2024 ABG QCDR Measure Specifications

ABG QCDR MEASURE SPECIFICATIONS INDEX

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Disclaimer

The ABG QCDR is certified by CMS as a Qualified Clinical Data Registry (QCDR); however, submitting data to the ABG QCDR does not guarantee success in the CMS Merit-Based Incentive Payment Program (MIPS). There are many variables that contribute to your outcome when participating in this program.

Measure Calculations

$$\text{Reporting Rate} = \frac{\text{Performance Met + Performance Not Met + Denominator Exceptions}}{\text{Initial Patient Population - Denominator Exclusions}}$$

$$\text{Performance Rate} = \frac{\text{Performance Met}}{\text{Reporting Numerator – Denominator Exceptions}}$$

MIPS Measures Available for ABG QCDR Reporting for PY 2024

Measure ID	Measure Title	Measure Type
Q#047	Advance Care Plan	Process (High Priority)
Q#130	Documentation of Current Medications in the Medical Record	Process (High Priority)
Q#134	Preventative Care and Screening: Screening for Depression and Follow-up Plan	Process
Q#145	Radiology: Exposure Dose Indices or Exposure Time and Number of Images Reported for Procedures Using Fluoroscopy	Process (High Priority)
Q#155	Falls: Plan of Care	Process (High Priority)
Q#182	Functional Outcome Assessment	Process (High Priority)
Q#226	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	Process
Q#236	Controlling High Blood Pressure	Intermediate Outcome (High Priority)
Q#317	Preventative Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Process
Q#404*	Anesthesiology Smoking Abstinence	Intermediate Outcome (High Priority)
Q#424*	Perioperative Temperature Management	Outcome (High Priority)
Q#430*	Prevention of Post-Operative Nausea and Vomiting (PONV) – Combination Therapy	Process (High Priority)
Q#431	Preventive Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling	Process
Q#463*	Prevention of Post-Operative Vomiting (POV) – Combination Therapy (Pediatrics)	Process (High Priority)
Q#468	Continuity of Pharmacotherapy for Opioid Use Disorder (OUD)	Process (High Priority)
Q#477*	Multimodal Pain Management	Process (High Priority)

Measures with an asterisk (*) are included in the CMS-recommended Anesthesiology Measure Set.

ABG42: Known or Suspected Difficult Airway Mitigation Strategies

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 induction and placement of the endotracheal tube and have difficult airway equipment in the room prior to the induction.

National Quality Strategy Domain: Patient Safety

Measure Type: Process

High Priority Status: Yes

High Priority Type: Patient Safety

Inverse Measure: No

Risk Adjusted: 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: Age < 18, 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**.**

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 reported unplanned use of difficult airway equipment (ABG observation **037**)**, or** unable to intubate

(ABG observation **038**), **or** failed airway (ABG observation **004**)

Definitions:

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.

References:

Practice Guidelines for Management of the Difficult Airway, An Updated Report by the American

Society of Anesthesiologists Task Force on Management of the Difficult Airway. Anesthesiology 2013; 118:251-70.

https://pubs.asahq.org/anesthesiology/article/118/2/251/13535/Practice-Guidelines-for-Management-of-the

Data Source: Claims, Hybrid, EHR, Paper medical record, other

Measure Steward: ABG QCDR

Inverse Measure: No

Proportional Measure: Yes

Continuous Variable Measure: No

Ratio Measure: No

Risk Adjustment: No

Meaningful Measure Area: Preventable Healthcare Harm

Number of Performance Rates: 1

Care Setting: Ambulatory surgery center, ambulatory care: hospital, hospital inpatient, hospital outpatient, imaging facility, office-based surgery center

Includes Telehealth: No

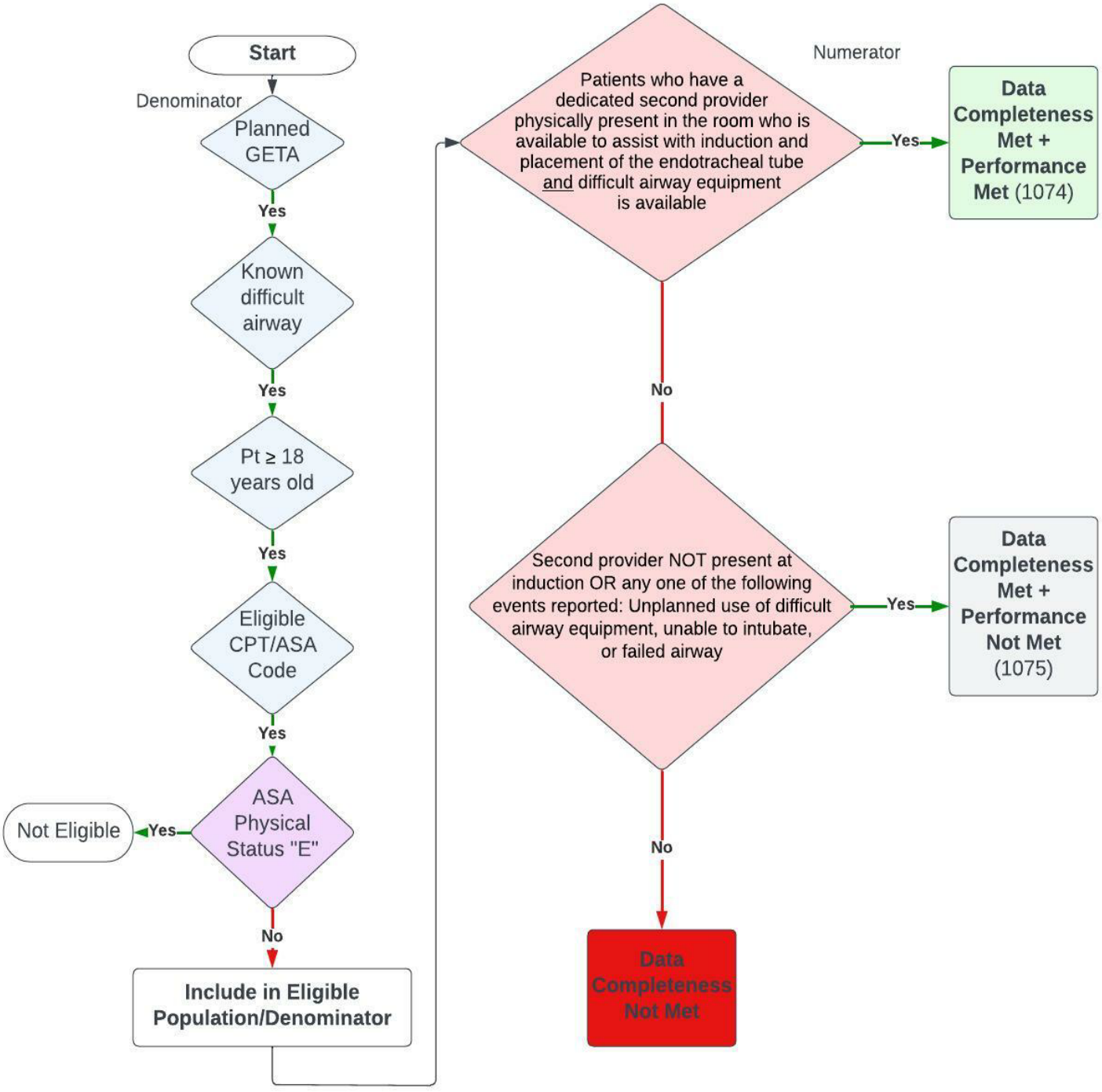
NQF Number: Not applicable

eCQM Number: Not applicable

2023 Clinical Quality Measure Flow for ABG 42

Known or Suspected Difficult Airway Mitigation Strategies

Disclaimer: *Refer to the measure specification for specific coding and instructions to submit this measure.*



ABG 44: Low Flow Inhalational General Anesthesia

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).

NQS Domain / Meaningful Measures Area
Efficient Use of Healthcare Resources/Clinical Process/Effectiveness

Measure Type
Process

High Priority Status
Yes

Inverse Measure
No

Instructions
This measure is to be reported each time a patient undergoes an elective procedure 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.[1]

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).**

NQF Number
Not applicable

eCQM
Not applicable

Rationale

Managing Fresh Gas Flow to Reduce Environmental Contamination

Introduction
When using a circle anesthesia system, any anesthetic gases and vapors that enter the scavenging system will flow through the hospital vacuum system and ultimately be vented outside the hospital to the atmosphere. The total fresh gas flow determines the amount of gas entering the scavenging system per minute. Whenever fresh gas flow exceeds the patient's requirement, gases and vapors will enter the scavenging system and ultimately contaminate the atmosphere. By choosing the minimal total fresh gas flow, the environmental impact of anesthetic vapors and gases can be minimized. Although the environmental impact of a single case may be minimal, every practitioner can make a significant difference over the thousands of procedures during their career by practicing careful fresh gas flow management for each case. There are three strategies to minimize fresh gas flow and environmental contamination. To implement these strategies, it is important to understand how to utilize anesthetic agent and oxygen concentration monitors to safely deliver the minimum fresh gas flow.

Strategy #1: Minimize Fresh Gas Flow During Maintenance
With this background, the first strategy to reduce the environmental impact of anesthetic vapors is to minimize the fresh gas flow during the maintenance phase of the case. As an example of a low, or minimal, flow anesthetic technique, consider a case of a 70 kg male requiring general anesthesia. Following intravenous induction, isoflurane was administered using oxygen and air at 2 L/min each for a total fresh gas flow of 4 L/min. Once the exhaled concentration of isoflurane is close to the inspired concentration, uptake from the lungs has slowed and the fresh gas flow can be reduced. Assuming oxygen consumption to be about 350 mL/min, the oxygen flow can be set to 350 mL/min. The air flowmeter can be set at 500 mL/min which would deliver an additional 105 mL/min of oxygen and the total fresh gas flow will be less than 1 L/min. If nitrous oxide is used, the oxygen flowmeter should be set to 500 mL/min at a minimum and nitrous oxide at 500 mL/min.

Managing this technique requires that the inspired oxygen concentration be monitored. If oxygen consumption exceeds the total oxygen delivered, the inspired oxygen concentration will diminish over time, which will be an indication that oxygen flow needs to be increased. There is still some environmental contamination with this technique, since the total fresh gas flow exceeds what is consumed, but it is easier to manage than a true "closed circuit" technique. Unless the patient has a large oxygen consumption (e.g., trauma, pregnancy) it should be possible during the maintenance phase of anesthesia to limit the fresh gas flow to a maximum of 1 L/minute. For smaller patients with even lower oxygen consumption requirements, the maintenance fresh gas flow can be reduced even further with the same caveat of monitoring inspired oxygen concentration.

Greening the Operating Room and Perioperative Arena: Environmental Sustainability for Anesthesia Practice. **Task Force on Environmental Sustainability Committee on Equipment and Facilities, American Society of Anesthesiologists (ASA).**
https://www.asahq.org/about-asa/governance-and-committees/asa-committees/environmental-sustainability/greening-the-operating-room

Described in 1952 by Foldes, the technique of reducing the fresh gas flow during an anesthetic to a level ≤ 1 L/min is both safe and effective.[2] Additionally, there are benefits to both the patient, cost savings to the facility and benefits to the environment.[3]

- The inhalational anesthetic agents sevoflurane isoflurane and desflurane have global warming potentials 2-3 orders of magnitude higher than CO2.[3]
- Nitrous oxide contributes significantly to global warming and ozone depletion.[3]
- 5% of the carbon footprint (CO2e) of the British National Health System is attributable to exhaled anesthetic agents.[3]
- Reducing the environmental impact of anesthesia, can be achieved through behavior change.[3]
- The chemical properties and global warming impacts of these gases vary, with atmospheric lifetimes of 1–5 years for sevoflurane, 3–6 years for isoflurane, 9–21 years for desflurane, and 114 years for N_2O.[4]
- The conservation of heat and moisture within the breathing system is an added benefit of low flow anesthesia to the patient especially when humidifier connection filters are not used.
- Low flow anesthesia can result in cost savings even when the increased cost of CO2 absorber is factored in, especially with regards to usage of Sevoflurane and Desflurane.[5]
- The simulated low flow anesthesia of 1 L/min FGF across all agents predicted a 48% reduction in costs of volatile anesthetics at a tertiary hospital.[6]

References:

1. Maintenance of general anesthesia: Overview - UpToDate
2. Foldes F, et al. The Administration of Nitrous Oxide-Oxygen Anesthesia in Closed System, Ann Surg, 1952, vol 136 (pg. 978-81).
3. Campbell M, et al. Atmospheric Science, Anaesthesia and the Environment, BJA Education, 15 (4): 173–179 (2015).
4. Varuguese, S, et al. Environmental and Occupational Considerations of Anesthesia: A Narrative Review and Update. Anesthesia & Analgesia: October 2021 - Volume 133 - Issue 4 - p 826-835.
5. Effect of Co2 Absorbent on the Cost of Low Flow Anesthesia: Lower Flows Are Not Always Cheaper (asaabstracts.com)
6. Edmonds A, et al. Evidence-Based Project: Cost Savings and Reduction in Environmental Release with Low-Flow Anesthesia. *AANA Journal* □ February 2021 □ Vol. 89, No. 1

Data Source: Claims, EHR, Hybrid, Paper medical record, Claims, Other

Measure Steward: ABG QCDR

Number of Performance Rates: 1

Number of Multiple Performance Rates: Not applicable

Care Setting: Ambulatory surgery center, ambulatory care: hospital, hospital inpatient, hospital outpatient, imaging facility, office-based surgery center, imaging facility

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

2023 Clinical Quality Measure Flow for ABG 44

Low Flow Inhalational General Anesthesia

Disclaimer: *Refer to the measure specification for specific coding and instructions to submit this measure.*