

2023 AQR QCDR MEASURE SPECIFICATIONS MANUAL

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2023 AQR QCDR Measure Specifications Manual

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Introduction

Thank you for participating in the Anesthesia Quality Registry (AQR) QCDR. This manual contains the specifications for all QCDR measures supported by the AQR for the 2023 reporting year. For additional details on external measures/stewards, please visit the following:

NACOR QCDR <https://aqihq.org>
ABG QCDR <https://anesthesiabg.com>

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2022 Retired Measures

Measure ID	Measure Title
76	Prevention of Central Venous Catheter (CVC)-Related Bloodstream Infections
Quantum31	Central Line Ultrasound Guidance
AQI57	Safe Opioid Prescribing Practices
AQI62	Obstructive Sleep Apnea: Patient Education

2023 MIPS Measures Supported*

Measure ID	Measure Title
128	Body Mass Index (BMI) Screening and Follow-up Plan
130	Documentation of Current Medications in the Medical Record
145	Exposure Dose or Time for Procedures Using Fluoroscopy
155	Falls: Plan of Care
404	Anesthesiology Smoking Abstinence
424	Perioperative Temperature Management
430	Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy
463	Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)
477	Multimodal Pain Management

2023 QCDR Measures Supported*

Measure ID	Measure Title
EPREOP30	Ultrasound Guidance for Peripheral Nerve Block with Patient Experience
EPREOP31**	Intraoperative Hypotension among Non-Emergent Noncardiac Surgical Cases
AQI18	Coronary Artery Bypass Graft (CABG): Prolonged Intubation
AQI48	Patient-Reported Experience with Anesthesia
AQI56	Use of Neuraxial Techniques and/or Peripheral Nerve Blocks for Total Knee Arthroplasty (TKA)
AQI65	Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass
AQI67	Consultation for Frail Patients
AQI68	Obstructive Sleep Apnea: Mitigation Strategies
AQI69	Intraoperative Antibiotic Redosing
AQI71	Ambulatory Glucose Management
AQI72	Perioperative Anemia Management
AQI73	Prevention of Arterial Line Related Bloodstream Infections
ABG40	Hypotension Prevention After Spinal Placement for Elective Cesarean Section
ABG41	Upper Extremity Nerve Blockade in Shoulder Surgery
ABG43	Use of Capnography for non-Operating Room anesthesia Measure
MEDNAX54	Labor Epidural Failure when Converting from Labor Analgesia to Cesarean Section Anesthesia

*via application - additional MIPS and QCDR measures available via other mechanisms

**requires EHR integration

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Measure Title

ePreop30: Ultrasound Guidance for Peripheral Nerve Block with Patient Experience

Measure Description: Percentage of patients, aged 18 years and older, who undergo upper or lower extremity peripheral nerve blockade and for whom ultrasound guidance is used and documented in the medical record and the patient is sent a survey within 30 days and the survey indicates experience with nerve block.

NQS Domain / Meaningful Measures Area

Person and Caregiver-Centered Experience and Outcomes / Patient's Experience of Care

Measure Type

Outcome

High Priority Status

Yes

Numerator

Number of denominator eligible patients for whom ultrasound guidance is used and documented in the medical record. The patient is sent a survey within 30 days and the survey indicates a positive experience with the nerve block.

*** Patient Experience Question: If your Anesthesia provider(s) placed a nerve block to help with your pain control, how would you rate your satisfaction?*

Response Options:

- *N/A – Not applicable*
- *1 – Very unsatisfied*
- *2 – Unsatisfied*
- *3 – Neutral*
- *4 – Satisfied*
- *5 – Very satisfied*

Denominator

All patients aged 18 years and older who undergo upper or lower extremity peripheral nerve blockade and had a patient survey returned.

Denominator-Eligible Case Codes

64415, 64416, 64417, 64445, 64446, 64447, 64448, 64449, 64450, +76942 (U/S Code)

Denominator Exclusions

Emergent anesthesia cases 99140, organ donors/ASAPS 6

Denominator Exceptions

Patient refusal, no contact information for patient

Quality Data Coding

Performance Met:

99A12 – Patient provided with a survey to assess their experience and satisfaction with nerve block (greater than or equal to 4 of 5)

Performance Not Met:

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99A13 – Patient provided with a survey to assess their experience and satisfaction with nerve block (less than or equal to 3 of 5)

Denominator Exclusion:

99A14 – Emergent anesthesia cases 99140, organ donors/ASAPS 6

Denominator Exception:

99A15 – Patient refusal, no contact information for patient

Rationale

Meta-analysis of randomized controlled trials indicates that ultrasound guidance improves the quality of sensory blockade, reduces the need for supplementation, and reduces the rate of minor complications. Cochrane Library 2015

Data Source: Registry

Submission Pathway: Traditional MIPS

Care Setting: Hospital

Telehealth: No

Measure Steward: ePreop Anesthesia Quality Registry

Number of Multiple Performance Rates: Not applicable

Inverse Measure: No

Proportional Measure: Yes

Continuous Variable Measure: No

Ratio Measure: No

Risk Adjusted: No

Comments

None

Instructions/Notes

Requires use of the ePreop/Provation Patient Experience Module.

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Measure Title

ePreop31: Intraoperative Hypotension among Non-Emergent Noncardiac Surgical Cases

Measure Description: Percentage of general anesthesia cases in which mean arterial pressure (MAP) fell below 65 mmHg for cumulative total of 15 minutes or more

NQS Domain / Meaningful Measures Area

Patient Safety / Preventable Healthcare Harm

Measure Type

Intermediate Outcome

High Priority Status

Yes

Inverse Measure

Yes - A lower score indicates better quality. Note that providers are not expected to receive a score of zero on the measure, because some patients could have a MAP that falls below 65 for reasons outside a provider's control.

Instructions

This measure evaluates the proportion of cases in which the patient's MAP is below 65 mmHg for 15 minutes or more, cumulatively over the course of the surgery. The numerator condition is met when MAP is below 65 mmHg for one continuous period lasting 15 minutes or more, or if the patient has several discrete periods with a MAP below 65 mmHg that collectively sum to 15 minutes or more. Note that this measure is not intended to substitute for the clinician's judgement about managing IOH for any given patient, and for some patients the clinician may manage blood pressure using a higher or lower target MAP (e.g., a higher MAP target for patients with chronic hypertension).

To report the measure, the reporting clinician must submit data on the patient's MAP over the course of the surgery as monitored by an anesthesia information management system (AIMS). The reporting clinician must submit intraoperative patient vitals extracted directly from an interface with the monitor. Reporting clinicians who track blood pressure manually are not eligible to report the measure. If the record for a given case includes both vitals pulled from the monitor and manually recorded vitals, only those from the monitor will be used to score the measure.

The first blood pressure reading is defined as the anesthesia start time. The measure end time is defined as the anesthesia end time. A given blood pressure reading will be attributed to the period that runs from the time the reading was recorded to the time of either the next reading or the measure end time. If the period between a given reading and either the next reading or the measure end time lasts for longer than five minutes, the reading will only be attributed for five minutes. If the reporting clinician monitors a patient using more than one method and there are two MAPs available at the same point in time, the measure uses the invasive value for scoring the measure. The measure attributes the full case to all reporting clinicians who provide care during any portion of the case from the beginning to the end of the measurement period.

The measure excludes patients with a baseline MAP below 65 mmHg. To determine the patient's baseline MAP, the measure relies on the most recent reading taken from the preoperative holding area. If no such reading is available, the measure uses the most recent MAP taken in the operating room before induction of anesthesia.

If a clinician does not have MAP values available to report either for the baseline MAP or for measurements across the measurement period, the clinician may submit pairs of systolic and diastolic blood pressures (SBPs and DBPs) as a replacement for the MAP. The registry collecting the data will use these systolic and diastolic pressure values to calculate MAP values. Specifically, the registry will calculate MAP using the following formula: $MAP = 1/3 (SBP) + 2/3 (DBP)$ (Sesso et al. 2000).

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Non-emergency surgeries include both elective and urgent surgeries.

Because longitudinal blood pressure data can contain artifactual values (for example, inaccurate readings caused by the surgeon's leaning on the blood pressure cuff), the measure will drop MAP, SBP, and DBP readings that are likely to be artifacts. Specifically, the measure will drop individual MAP readings that meet any of the following criteria:

Documented as an artifact by the clinician

SBP \geq 300 mmHg or \leq 20 mmHg

DBP \leq 5 mmHg or DBP \geq 225 mmHg

SBP and DBP within 5 mmHg

MAP \leq 30 mmHg or \geq 250 mmHg

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, patient demographics and billing data are used to identify patients who are included in the measure's denominator. Denominator eligible cases are required to be sent from an electronic reporting facility to qualify. Registry codes are used to report the numerator. Reporting clinicians who track information manually are not eligible to report the measure.

Denominator

- Unadjusted measure score: All cases in which adults (ages 18 and older) with noncardiac, non-emergency surgery requires general, neuraxial, or regional anesthesia care.
- Risk adjusted measure score: The expected number of cases in which patients have a MAP below 65 mmHg that exceeds the cumulative length of 15 minutes with noncardiac, non-emergency surgery requiring general, neuraxial, or regional anesthesia care, based on the risk adjustment model.

Denominator Criteria (Eligible Cases):

Patient aged 18 years and older

AND

Anesthesia Types: General Anesthesia, Neuraxial Anesthesia, Regional Anesthesia

AND

Patient encounter during the reporting period (CPT):

00100, 00103, 00160, 00162, 00164, 00170, 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, 00520, 00524, 00528, 00529, 00530, 00532, 00534, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00750, 00752, 00756, 00770, 00790, 00792, 00794, 00797, 00800, 00802, 00820, 00830, 00832, 00840, 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, 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, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 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, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01937, 01938, 01939, 01940, 01941, 01942, 01951, 01952, 01953

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Denominator Exclusions

- **99A16** - The measure excludes patients with a baseline MAP below 65 mmHg
 - To determine the patient's baseline MAP, the measure relies on the most recent reading taken from the preoperative holding area. If no such reading is available, the measure uses the most recent MAP taken in the operating room before induction of anesthesia.
 - If a clinician does not have MAP values available to report either for the baseline MAP or for measurements across the measurement period, the clinician may submit pairs of systolic and diastolic blood pressures (SBPs and DBPs) as a replacement for the MAP. The registry collecting the data will use these systolic and diastolic pressure values to calculate MAP values. Specifically, the registry will calculate MAP using the following formula: $MAP = 1/3 (SBP) + 2/3 (DBP)$ (Sesso et al. 2000).
- **99135 CPT code** - The measure excludes surgeries where add on code 99135 (Anesthesia complicated by utilization of controlled hypotension) is listed separately in addition to the code for the primary anesthesia procedure)
- American Society of Anesthesiologists (ASA) Physical Status Classification of 1, 5 and 6
- Emergency case

Numerator

Patients who have a MAP below 65 mmHg that exceeds the cumulative length of 15 minutes with noncardiac, non-emergency surgery requiring general, neuraxial, or regional anesthesia care

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

99A17 - MAP below 65 mmHg that exceeds the cumulative length of 15 minutes.

Performance Not Met:

99A18 - MAP does not fall below 65 mmHg for a cumulative length of 15 minutes

NQF Number: Not applicable

eCQM: Not applicable

Rationale

MAP below 60–70 mmHg among adults having non-cardiac surgery is associated with increased risk of acute kidney injury (AKI), myocardial injury, and mortality, and the risk is a function of both hypotension severity and duration (Sessler et al. 2019). Noncardiac surgery patients are at increased risk of AKI when their cumulative time below a MAP of 65 mmHg reaches or exceeds 13 minutes. When patients fall even further below this threshold (for example, MAP below 55 mmHg), even shorter durations are associated with increased risk of AKI (Salmasi et al. 2017). Among adult noncardiac surgery patients, 31.3 percent have experienced MAP below 65 mmHg for 10 minutes or longer (Bijker et al. 2007). Different approaches for managing patients' blood pressure during surgery are significantly associated with higher or lower risks of postoperative organ dysfunction, including renal dysfunction (Futier et al.2017).

Data Source: Claims, EHR (AIMS, patient record)

Submission Pathway: Traditional MIPS

Care Setting: Hospital

Telehealth: No

Measure Steward: ePreop Anesthesia Quality Registry/Cleveland Clinic

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Number of Multiple Performance Rates: Not applicable

Proportional Measure: No

Continuous Variable Measure: No

Ratio Measure: Yes - This is a ratio measure that will score greater than or equal to zero

Risk Adjusted: Yes

Risk adjustment: Variables incorporated into the risk adjustment model include the following:

- Age
- ASA physical status classification
- Body mass index
- Duration of surgery
- Gender

Steps for Calculating Unadjusted and Risk-Adjusted Measure Scores:

The measure is risk-adjusted to account for patient-level and case-level risk factors that affect the probability of IOH that are outside of an anesthesia provider's control. The risk adjustment model calculates the likelihood that a given case would result in IOH based on patient factors; the risk-adjusted measure then scores a clinician by comparing observed instances of IOH to the expected number of IOH cases for that clinician, given the characteristics of their patient population. Clinicians with more observed cases of IOH than expected would receive a higher (worse) score than those with fewer observed cases of IOH than expected.

Use the following steps to calculate clinician-level unadjusted and risk-adjusted measure scores. Note that this measure is specified at the individual clinician-level, but those wishing to report this measure at the group level can follow the calculation steps below but perform those calculations at the group rather than clinician-level (e.g., identifying measure denominator cases associated with the provider group).

1. First, *clean the data* to be used in calculating the measure scores. Check for missing or implausible values for key variables and drop artefactual blood pressure readings from the longitudinal blood pressure data.
2. Apply the measure logic to all cases occurring during the measurement period to identify all cases meeting *the denominator criteria*, all cases *excluded from the denominator*, and all cases meeting *the numerator criteria* (i.e., cases with IOH).
3. Calculate a *clinician-level unadjusted measure score*. This score is a percentage, with the numerator defined as all numerator cases associated with the clinician, and the denominator defined as all denominator cases (minus excluded cases) associated with the clinician.
4. Apply the risk adjustment model to calculate *the predicted probability that a given case would meet the numerator criteria* (i.e., result in IOH). The model use logistic regression to calculate the log-odds that a given case will result in IOH based on patient- and case-level factors. Apply the model to all cases that meet the denominator criteria and that are not excluded from the denominator. Transform the case-level log-odds into case-level predicted probabilities. To do so, exponentiate the log-odds to first transform it to odds. Then transform the odds to probability by taking the odds divided by 1 plus the odds.
5. Calculate a *clinician-level expected number of IOH cases*. For a given clinician, take the sum of the predicted probabilities for all denominator cases associated with the clinician (minus exclusions). This sum represents the total number of cases for the clinician that are expected to result in IOH, given the risk level of his or her patients.
6. Calculate a *risk-adjusted score* for each clinician. The score is the ratio of the clinician's total count of cases meeting the numerator criteria to the expected number of IOH cases, among cases that meet denominator criteria for that clinician.
7. (Optional) Transform the risk-adjusted score for each clinician *into a percentage*. Note that performing this transformation is not necessary to calculate the measure, but individual sites may find that representing the scores

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as a percentage may be helpful for communicating with providers about their measure score. To do so, multiply each clinician’s risk adjusted score from Step 6 (the observed to expected ratio) by the average unadjusted IOH measure score for the larger unit within which clinicians are being compared, for example, a group practice, hospital department, or national reporting program. This transformation may make the risk-adjusted score more easily interpretable, although it is not a true percentage generated from the ratio of numerator and denominator, and it can result in “percentages” greater than 100%.

The remainder of this document describes each of these steps in detail.

Step 1: Clean the data to be used in measure score calculation

This section described the recommended steps for cleaning the data to be included in the measure score calculation. It identifies checks to run on the data, but in most cases, it does not proscribe a specific approach for cleaning the data, leaving that determination to each individual site.

1. Check for missing values of any of the risk adjustment variables (age, gender, ASA status, BMI, surgery length); the risk adjustment model requires that all covariates are non-missing for each case. Determine how best to address missing values (e.g., impute them, or drop the case if there are few cases with missing values).
2. Check for implausible values for the risk adjustment variables. Determine how best to address them (e.g., correct them if possible, or drop the case if there are few implausible values).
3. Check for implausible values for the timestamp variables. For example, anesthesia start time and induction time should always occur before anesthesia end time. Determine how best to address implausible timelines (e.g., correct them if possible, or drop the case if there are few implausible timelines).
4. Drop artefactual blood pressure readings from longitudinal blood pressure data. See Guidelines section above for details.

Step 2 Apply measure logic to identify denominator cases, denominator exclusions, and numerator cases

This section describes the steps used to apply the measure logic to each case included in the measure’s initial population. See specifications above and attached measure flow diagram for more detailed guidance on applying measure logic, including definitions of all key parameters.

1. Run the measure on all anesthesia cases during the measurement period, representing a full calendar year.
2. Apply the initial population criteria to each case (see Initial Population section above for definitions for key parameters), and remove cases from the population if any of the below scenarios applies:
 - a. Patient is under 18 years of age
 - b. Case is an emergency surgery
 - c. Case does not include general anesthesia, neuraxial, or regional anesthesia care
3. Use the cases in the initial population as *the denominator cases*.
4. *Apply denominator exclusion criteria* to the denominator cases (see Denominator Exclusions section above for definitions of key parameters), and exclude cases if any of the below scenarios applies:
 - a. Case has ASA Physical Status Classification of 1, 5 or 6
 - b. Patient has baseline MAP below 65 mmHg
 - c. Case includes induced hypotension
5. For each denominator case not excluded from the measure, apply the numerator criteria. Calculate the cumulative duration in which the patient’s MAP was below 65 mmHg from anesthesia start time to anesthesia end. If this duration reaches or exceeds 15 minutes, assign the case to *the numerator population*. Otherwise, do not assign the case to the numerator population.

Step 3: Calculate the clinician-level unadjusted measure score

This section describes the steps for calculating each clinician’s unadjusted score on the IOH measure.

1. For a given clinician, identify all cases the clinician is associated with that are included in the measure denominator.
2. Calculate the clinician’s unadjusted score on the measures using the following equation:

$$IOH_{Unadjusted} = \frac{(Sum\ of\ numerator\ cases)}{(Sum\ of\ denominator\ cases) - (Sum\ of\ denominator\ exclusion\ cases)}$$

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Step 4: Apply risk adjustment model to calculate predicted probability of IOH

After calculating the unadjusted score, the next step is to apply the risk adjustment logistic regression model to each denominator case to determine the case's predicted probability of inclusion in the numerator population (i.e., of IOH occurring) given the case mix. The model includes five risk adjustment variables that may have an association with risk of IOH based on the clinical literature, input from experts during development of the measure, results from measure testing, or a combination of these factors. The risk adjustment variables include the patient's age, the ASA Physical Status Classification for the case, the patient's body mass index (BMI), the duration of the surgery, and the patient's gender. These variables were selected because they are associated with IOH but are outside the control of the clinician. In the model, these categorical variables with k categories are transformed into (k-1) variables with two levels.

1. Apply the risk adjustment model to each case that is part of the denominator population and that has not been excluded.

2. The risk adjustment model is a logistic regression model with the following form:

$$\text{logit}(IOH) = \beta_0 + \beta_1 * \text{Age} + \beta_2 * \text{ASA}_2 + \beta_3 * \text{ASA}_4 + \beta_4 * \text{BMI} + \beta_5 * \text{Surg_Length_Cat_60-119} + \beta_6 * \text{Surg_Length_Cat_120-179} + \beta_7 * \text{Surg_Length_Cat_180-239} + \beta_8 * \text{Surg_Length_Cat_240-299} + \beta_9 * \text{Surg_Length_Cat_300-} + \beta_{10} * \text{Female}_1$$

Where:

β_0 = the intercept term of the logistic regression

β_1 = the coefficient for age

Age = the age in years of the patient at the time of surgery (in years)

β_2 = the coefficient for ASA physical status classification being 2.

ASA_2 = a binary variable indicating whether the ASA physical status classification of the case is 2, with ASA_2=1 for cases in which the ASA physical status classification is 2, and ASA_2=0 for cases in which it is not 2.

β_3 = the coefficient for ASA physical status classification being 4.

ASA_4 = a binary variable indicating whether the ASA physical status classification of the case is 4, with ASA_4=1 for cases in which the ASA physical status classification is 4, and ASA_4=0 for cases in which it is not 4.

β_4 = the coefficient for body mass index (BMI)

BMI = the BMI of the patient at the time of surgery

β_5 = the coefficient for the duration of surgery being between 60 and 119 minutes

Surg_Length_Cat_60-119 = a binary variable indicating whether the duration of surgery from anesthesia start time to anesthesia end time was between 60 and 119 minutes, with

Surg_Length_Cat_60-119 = 1 for surgeries that met this criteria and Surg_Length_Cat_60-119 = 0 for surgeries that did not meet this criteria.

β_6 = the coefficient for the duration of surgery being between 120 and 179 minutes

Surg_Length_Cat_120-179 = a binary variable indicating whether the duration of surgery from anesthesia start time to anesthesia end time was between 120 and 179 minutes, with

Surg_Length_Cat_120-179 = 1 for surgeries that met this criteria and Surg_Length_Cat_120-179 = 0 for surgeries that did not meet this criteria.

β_7 = the coefficient for the duration of surgery being between 180 and 239 minutes

Surg_Length_Cat_180-239 = a binary variable indicating whether the duration of surgery from anesthesia start time to anesthesia end time was between 180 and 239 minutes, with

Surg_Length_Cat_180-239 = 1 for surgeries that met this criteria and Surg_Length_Cat_180-239 = 0 for surgeries that did not meet this criteria.

β_8 = the coefficient for the duration of surgery being between 240 and 299 minutes

Surg_Length_Cat_240-299 = a binary variable indicating whether the duration of surgery from anesthesia start time to anesthesia end time was between 240 and 299 minutes, with

Surg_Length_Cat_240-299 = 1 for surgeries that met this criteria and Surg_Length_Cat_240-299 = 0 for surgeries that did not meet this criteria.

β_9 = the coefficient for the duration of surgery being 300 minutes or longer

Surg_Length_Cat_300- = a binary variable indicating whether the duration of surgery from anesthesia start time to anesthesia end time was 300 minutes or longer, with Surg_Length_Cat_300-

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= 1 for surgeries that met this criteria and Surg_Length_Cat_300 = 0 for surgeries that did not meet this criteria.

β_{10} = the coefficient for the gender of the patient

Female_1 = a binary variable indicating the gender of the patient, with Female_1 = 1 for female and 0 for male.

See Table 1 for the values of the constant and the regression coefficients.

Table 1: Parameters for risk adjustment model for the intraoperative hypotension quality measure

Parameter	Value
β_0 : Constant/Intercept	-1.576
β_1 : Coefficient 1: Age	-0.008
β_2 : Coefficient 2: ASA_2	0.157
β_3 : Coefficient 3: ASA_4	0.529
β_4 : Coefficient 4: BMI	-0.018
β_5 : Coefficient 5: Surg_Length_Cat_60–119	1.316
β_6 : Coefficient 6: Surg_Length_Cat_120–179	1.734
β_7 : Coefficient 7: Surg_Length_Cat_180–239	1.936
β_8 : Coefficient 8: Surg_Length_Cat_240–299	2.235
β_9 : Coefficient 9: Surg_Length_Cat_300+	2.879
β_{10} : Coefficient 10: Female1	0.173

- The model calculates the log-odds of each case developing IOH, given the risk factors for the given patient and case. Next, transform the case-level log-odds into case-level predicted probabilities. To do so, exponentiate the log-odds to first transform it to odds. Then transform the odds to probability by taking the odds divided by 1 plus the odds. Predicted probabilities can range from 0.00 to 1.00. Values closer to 1.00 represent a higher likelihood that the case would result in IOH. The predicted probability (denoted as $IOH_{expected}$) can be presented as:

$$IOH_{expected} = \frac{e^{\text{logit}(IOH)}}{1 + e^{\text{logit}(IOH)}}$$

Where, $\text{logit}(IOH)$ is defined in Step 4.2.

Step 5: Calculate the clinician-level expected number of IOH cases

Next, determine each clinician’s expected number of IOH cases based on the risk-adjustment model by summing the case-level predicted probabilities.

- For a given clinician, identify all cases the clinician is associated with that are included in the measure denominator and that have not been excluded.
- Calculate the clinician’s expected number of IOH cases by summing all of the predicted probabilities of IOH for all of the denominator cases.

Step 6: Calculate the clinician-level risk-adjusted measure score

After computing an observed and expected number of IOH cases for each clinician, the measure uses those two values as inputs for the risk-adjusted score.

- For a given clinician, use the observed and expected number of IOH cases to calculate the risk-adjusted score. The observed number of cases is the numerator from the equation in Step 3, and the expected number of cases is the sum calculated in Step 5. Calculate the risk-adjusted score as follows:

$$IOH_{Adjusted} = \frac{(\text{Sum of numerator cases})}{(\text{Sum of expected IOH cases})}$$

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The resulting score will be a ratio. A score of 1 indicates the clinician had the number of IOH cases we would expect, based on their case mix. Scores less than 1 indicate the clinician had fewer IOH cases than predicted, meaning they are performing better than expected for their case mix. Scores greater than 1 indicate the clinician had more cases of IOH than predicted, meaning they are performing worse than expected given their case mix.

Step 7 (optional): Transform risk-adjusted measure score into a percentage

To make the risk-adjusted scores more easily interpretable, the clinician-level ratios calculated in Step 6 can be multiplied by the overall unadjusted performance rate on the measure to transform them into percentages. Note that performing this transformation is not necessary to calculate the measure, but individual sites may find that representing the scores as a percentage may be helpful for communicating with providers about their measure score. To do so, multiply each clinician's risk adjusted score from Step 6 (the observed to expected ratio) by the average unadjusted IOH measure score for the larger unit within which clinicians are being compared, for example, a group practice, hospital department, or national reporting program. This transformation may make the risk-adjusted score more easily interpretable, although it is not a true percentage generated from the ratio of numerator and denominator, and it can result in "percentages" greater than 100%.

$$IOH_{Adjusted} = \frac{(\text{Sum of numerator cases})}{(\text{Sum of expected IOH cases})} * \text{Overall_rate}$$

References

- Anesthesia Quality Institute. "2018 AQI NACOR Data Element Conceptual Definitions, Version 3.0." Schaumburg, IL: Anesthesia Quality Institute, January 2018. Available at http://www.aqihq.org/files/AQI_NACOR_DATA_ELEMENT_DEFINITIONS_v3%202018_FINAL.pdf. Accessed March 14, 2019.
- Bijker, Jilles, Wilton A. van Klei, Teus H. Kappen, Leo van Wolfswinkel, Karel G.M. Moons, and Cor J. Kalkman. "Incidence of Intraoperative Hypotension as a Function of the Chosen Definition." *Anesthesiology*, vol. 107, no. 2, 2007, pp. 213–220. doi:10.1097/01.anes.0000270724.40897.8e.
- Futier, E., J.-Y. Lefrant, P.-G. Guinot, T. Godet, E. Lorne, P. Cuvillon, S. Bertran, M. Leone, B. Pastene, V. Piriou, S. Molliex, J. Albanese, J. Julia, B. Tavernier, E. Imhoff, J. Bazin, J. Constantin, B. Pereira, and S. Jaber. "Effect of Individualized Versus Standard Blood Pressure Management Strategies on Postoperative Organ Dysfunction Among High-Risk Patients Undergoing Major Surgery: A Randomized Clinical Trial." *JAMA*, vol. 318, no. 14, 2017, pp. 1346–1357. doi:10.1001/jama.2017.14172.
- Salmasi, Vafi, Kamal Maheshwari, Dongsheng Yang, Edward J. Mascha, Asha Singh, Daniel I. Sessler, and Andrea Kurz. "Relationship Between Intraoperative Hypotension, Defined by Either Reduction from Baseline or Absolute Thresholds, and Acute Kidney and Myocardial Injury After Noncardiac Surgery: A Retrospective Cohort Analysis." *Anesthesiology*, vol. 126, no. 1, 2017, pp. 47–65. doi: 10.1097/ALN.0000000000001432.
- Sessler, Daniel I., Joshua A. Bloomstone, Solomon Aronson, Colin Berry, Tong J. Gan, John A. Kellum, James Plumb, Monty G. Mythen, Michael P. W. Grocott, Mark R. Edwards, Timothy E. Miller, and the Perioperative Quality Initiative-3 Workgroup. "Perioperative Quality Initiative Consensus Statement on Intraoperative Blood Pressure, Risk and Outcomes for Elective Surgery." *British Journal of Anaesthesia*. Published electronically February 27, 2019. doi: 10.1016/j.bja.2019.01.013
- Sesso, Howard D., Meir J. Stampfer, Bernard Rosner, Charles H. Hennekens, J. Michael Gaziano, JoAnn E. Manson, and Robert J. Glynn. "Systolic and Diastolic Blood Pressure, Pulse Pressure, and Mean Arterial Pressure as Predictors of Cardiovascular Disease Risk in Men." *Hypertension*, vol. 36, no. 5, 2000, pp. 801–807. doi: 10.1161/01.HYP.36.5.801.

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Measure Title

AQI18: Coronary Artery Bypass Graft (CABG): Prolonged Intubation – Inverse Measure

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description

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

NQS Domain / Meaningful Measures Area

Effective Clinical Care / Preventable Healthcare Harm

Measure Type

Outcome

High Priority Status

Yes

Inverse Measure

Yes

Instructions

This measure is to be reported each time an isolated CABG procedure is performed during the reporting period. It is anticipated that qualified anesthesia providers and eligible clinicians who provide services for isolated CABG will submit this measure. This measure is intended to reflect the quality of services provided for isolated CABG or isolated reoperation CABG patients.

Measure Reporting via the Qualified Clinical Data Registry

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

Denominator

All patients, aged 18 years and older, undergoing isolated CABG surgery

Definition: Isolated CABG refers to CABG using arterial and/or venous grafts only.

Denominator Criteria (Eligible Cases):

Patient aged 18 years and older on date of encounter

AND

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

AND

00566, 00567

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

AND

Patient encounter during the reporting period (CPT): 33530

AND

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00562

Denominator Exclusions

- Organ donors as designated by ASA Physical Status 6
- Procedure reduced or discontinued prior to initiation of CPB as indicated on the claim by Modifier 52 or Modifier 53

Numerator

Patients who require intubation > 24 hours following exit from the operating room

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

G8569 Prolonged postoperative intubation (> 24 hrs) required

OR

Performance Not Met:

G8570 Prolonged postoperative intubation (>24 hrs) not required

NQF Number: Not applicable

eCQM: Not applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Setting: Hospital Inpatient

Telehealth: No

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

Number of Performance Rates: 1

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

AQI48: Patient-Reported Experience with Anesthesia†

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care and who reported a positive experience.

This measure will consist of two performance rates:

AQI48a: Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care

AQI48b: Percentage of patients, aged 18 and older, who completed a survey on their patient experience and satisfaction with anesthesia care who report a positive experience with anesthesia care

NOTE: The measure requires that a valid survey, as defined in the numerator, be sent to patients between discharge from the facility and within 30 days of facility discharge. To report AQI 48b, a minimum number of 20 surveys with the mandatory question completed must be reported.

NQS Domain / Meaningful Measure Area

Person and Caregiver-Centered Experience and Outcomes / Patient's Experience of Care

Measure Type

Patient Reported Outcome (PRO)

High Priority Status

Yes

Inverse Measure:

No

Instructions:

This measure, consisting of two performance rates for AQI48a and AQI48b, is to be reported each time a patient underwent a procedure* with anesthesia during the reporting period. AQI48a should be reported each time a patient undergoes a procedure under anesthesia. To report AQI48b, the provider must report the individual patient scores received by the patient who completed the survey described in AQI48a. A percentage reporting a positive experience will be calculated by the registry on the provider's behalf. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

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

Denominator

Patients, aged 18 and older, who undergo a procedure* under anesthesia (AQI48a) and who complete a survey on their patient experience and satisfaction with anesthesia care (AQI48b)

Definition: *Any procedure including surgical, therapeutic or diagnostic

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Denominator Note: In order to report AQI48b, the denominator must include a minimum of 20 returned surveys.

Denominator Criteria (Eligible Cases):

Patient aged 18 years or older on date of encounter

AND

AQI 48a: 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, 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, 01937, 01938, 01939, 01940, 01941, 01942, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01991, 01992, 20526, 20550, 20551, 20552, 20553, 20600, 20604, 20605, 20606, 20610, 20611, 27096, 36555, 36556, 36570, 36571, 36578, 36580, 36581, 36582, 36583, 36584, 36585, 62263, 62264, 62270, 62272, 62273, 62280, 62281, 62282, 62320, 62321, 62322, 62323, 62324, 62325, 62326, 62327, 62328, 62329, 62350, 62355, 62360, 62361, 62362, 62365, 62370, 63650, 63661, 63662, 63663, 63664, 63685, 63688, 64400, 64405, 64408, 64415, 64416, 64417, 64418, 64420, 64425, 64430, 64435, 64445, 64446, 64447, 64448, 64449, 64450, 64451, 64454, 64461, 64463, 64479, 64483, 64486, 64487, 64488, 64489, 64490, 64493, 64505, 64510, 64517, 64520, 64530, 64600, 64605, 64610, 64620, 64624, 64625, 64630, 64633, 64635, 64640, 64680, 64681, 93503, 95990, 95991

For AQI48b

AND

Patient completed a survey on their patient experience and satisfaction with anesthesia care **10A72**

Denominator Exclusions

- **48a:** Organ Donors as designated with ASA Physical Status 6
- **48a:** Patient died within 30 days of the procedure: **10A11**
- **48b:** Patient did not complete the mandatory anesthesia satisfaction question: **10A69**

Numerator-AQI48a:

Patients who received a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia.

Numerator Note: The survey should be administered to the patient shortly following discharge from the facility.

Definition: Practices and eligible clinicians may customize their patient experience and satisfaction with anesthesia surveys to meet local needs but, at a minimum, a valid survey must include a core set of questions that address three of the four following criteria related to patient experience and satisfaction and one mandatory question described below.

1. Pre-operative Education and Preparation
2. Patient and/or Family Communication
3. Care Team Response to Comfort and Well-Being
4. Post-operative pain control and/or management

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Mandatory question that must be included in each valid survey (practices must also include an option for patient to indicate “Not Applicable”):

1. On a scale of 1 to 5, where 1 indicates the worst anesthesia experience and where 5 indicates the best anesthesia experience, how would you rate your anesthesia experience?

Numerator Note: Practices and eligible clinicians may wish to supplement these questions by taking into consideration the recommendations of the ASA Committee on Performance and Outcomes Measurement work product entitled “Patient Satisfaction and Experience with Anesthesia.”

Numerator Note: Depending on local practice, practices and eligible clinicians may wish to supplement survey questions by taking into consideration the recommendations developed as part of the Perioperative Surgical Home (PSH) that are structured in five distinct components.

1. Pre-Operative Education and Preparation (Four Indicators)
 - a. Patient comfort with instructions provided about eating better
 - b. Patient comfort with instructions provided about exercise or physical therapy
 - c. Patient comfort with instructions provided about stopping smoking (if applicable)
 - d. Patient comfort with instructions provided about what to do after surgery
2. Check-In and Pre-Procedure Experience
3. Caregiver and Family Communication during Surgery
4. Care Team Response to Comfort and Well-Being
5. Post-Operative Pain Management

For more information on these resources, visit <https://www.asahq.org/psh>.

Numerator Quality-Data Coding Options for Reporting Satisfactorily: AQI48a

Performance Met:

10A12 Patient provided with a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia

OR

Denominator Exception

10A13 Documentation of patient reason(s), process reason(s) or medical reason(s) for not receiving survey (i.e. patients who are non-verbal, who are unable to be surveyed due to a medical or psychiatric reason, who are unable to be surveyed due to a language barrier, have not provided contact information, who are discharged to assisted living, skilled nursing facility or other similar location where direct access to the patient is not available, or who decline to be surveyed)

OR

Performance Not Met:

10A14 Patient was not provided with a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia

Numerator- AQI 48b:

Patients who reported a positive experience with anesthesia care.

Definition: A positive experience is defined as a response of 4 or 5 on the following mandatory patient experience and satisfaction survey question:

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On a scale of 1 to 5, where 1 indicates the worst anesthesia experience and where 5 indicates the best anesthesia experience, how would you rate your overall anesthesia experience? (*Practices must include an option for patient to indicate “Not Applicable”*)

Numerator Quality-Data Coding Options for Reporting Satisfactorily: AQI48b

Reporting note: To report this measure, the provider must report the individual patient scores. A percentage reporting a positive experience will be calculated on the provider’s behalf.

Performance Met:

10A70 Patient reported a positive anesthesia experience (i.e., a 4 or 5 on the mandatory survey question)

OR

Performance Not Met:

10A71 Patient did NOT report a positive anesthesia experience (i.e., a 1, 2, or 3 on the mandatory survey question)

Data Source: Database, Registry

Submission Pathway: Traditional MIPS, MVP

Care Settings: Ambulatory Care: Clinician Office; Ambulatory Care: Hospital; Hospital; Hospital Inpatient; Outpatient Services

Telehealth: No

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

Number of Multiple Performance Rates: 2

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Ratio Measure: No

Risk Adjusted: No

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Measure Title

AQI56: Use of Neuraxial Techniques and/or Peripheral Nerve Blocks for Total Knee Arthroplasty (TKA)

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients, regardless of age, that undergo primary total knee arthroplasty for whom neuraxial anesthesia and/or a peripheral nerve block is performed.

NQS Domain / Meaningful Measures Area

Effective Clinical Care / Appropriate use of Healthcare

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes primary total knee arthroplasty. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

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 primary total knee arthroplasty

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT):

01402

Denominator Exclusions

- Revision of TKA: CPT 27486, 27487 or **11A09**
- Prosthesis Removal: CPT 27488 or **11A10**

Numerator

Patients for whom neuraxial anesthesia and/or a peripheral nerve block is performed.

Numerator Note: For the purposes of this measure, a peripheral nerve block performed either as primary procedural anesthesia or performed for postoperative analgesia would meet the numerator. Administration of local infiltration analgesia is acceptable to meet this measure (performance met if anesthesiologist administered and denominator exception if the surgeon administered the LIA)

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Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A78 Neuraxial anesthesia and/or a peripheral nerve block was used

OR

Denominator Exception:

11A01 Documentation of patient reason(s) for not using either neuraxial anesthesia or a peripheral nerve block (e.g., patient refusal)

OR

11A81 Surgeon administered nerve block

OR

Performance Not Met:

10A79 Neuraxial anesthesia and/or a peripheral nerve block was NOT used

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Settings: Ambulatory Care; Hospital; Hospital Inpatient; Hospital Outpatient Services

Telehealth: No

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

Ratio Measure: No

Risk Adjustment: No

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Measure Title

AQI65: Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients, aged 18 years and older, undergoing a procedure using cardiopulmonary bypass who did not have a documented intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature ≥ 37.0 degrees Celsius during the period of cardiopulmonary bypass

NQS Domain / Meaningful Measures Area

Patient Safety / Preventable Healthcare Harm

Measure Type

Outcome

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes a cardiac operation using cardiopulmonary bypass 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 the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator.

Denominator

All patients aged 18 years or older, who undergo a procedure using cardiopulmonary bypass

Denominator Criteria (Eligible Cases):

Patient aged 18 years and older

AND

Patient encounter during the reporting period (CPT): 00562, 00563, 00567, 00580

Denominator Exclusions

- Procedure reduced or discontinued prior to initiation of CPB as indicated on the claim by Modifier 52 or Modifier 53.

Numerator

Patients who did not have an intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature ≥ 37.0 degrees Celsius during cardiopulmonary bypass

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

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11A11 All intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperatures <37.0 degrees Celsius during cardiopulmonary bypass

OR

Performance Not Met:

11A12 At least one intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature ≥ 37.0 degrees Celsius

OR

11A13 No documented pulmonary artery, oropharyngeal, or nasopharyngeal temperatures during cardiopulmonary bypass

NQF Number: Not applicable

eCQM: Not applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Setting: Hospital Inpatient

Telehealth: No

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

Ratio Measure: No

Risk Adjustment: No

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Measure Title

AQ167: Consultation for Frail Patients

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients aged 70 years or older, who undergo an inpatient procedure requiring anesthesia services and have a positive frailty screening result who receive a multidisciplinary consult or care during the hospital encounter

NQS Domain / Meaningful Measures Area

Communication and Care Coordination / Management of Chronic Conditions

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a frail patient undergoes an inpatient procedure 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 the Qualified Clinical Data Registry

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

Denominator: All patients aged 70 years or older, who undergo an inpatient procedure requiring anesthesia services and have a positive frailty screening result

Denominator Definition: Frailty can be screened using an established tool including but not limited to following tools:

- Fried Frailty Phenotype Criteria
- Modified Frailty Index
- The Vulnerable Elders Survey
- Initial Clinical Impression (“First Minute Impression”)

Denominator Criteria (Eligible Cases):

All patients aged 70 years and older

AND

Place of Service Code: **21 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,

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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, 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, 01937, 01938, 01939, 01940, 01941, 01942, 01951, 01952, 01991, 01992, 20526, 20550, 20551, 20552, 20553, 20600, 20604, 20605, 20606, 20610, 20611, 27096, 36555, 36556, 36570, 36571, 36578, 36580, 36581, 36582, 36583, 36584, 36585, 62263, 62264, 62270, 62272, 62273, 62280, 62281, 62282, 62320, 62321, 62322, 62323, 62324, 62325, 62326, 62327, 62328, 62329, 62350, 62355, 62360, 62361, 62362, 62365, 62370, 63650, 63661, 63662, 63663, 63664, 63685, 63688, 64400, 64405, 64408, 64415, 64416, 64417, 64418, 64420, 64425, 64430, 64435, 64445, 64446, 64447, 64448, 64449, 64450, 64451, 64454, 64461, 64463, 64479, 64483, 64486, 64487, 64488, 64489, 64490, 64493, 64505, 64510, 64517, 64520, 64530, 64600, 64605, 64610, 64620, 64624, 64625, 64630, 64633, 64635, 64640, 64680, 64681, 93503, 95990, 95991

AND

Positive Frailty Screening Result: **11A14**

Denominator Exclusions

- Emergent cases

Numerator: Patients who receive a multidisciplinary consult and/or multidisciplinary care during the hospital encounter
Numerator Definition: A multidisciplinary consult should include documentation of a discussion of the frailty screening result and can include consultation initiated by the anesthesiologist or other qualified anesthesia provider with surgery, geriatrics, hospital medicine, palliative care, or other appropriate specialty to help manage the perioperative care of a frail patient.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A15 Patient received multidisciplinary consult and/or multidisciplinary care

OR

Performance Not Met:

11A16 Patient did not receive multidisciplinary consult or multidisciplinary care

NQF Number: Not applicable

eCQM: Not applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Setting: Hospital Inpatient

Telehealth: No

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

Number of Multiple Performance Rates: Not applicable

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Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Ratio Measure: No

Risk Adjustment: No

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Measure Title

AQ168: Obstructive Sleep Apnea: Mitigation Strategies

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services who are screened for obstructive sleep apnea (OSA) AND, if positive, for whom two or more selected mitigation strategies were used prior to PACU discharge

NQS Domain / Meaningful Measures Area

Patient Safety / Preventable Healthcare Harm

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes an elective procedure under 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 the Qualified Clinical Data Registry

Patient demographics, G-codes and CPT codes are used to identify patients who are included in the measure denominator. Registry Codes are used to capture the numerator.

Denominator: All patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services

Denominator Note: For the purposes of this measure, anesthesia services only include cases using general anesthesia, neuraxial anesthesia and monitored anesthesia care (MAC)

Denominator Criteria (Eligible Cases):

Patients aged 18 years and older

AND

Elective procedure: **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, 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, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 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,

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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, 01937, 01938, 01939, 01940, 01941, 01942, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01991, 01992

Denominator Exclusions

- None

Numerator

Patients who are screened for obstructive sleep apnea AND, if positive, have documentation that two or more of the following mitigation strategies were used prior to PACU discharge:

- Preoperative initiation of continuous positive airway pressure (CPAP) or non-invasive positive pressure ventilation (NIPPV)
- Preoperative use of mandibular advancement devices or oral appliances
- Intraoperative administration of CPAP, nasopharyngeal airway, or oral appliance during sedation
- Use of major conduction anesthesia (spinal/epidural) or peripheral nerve block
- Multimodal analgesia
- Extubation while patient is awake
- Verification of full reversal of neuromuscular block
- Extubation and recovery carried out in lateral, semiupright, or other nonsupine position
- Postoperative administration of CPAP, nasopharyngeal airway, or oral appliance in the postanesthesia care unit (PACU)

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A26 Positive patient screen for OSA OR existing OSA diagnosis AND documentation of two or more mitigation strategies used prior to PACU discharge

OR

Performance Met:

11A27 Negative patient screen for OSA

OR

Denominator Exception

11A38 Documentation of medical reason(s) for not screening for obstructive sleep apnea and/or documenting the use of two or more mitigation strategies (e.g., patient remains intubated postoperatively, listed mitigation strategies contraindicated, other medical reason(s))

OR

Performance Not Met:

11A28 No patient screen for OSA OR positive OSA screen result and Documentation of less than 2 mitigation strategies used prior to PACU discharge

NQF Number: Not applicable

eCQM: Not applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

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Care Settings: Ambulatory Care: Clinician Office; Ambulatory Care: Hospital; Hospital; Hospital Inpatient; Outpatient Services

Telehealth: No

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

Ratio Measure: No

Risk Adjustment: No

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Measure Title

AQI69: Intraoperative Antibiotic Redosing

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients, aged 18 years and older, who received preoperative antibiotic prophylaxis within 60 minutes prior to incision (if fluoroquinolone or vancomycin, two hours) and undergo a procedure greater than two hours duration who received intraoperative antibiotic redosing at a maximum interval of two half-lives of the selected prophylactic antibiotic.

NQS Domain / Meaningful Measures Area

Patient Safety / Healthcare Associated Infections

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes a surgical procedure lasting greater than two hours duration 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 the Qualified Clinical Data Registry

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

Denominator

All patients, aged 18 years and older, who received preoperative antibiotic prophylaxis within 60 minutes (if fluoroquinolone or vancomycin, two hours) prior to incision and undergo a procedure greater than two hours duration.

Denominator Definition: For the purpose of this measure, preoperative antibiotic prophylaxis includes, but is not limited to, prophylaxis with the following antimicrobial agents:

- Ampicillin-sulbactam
- Ampicillin
- Aztreonam
- Cefazolin
- Cefuroxime
- Cefotaxime
- Cefoxitin
- Cefotetan
- Clindamycin
- Piperacillin-tazobactam

Denominator Criteria (Eligible Cases):

All patients, aged 18 years and older

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AND

Patient received antibiotic prophylaxis within 60 minutes (if fluoroquinolone or vancomycin, two hours) prior to incision:
10A87

AND

Procedure >2 hours duration: **11A60**

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00120, 00124, 00126, 00140, 00144, 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, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00528, 00529, 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, 00730, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00811, 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, 01120, 01140, 01150, 01160, 01170, 01173, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01382, 01390, 01392, 01400, 01402, 01404, 01430, 01432, 01440, 01442, 01444, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01500, 01502, 01520, 01522, 01610, 01620, 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, 01920, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01937, 01938, 01939, 01940, 01941, 01942, 01951, 01952, 01961, 01962, 01963, 01965, 01966

Denominator Exclusions

- Acute Renal failure²⁴: **11A61**
- Chronic kidney disease²⁵: **11A62**
- Procedure duration <2 half-lives of selected prophylactic antibiotic: **11A63**

Numerator

Patients who received intraoperative redosing of prophylactic antibiotics at a maximum interval of two half-lives of the selected prophylactic antibiotic

Numerator Note: If multiple redosing windows pass during a procedure, the recommended redosing window is the maximum amount of time that can pass between any two doses in order to meet this measure. Information on dosing and redosing should reflect clinical practice guidelines, local hospital policy, manufacturer guidance, and other materials imperative to safe practice. Antibiotic redosing should occur prior to closing the surgical incision.

Maximum redosing intervals for included antibiotics are listed below:

- Ampicillin-sulbactam: 2 hours
- Ampicillin: 2 hours
- Aztreonam: 4 hours
- Cefazolin: 4 hours
- Cefuroxime: 4 hours
- Cefotaxime: 3 hours
- Cefoxitin: 2 hours

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- Cefotetan: 6 hours
- Clindamycin: 6 hours
- Piperacillin-tazobactam: 2 hours

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A64 Patient received intraoperative redosing of prophylactic antibiotics at a maximum interval of two half-lives of the selected antibiotic

OR

Performance Met

11A65 Patient received intraoperative redosing of prophylactic antibiotics according to facility antibiotic stewardship program.

OR

Performance Not Met:

11A66 Patient did not receive intraoperative redosing of prophylactic antibiotics at a maximum interval of two half-lives of the selected antibiotic or according to facility antibiotic stewardship program.

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS, MVP

Care Setting: Hospital

Telehealth: No

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

Number of Performance Rates: 1

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

AQI71: Ambulatory Glucose Management

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of diabetic patients, aged 18 years and older, who receive an office-based or ambulatory surgery whose blood glucose level is appropriately managed throughout the perioperative period.

This measure will consist of four performance rates:

AQI71a: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery whose blood glucose level is tested prior to the start of anesthesia.

AQI71b: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) who received insulin prior to anesthesia end time.

AQI71c: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who received insulin perioperatively and who received a follow-up blood glucose level check following the administration of insulin and prior to discharge.

AQI71d: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) who received education on managing their glucose in the postoperative period prior to discharge.

NOTE: The overall measure score will be calculated as an average of the performance rates of parts A, B, C and D. In order to be scored on this measure, clinicians must have at least one eligible case reported for each sub-metric: AQI71a, AQI71b, AQI71c, and AQI71d.

NQS Domain / Meaningful Measures Area

Effective Clinical Care / Healthcare Associated Infections

Measure Type

Composite

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure will consist of four performance rates: AQI71a, AQI71b, AQI71c, and AQI71d. Each measure should be reported, as appropriate, for each time a patient undergoes a procedure in an office-based or ambulatory setting during the reporting period. This measure has four sub-metrics which are used to calculate the total composite score. All sub-metrics are required to be reported during the performance period. In order to be scored on this measure, clinicians must have at least one eligible case reported for AQI71a, AQI71b, AQI71c, and AQI71d. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

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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.

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Setting: Ambulatory Care: Hospital

Telehealth: No

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

Number of Performance Rates: 5

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

AQI71a: Ambulatory Point-of-Care Glucose Testing

Description: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery whose blood glucose level is tested prior to the start of anesthesia.

Denominator:

All patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery

Denominator definition: Office-based and ambulatory surgery is defined as a therapeutic or diagnostic procedure performed in a healthcare facility that does not require an overnight stay (less than 24 hours of care)

Denominator Criteria (eligible cases):

All patients, aged 18 years and older

AND

Diagnosis of diabetes mellitus: **11A41**

OR

ICD-10CM code: E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599,

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E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1, E13.37X2, E13.37X3, E13.37X9, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9

AND

Off Campus-Outpatient Hospital, On Campus – Outpatient Hospital, Ambulatory Surgical Center, and Office-Based Setting: Place of Service Codes 11, 19, 22 or 24

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00164, 00170, 00172, 00174, 00176, 00300, 00320, 00322, 00400, 00402, 00404, 00410, 00450, 00454, 00520, 00522, 00524, 00530, 00532, 00534, 00537, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00790, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00851, 00870, 00872, 00873, 00902, 00906, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01202, 01250, 01260, 01320, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01464, 01470, 01472, 01474, 01480, 01520, 01610, 01620, 01622, 01630, 01634, 01638, 01670, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01758, 01760, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01930, 01937, 01938, 01939, 01940, 01941, 01942, 01965, 01966, 01991, 01992

Denominator Exclusions:

- Procedure <30 minutes duration: **11A45**

Numerator:

Patients who received a blood glucose test prior to the start of anesthesia

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A51 Patient received a blood glucose test prior to start of anesthesia

OR

Performance Not Met:

11A52 Patient did NOT receive a glucose test prior to start of anesthesia

AQI71b: Ambulatory Hyperglycemia Control

Description

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Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) who received insulin prior to anesthesia end time.

Denominator:

All patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L)

Denominator definition: Office-based and ambulatory surgery is defined as a therapeutic or diagnostic procedure performed in a healthcare facility that does not require an overnight stay (less than 24 hours of care)

Denominator Criteria (Eligible Cases):

All patients, aged 18 years and older

AND

Diagnosis of diabetes mellitus: **11A41**

OR

ICD-10CM code: E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1, E13.37X2, E13.37X3, E13.37X9, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9

AND

Off Campus-Outpatient Hospital, On Campus – Outpatient Hospital, Ambulatory Surgical Center, and Office-Based Setting: Place of Service Codes 11, 19, 22 or 24

AND

Experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) prior to anesthesia end time: **11A44**

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00164, 00170, 00172, 00174, 00176, 00300, 00320, 00322, 00400, 00402, 00404, 00410, 00450, 00454, 00520, 00522, 00524, 00530, 00532, 00534, 00537, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00790, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00851, 00870, 00872, 00873,

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00902, 00906, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01202, 01250, 01260, 01320, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01464, 01470, 01472, 01474, 01480, 01520, 01610, 01620, 01622, 01630, 01634, 01638, 01670, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01758, 01760, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01930, 01937, 01938, 01939, 01940, 01941, 01942, 01965, 01966, 01991, 01992

Denominator Exclusions:

- Procedure <30 minutes duration: **11A45**

Numerator:

Patients who received insulin prior to anesthesia end time.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A53 Patient received insulin prior to anesthesia end time.

OR

Denominator Exception:

11A82 Documentation that insulin was not given because patient had severe comorbidities and glucose concentrations between 180 mg/dL and 250 mg/dL (10-13.9 mmol/L).

OR

Performance Not Met:

11A54 Patient did NOT receive insulin prior to anesthesia end time.

AQI71c: Follow-Up Glucose Check for Patients Receiving Insulin

Description: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who received insulin perioperatively and who received a follow-up blood glucose level check following the administration of insulin and prior to discharge.

Denominator:

All patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who received insulin perioperatively

Denominator definition: Office-based and ambulatory surgery is defined as a therapeutic or diagnostic procedure performed in a healthcare facility that does not require an overnight stay (less than 24 hours of care)

Denominator Criteria (Eligible Cases):

All patients, aged 18 years and older

AND

Diagnosis of diabetes mellitus: **11A41**

OR

ICD-10CM code: E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51,

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E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1, E13.37X2, E13.37X3, E13.37X9, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9

AND

Off Campus-Outpatient Hospital, On Campus – Outpatient Hospital, Ambulatory Surgical Center, and Office-Based Setting: Place of Service Codes 11, 19, 22 or 24

AND

Patient received insulin perioperatively: **11A55**

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00164, 00170, 00172, 00174, 00176, 00300, 00320, 00322, 00400, 00402, 00404, 00410, 00450, 00454, 00520, 00522, 00524, 00530, 00532, 00534, 00537, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00790, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00851, 00870, 00872, 00873, 00902, 00906, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01202, 01250, 01260, 01320, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01464, 01470, 01472, 01474, 01480, 01520, 01610, 01620, 01622, 01630, 01634, 01638, 01670, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01758, 01760, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01930, 01937, 01938, 01939, 01940, 01941, 01942, 01965, 01966, 01991, 01992

Denominator Exclusions:

- Procedure <30 minutes duration: **11A45**

Numerator:

Patients who received a follow-up blood glucose level check following the administration of insulin and prior to discharge.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A56 Patient received a follow-up blood glucose level check following the administration of insulin and prior to discharge.

OR

Performance Not Met:

11A57 Patient did NOT receive a follow-up blood glucose level check following the administration of insulin and prior to discharge.

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AQI71d: Hyperglycemia Management Patient Education

Description: Percentage of patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) who received education on managing their glucose in the postoperative period prior to discharge.

Denominator:

All patients, aged 18 years and older, with a current diagnosis of diabetes mellitus receiving anesthesia services for office-based or ambulatory surgery who experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L).

Denominator definition: Office-based or ambulatory surgery is defined as a therapeutic or diagnostic procedure performed in a healthcare facility that does not require an overnight stay (less than 24 hours of care).

Denominator Criteria (Eligible Cases):

All patients, aged 18 years and older

AND

Diagnosis of diabetes mellitus: **11A41**

OR

ICD-10CM code: E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37X1, E10.37X2, E10.37X3, E10.37X9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533, E11.3539, E11.3541, E11.3542, E11.3543, E11.3549, E11.3551, E11.3552, E11.3553, E11.3559, E11.3591, E11.3592, E11.3593, E11.3599, E11.36, E11.37X1, E11.37X2, E11.37X3, E11.37X9, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.3211, E13.3212, E13.3213, E13.3219, E13.3291, E13.3292, E13.3293, E13.3299, E13.3311, E13.3312, E13.3313, E13.3319, E13.3391, E13.3392, E13.3393, E13.3399, E13.3411, E13.3412, E13.3413, E13.3419, E13.3491, E13.3492, E13.3493, E13.3499, E13.3511, E13.3512, E13.3513, E13.3519, E13.3521, E13.3522, E13.3523, E13.3529, E13.3531, E13.3532, E13.3533, E13.3539, E13.3541, E13.3542, E13.3543, E13.3549, E13.3551, E13.3552, E13.3553, E13.3559, E13.3591, E13.3592, E13.3593, E13.3599, E13.36, E13.37X1, E13.37X2, E13.37X3, E13.37X9, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9

AND

Off Campus-Outpatient Hospital, On Campus – Outpatient Hospital, Ambulatory Surgical Center, and Office-Based Setting: Place of Service Codes 11, 19, 22 or 24

AND

Experienced a blood glucose level ≥ 180 mg/dL (10.0 mmol/L) prior to anesthesia end time: **11A44**

AND

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Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00164, 00170, 00172, 00174, 00176, 00300, 00320, 00322, 00400, 00402, 00404, 00410, 00450, 00454, 00520, 00522, 00524, 00530, 00532, 00534, 00537, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00790, 00797, 00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00851, 00870, 00872, 00873, 00902, 00906, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01202, 01250, 01260, 01320, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01464, 01470, 01472, 01474, 01480, 01520, 01610, 01620, 01622, 01630, 01634, 01638, 01670, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01758, 01760, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01930, 01937, 01938, 01939, 01940, 01941, 01942, 01965, 01966, 01991, 01992

Denominator Exclusions:

- Procedure <30 minutes duration: **11A45**

Numerator:

Patients who received education on managing their glucose in the postoperative period prior to discharge

Numerator Note: To meet this measure, the anesthesiologist or other member of the care team must provide both oral and written education. Provision of written materials alone is not sufficient.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A58 Patient received education on managing their glucose in the postoperative period prior to discharge.

OR

Performance Not Met:

11A59 Patient did NOT receive education on managing their glucose in the postoperative period prior to discharge.

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Measure Title

AQI72: Perioperative Anemia Management

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description: Percentage of patients, aged 18 years and older, undergoing elective total joint arthroplasty who were screened for anemia preoperatively AND, if positive, have documentation that one or more of the following management strategies were used prior to PACU discharge.

Management strategies include one or more of the following:

- Cell salvage techniques employed intraoperatively
- Intraoperative antifibrinolytic therapy or tourniquet, if not contraindicated
- Preoperative iron supplementation, epoetin alpha
- Use of evidence-based preoperative anemia management algorithm supplemented with laboratory testing and/or multidisciplinary consult

NQS Domain / Meaningful Measures Area

Patient Safety / Preventable Healthcare Harm

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient undergoes an elective total joint arthroplasty procedure 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 the Qualified Clinical Data Registry

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

Patients, aged 18 years and older, undergoing elective total joint arthroplasty.

Denominator Note: For the purpose of this measure, total joint arthroplasty includes arthroplasty of the knee, hip, and shoulder.

Denominator Criteria (Eligible Cases):

All patients, aged 18 years and older

AND

Elective Surgery: **G9643**

AND

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Patient encounter during the reporting period (CPT): 01214, 01215, 01402, 01638

Denominator Exclusions

Surgeon or other non-anesthesia professional completed one or more of the management strategies without direction or assistance from the anesthesia professional.

Numerator

Patients who were screened for anemia preoperatively AND, if positive, have documentation that one or more of the following management strategies were used prior to PACU discharge.

Management strategies include one or more of the following:

- Cell salvage techniques employed intraoperatively
- Intraoperative antifibrinolytic therapy or tourniquet, if not contraindicated
- Preoperative iron supplementation, epoetin alpha
- Use of evidence-based preoperative anemia management algorithm supplemented with laboratory testing and/or multidisciplinary consult

Numerator Definition: For the purpose of this measure, a positive preoperative anemia screening result is defined as a Hgb value <13 gm/dL for men or Hgb value <12 gm/dL for women

Numerator note: Preoperative screening for anemia could include any of the following tests: complete blood count (CBC), arterial blood gas (ABG), venous blood gas (VBG), or other point of care hemoglobin/hematocrit test within 90 days and until one day prior to the surgical procedure.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A67 Patient was screened for anemia preoperatively AND documentation of one or more selected management strategies used prior to PACU discharge.

OR

Denominator Exception:

11A68 Negative preoperative anemia screening result.

OR

Denominator Exception:

11A69 Documentation of medical or patient reason(s) for not screening for anemia and/or using selected management strategies (e.g., Jehovah's witness, patient refusal, contraindication, etc).

OR

Performance Not Met:

11A70 No preoperative patient screen for anemia OR positive preoperative anemia screening result and no documentation of one or more selected management strategies used prior to PACU discharge.

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims/Paper Medical Record, Registry

Submission Pathway: Traditional MIPS

Care Setting: Hospital

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Telehealth: No

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

Number of Performance Rates: 1

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

2023 AQR QCDR Measure Specifications Manual

Measure Title

AQI73: Prevention of Arterial Line-Related Bloodstream Infections

Provision licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Measure Description

Percentage of patients, regardless of age, who undergo placement of a peripheral intra-arterial catheter for whom the arterial line was inserted with all indicated elements of sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound techniques followed

The measure will consist of two performance rates:

AQI73a: Percentage of patients, regardless of age, who undergo placement of a peripheral intra-arterial line in the brachial, radial, posterior tibial, or dorsalis pedis artery for whom the arterial line was inserted with all indicated elements of sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound techniques followed

AQI73b: Percentage of patients, regardless of age, who undergo placement of a peripheral intra-arterial line in the femoral or axillary artery for whom the arterial line was inserted with all indicated elements of maximal sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound technique is followed

***NOTE:** The overall measure score will be calculated as an average of the total cases of part A and part B.*

NQS Domain / Meaningful Measures Area

Patient Safety / Healthcare Associated Infections

Measure Type

Composite

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure consists of two performance rates: *AQI73a* and *AQI73b*. Each measure should be reported, as appropriate, for each time a patient undergoes a procedure undergo placement of a peripheral intra-arterial catheter for whom the arterial line was inserted. This measure has two sub-metrics which are used to calculate the total composite score. *The overall measure score will be calculated as an average of the total cases of part A and part B.* It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator.

Registry codes are used to report the numerator of the measure.

NQF Number: Not Applicable

eCQM: Not Applicable

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Data Source:	Claims/Paper Medical Record, Registry
Submission Pathway:	Traditional MIPS
Measure Steward:	American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
Number of Performance Rates:	3
Proportion Measure Scoring:	Yes
Continuous Measure Scoring:	No
Risk Adjustment:	No
Care Setting:	Hospital
Telehealth Reporting Option:	No

AQI73a: Brachial, Radial, Posterior Tibial, or Dorsalis Pedis Arterial Lines

Description

Percentage of patients, regardless of age, who undergo an arterial line insertion in the brachial, radial, posterior tibial, or dorsalis pedis artery for whom the arterial line was inserted with all indicated elements of sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound techniques followed

Denominator:

All patients, regardless of age, who undergo placement of an intra-arterial catheter in the brachial, radial, posterior tibial or dorsalis pedis artery

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT): 36620

AND

Intra-arterial catheter placed in brachial, radial, posterior tibial, or dorsalis pedis artery: **11A71**

Denominator Exclusions:

None

Numerator:

Patients for whom intra-arterial catheter was inserted with all indicated elements of sterile barrier technique, hand hygiene, skin preparation (including >0.5% chlorhexidine with alcohol, unless there is a contraindication to chlorhexidine), and, if ultrasound is used, sterile ultrasound techniques followed

Numerator Definitions:

Sterile Barrier Technique: Includes all of the following elements: Cap AND mask AND sterile gloves AND sterile draping.

Sterile Ultrasound Techniques: Require sterile gel and sterile probe covers

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Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A74 All indicated elements of sterile barrier technique, hand hygiene, skin preparation, and, if ultrasound is used, sterile ultrasound techniques followed

OR

Denominator Exception:

11A75 Documentation of medical reason(s) for not following all indicated elements of sterile barrier technique, hand hygiene, skin preparation, and, if ultrasound is used, sterile ultrasound techniques during intra-arterial catheter insertion (e.g. An emergency surgical, therapeutic, or diagnostic procedure or an unanticipated worsening of the patient's clinical condition so that adherence would cause delay in arterial line insertion resulting in increased risk of harm to patient)

OR

Performance Not Met:

11A76 All indicated elements of sterile barrier technique, hand hygiene, skin preparation, and if ultrasound is used, sterile ultrasound techniques not followed, reason not otherwise specified

AQI73b: Femoral and Axillary Arterial Lines

Description:

Percentage of patients, regardless of age, who undergo an arterial line insertion in the femoral or axillary artery for whom the arterial line was inserted with all indicated elements of maximal sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound techniques followed.

Denominator:

All patients, regardless of age, who undergo placement of an intra-arterial catheter in the femoral or axillary artery

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT): 36620

AND

Intra-arterial catheter placed in femoral or axillary artery: **11A72**

Denominator Exclusions:

None

Numerator:

Patients for whom intra-arterial catheter was inserted with all elements of maximal sterile barrier technique, hand hygiene, skin preparation (including >0.5% chlorhexidine with alcohol, unless there is a contraindication to chlorhexidine), and, if ultrasound is used, sterile ultrasound techniques followed

Numerator Definitions:

Maximal Sterile Barrier Technique – includes all of the following elements: Cap AND mask AND sterile gloves AND sterile gown AND sterile full body draping

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Sterile Ultrasound Techniques- Require sterile gel and sterile probe covers

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

11A77 All elements of maximal sterile barrier technique, hand hygiene, skin preparation, and, if ultrasound is used, sterile ultrasound techniques followed.

OR

Denominator Exception:

11A78 Documentation of medical reason(s) for not following all elements of maximal sterile barrier technique, hand hygiene, skin preparation, and, if ultrasound is used, sterile ultrasound techniques during intra-arterial catheter insertion (e.g. An emergency surgical, therapeutic, or diagnostic procedure or an unanticipated worsening of the patient's clinical condition so that adherence would cause delay in arterial line insertion resulting in increased risk of harm to patient).

OR

Performance Not Met:

11A79 All elements of maximal sterile barrier technique, hand hygiene, skin preparation, and if ultrasound is used, sterile ultrasound techniques not followed, reason not otherwise specified.

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Measure Title

ABG40: Hypotension Prevention After Spinal Placement for Non-Emergent Cesarean Section

Provision licensed this measure from ABG QCDR

Measure Description: Percentage of patients, who present for non-emergent Caesarean section under spinal anesthesia who have phenylephrine infusions started prophylactically to prevent hypotension.

NQS Domain / Meaningful Measures Area

Patient Safety / Patient Focused Episode of Care

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time an adult patient presents for non-emergent Cesarean section under spinal anesthesia and who has phenylephrine infusions started prophylactically to prevent hypotension. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

Patient demographics and CPT codes are used to identify patients who are included in the measure denominator. G-codes and Registry Codes are used to capture the numerator.

Denominator

Patients who have non-emergent Caesarean section and undergo spinal anesthesia

Denominator Criteria (Eligible Cases):

All patients who undergo spinal anesthesia electively

AND

Patient encounter during the reporting period:

CPT: 59510, 59514, 59515/ ASA: 01961, 01968

Denominator Exclusions

ASA Physical Status = "E"

Exceptions

Contraindication to use of phenylephrine infusion (e.g. bradycardia, compromised cardiac function, pre-eclampsia, etc.)

Numerator

Patients who have a phenylephrine infusion started for prophylactic treatment of hypotension.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met: Phenylephrine infusion started prophylactically (ABG Measure Response code 1081)

OR

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Performance Not Met: Phenylephrine infusion NOT started prophylactically (ABG Measure Response code 1082)

Denominator Exceptions: Contraindication to phenylephrine infusion (ABG Measure Response code 1083)

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims, Hybrid, other

Submission Pathway: Traditional MIPS

Care Setting: Hospital

Telehealth: No

Measure Steward: ABG QCDR

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

ABG41: Upper Extremity Nerve Blockade in Shoulder Surgery

Provision licensed this measure from ABG QCDR

Measure Description: Percentage of patients who undergo elective shoulder arthroscopy or shoulder arthroplasty who have an upper extremity nerve blockade performed before or immediately after the procedure.

NQS Domain / Meaningful Measures Area

Effective Clinical Care / Patient Focused Episode of Care

Measure Type

Process

High Priority Status

No

Inverse Measure

No

Instructions

This measure is to be reported each time an adult patient presents for elective shoulder arthroscopy or elective shoulder arthroplasty. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

Patient demographics and CPT codes are used to identify patients who are included in the measure denominator. G-codes and Registry Codes are used to capture the numerator.

Denominator

Patients who have elective shoulder arthroscopy or shoulder arthroplasty.

Denominator Criteria (Eligible Cases): (ASA and CPT):

CPT: 23470, 23472, 23473, 23474, 29805, 29806, 29807, 29819, 29820, 29821, 29822, 29823, 29824, 29825, 29826, 29827, 29828 **ASA:** 01630, 01634, 01636, 01638

Denominator Exclusions

Patient age less than 18 years, ASA Physical Status = "E"

Denominator Exceptions

Contraindication to upper extremity nerve blockade; patient or surgeon refusal; Surgeon administered nerve block.

Numerator

Patients who have an upper extremity nerve block placed before or immediately after the procedure. Numerator Note: upper extremity block may include any one or a combination of the following: Interscalene, Supraclavicular, Suprascapular, Infraclavicular, Axillary.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

Upper extremity nerve block performed (ABG Measure Response code 1084)

OR

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Performance Not Met:

Upper extremity nerve block NOT performed (ABG Measure Response code 1085)

Denominator Exceptions: Contraindication to/refusal of upper extremity nerve block (ABG Measure Response Code 1086) or Surgeon administered upper extremity nerve block (ABG Measure Response Code 1087)

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims, Hybrid, other

Submission Pathway: Traditional MIPS

Care Setting: Ambulatory; Ambulatory Care: Clinician Office/Clinic; Ambulatory Care: Hospital; Ambulatory Surgical Center; Hospital; Hospital Inpatient; Hospital Outpatient

Telehealth: No

Measure Steward: ABG QCDR

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

ABG42: Known or Suspected Difficult Airway Mitigation Strategies

Provision licensed this measure from ABG QCDR

Measure Description: Percentage of patients with a known or suspected difficult airway who undergo a planned general endotracheal anesthetic that have both a second provider present at the induction and placement of the endotracheal tube and have difficult airway equipment in the room prior to the induction.

NQS Domain / Meaningful Measures Area

Patient Safety

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

The measure will be applicable to patients who by history or physical examination are known to have or are suspected of having a difficult airway and for whom general anesthesia with an endotracheal tube is planned. The measure will be considered met when a dedicated second provider is physically present in the room and is available to assist with induction and placement of the endotracheal tube. Additionally, the measure will be considered met when difficult airway equipment is brought into the room prior to induction to assist with the placement of the endotracheal tube if needed. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

Patient demographics and CPT codes are used to identify patients who are included in the measure denominator. G-codes and Registry Codes are used to capture the numerator.

Denominator

Patients with a known or suspected difficult airway who undergo a planned general endotracheal anesthetic.

Denominator Criteria (Eligible Cases):

Patient having a **GETA** (ABG Measure Response Code 1019)

AND

Patient identified as **difficult airway** – (ABG Measure Response Code 1073)

AND

CPT Codes included: 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, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906,

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00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 0930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966, 01992

Denominator Exclusions

Patient age less than 18 years, ASA Physical Status = "E"

Numerator

Patients who have a dedicated second provider physically present in the room who is available to assist with induction and placement of the endotracheal tube.

Numerator Note: suspected difficult airway- A difficult airway is defined as the clinical situation in which a conventionally trained anesthesiologist experiences difficulty with facemask ventilation of the upper airway, difficulty with tracheal intubation, or both. The difficult airway represents a complex interaction between patient factors, the clinical setting, and the skills of the practitioner.

Numerator Note: dedicated second provider- capable healthcare provider whose only responsibility at the time of induction is to provide assistance with management of difficult airway. A dedicated second provider may include operating room staff: physician, certified registered nurse anesthetist, registered nurse, resident, or anesthesia technician.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met: Second provider present at induction (ABG Measure Response Code 1074)

AND

Use of difficult airway equipment, planned is reported (ABG Observation 036)

OR

Performance Not Met: Second provider NOT present at induction (ABG Measure Response Code 1075)

OR

ABG Observation 037, 038 or 004 reported (unplanned use of difficult airway equipment, unable to intubate or failed airway)

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims, Hybrid, other

Submission Pathway: Traditional MIPS

Care Setting: Hospital, Ambulatory Surgery Center, Office Based Surgery Center

Telehealth: No

Measure Steward: ABG QCDR

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Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

ABG43: Use of Capnography for non-Operating Room anesthesia Measure

Provision licensed this measure from ABG QCDR

Measure Description: Percentage of patients receiving anesthesia in a non-operating room setting who have end-tidal carbon dioxide (ETCO₂) monitored using capnography.

NQS Domain / Meaningful Measures Area

Patient Safety / Preventable Healthcare Harm

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported each time a patient receives anesthesia in a non-operating room setting. End-tidal carbon dioxide (ETCO₂) can be recorded in the medical record with either a qualitative (“+”) or quantitative measure (numerical value).

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, type of anesthesia, and patient location 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 receiving anesthesia in a non-operating room procedure room setting for whom select CPT codes are reported.

Denominator Criteria (Eligible Cases):

Patients receiving anesthesia in a non-operating room setting (Measure response code 1088).

AND

Patient encounter reported with one of the following applicable setting anesthesia services:

CPT: 00104, 00410, 00731, 00732, 00811, 00812, 00813, 01922

Denominator Exclusions

Patients receiving anesthesia in an operating room setting

Numerator

Patients who have end-tidal carbon dioxide (ETCO₂) monitoring using capnography.

Numerator Note: Operating room is defined as a permanent fixed location in which procedures are performed and is equipped with a dedicated anesthesia machine (mechanical ventilator and inhalational anesthetic delivery system) with standard OR monitors (BP, EKG, pulse oximetry, end tidal CO₂). Procedure rooms where anesthesia machines and standard monitors are made available on an “as needed” basis are not considered operating rooms for the purposes of this measure.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

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Performance Met:

Mednax53A: Clinician monitored end-tidal carbon dioxide (ETCO₂) using capnography.
End-tidal carbon dioxide can be recorded in the medical record with either a qualitative (“+”) or quantitative measure (numerical value).

Performance Not Met:

Mednax53B: Clinician did not monitor end-tidal carbon dioxide using capnography.

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims, Hybrid, other

Submission Pathway: Traditional MIPS

Care Setting: Ambulatory Care sites, Ambulatory surgery center, emergency department, hospital inpatient, hospital outpatient, imaging facility, office-based surgery center, clinic

Telehealth: No

Measure Steward: ABG QCDR

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

MEDNAX54: Labor Epidural Failure when Converting from Labor Analgesia to Cesarean Section Anesthesia

Provision licensed this measure from ABG QCDR

Measure Description: The percentage of patients who have pre-existing labor epidural or combined epidural/spinal technique who require either repeat procedural epidural or spinal, general anesthesia, or supplemental sedation as defined below for cesarean section.

NQS Domain / Meaningful Measures Area

Efficiency and Cost Reduction / Appropriate Use of Healthcare

Measure Type

Outcome

High Priority Status

Yes

Inverse Measure

Yes

Instructions

This measure is to be reported each time a patient with an existing labor epidural or combined epidural/spinal requires delivery by cesarean section.

Measure Reporting via the Qualified Clinical Data Registry

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

Denominator

All parturients with an existing labor epidural or epidural/spinal technique who require delivery by cesarean section.

Denominator Criteria (Eligible Cases):

Parturient

AND

with labor epidural in place (CPT code 01967)

AND

requires delivery by cesarean section (CPT code +01968)

Denominator Exclusions: Urgent/Emergent C/S for fetal well-being (Measure Response Code 1091).

Numerator

Patients who have pre-existing labor epidural or epidural/spinal technique who require either general anesthesia, repeat procedural epidural and/or spinal technique, or supplemental sedation for cesarean section. For the purposes of this measure, “supplemental sedation” is defined as any dose of propofol, etomidate, or nitrous oxide.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

Mednax54A: Patient who has pre-existing labor epidural or epidural/spinal technique who requires either

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general anesthetic, repeat procedural epidural and/or spinal technique, or supplemental sedation for cesarean section.

Performance Not Met:

Mednax54B: Patients who has pre-existing labor epidural or epidural/spinal technique who did not require either general anesthesia, repeat procedural epidural and/or spinal technique, or supplemental sedation

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Claims, Hybrid, Other

Submission Pathway: Traditional MIPS

Care Setting: Hospital Inpatient

Telehealth: No

Measure Steward: ABG QCDR

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

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Measure Title

MEDNAX56: Use of a “PEG Test” to Manage Patients Receiving Opioids

Provision licensed this measure from ABG QCDR

Measure Description: Percentage of patients in an outpatient setting, aged 18 and older, in whom a stable dose of opioids is prescribed for greater than 6 weeks for pain control, and the results of a “PEG Test” are correctly interpreted and applied to the management of their opioid prescriptions.

NQS Domain / Meaningful Measures Area

Effective Clinical Care / Medication Management

Measure Type

Process

High Priority Status

Yes

Inverse Measure

No

Instructions

This measure is to be reported once each reporting period. The measure applies when a practitioner sees a patient in an outpatient setting who has been taking a stable dose of opioids for greater than 6 weeks. A stable dose of opioids is defined as the same medication, route of delivery, dose, and schedule for at least a one-week time period.

The PEG score is determined prior to the initiation of opioid therapy (Baseline PEG), and then after the patient has been on a stable dose of opioid therapy for greater than 6 weeks. These scores are recorded in the medical record. For those patients who are already on opioid therapy at the time the measure is applied, the “Baseline PEG” may also be determined after a washout period of opioids, or by asking the patient to answer the Baseline PEG questions like he would have prior to beginning opioid therapy. A 30% change in PEG score is considered a significant improvement.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. QCDR-established codes are used to report the numerator of the measure.

Denominator

All patients, aged 18 and older, receiving chronic opioid therapy for pain management in an outpatient setting, and who have been at a stable dose of opioids for greater than 6 weeks.

Denominator Criteria (Eligible Cases):

Patients aged ≥ 18 years on date of encounter

AND

taking a stable dose of opioid medications for greater than 6 weeks in an outpatient setting (Measure Response Code 1092)

AND

At least one encounter during the one-year performance period (CPT or HCPCS): 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245.

Denominator Exclusions (Measure Response Code 1093): Inpatients

OR

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Post-op surgical patients (defined as the period of time after surgery, not to exceed 6 weeks)

OR

Patients in hospice or palliative care treatment programs

OR

Patients in whom the opioid dose is still being adjusted and has not been consistent during the 6 weeks prior to the reporting period

Denominator Exception: Acute pain flare with elevated PEG that is assessed to be acutely transient and not warranting excessive opioid titration at this visit. (**Measure Response Code 1094**)

Denominator Exclusions

Inpatients OR Post-op surgical patients (defined as the period of time after surgery, not to exceed 6 weeks) OR Patients in hospice or palliative care treatment programs OR Patients in whom the opioid dose is still being adjusted and has not been consistent during the 6 weeks prior to the reporting period

Exceptions

Acute pain flare with elevated PEG that is assessed to be acutely transient and not warranting excessive opioid titration at this visit.

Numerator

Use of PEG Test results to guide opioid prescribing.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

Mednax12A: At least once during the reporting year, clinician used the PEG Test results to correctly continue opioid prescribing, meaning the PEG score showed a reduction of 30% or greater from baseline, and the patient was continued on the opioid regimen.

OR

Mednax12B: At least once during the reporting year, clinician used the PEG Test result to correctly discontinue previous opioid regimen (PEG score was not reduced 30% or more from baseline), and then weaned the patient off opioids, adjusted the dose of opioid, or changed to a different opioid.

Performance Not Met:

Mednax12C: At least once during the reporting year, clinician did not administer the PEG Test or administered the test and did not alter opioid prescribing appropriately.

NQF Number: Not Applicable

eCQM: Not Applicable

Data Source: Administrative Claims, hybrid, other

Submission Pathway: Traditional MIPS

Care Setting: Ambulatory Care: Clinician Office/Clinic, ambulatory care, outpatient services

Telehealth: Yes

Measure Steward: ABG QCDR

Number of Multiple Performance Rates: Not Applicable

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Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No