

Use of High-Risk Medications in Older Adults (DAE)

Measure title	Use of High-Risk Medications in Older Adults	Measure ID	DAE
Description	The percentage of persons 67 years of age and older who had at least two dispensing events for the same high-risk medication. Three rates are reported: 1. The percentage of persons 67 years of age and older who had at least two dispensing events for high-risk medications to avoid from the same drug class. 2. The percentage of persons 67 years of age and older who had at least two dispensing events for high-risk medications to avoid from the same drug class, except for appropriate diagnoses. 3. Total rate (the sum of the two numerators divided by the denominator, deduplicating for persons in both numerators).		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org. Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement/ rationale	This measure is based on Table 2 of the American Geriatrics Society Beers Criteria, which includes potentially inappropriate medications for use in older adults. In older adults, certain medications are associated with increased risk of harm from drug side-effects and drug toxicity and pose a concern for patient safety. Use of potentially inappropriate medications in older adults can lead to poor health outcomes, including adverse drug events, confusion, falls, hospitalizations, and death (American Geriatrics Society Beers Criteria Update Expert Panel, 2015, 2019, 2023). Refer to the HEDIS Measure Library & Historical Data measure web page for additional information about the clinical rationale.		
Citations	American Geriatrics Society Beers Criteria Update Expert Panel. 2023. "American Geriatrics Society 2023 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults." <i>Journal of the American Geriatrics Society</i> 71(7), 2052–81. American Geriatrics Society Beers Criteria Update Expert Panel. 2019. "American Geriatrics Society 2019 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults." <i>Journal of the American Geriatrics Society</i> 67(4), 674–94. American Geriatrics Society Beers Criteria Update Expert Panel. 2015. "American Geriatrics Society 2015 Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults." <i>Journal of the American Geriatrics Society</i> 63, 2227–46.		

Characteristics	
Scoring	Composite.
Type	Process.
Product lines	Medicare.
Stratifications	None.
Risk adjustment	None.
Improvement notation	Decreased score indicates improvement.
Guidance	Data collection methodology: Administrative. (Refer to General Guideline Data Collection Methods for additional information.) Date specificity: Dates must be specific enough to determine the event occurred in the period being measured. Which services count? • Include all paid, suspended, pending and denied claims to identify the initial population and denominator exclusions. • Do not include denied claims when identifying numerator events; only include claims the organization paid for or expects to pay for (i.e., claims incurred but not paid). Supplemental data exceptions: Supplemental data may not be used for this measure, except for denominator exclusions. Medication lists: • If an organization uses both pharmacy data (NDC codes) and clinical data (RxNorm codes) for reporting, and there are both NDC and RxNorm codes on the same date of service, use only one data source for the date of service. • Medication lists used for this measure contain any applicable combination products. Other guidance: • The total rate is the sum of the two numerators divided by the denominator; deduplicate persons in the two numerators prior to calculating and reporting the total rate. • The measure reflects potentially inappropriate medication use in older adults, both for medications where any use is inappropriate (Numerator 1) and for medications where use under all but specific indications is potentially inappropriate (Numerator 2).
Definitions	
IPSD	Index prescription start date. The earliest prescription dispensing date for a high-risk medication during the measurement period.

Initial population	<i>Measure item count:</i> Person. <i>Attribution basis:</i> Enrollment. • <i>Benefits:</i> Medical and pharmacy. • <i>Continuous enrollment:</i> Measurement period and year prior to the measurement period. • <i>Allowable gap:</i> No more than one gap of ≤45 days during each year of the continuous enrollment period. No gaps on the last day of the measurement period. <i>Ages:</i> 67 years of age and older as of the last day of the measurement period. <i>Event:</i> None.
Denominator exclusions	Deceased persons. Persons who died any time on or before the last day of the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. Persons in hospice or using hospice services. Persons who use hospice services (<u>Hospice Encounter Value Set</u>; <u>Hospice Intervention Value Set</u>) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. Persons receiving palliative care. Persons receiving palliative care (<u>Palliative Care Observations Value Set</u>; <u>Palliative Care Procedures Value Set</u>) or who had an encounter for palliative care (ICD-10-CM code Z51.5*) any time during the measurement period. Coding Guidance *Do not include laboratory claims (claims with POS code 81).
Denominator	The initial population minus denominator exclusions.
Numerator	Numerator 1: High-risk medications to avoid. Persons who received at least two dispensing events for high-risk medications from the same drug class during the measurement period. Follow the instructions for each medication group below (high-risk medications, high-risk medications with days supply criteria, high-risk medications with average daily dose criteria) to identify numerator compliance. If a person meets criteria for at least one of the following medication groups, they are numerator compliant. Include people who meet criteria for more than one medication group only once in the numerator. High-risk medications. Persons with two or more dispensing events (any days supply) for high-risk medications from the same drug class on different dates of service during the measurement period are numerator compliant.

Use the medication lists to determine if drugs are in the same or different drug class. Drugs in the same medication list are considered to be in the same drug class.

High-Risk Medications

Drug Class	Medication Lists
Anticholinergics, first-generation antihistamines	Potentially Harmful Antihistamines for Older Adults Medications List
Anticholinergics, anti-Parkinson agents	Potentially Harmful Antiparkinsonian Agents for Older Adults Medications List
Antispasmodics	Potentially Harmful Gastrointestinal Antispasmodics for Older Adults Medications List
Antithrombotic	Dipyridamole Medications List
Cardiovascular, alpha agonists, central	Guanfacine Medications List
Cardiovascular, other	Nifedipine Medications List
Central nervous system, antidepressants	Potentially Harmful Antidepressants for Older Adults Medications List
Central nervous system, barbiturates	Potentially Harmful Barbiturates for Older Adults Medications List
Central nervous system, vasodilators	Ergoloid Mesylates Medications List
Central nervous system, other	Meprobamate Medications List
Endocrine system, estrogens with or without progestins; include only oral and topical patch products	Potentially Harmful Estrogens for Older Adults Medications List
Endocrine system, sulfonylureas, long-duration	Potentially Harmful Sulfonylureas for Older Adults Medications List
Endocrine system, desiccated thyroid	Desiccated Thyroid Medications List
Endocrine system, megestrol	Megestrol Medications List
Nonbenzodiazepine hypnotics	Potentially Harmful Nonbenzodiazepine Hypnotics for Older Adults Medications List
Pain medications, skeletal muscle relaxants	Potentially Harmful Skeletal Muscle Relaxants for Older Adults Medications List
Pain medications, meperidine	Meperidine Combinations Medications List
Pain medications, other	Potentially Harmful Pain Medications for Older Adults Medications List

High-risk medications with days supply criteria.

For each person, identify dispensing events during the measurement period for medications in the [Potentially Harmful Antiinfectives for Older Adults Medications List](#).

Calculate days supply for all dispensing events. Sum the days supply and include any days supply that extends beyond December 31 of the measurement period.

- *For example*, a prescription of a 90-days supply dispensed on December 1 of the measurement period counts as a 90-days supply.

Persons who meet both of the following are numerator compliant:

- Two or more dispensing events on different dates of service.
- Summed days supply exceeds the days supply criteria.

Note: The intent is to identify all persons who had multiple dispensing events where the summed days supply exceeds the days supply criteria; there is no requirement that each dispensing event exceed the days supply criteria.

High-Risk Medications With Days Supply Criteria

Description	Days Supply Criteria	Medication Lists
Anti-Infectives, other	>90 days	Potentially Harmful Antiinfectives for Older Adults Medications List

High-risk medications with average daily dose criteria.

Use the medication lists in the High-Risk Medications With Average Daily Dose Criteria table below to identify persons with dispensing events during the measurement period.

Calculate average daily dose for each dispensing event. To calculate average daily dose, multiply the quantity of pills dispensed by the dose of each pill and divide by the days supply.

- *For example*, a prescription for a 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 dispensed by daily dose and divide by the days supply.

Do not round when calculating average daily dose.

The High-Risk Medications With Average Daily Dose Criteria table includes a "Medication Lists" column that identifies the same high-risk medication by grouping them on the same row.

Persons who meet both of the following for the same medication are numerator compliant:

- Two or more dispensing events on different dates of service.
- Average daily dose for two or more dispensing events (on different dates of service) exceeds the average daily dose criteria.

High-Risk Medications With Average Daily Dose Criteria

Description	Average Daily Dose Criteria	Medication Lists
Cardiovascular, other	>0.125 mg/day	Digoxin .05 mg per mL Medications List Digoxin .0625 mg Medications List Digoxin .1 mg per mL Medications List Digoxin .125 mg Medications List Digoxin .25 mg Medications List Digoxin .25 mg per mL Medications List

	Description	Average Daily Dose Criteria	Medication Lists
	Tertiary TCAs (as single agent or as part of combination products)	>6 mg/day	Doxepin 3 mg Medications List Doxepin 6 mg Medications List Doxepin 10 mg Medications List Doxepin 10 mg per mL Medications List Doxepin 25 mg Medications List Doxepin 50 mg Medications List Doxepin 75 mg Medications List Doxepin 100 mg Medications List Doxepin 150 mg Medications List
Numerator 2: High-risk medications to avoid except for appropriate diagnosis. Persons who had at least two dispensing events for high-risk medications from the same drug class except for appropriate diagnosis during the measurement period. Follow the instructions for each medication class (antipsychotics and benzodiazepines) to identify numerator compliance. Include persons who are numerator compliant for more than one medication class only once in the numerator. Antipsychotics. Persons who meet both of the following are numerator compliant: - Two or more dispensing events for an antipsychotic (Potentially Harmful Antipsychotics for Older Adults Medications List) on different dates of service during the measurement period. - The person did not have a diagnosis of schizophrenia or schizoaffective disorder (Schizophrenia Value Set*), manic episodes or bipolar disorder (Manic Episodes and Bipolar Disorders Value Set*) on or between January 1 of the year prior to the measurement period and the IPSD for antipsychotics. Benzodiazepines. Persons who meet both of the following are numerator compliant: - Two or more dispensing events for a benzodiazepine (Potentially Harmful Benzodiazepines for Older Adults Medications List) on different dates of service during the measurement period. - The person did not have a diagnosis of seizure disorders (Seizure Disorders Value Set*), rapid eye movement sleep behavior disorder (REM Sleep Behavior Disorder Value Set*), benzodiazepine withdrawal (Benzodiazepine Withdrawal Value Set*), ethanol withdrawal (Alcohol Withdrawal Value Set*) or severe generalized anxiety disorder (Generalized Anxiety Disorder Value Set*) on or between January 1 of the year prior to the measurement period and the IPSD for benzodiazepines.			

	High-Risk Medications Based on Prescription and Diagnosis Data <table><tr><th>Drug Class</th><th>Medication Lists</th></tr><tr><td>Antipsychotics, first (conventional) and second (atypical) generation</td><td>Potentially Harmful Antipsychotics for Older Adults Medications List</td></tr><tr><td>Benzodiazepines, long, short and intermediate acting</td><td>Potentially Harmful Benzodiazepines for Older Adults Medications List</td></tr></table> Coding Guidance *Do not include laboratory claims (claims with POS code 81).	Drug Class	Medication Lists	Antipsychotics, first (conventional) and second (atypical) generation	Potentially Harmful Antipsychotics for Older Adults Medications List	Benzodiazepines, long, short and intermediate acting	Potentially Harmful Benzodiazepines for Older Adults Medications List															
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Summary of changes	No changes to this measure.																					
Data element tables	Organizations that submit HEDIS data to NCQA must provide the following data elements. Table DAE-3: Data Elements for Use of High-Risk Medications in Older Adults <table><tr><th>Metric</th><th>Data Element</th><th>Reporting Instructions</th></tr><tr><td>HighRiskMedicationsToAvoid</td><td>Benefit</td><td>Metadata</td></tr><tr><td>ExceptAppropriateDiagnosis</td><td>InitialPopulation</td><td>Repeat per Metric</td></tr><tr><td>Total</td><td>Exclusions</td><td>Repeat per Metric</td></tr><tr><td></td><td>Denominator</td><td>Repeat per Metric</td></tr><tr><td></td><td>NumeratorByAdmin</td><td>For each Metric</td></tr><tr><td></td><td>Rate</td><td>(Percent)</td></tr></table>	Metric	Data Element	Reporting Instructions	HighRiskMedicationsToAvoid	Benefit	Metadata	ExceptAppropriateDiagnosis	InitialPopulation	Repeat per Metric	Total	Exclusions	Repeat per Metric		Denominator	Repeat per Metric		NumeratorByAdmin	For each Metric		Rate	(Percent)
Metric	Data Element	Reporting Instructions																				
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Rules for Allowable Adjustments	Copyright and use: The “Rules for Allowable Adjustments of HEDIS” (the “Rules”) describe how NCQA’s HEDIS measure specifications can be adjusted for other populations, if applicable. The Rules, reviewed and approved by NCQA measure experts, provide for expanded use of HEDIS measures without changing their clinical intent. Adjusted HEDIS measures may not be used for HEDIS health plan reporting. ADJUSTMENTS ALLOWED Product lines. Organizations are not required to use product line criteria; product lines may be combined, and all (or no) product line criteria may be used. Attribution. Organizations are not required to use enrollment criteria. Benefits. Organizations are not required to use a benefit. Other. Organizations may use additional initial population criteria to focus on an area of interest defined by gender, race, ethnicity, socioeconomic or sociodemographic characteristics, geographic region or another characteristic. Exclusions. The hospice, deceased person and palliative care exclusions are not required.																					

- *Telehealth.* Services/events that allow the use of synchronous telehealth visits, telephone visits and asynchronous telehealth (e-visits, virtual check-ins) may be stratified to identify services performed via telehealth. This adjustment is not allowed for events, numerators and exclusions that do not allow the use of telehealth.
- *Supplemental data.* Supplemental data may be used to identify initial population, denominator, exclusion and numerator events.

ADJUSTMENTS ALLOWED WITH LIMITS

- *Ages.* The age determination dates may be changed (e.g., select “age as of June 30”). Changing the denominator age range is allowed if the limits are within the specified age range (67 years and older). The denominator age may not be expanded.
- *Numerator.* Medication lists and logic may not be changed. Organizations may include denied claims to calculate the numerator for High-Risk Medications to Avoid and High-Risk Medications to Avoid Except for Appropriate Diagnosis indicators.