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2024 AQR QCDR MEASURE SPECIFICATIONS MANUAL

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Table of Contents

Introduction 1

2023 Retired Measures 2

2024 MIPS Measures Supported 2

2024 QCDR Measures Supported 2

ePreop30: Ultrasound Guidance for Peripheral Nerve Block with Patient Experience 3

ePreop31: Intraoperative Hypotension (IOH) among Non-Emergent Noncardiac Surgical Cases 5

AQI18: Coronary Artery Bypass Graft (CABG): Prolonged Intubation – Inverse Measure 13

AQI48: Patient-Reported Experience with Anesthesia 15

AQI49: Adherence to Blood Conservation Guidelines for Cardiac Operations using Cardiopulmonary Bypass (CPB) – Composite 19

AQI65: Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass 22

AQI67: Consultation for Frail Patients 24

AQI71: Ambulatory Glucose Management 27

AQI72: Perioperative Anemia Management 35

ABG42: Known or Suspected Difficult Airway Mitigation Strategies 38

ABG44: Low Flow Inhalational General Anesthesia 41

Introduction

Thank you for participating in the Anesthesia Quality Registry (AQR QCDR) in Collaboration with Anesthesia Quality Institute (AQI) and American Society of Anesthesiologists (ASA). This manual contains the specifications for all QCDR measures supported by the AQR for the 2024 reporting year. For additional details on external measures/stewards, please visit the following:

Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA) https://aqihq.org

ABG QCDR in Collaboration with Insight Medical Data Services, LLC https://anesthesiabg.com

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2024 AQR QCDR Measure Specifications Manual

2023 Retired Measures

Measure ID	Measure Title
128	Body Mass Index (BMI) Screening and Follow-up Plan
AQI56	Use of Neuraxial Techniques and/or Peripheral Nerve Blocks for Total Knee Arthroplasty (TKA)
AQI68	Obstructive Sleep Apnea: Mitigation Strategies
AQI69	Intraoperative Antibiotic Redosing
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
MEDNAX56	Use of a "PEG Test" to Manage Patients Receiving Opioids

2024 MIPS Measures Supported

Measure ID	Measure Title
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
487	Screening for Social Drivers of Health

2024 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
AQI49	Adherence to Blood Conservation Guidelines for Cardiac Operations using Cardiopulmonary Bypass (CPB) – Composite
AQI65	Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass
AQI67	Consultation for Frail Patients
AQI71	Ambulatory Glucose Management
AQI72	Perioperative Anemia Management
ABG42	Known or Suspected Difficult Airway Mitigation Strategies
ABG44	Low Flow Inhalational General Anesthesia

***requires EHR integration*

2024 AQR QCDR Measure Specifications Manual

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.

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:
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: Other: Other: Claims, EHR (AIMS, partial patient record), Hybrid, Paper medical record, Record review, Registry (Anesthesia Quality Registry (AQR)), Contracted third party data capture systems

Care Setting: Hospital

Telehealth: No

Measure Steward: Anesthesia Quality Registry (AQR QCDR) in Collaboration with Anesthesia Quality Institute (AQI) and American Society of Anesthesiologists (ASA)

Number of Multiple Performance Rates: Not applicable

Inverse Measure: No

Proportional Measure: Yes

Continuous Variable Measure: No

Ratio Measure: No

Risk Adjusted: No

MIPS Reporting Option: Traditional MIPS

Comments
None

Instructions/Notes
Available with Provation Patient Experience Survey Module.

2024 AQR QCDR Measure Specifications Manual

Measure Title

ePreop31: Intraoperative Hypotension (IOH) among Non-Emergent Noncardiac Surgical Cases

Measure Description: Percentage of general, neuraxial, or regional anesthesia care cases in which the mean arterial pressure (MAP) fell below 65 mmHg for a cumulative total of 15 minutes or more.

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).

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 ≥ 300 mmHg or ≤20 mmHg

DBP ≤5 mmHg or DBP ≥ 225 mmHg

SBP and DBP within 5 mmHg

MAP ≤30 mmHg or ≥ 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

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 or 6
- Emergency case
- Cardiac Procedures
- Obstetric non-operative procedures
- Liver or lung transplant procedures
- Cataract procedures

Numerator
Patients who have a MAP below 65 mmHg that exceeds the cumulative length of 15 minutes.

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

CBE 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: Administrative claims data; Other: Other: Claims, EHR (AIMS, patient record)

MIPS Reporting Option: Traditional MIPS, MVP

Care Setting: Hospital

Telehealth: No

Measure Steward: Provation Anesthesia Quality Registry (AQR QCDR)/Cleveland Clinic

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 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:

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

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:

$$logit(IOH) = \beta_0 + \beta_1 * Age + \beta_2 * ASA\_2 + \beta_3 * ASA\_4 + \beta_4 * BMI + \beta_5 * Surg\_Length\_Cat\_60–119 + \beta_6 * Surg\_Length\_Cat\_120–179 + \beta_7 * Surg\_Length\_Cat\_180–239 + \beta_8 * Surg\_Length\_Cat\_240–299 + \beta_9 * Surg\_Length\_Cat\_300– + \beta_{10} * Female\_1$$

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– = 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

3. 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:

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

Where, 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.

1. 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.
2. 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.

1. 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:

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

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%.

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

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2024 AQR QCDR Measure Specifications Manual

Measure Title

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

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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

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
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 greater than 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

CBE Number: Not applicable

eCQM: Not applicable

Data Source: Hybrid; Other: Other: Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems

Care Setting: Hospital Inpatient

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

Number of Performance Rates: 1

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

2024 AQR QCDR Measure Specifications Manual

Measure Title

AQI48: Patient-Reported Experience with Anesthesia

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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 within 60 days of receipt of the survey.

*NOTE: The measure requires that a valid survey, as defined in the numerator of AQI48a, be sent to patients between discharge from the facility and within 30 days of facility discharge. To report AQI48b, a minimum number of 20 surveys with the mandatory question completed must be reported. ** In order to be scored on this measure, clinicians must report BOTH AQI48a AND AQI48b.*

Measure Type
Patient-Reported Outcome-based Performance Measure (PRO-PM)

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 within 60 days of procedure (AQI48b)

Definition: *Any procedure including surgical, therapeutic or diagnostic

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

Denominator-AQI48a
Patients aged 18 and older, who undergo a procedure* under anesthesia
Definition: *Any procedure including surgical, therapeutic or diagnostic

Denominator-AQI48b
All patients from the numerator of AQI48a who complete a survey on their patient experience and satisfaction with anesthesia care within 60 days of receipt of the survey.

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 within 60 days of receipt of the survey **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

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 within 60 days of receipt of the survey.

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

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: Hybrid; Other: Other: Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems

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

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Multiple Performance Rates: 2

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Ratio Measure: No

Risk Adjusted: No

MIPS Reporting Option: Traditional MIPS, MVP

2024 AQR QCDR Measure Specifications Manual

Measure Title

AQI49: Adherence to Blood Conservation Guidelines for Cardiac Operations using Cardiopulmonary Bypass (CPB) – Composite

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Measure Description: Percentage of patients, aged 18 years and older, who undergo a cardiac operation using cardiopulmonary bypass for whom selected blood conservation strategies were used.

Measure Type
Process

High Priority Status
No

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. This measure has four sub-metrics which are used to calculate the total composite score. All sub-metrics are required to report to indicate performance met or performance not met. 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, CPT codes, and Registry codes are used to identify patients who are included in the measure denominator. CPT Category codes and Registry codes are used to report the numerator.

Denominator
Patients aged 18 years and older, who undergo a cardiac operation using cardiopulmonary bypass.

Denominator Note: Patients undergoing a re-operation are included in the denominator to the measure

Denominator Criteria (Eligible Cases):
Patient aged 18 years or older on date of encounter
AND
Patient encounter during the reporting period (CPT): 00562, 00563, 00567, 00580

Denominator Exclusions
• Emergent cases
• Lung transplants not using cardiopulmonary bypass: 11A80
• Procedure reduced or discontinued prior to initiation of CPB as indicated on the claim by Modifier 52 or Modifier 53.

Numerator
Patients for whom selected blood conservation strategies were used.

Numerator Scoring: Each blood conservation strategy of this measure accounts for 25% of the total composite score. Each of the four blood conservation strategies must be reported to be included in the performance measurement. The total composite score will be calculated by the data source and not the individual practitioner.

1. Use of Lysine analogues
Numerator Note: As indicated by Intraoperative Antifibrinolytic med: Aminocaproic Acid or Tranexamic Acid.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A01 Patients for whom lysine analogues were used.

OR

Performance Not Met:

10A02 Patients for whom lysine analogues were NOT used.

2. Use of mini-circuits or Retrograde Autologous Priming (RAP) or Ultrafiltration (Minimize hemodilution caused by cardiopulmonary bypass pump priming solution)
Numerator Note: Record the usage of retrograde autologous priming or a miniaturized circuit volume by the cardiopulmonary perfusion team prior to the onset of cardiopulmonary bypass.

Numerator Note: Capture the total volume of ultrafiltrate removed by the cardiopulmonary perfusion team during cardiopulmonary bypass and during modified ultra-hemofiltration post-CPB. Record the data in milliliters.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A03 Patients for whom mini-circuits or Retrograde Autologous Priming (RAP) or Ultrafiltration were used.

OR

Performance Not Met:

10A04 Patients for whom mini-circuits or Retrograde Autologous Priming (RAP) or Ultrafiltration were NOT used.

3. Use of red cell salvage using centrifugation
Numerator Note: Capture the volume of cell saver collected and given. Do not include autologous, allogeneic, pump-residual, or chest-tube recirculated blood.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A05 Patients for whom red cell salvage using centrifugation was used.

OR

Performance Not Met:

10A06 Patients for whom red cell salvage using centrifugation were NOT used.

4. Use of transfusion algorithm supplemented with point-of-care testing
Numerator Note: Transfusion algorithm includes SCA/STS guideline recommendations, or an evidence-based algorithm formulated at the local level.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

10A07 Patients for whom transfusion algorithm supplemented with point-of-care testing was used.

OR

Performance Not Met:

10A08 Patients for whom transfusion algorithm supplemented with point-of-care testing was NOT used.

Composite Performance Score

Performance Score Note: This performance score is calculated by the data source and not the individual practitioner. Eligible clinicians reporting this measure must submit numerator quality codes for each of the four blood conservation strategies identified in this measure. The performance score is the cumulative sum of performance met for each blood conservation strategy listed in the numerator of this measure.

For example, for a single patient encounter, if the eligible clinician reports performance met coding for "Use of mini-circuits or RAP or Ultrafiltration," "Use of red cell salvage using centrifugation," and "Use of transfusion algorithm supplemented with point-of-care testing" and performance not met for "Use of lysine analogues," the cumulative score would be calculated as 3 performance met divided by 4 possibilities of performance met that would equal 75%. This eligible clinician for this particular patient would be assessed as "Performance Not Met" because the eligible clinician had a cumulative score less than 100%.

Performance Met:

10A09 Patients for whom a cumulative score of 100% of blood conservation strategies was met.

OR

Performance Not Met:

10A10 Patients for whom a cumulative score of less than 100% of blood conservation strategies was met.

CBE Number: Not Applicable

eCQM: Not Applicable

Data Source: Hybrid; Other: Other: Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems

Care Setting: Hospital Inpatient

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

MIPS Reporting Option: Traditional MIPS

2024 AQR QCDR Measure Specifications Manual

Measure Title

AQI65: Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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

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:
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

CBE Number: Not applicable

eCQM: Not applicable

Data Source: Hybrid; Other: Other: Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems

Care Setting: Hospital Inpatient

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Ratio Measure: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

2024 AQR QCDR Measure Specifications Manual

Measure Title

AQI67: Consultation for Frail Patients

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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

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, 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

CBE Number: Not applicable

eCQM: Not applicable

Data Source: Hybrid; Other: Other: Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems

Care Setting: Hospital Inpatient

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Multiple Performance Rates: Not applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Ratio Measure: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

Measure Title

AQI71: Ambulatory Glucose Management

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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.

Measure Type
Process

High Priority Status
No

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
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.

CBE Number: Not Applicable

eCQM: Not Applicable

Data Source: Hybrid; Other: Other: We expect that the data source used for the measure will be similar to other AQI NACOR QCDR Measures. Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems.

Care Setting: Ambulatory Care: Hospital

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Performance Rates: 5

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

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, 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

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, 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, 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.

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

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.

Measure Title

AQI72: Perioperative Anemia Management

Provation licensed this measure from Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

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

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

Denominator Exclusions

Surgeon or other non-anesthesia professional clinician 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.

CBE Number: Not Applicable

eCQM: Not Applicable

Data Source: Hybrid; Other: Other: We expect that the data source used for the measure will be similar to other AQI NACOR QCDR Measures. Quality measures included in AQI NACOR are reported to the registry by participants who use a combination data sources that may include one or more of the following: administrative claims/billing data, facility discharge data, EHR (AIMS, partial patient record), paper medical record, and/or contracted third party data capture systems.

Care Setting: Hospital

Telehealth: No

Measure Steward: Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR) in Collaboration with American Society of Anesthesiologists (ASA)

Number of Performance Rates: 1

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

2024 AQR QCDR Measure Specifications Manual

Measure Title

ABG42: Known or Suspected Difficult Airway Mitigation Strategies

Provation licensed this measure from ABG QCDR in Collaboration with Insight Medical Data Services, LLC

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.

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, 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)

CBE Number: Not Applicable

eCQM: Not Applicable

Data Source: Hybrid; Other: Other: Medical Record, Registry

Care Setting: Ambulatory Surgical Center; Office Based Surgery Center; Hospital Inpatient; Hospital Outpatient; Ambulatory Care: Hospital

Telehealth: No

Measure Steward: ABG QCDR in Collaboration with Insight Medical Data Services, LLC

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS

2024 AQR QCDR Measure Specifications Manual

Measure Title

ABG44: Low Flow Inhalational General Anesthesia

Provation licensed this measure from ABG QCDR in Collaboration with Insight Medical Data Services, LLC

Measure Description: Percentage of patients aged 18 years or older, who undergo an elective procedure lasting 30 minutes or longer requiring inhalational general anesthesia who during the maintenance phase of the anesthetic have a total fresh gas flow less than or equal to 1 L/min (less than or equal to 2 L/min for Sevoflurane).

Measure Type
Efficiency

High Priority Status
Yes

Inverse Measure
No

Instructions
This measure is to be reported each time a patient undergoes an elective procedure in which inhalational general anesthesia is used. 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
All patients aged 18 years or older, who undergo an elective procedure lasting 30 minutes or longer requiring inhalational general anesthesia. **(1095)**

Denominator Criteria (Eligible Cases):
Patients aged 18 years and older
AND
Elective procedure
AND
Patient who receives inhalational general anesthesia
AND
Procedure lasts 30 minutes or longer

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, 00566, 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, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935,01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966

Denominator Exceptions
Patient or technical reason exists for not providing low flow inhalational anesthesia (e.g., flow meter not capable of generating low flows, patient hypermetabolic, lack of CO2 absorbents without KOH and low concentrations of NaOH, etc.) **(1096)**

Numerator
Patients who undergo an elective procedure lasting 30 minutes or longer requiring inhalational general anesthesia who during the maintenance phase of the anesthetic have a total fresh gas flow less than or equal to1 L/min (less than or equal to 2 L/min for Sevoflurane).

Numerator Definition
Inhalational general anesthesia is defined as the use of at least one inhalational anesthetic gas (e.g., halothane, isoflurane, desflurane, sevoflurane, nitrous oxide) as the primary mode of anesthesia for the procedure.

The maintenance phase of the inhalational anesthetic is defined as the portion of the case in which Stage III surgical anesthesia (e.g., unconsciousness, amnesia, immobility, unresponsive to surgical stimulation) is achieved at a safe anesthetic depth while also maintaining respiratory and hemodynamic stability. This occurs between the induction and emergence phases of the case.

Fresh gas flow (FGF) is defined as the combined admixture of medical gases such as air, oxygen, or nitrous oxide as well as volatile anesthetics as set by the anesthesia provider.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:
The total FGF is reduced to less than or equal to 1 L/min (less than or equal to 2 L/min for Sevoflurane) for the duration of the maintenance phase of the anesthetic **(1097)**.
OR
Performance Not Met:
The total FGF is greater than 1 L/min (greater than 2 L/min for Sevoflurane) for the duration of the maintenance phase of the anesthetic **(1098)**.

CBE Number: Not Applicable

eCQM: Not Applicable

Data Source: Hybrid; Other: Other: Medical Record, Registry

Care Setting: Ambulatory Surgical Center; Imaging Facility; Office Based Surgery Center; Ambulatory Care: Hospital; Hospital Inpatient; Hospital Outpatient

Telehealth: No

Measure Steward: ABG QCDR in Collaboration with Insight Medical Data Services, LLC

Number of Multiple Performance Rates: Not Applicable

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

MIPS Reporting Option: Traditional MIPS, MVP