

**Quality ID #430: Prevention of Post-Operative Nausea and Vomiting (PONV) – Combination Therapy**  
– National Quality Strategy Domain: Patient Safety  
– Meaningful Measure Area: Preventive Care

**2020 COLLECTION TYPE:**

**MIPS CLINICAL QUALITY MEASURES (CQMS)**

**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  $\geq 18$  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, 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-HT<sub>3</sub>) 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.

**CLINICAL RECOMMENDATION STATEMENTS:**

**Practice Guidelines for Postanesthetic Care; American Society of Anesthesiologists, 2013**

Anti-emetic agents should be used for the prevention and treatment of nausea and vomiting when indicated.

Multiple anti-emetic agents may be used for the prevention and treatment of nausea and vomiting when indicated.

**Consensus Guidelines for the Management of Postoperative Nausea and Vomiting; Society for Ambulatory Anesthesia (SAMBA), 2014**

Administer prophylactic therapy with combination ( $\geq 2$ ) interventions/multimodal therapy in patients at high risk for PONV.

**COPYRIGHT:**

The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications.

The measure, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the measure for commercial gain, or incorporation of the measure into a product or service that is sold, licensed, or distributed for commercial gain.

Commercial uses of the measure require a license agreement between the user and the PCPI® Foundation (PCPI®) or the American Society of Anesthesiologists (ASA). Neither ASA, nor the American Medical Association (AMA), nor the AMA-convened Physician Consortium for Performance Improvement® (AMA-PCPI), now known as the PCPI, nor their members shall be responsible for any use of the measure.

**The AMA's and AMA-PCPI's significant past efforts and contributions to the development and updating of the measure is acknowledged. ASA is solely responsible for the review and enhancement ("Maintenance") of the measure as of May 15, 2014.**

ASA encourages use of the measure by other health care professionals, where appropriate.

**THE MEASURE AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.**

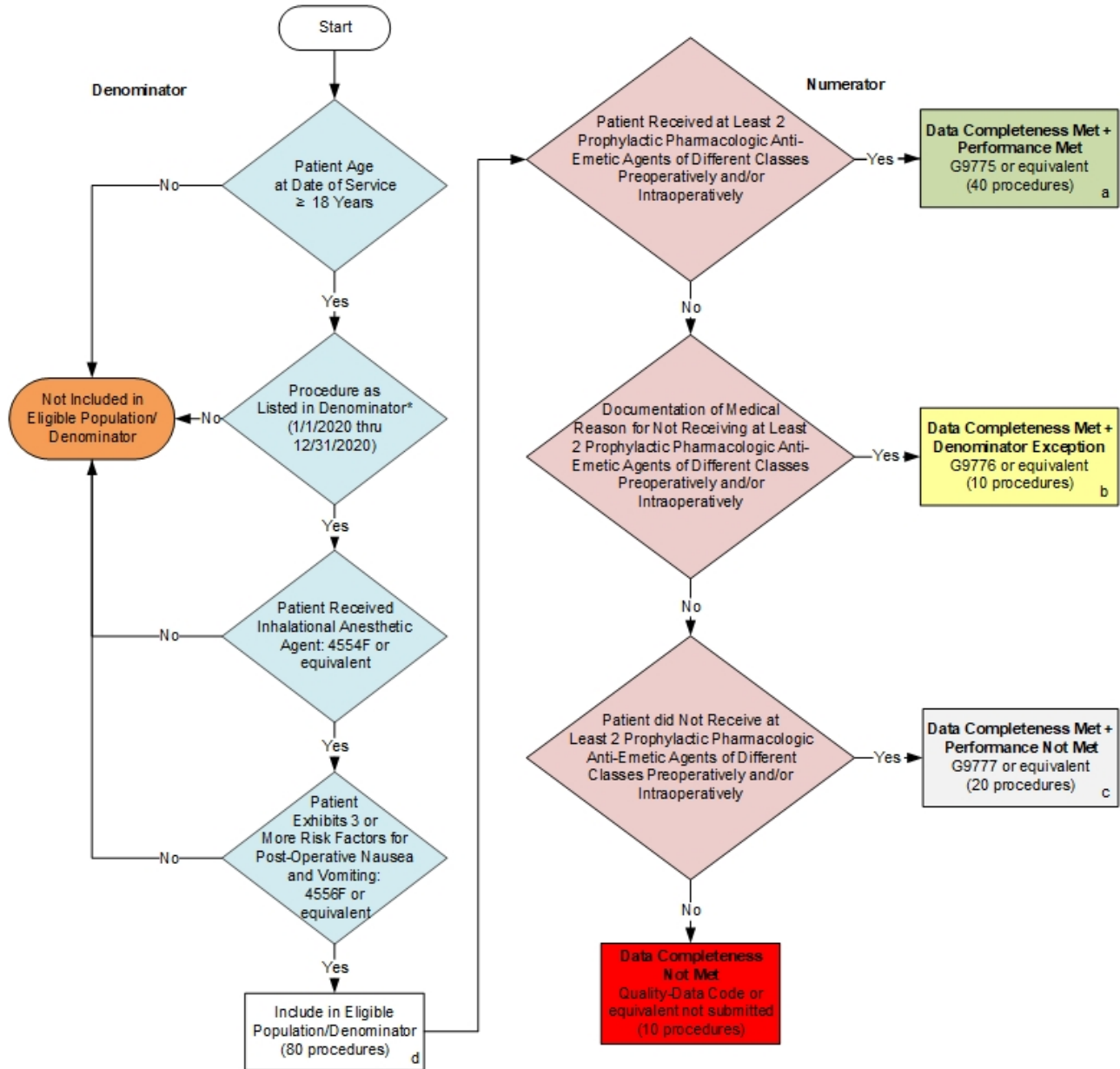
© 2019 PCPI® Foundation and American Society of Anesthesiologists. All Rights Reserved.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. ASA, the AMA, the PCPI and its members and former members of the AMA-PCPI disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

CPT® contained in the Measure specifications is copyright 2004-2019 American Medical Association. LOINC® copyright 2004-2019 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2019 The International Health Terminology Standards Development Organisation (IHTSDO). ICD-10 is copyright 2019 World Health Organization. All Rights Reserved.

**2020 Clinical Quality Measure Flow for Quality ID #430:  
Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy**

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



**SAMPLE CALCULATIONS:**

**Data Completeness=**  

$$\frac{\text{Performance Met (a=40 procedures)} + \text{Denominator Exception (b=10 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**  

$$\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures) - Denominator Exception (b=10 procedures)} = 60 \text{ procedures}} = \frac{40 \text{ procedures}}{60 \text{ procedures}} = 66.66\%$$

\*See the posted measure specification for specific coding and instructions to submitted this measure.  
 NOTE: Submission Frequency: Procedure

CPT only copyright 2019 American Medical Association. All rights reserved.  
 The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

**2020 Clinical Quality Measure Flow Narrative for Quality ID #430:  
Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy**

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

1. Start with Denominator
2. Check Patient Age:
  - a. If Patient Age is greater than or equal to 18 Years on Date of Service equals No during the performance period, do not include in Eligible Population. Stop Processing.
  - b. If Patient Age is greater than or equal to 18 years on Date of Service equals Yes during the performance period, proceed to check Procedure Performed.
3. Check Procedure Performed:
  - a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Procedure as Listed in the Denominator equals Yes, proceed to check Patient Received Inhalational Anesthetic Agent.
4. Check Patient Received Inhalational Anesthetic Agent:
  - a. If Patient Received Inhalational Anesthetic Agent equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient Received Inhalational Anesthetic Agent equals Yes, proceed to check Patient Exhibits 3 or More Risk Factors for Post-Operative Nausea and Vomiting.
5. Check Patient Exhibits 3 or More Risk Factors for Post-Operative Nausea and Vomiting:
  - a. If Patient Exhibits 3 or More Risk Factors for Post-Operative Nausea and Vomiting equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient Exhibits 3 or More Risk Factors for Post-Operative Nausea and Vomiting equals Yes, include in Eligible Population.
6. Denominator Population:
  - a. Denominator Population is all Eligible Procedures in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 procedures in the Sample Calculation.
7. Start Numerator
8. Check Patient Received at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively:
  - a. If Patient Received at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 procedures in the Sample Calculation.

- c. If Patient Received at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals No, proceed to check Documentation of Medical Reason(s) for Not Receiving at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and Intraoperatively.
9. Check Documentation of Medical Reason(s) for Not Receiving at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively:
  - a. If Documentation of Medical Reason(s) for Not Receiving at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals Yes, include in Data Completeness Met and Denominator Exception.
  - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 10 procedures in the Sample Calculation.
  - c. If Documentation of Medical Reason(s) for Not Receiving at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals No, proceed check Patient did Not Receive at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively.
10. Check Patient did Not Receive at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively:
  - a. If Patient did Not Receive at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness Rate in the Sample Calculation listed at the end of this document. Letter c equals 20 procedures in the Sample Calculation.
  - c. If Patient did Not Receive at Least Two Prophylactic Pharmacologic Anti-Emetic Agents of Different Classes Preoperatively and/or Intraoperatively equals No, proceed to check Data Completeness Not Met.
11. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

Data Completeness=

$$\frac{\text{Performance Met (a=40 procedures)} + \text{Denominator Exception (b=10 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures) - Denominator Exception (b=10 procedures)} = 80 \text{ procedures}} = \frac{40 \text{ procedures}}{80 \text{ procedures}} = 66.66\%$$