

INTERNAL IMPROVEMENT MEASURES 2018 MEASURE BOOK

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National Anesthesia Clinical Outcomes Registry
Anesthesia Quality Institute

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‡‡ The efforts and contributions of ePREOP and MEDNAX to harmonize this Measure with other similar anesthesia quality measures and to update this Measure on an ongoing basis is acknowledged.

Introduction

The Anesthesia Quality Institute's National Anesthesia Clinical Outcomes Registry (AQI NACOR), established by the American Society of Anesthesiologists® (ASA), assists anesthesiologists in assessing and improving patient care.

Measures used in regulatory programs are altered or retired annually due to changing regulatory requirements and program objectives set out by The Centers for Medicare & Medicaid Services (CMS). AQI NACOR recognizes that retired measures or those not suitable for CMS programs may still be meaningful for anesthesiologists and other qualified anesthesia providers. Reporting these measures may aid a practice in benchmarking their performance, demonstrating their value and quality care to payers and facility administrations or as part of practice and quality improvement initiatives.

Measures in this book, identified as Internal Improvement Measures (IIM), are a collection of measures available for reporting to NACOR for internal improvement purposes only. These measures are optional for practices to report. CMS has not recognized and will not accept these measures as part of an anesthesiologist's or practice's participation in the Merit-based Incentive Payment System (MIPS) or as part of an Advanced Alternative Payment Model (APM). AQI NACOR will not send data gathered on these measures to CMS.

Participants in NACOR Basic and Quality Concierge® can report IIMs regardless of their participation in the MIPS or an APM. If MIPS-eligible or within an APM, NACOR participants can submit data to AQI NACOR on these IIMs in addition to reporting MIPS and QCDR measures through the Qualified Registry and Qualified Clinical Data Registry (QCDR).

Measure Title

IIM01: Assessment of Acute Postoperative Pain

Measure Description

Percentage of patients aged 18 years or older admitted to the postanesthesia care unit (PACU) following an anesthetic with an initial pain score < 7 out of 10.

Measure Type

Intermediate Outcome

Inverse Measure

No

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 NACOR

CPT codes, registry 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 18 years and older admitted to PACU who are assessed for pain.

Denominator Criteria (Eligible Cases):

Patients age 18 years or older on date of encounter

AND

Patient assessed for pain in the postanesthesia care unit: **11A02**

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, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 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, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 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, 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, 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, 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, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients with an initial pain score < 7 out of 10

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A03 Patient has an initial pain score of < 7 out of 10

OR

Performance Not Met:

11A04 Patient has an initial pain score of ≥ 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. 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.

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Measure Title

IIM02: Patient Education on Safe Opioid Storage and Disposal†

Measure Description

Percentage patients prescribed opioid medications in an outpatient setting who were provided oral and written education on safe storage and disposal of opioid medications.

Measure Type

Process

Inverse Measure

No

Instructions

This measure is to be reported each time a patient is prescribed opioid medications in the outpatient setting. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

Patient demographics and CPT codes are used to identify patients who are included in the measure denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who are prescribed opioid medications in an outpatient setting

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT):

99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99224, 99225, 99226, 99241, 99242, 99243, 99244, 99245, 99281, 99282, 99283, 99284, 99285

AND

Opioid prescribed during visit: **10A32**

Denominator Exclusions

- None

Numerator

Patients who were provided oral and written education on safe storage and disposal of opioid medications.

Numerator Note: To meet this measure, the prescribing provider, or other member of the care team under the direction of the prescribing provider, must provide both oral and written education. Provision of written educational materials alone is not sufficient. Education can be documented by provider in an encounter note, visit summary, or discharge instructions.

The content of written educational materials will vary depending on location. Some examples of written educational materials are included below for reference:

http://www.aafp.org/dam/AAFP/documents/patient_care/pain_management/safe-storage.pdf

https://productstewardship.site-ym.com/page/What_To_Do_With_Meds

<https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm101653.htm>

https://www.deadiversion.usdoj.gov/drug_disposal/non_registrant/index.html

<https://apps.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e1s1>

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A73

Oral and written education was provided on safe storage and disposal of opioid medications

OR

Performance Not Met:

10A74

Oral and written education was not provided on safe storage and disposal of opioid medications

Rationale

The prescription opioid epidemic continues to grapple the nation. Most adolescents and adults reporting nonmedical use of opioid medications obtain these medications through their family or friends.ⁱ Recent literature suggests that current practices related to sharing, storing, and disposing of opioid medications, as well as communication of information on these topics, are suboptimal.ⁱⁱ There is literature to support that educating patients on safe opioid use, storage, and disposal improves outcomes.ⁱⁱⁱ Patients who received educational material were:

1. More likely to keep their medication hidden or locked in a safe place
2. Less likely to have unused medication at home
3. More aware of the proper opioid disposal methods
4. More likely to be aware of the potential danger of their opioids being taken by others
5. Significantly less likely to share their opioids with someone else
6. Less likely to practice unsafe use of opioids, defined as sharing or losing their opioids

This underscores the importance of including safe opioid storage and disposal education at every instance in which patients are prescribed opioids for their pain.

Clinical Recommendation Statements

2016 CDC Guideline for Prescribing Opioids for Chronic Pain-United States^{iv}

“Discuss risks to household members and other individuals if opioids are intentionally or unintentionally shared with others for whom they are not prescribed, including the possibility that others might experience overdose at the same or at lower dosage than prescribed for the patient and that young children are susceptible to unintentional ingestion. Discuss storage of opioids in a secure, preferably locked location and options for safe disposal of unused opioids.”

2017 VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain^v

“When prescribing opioids, provide in-depth and patient-specific education on medication (e.g., side effects, dosing, administration, storage, safety, disposal, take back programs) during medical visits in conjunction with distributing or otherwise enabling access to educational materials.”

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References:

ⁱ Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: mental health findings. <http://www.samhsa.gov/data/sites/default/files/NSDUHmhfr2013/NSDUHmhfr2013.pdf>. Published November 2014.

ⁱⁱ Kennedy-Hendricks A, Gielen A, McDonald E, McGinty EE, Shields W, Barry CL. Medication Sharing, Storage, and Disposal Practices for Opioid Medications Among US Adults. *JAMA Intern Med.* 2016;176(7):1027–1029.

ⁱⁱⁱ de la Cruz M, Reddy A, Balankari V, et al. The impact of an educational program on patient practices for safe use, storage, and disposal of opioids at a comprehensive cancer center. *Oncologist.* 2016 Oct 14. doi: 10.1634/theoncologist.2016-0266.

^{iv} Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain—United States, 2016. *JAMA.* 2016;315(15):1624-1645. Doi: 10.1001/jama.2016.1464

^v The Opioid Therapy for Chronic Pain Work Group; Office of Quality, Safety and Value, Veterans Affairs; Office of Evidence Based Practice, U.S. Army Medical Command. VA/DoD clinical practice guideline for opioid therapy for chronic pain. Department of Veterans Affairs, Department of Defense. Version 3.0. 2017. Available at: <https://www.healthquality.va.gov/guidelines/Pain/cot/VADoDOTCPG022717.pdf>. Accessed August 31, 2017.

Measure Title

IIM03: Perioperative Cardiac Arrest

Measure Description

Percentage of patients, regardless of age, who undergo a procedure* under anesthesia who experience an unanticipated cardiac arrest under the care of a qualified anesthesia provider prior to anesthesia end time.**

Measure Type

Outcome

Inverse Measure

Yes

Instructions

This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia that does not include planned cardiac arrest. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

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):

All patients, regardless of age

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, 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, 00566, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6
- Cases with a documented planned cardiac arrest (i.e., use of CPT Code 99116 for deep hypothermia)

Numerator

Patients who experienced an unanticipated cardiac arrest* under the care of a qualified anesthesia provider prior to anesthesia end time**.

Definitions: * Cardiac arrest is the unplanned cessation of the mechanical activity of the heart as confirmed by the absence of signs of effective circulation. Cardiac compression and/or defibrillation may be required for treatment.ⁱ

** Anesthesia End (Finish) Time is the time at which the anesthesiologist turns over care of the patient to a post anesthesia care team (either PACU or ICU). This time ends when the anesthesia team is no longer furnishing anesthesia services to the patient, that is when the patient may be placed safely under postoperative care and when the anesthesia team has completed transfer of patient care.ⁱ

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A28 Patient experienced an unanticipated cardiac arrest

OR

Performance Not Met:

10A29 Patient did not experience unanticipated cardiac arrest

Rationale

Cardiac arrest in the perioperative period is an unplanned event where the actions of an anesthesiologist or other qualified anesthesia provider are essential to preventing patient harm and, should cardiac arrest occur, to effectively treat cardiac arrest and prevent further complications. Prevention of cardiac arrest is a core goal of anesthesia providers as they are the clinicians responsible for cardiopulmonary function of the patient and in ensuring proper airway management.

The *Perioperative Cardiac Arrest* measure reflects the performance of qualified anesthesia providers in preventing perioperative cardiac arrest. A number of recent studies have identified the central role anesthesiologists play in preventing cardiac arrest of patients. Approximately 23-28% of perioperative cardiac arrests are directly attributable to complications from anesthesia.^{ii, iii, iv} One study found that 54% of cardiac arrests under neuraxial anesthesia were directly related to the anesthetic.ⁱⁱⁱ Overall, airway management and medication factors were the most common causes of anesthesia-related cardiac arrests, with airway management issues accounting for 64% of anesthesia-related cardiac arrests.^{iii, iv} Studies found mortality resulting from cardiac arrest cases directly related to anesthesia was approximately 30%.ⁱⁱ

These findings suggest anesthetic complications may occur in part due to physician decision-making related to airway management and other factors, which can significantly influence and affect patient outcomes, including mortality.ⁱⁱ With about 25% of perioperative cardiac arrests attributable to anesthesia-related causes, this measure addresses a serious medical event often related to the decisions of the qualified anesthesia providers.ⁱⁱ Moreover, it is the

responsibility of the qualified anesthesia providers to manage perioperative cardiac arrest, including resuscitating and treating the patient as well investigating the etiology of the cardiac arrest regardless of its cause. Although several providers impact patient safety and outcomes, qualified anesthesia providers play a leading role in ensuring patient safety in the perioperative period. One study examining closed claims of anesthesia malpractice found delays in recognition and treatment of hemorrhage and communication breakdowns including between the anesthesiologist and surgeon contributed to adverse patient outcomes.^v Evidence supports the integral position of anesthesiologists and other qualified anesthesia providers during the perioperative period, and demonstrates how anesthesiology practice can influence patient outcomes, including perioperative cardiac arrest.

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References

ⁱ ASA Ad Hoc Committee on Data Definitions, 2017, <https://www.aqihq.org/qualitymeasurementtools.aspx>

ⁱⁱ Ellis SJ, Newland MC, Simonson JA, Peters KR, Romberger DJ, Mercer DW, Tinker JH, Harter RL, Kindscher JD, Qiu F, Lisco SJ. Anesthesia-related cardiac arrest. *Anesthesiology*. 2014; 120:829-38.

ⁱⁱⁱ Kopp SL, Horlocker TT, Warner ME, Hebl JR, Vachon CA, Schroeder DR, Gould AB, Sprung J. Cardiac Arrest During Neuraxial Anesthesia: Frequency and Predisposing Factors Associated with Survival. *Anesth Analg*. 2005; 100(3):855-65.

^{iv} Nunes JC, Braz JRC, Oliveira TS, de Carvalho LR, Castiglia YMM, Braz LG. Intraoperative and Anesthesia-Related Cardiac Arrest and Its Mortality in Older Patients: A 15-Year Survey in a Tertiary Teaching Hospital. *PLOS ONE*. 2014; 9(8).

^v Dutton RP, Lee LA, Stephens LS, Posner KL, Davies JM, Domino KB. Massive hemorrhage: A report from the Anesthesia Closed Claims Project. *Anesthesiology*. 2014; 121:450-58

Measure Title

IIM04: Perioperative Care: Timing of Prophylactic Antibiotic – Administering Physician

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)

Measure Type

Process

Inverse Measure

No

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 (e.g., contraindicated, patient already receiving antibiotics).

Measure Reporting via NACOR

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.

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, 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

- 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.

<ul style="list-style-type: none">• Ampicillin/sulbactam• Aztreonam• Cefazolin• Cefmetazole• Cefotetan• Cefoxitin	<ul style="list-style-type: none">• Cefuroxime• Ciprofloxacin• Clindamycin• Ertapenem• Erythromycin base• Fluoroquinolone• Gatifloxacin	<ul style="list-style-type: none">• Gentamicin• Levofloxacin• Metronidazole• Moxifloxacin• Neomycin• Vancomycin
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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

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.

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.

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.

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 Statements

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)

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates:	Not applicable
Proportion Measure Scoring:	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No

Measure Title

IIM05: Perioperative Mortality Rate††

Measure Description

Percentage of patients, regardless of age, who undergo a procedure* under anesthesia and who experience mortality under the care of an anesthesia provider prior to anesthesia end time.**

Measure Type

Outcome

Inverse Measure

Yes

Instructions:

This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

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):

All patients, regardless of age

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 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, 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, 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, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who experience mortality* under the care of an anesthesia provider prior to anesthesia end time**.

Definitions: * Death or mortality is defined as the irreversible cessation of all vital functions as indicated by permanent stoppage of the heart, respiration and brain activity; the end of life.¹

** Anesthesia End (Finish) Time is the time at which the anesthesiologist turns over care of the patient to a post anesthesia care team (either PACU or ICU). This time ends when the anesthesia team is no longer furnishing anesthesia services to the patient, that is when the patient may be placed safely under postoperative care and when the anesthesia team has completed transfer of patient care.ⁱ

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A30 Patient experienced mortality under the care of a qualified anesthesia provider prior to anesthesia end time.

OR

Performance Not Met:

10A31 Patient did not experience mortality under the care of a qualified anesthesia provider prior to anesthesia end time.

Rationale

Anesthesiologists and qualified anesthesia providers provide a multi-faceted approach to ensuring patient safety during a procedure and in the postanesthesia care unit. Among other responsibilities, anesthesiologists and qualified anesthesia providers are responsible for the cardiopulmonary management of the patient. The mortality rate reflects deaths that occur while a patient is undergoing a procedure under the care of an anesthesia provider during the perioperative period. The measure extends beyond the intraoperative component of care (within the operating room) since a significant number of complications develop during the recovery phase (after leaving the operating room).

Patient mortality is a primary concern for anesthesiologists and qualified anesthesia providers, patients and the families and caregivers of the patients. Immediate perioperative death either in the operating room or postanesthesia care unit is a catastrophic event that should rarely occur. All deaths should trigger an investigation into the causes and events that led to the death with subsequent new procedures or training put in place to prevent such deaths from happening in the future.

Capturing this data in a uniform fashion allows for an assessment of variability across practices and identify outliers at the individual physician level.

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates:	Not applicable
Proportion Measure Scoring:	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No

References

ⁱ ASA Ad Hoc Committee on Data Definitions, 2017, <https://www.aqihq.org/qualitymeasurementtools.aspx>

ⁱⁱ Bainbridge, Daniel, et al. "Perioperative and anaesthetic-related mortality in developed and developing countries: a systematic review and meta-analysis." *The Lancet* 380.9847 (2012): 1075-1081.

ⁱⁱⁱ Landoni, Giovanni, et al. "Randomized evidence for reduction of perioperative mortality." *Journal of cardiothoracic and vascular anesthesia* 26.5 (2012): 764-772.

Measure Title

IIM06: Postanesthesia Care Unit (PACU) Re-intubation Rate‡

Measure Description

Percentage of patients, regardless of age, who received general anesthesia for a procedure via endotracheal tube who were extubated in the operating room or the postanesthesia care unit (PACU) and required re-intubation prior to PACU discharge.

Measure Type

Intermediate Outcome

Inverse Measure

Yes

Instructions

This measure is to be reported each time a patient, regardless of age, undergoes a procedure under the care of an anesthesia provider under general anesthesia via endotracheal tube who was extubated in the operating room or the postanesthesia care unit (PACU). It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

CPT codes, registry 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.

Denominator

All patients, regardless of age, who received general anesthesia for a procedure via endotracheal tube who were extubated in the operating room or postanesthesia care unit.

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient received general anesthesia that includes an endotracheal tube: **10A15**

AND

Patient was extubated in the operating room or postanesthesia care unit (PACU): **10A33**

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, 01953, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6
- Patients who bypassed PACU care: **10A25**
- Patient received a planned trial of extubation documented in the medical record prior to removal of the original endotracheal tube: **10A34**

Numerator

Patients who required re-intubation in the postanesthesia care unit

Definition: Reintubation is defined as the need to insert an endotracheal tube resulting from the inability to sustain adequate spontaneous breathing occurring after the removal of an artificial airway.ⁱ

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A35 Patient required re-intubation in the postanesthesia care unit

Performance Not Met:

10A36 Patient did not require re-intubation in the postanesthesia care unit

Rationale

Anesthesiologists and qualified anesthesia providers are responsible for safe and appropriate airway management of patients undergoing a procedure under the care of an anesthesia provider during the perioperative period. The need for early repeat airway management of surgical patients is strongly associated with subsequent serious adverse outcomes including, but not limited to, prolonged hospital stays, transfer to the Intensive Care Unit (ICU) and increased costs of care. Assessment of this measure under a unified definition is an important tool for benchmarking the performance of anesthesia practices and individual anesthesiologists and qualified anesthesia providers.

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References:

ⁱASA Ad Hoc Committee on Data Definitions, 2017, <https://www.aqihq.org/qualitymeasurementtools.aspx>

Measure Title

IIM07: Postdural Puncture Headache after Epidural Anesthesia/Analgesia

Measure Description

Percentage of patients, regardless of age, who undergo an obstetric procedure using epidural anesthesia or analgesia who experience a postdural puncture headache.

Measure Type

Outcome

Inverse Measure

Yes

Instructions

This measure is to be reported each time a patient undergoes an obstetric procedure using epidural anesthesia or analgesia during the reporting period. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

Patient demographics and CPT codes are used to identify patients who are included in the measure denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo an obstetric procedure using epidural anesthesia

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Anesthesia Type: Epidural

AND

Obstetric Procedure (CPT): 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, +01968, +01969

Denominator Exclusions / Exceptions

- None

Numerator

Patients who experienced a postdural puncture headache.

Definition: Postdural Puncture Headache: The new onset of pain in various parts of the head, not confined to the area of distribution of any nerve, usually occurring within 72 hours of an intended or unintended dural puncture. Signs and symptoms include the headache worsening in the sitting or upright position, usually relieved when the patient is supine, may be accompanied by visual or auditory changes, and may occur more frequently in younger patients when the dura has been punctured. A clinical scenario in which a postdural puncture headache may present may be following placement of an epidural or spinal anesthetic or sometimes following a nerve block in close proximity to the neuraxis (e.g. paravertebral or interscalene block).

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:
10A64

Patient experienced a postdural puncture headache

OR

Performance Not Met:
10A65

Patient did not experience a postdural puncture headache

Rationale

Postdural puncture headache is a significant and painful complication of anesthesia care, most often associated with obstetric patients following labor and delivery. While 30% of obstetric patients present with headache following birth for various reasons such as caffeine withdrawal or lack of sleep, postdural puncture headaches differ in that they are a direct result of dura puncture during administration of spinal anesthesia. Research suggests that 20,000 to 50,000 patients experience postdural puncture headache each year.ⁱ

Postdural puncture headaches can leave patients debilitated for days, slowing recovery and reducing ambulation and mother-to-child interaction during the first few days following birth. Although an adverse outcome on its own, postdural puncture headache can also be a precursor to other serious conditions such as chronic headache, subdural hematoma, cerebral herniation and even death.ⁱⁱ There is a range of activities that a provider can take to reduce the likelihood of a postdural puncture headache, including needle selection and anesthesia technique. As administrators of anesthesia, physician anesthesiologists and other qualified anesthesia providers are able to influence behaviors and practices that may contribute directly to postdural puncture headaches. With an abundance of research supporting the use of pencil-point needles for spinal anesthesia and the prevalence of postdural puncture headaches, anesthesiologists are well suited to address this significant gap in care.ⁱⁱⁱ

Clinical Recommendation Statement

2016 ASA/SOAP Practice Guidelines for Obstetric Anesthesia^{iv}

“Use pencil-point spinal needles instead of cutting-bevel spinal needles to minimize the risk of postdural puncture headache.” (Category A1-B evidence)

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References:

ⁱ Sachs A, Smiley R. Post-dural Puncture Headache: The Worst Common Complication in Obstetric Anesthesia. *Seminars in Perinatology*. 2014;38(6): 386-394. <https://doi.org/10.1053/j.semperi.2014.07.007>.

ⁱⁱ Turnbull DK, Shepherd, DB; Post-dural Puncture Headache: Pathogenesis, Prevention and Treatment. *British Journal of Anaesthesia*, 2003; 91(5): 718–729, <https://doi.org/10.1093/bja/aeg231>

ⁱⁱⁱ Xu H, Liu Y, Song W, ShunLi K, et, al. Comparison of Cutting and Pencil-Point Spinal Needle in Spinal Anesthesia Regarding Postdural Puncture Headache: A Meta-Analysis. *Medicine (Baltimore)*. 2017 Apr; 96(14): e6527

^{iv} American Society of Anesthesiologists Committee on Standards and Practice Parameters. Practice Guidelines for Obstetric Anesthesia. An Updated Report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia and the Society for Obstetric Anesthesia and Perinatology. *Anesthesia*. 2016;124(2):1-3

Measure Title

IIM08: Pre-Procedural Timeout Checklist†

Measure Description

Percentage of patients, regardless of age, that undergo an interventional pain procedure or other procedure under regional anesthesia and that have documentation that all applicable safety checks from the ASRA Checklist for Performing Regional Nerve Blocks were performed prior to the administration of anesthesia/analgesia.

Measure Type

Process

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes an interventional pain procedure or procedure under regional anesthesia during the reporting period. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

Anesthesia type used and CPT codes are used to identify patients who are included in the measure denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo an acute or chronic interventional pain procedure or other procedure under regional anesthesia

Denominator Criteria (Eligible Cases):

All patients regardless of age

AND

Anesthesia type: Neuraxial or Peripheral Nerve Block

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, +01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, +01968, +01969, 01991, 01992, 20526, 20550, 20551, 20552, 20553, 20600, 20604, 20605, 20606, 20610, 20611, 27096, 62263, 62264, 62270, 62272, 62273, 62280, 62281, 62282, 62320, 62321, 62322, 62323, 62324, 62325, 62326, 62327, 62350, 62355, 62360, 62361, 62362, 62365, 62367, 62368, 62369, 62370, 63650, 63661, 63662, 63663, 63664, 63685, 63688, 64400, 64402, 64405, 64408, 64410, 64413, 64415, 64416, 64417, 64418, 64420, 64421, 64425, 64430, 64435, 64445, 64446, 64447, 64448, 64449, 64450, 64461, +64462, 64463, 64479, +64480, 64483, +64484, 64486, 64487, 64488, 64489, 64490, +64491, +64492, 64493, +64494, +64495, 64505, 64508, 64510, 64517, 64520, 64530, 64600, 64605, 64610, 64620, 64630, 64633, +64634, 64635, +64636, 64640, 64680, 64681, 72275, 76942, +77002, +77003, 95990, 95991

Denominator Exclusions

- Peripheral Nerve Block not associated with invasive procedure: **10A75**

Numerator

Patients who have documentation that all applicable safety checks from the ASRA Checklist for Performing Regional Nerve Blocks were performed prior to the administration of anesthesia/analgesia

Definition: The ASRA Checklist for Performing Regional Nerve Blocks includes the following items:

- Patient identification (2 criteria)
- Allergies and anticoagulation status, including anticoagulation medications, *reviewed*
- Surgical procedure/consent confirmed
- Block plan confirmed; site marked by proceduralist; separately from surgical marking
- Necessary equipment present; drugs/solutions labeled
- Resuscitation equipment immediately available (e.g., airway devices, suction, vasoactive drugs, lipid emulsion)
- Appropriate ASA monitors applied; IV access, sedation, and supplemental oxygen provided if indicated
- Aseptic technique used: hand cleansing performed; mask and sterile gloves used
- “Time Out” performed before needle insertion for each new block site if position changed or separated in time or performed by another team

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A76

All applicable safety checks from the ASRA Checklist for Performing Regional Nerve Blocks were performed prior to the administration of anesthesia/analgesia

OR

Performance Not Met:

10A77

All applicable safety checks from the ASRA Checklist for Performing Regional Nerve Blocks were NOT performed prior to the administration of anesthesia/analgesia

Rationale

In 2010, Cohen et al. examined the incidence and root cause analysis of wrong site pain management procedures.¹ Records were evaluated during the two-year period from four civilian academic teaching hospitals, three military treatment facilities, and three private practices. 13 cases were identified (incidence 0.027%). Only one case followed the universal protocol. The authors concluded that there should be adaptation of the universal protocol to nerve blocks and strict adherence to guidelines in order to prevent wrong site interventional pain procedures.

Clinical Recommendation Statements

2017 The Joint Commission Hospital National Patient Safety Goals: Universal Protocol for Preventing Wrong Site, Wrong Procedure, and Wrong Person Surgeryⁱⁱ

- “1. Conduct a time-out immediately before starting the invasive procedure or making the incision.
2. The time-out has the following characteristics:
 - It is standardized, as defined by the hospital.
 - It is initiated by a designated member of the team.
 - It involves the immediate members of the procedure team, including the individual performing the procedure, the anesthesia providers, the circulating nurse, the operating room technician, and other active participants who will be participating in the procedure from the beginning.
3. When two or more procedures are being performed on the same patient, and the person performing the procedure changes, perform a time-out before each procedure is initiated.
4. During the time-out, the team members agree, at a minimum, on the following:
 - Correct patient identity
 - The correct site
 - The procedure to be done
5. Document the completion of the time-out.
Note: the hospital determines the amount and type of documentation.”

Data Source:	Claims/Paper Medical Record, Registry
Measure Steward:	American Society of Anesthesiologists (ASA)
Number of Multiple Performance Rates:	Not Applicable
Proportion Measure Scoring:	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No

References:

ⁱ Cohen, SP, Hayek SM, Datta S, et al. Incidence and root cause analysis of wrong-site pain management procedures. A multicenter study. *Anesthesiology*. 2010;112(3):711-718.

ⁱⁱ The Joint Commission. 2017. https://www.jointcommission.org/assets/1/6/NPSG_Chapter_HAP_Jan2017.pdf

Measure Title

IIM09: Procedural Safety for Central Line Placement††

Measure Description

Percentage of patients, regardless of age, who underwent a central venous cannulation insertion and did not experience a central line placement injury.

Measure Type

Intermediate Outcome

Inverse Measure

No

Instructions

This measure is to be reported each time a central venous cannulation is attempted during the reporting period and the appropriate denominator criteria were recorded. It is anticipated that clinicians who attempt central venous cannulation insertions will submit this measure.

Measure Reporting via NACOR

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 central venous cannulation insertion.

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT): 36555, 36556, 36557, 36558, 36560, 36561, 36563, 36565, 36566, 36568, 36569, 36570, 36571, 36578, 36580, 36581, 36582, 36583, 36584, 36585, 93503

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who did not experience a central line placement injury.

Definition: A Central Line Placement Injury includes a pneumothorax, hemothorax or thoracic duct, cardiac or vascular injury that results from an attempted or completed insertion of a central venous catheter.

Numerator Note: The measure should be reported as “Performance Not Met” for patients whom central venous catheter (CVC) with documented arterial injury (from the medical record or PSI code) or pneumothorax (ICD-10-CM: J93.83, J93.9) requiring thoracostomy placement. For this indicator, the trauma can only be attributed to the attempted placement of central venous line by the anesthesia team and cannot be attributed to other causes.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met.

<p>OR <i>Performance Not Met</i></p>	<p>10A40 Patient did not experience a central line placement injury</p> <p>10A41 Patient experienced a central line placement injury</p>
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Rationale

A number of patients undergoing anesthesia for various surgical procedures require a more precise and sophisticated level of cardiovascular monitoring than can be obtained from standard, noninvasive techniques. Placement of an arterial catheter, central venous catheter and/or flow directed pulmonary artery catheter may be required to obtain additional and more precise information necessary for safe and effective anesthesia and life support in the perioperative period.

Anesthesiologists and qualified anesthesia providers are often responsible for placing arterial catheters, central venous catheters and pulmonary artery catheters. Anesthesiologists and qualified anesthesia providers protect patient safety and are responsible for preventing injuries that may occur because of central line placement. Scientific literature has documented that the risk for these complications can be reduced through evidence-based practices that address placement and management of central venous catheters and the reduction of infections, mechanical, thrombotic and other adverse outcomes associated with central venous catheterization.

Practice guidelines in support of this measure also address how clinicians can improve the management of arterial trauma or injury arising from central venous catheterization. Central line placement injuries may result in adverse events and contribute to patient discomfort. Arterial injury and pneumothorax each require additional treatment that adds to health care cost and increases patient discomfort as well. Capturing this data in a uniform fashion allows for an assessment of variability across practices and identify outliers at the individual physician level.

Data Source:	Claims/Paper Medical Record, Registry
Measure Steward:	American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
Number of Multiple Performance Rates:	Not applicable
Proportion Measure Scoring:	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No

References

- ⁱ ASA Ad Hoc Committee on Data Definitions, 2017, <https://www.aqihq.org/qualitymeasurementtools.aspx>
- ⁱⁱ American Society of Anesthesiologists. Statement on Intravascular Catheterization Procedures. Approved 16 October 2013.
- ⁱⁱⁱ American Society of Anesthesiologists Task Force on Central Venous Access. Practice Guidelines for Central Venous Access: A Report by the American Society of Anesthesiologists Task Force on Central Venous Access. *Anesthesiology*, 2012 Mar;116(3): 539-573.

Measure Title

IIM10: 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 general 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 general anesthesia.

Measure Type

Process

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes a surgical procedure under general anesthesia. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

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 general anesthesia.

Denominator

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

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient underwent a surgical procedure under general anesthesia: **10A42**

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, 01953, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6

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 general 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 anesthesia machine and medication check complete?
- Is the pulse oximeter on the Patient And Functioning?
- Does the Patient have a:
 - o Known Allergy?
 - o Difficult Airway/Aspiration Risk?
 - o Risk of >500 ml Blood Loss (7ml/kg in children)?

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A43 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:

10A44 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.

WHO Guidelines for Safe Surgery

The World Health Organization's Guidelines for Safe Surgery and accompanying Surgical Safety Checklist reinforce established safety practices and ensures beneficial preoperative, intraoperative and postoperative steps are undertaken in a timely and efficient way.ⁱ

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/>

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References:

ⁱ World Health Organization. WHO Guidelines for Safe Surgery 2009. Retrieved from: http://www.who.int/patientsafety/safesurgery/tools_resources/9789241598552/en/.

Measure Title

IIM011: Treatment of Hyperglycemia with Insulin

Measure Description

The percentage of patients aged 18 years and older, who undergo elective inpatient surgery and who have a blood glucose level of > 200 mg/dL after anesthesia start time and who receive insulin during anesthesia or PACU care.

Measure Type

Process

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes elective inpatient surgery during the reporting period. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

Patient demographics, place of service indicators, CPT codes, G-codes and Registry codes 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

Patients, aged 18 years and older, who undergo elective inpatient surgery under anesthesia and have a blood glucose level > 200 mg/dL after anesthesia start time and prior to anesthesia end time.

Definitions: **Anesthesia Start Time** is the time when the anesthesia team assumes continuous care of the patient and begins preparing the patient for anesthetic services in the operating room or an equivalent area.

Anesthesia End (Finish) Time is the time at which the anesthesiologist turns over care of the patient to a post anesthesia care team (either PACU or ICU). This time ends when the anesthesia team is no longer furnishing anesthesia services to the patient, that is when the patient may be placed safely under *postoperative* care and when the anesthesia team has completed transfer of patient care.ⁱ

Denominator Criteria (Eligible Cases):

Patient aged 18 years or older on date of encounter

AND

Elective surgery: **G9643**

AND

Place of Service Code: 21 (Inpatient)

AND

Patient experienced a blood glucose level > 200 mg/dL after anesthesia start time and prior to anesthesia end time: **10A45**

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, 01953, 01991, 01992

Denominator Exclusions

- None

Numerator

Patients who are administered insulin during anesthesia or PACU care after having a blood glucose level > 200 mg/dL

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A46

Patient received insulin during anesthesia or PACU care after having a blood glucose level >200 mg/dL.

OR

Denominator Exception:

10A47

Patient did not receive insulin because of previous history of adverse reaction or documented allergy to insulin.

OR

Performance Not Met:

10A48

Patient did not receive insulin during anesthesia or PACU care after having a blood glucose level >200 mg/dL.

Rationale

Perioperative hyperglycemia is associated with significant morbidity. Target values for perioperative glucose management in practice guidelines and in outcome studies vary, but usual target blood glucose levels vary from 140 mg/dL to 200 mg/dL. Anesthesiologists and qualified anesthesia providers can foster high quality care and improve clinical outcomes by ensuring that hyperglycemia is treated appropriately. The Anesthesia Quality Institute Outcomes Glossary 2016 defines hyperglycemia as an abnormally high concentration of glucose (greater than 200 mg/dl or 11.1 mmol/l) in the circulating blood. As a minimal indicator of appropriate perioperative management of hyperglycemia during anesthesia care, this measure determines the proportion of patients in whom a blood glucose level of >200 mg/dL obtained during anesthesia care is treated with insulin. It is intended to apply to adult inpatients undergoing surgery.

One retrospective study of 995 patients who had undergone major general and vascular surgery investigated the association of perioperative acute hyperglycemia and risk of 30-day postoperative infection (POI) over an 18-month period. Postoperative hyperglycemia increased the risk of POI by 30% with every 40-point increase from normoglycemia (<110 mg/dL).ⁱⁱ

In both mastectomy and major vascular surgery, glucose level > 150 mg/dL was associated with an increased risk of surgical site infection.^{iii,iv}

In one study of 55,408 patients with diabetes undergoing a variety of noncardiac operations, elevated 24-hour postoperative glucose concentrations were independently associated with postoperative infection: Adjusted incidence rate ratio for glucose 150-250 mg/dL = 1.22; for >250 mg/dL, adjusted incidence rate ratio = 1.43.^v

The Endocrine Society states that postoperative blood glucose values greater than 200 mg/dL are associated with prolonged hospital length of stay and an increased risk of postoperative complications, including wound infections and cardiac arrhythmias. As a glycemic target, The Endocrine Society recommends random blood glucose level of less than 180 mg/dl for the majority of hospitalized patients with non-critical illness, and this threshold is also recommended for ambulatory surgical patients and most cardiac surgical patients.^{vi}

Cardiac surgical patients with blood glucose > 200 mg/dL within 48 hours of surgery was associated with an increased incidence of surgical site infections.^{vii}

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

References

ⁱ ASA Ad Hoc Committee on Data Definitions, 2017, <https://www.aqihq.org/qualitymeasurementtools.aspx>

ⁱⁱ Ramos, M, et. al. 2008. "Relationship of perioperative hyperglycemia and postoperative infections in patients who undergo general or vascular surgery." *Ann Surg* 2008;248: 585–591.

ⁱⁱⁱ Villar-Compte, D., et. al. 2008. "Hyperglycemia as a risk factor for surgical site infections in patients undergoing mastectomy." *AJIC*. 36:192-198.

^{iv} Vriesendorp, T. M., et. al. 2004. "Early post-operative glucose levels are an independent risk factor for infection after peripheral vascular surgery: A retrospective study." *Eur J Vasc Endovasc Surg*; 28:520-255

^v King, J.T., et al. 2011. "Glycemic control and infections in patients with diabetes undergoing noncardiac surgery." *Ann Surg*. 253(1):158-165

^{vi} Jacobi J, et al. 2012. "Guidelines for the use of an insulin infusion for the management of hyperglycemia in critically ill patients." *Crit Care Med*. 40(12):3251-3276

^{vii} Latham, R, et. al. 2001. “The associate of diabetes and glucose control with surgical-site infections among cardiothoracic surgery patients.” *Inf Contr Hosp Epidemiol.* 22(10): 607-612

Measure Title

IIM012: Unplanned Transfer or Admission to Hospital

Measure Description

Percentage of patients, regardless of age, scheduled for outpatient surgery with plans to be discharged the same day as surgery who have an unplanned hospital transfer or hospital admission within 48 hours of anesthesia start time.

Measure Type

Outcome

Inverse Measure

No

Instructions

This measure is to be reported each time a patient, regardless of age, undergoes an elective outpatient procedure under anesthesia. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via NACOR

CPT codes, registry 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.

Denominator

All patients, regardless of age, who undergo an outpatient, elective surgical procedure, regardless of facility, under anesthesia who did not have a planned stay documented prior to procedure.

Denominator Definition: A planned stay includes inpatient admission or observational stay.

Denominator Note: "Day of surgery" includes all patients in which the expected duration of services does not exceed 24 hours.

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

POS Code: **11, 19, 22 or 24**

AND

Elective surgery: **G9643**

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, 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, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 00812, 00813, 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, 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, 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, 01935, 01936, 01951, 01952, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

AND

Patient did NOT have a documented planned stay prior to procedure: **11A05**

AND

Patient did NOT have an inpatient or under observational status at time of encounter: **11A06**

Denominator Exclusions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who have an unplanned hospital transfer or admission within 48 hours anesthesia start time who were scheduled to be discharged from the facility on the same day as surgical procedure is performed.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A07

Patient who was scheduled to be discharged from the facility on the same day as surgical procedure was performed experienced an unplanned hospital transfer or admission within 48 hours of anesthesia start time.

Performance Not Met:

11A08

Patient did not experience an unplanned hospital transfer or admission within 48 hours anesthesia start time.

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Adverse events that result in an unplanned transfer or admission to the hospital may cause patients and their caregivers financial and social distress as well as significantly increase the cost of care. The need for hospital admission following ambulatory surgery may indicate a lack of appropriate risk stratification or suboptimal preoperative evaluation and testing. This represents a potentially preventable burden on hospital resources and healthcare system finances. While it is not always possible to predict who will require hospital admission following ambulatory surgery, a high rate of admission may indicate poor quality care to include inadequate preoperative risk stratification and medical optimization. The goal for outpatient surgery should be zero hospital admissions. Any outpatient admission to a hospital should be captured and reviewed.

Data Source: Claims/Paper Medical Record, Registry

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

Number of Multiple Performance Rates:	Not applicable
Proportion Measure Scoring	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No

References:

Coley KC, Williams BA, DaPos SV, Chen C, Smith RB. Retrospective evaluation of unanticipated admissions and readmissions after same day surgery and associated costs. J Clin Anesth. 2002 Aug;14(5):349-53. PubMed External Web Site Policy.

Department of Health and Human Services, Office of Inspector General. Quality oversight of ambulatory surgical centers: holding state agencies and accreditors accountable. Supplemental report 2. Washington (DC): Department of Health and Human Services, Office of Inspector General; 2002 Feb.