AQI QCDR Measure Specification

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Anesthesia Quality Institute

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Non-PQRS QCDR Measures

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)..........................................................................................................................2
ASA #7: Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy (Adults)...............5
ASA #8: Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)..............................7
ASA #9: Anesthesiology: Post-Anesthetic Transfer of Care Measure: Procedure Room to a Post Anesthesia Care Unit................................................................................................................................................9
ASA #10: Composite Anesthesia Safety.................................................................................................................................................................................................12
ASA #11: Immediate Perioperative Cardiac Arrest Rate ..........................................................................................14
ASA #12: Immediate Perioperative Mortality Rate .................................................................................................16
ASA #13: PACU Re-intubation Rate ..........................................................................................................................18
ASA #14: Short-term Pain Management ..................................................................................................................20
ASA #15: Composite Procedural Safety for Central Line Placement.................................................................22
ASA #16: Composite Patient Experience Measure..............................................................................................24
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 receive an anesthetic and are admitted to an Intensive Care Unit (ICU) directly from the anesthetizing location, that have a documented use of a checklist or protocol for the transfer of care from the responsible anesthesia practitioner to the responsible ICU practitioner.

NQS Domain
Communication and Care Coordination

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 practitioner.

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

Numeration Quality-Data Coding Options for Reporting Satisfactorily:
All elements above are included in the transfer of care protocol or checklist and documented.
The following Cat II CPT codes are to be used:
0581F Patient transferred directly from anesthetizing location to critical care unit
0582F Patient not transferred directly from anesthetizing location to critical care unit
0583F Transfer of care checklist used
0584F Transfer of care checklist not used

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
Patient encounter during the reporting period (CPT): Anesthesia codes which are commonly indicated for associated surgical procedure(s):
Denominator Exclusions / Exceptions
None

Rationale
Hand-offs of care are a vulnerable moment for patient safety, but required in any 24/7 healthcare system. Anesthesia providers routinely transfer critically ill patients from the OR to the ICU, and are responsible for transmitting knowledge about patient history, a summary of intraoperative events, and future plans for hemodynamic and pain management to the ICU 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 this is an emerging best practice in anesthesia care.

Measure Type (Process/Outcome)
Process

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

Data Source
Claims and Registry

Measure Reporting via Admin/Claims Data
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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
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 receive an inhalational general anesthetic, and 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

Numerator
Patients who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic 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 (eg, ondansetron, dolasetron, granisetron and tropisetron)
• steroids (eg, dexamethasone)
• phenothiazines (eg, promethazine, prochlorperazine)
• phenylethylamine (eg, ephedrine)
• butyrophenones (eg, droperidol, haloperidol)
• antihistamine (eg, dimenhydrinate, diphenhydramine)
• anticholinergic (eg, transdermal scopolamine)

The following Cat II CPT codes should be reported:
4554F  Patient received inhalation anesthetic agent
4555F  Patient did not receive inhalational anesthetic agent
4556F  Patient exhibits 3 or more risk factors for post-operative nausea and vomiting
4557F  Patient does not exhibit 3 or more risk factors for post-operative nausea and vomiting
4558F  Patient received at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and intraoperatively

Denominator
All patients aged 18 years and older who receive an inhalational general anesthetic and have three or more risk factors for PONV

Definition:
Risk factors for PONV are:
(1) history of PONV or a history of motion sickness,
(2) non-smoker, and
(3) intended administration of opioids for post-operative analgesia*

*This includes use of opioids given intraoperatively 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.

Denominator Criteria (Eligible Cases):
   Patient >= 18
   And
   Patient Gender is female

Denominator Exclusions / Exceptions
Documentation of medical reason(s) for not administering pharmacologic prophylaxis (eg, intolerance or other)

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.

Measure Type (Process/Outcome)
Process

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

Data Source
Claims and Registry

Measure Reporting via Admin/Claims Data
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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
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 receive a general anesthetic in which an inhalation 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

NQS Domain
Person and Caregiver-Centered Experience and Outcomes

Numerator
Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes.

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 (eg, ondansetron, dolasetron, granisetron and tropisetron)
• steroids (eg, dexamethasone)
• phenothiazines (eg, promethazine, prochlorperazine)
• phenylethylamine (eg, ephedrine)
• butyrophenones (eg, droperidol, haloperidol)
• antihistamine (eg, dimenhydrinate, diphenhydramine)
• anticholinergic (eg, transdermal scopolamine)

The following Cat II CPT codes should be reported:
4554F Patient received inhalation anesthetic agent
4555F Patient did not receive inhalational anesthetic agent
4556F Patient exhibits 3 or more risk factors for post-operative nausea and vomiting
4557F Patient does not exhibit 3 or more risk factors for post-operative nausea and vomiting
4558F Patient received at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and intraoperatively

Denominator
All patients aged 3 through 17 years of age, who are having a general anesthetic 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):

Patient Age < 18
And
Patient Age > 2
And
Anesthesia duration > 30 minutes

Denominator Exclusions / Exceptions

Denominator Exclusion: Cases in which an inhalational anesthetic is used only for induction.
Denominator Exception: Documentation of medical reason(s) for not administering pharmacologic prophylaxis (e.g., intolerance or other)

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.

Measure Type (Process/Outcome)

Process

Steward

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

Data Source

Claims and Registry

Measure Reporting via Admin/Claims Data

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 measures 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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
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
Communication and Care Coordination

Numerator
All age 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 post-procedure care for whom a checklist or protocol which includes the key transfer of care elements is utilized.

- All age patients under the care of an anesthesia practitioner AND
- Are transferred to another practitioner in a PACU following completion of the anesthetic care AND a transfer of care protocol or handoff tool/checklist that includes the required key handoff elements is used. The key handoff elements that must be included in the transition of care include:
  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 reporting
All elements above are included in the transfer of care protocol or checklist and documented.

The following codes can be included in the ASA_08 measure field:
A Patient transferred directly from procedure room to PACU
B Patient not transferred directly from procedure room to PACU
C Transfer of care checklist used
D Transfer of care checklist not used

Note: Multiple codes can/should be used.

Denominator
All age 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.
• All age patients under the care of an anesthesia practitioner AND
• who are transferred directly to the PACU at the 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

  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, 00330, 00332, 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, 00563, 00566, 00567, 00570, 00572, 00580, 00600, 00620, 00622, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00772, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00812, 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, 01122, 01124, 01125, 01130, 01140, 01150, 01160, 01162, 01164, 01166, 01170, 01172, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01384, 01386, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01524, 01526, 01528, 01530, 01532, 01540, 01542, 01544, 01546, 01548, 01550, 01552, 01554, 01556, 01560, 01562, 01564, 01566, 01568, 01570, 01572, 01574, 01576, 01578, 01580, 01590, 01592, 01594, 01596, 01598, 01600, 01620, 01622, 01630, 01632, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01720, 01722, 01724, 01726, 01728, 01730, 01732, 01740, 01742, 01744, 01750, 01752, 01754, 01756, 01758, 01760, 01770, 01772, 01780, 01800, 01820, 01822, 01824, 01826, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01910, 01912, 01914, 01916, 01920, 01922, 01924, 01926, 01930, 01931, 01932, 01934, 01936, 01951, 01952, 01954, 01956, 01958, 01961, 01963, 01965, 01966, 01967, 01990, 01991, 01992, 01999

**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.

**Rationale**

Hand-offs of care 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 intraoperative 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 this is an emerging best practice in anesthesia care.

**Measure Type (Process/Outcome)**

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

Data Source
Claims and Registry

Measure Reporting via Admin/Claims Data
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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:

ASA #10: Composite Anesthesia Safety

Measure Description:
Completion of a scheduled surgical procedure without the occurrence of a serious adverse event. The procedure is considered complete when the patient leaves the operating room or arrives in the PACU/ICU. The list of serious adverse events is defined here: http://www.aqihq.org/CPOM-registry-data-set.pdf

NQS Domain:
Effective Clinical Care

Numerator:
All patients who have the planned procedure, and who do not have a major complication of anesthesia

The following codes can be included in the ASA_10 measure field:
A Patient did not experience serious adverse event at completion of scheduled surgical procedure
B Patient did experience serious adverse event at completion of scheduled surgical procedure
C Patient did not have scheduled surgical procedure

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, 00452, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00526, 00540, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00622, 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, 01124, 01126, 01140, 01142, 01144, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01252, 01252, 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,
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 a scheduled surgery or procedure 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 Type (Process/Outcome):
Outcome

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

Data Source:
Claims, Registry, and HER

Measure Reporting via Admin/Claims Data
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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:
ASA #11: Immediate Perioperative Cardiac Arrest Rate

Measure Description:
For all non-emergent surgical cases, the numbers of patients who experience a cardiac arrest prior to PACU discharge.

Cardiac arrest is broadly defined as the cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation. Includes use of cardiac compressions and/or defibrillation and occurs with the first 48 hours after induction of anesthesia. Any episode of cardiovascular instability requiring closed chest compressions.

NQS Domain:
Patient Safety

Numerator
Number of patients experiencing an unanticipated cardiac arrest

The following codes can be included in the ASA_11 measure field:
A Patient did experience unanticipated cardiac arrest
B Patient did not experience unanticipated cardiac arrest
C Patient did not have surgical case
D Patient had planned cardiac arrest: deep hypothermia, electrophysiology cases, cardiac bypass cases

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, 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, 00620, 00622, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00710, 00712, 00714, 00716, 00720, 00722, 00724, 00726, 00728, 00740, 00742, 00744, 00746, 00748, 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, 00916, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00946, 00948, 00950, 00952, 01112, 01120, 01122, 01130, 01132, 01150, 01152, 01154, 01156, 01170, 01172, 01174, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01222, 01230, 01232, 01250, 01252, 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,
Denominator Exclusions / Exceptions:
Cases with planned cardiac arrest: deep hypothermia, electrophysiology cases, cardiac bypass cases
Emergent cases are excluded. These are identified by ASA Physical Status indicating case is emergent by using ‘E’ designation.

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 Type (Process/Outcome):
Intermediate Outcome

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

Data Source:
Claims and Registry

Measure Reporting via Admin/Claims Data
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 these measures 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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:
ASA #12: Immediate Perioperative Mortality Rate

Measure Description:
For all non-emergent surgical cases, the mortality prior to PACU discharges.

NQS Domain:
Patient Safety

Numerator:
The Number of patients who die in OR / PACU prior to discharge

The following codes can be included in the ASA_12 measure field:
A  Patient experienced mortality
C  Patient did not have surgical case
D  Patient presented for organ harvesting

Denominator:
All scheduled procedures receiving anesthesia

Denominator Criteria (Eligible Cases):
Patient of any age
And
ASA Physical Status indicate case was non-emergent (‘E’ is not present )
And
Patient encounter during the reporting period (CPT): Anesthesia codes which are commonly indicated for associated surgical procedure(s): 00100,00102, 00103, 00104, 00112, 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, 00452, 00454, 00470, 00472, 00474, 00500, 00520, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00544, 00548, 00550, 00555, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00622, 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,
Denominator Exclusions / Exceptions:
Organ Donors as designated by ASA Physical Status of 6

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 Type (Process/Outcome):
Outcome

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

Data Source:
Claims, Registry, and HER

Measure Reporting via Admin/Claims Data
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 measures 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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:

ASA #13: PACU Re-intubation Rate

Measure Description:
For all patients with a planned extubation following general anesthesia, the number requiring re-intubation prior to PACU discharge.

NQS Domain:
Patient Safety

Numerator:
The number of patients re-intubated with an ETT or new surgical airway. Any such patient who was extubated and then re-intubated before leaving the PACU

The following codes can be included in the ASA_13 measure field:
A Patient was re-intubated prior to PACU discharge
B Patient was not re-intubated prior to PACU discharge
C Patient was not previously intubated

Denominator:
All patients receiving GETA who are extubated prior to PACU discharge. Any patient not previously intubated who was intubated for the surgical procedure.

Denominator Exclusions / Exceptions:
Exclude patients transferred directly to the ICU from the OR.

Rationale:
Early reintubation 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 Type (Process/Outcome):
Intermediate Outcome

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

Data Source:
Claims, Registry, and HER

Measure Reporting via Admin/Claims Data
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 measures 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.

**Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:

ASA #14: Short-term Pain Management

Measure Description:
The number of patients admitted to the PACU following an anesthetic with a maximum pain score >7/10.

NQS Domain:
Person and Caregiver-Centered Experience and Outcomes

Numerator:
The number of lucid patients with an initial pain score 7/10 or higher

The following codes can be included in the ASA_14 measure field:
A Patient experienced pain > 7 out of 10
B Patient did not experience pain > 7 out of 10
C Patient was not lucid
D Patient was unable to communicate clearly

Denominator:
All patients age 10 and greater admitted to PACU who can be assessed for pain

Denominator Criteria ( Eligible Cases):
Patient of any age >= 10
And Patient can be assessed for pain
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, 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, 00620, 00622, 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, 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, 01489, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01658, 01660, 0170, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830,
Denominator Exclusions / Exceptions:
Chronic pain patients taking narcotics prior to surgery, patients with major psychiatric disorders, patients who do not speak English or present a language barrier.

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 Type (Process/Outcome):
Intermediate Outcome

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

Data Source:
Claims, Registry, and EMR

Measure Reporting via Admin/Claims Data
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 measures 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.

Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:

ASA #15: Composite Procedural Safety for Central Line Placement

Measure Description:
The number of patients who experience pneumothorax or arterial injury following central line placement.

NQS Domain:
Patient Safety

Numerator:
The number of patients with documented arterial injury (from the medical record or PSI code) or pneumothorax requiring thoracotomy placement (CPT 32035, 32036, 32551)

The following codes can be included in the ASA_15 measure field:
A Patient experienced injury
B Patient did not experience injury
D Unable to determine

Denominator:
All patients receiving central line placement for a planned surgical procedure

Denominator Exclusions / Exceptions:
Emergencies

Rationale:
Placement of central venous catheters is common for anesthesia providers, 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 Type (Process/Outcome):
Intermediate Outcome

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

Data Source:
Claims, Registry, and HER

Measure Reporting via Admin/Claims Data
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.

**Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.
Measure Title:

ASA #16: Composite Patient Experience

Measure Description:
Patient was surveyed regarding anesthesia experience using an approved tool. This can be CAHPS-S or another survey tool that meets the recommendations of the ASA CPOM paper on patient satisfaction. The paper is available here: [http://www.aqihq.org/files/ASA_Membership_Patient_Satisfaction.pdf](http://www.aqihq.org/files/ASA_Membership_Patient_Satisfaction.pdf)

NQS Domain:
Person and Caregiver-Centered Experience and Outcomes

Numerator:
The following codes can be included in the ASA_16 measure field:
A  Patient was surveyed
B  Patient was not surveyed
D  Patient was unable to be surveyed

Denominator:
Patient of any age >= 18
And
OR Case

Denominator Exclusions / Exceptions:
Non-verbal patients, patients with major psychiatric disorders, patients who cannot be surveyed due to language barriers.

Rationale:
Patient-centered outcomes are important discriminators of the quality of anesthesia practice, and every anesthesia department and provider should have access to relevant S-CAHPS data collected by the facility, as a means of guiding quality improvement initiatives.

Measure Type (Process/Outcome):
Composite

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

Data Source:
Other – CAHPS
Other – approved survey tool with an anesthesia component

**Measure Reporting via Admin/Claims Data**

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 measures 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.

**Measure Reporting via 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 quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

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