Quality ID #238 (CBE 0022): Use of High-Risk Medications in Older Adults

<u>2025 COLLECTION TYPE:</u>
MIPS CLINICAL QUALITY MEASURES (CQMS)

<u>MEASURE TYPE:</u>
Process – High Priority

<u>DESCRIPTION:</u>
Percentage of patients 65 years of age and older who were ordered at least two high-risk medications from the same drug class.

<u>INSTRUCTIONS:</u>
This measure is to be submitted a minimum of **once per performance period** for patients seen during the performance period. There is no diagnosis associated with this measure. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

The measure reflects potentially inappropriate medication use in older adults, both for medications where any use is inappropriate and for medications where use under all but specific indications is potentially inappropriate.

<u>This measure will be calculated with 2 performance rates:</u>
1. Percentage of patients 65 years of age and older who were ordered at least two high-risk medications from the same drug class.
2. Percentage of patients 65 years of age and older who were ordered at least two high-risk medications from the same drug class, except for appropriate diagnoses.

For accountability reporting in the CMS MIPS program, the rate for submission criteria 1 is used for performance.

NOTE: Patient encounters for this measure conducted via telehealth (including but not limited to encounters coded with GQ, GT, POS 02, POS 10) are allowable. Please note that effective January 1, 2025, while a measure may be denoted as telehealth eligible, specific denominator codes within the encounter may no longer be eligible due to changes outlined in the CY 2024 PFS Final Rule List of Medicare Telehealth Services.

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.

<u>SUBMISSION CRITERIA 1: PERCENTAGE OF PATIENTS 65 YEARS OF AGE AND OLDER WHO WERE ORDERED AT LEAST TWO HIGH-RISK MEDICATIONS FROM THE SAME DRUG CLASS</u>

*DENOMINATOR NOTE: *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.*

<u>DENOMINATOR (SUBMISSION CRITERIA 1):</u>
Patients 65 years and older who had a visit during the measurement period

<u>Denominator Criteria:</u>
Patients aged ≥ 65 years on date of encounter
<u>AND</u>
Patient encounter during performance period (CPT or HCPCS): 92002, 92004, 92012, 92014, 98000, 98001, 98002, 98003, 98004, 98005, 98006, 98007, 98008, 98009, 98010, 98011, 98012, 98013, 98014, 98015,98016, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99341, 99342, 99344, 99345, 99347, 99348, 99349, 99350, 99387*, 99397*, G0402, G0438, G0439
<u>AND NOT</u>
<u>DENOMINATOR EXCLUSIONS:</u>
Patients who use hospice services any time during the measurement period: G9741
<u>OR</u>
Patients receiving palliative care during the measurement period: G0034

<u>NUMERATOR (SUBMISSION CRITERIA 1):</u>
Patients ordered at least two high-risk medications from the same drug class during the measurement year.

<u>Definitions:</u>
The intent of the measure is to assess if the eligible clinician ordered high-risk medication(s). The intent of the numerator is to assess if the patient has either been ordered:
- At least two high-risk medications from the same drug class (grouped by row) in Table 1 on different dates of service, or
- At least two high-risk medications from the same drug class (grouped by row) in Table 2 on different dates of service, where the sum of days supply exceeds 90 days
- At least two high-risk medications from the same drug class in Table 3 on different dates of service, each exceeding average daily dose criteria.

If the patient had a high-risk medication previously prescribed by another provider, they would not be counted towards the numerator unless the submitting provider also ordered a high-risk medication for them from the same drug class.

Calculate average daily dose for each prescription event. To calculate average daily dose, multiply the quantity of pills prescribed by the dose of each pill and divide by the days supply. For example, a prescription for the 30-days supply of digoxin containing 15 pills, 0.25 mg each pill, has an average daily dose of 0.125 mg. To calculate average daily dose for elixirs and concentrates, multiply the volume prescribed by daily dose and divide by the days supply. Do not round when calculating average daily dose.

Cumulative Medication Duration – an individual's total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not dispensed.

To determine the "cumulative medication duration", determine first the number of the Medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

For example, there is an original prescription for 30 days with 2 refills for thirty days each. After a gap of 3 months, the medication was ordered again for 60 days with 1 refill for 60 days. The "cumulative medication duration" is (30 x 3) + (60 x 2) = 210 days over the 10 month period.

Table 1 - High-Risk Medications at any Dose or Duration

Description	Prescription	
Anticholinergics, first-generation antihistamines	Brompheniramine Chlorpheniramine	Diphenhydramine (oral) Doxylamine

Description	Prescription	
	Cyproheptadine Dimenhydrinate	Hydroxyzine Meclizine Promethazine Triprolidine
Anticholinergics, anti-Parkinson agents	Benztropine (oral)	Trihexyphenidyl
Antispasmodics	Atropine (exclude ophthalmic) Chlordiazepoxide-clidinium Dicyclomide	Hyoscyamine Scopolamine
Antithrombotics	Dipyridamole, (oral, excluding extended release)	
Cardiovascular, alpha agonists, central	Guanfacine	
Cardiovascular, other	Nifedipine (excluding extended release)	
Central nervous system, antidepressants	Amitriptyline Amoxapine Clomipramine Desipramine	Imipramine Nortriptyline Paroxetine
Central nervous system, barbiturates	Butalbital	Phenobarbital Primidone
Central nervous system, vasodilators	Ergot mesylates	
Central nervous system, other	Meprobamate	
Endocrine system, estrogens with or without progestins; include only oral and topical patch products	Conjugated estrogen Esterified estrogen Estradiol Estropipate	
Endocrine system, sulfonylureas, long-duration	Glimepiride	Glyburide
Endocrine system, other	Desiccated thyroid	
Endocrine system, megestrol	Megestrol	
Nonbenzodiazepine hypnotics	Eszopiclon Zaleplon	Zolpidem
Pain medications, skeletal muscle relaxants	Carisoprodol Chlorzoxazone Cyclobenzaprine	Metaxalone Methocarbamol Orphenadrine
Pain medications, meperidine	Meperidine	
Pain medications, other	Indomethacin	Ketorolac, includes parenteral and oral

*The registry version of the measure specifications only indicates the classes of drugs that are considered high-risk and do not include the specific coding of RxNorm. However, this measure aligns with the eCQM measure (CMS 156) and providers may review the RxNorm codes in the applicable eCQM value sets for submission.

**A row with one medication is considered a group (or drug class) of one; therefore, two orders of that same medication are numerator compliant.

Table 2 - High-Risk Medications With Days Supply Criteria

Description	Prescription		Days Supply Criteria
Anti-Infectives, other	Nitrofurantoin	Nitrofurantoin macrocrystals-monohydrate	> 90 days

Table 3 – High-Risk Medications With Average Daily Dose Criteria

Description	Prescription	Average Daily Dose Criteria
Cardiovascular, other	Digoxin	> 0.125 mg per day
Tertiary tricyclic antidepressants (TCAs) (as single agent or as part of combination products)	Doxepin	> 6 mg per day

Numerator Instructions:
INVERSE MEASURE – A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Submitting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

A high-risk medication is identified by either of the following:
- A prescription for medications classified as high risk at any dose and for any duration listed in Table 1
- Prescriptions for medications classified as high risk at any dose with greater than a 90 day cumulative medication duration listed in Table 2
- A prescription for medications classified as high risk exceeding average daily dose criteria listed in Table 3

Numerator Options:
Performance Met: At least two orders for high-risk medications from the same drug class **(G9367)**

OR

Performance Not Met: At least two orders for high-risk medications from the same drug class not ordered **(G9368)**

SUBMISSION CRITERIA 2: PERCENTAGE OF PATIENTS 65 YEARS OF AGE AND OLDER WHO WERE ORDERED AT LEAST TWO HIGH-RISK MEDICATIONS FROM THE SAME DRUG CLASS, EXCEPT FOR APPROPRIATE DIAGNOSES

*DENOMINATOR NOTE: *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.*

DENOMINATOR (SUBMISSION CRITERIA 2):
Patients 65 years and older who had a visit during the measurement period

Denominator Criteria:
Patients aged ≥ 65 years on date of encounter
AND

Patient encounter during performance period (CPT or HCPCS): 92002, 92004, 92012, 92014, 98000, 98001, 98002, 98003, 98004, 98005, 98006, 98007, 98008, 98009, 98010, 98011, 98012, 98013, 98014, 98015,98016, 99202, 99203, 99204, 99205,99212, 99213, 99214, 99215, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99341, 99342, 99344, 99345, 99347, 99348, 99349, 99350, 99387*, 99397*, G0402, G0438, G0439

<u>AND NOT</u>
<u>DENOMINATOR EXCLUSIONS:</u>
Patients who use hospice services any time during the measurement period: G9741
<u>OR</u>
Patients receiving palliative care during the measurement period: G0034

NUMERATOR (SUBMISSION CRITERIA 2):

Patients with at least two orders of high-risk medications from the same drug class (i.e., antipsychotics and benzodiazepines), except for appropriate diagnoses

Definitions:

The intent of the numerator is to assess if the patient has been ordered at least two high-risk medications from the same drug class (grouped by row) in Table 4 on different dates of service. The intent of the measure is to assess if the submitting provider ordered the high-risk medication(s). If the patient had a high-risk medication previously prescribed by another provider, they would not be counted towards the numerator unless the submitting provider also ordered a high-risk medication for them from the same drug class.

Index Prescription Start Date (IPSD) – The start date of the earliest prescription ordered for a high-risk medication during the measurement period.

Table 4 - High-Risk Medications

Description	Prescription	
Antipsychotics, first (conventional) and second (atypical) generation	• Aripiprazole • Aripiprazole lauroxil • Asenapine • Brexpiprazole • Cariprazine • Chlorpromazine • Clozapine • Fluphenazine • Haloperidol • Iloperidone • Loxapine • Lurasidone	• Molindone • Olanzapine • Paliperidone • Perphenazine • Pimavanserin • Pimozide • Quetiapine • Risperidone • Thioridazine • Thiothixene • Trifluoperazine • Ziprasidone
Benzodiazepines, long, short and intermediate acting	• Alprazolam • Chlordiazepoxide • Clobazam • Clonazepam • Clorazepate • Diazepam • Estazolam	• Lorazepam • Midazolam • Oxazepam • Temazepam • Triazolam

*The registry version of the measure specifications only indicates the classes of drugs that are considered high-risk and do not include the specific coding of RxNorm. However, this measure aligns with the eCQM measure (CMS 156) and providers may review the RxNorm codes in the applicable eCQM value sets for submission.

<u>Numerator Instructions:</u>
INVERSE MEASURE – A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Submitting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

A high-risk medication is identified by:
- A prescription for medications classified as high risk at any dose and for any duration listed in Table 4

<u>Numerator Options:</u>

Performance Met:	At least two orders for high-risk medications from the same drug class, (Table 4), without appropriate diagnoses **(M1209)**

<u>OR</u>

Performance Not Met:	At least two orders for high-risk medications from the same drug class, (Table 4), not ordered **(M1210)**

<u>OR</u>

Performance Not Met:	Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the Index Prescription Start Date (IPSD) for antipsychotics **(G0032)**

<u>OR</u>

Performance Not Met:	Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines **(G0033)**

<u>RATIONALE:</u>
Certain medications (MacKinnon & Hepler, 2003) are associated with increased risk of harm from drug side-effects and drug toxicity and pose a concern for patient safety. There is clinical consensus that these drugs pose increased risks in older adults (Kaufman, Brodin, & Sarafian, 2005). Potentially inappropriate medication (PIM) use in older adults has been connected to significantly longer hospital stay lengths and increased hospitalization costs (Hagstrom et al., 2015) as well as increased risk of death (Lau et al. 2004). Use of specific high-risk medications such as hypnotics, including benzodiazepine receptor agonists, and nonsteroidal anti-inflammatory drugs (NSAIDS) can result in increased risk of delirium, falls, fractures, gastrointestinal bleeding and acute kidney injury (Merel et al., 2017). Long-term use of benzodiazepines in older adults has been associated with increased risk of dementia (Zhong et al., 2015; Takada et al., 2016). Additionally, the use of antipsychotics can lead to increased risk of stroke and greater cognitive decline in older adults with dementia (Tampi et al., 2016). Among Medicare beneficiaries it is estimated that the prevalence of PIM use was 77% among long-stay nursing home residents (defined as >101 consecutive days in a nursing home). The most common PIMs were benzodiazepines, antipsychotics, and insulin (Riester et al., 2023).

Older adults receiving inappropriate medications are more likely to report poorer health status at follow-up, compared to those who receive appropriate medications (Lau et al. 2004). A study of the prevalence of potentially inappropriate medication use in older adults found that 40 percent of individuals 65 and older filled at least one prescription for a potentially inappropriate medication and 13 percent filled two or more (Fick et al. 2008). While some adverse drug events (ADEs) are unavoidable, studies estimate that between 30 and 80 percent of ADEs in older adults are preventable (MacKinnon and Hepler 2003). More recently with the onset of the COVID-19 pandemic, several studies

have shown an increase in anxiety, insomnia and depression rates, which could result in an increase in the use of high-risk medications in order to treat these conditions (Agrawal, 2020).

Reducing the number of inappropriate prescriptions can lead to improved patient safety and significant cost savings. Conservative estimates of extra costs due to potentially inappropriate medications in older adults average $7.2 billion a year (Fu et al. 2007). Medication use by older adults will likely increase further as the U.S. population ages, new drugs are developed, and new therapeutic and preventive uses for medications are discovered (Rothberg et al. 2008). The annual direct costs of preventable ADEs in the Medicare population have been estimated to exceed $800 million (IOM, 2007). By the year 2030, nearly one in five U.S. residents is expected to be aged 65 years or older; this age group is projected to more than double from 38.7 million in 2008 to more than 88.5 million in 2050. Likewise, the population aged 85 years or older is expected to increase almost four-fold, from 5.4 million to 19 million between 2008 and 2050. As the older adult population continues to grow, the number of older adults who present with multiple medical conditions for which several medications are prescribed will likely continue to increase, resulting in polypharmacy concerns (Gray and Gardner 2009).

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CLINICAL RECOMMENDATION STATEMENT:
The measure is based on recommendations from the American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (2023). The criteria were developed through key clinical expert consensus processes by Beers in 1997, Zahn in 2001 and an updated process by Fick in 2003, 2012, 2015 and 2019 and, most recently the American Geriatrics Society Beers Criteria Update Expert Panel in 2023. The Beers Criteria identifies lists of drugs that are potentially inappropriate for all older adults, except for those with certain conditions for which some high-risk medications may be warranted, and drugs that are potentially inappropriate in older adults based on various high-risk factors such as dosage, days' supply and underlying diseases or conditions. NCQA's Geriatric Measurement Advisory Panel recommended a subset of drugs that should be used with caution in older adults for inclusion in the proposed measure based upon the recommendations in the Beers Criteria.

REFERENCE:
The 2023 American Geriatrics Society Beers Criteria Update Expert Panel. (2023). American Geriatrics Society 2023 updated AGS Beers Criteria for potentially inappropriate medication use in older adults. Journal of the American Geriatrics Society, 71(7), 2052-2081.

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2025 Clinical Quality Measure Flow for Quality ID #238 (CBE 0022): Use of High-Risk Medications in Older Adults Submission Criteria One

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

Multiple Performance Rates
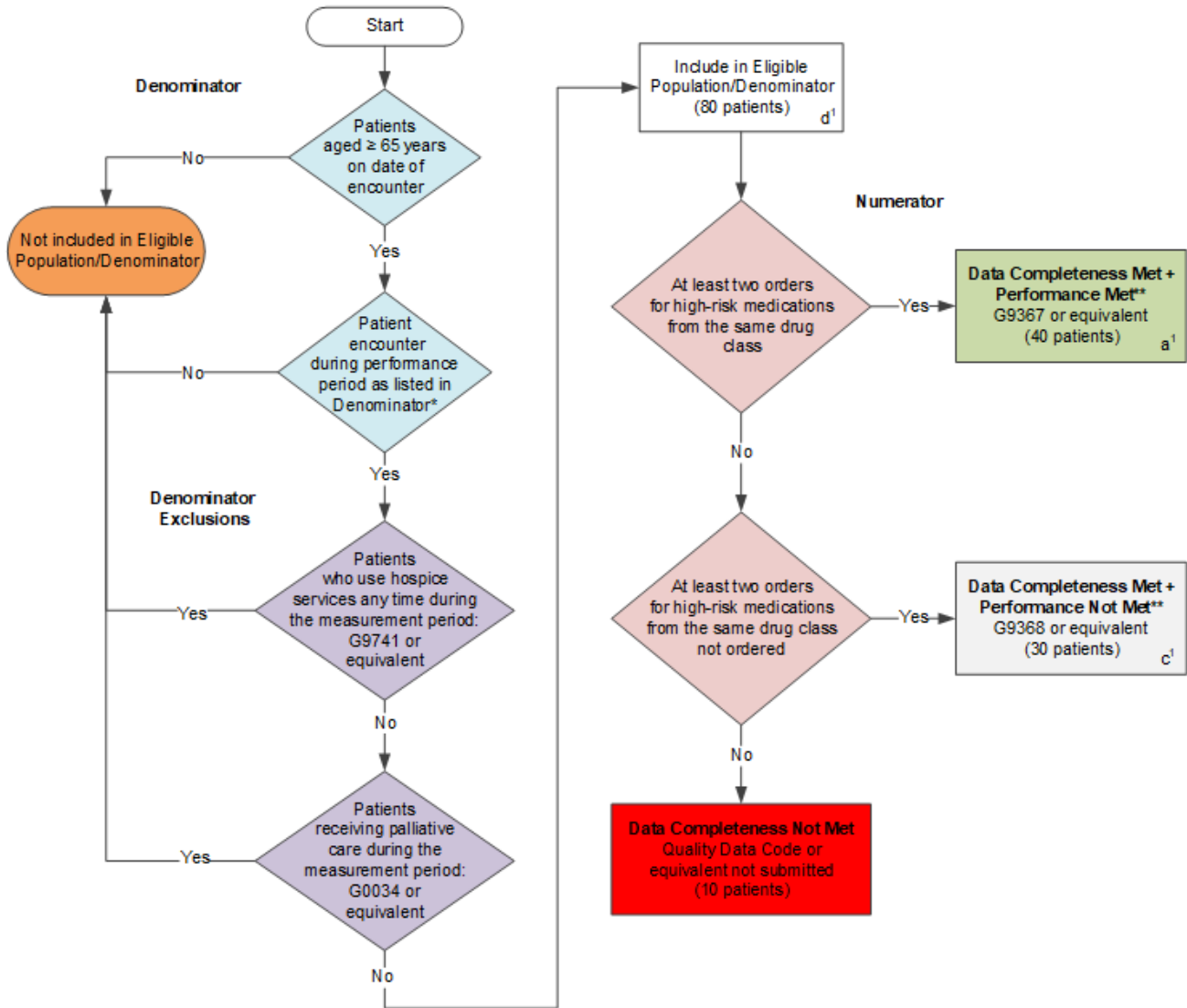
SAMPLE CALCULATIONS: SUBMISSION CRITERIA ONE

Data Completeness=

$$\frac{\text{Performance Met } (a^1 = 40 \text{ patients}) + \text{Performance Not Met } (c^1 = 30 \text{ patients})}{\text{Eligible Population / Denominator } (d^1 = 80 \text{ patients})} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met } (a^1 = 40 \text{ patients})}{\text{Data Completeness Numerator } (70 \text{ patients})} = \frac{40 \text{ patients}}{70 \text{ patients}} = 57.14\%$$
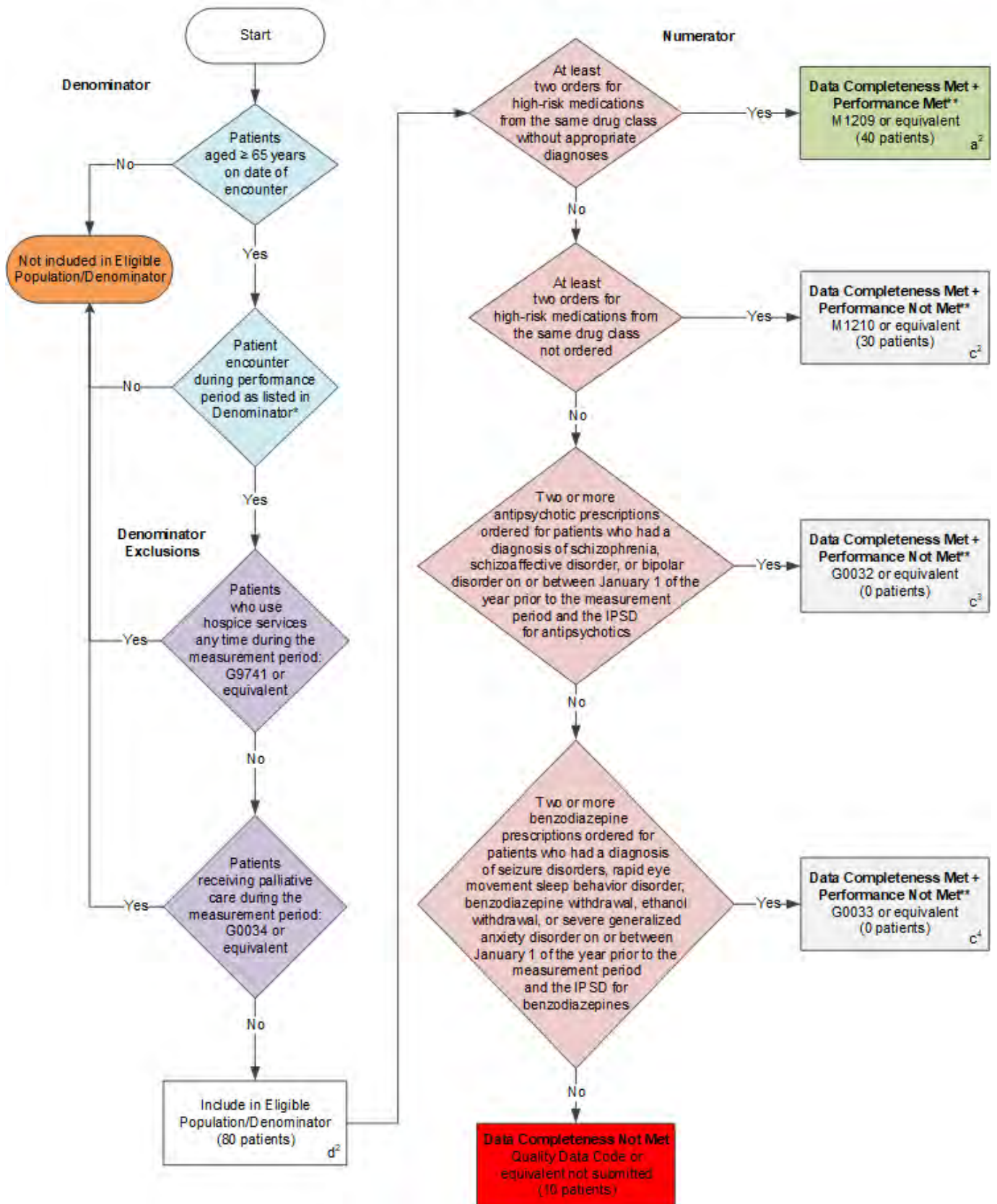
* See the posted measure specification for specific coding and instructions to submit this measure.
**A lower calculated performance rate for this measure indicates better clinical care or control.
NOTE : Submission Frequency: Patient-Process

Submission Criteria Two

Denominator

Start

Patients aged ≥ 65 years on date of encounter

— No → Not included in Eligible Population/Denominator

Yes ↓

Patient encounter during performance period as listed in Denominator*

— No → Not included in Eligible Population/Denominator

Yes ↓

Denominator Exclusions

Patients who use hospice services any time during the measurement period: G9741 or equivalent

— Yes → Not included in Eligible Population/Denominator

No ↓

Patients receiving palliative care during the measurement period: G0034 or equivalent

— Yes → Not included in Eligible Population/Denominator

No ↓

Include in Eligible Population/Denominator (80 patients) d[2]

Numerator

At least two orders for high-risk medications from the same drug class without appropriate diagnoses

— Yes → Data Completeness Met + Performance Met** M1209 or equivalent (40 patients) a[2]

No ↓

At least two orders for high-risk medications from the same drug class not ordered

— Yes → Data Completeness Met + Performance Not Met** M1210 or equivalent (30 patients) c[2]

No ↓

Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics

— Yes → Data Completeness Met + Performance Not Met** G0032 or equivalent (0 patients) c[3]

No ↓

Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines

— Yes → Data Completeness Met + Performance Not Met** G0033 or equivalent (0 patients) c[4]

No ↓

Data Completeness Not Met Quality Data Code or equivalent not submitted (10 patients)

SAMPLE CALCULATIONS: SUBMISSION CRITERIA TWO

Data Completeness=

$$\frac{\text{Performance Met } (a^2\text{=40 patients}) + \text{Performance Not Met } (c^2+c^3+c^4\text{=30 patients})}{\text{Eligible Population / Denominator } (d^2\text{=80 patients})} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met } (a^2\text{=40 patients})}{\text{Data Completeness Numerator (70 patients)}} = \frac{40 \text{ patients}}{70 \text{ patients}} = 57.14\%$$

* See the posted measure specification for specific coding and instructions to submit this measure.

**A lower calculated performance rate for this measure indicates better clinical care or control.

NOTE: Submission Frequency: Patient-Process

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

<u>Submission Criteria One:</u>

1. Start with Denominator

2. Check *Patients aged greater than or equal to 65 years on date of encounter*:

    a. If *Patients aged greater than or equal to 65 years on date of encounter* equals No, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patients aged greater than or equal to 65 years on date of encounter* equals Yes, proceed to check *Patient encounter during performance period as listed in Denominator**.

3. Check *Patient encounter during performance period as listed in Denominator**:

    a. If *Patient encounter during performance period as listed in Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patient encounter during performance period as listed in Denominator** equals Yes, proceed to check *Patients who use hospice services any time during the measurement period*.

4. Check *Patients who use hospice services any time during the measurement period*:

    a. If *Patients who use hospice services any time during the measurement period* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patients who use hospice services any time during the measurement period* equals No, proceed to check *Patients receiving palliative care during the measurement period*.

5. Check *Patients receiving palliative care during the measurement period*:

    a. If *Patients receiving palliative care during the measurement period* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patients receiving palliative care during the measurement period* equals No, include in *Eligible Population/Denominator*.

6. Denominator Population:

    - Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d[1] equals 80 patients in the Sample Calculation.

7. Start Numerator

8. Check *At least two orders for high-risk medications from the same drug class*:

    a. If *At least two orders for high-risk medications from the same drug class* equals Yes, include in *Data Completeness Met and Performance Met***.

        - *Data Completeness Met and Performance Met*** letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a[1] equals 40 patients in Sample Calculation.

b. If *At least two orders for high-risk medications from the same drug class* equals No, proceed to check *At least two orders for high-risk medications from the same drug class not ordered*.

9. Check *At least two orders for high-risk medications from the same drug class not ordered*:

a. If *At least two orders for high-risk medications from the same drug class not ordered* equals Yes, include in *Data Completeness Met and Performance Not Met***.

- *Data Completeness Met and Performance Not Met*** letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c^1 equals 30 patients in the Sample Calculation.

b. If *At least two orders for high-risk medications from the same drug class not ordered* equals No, proceed to check *Data Completeness Not Met*.

10. Check *Data Completeness Not Met*:

a. If *Data Completeness Not Met*, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from Data Completeness Numerator in the Sample Calculation.

Sample Calculations: Submission Criteria One

Data Completeness equals Performance Met (a^1 equals 40 patients) plus Performance Not Met (c^1 equals 30 patients) divided by Eligible Population / Denominator (d^1 equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a^1 equals 40 patients) divided by Data Completeness Numerator (70 patients). All equals 40 patients divided by 70 patients. All equals 57.14 percent.

* See the posted measure specification for specific coding and instructions to submit this measure.

**A lower calculated performance rate for this measure indicates better clinical care or control.

NOTE: Submission Frequency: Patient-Process

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.

Submission Criteria Two:

1. Start with Denominator

2. Check *Patients aged greater than or equal to 65 years on date of encounter*:

a. If *Patients aged greater than or equal to 65 years on date of encounter* equals No, do not include in *Eligible Population/Denominator*. Stop processing.

b. If *Patients aged greater than or equal to 65 years on date of encounter* equals Yes, proceed to check *Patient encounter during performance period as listed in Denominator**.

3. Check *Patient encounter during performance period as listed in Denominator**:

a. If *Patient encounter during performance period as listed in Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.

b. If *Patient encounter during performance period as listed in Denominator** equals Yes, proceed to check *Patients who use hospice services any time during the measurement period.*

4. Check *Patients who use hospice services any time during the measurement period*:

   a. If *Patients who use hospice services any time during the measurement period* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

   b. If *Patients who use hospice services any time during the measurement period* equals No, proceed to check *Patients receiving palliative care during the measurement period.*

5. Check *Patients receiving palliative care during the measurement period*:

   a. If *Patients receiving palliative care during the measurement period* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

   b. If *Patients receiving palliative care during the measurement period* equals No, include in *Eligible Population/Denominator*.

6. Denominator Population:

   - Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d_2 equals 80 patients in the Sample Calculation.

7. Start Numerator

8. Check *At least two orders for high-risk medications from the same drug class*:

   a. If *At least two orders for high-risk medications from the same drug class without appropriate diagnosis* equals Yes, include in *Data Completeness Met and Performance Met***.

      - *Data Completeness Met and Performance Met*** letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a_2 equals 40 patients in Sample Calculation.

   b. If *At least two orders for high-risk medications from the same drug class without appropriate diagnosis* equals No, proceed to check *At least two orders for high-risk medications from the same drug class not ordered*.

9. Check *At least two orders for high-risk medications from the same drug class not ordered*:

   a. If *At least two orders for high-risk medications from the same drug class not ordered* equals Yes, include in *Data Completeness Met and Performance Not Met***.

      - *Data Completeness Met and Performance Not Met*** letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c_2 equals 30 patients in the Sample Calculation.

   b. If *At least two orders for high-risk medications from the same drug class not ordered* equals No, proceed to check *Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics.*

10. Check *Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics*:

a. If *Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics* equals Yes, include in *Data Completeness Met and Performance Not Met***.

- *Data Completeness Met and Performance Not Met*** letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c_3 equals 0 patients in the Sample Calculation.

b. If *Two or more antipsychotic prescriptions ordered for patients who had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics* equals No, proceed to check *Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines.*

11. Check *Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines*:

a. If *Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines* equals Yes, include in *Data Completeness Met and Performance Not Met***.

- *Data Completeness Met and Performance Not Met*** letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c_4 equals 0 patients in the Sample Calculation.

b. If *Two or more benzodiazepine prescriptions ordered for patients who had a diagnosis of seizure disorders, rapid eye movement sleep behavior disorder, benzodiazepine withdrawal, ethanol withdrawal, or severe generalized anxiety disorder on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines* equals No, proceed to check *Data Completeness Not Met.*

12. Check *Data Completeness Not Met*:

a. If *Data Completeness Not Met*, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from Data Completeness Numerator in the Sample Calculation.

Sample Calculations: Submission Criteria Two

Data Completeness equals Performance Met (a_2 equals 40 patients) plus Performance Not Met (c_2 plus c_3 plus c_4 equals 30 patients) divided by Eligible Population / Denominator (d_2 equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a_2 equals 40 patients) divided by Data Completeness Numerator (70 patients). All equals 40 patients divided by 70 patients. All equals 57.14 percent.

* See the posted measure specification for specific coding and instructions to submit this measure.

**A lower calculated performance rate for this measure indicates better clinical care or control.

NOTE: Submission Frequency: Patient-Process

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.