2026 Quality ID PIMSH20: Appropriate Antiemetic Therapy for High- and Moderate-Emetic-Risk Antineoplastic Agents

--**High Priority Type: High Priority**
--**Measure Type**: Patient Safety/Process

2026 COLLECTION TYPE:
Practice Insights by McKesson in Collaboration with The US Oncology Network – QCDR
The Oncology Quality Hub

DATA SOURCE USED FOR THE MEASURE:
EHR--Medical record, including problem list, drug lists, and lab reports

Administrative claims data; Claims; EHR

Claims data is used to determine eligible patients, and EMR data is used to identify eligible medications ordered and administered for the calculation of the numerator and denominator.

DESCRIPTION:
Percentage of cancer patients aged 18 years and older treated with high- or moderate-emetic-risk antineoplastic agents who are administered appropriate pre-treatment antiemetic therapy

DENOMINATOR:
Denominator Criteria 1: Patients who receive their first ever high-emetic-risk intravenous or both intravenous and oral antineoplastic agents during cycle 1 of any chemotherapy regimen

Denominator Criteria 2: Patients who receive their first ever moderate-emetic-risk intravenous or both intravenous and oral antineoplastic agents during cycle 1 of any chemotherapy regimen

Denominator Guidance:
For multi-drug regimens, select antiemetic therapy based on the drug with the highest emetic risk. For guidance on determining emetic risk, please refer to the 2023 MASCC and ESMO guideline update for the prevention of chemotherapy- and radiotherapy-induced nausea and vomiting. Herrstedt, J. et al. ESMO Open, Volume 9, Issue 2, 102195.

DENOMINATOR EXCLUSION:
None

DENOMINATOR EXCEPTIONS:
Denominator Exception Criteria 1:
- Patient allergy or intolerance to neurokinin 1 (NK1) receptor antagonist, serotonin (5-HT3) receptor antagonist, dexamethasone, or olanzapine.
- Patients whose antineoplastic regimen includes prednisone

Denominator Exception Criteria 2:
- Patient allergy or intolerance to 5-HT3 receptor antagonist, or dexamethasone.
- Patients whose antineoplastic regimen includes prednisone.

NUMERATOR:
Numerator Criteria 1: Patients who are administered prior to treatment a four-drug combination of a neurokinin 1 (NK1) receptor antagonist, a serotonin (5-HT3) receptor antagonist, dexamethasone, and olanzapine

Numerator Criteria 2: Patients who are administered prior to treatment a two-drug combination of a 5-HT3 receptor antagonist, and dexamethasone

Numerator Guidance: For the purposes of the measure, the following antiemetics would meet the measure:
- Antiemetics administered on the same day as cycle 1 day 1 of the therapy OR
- Any new or refill prescription order of antiemetics on the same day as cycle 1 day 1 of the therapy or within 89 days prior to cycle 1 day 1 of the therapy OR
- Any record of antiemetics as active on the medication list within 90 days prior to cycle 1 day 1 of the therapy

Oral/IV combination regimen is when oral antineoplastic therapy is ordered as a component of a treatment regimen. Both oral and IV antineoplastic agents are ordered on the same day, and the IV agent determines the emetic risk of the oral/IV combination regimen.

Note: ASCO acknowledges that all practices may encounter a scenario in which an antineoplastic intended to be given on C1D1 is held. In this scenario, it is possible for prophylactic antiemetic treatment to be considered inappropriate if the intended antineoplastic is ultimately not administered. The technical expert panel expects these scenarios to be consistent across practice types and settings, and unlikely to substantially impact performance scores.

Performance on this measure is intended to be attributed to the prescribing or attending provider, and is not meant to reflect incident-to billing under non-physician providers (NPPs) who may be practicing in the infusion center during the patient's antineoplastic therapy.

NUMERATOR EXCLUSIONS:
None

TELEHEALTH:
Included

PERFORMANCE RATE DESCRIPTION:
This measure is intended to have one reporting rate, which aggregates the following populations into a single performance rate for reporting purposes:

- Population 1: Patients who receive their first ever high-emetic-risk intravenous antineoplastic agents during cycle 1 of any chemotherapy regimen and are administered prior to treatment a four-drug combination of a

neurokinin 1 (NK1) receptor antagonist, a serotonin (5-HT3) receptor antagonist, dexamethasone, and olanzapine
- Population 2: Patients who receive their first ever moderate-emetic-risk intravenous antineoplastic agents during cycle 1 of any chemotherapy regimen and are administered prior to treatment a two-drug combination of a 5-HT3 receptor antagonist, and dexamethasone

For the purposes of this measure, a single performance rate can be calculated as follows:
Performance Rate = (Numerator 1 + Numerator 2)/[(Denominator 1 - Denominator Exceptions 1) + (Denominator 2 - Denominator Exceptions 2)]

REPORTING OPTIONS:
Traditional MIPS

CLINICAL RECOMMENDATION STATEMENT:
Recommendations for the use of high- and moderate-emetic-risk antineoplastic agents included in ASCO's 2020 antiemetic guideline are shown below (Hesketh et al., 2020, p. 2783).
High-emetic risk antineoplastic agents
* Adults treated with cisplatin and other high-emetic-risk single agents should be offered a 4-drug combination of an NK1 receptor antagonist, a serotonin (5-HT3) receptor antagonist, dexamethasone, and olanzapine (day 1). Dexamethasone and olanzapine should be continued on days 2 to 4 (Type: evidence based, benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong).
* Adults treated with an anthracycline combined with cyclophosphamide should be offered a 4-drug combination of an NK1 receptor antagonist, a 5-HT3 receptor antagonist, dexamethasone, and olanzapine (day 1). Olanzapine should be discontinued on days 2 to 4 (Type: evidence-based, benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong).
Moderate-emetic-risk antineoplastic agents
* Adults treated with carboplatin area under the curve (AUC) greater than or equal to 4 mg/mL/min should be offered a 3-drug combination of an NK1 receptor antagonist, a 5-HT3 receptor antagonist, and dexamethasone (day 1) (Type: evidence based; benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong).
* Adults treated with moderate-emetic-risk antineoplastic agents (excluding carboplatin AUC greater than or equal to 4 mg/mL/min) should be offered a 2-drug combination of a 5-HT3 receptor antagonist and dexamethasone (day 1) (Type: evidence based, benefits outweigh harms; Evidence quality: high; Strength of recommendation: strong).

QCDR MEASURE RATIONALE:
Adherence to antiemetic guidelines has been linked to improved control of nausea and vomiting. In their prospective, observational, multicenter study, Aapro et al. (2012) note that the clinical uptake of antiemetic guidelines remains suboptimal, despite the availability of several updated evidence-based consensus guidelines for preventing chemotherapy-induced nausea and vomiting. Chemotherapy-induced nausea and vomiting may discourage patients from completing a chemotherapy regimen, adversely impacts quality of life and a patient's ability to carry out daily activities, and may require emergency care or hospitalization, adding to the economic burden of healthcare (Aapro et al., 2012).

Additionally, chemotherapy-induced nausea and vomiting (CINV) carries an economic impact as a result of unplanned office visits, calls to the office, hydration therapy, and hospitalizations (Gilmore, et al., 2014). Preventing CINV from the start of chemotherapy is critical, as successful control in the acute phase (0-24 hours after chemotherapy) is associated with reduced incidence of CINV in the delayed phase (day 2 onward), control in cycle 1 is associated with reduced incidence in subsequent chemotherapy cycles, and patients who experience CINV may go on to develop anticipatory nausea and vomiting in later cycles (Gilmore et al., 2014).

The first ASCO guideline for antiemetics was published in 1999, with updates in 2006, 2011, 2015, 2017, and 2020. Recommendations for adults in the 2020 guideline update are unchanged with the exception of the option of adding olanzapine in the setting of hematopoietic stem cell transplantation. Evidence for the remaining recommendations is discussed in the 2017 guideline (Hesketh et al., 2020)

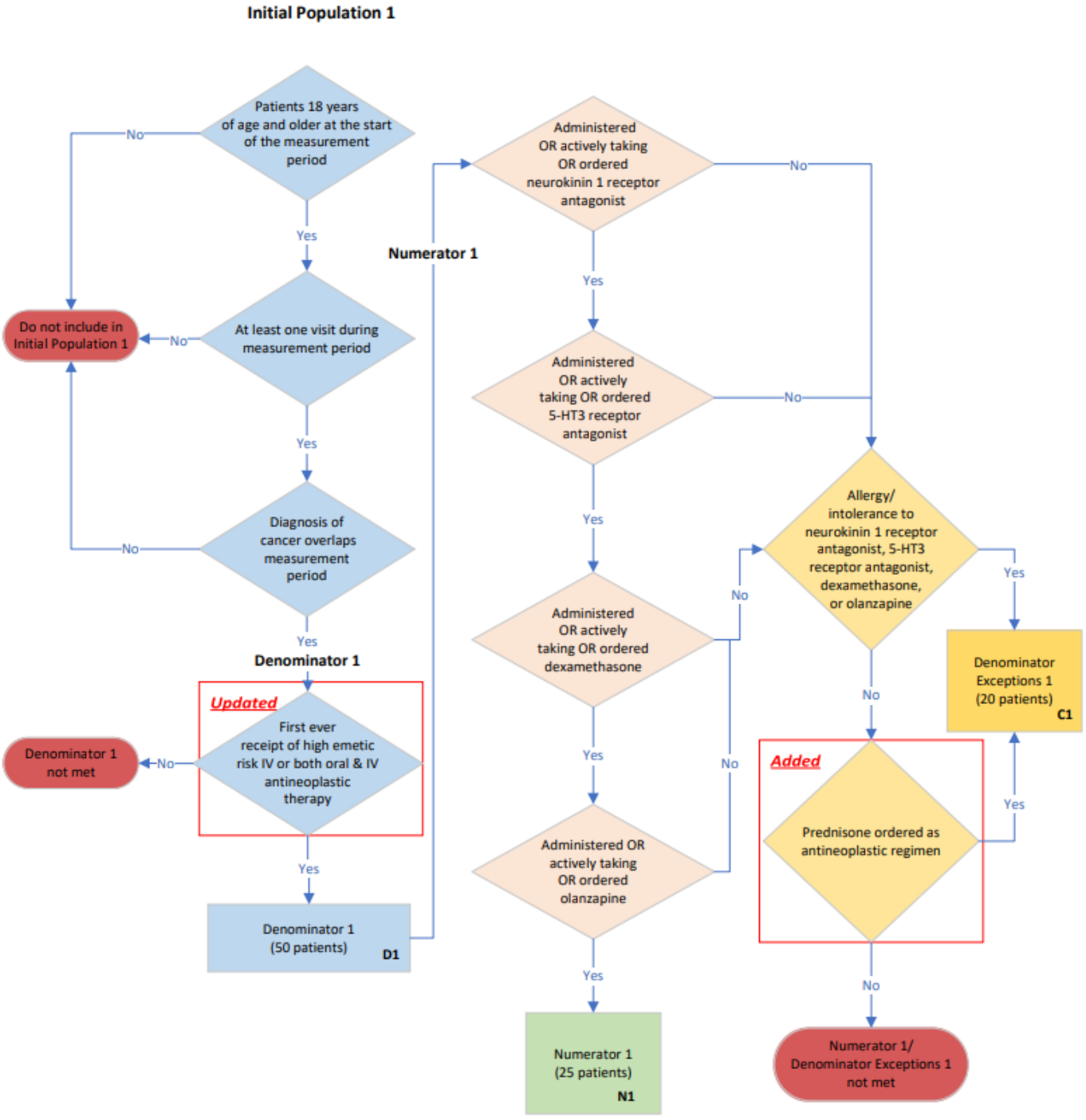
eCQM Flow
eCQM ID: 1045
eCQM Version: 3
NQF #: N/A

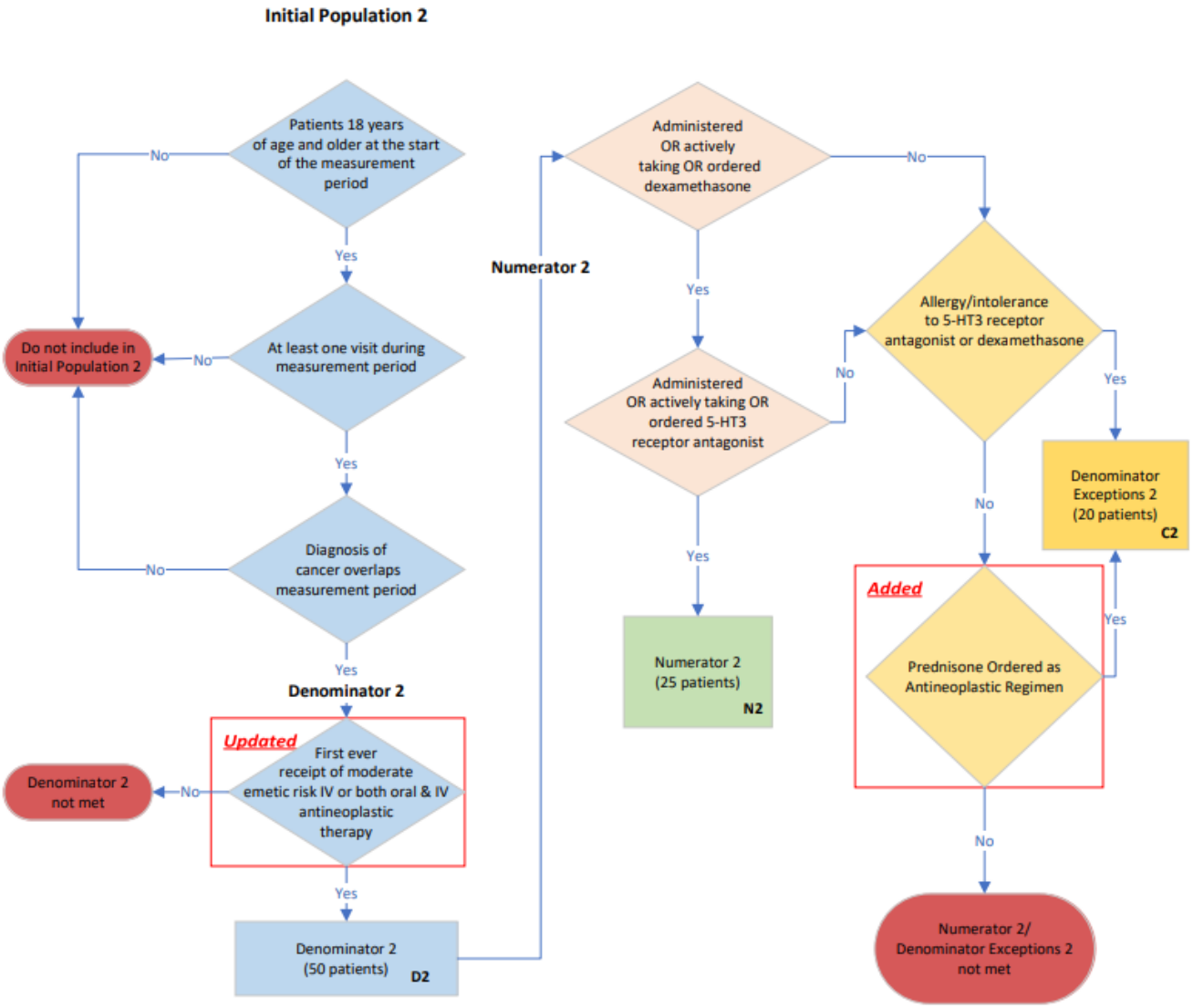
NOTE: This flow diagram represents an overview of population criteria requirements. ***Refer to the eCQM specification for a complete list of data elements included in this measure and required for submission.***

Appropriate Antiemetic Therapy for High- and Moderate-Emetic-Risk Antineoplastic Agents

Percentage of cancer patients aged 18 years and older treated with high- or moderate-emetic-risk antineoplastic agents who are administered appropriate pre-treatment antiemetic therapy

This eCQM is a patient-based measure.





Sample Calculation

Performance Rate * (Population 1 and 2) =

Numerator (N1 + N2= 50 patients) / Denominator (D1 + D2= 100 patients) – Denominator Exceptions (E1 + E2 = 40 patients) = 50 / 60 = 83%

*This eCQM is intended to have one performance rate.

These performance measures are not clinical guidelines and do not establish a standard of medical care and have not been tested for all potential applications.

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