEAL WEB INCISION
42.09	Other incision of esophagus	ESOPHAGEAL INCISION NEC
42.10	Esophagostomy, not otherwise specified	ESOPHAGOSTOMY NOS
42.11	Cervical esophagostomy	CERVICAL ESOPHAGOSTOMY
42.12	Exteriorization of esophageal pouch	ESOPH POUCH EXTERIORIZAT
42.19	Other external fistulization of esophagus	EXT FISTULIZAT ESOPH NEC
42.40	Esophagectomy, not otherwise specified	ESOPHAGECTOMY NOS
42.41	Partial esophagectomy	PARTIAL ESOPHAGECTOMY
42.42	Total esophagectomy	TOTAL ESOPHAGECTOMY
42.51	Intrathoracic esophagoesophagostomy	THORAC ESOPHAGOESOPHAGOS
42.52	Intrathoracic esophagogastrostomy	THORAC ESOPHAGOGASTROST
42.53	Intrathoracic esophageal anastomosis with interposition of small bowel	THORAC SM BOWEL INTERPOS

42.54	Other intrathoracic esophagoenterostomy	THORAC ESOPHAGOENTER NEC
42.55	Intrathoracic esophageal anastomosis with interposition of colon	THORAC LG BOWEL INTERPOS
42.56	Other intrathoracic esophagocolostomy	THORAC ESOPHAGOCOLOS NEC
42.58	Intrathoracic esophageal anastomosis with other interposition	THORAC INTERPOSITION NEC
42.59	Other intrathoracic anastomosis of esophagus	THORAC ESOPHAG ANAST NEC
42.61	Antesternal esophagoesophagostomy	STERN ESOPHAGOESOPHAGOST
42.62	Antesternal esophagogastrostomy	STERN ESOPHAGOGASTROSTOM
42.63	Antesternal esophageal anastomosis with interposition of small bowel	STERN SM BOWEL INTERPOS
42.64	Other antesternal esophagoenterostomy	STERN ESOPHAGOENTER NEC
42.65	Antesternal esophageal anastomosis with interposition of colon	STERN LG BOWEL INTERPOS
42.66	Other antesternal esophagocolostomy	STERN ESOPHAGOCOLOS NEC
42.68	Other antesternal esophageal anastomosis with interposition	STERN INTERPOSITION NEC
42.69	Other antesternal anastomosis of esophagus	STERN ESOPHAG ANAST NEC
42.82	Suture of laceration of esophagus	SUTURE ESOPHAGEAL LACER
42.83	Closure of esophagostomy	ESOPHAGOSTOMY CLOSURE
42.84	Repair of esophageal fistula, not elsewhere classified	ESOPH FISTULA REPAIR NEC
42.85	Repair of esophageal stricture	ESOPHAG STRICTURE REPAIR
42.86	Production of subcutaneous tunnel without esophageal anastomosis	PROD SUBQ TUNNEL NO ANAS
42.87	Other graft of esophagus	ESOPHAGEAL GRAFT NEC
42.89	Other repair of esophagus	ESOPHAGEAL REPAIR NEC
43.5	Partial gastrectomy with anastomosis to esophagus	PROXIMAL GASTRECTOMY
43.6	Partial gastrectomy with anastomosis to duodenum	DISTAL GASTRECTOMY
43.7	Partial gastrectomy with anastomosis to jejunum	PART GASTREC W JEJ ANAST
43.81	Partial gastrectomy with jejunal transposition	PART GAST W JEJ TRANSPOS
43.89	Other partial gastrectomy	PARTIAL GASTRECTOMY NEC
43.91	Total gastrectomy with intestinal interposition	TOT GAST W INTES INTERPO
43.99	Other total gastrectomy	TOTAL GASTRECTOMY NEC
44.00	Vagotomy, not otherwise specified	VAGOTOMY NOS
44.01	Truncal vagotomy	TRUNCAL VAGOTOMY
44.02	Highly selective vagotomy	HIGHLY SELECT VAGOTOMY
44.03	Other selective vagotomy	SELECTIVE VAGOTOMY NEC
44.21	Dilation of pylorus by incision	DILATE PYLORUS, INCISION
44.29	Other pyloroplasty	OTHER PYLOROPLASTY
44.31	High gastric bypass	HIGH GASTRIC BYPASS
44.39	Other gastroenterostomy	GASTROENTEROSTOMY NEC

44.40	Suture of peptic ulcer, not otherwise specified	SUTURE PEPTIC ULCER NOS
44.41	Suture of gastric ulcer site	SUT GASTRIC ULCER SITE
44.42	Suture of duodenal ulcer site	SUTURE DUODEN ULCER SITE
44.5	Revision of gastric anastomosis	REVISION GASTRIC ANASTOM
44.61	Suture of laceration of stomach	SUTURE GASTRIC LACERAT
44.63	Closure of other gastric fistula	CLOSE GASTRIC FISTUL NEC
44.64	Gastropexy	GASTROPEXY
44.65	Esophagogastroplasty	ESOPHAGOGASTROPLASTY
44.66	Other procedures for creation of esophagogastric sphincteric competence	CREAT ESOPHAGASTR SPHINC
44.69	Other (Inversion of gastric diverticulum, repair of stomach NOS)	GASTRIC REPAIR NEC
44.91	Ligation of gastric varices	LIGATE GASTRIC VARICES
44.92	Intraoperative manipulation of stomach	INTRAOP GASTRIC MANIPUL
44.99	Other operations on stomach	GASTRIC OPERATION NEC
45.00	Incision of intestine, not otherwise specified	INTESTINAL INCISION NOS
45.01	Incision of duodenum	DUODENAL INCISION
45.02	Other incision of small intestine	SMALL BOWEL INCISION NEC
45.03	Incision of large intestine	LARGE BOWEL INCISION
45.31	Other local excision of lesion of duodenum	OTH EXCISE DUODENUM LES
45.32	Other destruction of lesion of duodenum	DESTRUCT DUODEN LES NEC
45.33	Local excision of lesion or tissue of small intestine, except duodenum	LOCAL EXCIS SM BOWEL NEC
45.34	Other destruction of lesion of small intestine, except duodenum	DESTR SM BOWEL LES NEC
45.41	Excision of lesion or tissue of large intestine	EXCISE LG INTESTINE LES
45.49	Other destruction of lesion of large intestine	DESTRUC LG BOWEL LES NEC
45.50	Isolation of intestinal segment, not otherwise specified	INTEST SEG ISOLAT NOS
45.51	Isolation of segment of small intestine	SM BOWEL SEGMENT ISOLAT
45.52	Isolation of segment of large intestine	LG BOWEL SEGMENT ISOLAT
45.61	Multiple segmental resection of small intestine	MULT SEG SM BOWEL EXCIS
45.62	Other partial resection of small intestine	PART SM BOWEL RESECT NEC
45.63	Total removal of small intestine	TOTAL REMOVAL SM BOWEL
45.71	Multiple segmental resection of large intestine	MULT SEG LG BOWEL EXCIS
45.72	Cecectomy	CECECTOMY
45.73	Right hemicolectomy	RIGHT HEMICOLECTOMY
45.74	Resection of transverse colon	TRANSVERSE COLON RESECT
45.75	Left hemicolectomy	LEFT HEMICOLECTOMY
45.76	Sigmoidectomy	SIGMOIDECTOMY

45.79	Other partial excision of large intestine	PART LG BOWEL EXCIS NEC
45.8	Total intra-abdominal colectomy	TOT INTRA-ABD COLECTOMY
45.90	Intestinal anastomosis, not otherwise specified	INTESTINAL ANASTOM NOS
45.91	Small-to-small intestinal anastomosis	SM-TO-SM BOWEL ANASTOM
45.92	Anastomosis of small intestine to rectal stump	SM BOWEL-RECT STUMP ANAS
45.93	Other small-to-large intestinal anastomosis	SMALL-TO-LARGE BOWEL NEC
45.94	Large-to-large intestinal anastomosis	LG-TO-LG BOWEL ANASTOM
45.95	Anastomosis to anus	ANAL ANASTOMOSIS
46.01	Exteriorization of small intestine	SM BOWEL EXTERIORIZATION
46.02	Resection of exteriorized segment of small intestine	RESECT EXT SEG SM BOWEL
46.03	Exteriorization of large intestine	LG BOWEL EXTERIORIZATION
46.04	Resection of exteriorized segment of large intestine	RESECT EXT SEG LG BOWEL
46.10	Colostomy, not otherwise specified	COLOSTOMY NOS
46.11	Temporary colostomy	TEMPORARY COLOSTOMY
46.13	Permanent colostomy	PERMANENT COLOSTOMY
46.20	Ileostomy, not otherwise specified	ILEOSTOMY NOS
46.21	Temporary ileostomy	TEMPORARY ILEOSTOMY
46.22	Continent ileostomy	CONTINENT ILEOSTOMY
46.23	Other permanent ileostomy	PERMANENT ILEOSTOMY NEC
46.42	Repair of pericolostomy hernia	PERICOLOST HERNIA REPAIR
46.43	Other revision of stoma of large intestine	LG BOWEL STOMA REVIS NEC
46.50	Closure of intestinal stoma, not otherwise specified	INTEST STOMA CLOSURE NOS
46.51	Closure of stoma of small intestine	SM BOWEL STOMA CLOSURE
46.52	Closure of stoma of large intestine	LG BOWEL STOMA CLOSURE
46.60	Fixation of intestine, not otherwise specified	INTESTINAL FIXATION NOS
46.61	Fixation of small intestine to abdominal wall	SM BOWEL-ABD WALL FIXAT
46.62	Other fixation of small intestine	SMALL BOWEL FIXATION NEC
46.63	Fixation of large intestine to abdominal wall	LG BOWEL-ABD WALL FIXAT
46.64	Other fixation of large intestine	LARGE BOWEL FIXATION NEC
46.71	Suture of laceration of duodenum	DUODENAL LACERAT SUTURE
46.72	Closure of fistula of duodenum	DUODENAL FISTULA CLOSURE
46.75	Suture of laceration of large intestine	SUTURE LG BOWEL LACERAT
46.76	Closure of fistula of large intestine	CLOSE LG BOWEL FISTULA
46.79	Other repair of intestine	REPAIR OF INTESTINE NEC
46.91	Myotomy of sigmoid colon	MYOTOMY OF SIGMOID COLON

46.92	Myotomy of other parts of colon	MYOTOMY OF COLON NEC
46.94	Revision of anastomosis of large intestine	REVISE LG BOWEL ANASTOM
48.0	Proctotomy	PROCTOTOMY
48.1	Proctostomy	PROCTOSTOMY
48.41	Soave submucosal resection of rectum	SOAVE SUBMUC RECT RESECT
48.49	Other pull-through resection of rectum	PULL-THRU RECT RESEC NEC
48.5	Abdominoperineal resection of rectum	ABD-PERINEAL RECT RESECT
48.61	Transsacral rectosigmoidectomy	TRANSSAC RECTOSIGMOIDECT
48.62	Anterior resection of rectum with synchronous colostomy	ANT RECT RESECT W COLOST
48.63	Other anterior resection of rectum	ANTERIOR RECT RESECT NEC
48.64	Posterior resection of rectum	POSTERIOR RECT RESECTION
48.65	Duhamel resection of rectum	DUHAMEL RECTAL RESECTION
48.69	Other (Partial proctectomy, rectal resection NOS)	RECTAL RESECTION NEC
48.72	Closure of proctostomy	CLOSURE OF PROCTOSTOMY
48.73	Closure of other rectal fistula	CLOSE RECTAL FIST NEC
48.74	Rectorectostomy	RECTORECTOSTOMY
48.75	Abdominal proctopexy	ABDOMINAL PROCTOPEXY
48.76	Other proctopexy	PROCTOPEXY NEC
50.0	Hepatotomy	HEPATOTOMY
50.21	Marsupialization of lesion of liver	MARSUPIALIZAT LIVER LES
50.22	Partial hepatectomy	PARTIAL HEPATECTOMY
50.29	Other destruction of lesion of liver	DESTRUC HEPATIC LES NEC
50.3	Lobectomy of liver	HEPATIC LOBECTOMY
51.31	Anastomosis of gallbladder to hepatic ducts	GB-TO-HEPAT DUCT ANAST
51.32	Anastomosis of gallbladder to intestine	GB-TO-INTESTINE ANASTOM
51.33	Anastomosis of gallbladder to pancreas	GB-TO-PANCREAS ANASTOM
51.34	Anastomosis of gallbladder to stomach	GB-TO-STOMACH ANASTOMOS
51.35	Other gallbladder anastomosis	GALLBLADDER ANASTOM NEC
51.36	Choledochoenterostomy	CHOLEDOCHOENTEROSTOMY
51.37	Anastomosis of hepatic duct to gastrointestinal tract	HEPATIC DUCT-GI ANASTOM
51.39	Other bile duct anastomosis	BILE DUCT ANASTOMOS NEC
51.41	Common duct exploration for removal of calculus	CDE FOR CALCULUS REMOV
51.42	Common duct exploration for relief of other obstruction	CDE FOR OBSTRUCTION NEC
51.49	Incision of other bile ducts for relief of obstruction	INCIS OBSTR BILE DUC NEC
51.51	Exploration of common duct	COMMON DUCT EXPLORATION

51.59	Incision of other bile duct	BILE DUCT INCISION NEC
51.61	Excision of cystic duct remnant	EXCIS CYST DUCT REMNANT
51.62	Excision of ampulla of Vater (with reimplantation of common duct)	EXCIS AMPULLA OF VATER
51.63	Other excision of common duct	COMMON DUCT EXCIS NEC
51.69	Excision of other bile duct	BILE DUCT EXCISION NEC
51.71	Simple suture of common bile duct	SIMPLE SUT-COMMON DUCT
51.72	Choledochoplasty	CHOLEDOCHOPLASTY
51.79	Repair of other bile ducts	BILE DUCT REPAIR NEC
51.81	Dilation of sphincter of Oddi	SPHINCTER OF ODDI DILAT
51.82	Pancreatic sphincterotomy	PANCREAT SPHINCTEROTOM
51.83	Pancreatic sphincteroplasty	PANCREAT SPHINCTEROPLAS
51.89	Other operations on sphincter of Oddi	SPHINCT OF ODDI OP NEC
51.91	Repair of laceration of gallbladder	REPAIR GB LACERATION
51.92	Closure of cholecystostomy	CLOSURE CHOLECYSTOSTOMY
51.93	Closure of other biliary fistula	CLOS BILIARY FISTUL NEC
51.94	Revision of anastomosis of biliary tract	REVIS BILE TRACT ANASTOM
51.95	Removal of prosthetic device from bile duct	REMOVE BILE DUCT PROSTH
51.99	Other operations on biliary tract	BILIARY TRACT OP NEC
52.09	Other pancreatotomy	PANCREATOTOMY NEC
52.22	Other excision or destruction of lesion or tissue of pancreas or pancreatic duct	OTHER DESTRU PANCREA LES
52.3	Marsupialization of pancreatic cyst	PANCREAT CYST MARSUPIALI
52.4	Internal drainage of pancreatic cyst	INT DRAIN PANCREAT CYST
52.51	Proximal pancreatectomy	PROXIMAL PANCREATECTOMY
52.52	Distal pancreatectomy	DISTAL PANCREATECTOMY
52.53	Radical subtotal pancreatectomy	RAD SUBTOT PANCREATECTOM
52.59	Other partial pancreatectomy	PARTIAL PANCREATECT NEC
52.6	Total pancreatectomy	TOTAL PANCREATECTOMY
52.7	Radical pancreaticoduodenectomy	RAD PANCREATICODUODENECT
52.92	Cannulation of pancreatic duct	CANNULATION PANCREA DUC
52.95	Other repair of pancreas	PANCREATIC REPAIR NEC
52.96	Anastomosis of pancreas	PANCREATIC ANASTOMOSIS
52.99	Other operations on pancreas	PANCREATIC OPERATION NEC
53.7	Repair of diaphragmatic hernia, abdominal approach	ABD REPAIR-DIAPHR HERNIA
53.80	Repair of diaphragmatic hernia with thoracic approach, not otherwise specified	THOR REP-DIAPH HERN NOS
53.81	Plication of the diaphragm	DIAPHRAGMATIC PLICATION

53.82	Repair of parasternal hernia	PARASTERN HERNIA REPAIR
54.11	Exploratory laparotomy	EXPLORATORY LAPAROTOMY
54.12	Reopening of recent laparotomy site	REOPEN RECENT LAP SITE
54.19	Other laparotomy	LAPAROTOMY NEC
54.4	Excision or destruction of peritoneal tissue	DESTRUCT PERITONEAL TISS
54.59	Other lysis of peritoneal adhesions	OTH PERITON ADHESIOLYSIS
54.61	Reclosure of postoperative disruption of abdominal wall	RECLOSE POST OP DISRUPT
54.62	Delayed closure of granulating abdominal wound	DELAYED CLOS ABD WOUND
54.63	Other suture of abdominal wall	ABD WALL SUTURE NEC
54.64	Suture of peritoneum	PERITONEAL SUTURE
54.71	Repair of gastroschisis	REPAIR OF GASTROSCHISIS
54.72	Other repair of abdominal wall	ABDOMEN WALL REPAIR NEC
54.73	Other repair of peritoneum	PERITONEAL REPAIR NEC
54.74	Other repair of omentum	OMENTAL REPAIR NEC
54.75	Other repair of mesentery	MESENTERIC REPAIR NEC
54.92	Removal of foreign body from peritoneal cavity	REMOVE FB FROM PERITON
54.94	Creation of peritoneovascular shunt	CREAT PERITONEOVAS SHUNT
54.95	Incision of peritoneum	PERITONEAL INCISION
55.4	Partial nephrectomy	PARTIAL NEPHRECTOMY
55.51	Nephroureterectomy	NEPHROURETERECTOMY
55.52	Nephrectomy of remaining kidney	SOLITARY KIDNEY NEPHRECT
55.53	Removal of transplanted or rejected kidney	REJECTED KIDNEY NEPHRECT
55.54	Bilateral nephrectomy	BILATERAL NEPHRECTOMY
56.51	Formation of cutaneous uretero-ileostomy	FORM CUTAN ILEOURETEROST
56.52	Revision of cutaneous uretero-ileostomy	REVIS CUTAN ILEOURETEROS
56.71	Urinary diversion to intestine	URIN DIVERSION TO BOWEL
56.72	Revision of ureterointestinal anastomosis	REVIS URETEROENTEROSTOMY
56.73	Nephrocystanastomosis, not otherwise specified	NEPHROCYSTANASTOMOSI NOS
56.74	Ureteroneocystostomy	URETERONEOCYSTOSTOMY
56.75	Transureteroureterostomy	TRANSURETEROURETEROSTOMY
56.79	Other anastomosis or bypass of ureter	URETERAL ANASTOMOSIS NEC
57.6	Partial cystectomy	PARTIAL CYSTECTOMY
57.71	Radical cystectomy	RADICAL CYSTECTOMY
57.79	Other total cystectomy	TOTAL CYSTECTOMY NEC
57.81	Suture of laceration of bladder	SUTURE BLADDER LACERAT

57.82	Closure of cystostomy	CYSTOSTOMY CLOSURE
57.83	Repair of fistula involving bladder and intestine	ENTEROVESICO FIST REPAIR
57.84	Repair of other fistula of bladder	VESIC FISTULA REPAIR NEC
57.85	Cystourethroplasty and plastic repair of bladder neck	CYSTOURETHROPLASTY
57.86	Repair of bladder exstrophy	BLADDER EXSTROPHY REPAIR
57.87	Reconstruction of urinary bladder	BLADDER RECONSTRUCTION
57.88	Other anastomosis of bladder	BLADDER ANASTOMOSIS NEC
57.89	Other repair of bladder	BLADDER REPAIR NEC
59.00	Retroperitoneal dissection, not otherwise specified	RETROPERIT DISSECT NOS
59.02	Other lysis of perirenal or periureteral adhesions	PERIREN ADHESIOLYS NEC
59.09	Other incision of perirenal or periureteral tissue	PERIREN/URETER INCIS NEC
60.3	Suprapubic prostatectomy	SUPRAPUBIC PROSTATECTOMY
60.4	Retropubic prostatectomy	RETROPUBIC PROSTATECTOMY
60.5	Radical prostatectomy	RADICAL PROSTATECTOMY
65.22	Wedge resection of ovary	OVARIAN WEDGE RESECTION
65.29	Other local excision or destruction of ovary	LOCAL DESTR OVA LES NEC
65.39	Other unilateral oophorectomy	OTH UNILAT OOPHORECTOMY
65.49	Other unilateral salpingo-oophorectomy	OTH UNI SALPINGO-OOPHOR
5.51	Other removal of both ovaries at same operative episode	OTH REMOVE BOTH OVARIES
65.52	Other removal of remaining ovary	OTH REMOVE REMAIN OVARY
65.61	Other removal of both ovaries and tubes at same operative episode	OTH REMOVE OVARIES/TUBES
65.62	Other removal of remaining ovary and tube	OTH REMOVE REM OVA/TUBE
66.4	Total unilateral salpingectomy	TOTAL UNILAT SALPINGECT
66.51	Removal of both fallopian tubes at same operative episode	REMOVE BOTH FALLOP TUBES
66.52	Removal of remaining fallopian tube	REMOVE SOLITARY FAL TUBE
66.61	Excision or destruction of lesion of fallopian tube	DESTROY FALLOP TUBE LES
66.62	Salpingectomy with removal of tubal pregnancy	REMOV TUBE & ECTOP PREG
66.63	Bilateral partial salpingectomy, not otherwise specified	BILAT PART SALPINGEC NOS
66.69	Other partial salpingectomy	PARTIAL SALPINGECTOM NEC
68.49	Other and unspecified total abdominal hysterectomy	TOTAL ABD HYST NEC/NOS
68.51	Laparoscopically assisted vaginal hysterectomy (LAVH)	LAP AST VAG HYSTERECTOMY
68.59	Other and unspecified vaginal hysterectomy	VAG HYSTERECTOMY NEC/NOS
68.69	Other and unspecified radical abdominal hysterectomy	RADICAL ABD HYST NEC/NOS
68.79	Other and unspecified radical vaginal hysterectomy	RADICAL VAG HYST NEC/NOS
81.40	Repair of hip, not elsewhere classified	REPAIR OF HIP, NEC

81.51	Total hip replacement	TOTAL HIP REPLACEMENT
81.52	Partial hip replacement	PARTIAL HIP REPLACEMENT
81.53	Revision of hip replacement, not otherwise specified	REVISE HIP REPLACEMT NOS
81.54	Total knee replacement	TOTAL KNEE REPLACEMENT
81.55	Revision of knee replacement, not otherwise specified	REVISE KNEE REPLACE NOS

Appendix B
NQF-Endorsed Measures for Surgery and Anesthesia

NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Death among surgical inpatients with treatable serious complications (failure to rescue)	Agency for Healthcare Research and Quality (AHRQ)	Hospital Care 2003, Nursing Sensitive 2004
Timing of antibiotic prophylaxis for surgery patients	Centers for Medicare & Medicaid Services (CMS)/The Joint Commission	Hospital Care 2003
Selection of antibiotic prophylaxis for surgery patients	CMS/The Joint Commission	Hospital Care 2003
Duration of prophylaxis for cardiac patients	CMS/The Joint Commission	Hospital Care 2003
Surgical re-exploration	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Risk-adjusted operative mortality for CABG	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Risk-adjusted operative mortality for aortic valve replacement (AVR)	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Risk-adjusted operative mortality for mitral valve replacement/repair (MVR)	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Risk-adjusted operative mortality MVR+CABG Surgery	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Risk-adjusted operative mortality for AVR+CABG	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Surgical volume - a. isolated CABG surgery, b. valve surgery, c. CABG+valve surgery	CMS	Cardiac Surgery 2004
Timing of antibiotic prophylaxis for cardiac surgery patients	CMS/The Joint Commission	Cardiac Surgery 2004
Selection of antibiotic prophylaxis for cardiac surgery patients	CMS/The Joint Commission	Cardiac Surgery 2004
Duration of prophylaxis for cardiac surgery patients	CMS/The Joint Commission	Cardiac Surgery 2004
Prolonged intubation (ventilation)	The Society of Thoracic Surgeons	Cardiac Surgery 2004

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NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Stroke/cerebrovascular accident	The Society of Thoracic Surgeons	Cardiac Surgery 2004
CABG using internal mammary artery (IMA)	CMS	Cardiac Surgery 2004
Participation in a systematic database for cardiac surgery	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Post-operative renal failure	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Anti-platelet medication at discharge	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Beta blockade at discharge	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Anti-lipid treatment discharge	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Pre-operative beta blockade	The Society of Thoracic Surgeons	Cardiac Surgery 2004
Deep sternal wound infection rate	The Society of Thoracic Surgeons	Cardiac Surgery 2004
HCAHPS	AHRQ	HCAHPS 2005
Cardiac patients with controlled 6AM postoperative serum glucose	CMS The Joint Commission	Healthcare-Associated Infections 2007
Surgery patients with appropriate hair removal	CMS The Joint Commission	Healthcare-Associated Infections 2007
Surgery patients on beta blocker therapy prior to admission who received a beta blocker during the perioperative period	CMS The Joint Commission	Hospital Care 2007
CLINICIAN-LEVEL MEASURES		
Use of IMA in isolated CABG	The Society of Thoracic Surgeons	Hospital Care, Specialty Clinician Measures 2007
Use of IMA in isolated CABG	CMS Physician Quality Reporting Initiative	Hospital Care, Specialty Clinician Measures 2007
Preop beta blocker in patient with isolated CABG	The Society of Thoracic Surgeons	Hospital Care, Specialty Clinician Measures 2007
Pre-op beta blocker in patient with isolated CABG	CMS Physician Quality Reporting Initiative	Hospital Care, Specialty Clinician Measures 2007
Anti-platelet medication on discharge	The Society of Thoracic Surgeons	Hospital Care, Specialty Clinician Measures 2007
Beta blocker on discharge	The Society of Thoracic Surgeons	Hospital Care, Specialty Clinician Measures 2007

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NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Venous thromboembolism (VTE) prophylaxis	American Cancer Society (ACS) American Medical Association Physician Consortium for Performance Improvement (AMA PCPI) National Committee for Quality Assurance (NCQA)	Hospital Care, Specialty Clinician Measures 2007
Timing of prophylactic antibiotics—ordering physician	ACS AMA PCPI NCQA	Hospital Care, Specialty Clinician Measures 2007
Timing of prophylactic antibiotics—administering physician	ACS AMA PCPI NCQA	Hospital Care, Specialty Clinician Measures 2007
Selection of prophylactic antibiotic—first OR second-generation cephalosporin	ACS AMA PCPI NCQA	Hospital Care, Specialty Clinician Measures 2007
Discontinuation of prophylactic antibiotics (non-cardiac procedures)	ACS AMA PCPI NCQA	Hospital Care, Specialty Clinician Measures 2007
Discontinuation of prophylactic antibiotics (cardiac procedures)	ACS AMA PCPI NCQA	Hospital Care, Specialty Clinician Measures 2007
Recording of clinical stage prior to surgery for lung cancer and esophageal cancer resection	The Society of Thoracic Surgeons	New Clinician Measures 2008
Participation in a systematic national database for general thoracic surgery	The Society of Thoracic Surgeons	New Clinician Measures 2008
Recording of performance status prior to lung or esophageal cancer resection	The Society of Thoracic Surgeons	New Clinician Measures 2008
Pulmonary function tests before major anatomic lung resection	The Society of Thoracic Surgeons	New Clinician Measures 2008
Risk-adjusted morbidity: length of stay >14 days after elective lobectomy for lung cancer	The Society of Thoracic Surgeons	New Clinician Measures 2008
Risk-adjusted morbidity and mortality for esophagectomy for cancer	The Society of Thoracic Surgeons	New Clinician Measures 2008
Anesthesiology and critical care: prevention of catheter-related bloodstream infections – central venous catheter insertion protocol	American Society of Anesthesiologists AMA PCPI	New Clinician Measures 2008

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NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Perioperative anti-platelet therapy for patients undergoing carotid endarterectomy	Vascular Study Group of Northern New England (VSGNNE) Society for Vascular Surgery (SVS)	New Clinician Measures 2008
Use of patch during conventional endarterectomy	VSGNNE SVS	New Clinician Measures 2008
SERIOUS REPORTABLE EVENTS AND SAFE PRACTICES		
Surgery performed on the wrong body part	NQF	Serious Reportable Events 2002/2006
Surgery performed on the wrong patient	NQF	Serious Reportable Events 2002/2006
Wrong surgical procedure performed on a patient	NQF	Serious Reportable Events 2002/2006
Unintended retention of a foreign object in a patient after surgery or other procedure	NQF	Serious Reportable Events 2002/2006
Intraoperative or immediately postoperative death in an ASA Class I patient	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with the use of contaminated drugs, devices, or biologics provided by the healthcare facility	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with the use or function of a device in patient care, in which the device is used or functions other than as intended	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with intravascular air embolism that occurs while being cared for in a healthcare facility	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation or wrong route of administration)	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products	NQF	Serious Reportable Events 2002/2006

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NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Patient death or serious disability associated with hypoglycemia, the onset of which occurs while the patient is being cared for in a healthcare facility	NQF	Serious Reportable Events 2002/2006
Patient death or serious disability associated with an electric shock while being cared for in a healthcare facility	NQF	Serious Reportable Events 2002/2006
Any incident in which a line designated for oxygen or other gas to be delivered to a patient contains the wrong gas or is contaminated by toxic substances	NQF	Serious Reportable Events 2002/2006
Ask each patient or legal surrogate to "teach back" in his or her own words, key information about the proposed treatments or procedures for which he or she is being asked to provide informed consent	NQF	Safe Practices 2003/2006
Ensure that written documentation of the patient's preferences for life-sustaining treatments is prominently displayed in his or her chart	NQF	Safe Practices2003/2006
Following serious unanticipated outcomes, including those that are clearly caused by systems failures, the patient and, as appropriate, family should receive timely and transparent clear communication concerning what is known about the event	NQF	Safe Practices 2003/2006
A "Discharge Plan" must be prepared for each patient at the time of hospital discharge, and a concise discharge summary must be prepared for and relayed to the clinical caregiver accepting responsibility for post-discharge care in a timely manner. Organizations must ensure that there is confirmation of receipt of the discharge information by the independent licensed practitioner who will assume the responsibility for care after discharge	NQF	Safe Practices 2003/2006
Prevent surgical site infections by implementing four components of care: 1) appropriate use of antibiotics; 2) appropriate hair removal; 3) maintenance of postoperative glucose control for patients undergoing major cardiac surgery; and 4) establishment of postoperative normothermia for patients undergoing colorectal surgery	NQF	Safe Practices 2003/2006
Comply with current Centers for Disease Control and Prevention hand hygiene guidelines	NQF	Safe Practices 2003/2006

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NQF-Endorsed Voluntary Consensus Standards for Surgery and Anesthesia Care

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
For high-risk elective cardiac procedures or other specified care, patients should be clearly informed of the likely reduced risk of an adverse outcome at treatment facilities that participate in clinical outcomes registries and minimize the number of surgeons performing those procedures with the strongest volume – outcomes relationship	NQF	Safe Practices 2003/2006
Implement the Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery for all invasive procedures	NQF	Safe Practices 2003/2006
Evaluate each patient undergoing elective surgery for risk of an acute ischemic peri-operative cardiac event and consider prophylactic treatment with beta-blockers for patients who either: 1) have required beta-blockers to control symptoms of angina or patients with symptomatic arrhythmias or hypertension, or 2) are at high cardiac risk owing to the finding of ischemia on preoperative testing and are undergoing vascular surgery	NQF	Safe Practices 2003/2006
Evaluate each patient upon admission, and regularly thereafter, for the risk of developing VTE/DVT. Utilize clinically appropriate, evidence-based methods of thromboprophylaxis	NQF	Safe Practices 2003/2006

NQF-Endorsed Voluntary Consensus Standards for Ambulatory Surgical Centers

CONSENSUS STANDARD	OWNER/STEWARD(s)	NQF PROJECT
Patient burn	ASC Quality Collaboration	Ambulatory Care Phase 3, Cycle 3 2007
Prophylactic intravenous antibiotic timing	ASC Quality Collaboration	Ambulatory Care Phase 3, Cycle 3 2007
Hospital transfer/admission	ASC Quality Collaboration	Ambulatory Care Phase 3, Cycle 3 2007
Patient fall	ASC Quality Collaboration	Ambulatory Care Phase 3, Cycle 3 2007
Wrong site, wrong side, wrong patient, wrong procedure, wrong implant	ASC Quality Collaboration	Ambulatory Care Phase 3, Cycle 3 2007
Selection of prophylactic antibiotic, 1st or 2nd generation cephalosporin	AMA PCPI	Ambulatory Care Phase 3, Cycle 3 2007
Timing of prophylactic antibiotics, ordering physician	AMA PCPI	Ambulatory Care Phase 3, Cycle 3 2007
Timing of prophylactic antibiotics, administering physician	AMA PCPI	Ambulatory Care Phase 3, Cycle 3 2007
Discontinuation of prophylactic antibiotics, non-cardiac procedures	AMA PCPI	Ambulatory Care Phase 3, Cycle 3 2007

THE NATIONAL QUALITY FORUM (NQF) is a private, nonprofit, open membership, public benefit corporation whose mission is to improve the American healthcare system so that it can be counted on to provide safe, timely, compassionate, and accountable care using the best current knowledge. Established in 1999, NQF is a unique public-private partnership having broad participation from all parts of the healthcare industry. As a voluntary consensus standard-setting organization, NQF seeks to develop a common vision for healthcare quality improvement, create a foundation for standardized healthcare performance data collection and reporting, and identify a national strategy for healthcare quality improvement. NQF provides an equitable mechanism for addressing the disparate priorities of healthcare's many stakeholders.

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