

# 2024 MACRA Ready™ *for Anesthesiology*

(v03/12/2024)

**Please note:** This guide was prepared for informational purposes only and isn't intended to grant rights or impose obligations. The information provided is only intended to be a general summary. It is not intended to take the place of the written law, including the regulations. We encourage readers to review the specific statutes, regulations, and other interpretive materials for a full and accurate statement of their contents.

This manual covers "**Traditional MIPS**" for the Quality Payment Program (<https://qpp.cms.gov>).



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## I. Quality Payment Program ([qpp.cms.gov](http://qpp.cms.gov))

### Overview

The Merit-based Incentive Payment System (MIPS) is one way to participate in the Quality Payment Program (QPP). The program describes how CMS reimburses MIPS eligible providers (EPs) for Part B covered professional services and rewards them for improving the quality of patient care and outcomes.

Under MIPS, CMS evaluates your performance across multiple performance categories that lead to improved quality and value in our healthcare system.

Key points:

1. **Payment Adjustment:** Each Eligible Provider (EP) - defined as any unique NPI + TIN combination - will ultimately be given a Payment Adjustment on Medicare claims ranging from a max penalty of -9% to a theoretical max bonus of +9% (but much more likely max is lower). The final payment adjustment is a function of the NPI's **Composite Performance Score (CPS)**.
2. **Composite Performance Score:** The EP's Composite Performance Score ranges from 0 to 100 with 0 resulting in the max penalty and a CPS of 100 resulting in the max bonus. The CPS is determined by a complex formula consisting of weighted averages from **Four Performance Categories**.
3. **Four Performance Categories:** Specific weighted averages of the following four performance categories produce your final Composite Performance Score (0-100): **Quality, Promoting Interoperability, Improvement Activities, and Cost**.

CMS designed MIPS to update and consolidate previous programs, including: Medicare Electronic Health Records (EHR) Incentive Program for Eligible Clinicians, Physician Quality Reporting System (PQRS), and the Value-Based Payment Modifier (VBM).

MIPS was designed to tie payments to quality and cost efficient care, drive improvement in care processes and health outcomes, increase the use of healthcare information, and reduce the cost of care.

The **MIPS Performance Year** begins on January 1 and ends on December 31 each year. Program participants must report quality data on 100% of cases during one calendar year by March 31 of the following calendar year. For example, program participants who collect data in 2024 will ultimately have their data sent to CMS by March 31, 2025 to be eligible for a payment increase and to avoid a payment reduction for claims filed in 2026.

## Payment Adjustment (ie. "Penalty" or "Bonus")

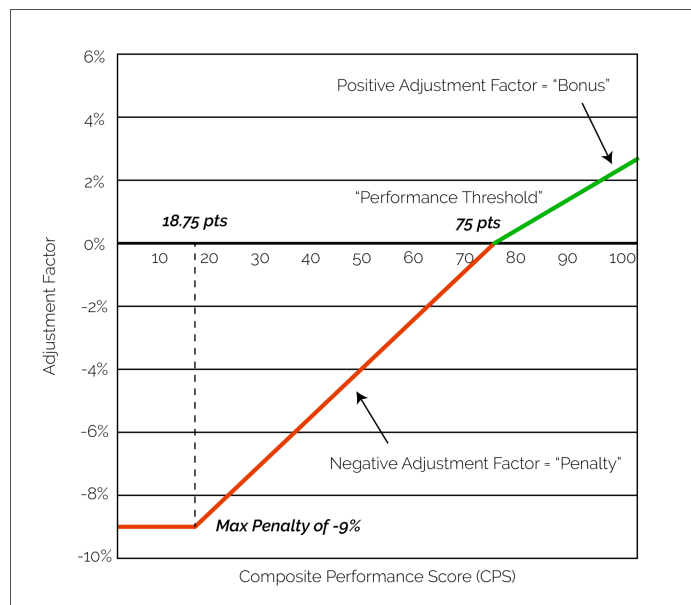
The EP's Payment Adjustment will be negative (i.e. "penalty"), positive (i.e. "bonus"), or neutral (i.e. "no adjustment"). This percent change will be recognized on Medicare claims filed by the NPI + TIN combination, two years after the reporting period.

Keep in mind, EPs are defined by their unique NPI + TIN combination, meaning any NPI may have several Payment Adjustments, depending on how many TINs they bill under. For example, if a given NPI files claims with CMS using 4 different TINs, they will receive 4 separate Payment Adjustments. This provides segregation between employers, such that the payment adjustment from one TIN will not affect another TIN's future claims.

The Payment Adjustment is determined by the EP's Composite Performance Score. This is a nonlinear relationship across the entire CPS range (see chart below). While predicting any specific Payment Adjustment is difficult, the table below illustrates some helpful "mile markers", connecting specific payment adjustments to specific Composite Performance Scores.

Payment Adjustment	Composite Performance Score	Common Name
-9%	0 - 18.75	Max Penalty
Linear sliding scale	18.76 - 74.99	
0%	75 (same in 2022)	Performance Threshold
Linear sliding scale	75.01 - 99.99	
+9% (theoretical max)*	100	Maximum Bonus

\***Theoretical max** bonus is a function of the amount raised from the EPs paying a penalty via negative payment adjustments. Estimates for max bonus will likely be closer to +3%.



## Composite Performance Score

A CPS ranges from 0 to 100 for each Performance Year.

The CPS is determined by a complex formula consisting of weighted averages from 4 Performance Categories: Promoting Interoperability, Cost, Improvement Activities, and Quality. For "Non-Patient Facing" EPs, the weighted significance of each Performance Category is shown in the table below.

Performance Category	Weight	Notes
Promoting Interoperability	0%	<ul style="list-style-type: none"><li>• Re-weighted to 0% for non-patient facing Eligible Providers (e.g. Anesthesiologists and CRNAs)</li></ul>
Cost	30%	<ul style="list-style-type: none"><li>• Unclear how this will be determined by CMS</li><li>• No additional data submission required</li></ul>
Improvement Activities	15%	<ul style="list-style-type: none"><li>• Annual attestation of activities performed over the reporting period</li></ul>
Quality	55%	<ul style="list-style-type: none"><li>• No limit on number of measures submitted</li><li>• CMS will only count your top 6 measures</li></ul>

These 4 Performance Categories are used to determine a Composite Performance Score which is then used to determine the Payment Adjustment for each unique NPI + TIN. Let's take a deeper dive into each of the Performance Categories.

## Four Performance Categories

### 1. Promoting Interoperability (0% of CPS)

Most clinicians must collect data using certified electronic health record technology (CEHRT) on the required measures for the same continuous 90 (+)-day in the current performance period. This performance category replaced the Medicare EHR Incentive Program for EPs, commonly known as "Meaningful Use".

In years past, CMS has re-weighted this category to 0% for all anesthesia providers based on their status as "non-patient facing". There is no requirement for anesthesia EPs to use CEHRTs. Instead, the weight for this category is transferred to the Quality category (see below).

### 2. Cost (30% of CPS)

This performance category replaces the VBM. The cost of the care you provide will be calculated by CMS based on your Medicare claims. MIPS uses cost measures to gauge the total cost of care during the year or during a hospital stay. This is a bit of a black box, in that there is no current way to track or review this component score. Fortunately, there is no additional data submission requirement either.

### 3. Improvement Activities (15% of CPS)

This category includes an inventory of activities that assess how you improve your care processes, enhance patient engagement in care, and increase access to care. The inventory allows you to choose the activities appropriate to your practice from categories such as, enhancing care coordination, patient and clinician shared decision-making, and expansion of practice access.

This entails a single end-of-year attestation of the following available activities to verify to CMS that the data collected is being used to improve patient care. **These are subject to CMS audits. Please be diligent in the selection for your providers.** (For more detailed information for required validation documentation: <https://qpp.cms.gov/mips/improvement-activities>)

The IA category accounts for 15% of the Final CPS. To earn full credit in this category, participants must attest to one of the following combinations of activities (each activity must be performed for 90 days or more during the reporting period, unless otherwise stated in the activity description):

- 2 high-weighted activities
- 1 high-weighted activity and 2 medium-weighted activities
- At least 4 medium-weighted activities

#### 4. Quality (55% of CPS)

This category covers the quality of the care you deliver, based on performance measures created by CMS, as well as medical professional and stakeholder groups. CMS will only use a maximum of 6 measures to determine your quality of care. You must report on at least 70% of your eligible patients for the entire year.

**NOTE:** While Graphium Health will report quality data for all 13 MACRA measures described below, CMS will only consider the top 6 performing measures. So leaving a question blank will NOT necessarily negatively impact your Payment Adjustment, *assuming there are another 6 applicable measures being recorded.*

#### Category Maximum Points

Each of the 6 MACRA measures is worth a max of 10 points, giving this category a maximum score of 60 points. For example, if you earn a total of 25 points from your top 6 MACRA measures, then you will have earned 41.7 points ( $=25/60$ ) of the Quality category.

Because the Quality Performance Category is worth 55% of the CPS, the total amount of points from this category towards CPS is 41.7% of 55 = 22.9 points.

#### Points per Measure

Each MACRA measure is assigned a score ranging from 0 to 10, depending on how your Performance Met for a given measure compares with the measure's national benchmark. In other words, after all quality data has been collected across the country for the entire year, CMS will divide a given measure's Performance Met rates into decile categories to create the measure's benchmark as seen in the table below for QID 430 (Prevention of PONV - Combo Therapy).

Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
31.65 - 87.82	87.83 - 96.42	96.43 - 99.25	99.26 - 99.97	99.98 - 99.99	--	--	100

In this example, if your EP's Performance Met for MIPS 430 was 98.6%, then they would fall in Decile 5, thus earning a total of 5 pts for this measure.

**NOTE:** A Performance Rate of 69% for MACRA Measure A may actually be worth more CPS points compared to a 98% Performance Met for MACRA Measure B because the number of points earned for each measure is a function of BOTH your Performance Met AND how it compares to the measure's national benchmark.



## Performance Met Percentage

In calculating any individual MACRA measure's Performance Met rate, all anesthesia cases for a given EP during the Reporting Periods are individually evaluated for all the elements required to score the MACRA measure. The individual criteria for each MACRA measure are described on the pages that follow.

Each measure for a given anesthetic case is assigned one of the following states based on the data provided by the EP:

**Performance Met:** Case is eligible for this measure (based on denominator criteria), and evaluation of numerator criteria resulted in successful performance

**Performance Not Met:** Case is eligible for this measure (based on denominator criteria), but evaluation of numerator criteria resulted in failed performance

**Data Completeness Not Met:** Case is eligible for this measure (based on denominator criteria) but is missing data required for numerator evaluation

**Ineligible:** Case is ineligible for this measure due to Denominator Exclusion criteria or because of missing fields. Denominator Exclusion criteria is specifically defined in each measure. For example, an ASA Physical Status of 5 may mean a given measure does not apply to a given case. "Performance Met" rate for this measure will not be affected by this case. Please review the measure definition for further details.

**Denominator Exception:** Based on denominator criteria for this measure, case was eligible, but it was ultimately excluded because it met certain additional criteria as defined by the measure. "Performance Met" rate for this measure will not be affected by this case. Please review the measure definition for further details.

*Performance Met rate =*

$$\frac{\text{\# of Performance Met Cases}}{\text{\# of Performance Met Cases} + \text{\# of Performance NOT Met Cases}}$$

*Data Completeness rate =*

$$\frac{\text{\# of Performance Met Cases} + \text{\# of Performance NOT Met Cases}}{\text{\# of Performance Met Cases} + \text{\# of Performance NOT Met Cases} + \text{\# of Data Completeness NOT Met Cases}}$$

## Reporting Thresholds, Participation Status, & Reporting Options

### Reporting Thresholds

For the Merit-based Incentive Payment System (MIPS), CMS reviews past and current Medicare Part B Claims and Provider Enrollment, Chain, and Ownership System (PECOS) data for clinicians and practices twice for each Performance Year (each review is called a determination segment). Data from the two segments is then reconciled and released as the final eligibility determination. (<https://qpp.cms.gov/mips/how-eligibility-is-determined>)

Clinicians and practices must exceed the low-volume threshold during both review periods to be eligible for MIPS.

You must participate in MIPS (unless otherwise exempt) if, in both 12-month segments of the MIPS Determination Period, you:

- Bill more than \$90,000 for Part B covered professional services, and
- See more than 200 Part B patients, and;
- Provide more than 200 covered professional services to Part B patients.


### Participation Status

There are different ways to become a MIPS eligible clinician, depending on whether you're reporting as an individual or part of a group.

#### MIPS Eligible as an Individual


MIPS Eligibility:  **INDIVIDUAL**

In order to be MIPS eligible as an individual clinician, you must:

- Be identified as a [MIPS eligible clinician type](#) on Medicare Part B claims,
- Have enrolled in Medicare before 2020,
- Not be a [Qualifying Alternative Payment Model Participant](#)  (QP), and
- Exceed the [low-volume threshold](#) as an individual.



If you're MIPS eligible as an individual, you're required to report for MIPS.

## MIPS Eligible as Part of a Group

MIPS Eligibility:  GROUP

In order to be MIPS eligible as part of a group, you must:

- Be identified as a [MIPS eligible clinician type](#) on Medicare Part B claims,
- Have enrolled in Medicare before 2020,
- Not be a QP, and
- Be associated with a practice which exceeds the [low-volume threshold](#).

If you're MIPS eligible in your group, you'll receive a score and [payment adjustment](#)  based on [group reporting](#)  when the group reports.

**NOTE:** If CMS determines a given EP is "Individual Exempt" and the EP elects to reports as an Individual, then no Payment Adjustment will be assigned, regardless of data submitted. **It is much more common for EPs to report as a Group because their group volume exceeds the low-volume threshold making them eligible to receive a positive Payment Adjustment.**

Find any EP's Participation Status at: <https://qpp.cms.gov/participation-lookup>

### Reporting: Group vs Individual

Each TIN may report as either a "Group", "Individual", or "Both". Recall "MACRA Exempt" status is evaluated for each NPI on both an *individual* and *group* basis. That is, the "MACRA Exempt" criteria are applied at the NPI level (i.e. all cases for an NPI) and to the TIN level (i.e. all cases for a TIN). If a given NPI is deemed "Individual MACRA Exempt" by CMS and the elect to report as an Individual, then they will not receive a penalty or a bonus. Rather, CMS will label them as a "Voluntary Submitter" and while they still will receive a CPS, it will provide no financial adjustment - negative or positive.

#### *Report as an Individual*

If reporting only as an individual, the NPI's measures and activities for the given TIN will be reported to the QCDR. Composite Performance Scores will be based on individual EP's performance.

#### *Report as a Group*

If reporting as a group, all NPIs' measures and activities for the given TIN will be reported to the QCDR. The group's performance data across the 4 Performance Categories for a single TIN will be evaluated in aggregate. Each EP in the TIN group will then receive the same CPS based on the group's performance.

**If reporting as a Group, it is important to ensure you report quality data for ALL NPIs within a given TIN.** For a complete list of all NPIs within your TIN please check your CMS portal at <https://portal.cms.gov>

## II. Improvement Activities

### **Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record**

#### **Activity Description:**

Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol- driven nurse line with access to medical record) that could include one or more of the following:

- Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);
- Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or
- Provision of same-day or next-day access to a MIPS eligible clinician, group or care team when needed for urgent care or transition management.

#### **Activity ID:**

IA\_EPA\_1

#### **Subcategory Name:**

Expanded Practice Access

#### **Activity Weighting:**

High

## **Regular Review Practices in Place on Targeted Patient Population Needs**

### **Activity Description:**

Implement regular reviews of targeted patient population needs, such as structured clinical case reviews, which include access to reports that show unique characteristics of MIPS eligible clinician's patient population, identification of underserved patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources. The review should consider how structural inequities, such as racism, are influencing patterns of care and consider changes to acknowledge and address them. Reviews should stratify patient data by demographic characteristics and health related social needs to appropriately identify differences among unique populations and assess the drivers of gaps and disparities and identify interventions appropriate for the needs of the sub-populations.

### **Activity ID:**

IA\_PM\_11

### **Subcategory Name:**

Population Management

### **Activity Weighting:**

Medium

## **Implementation of documentation improvements for practice/process improvements**

### **Activity Description:**

Implementation of practices/processes that document care coordination activities (e.g., a documented care coordination encounter that tracks all clinical staff involved and communications from date patient is scheduled for outpatient procedure through day of procedure).

### **Activity ID:**

IA\_CC\_8

### **Subcategory Name:**

Care Coordination

### **Activity Weighting:**

Medium

## **PSH Care Coordination**

### **Activity Description:**

Participation in a Perioperative Surgical Home (PSH) that provides a patient-centered, physician-led, interdisciplinary, and team-based system of coordinated patient care, which coordinates care from pre-procedure assessment through the acute care episode, recovery, and post-acute care. This activity allows for reporting of strategies and processes related to care coordination of patients receiving surgical or procedural care within a PSH. The clinician must perform one or more of the following care coordination activities:

- Coordinate with care managers/navigators in preoperative clinic to plan and implementation comprehensive post discharge plan of care;
- Deploy perioperative clinic and care processes to reduce post-operative visits to emergency rooms;
- Implement evidence-informed practices and standardize care across the entire spectrum of surgical patients; or
- Implement processes to ensure effective communications and education of patients' post-discharge instructions.

### **Activity ID:**

IA\_CC\_15

### **Subcategory Name:**

Care Coordination

### **Activity Weighting:**

Medium

**Tracking of clinician’s relationship to and responsibility for a patient by reporting MACRA patient relationship codes.**

**Activity Description:**

To receive credit for this improvement activity, a MIPS eligible clinician must attest that they reported MACRA patient relationship codes (PRC) using the applicable HCPCS modifiers on 50 percent or more of their Medicare claims for a minimum of a continuous 90-day period within the performance period. Reporting the PRC modifiers enables the identification of a clinician’s relationship with, and responsibility for, a patient at the time of furnishing an item or service. See the CY 2018 PFS final rule (82 FR 53232 through 53234) for more details on these codes.

**Activity ID:**

IA\_CC\_19

**Subcategory Name:**

Care Coordination

**Activity Weighting:**

High



## **Collection and follow-up on patient experience and satisfaction data on beneficiary engagement**

### **Activity Description:**

Collect and follow up on patient experience and satisfaction data. ***This activity also requires follow-up on findings of assessments, including the development and implementation of improvement plans.*** To fulfill the requirements of this activity, MIPS eligible clinicians can use surveys (e.g., Consumer Assessment of Healthcare Providers and Systems Survey), advisory councils, or other mechanisms. MIPS eligible clinicians may consider implementing patient surveys in multiple languages, based on the needs of their patient population.

### **Activity ID:**

IA\_BE\_6

### **Subcategory Name:**

Beneficiary Engagement

### **Activity Weighting:**

High

## **Improved Practices that Engage Patients Pre-Visit**

### **Activity Description:**

Implementation of workflow changes that engage patients prior to the visit, such as a pre-visit development of a shared visit agenda with the patient, or targeted pre-visit laboratory testing that will be resulted and available to the MIPS eligible clinician to review and discuss during the patient's appointment.

### **Activity ID:**

IA\_BE\_22

### **Subcategory Name:**

Beneficiary Engagement

### **Activity Weighting:**

Medium

**Participation in an AHRQ-listed patient safety organization.**

**Activity Description:**

Participation in an AHRQ-listed patient safety organization.

**Activity ID:**

IA\_PSPA\_1

**Subcategory Name:**

Patient Safety and Practice Assessment

**Activity Weighting:**

Medium

## **Participation in MOC Part IV**

### **Activity Description:**

In order to receive credit for this activity, a MIPS eligible clinician must participate in Maintenance of Certification (MOC) Part IV. Maintenance of Certification (MOC) Part IV requires clinicians to perform monthly activities across practice to regularly assess performance by reviewing outcomes addressing identified areas for improvement and evaluating the results.

Some examples of activities that can be completed to receive MOC Part IV credit are: the American Board of Internal Medicine (ABIM) Approved Quality Improvement (AQI) Program, National Cardiovascular Data Registry (NCDR) Clinical Quality Coach, Quality Practice Initiative Certification Program, American Board of Medical Specialties Practice Performance Improvement Module or American Society of Anesthesiologists (ASA) Simulation Education Network, for improving professional practice including participation in a local, regional or national outcomes registry or quality assessment program; specialty- specific activities including Safety Certification in Outpatient Practice Excellence (SCOPE); American Psychiatric Association (APA) Performance in Practice modules.

### **Activity ID:**

IA\_PSPA\_2

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## Use of QCDR data for ongoing practice assessment and improvements

### Activity Description:

Participation in a Qualified Clinical Data Registry (QCDR) and use of QCDR data for ongoing practice assessment and improvements in patient safety, including:

- Performance of activities that promote use of standard practices, tools, and processes for quality improvement (for example, documented preventive health efforts, like screening and vaccinations) that can be shared across MIPS eligible clinicians or groups);
  - Use of standard questionnaires for assessing improvements in health disparities related to functional health status (for example, use of Seattle Angina Questionnaire, MD Anderson Symptom Inventory, and/or SF-12/VR-12 functional health status assessment);
  - Use of standardized processes for screening for drivers of health, such as food security, housing stability, and transportation accessibility;
  - Generation and use of regular feedback reports that summarize local practice patterns and treatment outcomes, including for populations that are disadvantaged and/or underserved by the healthcare system;
  - Use of processes and tools that engage patients to improve adherence to treatment plans;
  - Implementation of patient self-action plans;
  - Implementation of shared clinical decision-making capabilities;
  - ***Use of QCDR patient experience data to inform and advance improvements in beneficiary engagement;***
  - Promotion of collaborative learning network opportunities that are interactive;
  - Use of supporting QCDR modules that can be incorporated into the certified EHR technology;
- OR
- ***Use of QCDR data for quality improvement, such as comparative analysis across specific patient populations of adverse outcomes after an outpatient surgical procedure and corrective steps to address these outcomes.***

### Activity ID:

IA\_PSPA\_7

### Subcategory Name:

Patient Safety and Practice Assessment

### Activity Weighting:

Medium

## **Use of Patient Safety Tools**

### **Activity Description:**

In order to receive credit for this activity, a MIPS eligible clinician must use tools that assist specialty practices in tracking specific measures that are meaningful to their practice.

Some examples of tools that could satisfy this activity are: a surgical risk calculator; evidence based protocols, such as Enhanced Recovery After Surgery (ERAS) protocols; the Centers for Disease Control (CDC) Guide for Infection Prevention for Outpatient Settings predictive algorithms; and the opiate risk tool (ORT) or similar tool.

### **Activity ID:**

IA\_PSPA\_8

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## **Participation in private payer CPIA**

### **Activity Description:**

Participation in designated private payer clinical practice improvement activities.

### **Activity ID:**

IA\_PSPA\_12

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## **Participation in Joint Commission Evaluation Initiative**

**Activity Description:**

Participation in Joint Commission Ongoing Professional Practice Evaluation initiative.

**Activity ID:**

IA\_PSPA\_13

**Subcategory Name:**

Patient Safety and Practice Assessment

**Activity Weighting:**

Medium



## **Use of decision support and standardized treatment protocols**

### **Activity Description:**

Use decision support and standardized treatment protocols to manage workflow in the team to meet patient needs.

### **Activity ID:**

IA\_PSPA\_16

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## **Implementation of formal quality improvement methods, practice changes, or other practice improvement processes**

### **Activity Description:**

Adopt a formal model for quality improvement and create a culture in which all staff, including leadership, actively participates in improvement activities that could include one or more of the following, such as:

- Participation in multisource feedback;
- Train all staff in quality improvement methods;
- Integrate practice change/quality improvement into staff duties;
- Engage all staff in identifying and testing practice changes;
- Designate regular team meetings to review data and plan improvement cycles;
- ***Promote transparency and accelerate improvement by sharing practice level and panel level quality of care, patient experience and utilization data with staff;***
- Promote transparency and engage patients and families by sharing practice level quality of care, patient experience and utilization data with patients and families, including activities in which clinicians act upon patient experience data;
- Participation in Bridges to Excellence;
- Participation in American Board of Medical Specialties (ABMS) Multi-Specialty Portfolio Program.

### **Activity ID:**

IA\_PSPA\_19

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## **Completion of an Accredited Safety or Quality Improvement Program**

### **Activity Description:**

Completion of an accredited performance improvement continuing medical education (CME) program that addresses performance or quality improvement according to the following criteria:

- The activity must address a quality or safety gap that is supported by a needs assessment or problem analysis, or must support the completion of such a needs assessment as part of the activity;
- The activity must have specific, measurable aim(s) for improvement;
- The activity must include interventions intended to result in improvement;
- The activity must include data collection and analysis of performance data to assess the impact of the interventions; and
- The accredited program must define meaningful clinician participation in their activity, describe the mechanism for identifying clinicians who meet the requirements, and provide participant completion information.

An example of an activity that could satisfy this improvement activity is completion of an accredited continuing medical education program related to opioid analgesic risk and evaluation strategy (REMS) to address pain control (that is, acute and chronic pain).

### **Activity ID:**

IA\_PSPA\_28

### **Subcategory Name:**

Patient Safety and Practice Assessment

### **Activity Weighting:**

Medium

## **Provide Education Opportunities for New Clinicians**

### **Activity Description:**

MIPS eligible clinicians acting as a preceptor for clinicians-in-training (such as medical residents/fellows, medical students, physician assistants, nurse practitioners, or clinical nurse specialists) and accepting such clinicians for clinical rotations in community practices in small, underserved, or rural areas.

### **Activity ID:**

IA\_AHE\_6

### **Subcategory Name:**

Achieving Health Equity

### **Activity Weighting:**

High

## **Promoting Clinician Well-Being**

### **Activity Description:**

Develop and implement programs to support clinician well-being and resilience—for example, through relationship-building opportunities, leadership development plans, or creation of a team within a practice to address clinician well-being—using one of the following approaches:

- Completion of clinician survey on clinician well-being with subsequent implementation of an improvement plan based on the results of the survey.
- Completion of training regarding clinician well-being with subsequent implementation of a plan for improvement.

### **Activity ID:**

IA\_BMH\_12

### **Subcategory Name:**

Behavioral and Mental Health

### **Activity Weighting:**

High

## **Create and Implement an Anti-Racism Plan**

### **Activity Description:**

Create and implement an anti-racism plan using the CMS Disparities Impact Statement or other anti-racism planning tools. The plan should include a clinic-wide review of existing tools and policies, such as value statements or clinical practice guidelines, to ensure that they include and are aligned with a commitment to anti-racism and an understanding of race as a political and social construct, not a physiological one.

The plan should also identify ways in which issues and gaps identified in the review can be addressed and should include target goals and milestones for addressing prioritized issues and gaps. This may also include an assessment and drafting of an organization's plan to prevent and address racism and/or improve language access and accessibility to ensure services are accessible and understandable for those seeking care. The MIPS eligible clinician or practice can also consider including in their plan ongoing training on anti-racism and/or other processes to support identifying explicit and implicit biases in patient care and addressing historic health inequities experienced by people of color. More information about elements of the CMS Disparities Impact Statement is detailed in the template and action plan document at: <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf>

### **Activity ID:**

IA\_AHE\_8

### **Subcategory Name:**

Achieving Health Equity

### **Activity Weighting:**

High

## **Implementation of a Personal Protective Equipment (PPE) Plan**

### **Activity Description:**

Implement a plan to acquire, store, maintain, and replenish supplies of personal protective equipment (PPE) for all clinicians or other staff who are in physical proximity to patients. In accordance with guidance from the Centers for Disease Control and Prevention (CDC) the PPE plan should address:

- Conventional capacity: PPE controls that should be implemented in general infection prevention and control plans in healthcare settings, including training in proper PPE use.
- Contingency capacity: actions that may be used temporarily during periods of expected PPE shortages.
- Crisis capacity: strategies that may need to be considered during periods of known PPE shortages.

The PPE plan should address all of the following types of PPE:

- Standard precautions (e.g., hand hygiene, prevention of needle-stick or sharps injuries, safe waste management, cleaning and disinfection of the environment)
- Eye protection
- Gowns (including coveralls or aprons) • Gloves
- Facemasks
- Respirators (including N95 respirators)

### **Activity ID:**

IA\_ERP\_4

### **Subcategory Name:**

Emergency Response & Preparedness

### **Activity Weighting:**

Medium

**Participation in a 60-day or greater effort to support domestic or international humanitarian needs**

**Activity Description:**

Participation in domestic or international humanitarian volunteer work. Activities that simply involve registration are not sufficient. MIPS eligible clinicians and groups attest to domestic or international humanitarian volunteer work for a period of a continuous 60 days or greater.

**Activity ID:**

IA\_ERP\_2

**Subcategory Name:**

Emergency Response And Preparedness

**Activity Weighting:**

High



### III. MACRA Measures

## ABG 42: 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 the induction and placement of the endotracheal tube and have difficult airway equipment in the room prior to the induction.

**NQS DOMAIN:** Patient Safety

**MEASURE TYPE:** Process

**HIGH PRIORITY STATUS:** Yes

**HIGH PRIORITY TYPE:** Patient Safety

**INVERSE MEASURE:** No

**RISK ADJUSTED:** No

### **INSTRUCTIONS:**

This measure is to be reported each time an adult patient with a known or suspected difficult airway undergoes a planned general anesthetic requiring placement of an endotracheal tube. At the time of induction and placement of the endotracheal tube a second dedicated provider will be present to serve as an assistant for management of a difficult airway. Additionally, difficult airway equipment will be present in the room prior to induction in the event that such equipment is necessary to assist with placement of the endotracheal tube. 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:**

**Denominator Criteria (Eligible Cases):**

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

**AND**

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

**AND**

**Patient encounter during the reporting period (CPT):**

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142,  
00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172,  
00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215,  
00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350,  
00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470,  
00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530,  
00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548,  
00550, 00560, 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, 00930, 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**

**OR**

**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 Options:**

***Performance Met:***

**Second provider present at induction (ABG Measure Response code 1074)**

**AND**

**Use of difficult airway equipment, planned is reported (ABG Measure Response code 036)**

**OR**

***Performance Not Met:***

**Second provider NOT present at induction (ABG Measure Response code 1075)**

**OR**

**Unplanned use of difficult airway equipment (ABG Measure Response code 037)**

**RELEVANT FIELDS**

- ASA CPT code
- Date of Birth
- Difficult airway
- Planned use of difficult airway equipment
- Unplanned use of difficult airway equipment

**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 for management of the difficult airway. A dedicated second provider may include operating room staff: physician, certified registered nurse anesthetist, registered nurse, resident or anesthesia technician.

Numerator Note: Difficult airway equipment- The definition of “difficult airway equipment” for this measure includes any advanced airway devices such as video laryngoscopes, intubating LMA, fiberoptic bronchoscope, Bullard, etc. Stylets and/or bougies unless they have been modified to include a light source or some other mechanical addition to manipulate their placement are not considered “difficult airway equipment”.

### **REPORTING CODES**

<b>ABG Codes</b>	<b>Definition</b>
1019	Has a non-emergency procedure in which the anesthesia plan calls for general anesthesia with endotracheal intubation
1073	Patient is identified as a known or suspected difficult airway in the pre-operative period
1074	A dedicated second provider is present at induction and placement of the endotracheal tube
036	Difficult airway equipment is present in the room prior to the induction of anesthesia
1075	A dedicated second provider is NOT present at induction and placement of the endotracheal tube
037	Difficult airway equipment is NOT present in the room prior to the induction of anesthesia

## 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**

**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, 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 to 1 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.<sup>1</sup>

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**).

## **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/committee-on-equipment-and-facilities/environmental-sustainability/greening-the-operating-room#3gas>

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.<sup>2</sup> Additionally, there are benefits to both the patient, cost savings to the facility and benefits to the environment.<sup>3</sup>

- The inhalational anesthetic agents sevoflurane isoflurane and desflurane have global warming potentials 2-3 orders of magnitude higher than CO<sub>2</sub>.<sup>3</sup>
- Nitrous oxide contributes significantly to global warming and ozone depletion.<sup>3</sup>
- 5% of the carbon footprint (CO<sub>2</sub>e) of the British National Health System is attributable to exhaled anesthetic agents.<sup>3</sup>
- Reducing the environmental impact of anesthesia, can be achieved through behavior change.<sup>3</sup>

- 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<sub>2</sub>O.<sup>4</sup>
- 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 CO<sub>2</sub> absorber is factored in,
- especially with regards to usage of Sevoflurane and Desflurane.<sup>5</sup>
- 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.<sup>6</sup>

**RELEVANT FIELDS:**

- ASA CPT code
- Inhalational agent used
- Anes Start
- Anes End
- Emergency status
- Patient age

**REPORTING CODES**

ABG 44 Code	Definition
1095	All patients aged 18 years or older, who undergo an elective procedure lasting 30 minutes or longer requiring inhalational general anesthesia.
1096	Patient or technical reason exists for not providing low flow inhalational anesthesia
1097	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
1098	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

## AQI 18: Coronary Artery Bypass Graft (CABG): Prolonged Intubation – Inverse Measure

### **MEASURE DESCRIPTION**

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

### **NQS DOMAIN/MEANINGFUL MEASURES AREA**

Effective Clinical Care/Preventable Healthcare Harm

### **MEASURE TYPE**

Outcome

### **HIGH PRIORITY STATUS**

Yes

### **INVERSE MEASURE**

Yes

### **INSTRUCTIONS**

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

### **Measure Reporting via the Qualified Clinical Data Registry**

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

### **DENOMINATOR**

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

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

### **Denominator Criteria (Eligible Cases):**

Patient aged 18 years and older on date of encounter

**AND**

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

**AND**

00566, 00567

**OR**

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

**AND**

**Patient encounter during the reporting period (CPT):** 33530

**AND**

00562

### **DENOMINATOR EXCLUSIONS**

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

### **NUMERATOR**

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

#### **Numerator Quality-Data Coding Options for Reporting Satisfactorily**

##### ***Performance Met:***

Prolonged postoperative intubation (> 24 hrs) required (**G8569**)

**OR**

##### ***Performance Not Met:***

Prolonged postoperative intubation (>24 hrs) not required (**G8570**)

### **RATIONALE**

Prolonged intubation and/or prolonged ventilation following coronary artery bypass graft (CABG) surgery is associated with increased mortality and morbidity.<sup>1</sup> A review of the literature suggests several predictors associated with prolonged ventilation following CABG including increased incidence of pneumonia and pulmonary atelectasis, history of hypertension, COPD, kidney disease and endocarditis among others.<sup>2</sup> Most complications were associated with prolonged length of stay in the ICU and hospital and increased resource use.

Physician anesthesiologists and other qualified anesthesia providers must maintain respiratory function of patients throughout the perioperative period and play a critical role in patients' respiratory care. As physician anesthesiologists and other qualified anesthesia providers control the patient breathing function, their decision-making and care related to airway management can greatly impact outcomes related to prolonged intubation and ventilation. One retrospective

study found that physicians in the perioperative period are altering their management of types to reduce adverse respiratory outcomes. For example, research shows aortic aneurysm, combined and valve procedures, and preoperative renal dysfunction and stroke were strong predictors for prolonged ventilation. Changes to care and procedures to reduce adverse respiratory outcomes require the engagement of physician anesthesiologist and other qualified anesthesia provider expertise and skill to ensure appropriate patient care.

**RELEVANT FIELDS**

- Date of service
- Date of birth
- ASA CPT code
- Isolated CABG surgery
- Intubation (> 24 hrs) required

**REPORTING CODES**

AQI 68 Code	Definition
G8569	Prolonged postoperative intubation (> 24 hrs) required
G8570	Prolonged postoperative intubation (>24 hrs) not required

## AQI 48: Patient-Reported Experience with Anesthesia\*\*\*

### **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 and who report a positive experience with anesthesia care

**NOTE:** The measure requires that a valid survey, as defined in the numerator of 48a, be sent to patients between discharge from the facility and within 30 days of facility discharge. To report AQI 48b, a minimum number of 20 surveys, as described in the numerator of 48a, with the mandatory question completed must be reported. **In order to be scored on this measure, clinicians must report BOTH AQI48a AND AQI48b.**

**NQS DOMAIN / MEANINGFUL MEASURES AREA:** Person and Caregiver-Centered Experience and Outcomes / Patient's Experience of Care

**MEASURE TYPE:** Patient-Reported Outcome

**HIGH PRIORITY STATUS:** Yes

**INVERSE MEASURE:** No

### **INSTRUCTIONS:**

This measure consists of two performance rates: AQI48a and AQI48b. AQI48a should be reported each time a patient undergoes a procedure under anesthesia. AQI48b should be reported every time a completed survey is returned by the patient. To be scored on AQI48b, the provider must collect the individual scores received on the survey as described in AQI48a. It is anticipated that qualified anesthesia providers and eligible clinicians who provide denominator-eligible services will submit this measure.

### **RATIONALE:**

Despite the implementation of CAHPS and H-CAHPS, there is a persistent gap in the ability to adequately measure patient experience on the selection of performance measures for performance-based payment programs. To provide high quality, patient-centered care in the future, anesthesiologists and other qualified anesthesia providers should measure and respond

to the patients' perception of the degree to which they felt they were treated as individuals and empowered by their anesthesiology practitioners to engage in decision-making for their care. The assessment of patient satisfaction with anesthesia care provides important feedback which enables providers to improve care delivery and quality. At present there is a vast array of tools available for practices and individuals to implement based upon local patient populations and for local quality improvement initiatives.

**OVERALL PERFORMANCE RATE FOR SCORING:** AQI48b

## AQI 48a

### **DESCRIPTION-AQI48A**

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

### **DENOMINATOR-AQI48A**

Patients aged 18 and older, who undergo a procedure\* under anesthesia

**Definition:** \*Any procedure including surgical, therapeutic or diagnostic

#### **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,  
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64600, 64605, 64610, 64620, 64624, 64625, 64630, 64633, 64635,  
64640, 64680, 64681, 72275, 93503, 95990, 95991

**Denominator Exclusions-AQI48a**

**Organ Donors as designated with ASA Physical Status 6**

**OR**

**Patient died within 30 days of the procedure (10A11)**

**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”):

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 with Anesthesia White Paper.”

**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/psb>.

**Numerator Options:**

***Performance Met:***

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

**OR**

***Denominator Exception***

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. (**10A13**)

**OR**

***Performance Not Met:***

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

**RELEVANT FIELDS**

- Date of procedure

- Date of birth
- ASA CPT code
- ASA physical status
- Received a survey within 30 days

**REPORTING CODES**

AQI 48a Code	Definition
10A12	Patient provided with a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia
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.
10A14	Patient was not provided with a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia

## AQI 48b

### **DESCRIPTION-AQI48B:**

Percentage of patients who complete the survey from AQI48a on their patient experience and satisfaction with anesthesia care and report a positive experience.

### **DENOMINATOR-AQI48B:**

All patients from the numerator of AQI48a who complete a survey on their patient experience and satisfaction with anesthesia care

***DENOMINATOR NOTE:*** In order to report AQI48b, the denominator must include a minimum of 20 returned surveys.

### **Denominator Criteria (Eligible Cases):**

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

### **Denominator Exclusions-AQI48b**

**Patient did not complete the mandatory anesthesia satisfaction question:** 10A69

### **NUMERATOR- AQI 48B:**

Patients who reported a positive experience with anesthesia care.

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

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? (Practices must include an option for patient to indicate “Not Applicable”)

### **Numerator Options:**

**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:***

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

## **OR**

### ***Performance Not Met:***

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

**RELEVANT FIELDS**

- Date of procedure
- Date of birth
- ASA CPT code
- ASA physical status
- Received a survey within 30 days
- Survey response received
- Survey response answer

**REPORTING CODES**

AQI 48b Code	Definition
10A72	Patient completed a survey on their patient experience and satisfaction with anesthesia care
10A69	Patient did not complete the mandatory anesthesia satisfaction question
10A70	Patient reported a positive anesthesia experience (i.e., a 4 or 5 on the mandatory survey question)
10A71	Patient did NOT report a positive anesthesia experience (i.e., a 1, 2, or 3 on the mandatory survey question)

## AQI 65: Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass

### **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  $\geq 37.0$  degrees Celsius during the period of cardiopulmonary bypass.

### **NQS DOMAIN/MEANINGFUL MEASURES AREA**

Patient Safety/Preventable Healthcare Harm

### **MEASURE TYPE**

Outcome

### **HIGH PRIORITY STATUS**

Yes

### **INVERSE MEASURE**

No

### **INSTRUCTIONS**

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

### **Measure Reporting via the Qualified Clinical Data Registry**

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

### **DENOMINATOR**

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

#### **Denominator Criteria (Eligible Cases):**

**Patient aged 18 years and older**

**AND**

**Patient encounter during the reporting period (CPT):**

00562, 00563, 00567, 00580

### **DENOMINATOR EXCLUSIONS**

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

### **NUMERATOR**

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

#### **Numerator Quality-Data Coding Options for Reporting Satisfactorily:**

##### ***Performance Met:***

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

**OR**

##### ***Performance Not Met:***

At least one intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature  $\geq 37.0$  degrees Celsius (**11A12**)

**OR**

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

### **RATIONALE**

Appropriate temperature management in the setting of cardiopulmonary bypass (CPB) is important to avoid cerebral hyperthermia and associated cerebral injury. Studies have associated cerebral hyperthermia with complications such as cognitive dysfunction, mediastinitis, and acute kidney injury. Through careful monitoring, good communication with perfusionists, and the assurance of appropriate rewarming strategies, anesthesiologists can prevent cerebral hyperthermia.

### **RELEVANT FIELDS**

- Date of service
- Date of birth
- ASA CPT code
- CBP performed
- Hypothermia status

## **REPORTING CODES**

AQI 68 Code	Definition
11A11	All intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperatures <37.0 degrees Celsius during cardiopulmonary bypass
11A12	At least one intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature $\geq$ 37.0 degrees Celsius
11A13	No documented pulmonary artery, oropharyngeal, or nasopharyngeal temperatures during cardiopulmonary bypass



## AQI67: Consultation for Frail Patients

### **MEASURE DESCRIPTION**

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

### **NQS DOMAIN/MEANINGFUL MEASURES AREA**

Communication and Care Coordination/Management of Chronic Conditions

### **MEASURE TYPE**

Process

### **HIGH PRIORITY STATUS**

Yes

### **INVERSE MEASURE**

No

### **INSTRUCTIONS**

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

### **Measure Reporting via the Qualified Clinical Data Registry**

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

### **DENOMINATOR**

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

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

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

**Denominator Criteria (Eligible Cases):**

All patients aged 70 years and older

**AND**

**Place of Service Code: 21**

**AND**

**Patient encounter during the reporting period (CPT):** 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00731, 00732, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 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:***

Patient received multidisciplinary consult and/or multidisciplinary care (**11A15**)

**OR**

***Performance Not Met:***

Patient did not receive multidisciplinary consult or multidisciplinary care (**11A16**)

**RATIONALE**

Frailty is a health state that makes a patient particularly vulnerable to stressors, such as surgery. Among elderly surgical patients, frailty has been well-associated with post-operative complications and mortality. While evidence is still evolving regarding appropriate interventions to best manage frailty in the perioperative setting and to optimize patient outcomes, there is agreement that preoperative assessment and identification of frailty is an important first step to ensure coordinated and patient-centric care for the frail patient throughout their perioperative course. Preoperative identification of frailty and appropriate multi-disciplinary consultation allows for the care team to provide appropriate counseling regarding the anticipated outcomes of surgery, better anticipate post-operative complications, and better prepare patients and families for their postoperative course. Multi-disciplinary consultation for frail patients can also allow for the implementation of appropriate team-based care pathways to manage complications such as postoperative delirium, as well as help patients and families define their care goals and expectations.

**RELEVANT FIELDS**

- Date of service
- Date of birth
- ASA CPT code
- Frailty screening result
- Multidisciplinary care

**REPORTING CODES**

AQI 68 Code	Definition
11A14	Positive Frailty Screening Result
11A15	Patient received multidisciplinary consult and/or multidisciplinary care
11A16	Patient did not receive multidisciplinary consult or multidisciplinary care

## AQI71: Ambulatory Glucose Management

### **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  $\geq 180$  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  $\geq 180$  mg/dL (10.0 mmol/L) who received education on managing their glucose in the postoperative period prior to discharge.

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

### **NQS DOMAIN/MEANINGFUL MEASURES AREA**

Effective Clinical Care/Healthcare Associated Infections

### **MEASURE TYPE**

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 submetrics 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.

## **RATIONALE**

Diabetes mellitus has been shown to be an important risk factor for surgical site infection and other surgical complications. With increasingly complex procedures being performed in an ambulatory setting, perioperative glucose management is an important aspect of ambulatory anesthesia care. For diabetic patients, preoperative testing of blood glucose levels can provide an important indicator for their intraoperative insulin and care management needs. Despite the importance of glucose testing, evidence shows that it is not consistently performed in the ambulatory setting. Improved preoperative glucose testing can help anesthesia providers better anticipate and manage the needs of their diabetic patients throughout the perioperative period.

## AQI71a: Ambulatory Point-of-Care Glucose Testing

### **MEASURE 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**

#### **AND**

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

E11.3591, E11.41, E11.621, E13.00, E13.3213, E13.3392,  
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E11.3392, E11.3511, E11.3539, E11.3593, E11.43, E11.628,  
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E13.638, E10.3212, E10.3391, E10.3499, E10.3533, E10.3592,  
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E11.36, E11.49, E11.638, E13.21, E13.3293, E13.3412, E13.3521,  
E13.3549, E13.37X2, E13.52, E13.649, E10.3219, E10.3393,  
E10.3512, E10.3541, E10.3599, E10.44, E10.630, E11.11,  
E11.3292, E11.3411, E11.3519, E11.3543, E11.37X1, E11.51,  
E11.641, E13.22, E13.3299, E13.3413, E13.3522, E13.3551,  
E13.37X3, E13.59, E13.65

**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 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:***

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

**OR**

#### ***Performance Not Met:***

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

## AQI71b: Ambulatory Hyperglycemia Control

### **MEASURE 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**

#### **AND**

**ICD-10CM code:** (see official documentation for list of ICD codes)

#### **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:***

Patient received insulin prior to anesthesia end time. (**11A53**)

**OR**

##### ***Denominator Exception:***

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). (**11A82**)

**OR**

##### ***Performance Not Met:***

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

## AQI71c: Follow-Up Glucose Check for Patients Receiving Insulin

### **MEASURE 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**

#### **AND**

**ICD-10CM code:** (see official documentation for list of ICD codes)

#### **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:***

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

##### **OR**

##### ***Performance Not Met:***

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

## AQI71d: Hyperglycemia Management Patient Education

### **MEASURE 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 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**

#### **AND**

**ICD-10CM code:** (see official documentation for list of ICD codes)

#### **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:***

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

#### **OR**

#### ***Performance Not Met:***

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



## AQI 72: Perioperative Anemia Management

### **MEASURE DESCRIPTION**

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

Management strategies include one or more of the following:

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

### **NQS DOMAIN/MEANINGFUL MEASURES AREA**

Patient Safety/Preventable Healthcare Harm

### **MEASURE TYPE**

Process

### **HIGH PRIORITY STATUS**

Yes

### **INVERSE MEASURE**

No

### **INSTRUCTIONS**

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

### **Measure Reporting via the Qualified Clinical Data Registry**

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

### **DENOMINATOR**

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

***Denominator Note:***

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

**Denominator Criteria (Eligible Cases):**

**All patients, aged 18 years and older**

**AND**

**Elective Surgery: G9643**

**AND**

**Patient encounter during the reporting period (CPT):**

01214, 01215, 01402, 01638

**DENOMINATOR EXCLUSIONS**

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

**(11A80)**

**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 all adults, regardless of gender.

***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:***

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

**OR**

***Denominator Exception:***

Negative preoperative anemia screening result. **(11A68)**

**OR**

***Denominator Exception:***

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

**OR**

***Performance Not Met:***

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. (11A70)

**RATIONALE**

Anemia is a common complication of many chronic illnesses that interferes with iron absorption. It has been estimated that at least one-third of patients undergoing non-emergent surgical procedures have potentially treatable anemia. Preoperative anemia is associated with increased need for perioperative blood transfusion as well as significant perioperative morbidity and mortality. Appropriate preoperative anemia management can reduce the risk of perioperative blood transfusion, help identify co-morbidities, and improve perioperative outcomes by improving patients' readiness for surgery. The 2015 American Society of Anesthesiologists Guideline on Perioperative Blood Management indicate "TEG and ROTEM-guided algorithms are shown to be effective in reducing blood transfusion requirements." Additionally, studies have found that preoperative anemia has been associated with postoperative joint infections. The preoperative screening for anemia would reduce the number of post-operative joint infections." More resources can be found at the American Association of Blood Banks.

The purpose of this measure is to drive quality changes within perioperative anemia management. Testing algorithms may not be available in all practices. Those that do not have testing algorithms should use a different strategy to fulfill requirements of this measure.

**RELEVANT FIELDS**

- Date of service
- Date of birth
- ASA CPT code
- Anemia screen
- Anemia present

## **REPORTING CODES**

<b>AQI 68 Code</b>	<b>Definition</b>
G9643	Elective Surgery
11A67	Patient was screened for anemia preoperatively AND documentation of one or more selected management strategies used prior to PACU discharge.
11A68	Negative preoperative anemia screening result.
11A69	Documentation of medical or patient reason(s) for not screening for anemia and/or using selected management strategies (e.g., patient refusal, contraindication, etc.).
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.
11A80	Surgeon or other non-anesthesia professional clinician completed one or more of the management strategies without direction or assistance from the anesthesia professional.

## QID 404: Anesthesiology Smoking Abstinence

### **MEASURE TYPE:**

Intermediate Outcome – High Priority

### **DESCRIPTION:**

The percentage of current smokers who abstain from cigarettes prior to anesthesia on the day of elective surgery or procedure

### **INSTRUCTIONS:**

This measure is to be submitted each time an elective surgery, diagnostic, or pain procedure is performed under anesthesia during the performance period. There is no diagnosis associated with this measure. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

### **MEASURE SUBMISSION TYPE:**

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

### **DENOMINATOR:**

All patients aged 18 years and older who are evaluated in preparation for elective surgical, diagnostic, or pain procedure requiring anesthesia services and identified as a current smoker prior to the day of the surgery or procedure with instruction from anesthesiologist or proxy to abstain from smoking on the day of surgery or procedure.

***DENOMINATOR NOTE:*** Preoperative smoking cessation instruction can be performed by an anesthesiologist or proxy, including but not limited to a surgeon, nursing staff, or other preoperative care team member, as part of preoperative evaluation.

### **Denominator Criteria (Eligible Cases):**

Patients aged  $\geq$  18 years on date of service

### **AND**

**Patient procedure during the performance 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, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625,  
00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730,  
00731, 00732, 00750, 00752, 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, 01402, 01404, 01420, 01430, 01432, 01482,  
01484, 01486, 01490, 01500, 01638, 01650, 01652, 01654, 01656,  
01742, 01744, 01756, 01758, 01760, 01840, 01842, 01844, 01850,  
01852, 01932, 01933, 01935, 01936, 01951, 62320, 62321, 62322,  
62323, 62324, 64415, 64416, 64417, 64418, 64420, 64450, 64455,  
64461, 64463, 64479, 64517, 64520, 64530, 0228T, 0230T, 01274,  
01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01440,  
01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01502,  
01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01670,  
01680, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01770,  
01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01860,  
01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01952,  
01958, 01960, 01961, 01966, 01991, 01992, 27095, 27096, 62325,  
62326, 62327, 64400, 64405, 64408, 64421, 64425, 64430, 64435,  
64445, 64446, 64447, 64448, 64449, 64483, 64486, 64487, 64488,  
64489, 64490, 64493, 64505, 64510

**AND**

**Current smoker (e.g. cigarette, cigar, pipe, e-cigarette or marijuana): G9642**

**Elective surgery: G9643**

**AND**

**Received instruction from the anesthesiologist or proxy prior to the day of surgery  
to abstain from smoking on the day of surgery: G9497**

**NUMERATOR:**

Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure

**Definition:**

**Abstinence** - Defined by either patient self-report or an exhaled carbon monoxide level of < 10 ppm.

**Numerator Options:*****Performance Met:***

Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure (**G9644**)

**OR*****Performance Not Met:***

Patients who did not abstain from smoking prior to anesthesia on the day of surgery or procedure (**G9645**)

**RATIONALE:**

Each year, approximately 10 million cigarette smokers require surgery and anesthesia in the U.S. Smoking is a significant independent risk factor for perioperative heart, lung, and wound-related complications. There now is good evidence that perioperative abstinence from smoking reduces the risk of heart, lung, and wound-related perioperative complications, and that the perioperative period represents a “teachable moment” for smoking cessation that improves long-term abstinence rates. While a longer duration of abstinence is associated with a greater benefit for patients, even just abstinence on the morning of surgery is associated with reduced levels of nicotine and carbon monoxide levels and a reduced risk of myocardial ischemia and surgical site infections. Evidence shows that perioperative tobacco cessation interventions can 1) increase perioperative abstinence rates in surgical patients who smoke and 2) decrease the rate of perioperative complications. Recent reviews identified a range of effective interventions, from brief counseling to the use of behavioral therapy and pharmacotherapy, that physicians who care for surgical patients (e.g., anesthesiologists and surgeons) can incorporate into their practices to improve perioperative smoking abstinence. Unfortunately, evidence also suggests that few of these physicians take advantage of the opportunity to intervene, and that many surgical patients still smoke even on the morning of surgery. If more surgical patients get help to quit smoking around the time of surgery, this will both reduce the rate of smoking-related perioperative complications such as wound infection, and lead to long-term improvements in health, as the average smoker gains 6-8 life years if they quit. Thus, this measure on abstinence on the morning of surgery not only directly affects acute surgical risk, but also serves as a marker for the provision of effective preoperative tobacco use interventions.

**RELEVANT FIELDS**

- Date of service
- Date of birth
- ASA CPT code
- Smoker status
- Elective case
- Received cessation instructions
- Smoked on day of procedure

**REPORTING CODES**

QID 404 Code	Definition
G9642	Current smoker (e.g. cigarette, cigar, pipe, e-cigarette or marijuana)
G9643	Elective surgery
G9497	Received instruction from the anesthesiologist or proxy prior to the day of surgery to abstain from smoking on the day of surgery
G9644	Patients who abstained from smoking prior to anesthesia on the day of surgery or procedure
G9645	Patients who did not abstain from smoking prior to anesthesia on the day of surgery or procedure



## QID 424: Perioperative Temperature Management

### **MEASURE TYPE:**

Outcome – High Priority

### **DESCRIPTION:**

Percentage of patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

### **INSTRUCTIONS:**

This measure is to be submitted each time any procedure including surgical, therapeutic or diagnostic is performed under general or neuraxial anesthesia during the performance period. There is no diagnosis associated with this measure. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

### **MEASURE SUBMISSION TYPE:**

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

### **DENOMINATOR:**

All patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer

#### **Denominator Instructions:**

The anesthesia time used for this measure should be the time recorded in the anesthesia record.

#### **Denominator Criteria (Eligible Cases):**

**All patients, regardless of age**

**AND**

**Patient procedure during the performance period (CPT):**

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142,  
00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172,  
00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215,  
00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350,  
00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470,  
00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530,  
00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548,  
00550, 00560, 00600, 00604, 00620, 00625, 00626, 00630, 00632,  
00635, 00640, 00670, 00700, 00702, 00730, 00731, 00732, 00750,  
00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797,  
00800, 00802, 00811, 00812, 00813, 00820, 00830, 00832, 00834,  
00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862,  
00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882,  
00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918,  
00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934,  
00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112,  
01120, 01130, 01140, 01150, 01160, 01170, 01173, 01200, 01202,  
01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250,  
01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382,  
01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440,  
01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482,  
01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620,  
01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656,  
01670, 01680, 01710, 01712, 01714, 01716, 01730, 01732, 01740,  
01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782,  
01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850,  
01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933,  
01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966

**AND**

**Anesthesia of 60 minutes duration or longer: 4255F**

**AND NOT**

**DENOMINATOR EXCLUSIONS:**

**Monitored Anesthesia Care (MAC): G9654**

**OR**

**Peripheral Nerve Block (PNB): G9770**

**NUMERATOR:**

Patients for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

**Numerator Options:**

***Performance Met:***

At least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time (**G9771**)

**OR**

***Denominator Exception:***

Documentation of medical reason(s) for not achieving at least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time (e.g., Emergency cases, Intentional hypothermia, etc.) (**G9772**)

**OR**

***Performance Not Met:***

At least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) not achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time, Reason Not Given (**G9773**)

**RATIONALE:**

A drop in core temperature during surgery, known as perioperative hypothermia, can result in numerous adverse effects, which can include adverse myocardial outcomes, subcutaneous vasoconstriction, increased incidence of surgical site infection, and impaired healing of wounds. The desired outcome, reduction in adverse surgical effects due to perioperative hypothermia, is affected by maintenance of normothermia during surgery.

Unintended perioperative hypothermia occurs in up to 20% of surgical patients. An observational cohort study in a pediatric setting found that more than 50% of children experienced intraoperative hypothermia. Pediatric patients undergoing major surgery were at greater risk of intraoperative hypothermia.

**RELEVANT FIELDS**

- Date of procedure
- Date of birth
- ASA CPT code
- Total anesthesia time
- Primary anesthesia used
- Postop patient temperature

## REPORTING CODES

QID 424 Code	Definition
4255F	Anesthesia of 60 minutes duration or longer
G9654	Monitored Anesthesia Care (MAC)
G9770	Peripheral Nerve Block (PNB)
G9771	At least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time
G9772	Documentation of medical reason(s) for not achieving at least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) within the 30minutes immediately before or the 15 minutes immediately after anesthesia end time (e.g., Emergency cases, Intentional hypothermia, etc.)
G9773	At least 1 body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) not achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time, Reason Not Given

## QID 430: Prevention of Post-Operative Nausea and Vomiting (PONV) – Combination Therapy

### **MEASURE TYPE:**

Process – High Priority

### **DESCRIPTION:**

Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively

### **INSTRUCTIONS:**

This measure is to be submitted each time any procedure including surgical, therapeutic or diagnostic under an inhalational general anesthetic is performed during the performance period. There is no diagnosis associated with this measure. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

### **MEASURE SUBMISSION TYPE:**

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

### **DENOMINATOR:**

All patients, aged 18 years and older, who undergo any procedure including surgical, therapeutic or diagnostic under an inhalational general anesthetic, AND who have three or more risk factors for PONV

#### **Definition:**

PONV Risk Factors – The following are risk factors for PONV:

- Female gender
- History of PONV
- History of motion sickness

- Non-smoker
- Intended administration of opioids for post-operative analgesia. This includes use of opioids given intraoperatively and whose effects extend into the post anesthesia care unit (PACU) or post-operative period, or opioids given in the PACU, or opioids given after discharge from the PACU.

**Denominator Criteria (Eligible Cases):**

Patients aged ≥ 18 years on date of service

**AND**

**Patient procedure during the performance 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

**AND**

**Patient received inhalational anesthetic agent: 4554F**

**AND**

**Patient exhibits 3 or more risk factors for post-operative nausea and vomiting:**

**4556F**

**NUMERATOR:**

Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively

**Definition:**

**Anti-emetics Therapy** – The recommended first- and second-line classes of pharmacologic anti-emetics for PONV prophylaxis in patients at moderate to severe risk of PONV include (but are not limited to):

- NK-1 Receptor Antagonists
- 5-Hydroxytryptamine (5-HT3) Receptor Antagonists
- Glucocorticoids
- Phenothiazines
- Phenylethylamines
- Butyrophenones
- Antihistamines
- Anticholinergics

**NOTE:** The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA’s web site page entitled “Drug Safety Communications” for up-to-date drug recall and alert information when prescribing medications.

**Numerator Options:**

***Performance Met:***

Patient received at least 2 prophylactic pharmacologic anti- emetic agents of different classes preoperatively and/or intraoperatively (**G9775**)

**OR**

***Denominator Exception:***

Documentation of medical reason for not receiving at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (e.g., intolerance or other medical reason) (**G9776**)

**OR**

***Performance Not Met:*** Patient did not receive at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (**G9777**)

**RATIONALE:**

Postoperative nausea and vomiting (PONV) is an important patient-centered outcome of anesthesia care. PONV is highly dis-satisfying to patients, although rarely life-threatening. A large body of scientific literature has defined risk factors for PONV; demonstrated effective prophylactic regimes based on these risk factors, and demonstrated high variability in this

outcome across individual centers and providers. Further, a number of papers have shown that performance can be assessed at the level of individual providers -- the outcome is common enough that sufficient power exists to assess variability and improvement at this level.

**RELEVANT FIELDS**

- Date of procedure
- Date of birth
- ASA CPT code
- Received inhalational agent
- ≥3 PONV risk factors
- Received ≥2 agents in different classes

**REPORTING CODES**

QID 430 Code	Definition
4554F	Patient received inhalational anesthetic agent
4556F	Patient exhibits 3 or more risk factors for post-operative nausea and vomiting
G9775	Patient received at least 2 prophylactic pharmacologic anti- emetic agents of different classes preoperatively and/or intraoperatively
G9776	Documentation of medical reason for not receiving at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (e.g., intolerance or other medical reason)
G9777	Performance Not Met: Patient did not receive at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively



## QID 463: Prevention of Post-Operative Vomiting (POV) – Combination Therapy (Pediatrics)

### **MEASURE TYPE:**

Process – High Priority

### **DESCRIPTION:**

Percentage of patients aged 3 through 17 years, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for post-operative vomiting (POV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively.

### **INSTRUCTIONS:**

This measure is to be submitted each time any procedure including surgical, therapeutic or diagnostic under an inhalational general anesthetic is performed during the performance period. There is no diagnosis associated with this measure. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

### **MEASURE SUBMISSION TYPE:**

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third-party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third-party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

### **DENOMINATOR:**

All patients, aged 3 through 17 years, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for POV

#### **Definition:**

PONV Risk Factors – The following are risk factors for POV:

- Surgery ≥ 30 minutes
- Age ≥ 3 years

- Strabismus surgery
- History of POV or Post-Operative Nausea and Vomiting (PONV)/motion sickness in patient
- Family History of POV/PONV
- Post-pubertal female
- Adenotonsillectomy
- Otoplasty
- Anticholinesterases
- Long-acting opioids

**Denominator Criteria (Eligible Cases):**

Patients aged 3 through 17 years on date of service

**AND**

**Patient procedure during the performance 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, 01991, 01992

**AND**

**Patient received inhalational anesthetic agent: 4554F**

**AND**

**Patient exhibits 2 or more risk factors for post-operative vomiting: G9954**

**AND NOT**

**DENOMINATOR EXCLUSION:**

**Cases in which an inhalational anesthetic is used only for induction: G9955**

**NUMERATOR:**

Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively

**Definition:**

**Anti-emetics Therapy** – The recommended pharmacologic anti-emetics for POV prophylaxis in pediatric patients at risk of POV include (but may not be limited to):

- 5-hydroxytryptamine (5-HT<sub>3</sub>) receptor antagonists (recommended as the first choice for prophylaxis for POV in children)
- Propofol for induction and maintenance of anesthesia
- Dexamethasone
- Antihistamines
- Butyrophenones

**NOTE:** The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.

**Numerator Instructions:**

Denominator exceptions should be determined or confirmed at the date of the denominator eligible procedure.

**Numerator Options:**

***Performance Met:***

Patient received combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (**G9956**)

**OR**

***Denominator Exception:***

Documentation of medical reason for not receiving combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (e.g., intolerance or other medical reason) (**G9957**)

**OR**

***Performance Not Met:*** Patient did not receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (**G9958**)

**RATIONALE:**

Postoperative nausea and vomiting (PONV) is an important patient-centered outcome of anesthesia care. PONV is highly dis-satisfying to patients, although rarely life-threatening. A large body of scientific literature has defined risk factors for PONV and has demonstrated effective prophylactic regimes based on these risk factors and demonstrated high variability in this outcome across individual centers and providers. Between 62-73% of children experience POV when prophylactic anti-emetics are not administered. Beyond the discomfort associated with the condition, POV is a comorbidity which can cause significant postoperative complications, including dehydration and postoperative bleeding. In several studies, incidence of POV decreased significantly in children receiving combination therapy compared to control groups not receiving combination therapy for POV. Further, a number of papers have shown that performance can be assessed at the level of individual providers -- the outcome is common enough that sufficient power exists to assess variability and improvement at this level. A separate measure is needed for pediatric patients because the risk factors and recommended prophylaxis are different from adults.

**RELEVANT FIELDS**

- Date of procedure
- Date of birth
- ASA CPT code
- Received maintenance inhalational agent
- $\geq 2$  POV risk factors
- Received  $\geq 2$  agents in different classes

## **REPORTING CODES**

<b>QID 430 Code</b>	<b>Definition</b>
4554F	Patient received inhalational anesthetic agent
G9954	Patient exhibits 2 or more risk factors for post-operative vomiting
G9956	Patient received combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively
G9957	Documentation of medical reason for not receiving combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively (e.g., intolerance or other medical reason)
G9958	Patient did not receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively

## QID 477: Multimodal Pain Management

### **MEASURE TYPE:**

Process – High Priority

### **DESCRIPTION:**

Percentage of patients, aged 18 years and older, undergoing selected surgical procedures that were managed with multimodal pain medicine

### **INSTRUCTIONS:**

This measure is to be reported each time a patient undergoes a selected surgical procedure during the reporting period. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible anesthesia providers and clinicians who provide denominator-eligible services will submit this measure.

### **MEASURE SUBMISSION TYPE:**

Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

### **DENOMINATOR:**

Patients, aged 18 years and older, who undergo selected surgical procedures

***DENOMINATOR NOTE:*** Selected surgical procedures include both elective and urgent open and laparoscopic intra-abdominal, spinal, pelvic, thoracic, breast, joint, head, neck, orthopedic and fracture repair surgeries.

### **Denominator Criteria (Eligible Cases):**

**Patients aged 18 years and older on date of encounter**

### **AND**

**Patient procedures during reporting period (CPT):**

00102, 00120, 00160, 00162, 00172, 00174, 00190, 00222, 00300,  
00320, 00402, 00404, 00406, 00450, 00470, 00472, 00500, 00528,  
00529, 00539, 00540, 00541, 00542, 00546, 00548, 00600, 00620,  
00625, 00626, 00630, 00670, 00700, 00730, 00750, 00752, 00754,  
00756, 00770, 00790, 00792, 00794, 00797, 00800, 00820, 00830,

00832, 00840, 00844, 00846, 00848, 00860, 00862, 00864, 00865,  
00866, 00870, 00872, 00873, 00880, 00902, 00906, 00910, 00912,  
00914, 00916, 00918, 00920, 00940, 00942, 00948, 01120, 01160,  
01170, 01173, 01210, 01214, 01215, 01220, 01230, 01360, 01392,  
01400, 01402, 01480, 01482, 01484, 01486, 01630, 01634, 01636,  
01638, 01740, 01742, 01744, 01760, 01830, 01832, 01961

**DENOMINATOR EXCLUSION:**

**Emergent cases: M1142**

**NUMERATOR:**

Patients for whom multimodal pain management is administered in the perioperative period from 6 hours prior to anesthesia start time until discharged from the post-anesthesia care unit

**Definition:**

Multimodal pain management is defined as the use of two or more drugs and/or interventions, NOT including systemic opioids, that act by different mechanisms for providing analgesia. These drugs and/or interventions can be administered via the same route or by different routes. Opioids may be administered for pain relief when indicated but will not count toward this measure.

***NUMERATOR NOTE:*** Documentation of qualifying medications or interventions provided from six hours prior to anesthesia start time through post-anesthesia care unit discharge count toward meeting the numerator.

**Numerator Options:**

***Performance Met:***

Multimodal pain management was used (**G2148**)

**OR**

***Denominator Exception:***

Documentation of medical reason(s) for not using multimodal pain management (e.g., allergy to multiple classes of analgesics, intubated patient, hepatic failure, patient reports no pain during PACU stay, other medical reason(s)) (**G2149**)

**OR**

***Performance Not Met:***

Multimodal pain management was not used (**G2150**)

**RATIONALE:**

Besides providing anesthesia care in the operating room, anesthesiologists are dedicated to providing the best perioperative pain management in order to improve patients' function and facilitate rehabilitation after surgery. In the past, pain management was limited to the use of opioids (also called narcotics). Opioids provide analgesia primarily through a unitary mechanism, and just adding more opioids does not usually lead to better pain control or improve

outcomes. In fact, opioids are responsible for a host of side effects that can be a threat to life, and increasing rates of complications after surgery can be attributed to the overuse and abuse of opioids. In 2012, the American Society of Anesthesiologists (ASA) published its guidelines for acute pain management in the perioperative setting (1), and ASA along with the American Society of Regional Anesthesia and Pain Medicine (ASRA) and American Pain Society collaborated on the 2016 clinical practice guidelines for the management of postoperative pain (2). These documents endorse the routine use of “multimodal analgesia” which means employing multiple classes of pain medications or therapies, working with different mechanisms of action, in the treatment of acute pain instead of relying on opioids alone.

While opioids may continue to be important pain medications, they must be combined with other classes of medications known to prevent and help relieve postoperative pain unless contraindicated. The list includes but is not limited to:

- **Non-steroidal anti-inflammatory drugs (NSAIDs):** Examples include ibuprofen, diclofenac, ketorolac, celecoxib, nabumetone. NSAIDs act on the prostaglandin system peripherally and work to decrease inflammation.
- **NMDA antagonists:** When administered in low dose, ketamine, magnesium, and other NMDA antagonists act on the N-methyl-D-aspartate receptors in the central nerve system to decrease acute pain and hyperalgesia.
- **Acetaminophen:** Acetaminophen acts on central prostaglandin synthesis and provides pain relief through multiple mechanisms.
- **Gabapentinoids:** Examples include gabapentin and pregabalin. These medications are membrane stabilizers that essentially decrease nerve firing.
- **Regional block:** The ASA and ASRA also strongly recommend the use of target-specific local anesthetic applications in the form of regional analgesic techniques as part of the multimodal analgesic protocol whenever indicated.
- **Steroids:** Dexamethasone during surgery has been shown to decrease pain and opioid requirements.
- **Local anesthetics:** Injection of local anesthetic in or around the surgical site by the surgeon is an example. Systemic lidocaine administered intravenously represents an alternative to regional analgesic techniques.

#### **RELEVANT FIELDS**

- Date of procedure
- Date of birth
- ASA CPT code
- Elective case
- Multimodal pain management used



## **REPORTING CODES**

<b>QID 477 Code</b>	<b>Definition</b>
M1142	Emergent case
G2148	Multimodal pain management was used
G2149	Documentation of medical reason(s) for not using multimodal pain management (e.g., allergy to multiple classes of analgesics, intubated patient, hepatic failure, patient reports no pain during PACU stay, other medical reason(s))
G2150	Multimodal pain management was not used

## V. Interpreting Payment Adjustments with New or Multiple TIN/NPI Combinations

Scenario	Payment Adjustment
<p>Clinician has a 2024 Final Score under <b>TIN A</b>.</p> <p>Clinician continues to bill under <b>TIN A</b> in the 2026 payment year.</p>	<p>Clinician will receive a payment adjustment for covered professional services billed in 2026 under their <b>TIN A/NPI</b> combination based on 2024 Final Score attributed to that <b>TIN A/NPI</b> combination.</p>
<p>Clinician has a single 2024 Final Score, received at <b>TIN A</b>.</p> <p>Clinician bills under <b>TIN B</b> in the 2026 payment year.</p>	<p>Clinician will receive a payment adjustment for covered professional services billed in 2026 under their <b>TIN B/NPI</b> combination based on 2024 Final Score attributed to their <b>TIN A/NPI</b> combination.</p>
<p>Clinician has a 2024 Final Score under <b>TIN A</b>.</p> <p>Clinician has a 2024 Final Score under <b>TIN B</b>.</p> <p>Clinician bills under <b>TIN C</b> in the 2026 payment year.</p>	<p>Clinician will receive a payment adjustment for covered professional services billed in 2026 under their <b>TIN C/NPI</b> combination based on their higher 2024 Final Score – either attributed to their <b>TIN A/NPI</b> combination or <b>TIN B/NPI</b> combination.</p>
<p>Clinician has a 2024 Final Score under <b>TIN A</b>.</p> <p>Clinician has a 2024 Final Score under <b>TIN B</b>.</p> <p>Clinician bills under <b>TIN A</b> and <b>TIN B</b> in the 2026 payment year.</p>	<p>Clinician will receive a payment adjustment for covered professional services billed in 2026 under their <b>TIN A/NPI</b> combination based on 2024 Final Score attributed to that <b>TIN A/NPI</b> combination.</p> <p>Clinician will receive a payment adjustment for covered professional services under their <b>TIN B/NPI</b> combination based on 2024 Final Score attributed to that <b>TIN B/NPI</b> combination.</p>

## VI. Disclaimer and Copyright

### **Disclaimer**

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## APPENDIX A: 2024 MACRA Ready Simple Form



## APPENDIX B: 2024 MACRA Ready Plus Form



## APPENDIX C: 2024 MACRA Quality Measure Definitions - Cheat Sheet



**MACRA MEASURE DEFINITIONS**

**AQI 48 Patient-Reported Experience with Anesthesia**

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. Survey needs to be sent within 30 days of anesthetic. Performance rate will be a function of percentage of surveys sent plus positive response rate.

*Send Graphium assessment/satisfaction survey:*

Graphium will email and/or text a single survey covering anesthesia satisfaction.

*Yes* - Graphium is approved to send and patient agrees to receive electronic satisfaction and post-discharge follow-up survey.

*Pt Declines* - Patients who are non-verbal, unable to be surveyed due to a language/medical reason, or *who decline to be surveyed*.

*No* - Graphium is not authorized to send a satisfaction and post-discharge follow-up survey. To be used when either surveys are not desired OR another survey service used.

**QID 463 Prevention of Post-Operative Vomiting (POV) – Combination Therapy (Pediatrics)**

Percentage of patients aged 3 through 17 years, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for post-operative vomiting (POV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively and/or intraoperatively.

- ≥ 2 risk factors for PONV:
- Surgery ≥ 30 minutes
  - Post-pubertal female
  - Age ≥ 3 years
  - Adenotonsillectomy
  - Strabismus surgery
  - Otoplasty
  - Family History of POV/PONV
  - Anticholinesterases
  - Long-acting opioids
  - History of POV or Post-Operative Nausea and Vomiting (PONV)/motion sickness in patient

**QID 404 Anesthesiology Smoking Abstinence**

The percentage of current smokers who abstain from cigarettes prior to anesthesia on the day of elective surgery or procedure.

*Patient is a smoker:* Patient identifies as a smoker (e.g. cigarette, cigar, pipe, e-cigarette or marijuana)

*Received cessation guidance:* Received instruction from the anesthesiologist or proxy prior to the day of surgery to abstain from smoking on the day of surgery.

*Smoked on day of surgery:* Patients who did NOT abstain from smoking prior to anesthesia on the day of surgery or procedure.

**AQI 71 Ambulatory Glucose Management**

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.

**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.

**AQI 67 Consultation for Frail Patients**

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.

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

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

**ABG 42 Known or Suspected Difficult Airway Mitigation Strategies**

Percentage of patients with a known or suspected difficult airway who undergo a planned GETA that have both a 2nd provider present AND have difficult airway equipment in the room prior to the induction.

*Provider:* Any OR staff (eg. physician, CRNA, RN, resident, or anesthesia tech) who is solely available to assist with the airway.

**AQI72: Perioperative Anemia Management**

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.

**QID 477 Multimodal Pain Management**

Percentage of patients, regardless of age, undergoing selected elective surgical procedures that were managed with multimodal pain medicine - defined as the use of ≥2 drugs and/or interventions, NOT including systemic opioids, that act by different mechanisms for providing analgesia. Opioids may be administered for pain relief when indicated but will not count towards this measure.

**AQI65: Avoidance of Cerebral Hyperthermia for Procedures Involving CPB**

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.

**ABG 44 Low Flow Inhalational General Anesthesia**

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).

**AQI 18 Coronary Artery Bypass Graft (CABG): Prolonged Intubation – Inverse Measure**

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

**QID 430 Prevention of Post-Operative Nausea and Vomiting (PONV)**

Percentage of patients, aged 18 years and older, who undergo a procedure under an inhalational general anesthetic, AND who have three or more risk factors for post-operative nausea and vomiting (PONV), who receive combination therapy consisting of **at least two prophylactic pharmacologic antiemetic agents** of different classes preoperatively and/or intraoperatively.

- ≥ 3 risk factors for PONV:
- Female gender
  - History of motion sickness
  - History of PONV
  - Non-smoker
  - Intended administration of opioids for post-op analgesia

*Combo therapy used:*

- NK-1 Receptor Antagonists
- Phenothiazines
- Butyrophenones
- Glucocorticoids
- Phenylethylamines
- Antihistamines
- 5-Hydroxytryptamine (5-HT3) Receptor Antagonists
- Anticholinergics

**QID 424 Perioperative Temperature Management**

Percentage of patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time.