



Measure Abbreviation: PONV 02 (MIPS 463)*

*PONV 02 is built to the specification outlined by the [Merit Based Incentive Program \(MIPS\) 463: Prevention of Post-Operative Vomiting \(POV\) – Combination Therapy measure \(Pediatrics\)](#). MIPS measure specifications are available for download at <https://qpp.cms.gov/resources/education>

Description: Percentage of patients aged 3 through 17 years of age, 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.

NQS Domain: Patient Safety

Measure Type: Process

Measure Summary: The PONV 02 (MIPS 463) measure identifies the percentage of pediatric patients who undergo a surgical procedure under general anesthetic, and who have two or more risk factors for postoperative vomiting (POV), who receive combination therapy consisting of at least two prophylactic pharmacologic antiemetic agents of different classes preoperatively and/or intraoperatively.¹ The purpose of this process of care measure is to reduce the incidence of postoperative nausea and vomiting in pediatric patients.

Inclusions:

- All patients, age 3 through 17 years of age, who undergo any procedure under general anesthesia in which an **inhalational general anesthetic** is used for maintenance AND who have **two or more risk factors for POV**.
 - POV Risk Factors:
 - Age ≥ 3 years
 - History of POV or Post-Operative Nausea and Vomiting (PONV) in patient, parent or sibling
 - Strabismus surgery (Indicated by CPT: 00140 or procedure text listed as ‘strab’ ‘eye’ ‘ocular’ or ‘lacrimal’)
 - Surgery ≥ 30 minutes

Algorithm for determining Case Length:

Case Start:

1. Anesthesia Induction End. If not available, then
2. Anesthesia Induction Start. If not available, then
3. Procedure Start. If not available, then
4. Patient in Room. If not available, then
5. Anesthesia Start

Case End:

1. Patient Extubated. If not available, then
2. LMA Removal Time. If not available, then
3. Procedure End. If not available, then
4. Patient Out of Room. If not available, then

- Procedures (by CPT) included: 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 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, 01935, 01936, 01951, 01952, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01991, 01992

Exclusions:

- Patients < 3 or > 17 years old.
- Procedures on the Neck (CPT 00326)
- Intrathoracic Procedures (CPT 00561)
- Procedures on the Lower Abdomen (CPT 00834)
- Labor Epidurals (CPT 01967, 01968, 01969)
- Endoscopy (CPT 00740, 00810)
- Obturator neurectomy (CPT 01180, 01190)
- Shoulder cast application (CPT 01682)
- Obstetric Non-Operative Procedure Rooms (Rooms tagged as OB-GYN – Labor and Delivery)
- Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”
- Cases in which an inhalation anesthetic is used only for induction

Other Measure Build Details:

For a case to be included for the PONV 02 measure, the patient must have received inhalational general anesthetic for ***maintenance*** purposes AND have two or more risk factors for POV. This measure determines ***maintenance*** as any inhalational general anesthetic administered after procedure start (MPOG Concept 50006).

Success: Patient receives combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively

Anti-emetic therapy: The recommended pharmacologic anti-emetics for PONV prophylaxis in pediatric patients at risk for moderate to severe PONV include (but may not limited to):

- 5-Hydroxytryptamine (5-HT₃) Receptor Antagonists (Recommended as the first choice for prophylaxis for POV in children)
- Glucocorticoids
- Anticholinergics
- Antihistamines
- Butyrophenones
- Phenothiazines
- Phenylethylamines
- NK-1 Receptor Antagonists

Definition 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.

Threshold: 90%

Responsible Provider: Provider(s) signed in at Induction End.

Risk Adjustment (for outcome measures): *Not applicable.*

References:

1. Gan TJ, Meyer TA, Apfel CC, et al. Society for Ambulatory Anesthesia guidelines for the management of postoperative nausea and vomiting. *Anesthesia and analgesia*. 2007;105(6):1615-1628, table of contents.
2. Fujii Y. Current management of vomiting after tonsillectomy in children. *Current drug safety*. 2009;4(1):62-73.
3. Kovac AL. Management of postoperative nausea and vomiting in children. *Paediatric drugs*. 2007;9(1):47-69.
4. Abd-Elshafy SK, Yacoup AM, Abdalla EE, El-Melegy TT, Abd-Elsalam KA. A New Look on Adding Dexamethasone as an Adjuvant to Caudal Bupivacaine; Efficacy on Postoperative Pain and Vomiting in Pediatric Patients. *Pain physician*. 2016;19(6):E841-852.
5. Fazel MR, Yegane-Moghaddam A, Forghani Z, Aghadoost D, Mahdian M, Fakharian E. The effect of dexamethasone on postoperative vomiting and oral intake after adenotonsillectomy. *International journal of pediatric otorhinolaryngology*. 2007;71(8):1235-1238.
6. Fearon JA, Dimas V, Ditthakasem K, Herbert MA. A Randomized Controlled Trial of Oral Versus Intravenous Administration of a Nonnarcotic Analgesia Protocol Following Pediatric Craniosynostosis Corrections on Nausea and Vomiting Rates. *The Journal of craniofacial surgery*. 2015;26(6):1951-1953.