AQI QCDR Measure Specification

Year 2015

Anesthesia Quality Institute

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Contents

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Measure Title

*ASA #6: Post-Anesthetic Transfer of Care: Use of Checklist or Protocol for Direct Transfer of Care from Procedure Room to Intensive Care Unit (ICU)

Measure Description
Percentage of patients, regardless of age, who undergo a procedure under anesthesia and are admitted to an Intensive Care Unit (ICU) directly from the anesthetizing location, who have a documented use of a checklist or protocol for the transfer of care from the responsible anesthesia practitioner to the responsible ICU team or team member

NQS Domain
Communication and Care Coordination

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient who undergoes a procedure under anesthesia is transferred from an anesthetizing location to the Intensive Care Unit (ICU).

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting via claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator
All patients, regardless of age, who receive an anesthetic and are admitted to an ICU directly from the anesthetizing location,

Denominator Criteria (Eligible Cases):
Patient of any age
AND
CPT II 0581F: Patient transferred directly from anesthetizing location to critical care unit
AND
Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00452, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00622, 00625, 00626, 00630, 00632, 00634, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750,

00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions
None

Numerator
Patients who have a documented use of a checklist or protocol for the transfer of care from the responsible anesthesia practitioner to the responsible ICU team or team member

Definition:
The key handoff elements that must be included in the transfer of care protocol or checklist include:

1. Identification of patient, key family member(s) or patient surrogate
2. Identification of responsible practitioner (primary service)
3. Discussion of pertinent medical history
4. Discussion of the surgical/procedure course (procedure, reason for surgery, procedure performed)
5. Intraoperative anesthetic management and issue/concerns to include things such as airway, hemodynamic, narcotic, sedation level and paralytic management and intravenous fluids/blood products and urine output during the procedure
6. Expectations/Plans for the early post-procedure period to include things such as the anticipated course (anticipatory guidance), complications, need for laboratory or ECG and medication administration
7. Opportunity for questions and acknowledgement of understanding of report from the receiving ICU team

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
CPT II 0583F Transfer of care checklist used

OR
Transfer of Care Not Documented – Medical Performance Exclusion:
CPT II 0583F-1P Documentation of medical reason that transfer of care checklist not used

OR
Transfer of Care Not Documented – Reason Unspecified:
CPT II 0583F-8P Transfer of care checklist not used, reason not given

Rationale
A uniform transfer of care protocol or handoff tool/checklist that is utilized for all patients directly admitted to the ICU after undergoing a procedure under the care of an anesthesia practitioner will facilitate effective communications between the medical practitioner who provided anesthesia during the procedure and the care practitioner in the ICU who is responsible for post-procedural care. This should minimize errors and oversights in medical care of ICU patients after procedures.

According to data published by the Joint Commission, communication errors were indicated in 59% of reported sentinel events in 2012 and in 54% of operative/post-operative complications between 2004 and 2012. A 2006 survey among residents at Massachusetts General Hospital found that 59% of respondents reported one or more patients experiencing harm as a result of ineffective patient handoff practices during their most recent clinical rotation.

Clinical Recommendation Statements:
The National Quality Forum, in its Preferred Practices and Performance Measures for Measuring and Reporting Care Coordination report, recommends:

Preferred Practice 23: Healthcare providers and healthcare organizations should implement protocols and policies for a standardized approach to all transitions of care. Policies and procedures related to transitions and the critical aspects should be included in the standardized approach.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #7: Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy (Adults)

Measure Description
Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively.

NQS Domain
Person and Caregiver-Centered Experience and Outcomes

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient having risk factors for PONV is treated pre-operatively or intra-operatively following inhalation general anesthetic.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting via claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator
All patients, aged 18 years and older, who undergo a procedure* under an inhalational general anesthetic, AND who have three or more risk factors for PONV

Denominator Criteria (Eligible Cases):
Patients aged 18 years and older
AND
CPT II 4554F: Patient received inhalation anesthetic agent
AND
CPT II 4556F: Patient has three or more risk factors for post-operative nausea and vomiting (PONV)

Risk factors for PONV include:

1. Female gender
2. History of PONV or a history of motion sickness
3. Non-smoker
4. Intended administration of opioids for post-operative analgesia**

* Any procedure including surgical, therapeutic or diagnostic.

** This includes use of opioids given intra-operatively and whose effects extend into the post anesthesia care unit (PACU) or post-operative period, or opioids given in the PACU, or opioids given after discharge from the PACU.

AND

CPT® Code for Procedure:

00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

Patient has less than three risk factors for post-operative nausea and vomiting (PONV)

Numerator

Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively

Definition: The recommended first- and second-line classes of pharmacologic anti-emetics for PONV prophylaxis in patients at moderate to severe risk of PONV include (but are not limited to):

- 5-hydroxytryptamine (5-HT3) receptor antagonists (e.g., ondansetron, dolasetron, granisetron and tropisetron)
- steroids (e.g., dexamethasone)
- phenothiazines (e.g., promethazine, prochlorperazine)
- phenylethylamine (e.g., ephedrine)
- butyrophenones (e.g., droperidol, haloperidol)
- antihistamine (e.g., dimenhydrinate, diphenhydramine)
- anticholinergic (e.g., transdermal scopolamine)

The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

4558F Patient received at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and intra-operatively

OR

Performance Not Met – Medical Performance Exclusion:

4558F-1P Documentation of medical reason(s) for not administering combination therapy of at least two prophylactic pharmacologic anti-emetic agents of different classes (eg, intolerance or other medical reason)

OR

Performance Not Met – Reason Unspecified:

4558F-8P Combination therapy of at least two prophylactic pharmacologic anti-emetic agents of different classes not administered, reason unspecified

Rationale

Postoperative nausea and vomiting (PONV) is an important patient-centered outcome of anesthesia care. PONV is highly dis-satisfying to patients, although rarely life-threatening. A large body of scientific literature has defined risk factors for PONV; demonstrated effective prophylactic regimes based on these risk factors, and demonstrated high variability in this outcome across individual centers and providers. Further, a number of papers have shown that performance can be assessed at the level of individual providers -- the outcome is common enough that sufficient power exists to assess variability and improvement at this level.

Clinical Recommendation Statements:

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Society for Ambulatory Anesthesia (SAMBA) PONV Prophylaxis Recommendations:

Administer prophylactic therapy with combination (≥ 2) interventions/multimodal therapy in patients at high risk for PONV

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #8: Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)

Measure Description
Percentage of patients aged 3 through 17 years of age, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for post-operative vomiting (POV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively.

NQS Domain
Person and Caregiver-Centered Experience and Outcomes

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient having risk factors for POV is treated pre-operatively or intra-operatively following inhalation general anesthetic.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes, patient demographics and registry codes are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting via claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator
All patients, aged 3 through 17 years of age, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for POV.

Definition: Risk factors for POV are:

- Surgery ≥ 30 minutes
- Age ≥ 3 years
- Strabismus surgery
- History of POV or PONV in parent or sibling

Denominator Criteria (Eligible Cases):
Patients Aged ≥ 3 years old and ≤ 17 years old
AND
ASA08A: Patient received general anesthetic with inhalational anesthetic for maintenance
AND
ASA08B: Patient has two or more risk factors for POV

AND

CPT® Code for Procedure:

00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

Cases in which an inhalational anesthetic is used only for induction.

Numerator

Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively

Definition: The recommended pharmacologic anti-emetics for POV prophylaxis in pediatric patients at risk of POV include (but may not be limited to):

- 5-hydroxytryptamine (5-HT3) receptor antagonists (recommended as the first choice for prophylaxis for POV in children)
- Dexamethasone
- Antihistamines
- Butyrophenones

The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

4558F Patient received at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and intra-operatively

OR

Performance Not Met – Medical Performance Exclusion:

4558F-1P Documentation of medical reason(s) for not administering combination therapy of at least two prophylactic pharmacologic anti-emetic agents of different classes (eg, intolerance or other medical reason)

OR

Performance Not Met – Reason Unspecified:

4558F-8P Combination therapy of at least two prophylactic pharmacologic Anti-emetic agents of different classes not administered, reason unspecified

Rationale

Postoperative nausea and vomiting (PONV) is an important patient-centered outcome of anesthesia care. PONV is highly dis-satisfying to patients, although rarely life-threatening. A large body of scientific literature has defined risk factors for PONV; demonstrated effective prophylactic regimes based on these risk factors, and demonstrated high variability in this outcome across individual centers and providers. Further, a number of papers have shown that performance can be assessed at the level of individual providers -- the outcome is common enough that sufficient power exists to assess variability and improvement at this level. A separate measure is needed for pediatric patients because the risk factors and recommended prophylaxis are different from adults.

Clinical Recommendation Statements:

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Society for Ambulatory Anesthesia (SAMBA) recommendations:

Administer prophylactic antiemetic therapy to children at increased risk for POV; as in adults, use of combination therapy is most effective.

All prophylaxis in children at moderate or high risk for POV should include combination therapy using a 5-HT3 antagonist and a second drug. Because the effects of interventions from different drug classes are additive, combining interventions has an additive effect in risk reduction.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #9: Anesthesiology: Post-Anesthetic Transfer of Care Measure: Procedure Room to a Post Anesthesia Care Unit

Measure Description
Percentage of patients who are under the care of an anesthesia practitioner and are admitted to a PACU in which a post-anesthetic formal transfer of care protocol or checklist which includes the key transfer of care elements is utilized.

NQS Domain
Communications and Care Coordination

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a care protocol or check list is utilized for patients admitted to a PACU.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes and registry codes are used to report the numerator of the measure.

When reporting via claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator
All patients who are cared for by an anesthesia practitioner and are transferred directly from the procedure room to the PACU upon completion of the anesthetic.

- Note: This measure does not include transfer of care during an anesthetic or to the ICU.

Denominator Criteria (Eligible Cases):
Patient of any age
AND
ASA09A Patient transferred directly from anesthetizing location to PACU
AND
Patient encounter during the reporting period (CPT):
Anesthesia codes which are commonly indicated for associated surgical procedure(s):

00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00452, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00622,

00625, 00626, 00630, 00632, 00634, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions
All age patients who have been cared for by an anesthesia practitioner who is not admitted from the operating room directly to a PACU.

Numerator
All patients who have been cared for by an anesthesia practitioner and are transferred directly from the procedure room to post-anesthesia care unit (PACU) for whom a checklist or protocol which includes the key transfer of care elements was utilized.

Definition:
The key handoff elements that must be included in the transition of care are:

1. Identification of patient
2. Identification of responsible practitioner (PACU nurse or advanced practitioner)
3. Discussion of pertinent medical history
4. Discussion of the surgical/procedure course (procedure, reason for surgery, procedure performed)
5. Intraoperative anesthetic management and issues/concerns.
6. Expectations/Plans for the early post-procedure period.
7. Opportunity for questions and acknowledgement of understanding of report from the receiving PACU team

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
CPT II 0583F: Transfer of care checklist used

OR
Transfer of Care Not Documented – Medical Performance Exclusion:
CPT II 0583F-1P: Documentation of medical reason that transfer of care checklist not used

OR
Transfer of Care Not Documented – Reason Unspecified:
CPT II 0583F-8P Transfer of care checklist not used, reason not given

Rationale
Hand-offs are a vulnerable moment for patient safety, but required in any 24/7 healthcare system. Anesthesia providers routinely transfer patients from the OR to the PACU, and are responsible for transmitting knowledge about patient history, a summary of intra-operative events, and future plans for hemodynamic and pain management to the new care team. Evidence demonstrates that this process can be facilitated by use of a checklist that motivates completion of all key components of the transfer, and is seen as an emerging best practice in anesthesia care.

Clinical Recommendation Statements:
The National Quality Forum, in its Preferred Practices and Performance Measures for Measuring and Reporting Care Coordination report, recommends:

Preferred Practice 23: Healthcare providers and healthcare organizations should implement protocols and policies for a standardized approach to all transitions of care. Policies and procedures related to transitions and the critical aspects should be included in the standardized approach.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #10: Composite Anesthesia Safety

Measure Description
Percentage of patients who underwent an anesthetic without the occurrence of a major adverse event.

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of the measure.

Denominator
All patients, regardless of age, who undergo a procedure* under anesthesia

Definition: *Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):
Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966,, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions
None

Numerator
Patients who experienced a major adverse event* prior to completion of anesthesia care**.

**Definition: ***Major adverse events of anesthesia are defined according to the 2009 Committee of Performance and Outcomes Measurement work product "Development of the ASA Critical Incidents Reporting System. The adverse events and their definitions can be accessed here: http://www.aqihq.org/files/CPOM-registry-data-set.pdf. Adverse events include:

- Death
- Cardiac arrest
- Perioperative myocardial infarction
- Anaphylaxis
- Malignant hyperthermia
- Transfusion reaction
- Stroke, cerebral vascular accident, or coma following anesthesia
- Visual loss
- Operation on incorrect site
- Operation on incorrect patient
- Medication error
- Unplanned ICU admission
- Intraoperative awareness
- Unrecognized difficult airway
- Reintubation
- Dental trauma
- Perioperative aspiration
- Vascular access complication, including vascular injury or pneumothorax
- Pneumothorax following attempted vascular access or regional anesthesia
- Infection following epidural or spinal anesthesia
- Epidural hematoma following spinal or epidural anesthesia
- High Spinal
- Postdural puncture headache
- Major systemic local anesthetic toxicity
- Peripheral neurologic deficit following regional anesthesia
- Infection following peripheral nerve block

** Anesthesia care is completed when the patient is discharged from the Postanesthesia Care Unit (PACU) or admitted to the Intensive Care Unit.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA10A: Patient did not experience an adverse event prior to completion of anesthesia care.

OR

Performance Not Met:

ASA10B: Patient experienced an adverse event prior to completion of anesthesia care

Rationale

Serious adverse events are rare in anesthesia care, but can be assessed for performance improvement purposes as a composite of mortality, major organ system injury, and unintended events (e.g. anaphylaxis, cardiac arrest) that carry a high risk. Completion of anesthesia care WITHOUT complication is the fundamental goal of both patients and anesthesia providers, suggesting that this metric is at the core of assessment for the specialties involved.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #11: Immediate Perioperative Cardiac Arrest

Measure Description
For all non-emergent surgical cases, the percentage of patients who experience a cardiac arrest* under the care of an anesthesia provider in the OR or PACU.

* Cardiac arrest: Cardiac arrest is broadly defined as the cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation. For the present registry, subcommittee members agreed that the definition should include the following use of cardiac compressions and/or defibrillation. Reporting of the etiology of cardiac arrest, may include, but not be limited to:

a. Ventricular fibrillation
b. Rapid ventricular tachycardia with hemodynamic instability
c. Asystole
d. Extreme bradycardia with hemodynamic instability

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Intermediate Outcome

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry Codes are used to report the numerator of the measure.

Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator
All scheduled procedures receiving anesthesia.

Denominator Criteria (Eligible Cases):
Patient of any age
AND
Patient encounter during the reporting period (CPT):
Anesthesia codes which are commonly indicated for associated surgical procedure(s):
00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520,

01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966,, 01990, 01991, 01992, 01999

Denominator Exclusions / Exceptions

- Cases with planned cardiac arrest – deep hypothermia, electrophysiology cases, cardiac bypass cases
- Emergent cases identified by ASA Physical Status indicating case is emergent by using 'E' designation

Numerator

Number of patients experiencing an unanticipated cardiac arrest.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA11A: Patient experienced an unanticipated cardiac arrest

OR

Performance Not Met:

ASA11B: Patient **did not** experience unanticipated cardiac arrest

Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Rationale

Cardiac arrest in the perioperative period is an unintended serious adverse event, associated with immediate mortality of about 50%. Arrest can occur as the result of sudden physiologic disruption due to surgery or medications (e.g. anaphylaxis, air embolus) or as the cumulative result of progressive deterioration (e.g. bleeding, heart failure). Prevention of cardiac arrest is a core goal of anesthesia providers, with high face validity as a discriminator of the quality of anesthesia care.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #12: Immediate Perioperative Mortality Rate

Measure Description

For all non-emergent surgical cases, the percentage of patients who experience mortality under the care of an anesthesia provider in the OR or PACU.

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Outcome

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II and registry codes are used to report the numerator of the measure.

Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator
All scheduled procedures receiving anesthesia.

Denominator Criteria (Eligible Cases):
Patient of any age
AND
Patient encounter during the reporting period (CPT):
Anesthesia codes which are commonly indicated for associated surgical procedure(s):
00100,00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966, , , 01991, 01992, 01999

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status of 6
- ASA Physical Status indicating case is emergent by using 'E' designation

Numerator

The number of deaths occurring during the immediate perioperative period.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA12A: Patient died

OR

Performance Not Met:

ASA12B: Patient **did not** die

Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Rationale

Mortality is the outcome of ultimate interest to patients and providers. Albeit very rare in the perioperative period, death in the OR or PACU is a sentinel event in any anesthesia department, as the majority of such occurrences can be traced directly to anesthetic management issues. Capturing this data in a uniform fashion will allow assessment of variability across practices and facilities, as well as identification of the rare outlier at the individual physician level.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #13: Post Anesthesia Care Unit (PACU) Re-intubation Rate

Measure Description
Percentage of patients, regardless of age, who were extubated in the Operating Room or the PACU following general anesthesia but required re-intubation prior to PACU discharge.

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Intermediate Outcome

Instructions:
This measure is to be reported each time a patient who undergoes a procedure under general anesthesia has a supraglottic airway (SGA) or endotracheal tube (ETT) placed for the procedure and then removed in the operating room or PACU.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of this measure.

Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator
All patients, regardless of age, who undergo a procedure under general anesthesia facilitated by an SGA or ETT who were extubated in the Operating Room or PACU.

Denominator Criteria (Eligible Cases):
Patient of any age
AND
Patient had a planned extubation following general anesthesia (ASA13F)
AND
Patient encounter during the reporting period (CPT):
00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392,

01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966, 01967, 01990, 01991, 01992, 01999

Denominator Exclusions / Exceptions
Patients transferred directly to the Intensive Care Unit (ICU) from the Operating Room (OR).

Numerator
Patients who required new management with an Endotracheal Tube (ETT), supraglottic airway (SGA) or new surgical airway prior to PACU discharge

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA13A: Patient required new airway management prior to PACU discharge.

Performance Not Met

ASA13B: Patient did not require new airway management prior to PACU discharge.

Performance Not Met – Medical Performance Exclusion

ASA13G: Patient received a planned trial of extubation documented in the medical record prior to removal of the original airway device

Rationale
The need for early repeat airway management of surgical patients is strongly associated with subsequent serious adverse outcomes; prolonged ICU and hospital stay, and increased costs of care. Assessment of this metric under a unified definition will be an important tool for benchmarking the performance of surgical facilities, anesthesia departments, and individual practitioners.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #14: Short-term Pain Management

Measure Description
The number of patients aged 10 years or older admitted to the PACU following an anesthetic with a pain score < 7 (out of 10).

NQS Domain
Person and Caregiver-Centered Experience and Outcomes

Measure Type (Process/Outcome)
Intermediate Outcome

Instructions:
This measure is to be reported each time a patient is admitted to the PACU following a procedure that included an anesthetic during the reporting period.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to identify the numerator.

Denominator
All patients age 10 years and older admitted to PACU who are assessed for pain.

Denominator Criteria (Eligible Cases):
Patients age 10 years or older
AND
Patient can be assessed for pain (**ASA14G)**
AND
Patient encounter during the reporting period (CPT):
Anesthesia codes which are commonly indicated for associated surgical procedure(s):
00100,00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832,

01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966, 01990, 01991, 01992, 01999

Denominator Exclusions / Exceptions
None

Numerator
The number of lucid patients with an initial pain score < 7/10

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
ASA14B: Patient **did not** experience pain > 7 out of 10

Patient Performance Exclusion:
ASA14D: Patient could not be assessed for pain (e.g. Patient with major psychiatric disorders, chronic pain patients and patients who do not speak English or present a language barrier).

OR
Performance Not Met:
ASA14A: Patient **did** experience pain > 7 out of 10

Rationale
Alleviation of pain is a core responsibility of the anesthesia provider, and adequate postoperative pain control is an important component of patient satisfaction with anesthesia and surgery. A large body of literature exists to support evidence-based practice in this area. Significant variability in outcomes exists at the practice, facility and individual provider level. Capture of this metric under a common definition will greatly enhance anesthesia quality management and lead directly to improvements in patient outcome.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #15: Composite Procedural Safety for Central Line Placement

Measure Description
Percentage of patients, regardless of age, who did not experience pneumothorax or arterial injury following attempted central venous cannulation.

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Intermediate Outcome

Instructions:
This measure is to be reported each time a central venous cannulation (CVC) is attempted during the reporting period. There is no diagnosis associated with this measure. It is anticipated that clinicians who attempt CVC insertions will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category codes are used to report the numerator of the measure.

Denominator
All patients, regardless of age, who undergo CVC insertion.

> **Denominator Criteria (Eligible Cases):**
> **Patient encounter during the reporting period (CPT):** 36555, 36556, 36557, 36558, 36560, 36561, 36563, 36565, 36566, 36568, 36569, 36570, 36571, 36575, 36576, 36578, 36580, 36581, 36582, 36583, 36584, 36585, 36589, 36590, 36592, 36595, 36596, 36597, 36598, 75901, 75902, 93503

Denominator Exclusions
None

Numerator
Patients who did not experience and arterial injury or pneumothorax requiring thoracostomy placement or decompression of the pleural cavity (from the medical record or PSI code).

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA15B: Patient did not experience an arterial injury or pneumothorax requiring thoracostomy placement.

OR

Medical Performance Exclusion:

ASA15C: Emergent Cases

OR

Performance Not Met

ASA15A: Patient did experience an arterial injury or pneumothorax requiring thoracostomy placement

OR

Patient encounter during the reporting period (CPT): 32035, 32036, 32551

Rationale

Central venous cannulation is commonly required for anesthesia patients but may be associated with serious adverse events. Arterial injury and pneumothorax each require additional treatment that adds to the cost and discomfort of care. Recent scientific literature has documented that the risk for these complications can be reduced through evidence-based practice, including the use of ultrasound localization of the central vein. This measure will allow for documentation of variability in occurrence of this outcome, and will empower quality improvement efforts.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title:

ASA #16: Composite Patient Experience

Measure Description
Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care (e.g. private vendor assessment of patient experience and satisfaction, Consumer Assessment of Healthcare Providers and Systems Surgical Care Survey or S-CAHPS).

NQS Domain
Person and Caregiver-Centered Experience and Outcomes

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient underwent a procedure with anesthesia

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measrure denominator. Registry codes are used to report the measure numerator.

Denominator
Patients, aged 18 and older, who undergo a procedure* under anesthesia.

Definition:
Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):
Patient aged 18 and older
AND
Patient encounter during the reporting period (CPT):
00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932,

00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966, 01967, 01990, 01991, 01992, 01999

Denominator Exclusions / Exceptions
Emergent cases

Numerator
Patients who received a survey* or similar tool used to assess their experience and satisfaction with anesthesia.

Definition:
* The survey tool used must reflect and take into consideration the recommendations of the ASA Committee on Performance and Outcomes Measurement work product entitled "Patient Satisfaction and Experience with Anesthesia."

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA16A: Patient provided with a survey or similar tool to assess their experience and satisfaction with anesthesia

OR

Performance Not Met

ASA16B: Patient was not provided with a survey or similar tool to assess their experience and satisfaction with anesthesia

OR

Performance Not Met:

ASA16F: Patient unable to be surveyed because of cognitive impairment or major psychiatric disorder.

OR

Performance Not Met:

ASA16G: Provider unable to send patient survey or similar tool in patient's preferred language

Rationale
Patient-centered outcomes are important discriminators of the quality of anesthesia practice. Anesthesia departments and individual providers should have access to relevant S-CAHPS data collected by the facility or practice as a means of guiding quality improvement initiatives.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #17: Perioperative Care: Timely Administration of Prophylactic Parenteral Antibiotics (NQF 269)

Measure Description
Percentage of surgical patients aged 18 years and older who receive an anesthetic when undergoing procedures with the indications for prophylactic parenteral antibiotics for whom administration of a prophylactic parenteral antibiotic ordered has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required)

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time an anesthesia service in the denominator is provided for surgical patients during the reporting period. There is no diagnosis associated with this measure. It is anticipated that clinicians who provide anesthesia services, as specified in the denominator coding*, will submit this measure - reporting on the timeliness of parenteral antibiotic administration. The clinician providing anesthesia services does not need to be the clinician who ordered the prophylactic parenteral antibiotic.

*The anesthesia services included in the denominator are associated with some surgical procedures for which prophylactic parenteral antibiotics may not be indicated. As a result, clinicians should report 4047F-8P for those instances in which anesthesia services are provided but not associated with surgical procedures for which prophylactic parenteral antibiotics are indicated.

If the clinician providing anesthesia services orders AND administers the prophylactic parenteral antibiotic within the appropriate timeframe, report quality-data code CPT II 4048F. Report CPT II 4048F with the 1P modifier in circumstances where the prophylactic parenteral antibiotic was not given for medical reasons (eg, contraindicated, patient already receiving antibiotics).

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT codes, and the appropriate CPT Category II code OR the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P- medical reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter as the denominator codes.

Denominator
All surgical patients aged 18 years and older who receive an anesthetic when undergoing procedures* with the indications for prophylactic parenteral antibiotics

> **DENOMINATOR NOTE:** Anesthesia services included in denominator are associated with some surgical procedures for which prophylactic parenteral antibiotics may not be indicated. Clinicians should

report 4047F-8P for those instances in which anesthesia services are provided but not associated with surgical procedures for which prophylactic parenteral antibiotics are indicated.

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): Anesthesia codes for which prophylactic parenteral antibiotics are commonly indicated for associated surgical procedure(s):
00100, 00102, 00103, 00120, 00140, 00145, 00147, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00450, 00454, 00470, 00472, 00474, 00500, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00670, 00700, 00730, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00820, 00830, 00832, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 01120, 01140, 01150, 01170, 01173, 01180, 01190, 01202, 01210, 01212, 01214, 01215, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01360, 01382, 01392, 01400, 01402, 01404, 01430, 01432, 01440, 01442, 01444, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01500, 01502, 01520, 01522, 01610, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01710, 01712, 01714, 01716, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01924, 01925, 01926, 01951, 01952, 01953, 01961, 01962, 01963, 01965, 01966, 01968, 01969

Denominator Exclusions / Exceptions
None

Numerator
Surgical patients for whom administration of a prophylactic parenteral antibiotic ordered has been initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required)

Numerator Instructions: This measure seeks to identify the timely administration of prophylactic parenteral antibiotic. This administration should begin within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision.

Numerator Quality-Data Coding Options for Reporting Satisfactorily:
The antimicrobial drugs listed below are considered prophylactic parenteral antibiotics for the purposes of this measure. ***4048F-8P*** *should be reported when antibiotics from this table were not ordered.*

• Ampicillin/sulbactam • Aztreonam • Cefazolin • Cefmetazole • Cefotetan • Cefoxitin	• Cefuroxime • Ciprofloxacin • Clindamycin • Ertapenem • Erythromycin base • Fluoroquinolone • Gatifloxacin	• Gentamicin • Levofloxacin • Metronidazole • Moxifloxacin • Neomycin • Pipericillin/tazobactam • Vancomycin

NUMERATOR NOTE: "Ordered" includes instances in which the prophylactic parenteral antibiotic is ordered by the clinician performing the surgical procedure OR is ordered by the clinician providing the anesthesia services.

Documentation that Prophylactic Parenteral Antibiotic was Administered Within Specified Timeframe

Performance Met: **CPT II 4048F:** Documentation that administration of prophylactic parenteral antibiotic was initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required) as ordered

OR

Prophylactic Parenteral Antibiotic not Administered for Medical Reasons (eg, contraindicated, patient already receiving antibiotics)

Append a modifier (**1P**) to CPT Category II code **4048F** to report documented circumstances that appropriately exclude patients from the denominator.

Medical Performance Exclusion: **4048F *with* 1P:** Documentation of medical reason(s) for not initiating administration of prophylactic parenteral antibiotics as specified (eg, contraindicated, patient already receiving antibiotics)

OR

If patient is not eligible for this measure because prophylactic parenteral antibiotic not ordered, report:

Prophylactic Parenteral Antibiotic not Ordered

Append a reporting modifier (**8P**) to CPT Category II code **4047F** to report circumstances when the patient is not eligible for the measure.

Other Performance Exclusion: **4047F *with* 8P:** No documentation of order for prophylactic parenteral antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required)

OR

Prophylactic Parenteral Antibiotic Ordered but not Initiated Within One Hour, Reason not Otherwise Specified

Append a reporting modifier (**8P**) to CPT Category II code **4048F** to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

Performance Not Met: **4048F *with* 8P: Administration of** prophylactic parenteral antibiotic was **not** initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required), reason not otherwise specified

Rationale:

The appropriate timing of administration of prophylactic parenteral antibiotics has been demonstrated to reduce the incidence of surgical wound infections. Available evidence suggests that although most surgical patients receive a prophylactic antibiotic, many do not receive the drug within one hour before incision as recommended.

Clinical Recommendation Statement:

Overall, administration of the first dose of antimicrobial beginning within 60 minutes before surgical incision is recommended. Administration of vancomycin and fluoroquinolones should begin within 120 minutes before surgical incision because of the prolonged infusion times required for these drugs. (ASHP, 2013)

Infusion of the first antimicrobial dose should begin within 60 minutes before incision. However, when a fluoroquinolone or vancomycin is indicated, the infusion should begin within 120 minutes before incision to prevent antibiotic-associated reactions. Although research has demonstrated that administration of the antimicrobial at the time of anesthesia induction is safe and results in adequate serum and tissue drug levels at the time of incision, there was no consensus that the infusion must be completed before incision. (SIPGWW, 2004)

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #18: Perioperative Temperature Management

(Submitted for NQF Endorsement 1/2015)

Measure Description
Percentage of patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Intermediate Outcome

Instructions:
This measure is to be reported each time a surgical or therapeutic procedure not involving cardiopulmonary bypass is performed under general or neuraxial anesthesia during the reporting period. There is no diagnosis associated with this measure. It is anticipated that clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting via claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator
All patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer

Denominator Criteria (Eligible Cases):
CPT II 4255F: Duration of general or neuraxial anesthesia 60 minutes or longer, as documented in the anesthesia record
AND
Patient encounter during the reporting period (CPT):
00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920,

00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966, 01968, 01969

Denominator Exclusions / Exceptions

Patients undergoing :

- Cardiopulmonary bypass : 00561, 00562, 00563, 00566, 00567, 00580
- Regional nerve block : 01958, 01960, 01967, 01991, 01992
- Monitored anesthesia care : any CPT code with -QS modifier

Numerator

Patients for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

CPT® II 4559F: At least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

OR

At Least One Body Temperature Equal to or Greater than 35.5 Degrees Centigrade not Achieved within Designated Timeframe for one of the following Medical Reasons – Medical Performance Exclusion:

CPT® II 4559F-1P: Documentation of one of the following medical reason(s) for not achieving at least one body temperature greater than or equal to 35.5 degrees Centigrade or 95.9 degrees Fahrenheit within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

- Emergency cases
- Intentional hypothermia

OR

At Least One Body Temperature Equal to or Greater than 35.5 Degrees Centigrade not Achieved within Designated Timeframe, Reason Not Otherwise Specified

CPT ® II 4559F-8P: At least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) ***not*** recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

Rationale
A drop in core temperature during surgery, known as perioperative hypothermia, can result in numerous adverse effects, which can include adverse myocardial outcomes, subcutaneous vasoconstriction, increased incidence of surgical site infection, and impaired healing of wounds. The desired outcome, reduction in adverse surgical effects due to perioperative hypothermia, is affected by maintenance of normothermia during surgery.

Unintended perioperative hypothermia occurs in up to 20% of surgical patients. An observational cohort study in a pediatric setting found that more than 50% of children experienced intraoperative hypothermia. Pediatric patients undergoing major surgery were at greater risk of intraoperative hypothermia.

Clinical Recommendation Statements:
The following evidence statements are quoted verbatim from the referenced clinical guidelines:

American College of Cardiology Foundation/American Heart Association recommend:

Maintenance of body temperature in a normothermic range is recommended for most procedures other than during periods in which mild hypothermia is intended to provide organ protection (e.g., during high aortic cross-clamping) (Class I, Level B)

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #19: Perioperative Use of Aspirin for Patients with Drug-Eluting Coronary Stents

Measure Description
Percentage of patients, aged 18 years and older with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia, who receive aspirin 24 hours prior to anesthesia start time

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient with a pre-existing drug-eluting coronary stent undergoes a surgical or therapeutic procedure under anesthesia within the reporting period.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes, CPT II codes, and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

Denominator
All patients, aged 18 years and older, with a pre-existing drug-eluting coronary stent, who undergo a surgical or therapeutic procedure under anesthesia

Denominator Criteria (Eligible Cases):
Patient aged 18 and older
AND
CPT II Code 4561F: Patient has a coronary artery stent
AND
Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860,

01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions
None

Numerator
Patients who receive* aspirin 24 hours prior to anesthesia start time

Definition:
* Patient reports taking aspirin OR hospital staff administered aspirin

Numerator Quality-Data Coding Options for Reporting Satisfactorily:
Performance Met:
CPT II 4563F: Patient received aspirin within 24 hours prior to anesthesia start time

OR
Patient Did Not Receive Aspirin Within 24 Hours Prior to Anesthesia Start Time – Medical Performance Exclusion:
CPT II 4563F-1P: Documentation of medical reason(s) for not receiving aspirin 24 hours prior to anesthesia start time (e.g., risks of preoperative aspirin therapy are greater than the risks of withholding aspirin, other medical reasons)

OR
Patient Did Not Receive Aspirin Within 24 Hours Prior to Anesthesia Start Time – Reason Unspecified:
CPT II 4563F-8P Patient did not receive aspirin within 24 hours prior to anesthesia start time, reason not otherwise specified

Rationale
Late stent thrombosis is a relatively rare but serious complication of stent placement, with an estimated case fatality rate of up to 45%. Multiple studies have shown that premature discontinuation of dual antiplatelet therapy is associated with increased risk of stent thrombosis in patients with drug-eluting stents. Late stent thrombosis, or thrombosis >1 year after stent placement, is of particular concern for drug-eluting stents. This concern indicates a need for a longer course of dual antiplatelet therapy for patients with drug-eluting stents compared to those with bare metal stents.

Clinical Recommendation Statements:
The following evidence statements are quoted verbatim from the referenced clinical guidelines:

American College of Cardiology and American Heart Association (ACC/AHA) recommendation:
In patients who have received drug-eluting coronary stents and who must undergo urgent surgical procedures that mandate the discontinuation of thienopyridine therapy, it is reasonable to continue aspirin if at all possible and restart the thienopyridine as soon as possible. (Class IIa, Level of Evidence: C)

For patients treated with DES who are to undergo subsequent procedures that mandate discontinuation of thienopyridine therapy, aspirin should be continued if at all possible and the thienopyridine restarted as soon as possible after the procedure because of concerns about late-stent thrombosis.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

*ASA #20: Surgical Safety Checklist – Applicable Safety Checks Completed Before Induction of Anesthesia

Measure Description
Percentage of patients, regardless of age, who undergo a surgical procedure under anesthesia who have documentation that all applicable safety checks from the World Health Organization (WHO) Surgical Safety Checklist (or other surgical checklist that includes the applicable safety checks for the specific procedure) were performed before induction of anesthesia

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient undergoes a surgical procedure under anesthesia.

Measure Reporting via the Qualified Clinical Data Registry
For this measure, report the appropriate registry codes for each patient for whom all applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) were performed before induction of anesthesia.

Denominator
All patients, regardless of age, who undergo a surgical procedure under anesthesia

Denominator Criteria (Eligible Cases):
Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions
None

Numerator
Patients who have documentation that all applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) were performed before induction of anesthesia

Definition:
The WHO Surgical Safety Checklist includes the following items

Before Induction of Anesthesia

- Has the patient confirmed his/her identity, site, procedure and consent?
- Is the site marked?
- Is the anaesthesia machine and medication check complete?
- Is the pulse oximeter on the Patient And Functioning?
- Does the Patient have a:
    - Known Allergy?
    - Difficult Airway/Aspiration Risk?
    - Risk of >500 ml Blood Loss (7ml/kg in children)?

Numerator Quality-Data Coding Options for Reporting Satisfactorily:
Performance Met – Documented Use of WHO Surgical Safety Checklist:

ASA20A: All applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) performed before induction of anesthesia

OR
Performance Not Met

ASA20B: All applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) NOT performed before induction of anesthesia

Rationale
In 2009, the World Health Organization (WHO) Safe Surgery Saves Lives Study Group published a study showing that utilization of a surgical safety checklist resulted in reduced perioperative mortality and complication rates. Since then, surgical safety checklists have been widely implemented around the world. Further studies confirm the WHO findings that implementation of the surgical safety checklist improves communication among members of the surgical team and reduces perioperative morbidity and mortality.

While the number of surgery-related sentinel events has decreased over the past several years, operative care still remains one of the top ten root causes for sentinel events. To address patient safety concerns in the operating room, surgical safety checklists have been widely implemented in recent years. However, compliance with surgical safety checklists and safety checklist protocols has been shown to vary widely. The level of checklist compliance has been shown to vary depending on the implementation strategy.

Clinical Recommendation Statements:
WHO Guidelines for Safe Surgery

The World Health Organization's Surgical Safety Checklist reinforces established safety practices and ensures beneficial preoperative, intraoperative and postoperative steps are undertaken in a timely and efficient way.

Introducing key safety elements into the operating routine, teams could maximize the likelihood of the best outcome for all surgical patients without placing an undue burden on the system or the providers.

WHO Surgical Safety Checklist is available at http://www.who.int/patientsafety/safesurgery/en/

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #21: Smoking Abstinence

Measure Description
Percentage of current smokers who abstain from smoking cigarettes prior to anesthesia on the day of elective surgery or procedure.

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Intermediate Outcome

Instructions:
This measure is to be reported each time a patient who is a current smoker is evaluated in preparation for elective surgical, diagnostic, or pain procedure with instructions from a clinician to abstain from smoking on the day of surgery and is evaluated for smoking abstinence on the day of surgery. It is expected that anesthesia providers would either incorporate this advice as a part of the preoperative evaluation center or in collaboration with surgeons and proceduralists to ensure that instructions to stop smoking occur prior to surgery. The anesthesia provider would confirm smoking status of the patient on the day of surgery.

Measure Reporting via the Qualified Clinical Data Registry
Patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to identify the measure numerator.

Denominator
All patients aged 18 years and older who are evaluated in preparation for elective surgical, diagnostic, or pain procedure in settings that include routine screening for smoking status with instruction to abstain from smoking on the day of surgery or procedure.

> **Denominator Criteria (Eligible Cases):**
> All patients, aged 18 years and older
> **AND**
> Are evaluated in preparation for elective surgical, diagnostic, or pain procedure in settings that include routine screening for smoking status with instruction to abstain from smoking on the day of surgery or procedure (**ASA21A**)
> **AND**
> Current cigarette smokers **(ASA21B)**

Denominator Exclusions / Exceptions
None

Numerator
Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure*.

> **Definition:**
> Smoking abstinence is defined by either patient self-report or an exhaled carbon monoxide level of <10 ppm.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA21C: Patient abstained from smoking prior to anesthesia on the day of surgery or procedure

Performance Not Met:

ASA21D: Patient did NOT abstain from smoking prior to anesthesia on the day of surgery or procedure.

Rationale

Each year, millions of cigarette smokers require surgery and anesthesia in the US. Smoking is a significant independent risk factor for perioperative heart, lung, and wound-related complications. There now is good evidence that perioperative abstinence from smoking reduces the risk of heart, lung, and wound-related perioperative complications, and that the perioperative period represents a "teachable moment" for smoking cessation that improves long-term abstinence rates; over 100,000 smokers quit in the US each year as a result of having a surgical procedure. Although evidence suggests that the longer the duration of abstinence the better, there is also evidence that even brief abstinence (e.g., abstaining from smoking on the morning of surgery) can dramatically reduce both nicotine and carbon monoxide levels and reduce risks for complications such as intraoperative myocardial ischemia. Evidence shows that tobacco interventions can 1) increase perioperative abstinence rates in surigical patients who smoke and 2) decrease the rate of perioperative complications. Thus, this measure, which incents the provision of tobacco interventions by clinicians as a part of routine clinical practice, will significantly improve the health of smokers who require surgery.

Clinical Recommendation Statements:

In its Clinical Practice Guideline for Treating Tobacco Use and Dependence, the US Public Health Services recognizes the important role that clinicians play in delivering tobacco use intervention services, strongly recommending that clinicians screen all adults for tobacco use and provide tobacco cessation interventions for those who use tobacco products.

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #22: Corneal Injury Diagnosed in the Post-Anesthesia Care Unit/Recovery Area after Anesthesia Care (Inverse Measure)

Measure Description
The percentage of patients, aged 18 years and older, who undergo anesthesia care who have a diagnosis of corneal injury in the post-anesthesia care unit/recovery area.

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Process

Instructions:
This measure is to be reported each time a patient underwent a procedure* with anesthesia not involving patients with pre-existing eye trauma or those patients undergoing ophthalmologic surgery.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the measure numerator.

Denominator
All patients, aged 18 and older, who undergo anesthesia care, except those with pre-existing eye trauma or those patients undergoing ophthalmologic surgery.

Denominator Criteria (Eligible Cases):
Patient aged 18 and older
AND
Patient encounter during the reporting period (CPT):
00100, 00102, 00104, 00120, 00124, 00120, 00124, 00126, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744,01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966, 01968, 01969

Denominator Exclusions / Exceptions
Patients who undergo ophthalmologic surgery or patients with a diagnosis of either eye trauma or corneal injury before anesthesia care.

Numerator
All patients who undergo anesthesia care and have a diagnosis of corneal injury in the post-anesthesia care unit/recovery area.

Definition:
Corneal Injury: Includes both exposure keratitis and corneal abrasion. For the purposes of this measure, the distinction does not need to be made with fluorescein examination of the cornea under ultraviolet light; however, it can be diagnosed in this manner. Corneal injury also includes any new symptom of eye pain treated with topical antibiotic (e.g., erythromycin) while in the post-anesthesia care unit/recovery area. Other causes of eye pain (e.g. acute angle-closure glaucoma) can be excluded by instilling one drop of local anesthetic (e.g., proparacaine) into the eye. If the pain is immediately and completely relieved, corneal injury is confirmed and acute angle-closure glaucoma is excluded.

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
ASA22A: Patient diagnosed with exposure keratitis or corneal abrasion in the post-anesthesia care unit or recovery room.

OR
Performance Not Met – Medical Performance Exclusion:
ASA22B: Patient NOT diagnosed with exposure keratitis or corneal abrasion in the post-anesthesia care unit or recovery room.

Rationale
Corneal abrasion/injury is the most common ophthalmologic complication that occurs during general anesthesia for non-ocular surgery. These injuries are usually just painful for the patient, but can lead to significant microbial keratitis with possibility of permanent scarring. There is no standardized method for protecting the eyes during an anesthetic for non-ocular surgery. Adhesive tape, individual single, sterile packaged eye covers, small bio-occlusive dressings, used with or without eye ointment are some of the options used. Some practitioners may simply observe closed, non-taped eyes. The specific type of eye ointment also varies significantly. Some ointment is made with petrolatum, some is water soluble, with or without preservatives. If ointment is used, preservative-free eye ointment is preferred, because preservative can cause corneal epithelial sloughing and conjunctiva hyperemia. None of the methods described in the literature are entirely effective at preventing corneal injury and some are associated with unwanted side effects. It is important to know that petrolatum is flammable and should be avoided when cautery will be used near the face. Several large studies have demonstrated that applying these techniques while measuring performance can lead to significant improvements in patient care. Measuring the incidence of corneal injury will give practices the data they need to assess performance, compare to national benchmarks, and if gaps are identified, undertake measures to improve eye protection for patients. The net result will be reduced corneal injuries and patient discomfort. All eye trauma cases and all eye surgery cases will be excluded from the measure. Reporting separately those procedures done on the face, including the ear, nose, and mandible, will serve as stratification allowing comparison of procedures which most anesthesiologists believe have a higher risk of corneal injury and which also remove the eyes from the direct control of the anesthesiologist.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #23: Coronary Artery Bypass Graft (CABG): Prolonged Intubation

Measure Description
Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation > 24 hours

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a patient an isolated CABG procedure is performed during the reporting period. It is anticipated that eligible professionals who provide services, identified by CPT Codes listed below, for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
00566, 00567

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
Patient encounter during the reporting period (CPT): 33530
AND
00562

Denominator Exclusions / Exceptions
None

Numerator
Patients undergoing isolated CABG who require intubation > 24 hours following exit from the operating room

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
Prolonged postoperative intubation (> 24 hrs) required **(G8569)**

OR
Performance Not Met:
Prolonged postoperative intubation (> 24 hrs) not required **(G8570)**

Rationale
Based on an STS coronary artery bypass graft (CABG) study population, the morbidity rate associated with prolonged intubation following CABG is 5.96%. Also, prolonged ventilation (defined as > 24 hours) was an independent predictor for readmission to the ICU following CABG surgery (OR=10.53; CI: 6.18 to 17.91). Shorter ventilation times are linked to high quality of care (ie, reduced in-hospital and operative mortality, as well as better long-term outcomes as compared to prolonged ventilation).

Clinical Recommendation Statements:
Extubation greater than (>) 24 hours postoperatively is considered a "pulmonary complication". Patients who were extubated more than 24 hours after surgery had a longer duration of hospital stay and a greater incidence of postoperative complications.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #24: Coronary Artery Bypass Graft (CABG): Stroke

Measure Description
Percentage of patients aged 18 years and older undergoing isolated CABG surgery who have a ***postoperative*** stroke (ie, any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a patient an isolated CABG procedure is performed during the reporting period. It is anticipated that eligible professionals who provide services, identified by CPT Codes listed below, for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
00566, 00567

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
Patient encounter during the reporting period (CPT): 33530
AND
00562

Denominator Exclusions / Exceptions
None

Numerator
Patients undergoing isolated CABG surgery who have a postoperative stroke (ie, any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours
Numerator Instructions: A lower calculated performance rate for this measure indicates better clinical care.

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
Stroke following isolated CABG surgery **(G8573)**

OR
Performance Not Met:
No stroke following isolated CABG surgery **(G8574)**

Rationale
Stroke is a devastating complication after coronary bypass surgery. The 1999 American College of Cardiology/American Heart Association (ACC/AHA) guidelines indicate that adverse cerebral outcomes are observed in ~6% of patients after bypass surgery equally divided between 2 types:
1) associated with major, focal neurological defects, stupor or coma and 2) evidence of deterioration in intellectual function. Type 1 deficits occur in ~3% of patients and are responsible for 21% mortality.
Reports in the literature on postoperative stroke incidence are difficult to compare because the conditions included in the term "stroke" vary. A standardized definition of stoke will provide common language to compare stroke incidence and evaluate management strategies for reducing this devastating complication.
Reported rates of postoperative cerebral dysfunction range from 0.4% to 13.8% following coronary operations. Complications for patients undergoing emergent CABG or valve surgery were greater than the complication rate for patients undergoing elective CABG or valve surgery. As bypass times increased, so did the incidence of stroke. When bypass time was 90 to 113 minutes, OR =1.59, p=0.022 and when bypass time was > 114 minutes, the OR =2.59, $p < 0.001$. Outcomes are better when patient age is younger and with beating-heart surgery rather than on-pump surgery.

Clinical Recommendation Statements:
The 1999 ACC/AHA guidelines describe strategies for reducing the risk of postoperative stroke such as an aggressive approach to the management of patients with severely diseased ascending aortas identified by intraoperative echocardiographic imaging, prevention or aggressive management of postoperative atrial fibrillation, delay of bypass surgery in the case of a left ventricular mural thrombus or a recent, preoperative CVA and preoperative carotid screening. Patients should carefully be screened for cerebrovascular disease to help prevent stroke and its associated morbidities.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #25: Coronary Artery Bypass Graft (CABG): Post-Operative Renal Failure

Measure Description
Percentage of patients aged 18 years and older undergoing isolated CABG surgery (without pre-existing renal failure) who develop postoperative renal failure or require dialysis

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a patient an isolated CABG procedure is performed during the reporting period. It is anticipated that eligible professionals who provide services, identified by CPT Codes listed below, for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
00566, 00567

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536
AND
Patient encounter during the reporting period (CPT): 33530
AND
00562

Denominator Exclusions / Exceptions
None

Numerator
Patients who develop postoperative renal failure or require dialysis; (Definition of renal failure/dialysis requirement - patient had acute renal failure or worsening renal function resulting in one of the following: 1) increase of serum creatinine to ≥ 4.0 mg/dL or 3x most recent preoperative creatinine level (acute rise must be at least 0.5 mg/dL), or 2) a new requirement for dialysis postoperatively)

Performance Met:
Developed postoperative renal failure or required dialysis **(G8575)**

OR
Performance Not Met:
No postoperative renal failure/dialysis not required **(G8576)**

Rationale
In 2000, coronary artery bypass graft (CABG) surgery was performed on more than 350,000 patients at a cost of close to $20 billion. Some degree of Acute Renal Dysfunction (ARD) occurs in about 8% of patients following CABG, and dialysis-dependent renal failure occurs in 0.7% to 3.5% of patients receiving CABG. The latter is associated with substantial increases in morbidity, length of stay, and mortality (odds ratios for mortality range from 15 to 27). ARD is associated with increased morbidity, mortality and length of stay in an ICU following surgery. In addition, Acute Renal Failure occurs in 1.5% of patients undergoing any type of cardiac surgery. There has been a substantial increase in postoperative morbidity, mortality, and cost associated with this relatively common complication, regardless of whether or not this incidence varies much between providers, and there are implications of even a modest decrease in its incidence.

Clinical Recommendation Statements:
Acute renal failure following CABG is an intermediate outcome measure for mortality since this complication is independently associated (OR=27) with early mortality following cardiac surgery, even after adjustment for comorbidity and postoperative complications.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #28: Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Stenting (CAS)

Measure Description
Percent of asymptomatic patients undergoing CAS who experience stroke or death following surgery while in the hospital.

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a CAS is performed during the reporting period. It is anticipated that clinicians who provide services of CAS, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding..

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure. The measure must capture both the surgical and related anesthesia code. There are no allowable performance exclusions for this measure.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 37215
AND
(CPT) 01925
AND NOT
Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure: **9006F**
OR
Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke**: 9007F**

Denominator Exclusions / Exceptions
None

Numerator
Patients who experience stroke or death in the hospital following CAS

Numerator Instructions: A lower calculated performance rate for this measure indicates better clinical care or control.

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
Documentation of patient stroke following CAS **(G9257)**

OR
Performance Met:
Documentation of patient death following CAS **(G9256)**

OR
Performance Not Met:
Documentation of patient survival and absence of stroke following CAS **(G9259)**

Rationale
Surgeons performing CAS on asymptomatic patients must select patients at low risk for morbidity and perform the procedure with a very low complication rate in order to achieve benefit. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

Clinical Recommendation Statements: Updated Society for Vascular Surgery guidelines for management of extracranial carotid disease. Ricotta et al, J Vasc Surg, 54:3, 2011
Neurologically asymptomatic patients with ≥ 60% diameter stenosis should be considered for CAS for reduction of long-term risk of stroke, provided the patient has a 3- to 5-year life expectancy and perioperative stroke/death rates can be ≤ 3% (GRADE 1, Level of Evidence A).

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #29: Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Endarterectomy (CAE)

Measure Description
Percent of asymptomatic patients undergoing CEA who experience stroke or death following surgery while in the hospital.

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time a CEA is performed during the reporting period. It is anticipated that clinicians who provide services of CEA, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure. The measure must capture both the surgical and related anesthesia code. There are no allowable performance exclusions for this measure.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 35301
AND
(CPT) 00350
AND NOT
Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure**: 9006F**
OR
Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke: **9007F**

Denominator Exclusions / Exceptions
None

Numerator
Patients who experience stroke or death in the hospital following CEA

****** A lower calculated performance rate for this measure indicates better clinical care or control.******

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Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met: Documentation of patient stroke following CEA (G9258)

OR

Performance Met: Documentation of patient death following CEA (G9260)

OR

Performance Not Met: Documentation of patient survival and absence of stroke following CEA (G9261)

Rationale

Surgeons performing CEA on asymptomatic patients must select patients at low risk for morbidity and perform the procedure with a very low complication rate in order to achieve benefit. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

Clinical Recommendation Statements:

Updated Society for Vascular Surgery guidelines for management of extracranial carotid disease. Ricotta et al, JVasc Surg, 54:3, 2011

Neurologically asymptomatic patients with ≥ 60% diameter stenosis should be considered for CEA for reduction of long-term risk of stroke, provided the patient has a 3- to 5-year life expectancy and perioperative stroke/death rates
can be ≤ 3% (GRADE 1, Level of Evidence A).

Measure Steward

American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #30: Rate of Endovascular aneurysm repair (EVAR) of small or moderate non-ruptured abdominal aortic aneurysms (AAA) who expire while in the hospital

Measure Description
Percent of patients undergoing endovascular repair of small or moderate abdominal aortic aneurysms (AAA) that die while in the hospital.

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions:
This measure is to be reported each time an EVAR is performed during the reporting period. It is anticipated that clinicians who provide services of EVAR, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. A lower calculated performance rate for this measure indicates better clinical care or control.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes, CPT Category II codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure.

Denominator

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 34800, 34802
AND
(CPT): 01926
AND NOT
For women:
Aortic aneurysm 5.5 - 5.9 cm maximum diameter on centerline formatted CT or minor diameter on axial formatted CT**: 9003F**
OR
Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT**: 9004F**
OR
For men:
Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT**: 9004F**

Denominator Exclusions / Exceptions
None

Numerator
Patients who die in the hospital following endovascular AAA repair

Numerator Instructions: A lower calculated performance rate for this measure indicates better clinical care or control.

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met:
Documentation of patient death in the hospital following endovascular AAA repair ***(G9262)***

OR

Performance Not Met:
Documentation of patient survival in the hospital following endovascular AAA repair ***(G9263)***

Rationale
Elective repair of a small or moderate sized AAA is a prophylactic procedure and the mortality/morbidity of the procedure must be contrasted with the risk of rupture over time. Surgeons should select patients for intervention who have a reasonable life expectancy and who do not have a high surgical risk.

Clinical Recommendation Statements:
The care of patients with an abdominal aortic aneurysm: The Society for Vascular Surgery practice guidelines. Chaikof et al, J Vasc Surg, 50:4, supplement, 2009.

Elective repair is recommended for patients that present with a fusiform AAA ≥5.5 cm in maximum diameter, in the absence of significant co-morbidities.

Surveillance is recommended for most patients with a fusiform AAA in the range of 4.0 cm to 5.4 cm in maximum diameter.

Measure Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #31: Total Knee Replacement: Venous thromboembolic and Cardiovascular Risk Evaluation

Measure Description
Percentage of patients regardless of age or gender undergoing a total knee replacement who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of Deep Vein Thrombosis, Pulmonary Embolism, Myocardial Infarction, Arrhythmia and Stroke).

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Outcome

Instructions
This measure is to be reported each time a patient undergoes a procedure listed in the denominator during the measurement period.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure.

Denominator
Patients regardless of age or gender undergoing a total knee replacement

Denominator Criteria (Eligible Cases):

Denominator Criteria (Eligible Cases):
Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 27438
AND
Patient encounter during the reporting period (CPT): 01392

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 27442, 27446
AND
Patient encounter during the reporting period (CPT): 01400

OR

Patient aged ≥ 18 years on date of encounter

AND
Patient encounter during the reporting period (CPT): 27447
AND
Patient encounter during the reporting period (CPT): 01402

Denominator Exclusions / Exceptions:
None

Numerator
Patients who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of Deep Vein Thrombosis, Pulmonary Embolism, Myocardial Infarction, Arrhythmia and Stroke)

Numerator Options:

Performance Met:	Patients who are evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of DVT, PE, MI, arrhythmia and stroke) **(G9298)**
OR	
Performance Not Met:	Patients who are not evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including (e.g. history of DVT, PE, MI, arrhythmia and stroke, reason not given) **(G9299)**

Rationale
Prior to a total knee replacement the patient's venous thromboembolic and cardiovascular risk should be evaluated. A population-based study of all Olmstead County, Minnesota, patients undergoing a total hip or knee arthroplasty from 1994 - 2008, reported that patients undergoing a total knee arthroplasty with a previous history of a cardiac event or a thromboembolic event were associated with an increased risk of a 90-day cardiac or thromboembolic event following surgery. (Singh JA, Jensen MR, Harmsen WS, Gabriel SE, Lewallen DG, 2011)

A study using the Danish national resident registries compared all patients undergoing a primary THR and TKR from 1998 – 2007 to control groups not undergoing one of the procedures and found that the AMI rate 2 weeks after TKR was increased 31-fold compared to the control group. (Lalmohamed A, Vestergaard P, Klop C, Grove EL, 2012)

Any preoperative disease state should be identified and managed prior to surgery to minimize the risk of the surgical procedure.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the preoperative period."

Clinical Recommendation Statements
"ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for the Noncardiac Surgery (Fleischer LA, Beckman JA, Brown KA, et al. ACC/AHA, 2007)

In patients with known coronary artery disease (CAD) or the new onset of signs or symptoms suggestive of CAD, baseline cardiac assessment should be performed. In the asymptomatic patient, a more extensive assessment of history and physical is warranted in those individuals 50 years of age or older, because the evidence related to the determination of cardiac risk factors and derivation of a Revised Cardiac Risk Index occurred in this population. Preoperative cardiac evaluation must therefore be carefully tailored to the circumstances that have prompted the evaluation and to the nature of the surgical illness."

Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #32: Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet

Measure Description
Percentage of patients regardless of age or gender undergoing a total knee replacement who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet.

NQS Domain
Patient Safety

Measure Type (Process/Outcome)
Outcome

Instructions
This measure is to be reported each time a patient undergoes a procedure listed in the denominator during the measurement period.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure.

Denominator
Patients regardless of age or gender undergoing a total knee replacement

Denominator Criteria (Eligible Cases):

Denominator Criteria (Eligible Cases):
Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 27438
AND
Patient encounter during the reporting period (CPT): 01392

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 27442, 27446
AND
Patient encounter during the reporting period (CPT): 01400

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 27447

AND
Patient encounter during the reporting period (CPT): 01402

Denominator Exclusions / Exceptions:
None

Numerator
Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet (tourniquet around the proximal thigh)

Numerator Options:
Performance Met:
Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet **(G9301)**
OR
Medical Performance Exclusion:
Documentation of medical reason(s) for not completely infusing the prophylactic antibiotic prior to the inflation of the proximal tourniquet (e.g., a tourniquet was not used) **(G9300)**
OR
Performance Not Met:
Prophylactic antibiotic not completely infused prior to the inflation of the proximal tourniquet, reason not given **(G9302)**

Rationale
"The Surgical Care Improvement Project (SCIP) evaluates the timing and appropriateness of the prophylactic antibiotic. This measure evaluates that the prophylactic antibiotic is completely infused prior to the inflation of the tourniquet.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the intraoperative period."

Clinical Recommendation Statements
"National Surgical Infection Prevention Project Advisory Statement 2004 (Bratzler DW, Houck PM, 2005)

If a proximal tourniquet is used, the antimicrobial should be completely infused before inflation."

Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Measure Title

ASA #33: Unplanned Hospital Readmission within 30 days of Principal Procedure

Measure Description
Percentage of patients aged 18 years or older who had an unplanned hospital readmission within 30 days of principal procedure

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions
This measure is to be reported each time a patient undergoes a procedure listed in the denominator and within the timeframe of located in the numerator.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator
Patients aged 18 years or older who had an unplanned hospital readmission with 30 days of principal procedure

Denominator Criteria (Eligible Cases):
Patients aged 18 years or older who underwent surgical procedures related to: Ventral Hernia, Appendectomy, AV Fistula, Cholecystectomy, Thyroidectomy, Mastectomy +/- Lymphadenectomy or Sentinel Lymph Node Biopsy (SLNB), Partial Mastectomy or Breast Biopsy/Lumpectomy +/- Lymphadenectomy or SLNB, Bariatric Laparoscopic or Open Roux en Y Gastric Bypass, Bariatric Sleeve Gastrectomy, Colectomy and who had an unplanned hospital readmission within 30 days of principal procedure.

Denominator Criteria (Eligible Cases):
Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60271
AND
Patient encounter during the reporting period (CPT): 00320

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19101, 19301, 19303, 19304
AND
Patient encounter during the reporting period (CPT): 00400

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19305, 19307
AND
Patient encounter during the reporting period (CPT): 00404

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19306
AND
Patient encounter during the reporting period (CPT): 00406

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 60270
AND
Patient encounter during the reporting period (CPT): 00540

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49572, 49585, 49587
AND
Patient encounter during the reporting period (CPT): 00750

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49560, 49565, 49652, 49653, 49654, 49655, 49656, 49657
AND
Patient encounter during the reporting period (CPT): 00752

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44204, 44206, 44207, 44208, 44960, 49561, 49566
AND
Patient encounter during the reporting period (CPT): 00790 **OR** 00840

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44150, 44151, 44160, 44205, 44210, 47562, 47563, 47564, 47600, 47605, 47610
AND
Patient encounter during the reporting period (CPT): 00790

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 43644, 43645, 43775, 43846, 43847
AND
Patient encounter during the reporting period (CPT): 00797

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49590
AND
Patient encounter during the reporting period (CPT): 00830

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44950, 44970
AND
Patient encounter during the reporting period (CPT): 00840

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19302
AND
Patient encounter during the reporting period (CPT): 01610

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 36818, 36819, 36820, 36821, 36825, 36830
AND
Patient encounter during the reporting period (CPT): 01844

Denominator Exclusions / Exceptions:
None

Numerator
Patients aged 18 years or older who had an unplanned hospital readmission within 30 days of principal procedure to the same hospital or an outside hospital for any reason

Note: A lower calculated performance rate for this measure indicates better clinical care or control

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met: Unplanned hospital readmission within 30 days of principal procedure (G9310)
OR
Performance Not Met: **NO** unplanned hospital readmission within 30 days of principal procedure (G9309)

Rationale
This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted.

Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
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Measure Title

ASA #34: Surgical Site Infection

Measure Description
Percentage of patients aged 18 years or older who had a surgical site infection (SSI)

NQS Domain
Effective Clinical Care

Measure Type (Process/Outcome)
Outcome

Instructions
This measure is to be reported each time a patient undergoes a procedure listed in the denominator and within the timeframe identified in the numerator.

Measure Reporting via the Qualified Clinical Data Registry
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator
Patients aged 18 years or older who underwent surgical procedures related to: Ventral Hernia, Appendectomy, AV Fistula, Cholecystectomy, Thyroidectomy, Mastectomy +/- Lymphadenectomy or Sentinel Lymph Node Biopsy (SLNB), Partial Mastectomy or Breast Biopsy/Lumpectomy +/- Lymphadenectomy or SLNB, Bariatric Laparoscopic or Open Roux en Y Gastric Bypass, Bariatric Sleeve Gastrectomy, Colectomy and who had a surgical site infection (SSI).

Denominator Criteria (Eligible Cases):
Patients aged 18 years or older who underwent surgical procedures related to: Ventral Hernia, Appendectomy, AV Fistula, Cholecystectomy, Thyroidectomy, Mastectomy +/- Lymphadenectomy or Sentinel Lymph Node Biopsy (SLNB), Partial Mastectomy or Breast Biopsy/Lumpectomy +/- Lymphadenectomy or SLNB, Bariatric Laparoscopic or Open Roux en Y Gastric Bypass, Bariatric Sleeve Gastrectomy, Colectomy and who had a surgical site infection (SSI).

Denominator Criteria (Eligible Cases):
Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60271
AND
Patient encounter during the reporting period (CPT): 00320

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19101, 19301, 19303, 19304
AND

Patient encounter during the reporting period (CPT): 00400

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19305, 19307
AND
Patient encounter during the reporting period (CPT): 00404

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19306
AND
Patient encounter during the reporting period (CPT): 00406

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 60270
AND
Patient encounter during the reporting period (CPT): 00540

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49572, 49585, 49587
AND
Patient encounter during the reporting period (CPT): 00750

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49560, 49565, 49652, 49653, 49654, 49655, 49656, 49657
AND
Patient encounter during the reporting period (CPT): 00752

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44204, 44206, 44207, 44208, 44960, 49561, 49566
AND

Patient encounter during the reporting period (CPT): 00790 **OR** 00840

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44150, 44151, 44160, 44205, 44210, 47562, 47563, 47564, 47600, 47605, 47610
AND
Patient encounter during the reporting period (CPT): 00790

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 43644, 43645, 43775, 43846, 43847
AND
Patient encounter during the reporting period (CPT): 00797

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 49590
AND
Patient encounter during the reporting period (CPT): 00830

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 44950, 44970
AND
Patient encounter during the reporting period (CPT): 00840

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 19302
AND
Patient encounter during the reporting period (CPT): 01610

OR

Patient aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 36818, 36819, 36820, 36821, 36825, 36830
AND
Patient encounter during the reporting period (CPT): 01844

Denominator Exclusions / Exceptions:
None

Numerator
Percentage of patients aged 18 years and older who had a surgical site infection (SSI)

Note: A lower calculated performance rate for this measure indicates better clinical care or control

Definition:
Superficial Incisional SSI: Superficial incisional SSI is an infection that occurs within 30 days after the operation and infection involves only skin or subcutaneous tissue of the incision and at least one of the following:

- Purulent drainage, with or without laboratory confirmation, from the superficial incision
- Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision
- At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat AND superficial incision is deliberately opened by the surgeon, unless incision is culture-negative
- Diagnosis of superficial incisional SSI by the surgeon or attending physician

Deep Incisional SSI: Deep Incision SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and infection involved deep soft tissues (for example, fascial and muscle layers) of the incision and at least one of the following:

- Purulent drainage from the deep incision but not from the organ/space component of the surgical site
- A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms: fever (> 38 C), localized pain, or tenderness, unless site is culture-negative
- An abscess or other evidence of infection involving the deep incision is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of a deep incision SSI by a surgeon or attending physician

Organ/Space SSI: Organ/Space SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and the infection involves any part of the anatomy (for example, organs or spaces), other than the incision, which was opened or manipulated during an operation and at least one of the following:

- Purulent drainage from a drain that is placed through a stab wound into the organ/space.
- Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space
- An abscess or other evidence of infection involving the organ/space that is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of an organ/space SSI by a surgeon or attending physician

Numerator Quality-Data Coding Options for Reporting Satisfactorily
Performance Met: Surgical site infection (G9312)
OR
Performance Not Met: **NO** surgical site infection (G9311)

Rationale

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted.

Steward
American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)