eCQM Title	**Diabetes: Glycemic Status Assessment Greater Than 9%**		
CMS ID	122	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	f2986519-5a4e-4149-a8f2-af0a1dc7f6bc
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Endorsed By	None		
Description	Percentage of patients 18-75 years of age with diabetes who had a glycemic status assessment (hemoglobin A1c [HbA1c] or glucose management indicator [GMI]) > 9.0% during the measurement period		
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Measure Scoring	Proportion		
Measure Type	Intermediate Outcome		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Diabetes is the seventh leading cause of death in the United States (Centers for Disease Control and Prevention [CDC], 2022a). In 2019, diabetes affected more than 37 million Americans (11.3% of the U.S. population) and killed more than 87,000 people (American Diabetes Association [ADA], 2022a). Diabetes is a long-lasting disease marked by high blood glucose levels, resulting from the body's inability to produce or use insulin properly (CDC, 2022a). People with diabetes are at increased risk of serious health complications including vision loss, heart disease, stroke, kidney damage, amputation of feet or legs, and premature death (CDC, 2022b). In 2017, diabetes cost the U.S. an estimated $327 billion: $237 billion in direct medical costs and $90 billion in reduced productivity. This is a 34% increase from the estimated $245 billion spent on diabetes in 2012 (ADA, 2018). Controlling A1c blood levels helps reduce the risk of microvascular complications (eye, kidney and nerve diseases) (ADA, 2022b).		
Clinical Recommendation Statement	American Diabetes Association (2023): - Assess glycemic status (A1C or other glycemic measurement such as time in range or glucose management indicator) at least two times a year in patients who are meeting treatment goals (and who have stable glycemic control). (Level of evidence: E) - An A1C goal for many nonpregnant adults of <7% (53 mmol/mol) without significant hypoglycemia is appropriate. (Level of evidence: A) - On the basis of health care professional judgement and patient preference, achievement of lower A1C levels than the goal of 7% may be acceptable and even beneficial if it can be achieved safely without significant hypoglycemia or other adverse effects of treatment. (Level of evidence: B) - Less stringent A1C goals (such as <8% [64 mmol/mol]) may be appropriate for patients with limited life expectancy or where the harms of treatment are greater than the benefits. Health care professionals should consider deintensification of therapy if appropriate to reduce the risk of hypoglycemia in patients with inappropriate stringent A1C targets. (Level of evidence: B) - Standardized, single-page glucose reports from continuous glucose monitoring (CGM) devices with visual cues, such as the ambulatory glucose profile, should be considered as a standard summary for all CGM devices. Level of evidence: E		
Improvement Notation	Lower score indicates better quality		

	Reference Type: CITATION
Reference	Reference Text: 'American Diabetes Association. (2018). Economic Costs of Diabetes in the U.S. in 2017. Diabetes Care, 41, 917-928. Retrieved from http://care.diabetesjournals.org/content/early/2018/03/20/dci18-0007'
	Reference Type: CITATION
Reference	Reference Text: 'American Diabetes Association. (2022a). Statistics About Diabetes. Retrieved from https://diabetes.org/about-us/statistics/about-diabetes'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2022a). What is Diabetes? Retrieved from https://www.cdc.gov/diabetes/basics/diabetes.html'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2022b). Diabetes Report Card 2021. US Dept of Health and Human Services. Retrieved from https://archive.cdc.gov/www_cdc_gov/diabetes/library/reports/reportcard.html'
	Reference Type: CITATION
Reference	Reference Text: 'ElSayed, N.A., Aleppo, G., Ardoda, V.R., Bannuru, R.B., Brown, F.M., Bruemmer, D.,…Staton, R.C., American Diabetes Association (ADA). (2022). 6. Glycemic Targets: Standards of Care in Diabetes—2023. Diabetes Care 2023,46(Supplement_1):S97–S110. https://doi.org/10.2337/dc23-S006'
Definition	None
Guidance	If the glycemic status assessment (HbA1c or GMI) is in the medical record, the test can be used to determine numerator compliance. Glycemic status assessment (HbA1c or GMI) must be reported as a percentage (%). If multiple glycemic status assessments were recorded for a single date, use the lowest result. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Patients 18-75 years of age by the end of the measurement period, with diabetes with a visit during the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period. Exclude patients 66 and older by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria: - Advanced illness diagnosis during the measurement period or the year prior - OR taking dementia medications during the measurement period or the year prior Exclude patients receiving palliative care for any part of the measurement period.
Numerator	Patients whose most recent glycemic status assessment (HbA1c or GMI) (performed during the measurement period) is >9.0% or is missing, or was not performed during the measurement period
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 75]
  and exists ( "Qualifying Encounters" )
  and exists ( ["Diagnosis": "Diabetes"] DiabetesDiagnosis
      where DiabetesDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or AIFrailLTCF."Is Age 66 or Older with Advanced Illness and Frailty"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Numerator

```
"Has Most Recent Glycemic Status Assessment Without Result"
  or "Has Most Recent Elevated Glycemic Status Assessment"
  or "Has No Record Of Glycemic Status Assessment"
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

AIFrailLTCF.Has Advanced Illness in Year Before or During Measurement Period

```
exists ( ["Diagnosis": "Advanced Illness"] AdvancedIllnessDiagnosis
    where AdvancedIllnessDiagnosis.prevalencePeriod starts during day of Interval[start of "Measurement Period" - 1 year, end of "Measurement Period"]
)
```

AIFrailLTCF.Has Criteria Indicating Frailty

```
exists ( ["Device, Order": "Frailty Device"] FrailtyDeviceOrder
    where FrailtyDeviceOrder.authorDatetime during day of "Measurement Period"
)
  or exists ( ["Assessment, Performed": "Medical equipment used"] EquipmentUsed
      where EquipmentUsed.result in "Frailty Device"
        and Global."NormalizeInterval" ( EquipmentUsed.relevantDatetime, EquipmentUsed.relevantPeriod ) ends during day of "Measurement Period"
  )
  or exists ( ["Diagnosis": "Frailty Diagnosis"] FrailtyDiagnosis
      where FrailtyDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Frailty Encounter"] FrailtyEncounter
      where FrailtyEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Symptom": "Frailty Symptom"] FrailtySymptom
      where FrailtySymptom.prevalencePeriod overlaps day of "Measurement Period"
  )
```

AIFrailLTCF.Has Dementia Medications in Year Before or During Measurement Period

```
exists (["Medication, Active": "Dementia Medications"] DementiaMedication
  where Global."NormalizeInterval" ( DementiaMedication.relevantDatetime, DementiaMedication.relevantPeriod ) overlaps day of Interval[start of "Measurement Period"
- 1 year,
  end of "Measurement Period"])
```

AIFrailLTCF.Is Age 66 or Older Living Long Term in a Nursing Home

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  )>= 66
)
  and ( ( Last(["Assessment, Performed": "Housing status"] HousingStatus
        where Global."NormalizeInterval"(HousingStatus.relevantDatetime, HousingStatus.relevantPeriod) ends on or before day of
        end of "Measurement Period"
        sort by
        end of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)asc
    )) LastHousingStatus
      where LastHousingStatus.result ~ "Lives in nursing home (finding)"
  ) is not null
```

AIFrailLTCF.Is Age 66 or Older with Advanced Illness and Frailty

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  ) >= 66
    and "Has Criteria Indicating Frailty"
    and ( "Has Advanced Illness in Year Before or During Measurement Period"
        or "Has Dementia Medications in Year Before or During Measurement Period"
    )
)
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or AIFrailLTCF."Is Age 66 or Older with Advanced Illness and Frailty"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Glycemic Status Assessment

```
( ["Laboratory Test, Performed": "HbA1c Laboratory Test"]
  union ["Laboratory Test, Performed": "Glucose management indicator"] ) GlycemicStatus
  where Global."LatestOf" ( GlycemicStatus.relevantDatetime, GlycemicStatus.relevantPeriod ) during day of "Measurement Period"
```

Has Most Recent Elevated Glycemic Status Assessment

```
"Lowest Glycemic Status Assessment Reading on Most Recent Day".result > 9 '%'
```

Has Most Recent Glycemic Status Assessment Without Result

```
"Lowest Glycemic Status Assessment Reading on Most Recent Day" is not null
  and "Lowest Glycemic Status Assessment Reading on Most Recent Day".result is null
```

Has No Record Of Glycemic Status Assessment

```
not exists "Glycemic Status Assessment"
```

Hospice.Has Hospice Services

```
exists ( ["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where ( InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
        or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
    )
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists ( ["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
      where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
      where HospiceAssessment.result ~ "Yes (qualifier value)"
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
      where HospiceOrder.authorDatetime during day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
      where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
  )
or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
      where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 75]
  and exists ( "Qualifying Encounters" )
  and exists ( ["Diagnosis": "Diabetes"] DiabetesDiagnosis
      where DiabetesDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Lowest Glycemic Status Assessment Reading on Most Recent Day

```
First("Glycemic Status Assessment" QualifyingGlycemicStatus
    where Global."LatestOf"(QualifyingGlycemicStatus.relevantDatetime, QualifyingGlycemicStatus.relevantPeriod) same day as "Most Recent Glycemic Status Date"
    sort by(result as Quantity)
)
```

Most Recent Glycemic Status Date

```
Last(("Glycemic Status Assessment" QualifyingGlycemicStatus
    return date from start of Global."NormalizeInterval"(QualifyingGlycemicStatus.relevantDatetime, QualifyingGlycemicStatus.relevantPeriod))
QualifyingGlycemicStatusDays
    sort asc
)
```

Numerator

```
"Has Most Recent Glycemic Status Assessment Without Result"
  or "Has Most Recent Elevated Glycemic Status Assessment"
  or "Has No Record Of Glycemic Status Assessment"
```

PalliativeCare.Has Palliative Care in the Measurement Period

```
exists ( ["Assessment, Performed": "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)"] PalliativeAssessment
    where Global."NormalizeInterval" ( PalliativeAssessment.relevantDatetime, PalliativeAssessment.relevantPeriod ) overlaps day of "Measurement Period"
)
  or exists ( ["Diagnosis": "Palliative Care Diagnosis"] PalliativeDiagnosis
      where PalliativeDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Palliative Care Encounter"] PalliativeEncounter
      where PalliativeEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Palliative Care Intervention"] PalliativeIntervention
      where Global."NormalizeInterval" ( PalliativeIntervention.relevantDatetime, PalliativeIntervention.relevantPeriod ) overlaps day of "Measurement Period"
  )
```

Qualifying Encounters

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Nutrition Services"]
  union ["Encounter, Performed": "Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes"]
  union ["Encounter, Performed": "Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes"]
  union ["Encounter, Performed": "Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes"]
  union ["Encounter, Performed": "Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis,
medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes"]
  union ["Encounter, Performed": "Medical nutrition therapy, reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis,
medical condition, or treatment regimen (including additional hours needed for renal disease), group (2 or more individuals), each 30 minutes"]
  union ["Encounter, Performed": "Telephone Visits"] ) ValidEncounters
  where ValidEncounters.relevantPeriod during day of "Measurement Period"
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.HasEnd(period Interval<DateTime>)

```
not (
  end of period is null
    or
    end of period = maximum DateTime
)
```

Global.Latest(period Interval<DateTime>)

```
if ( HasEnd(period)) then
end of period
  else start of period
```

Global.LatestOf(pointInTime DateTime, period Interval<DateTime>)

```
Latest(NormalizeInterval(pointInTime, period))
```

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" ("LOINC Code (71007-9)")
- code "Glucose management indicator" ("LOINC Code (97506-0)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Housing status" ("LOINC Code (71802-3)")
- code "Lives in nursing home (finding)" ("SNOMEDCT Code (160734000)")
- code "Medical equipment used" ("LOINC Code (98181-1)")
- code "Medical nutrition therapy, reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease), group (2 or more individuals), each 30 minutes" ("HCPCS Code (G0271)")
- code "Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes" ("CPT Code (97804)")
- code "Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes" ("CPT Code (97802)")
- code "Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes" ("CPT Code (97803)")
- code "Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes" ("HCPCS Code (G0270)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")
- valueset "Advanced Illness" (2.16.840.1.113883.3.464.1003.110.12.1082)
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Dementia Medications" (2.16.840.1.113883.3.464.1003.196.12.1510)
- valueset "Diabetes" (2.16.840.1.113883.3.464.1003.103.12.1001)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Frailty Device" (2.16.840.1.113883.3.464.1003.118.12.1300)
- valueset "Frailty Diagnosis" (2.16.840.1.113883.3.464.1003.113.12.1074)
- valueset "Frailty Encounter" (2.16.840.1.113883.3.464.1003.101.12.1088)
- valueset "Frailty Symptom" (2.16.840.1.113883.3.464.1003.113.12.1075)
- valueset "HbA1c Laboratory Test" (2.16.840.1.113883.3.464.1003.198.12.1013)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)
- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Nutrition Services" (2.16.840.1.113883.3.464.1003.1006)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Palliative Care Diagnosis" (2.16.840.1.113883.3.464.1003.1167)
- valueset "Palliative Care Encounter" (2.16.840.1.113883.3.464.1003.101.12.1090)
- valueset "Palliative Care Intervention" (2.16.840.1.113883.3.464.1003.198.12.1135)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" using "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal) (LOINC Code 71007-9)"
- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Assessment, Performed: Housing status" using "Housing status (LOINC Code 71802-3)"
- "Assessment, Performed: Medical equipment used" using "Medical equipment used (LOINC Code 98181-1)"
- "Device, Order: Frailty Device" using "Frailty Device (2.16.840.1.113883.3.464.1003.118.12.1300)"
- "Diagnosis: Advanced Illness" using "Advanced Illness (2.16.840.1.113883.3.464.1003.110.12.1082)"
- "Diagnosis: Diabetes" using "Diabetes (2.16.840.1.113883.3.464.1003.103.12.1001)"
- "Diagnosis: Frailty Diagnosis" using "Frailty Diagnosis (2.16.840.1.113883.3.464.1003.113.12.1074)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Diagnosis: Palliative Care Diagnosis" using "Palliative Care Diagnosis (2.16.840.1.113883.3.464.1003.1167)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: Frailty Encounter" using "Frailty Encounter (2.16.840.1.113883.3.464.1003.101.12.1088)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Medical nutrition therapy, reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease), group (2 or more individuals), each 30 minutes" using "Medical nutrition therapy, reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease), group (2 or more individuals), each 30 minutes (HCPCS Code G0271)"

- "Encounter, Performed: Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes" using "Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes (CPT Code 97804)"
- "Encounter, Performed: Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes" using "Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes (CPT Code 97802)"
- "Encounter, Performed: Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes" using "Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes (CPT Code 97803)"
- "Encounter, Performed: Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes" using "Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes (HCPCS Code G0270)"
- "Encounter, Performed: Nutrition Services" using "Nutrition Services (2.16.840.1.113883.3.464.1003.1006)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Palliative Care Encounter" using "Palliative Care Encounter (2.16.840.1.113883.3.464.1003.101.12.1090)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Palliative Care Intervention" using "Palliative Care Intervention (2.16.840.1.113883.3.464.1003.198.12.1135)"
- "Laboratory Test, Performed: Glucose management indicator" using "Glucose management indicator (LOINC Code 97506-0)"
- "Laboratory Test, Performed: HbA1c Laboratory Test" using "HbA1c Laboratory Test (2.16.840.1.113883.3.464.1003.198.12.1013)"
- "Medication, Active: Dementia Medications" using "Dementia Medications (2.16.840.1.113883.3.464.1003.196.12.1510)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Symptom: Frailty Symptom" using "Frailty Symptom (2.16.840.1.113883.3.464.1003.113.12.1075)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation**		
CMS ID	143	**eCQM Version Number**	14.0.000
CBE Number	0086e	**GUID**	db9d9f09-6b6a-4749-a8b2-8c1fdb018823
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	American Academy of Ophthalmology		
Measure Developer	American Academy of Ophthalmology		
Measure Developer	American Medical Association (AMA)		
Endorsed By	CMS Consensus Based Entity		
Description	Percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) who have an optic nerve head evaluation during one or more visits during the measurement period		
Copyright	Copyright 2025 American Academy of Ophthalmology. All Rights Reserved.		
Disclaimer	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, e.g., 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 American Academy of Ophthalmology (Academy). Neither the Academy, PCPI, nor the American Medical Association (AMA), nor the former AMA-convened Physician Consortium for Performance Improvement(R) (AMA-PCPI), nor their members shall be responsible for any use of the Measure. The PCPI's and AMA's significant past efforts and contributions to the development and updating of the Measures are acknowledged. The National Committee for Quality Assurance's significant past efforts and contributions to the development and updating of the Measure is acknowledged. THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Limited proprietary coding is contained in the Measure specifications for convenience. A license agreement must be entered prior to a third party's use of Current Procedural Terminology (CPT[R]) or other proprietary code set contained in the Measures. Any other use of CPT or other coding by the third party is strictly prohibited. The Academy, its members, the AMA, and former members of the PCPI disclaim all liability for use or accuracy of any CPT or other coding contained in the specifications. CPT(R) contained in the Measure specifications is copyright 2004-2024 American Medical Association. LOINC(R) is copyright 2004-2024 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2024 International Health Terminology Standards Development Organisation. ICD-10 is copyright 2024 World Health Organization. All Rights Reserved. Due to technical limitations, registered trademarks are indicated by (R) or [R].		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Glaucoma is a group of diseases that damage the eye's optic nerve and can result in vision loss and blindness. In 2011, 2.71 million persons in the U.S. had primary open-angle glaucoma (POAG) and in 2050, an estimated 7.32 million persons will have POAG (Vajaranant, Wu, Torres, & Varma, 2012). Furthermore, a study by Rein, Zhang, & Wirth (2006) estimated that the total financial burden of major visual disorders among U.S. residents aged 40 years or older was $35.4 billion in 2004: $16.2 billion in direct medical costs, $11.1 billion in other direct costs, and $8 billion in productivity losses. Of the direct medical costs, approximately $2.9 billion was attributable to glaucoma (Rein, Zhang, & Wirth, 2006). It is imperative that evidence-based care be delivered to all glaucoma patients. According to recent guidelines, optic nerve changes are one of the characteristics which reflect progression of glaucoma (the other characteristic is visual field). Examination of the optic nerve head (ONH) and retinal nerve fiber layer (RNFL) provides valuable structural information about optic nerve damage from glaucoma. Visible structural alterations of the ONH or RNFL may precede the onset of visual field defects. Careful study of the optic disc neural rim for small hemorrhages is important because these hemorrhages sometimes signal focal disc damage and visual field loss, and they may signify ongoing optic nerve damage in patients with glaucoma (Gedde et al., 2021). Despite evidence emphasizing the value of an optic nerve evaluation, there is a gap in documentation patterns of the optic nerve for both initial and follow-up care. This measure is intended to promote examination and documentation of the structure and function of the optic nerve, and to monitor and detect disease progression among patients diagnosed with POAG.		
Clinical Recommendation Statement	Ophthalmic Evaluation The ophthalmic evaluation specifically focuses on the following elements in the comprehensive adult medical eye evaluation: Visual acuity measurement Pupil examination Anterior segment examination IOP measurement Gonioscopy Optic nerve head (ONH) and retinal nerve fiber layer (RNFL) examination Fundus examination (Gedde et al., 2021) The optic nerve should be carefully examined for the signs of glaucoma damage, and its appearance should be serially documented (I+, moderate quality, strong recommendation) (Gedde et al., 2021).		
Improvement Notation	Higher score indicates better quality		
Reference	Reference Type: CITATION Reference Text: 'Rein, D. B., Zhang, P., & Wirth, K. (2006). The economic burden of major adult visual disorders in the United States. Archives of Ophthalmology, 124(12), 1754-1760. doi:10.1001/archopht.124.12.1754'		
Reference	Reference Type: CITATION Reference Text: 'Vajaranant, T. S., Wu, S., Torres, M., & Varma, R. (2012). The changing face of primary open-angle glaucoma in the United States: Demographic and geographic changes from 2011 to 2050. American Journal of Ophthalmology, 154(2). doi:10.1016/j.ajo.2012.02.024'		

Reference	Reference Type: CITATION Reference Text: 'Gedde, S. J., Vinod, K., Wright, M. M., Muir, K. W., Lind, J. T., Chen, P. P., Li, T., Mansberger, S. L., & American Academy of Ophthalmology Preferred Practice Pattern Glaucoma Panel (2021). Primary Open-Angle Glaucoma Preferred Practice Pattern(R). Ophthalmology, 128(1), P71–P150. https://doi.org/10.1016/j.ophtha.2020.10.022'
Definition	None
Guidance	Optic nerve head evaluation includes examination of the cup to disc ratio and identification of optic disc or retinal nerve abnormalities. Both of these components of the optic nerve head evaluation are examined using ophthalmoscopy. The measure, as written, does not specifically require documentation of laterality. Coding limitations in particular clinical terminologies do not currently allow for that level of specificity (ICD-10-CM includes laterality, but SNOMED-CT does not uniformly include this distinction). Therefore, at this time, it is not a requirement of this measure to indicate laterality of the diagnoses, findings or procedures. Available coding to capture the data elements specified in this measure has been provided. It is assumed that the eligible clinician will record laterality in the patient medical record, as quality care and clinical documentation should include laterality. This eCQM is a patient-based measure. Telehealth encounters are not eligible for this measure because the measure requires a clinical action that cannot be conducted via telehealth. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma
Denominator	Equals Initial Population
Denominator Exclusions	None
Numerator	Patients who have an optic nerve head evaluation during one or more visits during the measurement period
Numerator Exclusions	None
Denominator Exceptions	Documentation of medical reason(s) for not performing an optic nerve head evaluation
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 18
  and exists "Primary Open Angle Glaucoma Encounter"
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

None

Numerator

```
exists "Cup to Disc Ratio Performed with Result"
  and exists "Optic Disc Exam Performed with Result"
```

Numerator Exclusions

None

Denominator Exceptions

```
exists "Medical Reason for Not Performing Cup to Disc Ratio"
  or exists "Medical Reason for Not Performing Optic Disc Exam"
```

Stratification

None

Definitions

Cup to Disc Ratio Performed with Result

```
["Diagnostic Study, Performed": "Cup to Disc Ratio"] CupToDiscExamPerformed
  with "Primary Open Angle Glaucoma Encounter" EncounterWithPOAG
    such that Global."NormalizeInterval" ( CupToDiscExamPerformed.relevantDatetime, CupToDiscExamPerformed.relevantPeriod ) during day of
EncounterWithPOAG.relevantPeriod
  where CupToDiscExamPerformed.result is not null
```

Denominator

"Initial Population"

Denominator Exceptions

exists "Medical Reason for Not Performing Cup to Disc Ratio"
  or exists "Medical Reason for Not Performing Optic Disc Exam"

Initial Population

AgeInYearsAt(date from start of "Measurement Period") >= 18
  and exists "Primary Open Angle Glaucoma Encounter"

Medical Reason for Not Performing Cup to Disc Ratio

["Diagnostic Study, Not Performed": "Cup to Disc Ratio"] CupToDiscExamNotPerformed
  with "Primary Open Angle Glaucoma Encounter" EncounterWithPOAG
    such that CupToDiscExamNotPerformed.authorDatetime during day of EncounterWithPOAG.relevantPeriod
  where CupToDiscExamNotPerformed.negationRationale in "Medical Reason"

Medical Reason for Not Performing Optic Disc Exam

["Diagnostic Study, Not Performed": "Optic Disc Exam for Structural Abnormalities"] OpticDiscExamNotPerformed
  with "Primary Open Angle Glaucoma Encounter" EncounterWithPOAG
    such that OpticDiscExamNotPerformed.authorDatetime during day of EncounterWithPOAG.relevantPeriod
  where OpticDiscExamNotPerformed.negationRationale in "Medical Reason"

Numerator

exists "Cup to Disc Ratio Performed with Result"
  and exists "Optic Disc Exam Performed with Result"

Optic Disc Exam Performed with Result

["Diagnostic Study, Performed": "Optic Disc Exam for Structural Abnormalities"] OpticDiscExamPerformed
  with "Primary Open Angle Glaucoma Encounter" EncounterWithPOAG
    such that Global."NormalizeInterval" (OpticDiscExamPerformed.relevantDatetime, OpticDiscExamPerformed.relevantPeriod) during day of EncounterWithPOAG.relevantPeriod
  where OpticDiscExamPerformed.result is not null

Primary Open Angle Glaucoma Encounter

"Qualifying Encounter During Day of Measurement Period" ValidQualifyingEncounter
  with ["Diagnosis": "Primary Open Angle Glaucoma"] POAGDiagnosis
    such that POAGDiagnosis.prevalencePeriod overlaps day of ValidQualifyingEncounter.relevantPeriod

Qualifying Encounter During Day of Measurement Period

(["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Outpatient Consultation"]
  union ["Encounter, Performed": "Nursing Facility Visit"]
  union ["Encounter, Performed": "Care Services in Long Term Residential Facility"]) QualifyingEncounter
  where QualifyingEncounter.relevantPeriod during day of "Measurement Period"
    and QualifyingEncounter.class !~ "virtual"

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>

Terminology

- code "virtual" ("ActCode Code (VR)")
- valueset "Care Services in Long Term Residential Facility" (2.16.840.1.113883.3.464.1003.101.12.1014)
- valueset "Cup to Disc Ratio" (2.16.840.1.113883.3.526.3.1333)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Medical Reason" (2.16.840.1.113883.3.526.3.1007)
- valueset "Nursing Facility Visit" (2.16.840.1.113883.3.464.1003.101.12.1012)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Optic Disc Exam for Structural Abnormalities" (2.16.840.1.113883.3.526.3.1334)
- valueset "Outpatient Consultation" (2.16.840.1.113883.3.464.1003.101.12.1008)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Primary Open Angle Glaucoma" (2.16.840.1.113883.3.526.3.326)
- valueset "Race" (2.16.840.1.114222.4.11.836)

Data Criteria (QDM Data Elements)

- "Diagnosis: Primary Open Angle Glaucoma" using "Primary Open Angle Glaucoma (2.16.840.1.113883.3.526.3.326)"
- "Diagnostic Study, Not Performed: Cup to Disc Ratio" using "Cup to Disc Ratio (2.16.840.1.113883.3.526.3.1333)"

- "Diagnostic Study, Not Performed: Optic Disc Exam for Structural Abnormalities" using "Optic Disc Exam for Structural Abnormalities (2.16.840.1.113883.3.526.3.1334)"
- "Diagnostic Study, Performed: Cup to Disc Ratio" using "Cup to Disc Ratio (2.16.840.1.113883.3.526.3.1333)"
- "Diagnostic Study, Performed: Optic Disc Exam for Structural Abnormalities" using "Optic Disc Exam for Structural Abnormalities (2.16.840.1.113883.3.526.3.1334)"
- "Encounter, Performed: Care Services in Long Term Residential Facility" using "Care Services in Long Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care**		
CMS ID	142	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	53d6d7c3-43fb-4d24-8099-17e74c022c05
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	American Academy of Ophthalmology		
Measure Developer	American Academy of Ophthalmology		
Measure Developer	American Medical Association (AMA)		
Endorsed By	None		
Description	Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the ongoing care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once during the measurement period		
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Disclaimer			
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Diabetic retinopathy is a prevalent complication of diabetes, estimated to affect 28.5% of diabetic patients in the US (Zhang et al., 2010). Diabetic retinopathy is a key indicator of systemic complications of diabetes (Zhang et al., 2010). Coordination of care between the eye care specialist and the physician managing a patient's ongoing diabetes care is essential in stemming the progression of vision loss. Communication from the eye care specialist to a primary care physician facilitates the exchange of information about the severity and progression of a patient's diabetic retinopathy, adherence to recommended ocular care, need for follow-up visits, and treatment plans (Storey et al., 2016). Data from the Diabetes Control and Complications Trial showed that diabetic treatment and maintenance of glucose control delays the onset and slows the progression of diabetic retinopathy (Aiello & DCCT/EDIC Research Group, 2014). The ophthalmologist should refer patients with diabetes to a primary care physician or endocrinologist for appropriate management of their systemic condition and should communicate examination results to the physician managing the patient's ongoing diabetes care (Lim et al., 2025).		
Clinical Recommendation Statement	A goal is to achieve optimal control of blood glucose, blood pressure, and other risk factors through close communication with the patient's primary care physician on the status of the DR and the need for optimal metabolic control (Lim et al., 2025). Establishing a close partnership between the ophthalmologist and the primary care physician is an important step to ensure optimal patient care. Furthermore, it is important to help educate patients with diabetes as well as their primary care physician about the ophthalmologic implications of controlling blood glucose (as monitored by HbA1c) to as near to normal as is safely possible (Lim et al., 2025).		
Improvement Notation	Higher score indicates better quality		
Reference	Reference Type: CITATION Reference Text: 'Aiello, L. P., & DCCT/EDIC Research Group (2014). Diabetic retinopathy and other ocular findings in the diabetes control and complications trial/epidemiology of diabetes interventions and complications study. Diabetes care, 37(1), 17–23. doi:10.2337/dc13-2251'		
Reference	Reference Type: Citation Reference Text: 'Lim, J.I., Kim, S.J., Bailey, S.T., Kovach, J.L., Vemulakonda, G.A., Ying, G., Flaxel, C.J. and the American Academy of Ophthalmology Preferred Practice Pattern Retina/Vitreous Committee (2025). Diabetic Retinopathy Preferred Practice Pattern. Ophthalmology. 2025 in press. doi: 10.1016/j.ophtha.2024.12.020.'		
Reference	Reference Type: CITATION Reference Text: 'Storey, P. P., Murchison, A. P., Pizzi, L. T., Hark, L. A., Dai, Y., Leiby, B. E., & Haller, J. A. (2016). Impact of physician communication on diabetic eye examination adherence: Results from a Retrospective Cohort Analysis. Retina.;36(1),20-7. doi:10.1097/IAE.0000000000000652'		
Reference	Reference Type: CITATION Reference Text: 'Zhang, X., Saaddine, J. B., Chou, C. F., Cotch, M. F., Cheng, Y. J., Geiss, L. S., … Klein, R. (2010). Prevalence of diabetic retinopathy in the United States, 2005-2008. JAMA, 304(6), 649–656.		

	doi:10.1001/jama.2010.1111'
Definition	Communication - May include documentation in the medical record indicating that the findings of the dilated macular or fundus exam were communicated (e.g., verbally, by letter) with the clinician managing the patient's diabetic care OR a copy of a letter in the medical record to the clinician managing the patient's diabetic care outlining the findings of the dilated macular or fundus exam. Findings - Includes level of severity of retinopathy (e.g., mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema. The measure, as written, does not specifically require documentation of laterality. Coding limitations in particular clinical terminologies do not currently allow for that level of specificity (ICD-10-CM includes laterality, but SNOMED-CT does not uniformly include this distinction). Therefore, at this time, it is not a requirement of this measure to indicate laterality of the diagnoses, findings or procedures. Available coding to capture the data elements specified in this measure has been provided. It is assumed that the eligible clinician will record laterality in the patient medical record, as quality care and clinical documentation should include laterality.
Guidance	The communication of results, including the level of severity of diabetic retinopathy and presence or absence of macular edema to the primary care physician providing ongoing care of a patient's diabetes should be completed soon after the dilated exam is performed. Eligible clinicians reporting on this measure should note that all data for the measurement period is to be submitted by the deadline established by CMS. Therefore, eligible clinicians who see patients towards the end of the measurement period (i.e., December in particular), should communicate the results of the dilated macular exam as soon as possible in order for those patients to be counted in the measure numerator. Communicating the results as soon as possible after the date of the exam will ensure the data are included in the submission to CMS. This eCQM is a patient-based measure. Telehealth encounters are not eligible for this measure because the measure requires a clinical action that cannot be conducted via telehealth. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All patients aged 18 years and older with a diagnosis of diabetic retinopathy during the measurement period
Denominator	Equals Initial Population who had a dilated macular or fundus exam performed during the measurement period
Denominator Exclusions	None
Numerator	Patients with documentation, at least once within the measurement period, of the findings of the dilated macular or fundus exam via communication to the physician who manages the patient's diabetic care
Numerator Exclusions	None
Denominator Exceptions	Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes Documentation of patient reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity, and sex.

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Population Criteria

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 18
  and exists "Diabetic Retinopathy Encounter"
```

Denominator

```
"Initial Population"
  and exists "Macular Exam Performed"
```

Denominator Exclusions

None

Numerator

```
exists "Level of Severity of Retinopathy Findings Communicated"
  and ( exists "Macular Edema Absence Communicated"
      or exists "Macular Edema Presence Communicated"
      )
```

Numerator Exclusions

None

Denominator Exceptions

```
exists "Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy"
  or exists "Medical or Patient Reason for Not Communicating Absence of Macular Edema"
  or exists "Medical or Patient Reason for Not Communicating Presence of Macular Edema"
```

Stratification

None

Definitions

Denominator

```
"Initial Population"
  and exists "Macular Exam Performed"
```

Denominator Exceptions

```
exists "Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy"
 or exists "Medical or Patient Reason for Not Communicating Absence of Macular Edema"
 or exists "Medical or Patient Reason for Not Communicating Presence of Macular Edema"
```

Diabetic Retinopathy Encounter

```
"Qualifying Encounter During Day of Measurement Period" ValidQualifyingEncounter
  with ["Diagnosis": "Diabetic Retinopathy"] DiabeticRetinopathy
    such that DiabeticRetinopathy.prevalencePeriod overlaps day of ValidQualifyingEncounter.relevantPeriod
```

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 18
  and exists "Diabetic Retinopathy Encounter"
```

Level of Severity of Retinopathy Findings Communicated

```
["Communication, Performed": "Level of Severity of Retinopathy Findings"] LevelOfSeverityCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that LevelOfSeverityCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
      and LevelOfSeverityCommunicated.sentDatetime during day of "Measurement Period"
```

Macular Edema Absence Communicated

```
["Communication, Performed": "Macular edema absent (situation)"] MacularEdemaAbsentCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that MacularEdemaAbsentCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
      and MacularEdemaAbsentCommunicated.sentDatetime during day of "Measurement Period"
```

Macular Edema Presence Communicated

```
["Communication, Performed": "Macular Edema Findings Present"] MacularEdemaPresentCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that MacularEdemaPresentCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
      and MacularEdemaPresentCommunicated.sentDatetime during day of "Measurement Period"
```

Macular Exam Performed

```
["Diagnostic Study, Performed": "Macular Exam"] MacularExam
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that Global."NormalizeInterval" ( MacularExam.relevantDatetime, MacularExam.relevantPeriod ) during day of EncounterDiabeticRetinopathy.relevantPeriod
  where MacularExam.result is not null
```

Medical or Patient Reason for Not Communicating Absence of Macular Edema

```
["Communication, Not Performed": "Macular edema absent (situation)"] MacularEdemaAbsentNotCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that MacularEdemaAbsentNotCommunicated.authorDatetime during day of EncounterDiabeticRetinopathy.relevantPeriod
  where ( MacularEdemaAbsentNotCommunicated.negationRationale in "Medical Reason"
     or MacularEdemaAbsentNotCommunicated.negationRationale in "Patient Reason")
```

Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy

```
["Communication, Not Performed": "Level of Severity of Retinopathy Findings"] LevelOfSeverityNotCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that LevelOfSeverityNotCommunicated.authorDatetime during day of EncounterDiabeticRetinopathy.relevantPeriod
  where ( LevelOfSeverityNotCommunicated.negationRationale in "Medical Reason"
     or LevelOfSeverityNotCommunicated.negationRationale in "Patient Reason")
```

Medical or Patient Reason for Not Communicating Presence of Macular Edema

```
["Communication, Not Performed": "Macular Edema Findings Present"] MacularEdemaPresentNotCommunicated
  with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
    such that MacularEdemaPresentNotCommunicated.authorDatetime during day of EncounterDiabeticRetinopathy.relevantPeriod
  where ( MacularEdemaPresentNotCommunicated.negationRationale in "Medical Reason"
     or MacularEdemaPresentNotCommunicated.negationRationale in "Patient Reason"
  )
```

Numerator

```
exists "Level of Severity of Retinopathy Findings Communicated"
  and ( exists "Macular Edema Absence Communicated"
     or exists "Macular Edema Presence Communicated"
     )
```

Qualifying Encounter During Day of Measurement Period

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Outpatient Consultation"]
  union ["Encounter, Performed": "Care Services in Long Term Residential Facility"]
  union ["Encounter, Performed": "Nursing Facility Visit"] ) QualifyingEncounter
  where QualifyingEncounter.relevantPeriod during day of "Measurement Period"
    and QualifyingEncounter.class !~ "virtual"
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Macular edema absent (situation)" ("SNOMEDCT Code (428341000124108)")
- code "virtual" ("ActCode Code (VR)")
- valueset "Care Services in Long Term Residential Facility" (2.16.840.1.113883.3.464.1003.101.12.1014)
- valueset "Diabetic Retinopathy" (2.16.840.1.113883.3.526.3.327)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Level of Severity of Retinopathy Findings" (2.16.840.1.113883.3.526.3.1283)
- valueset "Macular Edema Findings Present" (2.16.840.1.113883.3.526.3.1320)
- valueset "Macular Exam" (2.16.840.1.113883.3.526.3.1251)
- valueset "Medical Reason" (2.16.840.1.113883.3.526.3.1007)
- valueset "Nursing Facility Visit" (2.16.840.1.113883.3.464.1003.101.12.1012)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Outpatient Consultation" (2.16.840.1.113883.3.464.1003.101.12.1008)
- valueset "Patient Reason" (2.16.840.1.113883.3.526.3.1008)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Race" (2.16.840.1.114222.4.11.836)

Data Criteria (QDM Data Elements)

- "Communication, Not Performed: Level of Severity of Retinopathy Findings" using "Level of Severity of Retinopathy Findings (2.16.840.1.113883.3.526.3.1283)"
- "Communication, Not Performed: Macular edema absent (situation)" using "Macular edema absent (situation) (SNOMEDCT Code 428341000124108)"
- "Communication, Not Performed: Macular Edema Findings Present" using "Macular Edema Findings Present (2.16.840.1.113883.3.526.3.1320)"
- "Communication, Performed: Level of Severity of Retinopathy Findings" using "Level of Severity of Retinopathy Findings (2.16.840.1.113883.3.526.3.1283)"
- "Communication, Performed: Macular edema absent (situation)" using "Macular edema absent (situation) (SNOMEDCT Code 428341000124108)"
- "Communication, Performed: Macular Edema Findings Present" using "Macular Edema Findings Present (2.16.840.1.113883.3.526.3.1320)"
- "Diagnosis: Diabetic Retinopathy" using "Diabetic Retinopathy (2.16.840.1.113883.3.526.3.327)"
- "Diagnostic Study, Performed: Macular Exam" using "Macular Exam (2.16.840.1.113883.3.526.3.1251)"
- "Encounter, Performed: Care Services in Long Term Residential Facility" using "Care Services in Long Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Diabetes: Eye Exam**		
CMS ID	131	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	d90bdab4-b9d2-4329-9993-5c34e2c0dc66
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Endorsed By	None		
Description	Percentage of patients 18-75 years of age with diabetes and an active diagnosis of retinopathy in any part of the measurement period who had a retinal or dilated eye exam by an eye care professional during the measurement period or diabetics with no diagnosis of retinopathy in any part of the measurement period who had a retinal or dilated eye exam by an eye care professional during the measurement period or in the 12 months prior to the measurement period		
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Disclaimer	The performance Measure is not a clinical guideline and does not establish a standard of medical care, and has not been tested for all potential applications. THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Diabetes is the eighth leading cause of death in the United States. In 2021, diabetes affected more than 38 million Americans (11.6 percent of the U.S. population) and killed more than 103,000 people (American Diabetes Association [ADA], 2024). Diabetes is a long-lasting disease marked by high blood glucose levels, resulting from the body's inability to produce or use insulin properly (Centers for Disease Control and Prevention [CDC], 2022a). People with diabetes are at increased risk of serious health complications including vision loss, heart disease, stroke, kidney damage, amputation of feet or legs, and premature death (CDC, 2022b). In 2022, diabetes cost the U.S. an estimated $413 billion: $307 billion in direct medical costs and $106 billion in reduced productivity. The direct medical cost of diabetes increased by 7% between 2017 and 2022 (Parker et al., 2022). Diabetes is the leading cause of new cases of blindness among adults aged 18–64 years (CDC, 2024). Diabetic retinopathy is progressive damage to the small blood vessels in the retina that may result in loss of vision. Approximately 4.1 million adults are affected by diabetic retinopathy (CDC, 2020).		
Clinical Recommendation Statement	American Diabetes Association (2024): - Adults with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 5 years after the onset of diabetes. (Level of evidence: B) - Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist at the time of the diabetes diagnosis. (Level of evidence: B) - If there is no evidence of retinopathy for one or more annual eye exams and glycemia is well controlled, then screening every 1–2 years may be considered. If any level of diabetic retinopathy is present, subsequent dilated retinal examinations should be repeated at least annually by an ophthalmologist or optometrist. If retinopathy is progressing or sight threatening, then examinations will be required more frequently. (Level of evidence: B)		
Improvement Notation	Higher score indicates better quality		
Reference	Reference Type: CITATION		

	Reference Text: 'American Diabetes Association Professional Practice Committee. 12. Retinopathy, neuropathy, and foot care: Standards of Care in Diabetes—2024. Diabetes Care 2024;47(Suppl. 1):S231–S243'
	Reference Type: CITATION
Reference	Reference Text: 'American Diabetes Association. (2024). Statistics About Diabetes. Retrieved from https://diabetes.org/about-diabetes/statistics/about-diabetes'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2020). Common Eye Disorders and Diseases. Retrieved from https://www.cdc.gov/visionhealth/basics/ced/index.html'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2022a). What is Diabetes? Retrieved from https://www.cdc.gov/diabetes/basics/diabetes.html'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2022b). National Diabetes Statistics Report, 2021. US Dept of Health and Human Services. Retrieved from https://www.cdc.gov/diabetes/library/reports/reportcard.html'
	Reference Type: Citation
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2024). National Diabetes Statistics Report. Retrieved from https://www.cdc.gov/diabetes/php/data-research/index.html'
	Reference Type: CITATION
Reference	Reference Text: 'Parker E, Lin J, Mahoney T, et al. Economic Costs of Diabetes in the U.S. in 2022. Diabetes Care. 2024;47(1):26-43. doi:10.2337/dci23-0085'
Definition	None
Guidance	The eye exam must be performed by an ophthalmologist or optometrist, or there must be evidence that fundus photography results were analyzed by a system that provides an autonomous artificial intelligence (AI) calculation. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Patients 18-75 years of age by the end of the measurement period, with diabetes with a visit during the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period. Exclude patients 66 and older by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria: - Advanced illness diagnosis during the measurement period or the year prior - OR taking dementia medications during the measurement period or the year prior Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period. Exclude patients receiving palliative care for any part of the measurement period. Exclude patients who have bilateral absence of eyes any time during the patient's history through the end of the measurement period.
Numerator	Patients with an eye screening for diabetic retinal disease. This includes patients with diabetes who had one of the following: - A diagnosis of retinopathy in any part of the measurement period and a retinal or dilated eye exam by an eye care professional in the measurement period - No diagnosis of retinopathy in any part of the measurement period and a retinal or dilated eye exam by an eye care professional in the measurement period or the year prior to the measurement period - An autonomous eye exam in the measurement period - A retinal exam finding with a retinopathy severity level in any part of the measurement period - A retinal exam finding with no retinopathy severity level in the year prior to the measurement period
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Table of Contents

Population Criteria

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 75]
  and exists ( "Qualifying Encounters" )
  and exists ( ["Diagnosis": "Diabetes"] DiabetesDx
      where DiabetesDx.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or AIFrailLTCF."Is Age 66 or Older with Advanced Illness and Frailty"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
  or "Bilateral Absence of Eyes"
```

Numerator

```
( "Diabetic Retinopathy Overlapping Measurement Period"
    and ( "Retinal Exam in Measurement Period" )
)
  or ( not ( "Diabetic Retinopathy Overlapping Measurement Period" )
      and ( "Retinal Exam in Measurement Period or Year Prior" )
  )
  or "Autonomous Eye Exam in Measurement Period"
  or "Retinal Exam Finding with Retinopathy Severity Level in Measurement Period"
  or "Retinal Exam Finding with No Retinopathy Severity Level in Year Prior"
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

AIFrailLTCF.Has Advanced Illness in Year Before or During Measurement Period

```
exists ( ["Diagnosis": "Advanced Illness"] AdvancedIllnessDiagnosis
    where AdvancedIllnessDiagnosis.prevalencePeriod starts during day of Interval[start of "Measurement Period" - 1 year, end of "Measurement Period"]
)
```

AIFrailLTCF.Has Criteria Indicating Frailty

```
exists ( ["Device, Order": "Frailty Device"] FrailtyDeviceOrder
    where FrailtyDeviceOrder.authorDatetime during day of "Measurement Period"
)
  or exists ( ["Assessment, Performed": "Medical equipment used"] EquipmentUsed
      where EquipmentUsed.result in "Frailty Device"
        and Global."NormalizeInterval" ( EquipmentUsed.relevantDatetime, EquipmentUsed.relevantPeriod ) ends during day of "Measurement Period"
  )
  or exists ( ["Diagnosis": "Frailty Diagnosis"] FrailtyDiagnosis
      where FrailtyDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Frailty Encounter"] FrailtyEncounter
      where FrailtyEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Symptom": "Frailty Symptom"] FrailtySymptom
      where FrailtySymptom.prevalencePeriod overlaps day of "Measurement Period"
  )
```

AIFrailLTCF.Has Dementia Medications in Year Before or During Measurement Period

```
exists (["Medication, Active": "Dementia Medications"] DementiaMedication
  where Global."NormalizeInterval" ( DementiaMedication.relevantDatetime, DementiaMedication.relevantPeriod ) overlaps day of Interval[start of "Measurement Period"
- 1 year,
  end of "Measurement Period"])
```

AIFrailLTCF.Is Age 66 or Older Living Long Term in a Nursing Home

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  )>= 66
)
  and ( ( Last(["Assessment, Performed": "Housing status"] HousingStatus
        where Global."NormalizeInterval"(HousingStatus.relevantDatetime, HousingStatus.relevantPeriod) ends on or before day of
        end of "Measurement Period"
        sort by
        end of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)asc
    )) LastHousingStatus
      where LastHousingStatus.result ~ "Lives in nursing home (finding)"
  ) is not null
```

AIFrailLTCF.Is Age 66 or Older with Advanced Illness and Frailty

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  ) >= 66
    and "Has Criteria Indicating Frailty"
    and ( "Has Advanced Illness in Year Before or During Measurement Period"
        or "Has Dementia Medications in Year Before or During Measurement Period"
    )
)
```

Autonomous Eye Exam in Measurement Period

```
exists ["Physical Exam, Performed": "Eye Diabetic retinopathy screening Autonomous artificial intelligence"] AutonomousEyeExam
  where AutonomousEyeExam.result in "Autonomous Eye Exam Result or Finding"
    and Global."NormalizeInterval" ( AutonomousEyeExam.relevantDatetime, AutonomousEyeExam.relevantPeriod ) during day of "Measurement Period"
```

Bilateral Absence of Eyes

```
  exists (["Diagnosis": "Anophthalmos of bilateral eyes (disorder)"] BilateralAbsenceEyes
      where BilateralAbsenceEyes.prevalencePeriod starts on or before day of end of "Measurement Period"
  )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or AIFrailLTCF."Is Age 66 or Older with Advanced Illness and Frailty"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
  or "Bilateral Absence of Eyes"
```

Diabetic Retinopathy Overlapping Measurement Period

```
exists ( ["Diagnosis": "Diabetic Retinopathy"] Retinopathy
    where Retinopathy.prevalencePeriod overlaps day of "Measurement Period"
)
```

Has Left Eye No Retinopathy in Year Prior

```
exists (["Physical Exam, Performed": "Left eye Diabetic retinopathy severity level by Ophthalmoscopy"] LeftEyeNoRetinopathy
    where LeftEyeNoRetinopathy.result ~ "No apparent retinopathy"
      and Global."NormalizeInterval" ( LeftEyeNoRetinopathy.relevantDatetime, LeftEyeNoRetinopathy.relevantPeriod ) during day of Interval[start of "Measurement
Period" - 1 year, end of "Measurement Period" - 1 year])
```

Has Left Eye Retinopathy

```
exists ["Physical Exam, Performed": "Left eye Diabetic retinopathy severity level by Ophthalmoscopy"] LeftEyeRetinopathy
  where LeftEyeRetinopathy.result in "Diabetic Retinopathy Severity Level"
    and Global."NormalizeInterval" ( LeftEyeRetinopathy.relevantDatetime, LeftEyeRetinopathy.relevantPeriod ) during day of "Measurement Period"
```

Has Right Eye No Retinopathy in Year Prior

```
exists (["Physical Exam, Performed": "Right eye Diabetic retinopathy severity level by Ophthalmoscopy"] RightEyeNoRetinopathy
  where RightEyeNoRetinopathy.result ~ "No apparent retinopathy"
    and Global."NormalizeInterval" ( RightEyeNoRetinopathy.relevantDatetime, RightEyeNoRetinopathy.relevantPeriod ) during day of Interval[start of "Measurement
Period" - 1 year, end of "Measurement Period" - 1 year])
```

Has Right Eye Retinopathy

```
exists ["Physical Exam, Performed": "Right eye Diabetic retinopathy severity level by Ophthalmoscopy"] RightEyeRetinopathy
  where RightEyeRetinopathy.result in "Diabetic Retinopathy Severity Level"
    and Global."NormalizeInterval" ( RightEyeRetinopathy.relevantDatetime, RightEyeRetinopathy.relevantPeriod ) during day of "Measurement Period"
```

Hospice.Has Hospice Services

```
exists ( ["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where ( InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
      or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
    )
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists ( ["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
      where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
      where HospiceAssessment.result ~ "Yes (qualifier value)"
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
      where HospiceOrder.authorDatetime during day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
      where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
  )
or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
      where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 75]
  and exists ( "Qualifying Encounters" )
  and exists ( ["Diagnosis": "Diabetes"] DiabetesDx
      where DiabetesDx.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Numerator

```
( "Diabetic Retinopathy Overlapping Measurement Period"
    and ( "Retinal Exam in Measurement Period" )
)
  or ( not ( "Diabetic Retinopathy Overlapping Measurement Period" )
      and ( "Retinal Exam in Measurement Period or Year Prior" )
  )
  or "Autonomous Eye Exam in Measurement Period"
  or "Retinal Exam Finding with Retinopathy Severity Level in Measurement Period"
  or "Retinal Exam Finding with No Retinopathy Severity Level in Year Prior"
```

PalliativeCare.Has Palliative Care in the Measurement Period

```
exists ( ["Assessment, Performed": "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)"] PalliativeAssessment
    where Global."NormalizeInterval" ( PalliativeAssessment.relevantDatetime, PalliativeAssessment.relevantPeriod ) overlaps day of "Measurement Period"
)
  or exists ( ["Diagnosis": "Palliative Care Diagnosis"] PalliativeDiagnosis
      where PalliativeDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Palliative Care Encounter"] PalliativeEncounter
      where PalliativeEncounter.relevantPeriod overlaps day of "Measurement Period"
```

```
)
or exists ( ["Intervention, Performed": "Palliative Care Intervention"] PalliativeIntervention
    where Global."NormalizeInterval" ( PalliativeIntervention.relevantDatetime, PalliativeIntervention.relevantPeriod ) overlaps day of "Measurement Period"
)
```

Qualifying Encounters

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Telephone Visits"] ) ValidEncounters
  where ValidEncounters.relevantPeriod during day of "Measurement Period"
```

Retinal Exam Finding with No Retinopathy Severity Level in Year Prior

```
( "Has Left Eye No Retinopathy in Year Prior" and "Has Right Eye No Retinopathy in Year Prior" )
```

Retinal Exam Finding with Retinopathy Severity Level in Measurement Period

```
( "Has Left Eye Retinopathy" and "Has Right Eye Retinopathy" )
    or ("Has Left Eye Retinopathy" and "Has Right Eye No Retinopathy in Year Prior")
    or ("Has Right Eye Retinopathy" and "Has Left Eye No Retinopathy in Year Prior")
```

Retinal Exam in Measurement Period

```
exists ["Physical Exam, Performed": "Retinal or Dilated Eye Exam"] RetinalExam
  where Global."NormalizeInterval" ( RetinalExam.relevantDatetime, RetinalExam.relevantPeriod ) during day of "Measurement Period"
```

Retinal Exam in Measurement Period or Year Prior

```
exists ["Physical Exam, Performed": "Retinal or Dilated Eye Exam"] RetinalExam
  where Global."NormalizeInterval" ( RetinalExam.relevantDatetime, RetinalExam.relevantPeriod ) during day of Interval[start of "Measurement Period" - 1 year, end of
"Measurement Period"]
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "Federal Administrative Sex"]
```

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Anophthalmos of bilateral eyes (disorder)" ("SNOMEDCT Code (15665641000119103)")
- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "Eye Diabetic retinopathy screening Autonomous artificial intelligence" ("LOINC Code (105914-6)")
- code "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" ("LOINC Code (71007-9)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Housing status" ("LOINC Code (71802-3)")
- code "Left eye Diabetic retinopathy severity level by Ophthalmoscopy" ("LOINC Code (71490-7)")
- code "Lives in nursing home (finding)" ("SNOMEDCT Code (160734000)")
- code "Medical equipment used" ("LOINC Code (98181-1)")
- code "No apparent retinopathy" ("LOINC Code (LA18643-9)")
- code "Right eye Diabetic retinopathy severity level by Ophthalmoscopy" ("LOINC Code (71491-5)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")
- valueset "Advanced Illness" (2.16.840.1.113883.3.464.1003.110.12.1082)
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Autonomous Eye Exam Result or Finding" (2.16.840.1.113883.3.464.1004.2616)
- valueset "Dementia Medications" (2.16.840.1.113883.3.464.1003.196.12.1510)
- valueset "Diabetes" (2.16.840.1.113883.3.464.1003.103.12.1001)
- valueset "Diabetic Retinopathy" (2.16.840.1.113883.3.526.3.327)
- valueset "Diabetic Retinopathy Severity Level" (2.16.840.1.113883.3.464.1003.1266)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Frailty Device" (2.16.840.1.113883.3.464.1003.118.12.1300)
- valueset "Frailty Diagnosis" (2.16.840.1.113883.3.464.1003.113.12.1074)
- valueset "Frailty Encounter" (2.16.840.1.113883.3.464.1003.101.12.1088)
- valueset "Frailty Symptom" (2.16.840.1.113883.3.464.1003.113.12.1075)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)
- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Palliative Care Diagnosis" (2.16.840.1.113883.3.464.1003.1167)
- valueset "Palliative Care Encounter" (2.16.840.1.113883.3.464.1003.101.12.1090)
- valueset "Palliative Care Intervention" (2.16.840.1.113883.3.464.1003.198.12.1135)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Race" (2.16.840.1.114222.4.11.836)

- valueset "Retinal or Dilated Eye Exam" (2.16.840.1.113883.3.464.1003.115.12.1088)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" using "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal) (LOINC Code 71007-9)"
- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Assessment, Performed: Housing status" using "Housing status (LOINC Code 71802-3)"
- "Assessment, Performed: Medical equipment used" using "Medical equipment used (LOINC Code 98181-1)"
- "Device, Order: Frailty Device" using "Frailty Device (2.16.840.1.113883.3.464.1003.118.12.1300)"
- "Diagnosis: Advanced Illness" using "Advanced Illness (2.16.840.1.113883.3.464.1003.110.12.1082)"
- "Diagnosis: Anophthalmos of bilateral eyes (disorder)" using "Anophthalmos of bilateral eyes (disorder) (SNOMEDCT Code 15665641000119103)"
- "Diagnosis: Diabetes" using "Diabetes (2.16.840.1.113883.3.464.1003.103.12.1001)"
- "Diagnosis: Diabetic Retinopathy" using "Diabetic Retinopathy (2.16.840.1.113883.3.526.3.327)"
- "Diagnosis: Frailty Diagnosis" using "Frailty Diagnosis (2.16.840.1.113883.3.464.1003.113.12.1074)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Diagnosis: Palliative Care Diagnosis" using "Palliative Care Diagnosis (2.16.840.1.113883.3.464.1003.1167)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: Frailty Encounter" using "Frailty Encounter (2.16.840.1.113883.3.464.1003.101.12.1088)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Palliative Care Encounter" using "Palliative Care Encounter (2.16.840.1.113883.3.464.1003.101.12.1090)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Palliative Care Intervention" using "Palliative Care Intervention (2.16.840.1.113883.3.464.1003.198.12.1135)"
- "Medication, Active: Dementia Medications" using "Dementia Medications (2.16.840.1.113883.3.464.1003.196.12.1510)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Physical Exam, Performed: Eye Diabetic retinopathy screening Autonomous artificial intelligence" using "Eye Diabetic retinopathy screening Autonomous artificial intelligence (LOINC Code 105914-6)"
- "Physical Exam, Performed: Left eye Diabetic retinopathy severity level by Ophthalmoscopy" using "Left eye Diabetic retinopathy severity level by Ophthalmoscopy (LOINC Code 71490-7)"
- "Physical Exam, Performed: Retinal or Dilated Eye Exam" using "Retinal or Dilated Eye Exam (2.16.840.1.113883.3.464.1003.115.12.1088)"
- "Physical Exam, Performed: Right eye Diabetic retinopathy severity level by Ophthalmoscopy" using "Right eye Diabetic retinopathy severity level by Ophthalmoscopy (LOINC Code 71491-5)"
- "Symptom: Frailty Symptom" using "Frailty Symptom (2.16.840.1.113883.3.464.1003.113.12.1075)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Documentation of Current Medications in the Medical Record**		
CMS ID	68	**eCQM Version Number**	15.0.000
CBE Number	Not Applicable	**GUID**	9a032d9c-3d9b-11e1-8634-00237d5bf174
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	Centers for Medicare & Medicaid Services (CMS)		
Measure Developer	American Institutes for Research (AIR)		
Endorsed By	None		
Description	Percentage of visits for which the eligible clinician attests to documenting a list of current medications using all immediate resources available on the date of the encounter		
Copyright	This electronic clinical quality measure (Measure) and related data specifications are owned and stewarded by the Centers for Medicare & Medicaid Services (CMS). CMS contracted (Contract # 75FCMC18D0027/ Task Order #: 75FCMC24F0144) with the American Institutes for Research (AIR) to develop this electronic measure. AIR is not responsible for any use of the Measure. AIR makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and AIR has no liability to anyone who relies on such measures or specifications. Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. AIR disclaims all liability for use or accuracy of any third-party codes contained in the specifications. CPT(R) contained in the Measure specifications is copyright 2004-2024 American Medical Association. LOINC(R) copyright 2004-2024 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2024 International Health Terminology Standards Development Organisation.		
Disclaimer	This performance 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 AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	According to the National Center for Health Statistics, during the years of 2013-2016, 48.4% of patients (both male and female) were prescribed at least one prescription medication with 12.6% taking 5 or more medications. Additionally, 89.8% of patients (both male and female) aged 65 years and older were prescribed at least one medication with 40.9% taking 5 or more medications (2018). In this context, maintaining an accurate and complete medication list has proven to be a challenging documentation endeavor for various health care provider settings. While most of outpatient encounters (two-thirds) result in providers prescribing at least one medication, hospitals have been the focus of medication safety efforts (Stock, Scott, & Gurtel, 2009). Nassaralla, Naessens, Chaudhry, Hansen, and Scheitel (2007) caution that this is at odds with the current trend, where patients with chronic illnesses are increasingly being treated in the outpatient setting and require careful monitoring of multiple medications. Additionally, Nassaralla et al. (2007) reveal that it is in fact in outpatient settings where more fatal adverse drug events (ADE) occur when these are compared to those occurring in hospitals (1 of 131 outpatient deaths compared to 1 in 854 inpatient deaths). In the outpatient setting, ADEs occur 25% of the time and over one-third of these are considered preventable (Tache, Sonnichsen, & Ashcroft, 2011). Particularly vulnerable are patients over 65 years, with evidence suggesting that the rate of ADEs per 10,000 person per year increases with age; 25-44 years old at 1.3; 45-64 at 2.2, and 65 + at 3.8 (Sarkar, López, Maselli, & Gonzales, 2011). Other vulnerable groups include individuals who are chronically ill or disabled (Nabhanizadeh, Oppewal, Boot, & Maes-Festen, 2019). These population groups are more likely to experience ADEs and subsequent hospitalization. A multiplicity of providers and inadequate care coordination among them has been identified as barriers to collecting complete and reliable medication records. A study conducted by Poornima et al. (2015) indicates that reconciliation and documentation continue to be poorly executed with discrepancies occurring in 92% of patients (74 of 80) admitted to the emergency room. Of 80 patients included in the study, the home medications were reordered for 65% of patients on their admission. Of the 65%, 29% had a change in their dosing interval, while 23% had a change in their route of administration, and 13% had a change in dose. A total of 361 medication discrepancies, or the difference between the medications patients were taking before admission and those listed in their admission orders, were identified in at least 74 patients. The study found that "Through an appropriate reconciliation programme, around 80% of errors relating to medication and the potential harm caused by these errors could be reduced" (Poornima et al., 2015). Presley et al. (2020) also recognized specific barriers to sufficient medication documentation and reconciliation in rural and resource-limited care settings. Documentation of current medications in the medical record facilitates the process of medication review and reconciliation by the provider, which is necessary for reducing ADEs and promoting medication safety. The need for provider to provider coordination regarding medication records, and the existing gap in implementation, is highlighted in the American Medical Association's Physician's Role in Medication Reconciliation, which states that "critical patient information, including medical and medication histories, current medications the patient is receiving and taking, and sources of medications, is essential to the delivery of safe medical care. However, interruptions in the continuity of care and information gaps in patient health records are common and significantly affect patient outcomes" (2007). This is because clinical decisions based on information that is incomplete and/or inaccurate are likely to lead to medication error and ADEs. Weeks, Corbette, and Stream (2010) noted similar barriers and identified the utilization of health information technology as an opportunity for facilitating the creation of universal medication lists. One 2015 meta-analysis showed an association between electronic health record (EHR) documentation with an overall risk ratio (RR) of 0.46 (95% CI = 0.38 to 0.55; P < 0.001) and ADEs with an overall RR of 0.66 (95% CI = 0.44 to 0.99; P = 0.045). This meta-analysis provides evidence that the use of the EHR can improve the quality of healthcare delivered to patients by reducing medication errors and ADEs (Campanella et al., 2016).		
Clinical Recommendation Statement	The Joint Commission's 2023 Ambulatory Health Care National Patient Safety Goals guide clinicians to maintain and communicate accurate patient medication information (2023). Specifically, the section NPSG.03.06.01 "Maintain and communicate accurate patient medication information" states the following: "Obtain and/or update information on the medications the patient is currently taking. This information is documented in a list or other format that is useful to those who manage medication. Compare the medication information the patient brought to the organization with the medications ordered for the patient by the organization in order to identify and resolve discrepancies." The Joint Commission's 2023 Hospital National Patient Safety Goals also addressed documenting current medications (2023). Specifically, the section NPSG.03.06.01 "Maintain and communicate accurate patient information" states the following: "Obtain information on the medications the patient is currently taking when they are admitted to the hospital or is seen in an outpatient setting. This information is documented in a list or other format that is useful to those who manage medications." The National Quality Forum's Safe Practices for Better Healthcare (2010), states the following: "The healthcare		

	organization must develop, reconcile, and communicate an accurate patient medication list throughout the continuum of care."
Improvement Notation	Higher score indicates better quality
Reference	Reference Type: CITATION Reference Text: 'American Medical Association. (2007). The physician's role in medication reconciliation: Issues, strategies, and safety principles. http://www.doctutor.es/wp-content/uploads/2013/09/med-rec-monograph.pdf.'
Reference	Reference Type: CITATION Reference Text: 'Campanella, P., Lovato, E., Marone, C., Fallacara, L., Mancuso, A., Ricciardi, W., & Specchia, M. L. (2016). The impact of electronic health records on health care quality: A systematic review and meta-analysis. European Journal of Public Health, 26(1), 60-64. https://doi.org/10.1093/eurpub/ckv122'
Reference	Reference Type: CITATION Reference Text: 'Nabhanizadeh, A., Oppewal, A., Boot, F. H., & Maes-Festen, D. (2019). Effectiveness of medication reviews in identifying and reducing medication-related problems among people with intellectual disabilities: A systematic review. Journal of Applied Research in Intellectual Disabilities, 32(4), 750–761. https://doi.org/10.1111/jar.12580'
Reference	Reference Type: CITATION Reference Text: 'Nassaralla, C. L., Naessens, J. M., Chaudhry, R., Hansen, M. A., & Scheitel, S. M. (2007). Implementation of a medication reconciliation process in an ambulatory internal medicine clinic. Quality and Safety in Health Care, 16(2), 90-94. http://doi.org/10.1136/qshc.2006.021113'
Reference	Reference Type: CITATION Reference Text: 'National Center for Health Statistics. (2018). Health, United States, 2018: Supplementary Table 38. Prescription drug use in the past 30 days, by sex, race and Hispanic origin, and age: United States, selected years 1988–1994 through 2013–2016. https://www.cdc.gov/nchs/data/hus/2018/038.pdf'
Reference	Reference Type: CITATION Reference Text: 'National Quality Forum. (2010). Safe practices for better healthcare - 2010 update. https://www.qualityforum.org/publications/2010/04/safe_practices_for_better_healthcare_%E2%80%93_2010_update.aspx'
Reference	Reference Type: CITATION Reference Text: 'Poornima, P., Reshma, P., Ramakrishnan, T. V., Rani, N. V., Devi, G. S., Seshadri, P. (2015). Medication reconciliation and medication error prevention in an emergency department of a tertiary care hospital. Journal of Young Pharmacists, 7(3), 241-249. https://www.jyoungpharm.org/sites/default/files/JYP_7_3_15.pdf'
Reference	Reference Type: CITATION Reference Text: 'Presley, C. A., Wooldridge, K. T., Byerly, S. H., Aylor, A. R., Kaboli, P. J., Roumie, C. L., Schnipper, J. L., Dittus, R. S., Mixon, A. S. (2020). The Rural VA Multi-Center Medication Reconciliation Quality Improvement Study (R-VA-MARQUIS). American Journal of Health-System Pharmacy, 77, 128-137. https://doi.org/10.1093/ajhp/zxz275'
Reference	Reference Type: CITATION Reference Text: 'Sarkar, U., López, A., Maselli, J. H., Gonzales, R. (2011). Adverse drug events in U.S. adult ambulatory medical care. Health Services Research, 46(5), 1517-1533. http://doi.org/10.1111/j.1475-6773.2011.01269.x'
Reference	Reference Type: CITATION Reference Text: 'Stock, R., Scott, J., & Gurtel, S. (2009). Using an electronic prescribing system to ensure accurate medication lists in a large multidisciplinary medical group. The Joint Commission Journal on Quality and Patient Safety, 35(5), 271-277'
Reference	Reference Type: CITATION Reference Text: 'Tache, S. V., Sonnichsen, A., & Ashcroft, D. M. (2011). Prevalence of adverse drug events in ambulatory care: A systematic review. The Annals of Pharmacotherapy, 45(7-8), 977-989. http://doi.org/10.1345/aph.1P627'
Reference	Reference Type: CITATION Reference Text: 'The Joint Commission. (2023). Ambulatory Health Care: 2023 National Patient Safety Goals. https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2023/npsg_chapter_ahc_jul2023.pdf'
Reference	Reference Type: CITATION Reference Text: 'The Joint Commission. (2023). Hospital: 2023 National Patient Safety Goals. https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2023/npsg_chapter_hap_jul2023.pdf'
Reference	Reference Type: CITATION Reference Text: 'Weeks, D. L., Corbette, C. F., & Stream, G. (2010). Beliefs of ambulatory care physicians about accuracy of patient medication records and technology-enhanced solutions to improve accuracy. Journal for Healthcare Quality, 32(5), 12-21. http://doi.org/10.1111/j.1945-1474.2010.00097.x'
Definition	Current Medications: Medications the patient is presently taking including all prescriptions, over-the-counter products, herbals, vitamins, minerals, dietary (nutritional) supplements, and cannabis/cannabidiol (CBD) products with each medication's name, dosage, frequency and administered route. Encounter to Document Medications: An encounter performed during the measurement period where medications should be reviewed. Route: Documentation of the way the medication enters the body (some examples include but are not limited to: oral, sublingual, subcutaneous injections, and/or topical).
Guidance	This eCQM is an episode-based measure. An episode is defined as each eligible encounter during the measurement period. This measure is to be reported for every eligible encounter during the measurement period. Eligible clinicians reporting this measure may document medication information received from the patient, authorized representative(s), caregiver(s) or other available healthcare resources. By reporting the action described in this measure, the provider attests to having documented a list of current medications utilizing all immediate resources available on the day of the encounter. This list must include all known prescriptions, over-the-counter products, herbals, vitamins, minerals, dietary (nutritional) supplements, cannabis/cannabidiol (CBD) products AND must contain the medications' name, dosage,

	frequency and route of administration. This measure should also be reported if the eligible clinician documented the patient is not currently taking any medications. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All visits occurring during the 12-month measurement period
Denominator	Equals Initial Population
Denominator Exclusions	None
Numerator	Eligible clinician attests to documenting, updating, or reviewing the patient's current medications using all immediate resources available on the date of the encounter
Numerator Exclusions	None
Denominator Exceptions	Documentation of an acute health crisis where time is of the essence and delay of treatment would jeopardize the patient's health status
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Table of Contents

Population Criteria

Initial Population

"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter

Denominator

"Initial Population"

Denominator Exclusions

None

Numerator

```
"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter
  with ( ["Procedure, Performed": "Documentation of current medications (procedure)"]
    union ["Intervention, Performed": "Documentation of current medications (procedure)"] ) MedicationsDocumented
    such that Global."EarliestOf" ( MedicationsDocumented.relevantDatetime, MedicationsDocumented.relevantPeriod ) during day of QualifyingEncounter.relevantPeriod
    and Global."HasEnd" ( Global."NormalizeInterval" ( MedicationsDocumented.relevantDatetime, MedicationsDocumented.relevantPeriod ) )
```

Numerator Exclusions

None

Denominator Exceptions

```
"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter
  with ( ["Procedure, Not Performed": "Documentation of current medications (procedure)"]
    union ["Intervention, Not Performed": "Documentation of current medications (procedure)"] ) MedicationsNotDocumented
    such that MedicationsNotDocumented.authorDatetime during day of QualifyingEncounter.relevantPeriod
      and MedicationsNotDocumented.negationRationale = "Acute health crisis (finding)"
```

Stratification

None

Definitions

Denominator

"Initial Population"

Denominator Exceptions

```
"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter
  with ( ["Procedure, Not Performed": "Documentation of current medications (procedure)"]
    union ["Intervention, Not Performed": "Documentation of current medications (procedure)"] ) MedicationsNotDocumented
    such that MedicationsNotDocumented.authorDatetime during day of QualifyingEncounter.relevantPeriod
      and MedicationsNotDocumented.negationRationale = "Acute health crisis (finding)"
```

Initial Population

"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter

Numerator

```
"Qualifying Encounter During Day of Measurement Period" QualifyingEncounter
  with ( ["Procedure, Performed": "Documentation of current medications (procedure)"]
    union ["Intervention, Performed": "Documentation of current medications (procedure)"] ) MedicationsDocumented
```

such that Global."EarliestOf" (MedicationsDocumented.relevantDatetime, MedicationsDocumented.relevantPeriod) during day of QualifyingEncounter.relevantPeriod
and Global."HasEnd" (Global."NormalizeInterval" (MedicationsDocumented.relevantDatetime, MedicationsDocumented.relevantPeriod))

Qualifying Encounter During Day of Measurement Period

["Encounter, Performed": "Encounter to Document Medications"] ValidEncounter
where ValidEncounter.relevantPeriod during day of "Measurement Period"

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.Earliest(period Interval<DateTime>)

```
if ( HasStart(period)) then start of period
  else
end of period
```

Global.EarliestOf(pointInTime DateTime, period Interval<DateTime>)

```
Earliest(NormalizeInterval(pointInTime, period))
```

Global.HasEnd(period Interval<DateTime>)

```
not (
  end of period is null
    or
    end of period = maximum DateTime
)
```

Global.HasStart(period Interval<DateTime>)

```
not ( start of period is null
    or start of period = minimum DateTime
)
```

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Acute health crisis (finding)" ("SNOMEDCT Code (705016005)")
- code "Documentation of current medications (procedure)" ("SNOMEDCT Code (428191000124101)")
- valueset "Encounter to Document Medications" (2.16.840.1.113883.3.600.1.1834)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Race" (2.16.840.1.114222.4.11.836)

Data Criteria (QDM Data Elements)

- "Encounter, Performed: Encounter to Document Medications" using "Encounter to Document Medications (2.16.840.1.113883.3.600.1.1834)"
- "Intervention, Not Performed: Documentation of current medications (procedure)" using "Documentation of current medications (procedure) (SNOMEDCT Code 428191000124101)"
- "Intervention, Performed: Documentation of current medications (procedure)" using "Documentation of current medications (procedure) (SNOMEDCT Code 428191000124101)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Procedure, Not Performed: Documentation of current medications (procedure)" using "Documentation of current medications (procedure) (SNOMEDCT Code 428191000124101)"
- "Procedure, Performed: Documentation of current medications (procedure)" using "Documentation of current medications (procedure) (SNOMEDCT Code 428191000124101)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	CLINICAL QUALITY MEASURE SET

eCQM Title	**Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery**		
CMS ID	133	**eCQM Version Number**	14.0.000
CBE Number	0565e	**GUID**	39e0424a-1727-4629-89e2-c46c2fbb3f5f
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	American Academy of Ophthalmology		
Measure Developer	American Academy of Ophthalmology		
Measure Developer	American Medical Association (AMA)		
Endorsed By	CMS Consensus Based Entity		
Description	Percentage of cataract surgeries for patients aged 18 and older with a diagnosis of uncomplicated cataract and no significant ocular conditions impacting the visual outcome of surgery and had best-corrected visual acuity of 20/40 or better (distance or near) achieved in the operative eye within 90 days following the cataract surgery		
Copyright	Copyright 2025 American Academy of Ophthalmology. All Rights Reserved.		
Disclaimer	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, e.g., 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 American Academy of Ophthalmology (Academy). Neither the Academy, PCPI, nor the American Medical Association (AMA), nor the former AMA-convened Physician Consortium for Performance Improvement(R) (AMA-PCPI), nor their members shall be responsible for any use of the Measure. The PCPI's and AMA's significant past efforts and contributions to the development and updating of the Measures are acknowledged. The National Committee for Quality Assurance's significant past efforts and contributions to the development and updating of the Measure is acknowledged. THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Limited proprietary coding is contained in the Measure specifications for convenience. A license agreement must be entered prior to a third party's use of Current Procedural Terminology (CPT[R]) or other proprietary code set contained in the Measures. Any other use of CPT or other coding by the third party is strictly prohibited. The Academy, its members, the AMA, and former members of the PCPI disclaim all liability for use or accuracy of any CPT or other coding contained in the specifications. CPT(R) contained in the Measure specifications is copyright 2004-2024 American Medical Association. LOINC(R) is copyright 2004-2024 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2024 International Health Terminology Standards Development Organisation. ICD-10 is copyright 2024 World Health Organization. All Rights Reserved. Due to technical limitations, registered trademarks are indicated by (R) or [R].		
Measure Scoring	Proportion		
Measure Type	Outcome		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	In the United States, cataracts affect more than 24 million adults over 40 years (National Eye Institute, 2019). According to (Miller et al., 2022), cataract surgery has a substantial beneficial impact on visual function and on quality of life. 1. Scientific basis for measuring visual acuity outcomes after cataract surgery The only reason to perform cataract surgery (other than for a limited set of medical indications) is to improve a patient's vision and associated functioning. The use of a 20/40 visual acuity threshold is based on several considerations. First, it is the level for unrestricted operation of a motor vehicle in the US. Second, it has been consistently used by the Food and Drug Administration in its assessment for approval of intraocular lens (IOL) and other vision devices. Third, it is the literature standard to denote success in cataract surgery. Fourth, work by West et al. in the Salisbury Eye Study suggests that 20/40 is a useful threshold for 50th percentile functioning for several vision-related tasks. Most patients achieve excellent visual acuity after cataract surgery (20/40 or better). This outcome is achieved consistently through careful attention through the accurate measurement of axial length and corneal power and the appropriate selection of an IOL power calculation formula. As such, it reflects the care and diligence with which the surgery is assessed, planned and executed. Failure to achieve this after surgery in eyes without comorbid ocular conditions that would impact the success of the surgery would reflect care that should be assessed for opportunities for improvement. The exclusion of patients with other ocular and systemic conditions known to increase the risk of an adverse outcome reflects the findings of the two published prediction rule papers for cataract surgery outcomes, by Mangione et al. (1995) and Steinberg et al. (1994). In both papers, the presence of comorbid glaucoma and macular degeneration negatively impacted the likelihood of successful outcomes of surgery. Further, as noted in the prior indicator, exclusion of eyes with ocular conditions that could impact the success of the surgery would NOT eliminate the large majority of eyes undergoing surgery while also minimizing the potential adverse selection that might otherwise occur relative to those patients with the most complex situations who might benefit the most from having surgery to maximize their remaining vision. 2. Evidence of a gap in care Cataract surgery successfully restores vision in the majority of people who have the procedure. Data from a study of 368,256 cataract surgeries show that corrected visual acuity (CDVA) of 0.5 (20/40) or better was achieved in 94.3% and CDVA of 1.0 (20/20) or better was achieved in 61.3% of cases (Lundstrom et al., 2013). Additionally, data from a UK multi-center Cataract National Dataset found a postoperative visual acuity of 6/12 (20/40) or better was achieved for 94.7% of eyes with no co-pathologies and in 79.9% of eyes with one or more co-pathologies (Jaycock et al., 2009). A rate of 85.5-94.7% of patients achieving a 20/40 or better visual acuity in the context of approximately 3 million cataract surgeries in the US annually would mean that between 160,000 to 435,000 individuals would not achieve a 20/40 or better visual acuity which suggests an opportunity for improvement.		
Clinical Recommendation Statement	This is an outcome measure. As such, there is no statement in the guideline specific to this measurement topic.		

Improvement Notation	Higher score indicates better quality
Reference	Reference Type: CITATION Reference Text: 'Jaycock, P., Johnston, R. L., Taylor, H., Adams, M., Tole, D. M., Galloway, P., … UK EPR user group (2009). The Cataract National Dataset electronic multi-centre audit of 55,567 operations: Updating benchmark standards of care in the United Kingdom and internationally. Eye, 23(1), 38-49. doi:10.1038/sj.eye.6703015'
Reference	Reference Type: CITATION Reference Text: 'Lim, J.I., Kim, S.J., Bailey, S.T., Kovach, J.L., Vemulakonda, G.A., Ying, G., Flaxel, C.J. and the American Academy of Ophthalmology Preferred Practice Pattern Retina/Vitreous Committee (2025). Diabetic Retinopathy Preferred Practice Pattern. Ophthalmology. 2025 in press. doi: 10.1016/j.ophtha.2024.12.020. '
Reference	Reference Type: CITATION Reference Text: 'Lundstrom, M., Barry, P., Henry, Y., Rosen, P., & Stenevi, U. (2013). Visual outcome of cataract surgery; Study from the European Registry of Quality Outcomes for Cataract and Refractive Surgery. Journal of Cataract & Refractive Surgery, 39(5), 673-679. doi:10.1016/j.jcrs.2012.11.026'
Reference	Reference Type: CITATION Reference Text: 'Mangione, C. M., Orav, J., Lawrence, M. G., Phillips, R.S., Seddon, J.M., & Goldman, L. (1995). Prediction of visual function after cataract surgery: A prospectively validated model. Archives of Ophthalmology, 113(10), 1305-1311. doi:10.1001/archopht.1995.01100100093037'
Reference	Reference Type: CITATION Reference Text: 'National Eye Institute. (2019). Cataract data and statistics. https://nei.nih.gov/eyedata/cataract'
Reference	Reference Type: CITATION Reference Text: 'Steinberg, E. P., Tielsch, J. M., Schein, O. D., Javitt, J. C., Sharkey, P., Cassard, S. D., … Damiano, A. M. (1994). National study of cataract surgery outcomes: Variation in 4-month postoperative outcomes as reflected in multiple outcome measures. Ophthalmology, 101(6), 1131-1141. doi:10.1016/s0161-6420(94)31210-3'
Definition	None
Guidance	This eCQM is an episode-based measure. An episode for this measure is defined as each cataract surgery during the measurement period, including instances where more than one cataract procedure was performed during the measurement period. Every cataract surgery during the measurement period should be counted as a measurable denominator event for the measure calculation. Only procedures performed during January 1 - September 30 of the measurement period will be considered for this measure, in order to determine if 20/40 or better visual acuity has been achieved within the 90 days following the cataract procedure. Cataract procedures performed during October 1 - December 31 are excluded from the initial population. The measure, as written, does not specifically require documentation of laterality. Coding limitations in particular clinical terminologies do not currently allow for that level of specificity (ICD-10-CM includes laterality, but SNOMED-CT does not uniformly include this distinction). Therefore, at this time, it is not a requirement of this measure to indicate laterality of the diagnoses, findings or procedures. Available coding to capture the data elements specified in this measure has been provided. It is assumed that the eligible clinician will record laterality in the patient medical record, as quality care and clinical documentation should include laterality. This measure is to be reported by the clinician performing the cataract surgery procedure. Clinicians who provide only preoperative or postoperative management of cataract patients are not eligible for this measure. Telehealth encounters are not eligible for this measure because the measure does not contain telehealth-eligible encounter codes. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All cataract surgeries performed between January and September of the measurement period for patients 18 years and older
Denominator	Equals Initial Population
Denominator Exclusions	Cataract surgeries in patients with significant ocular conditions impacting the visual outcome of surgery Significant ocular conditions include: amblyopia, burn confined to eye and adnexa, cataracts econdary to ocular disorders, congenital cataract, mature or hypermature cataract, posterior polar cataract, central corneal ulcer, certain types of iridocyclitis, choroidal degenerations, choroidal detachment, choroidal hemorrhage and rupture, cloudy cornea, corneal edema, disorders of cornea including corneal opacity, degeneration of macula and posterior pole, degenerative disorders of globe, diabetic macular edema, diabetic retinopathy disorders of optic chiasm, disorders of visual cortex, disseminated chorioretinitis and disseminated retinochoroiditis, focal chorioretinitis and focal retinochoroiditis, glaucoma, hereditary dystrophies (choroidal, corneal, retinal), hypotony of eye, injury to optic nerve and pathways, macular scare of posterior polar, morgagnian cataract, nystagmus and other irregular eye movements, open wound of eyeball, optic atrophy, optic neuritis, pathologic myopia, posterior lenticonus, prior penetrating keratoplasty, purulent endophthalmitis, retinal detachment with retinal defect, retinal vascular occlusion, retrolental fibroplasias, scleritis, separation of retinal layers, traumatic cataract, uveitis, vascular disorders of iris and ciliary body, and visual field defects
Numerator	Cataract surgeries with best-corrected visual acuity of 20/40 or better (distance or near) achieved in the operative eye within 90 days following cataract surgery
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Table of Contents

Population Criteria

Initial Population

```
"Cataract Surgery Between January and September of Measurement Period" CataractSurgeryPerformed
  where AgeInYearsAt(date from start of "Measurement Period") >= 18
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
"Cataract Surgeries in Patients with Significant Ocular Conditions Impacting the Visual Outcome of Surgery"
```

Numerator

```
"Cataract Surgery Between January and September of Measurement Period" CataractSurgeryPerformed
  with ( ["Physical Exam, Performed": "Best corrected visual acuity (observable entity)"]
    union ["Physical Exam, Performed": "Best Corrected Visual Acuity Exam Using Snellen Chart"] ) VisualAcuityExamPerformed
    such that Global."NormalizeInterval" ( VisualAcuityExamPerformed.relevantDatetime, VisualAcuityExamPerformed.relevantPeriod ) 90 days or less after day of end of
Global."NormalizeInterval" ( CataractSurgeryPerformed.relevantDatetime, CataractSurgeryPerformed.relevantPeriod )
      and VisualAcuityExamPerformed.result in "Visual Acuity 20/40 or Better"
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Cataract Surgeries in Patients with Significant Ocular Conditions Impacting the Visual Outcome of Surgery

```
"Cataract Surgery Between January and September of Measurement Period" CataractSurgeryPerformed
  with ( ["Diagnosis": "Acute and Subacute Iridocyclitis"]
    union ["Diagnosis": "Amblyopia"]
    union ["Diagnosis": "Burn Confined to Eye and Adnexa"]
    union ["Diagnosis": "Cataract Secondary to Ocular Disorders"]
    union ["Diagnosis": "Cataract Congenital"]
    union ["Diagnosis": "Cataract Mature or Hypermature"]
    union ["Diagnosis": "Cataract Posterior Polar"]
    union ["Diagnosis": "Central Corneal Ulcer"]
    union ["Diagnosis": "Certain Types of Iridocyclitis"]
    union ["Diagnosis": "Choroidal Degenerations"]
    union ["Diagnosis": "Choroidal Detachment"]
    union ["Diagnosis": "Choroidal Hemorrhage and Rupture"]
    union ["Diagnosis": "Chronic Iridocyclitis"]
    union ["Diagnosis": "Cloudy Cornea"]
    union ["Diagnosis": "Corneal Edema"]
    union ["Diagnosis": "Disorders of Cornea Including Corneal Opacity"]
    union ["Diagnosis": "Degeneration of Macula and Posterior Pole"]
    union ["Diagnosis": "Degenerative Disorders of Globe"]
    union ["Diagnosis": "Diabetic Macular Edema"]
    union ["Diagnosis": "Diabetic Retinopathy"]
    union ["Diagnosis": "Disorders of Optic Chiasm"]
    union ["Diagnosis": "Disorders of Visual Cortex"]
    union ["Diagnosis": "Disseminated Chorioretinitis and Disseminated Retinochoroiditis"]
    union ["Diagnosis": "Focal Chorioretinitis and Focal Retinochoroiditis"]
    union ["Diagnosis": "Glaucoma"]
    union ["Diagnosis": "Glaucoma Associated with Congenital Anomalies and Dystrophies and Systemic Syndromes"]
    union ["Diagnosis": "Hereditary Choroidal Dystrophies"]
    union ["Diagnosis": "Hereditary Corneal Dystrophies"]
    union ["Diagnosis": "Hereditary Retinal Dystrophies"]
    union ["Diagnosis": "Hypotony of Eye"]
    union ["Diagnosis": "Injury to Optic Nerve and Pathways"]
    union ["Diagnosis": "Macular Scar of Posterior Polar"]
    union ["Diagnosis": "Morgagnian Cataract"]
    union ["Diagnosis": "Nystagmus and Other Irregular Eye Movements"]
    union ["Diagnosis": "Open Wound of Eyeball"]
    union ["Diagnosis": "Optic Atrophy"]
    union ["Diagnosis": "Optic Neuritis"]
    union ["Diagnosis": "Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis"]
    union ["Diagnosis": "Other Background Retinopathy and Retinal Vascular Changes"]
    union ["Diagnosis": "Other Disorders of Optic Nerve"]
    union ["Diagnosis": "Other Endophthalmitis"]
    union ["Diagnosis": "Other Proliferative Retinopathy"]
    union ["Diagnosis": "Pathologic Myopia"]
    union ["Diagnosis": "Posterior Lenticonus"]
    union ["Diagnosis": "Prior Penetrating Keratoplasty"]
    union ["Diagnosis": "Purulent Endophthalmitis"]
    union ["Diagnosis": "Retinal Detachment with Retinal Defect"]
    union ["Diagnosis": "Retinal Vascular Occlusion"]
    union ["Diagnosis": "Retrolental Fibroplasias"]
    union ["Diagnosis": "Scleritis"]
    union ["Diagnosis": "Separation of Retinal Layers"]
    union ["Diagnosis": "Traumatic Cataract"]
    union ["Diagnosis": "Uveitis"]
    union ["Diagnosis": "Vascular Disorders of Iris and Ciliary Body"]
    union ["Diagnosis": "Visual Field Defects"] ) ComorbidDiagnosis
    such that ComorbidDiagnosis.prevalencePeriod overlaps before day of Global."NormalizeInterval" ( CataractSurgeryPerformed.relevantDatetime,
CataractSurgeryPerformed.relevantPeriod )
```

Cataract Surgery Between January and September of Measurement Period

["Procedure, Performed": "Cataract Surgery"] CataractSurgeryProcedure
where Global."NormalizeInterval" (CataractSurgeryProcedure.relevantDatetime, CataractSurgeryProcedure.relevantPeriod) during day of "Measurement Period"
and Global."NormalizeInterval" (CataractSurgeryProcedure.relevantDatetime, CataractSurgeryProcedure.relevantPeriod) starts 92 days or more before day of end of "Measurement Period"

Denominator

"Initial Population"

Denominator Exclusions

"Cataract Surgeries in Patients with Significant Ocular Conditions Impacting the Visual Outcome of Surgery"

Initial Population

"Cataract Surgery Between January and September of Measurement Period" CataractSurgeryPerformed
where AgeInYearsAt(date from start of "Measurement Period") >= 18

Numerator

"Cataract Surgery Between January and September of Measurement Period" CataractSurgeryPerformed
with (["Physical Exam, Performed": "Best corrected visual acuity (observable entity)"]
union ["Physical Exam, Performed": "Best Corrected Visual Acuity Exam Using Snellen Chart"]) VisualAcuityExamPerformed
such that Global."NormalizeInterval" (VisualAcuityExamPerformed.relevantDatetime, VisualAcuityExamPerformed.relevantPeriod) 90 days or less after day of end of Global."NormalizeInterval" (CataractSurgeryPerformed.relevantDatetime, CataractSurgeryPerformed.relevantPeriod)
and VisualAcuityExamPerformed.result in "Visual Acuity 20/40 or Better"

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

if pointInTime is not null then Interval[pointInTime, pointInTime]
else if period is not null then period
else null as Interval<DateTime>

Terminology

- code "Best corrected visual acuity (observable entity)" ("SNOMEDCT Code (419775003)")
- valueset "Acute and Subacute Iridocyclitis" (2.16.840.1.113883.3.526.3.1241)
- valueset "Amblyopia" (2.16.840.1.113883.3.526.3.1448)
- valueset "Best Corrected Visual Acuity Exam Using Snellen Chart" (2.16.840.1.113883.3.526.3.1560)
- valueset "Burn Confined to Eye and Adnexa" (2.16.840.1.113883.3.526.3.1409)
- valueset "Cataract Congenital" (2.16.840.1.113883.3.526.3.1412)
- valueset "Cataract Mature or Hypermature" (2.16.840.1.113883.3.526.3.1413)
- valueset "Cataract Posterior Polar" (2.16.840.1.113883.3.526.3.1414)
- valueset "Cataract Secondary to Ocular Disorders" (2.16.840.1.113883.3.526.3.1410)
- valueset "Cataract Surgery" (2.16.840.1.113883.3.526.3.1411)
- valueset "Central Corneal Ulcer" (2.16.840.1.113883.3.526.3.1428)
- valueset "Certain Types of Iridocyclitis" (2.16.840.1.113883.3.526.3.1415)
- valueset "Choroidal Degenerations" (2.16.840.1.113883.3.526.3.1450)
- valueset "Choroidal Detachment" (2.16.840.1.113883.3.526.3.1451)
- valueset "Choroidal Hemorrhage and Rupture" (2.16.840.1.113883.3.526.3.1452)
- valueset "Chronic Iridocyclitis" (2.16.840.1.113883.3.526.3.1416)
- valueset "Cloudy Cornea" (2.16.840.1.113883.3.526.3.1417)
- valueset "Corneal Edema" (2.16.840.1.113883.3.526.3.1418)
- valueset "Degeneration of Macula and Posterior Pole" (2.16.840.1.113883.3.526.3.1453)
- valueset "Degenerative Disorders of Globe" (2.16.840.1.113883.3.526.3.1454)
- valueset "Diabetic Macular Edema" (2.16.840.1.113883.3.526.3.1455)
- valueset "Diabetic Retinopathy" (2.16.840.1.113883.3.526.3.327)
- valueset "Disorders of Cornea Including Corneal Opacity" (2.16.840.1.113883.3.526.3.1419)
- valueset "Disorders of Optic Chiasm" (2.16.840.1.113883.3.526.3.1457)
- valueset "Disorders of Visual Cortex" (2.16.840.1.113883.3.526.3.1458)
- valueset "Disseminated Chorioretinitis and Disseminated Retinochoroiditis" (2.16.840.1.113883.3.526.3.1459)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Focal Chorioretinitis and Focal Retinochoroiditis" (2.16.840.1.113883.3.526.3.1460)
- valueset "Glaucoma" (2.16.840.1.113883.3.526.3.1423)
- valueset "Glaucoma Associated with Congenital Anomalies and Dystrophies and Systemic Syndromes" (2.16.840.1.113883.3.526.3.1461)
- valueset "Hereditary Choroidal Dystrophies" (2.16.840.1.113883.3.526.3.1462)
- valueset "Hereditary Corneal Dystrophies" (2.16.840.1.113883.3.526.3.1424)
- valueset "Hereditary Retinal Dystrophies" (2.16.840.1.113883.3.526.3.1463)
- valueset "Hypotony of Eye" (2.16.840.1.113883.3.526.3.1426)
- valueset "Injury to Optic Nerve and Pathways" (2.16.840.1.113883.3.526.3.1427)
- valueset "Macular Scar of Posterior Polar" (2.16.840.1.113883.3.526.3.1559)
- valueset "Morgagnian Cataract" (2.16.840.1.113883.3.526.3.1558)
- valueset "Nystagmus and Other Irregular Eye Movements" (2.16.840.1.113883.3.526.3.1465)
- valueset "Open Wound of Eyeball" (2.16.840.1.113883.3.526.3.1430)
- valueset "Optic Atrophy" (2.16.840.1.113883.3.526.3.1466)
- valueset "Optic Neuritis" (2.16.840.1.113883.3.526.3.1467)
- valueset "Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis" (2.16.840.1.113883.3.526.3.1468)
- valueset "Other Background Retinopathy and Retinal Vascular Changes" (2.16.840.1.113883.3.526.3.1469)
- valueset "Other Disorders of Optic Nerve" (2.16.840.1.113883.3.526.3.1471)
- valueset "Other Endophthalmitis" (2.16.840.1.113883.3.526.3.1473)
- valueset "Other Proliferative Retinopathy" (2.16.840.1.113883.3.526.3.1480)
- valueset "Pathologic Myopia" (2.16.840.1.113883.3.526.3.1432)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Posterior Lenticonus" (2.16.840.1.113883.3.526.3.1433)

- valueset "Prior Penetrating Keratoplasty" (2.16.840.1.113883.3.526.3.1475)
- valueset "Purulent Endophthalmitis" (2.16.840.1.113883.3.526.3.1477)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Retinal Detachment with Retinal Defect" (2.16.840.1.113883.3.526.3.1478)
- valueset "Retinal Vascular Occlusion" (2.16.840.1.113883.3.526.3.1479)
- valueset "Retrolental Fibroplasias" (2.16.840.1.113883.3.526.3.1438)
- valueset "Scleritis" (2.16.840.1.113762.1.4.1226.1)
- valueset "Separation of Retinal Layers" (2.16.840.1.113883.3.526.3.1482)
- valueset "Traumatic Cataract" (2.16.840.1.113883.3.526.3.1443)
- valueset "Uveitis" (2.16.840.1.113883.3.526.3.1444)
- valueset "Vascular Disorders of Iris and Ciliary Body" (2.16.840.1.113883.3.526.3.1445)
- valueset "Visual Acuity 20/40 or Better" (2.16.840.1.113883.3.526.3.1483)
- valueset "Visual Field Defects" (2.16.840.1.113883.3.526.3.1446)

Data Criteria (QDM Data Elements)

- "Diagnosis: Acute and Subacute Iridocyclitis" using "Acute and Subacute Iridocyclitis (2.16.840.1.113883.3.526.3.1241)"
- "Diagnosis: Amblyopia" using "Amblyopia (2.16.840.1.113883.3.526.3.1448)"
- "Diagnosis: Burn Confined to Eye and Adnexa" using "Burn Confined to Eye and Adnexa (2.16.840.1.113883.3.526.3.1409)"
- "Diagnosis: Cataract Congenital" using "Cataract Congenital (2.16.840.1.113883.3.526.3.1412)"
- "Diagnosis: Cataract Mature or Hypermature" using "Cataract Mature or Hypermature (2.16.840.1.113883.3.526.3.1413)"
- "Diagnosis: Cataract Posterior Polar" using "Cataract Posterior Polar (2.16.840.1.113883.3.526.3.1414)"
- "Diagnosis: Cataract Secondary to Ocular Disorders" using "Cataract Secondary to Ocular Disorders (2.16.840.1.113883.3.526.3.1410)"
- "Diagnosis: Central Corneal Ulcer" using "Central Corneal Ulcer (2.16.840.1.113883.3.526.3.1428)"
- "Diagnosis: Certain Types of Iridocyclitis" using "Certain Types of Iridocyclitis (2.16.840.1.113883.3.526.3.1415)"
- "Diagnosis: Choroidal Degenerations" using "Choroidal Degenerations (2.16.840.1.113883.3.526.3.1450)"
- "Diagnosis: Choroidal Detachment" using "Choroidal Detachment (2.16.840.1.113883.3.526.3.1451)"
- "Diagnosis: Choroidal Hemorrhage and Rupture" using "Choroidal Hemorrhage and Rupture (2.16.840.1.113883.3.526.3.1452)"
- "Diagnosis: Chronic Iridocyclitis" using "Chronic Iridocyclitis (2.16.840.1.113883.3.526.3.1416)"
- "Diagnosis: Cloudy Cornea" using "Cloudy Cornea (2.16.840.1.113883.3.526.3.1417)"
- "Diagnosis: Corneal Edema" using "Corneal Edema (2.16.840.1.113883.3.526.3.1418)"
- "Diagnosis: Degeneration of Macula and Posterior Pole" using "Degeneration of Macula and Posterior Pole (2.16.840.1.113883.3.526.3.1453)"
- "Diagnosis: Degenerative Disorders of Globe" using "Degenerative Disorders of Globe (2.16.840.1.113883.3.526.3.1454)"
- "Diagnosis: Diabetic Macular Edema" using "Diabetic Macular Edema (2.16.840.1.113883.3.526.3.1455)"
- "Diagnosis: Diabetic Retinopathy" using "Diabetic Retinopathy (2.16.840.1.113883.3.526.3.327)"
- "Diagnosis: Disorders of Cornea Including Corneal Opacity" using "Disorders of Cornea Including Corneal Opacity (2.16.840.1.113883.3.526.3.1419)"
- "Diagnosis: Disorders of Optic Chiasm" using "Disorders of Optic Chiasm (2.16.840.1.113883.3.526.3.1457)"
- "Diagnosis: Disorders of Visual Cortex" using "Disorders of Visual Cortex (2.16.840.1.113883.3.526.3.1458)"
- "Diagnosis: Disseminated Chorioretinitis and Disseminated Retinochoroiditis" using "Disseminated Chorioretinitis and Disseminated Retinochoroiditis (2.16.840.1.113883.3.526.3.1459)"
- "Diagnosis: Focal Chorioretinitis and Focal Retinochoroiditis" using "Focal Chorioretinitis and Focal Retinochoroiditis (2.16.840.1.113883.3.526.3.1460)"
- "Diagnosis: Glaucoma Associated with Congenital Anomalies and Dystrophies and Systemic Syndromes" using "Glaucoma Associated with Congenital Anomalies and Dystrophies and Systemic Syndromes (2.16.840.1.113883.3.526.3.1461)"
- "Diagnosis: Glaucoma" using "Glaucoma (2.16.840.1.113883.3.526.3.1423)"
- "Diagnosis: Hereditary Choroidal Dystrophies" using "Hereditary Choroidal Dystrophies (2.16.840.1.113883.3.526.3.1462)"
- "Diagnosis: Hereditary Corneal Dystrophies" using "Hereditary Corneal Dystrophies (2.16.840.1.113883.3.526.3.1424)"
- "Diagnosis: Hereditary Retinal Dystrophies" using "Hereditary Retinal Dystrophies (2.16.840.1.113883.3.526.3.1463)"
- "Diagnosis: Hypotony of Eye" using "Hypotony of Eye (2.16.840.1.113883.3.526.3.1426)"
- "Diagnosis: Injury to Optic Nerve and Pathways" using "Injury to Optic Nerve and Pathways (2.16.840.1.113883.3.526.3.1427)"
- "Diagnosis: Macular Scar of Posterior Polar" using "Macular Scar of Posterior Polar (2.16.840.1.113883.3.526.3.1559)"
- "Diagnosis: Morgagnian Cataract" using "Morgagnian Cataract (2.16.840.1.113883.3.526.3.1558)"
- "Diagnosis: Nystagmus and Other Irregular Eye Movements" using "Nystagmus and Other Irregular Eye Movements (2.16.840.1.113883.3.526.3.1465)"
- "Diagnosis: Open Wound of Eyeball" using "Open Wound of Eyeball (2.16.840.1.113883.3.526.3.1430)"
- "Diagnosis: Optic Atrophy" using "Optic Atrophy (2.16.840.1.113883.3.526.3.1466)"
- "Diagnosis: Optic Neuritis" using "Optic Neuritis (2.16.840.1.113883.3.526.3.1467)"
- "Diagnosis: Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis" using "Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis (2.16.840.1.113883.3.526.3.1468)"
- "Diagnosis: Other Background Retinopathy and Retinal Vascular Changes" using "Other Background Retinopathy and Retinal Vascular Changes (2.16.840.1.113883.3.526.3.1469)"
- "Diagnosis: Other Disorders of Optic Nerve" using "Other Disorders of Optic Nerve (2.16.840.1.113883.3.526.3.1471)"
- "Diagnosis: Other Endophthalmitis" using "Other Endophthalmitis (2.16.840.1.113883.3.526.3.1473)"
- "Diagnosis: Other Proliferative Retinopathy" using "Other Proliferative Retinopathy (2.16.840.1.113883.3.526.3.1480)"
- "Diagnosis: Pathologic Myopia" using "Pathologic Myopia (2.16.840.1.113883.3.526.3.1432)"
- "Diagnosis: Posterior Lenticonus" using "Posterior Lenticonus (2.16.840.1.113883.3.526.3.1433)"
- "Diagnosis: Prior Penetrating Keratoplasty" using "Prior Penetrating Keratoplasty (2.16.840.1.113883.3.526.3.1475)"
- "Diagnosis: Purulent Endophthalmitis" using "Purulent Endophthalmitis (2.16.840.1.113883.3.526.3.1477)"
- "Diagnosis: Retinal Detachment with Retinal Defect" using "Retinal Detachment with Retinal Defect (2.16.840.1.113883.3.526.3.1478)"
- "Diagnosis: Retinal Vascular Occlusion" using "Retinal Vascular Occlusion (2.16.840.1.113883.3.526.3.1479)"
- "Diagnosis: Retrolental Fibroplasias" using "Retrolental Fibroplasias (2.16.840.1.113883.3.526.3.1438)"
- "Diagnosis: Scleritis" using "Scleritis (2.16.840.1.113762.1.4.1226.1)"
- "Diagnosis: Separation of Retinal Layers" using "Separation of Retinal Layers (2.16.840.1.113883.3.526.3.1482)"
- "Diagnosis: Traumatic Cataract" using "Traumatic Cataract (2.16.840.1.113883.3.526.3.1443)"
- "Diagnosis: Uveitis" using "Uveitis (2.16.840.1.113883.3.526.3.1444)"
- "Diagnosis: Vascular Disorders of Iris and Ciliary Body" using "Vascular Disorders of Iris and Ciliary Body (2.16.840.1.113883.3.526.3.1445)"
- "Diagnosis: Visual Field Defects" using "Visual Field Defects (2.16.840.1.113883.3.526.3.1446)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Physical Exam, Performed: Best corrected visual acuity (observable entity)" using "Best corrected visual acuity (observable entity) (SNOMEDCT Code 419775003)"
- "Physical Exam, Performed: Best Corrected Visual Acuity Exam Using Snellen Chart" using "Best Corrected Visual Acuity Exam Using Snellen Chart (2.16.840.1.113883.3.526.3.1560)"
- "Procedure, Performed: Cataract Surgery" using "Cataract Surgery (2.16.840.1.113883.3.526.3.1411)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**		
CMS ID	138	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	e35791df-5b25-41bb-b260-673337bc44a8
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Measure Developer	American Medical Association (AMA)		
Endorsed By	None		
Description	Percentage of patients aged 12 years and older who were screened for tobacco use one or more times during the measurement period AND who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period if identified as a tobacco user. Three rates are reported: a. Percentage of patients aged 12 years and older who were screened for tobacco use one or more times during the measurement period b. Percentage of patients aged 12 years and older who were identified as a tobacco user during the measurement period who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period c. Percentage of patients aged 12 years and older who were screened for tobacco use one or more times during the measurement period AND who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period if identified as a tobacco user		
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Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	This measure is intended to promote adult tobacco screening and tobacco cessation interventions for those who use tobacco products. There is good evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) is successful in helping tobacco users quit. Tobacco users who are able to stop using tobacco lower their risk for heart disease, lung disease, and stroke.		
Clinical Recommendation Statement	The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration (FDA)-approved pharmacotherapy for cessation to nonpregnant adults who use tobacco (Grade A Recommendation) (U.S. Preventive Services Task Force, 2021). The USPSTF recommends that clinicians ask all pregnant persons about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant persons who use tobacco (Grade A Recommendation) (U.S. Preventive Services Task Force, 2021). The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women (Grade I Statement) (U.S. Preventive Services Task Force, 2021). The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of electronic cigarettes (e-cigarettes) for tobacco cessation in adults, including pregnant persons. The USPSTF recommends that clinicians direct patients who use tobacco to other tobacco cessation interventions with proven effectiveness and established safety (Grade I Statement) (U.S. Preventive Services Task Force, 2021). The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to		

prevent initiation of tobacco use among school-aged children and adolescents (Grade B Statement) (U.S. Preventive Services Task Force, 2020).

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary care--feasible interventions for the cessation of tobacco use among school-aged children and adolescents (Grade I Statement) (U.S. Preventive Services Task Force, 2020).

All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increase rates of clinician intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).

All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).

Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).

The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).

Improvement Notation

Higher score indicates better quality

Reference

Reference Type: CITATION

Reference Text: 'US Department of Health and Human Services. (2008). 6, Evidence and Recommendations. Treating Tobacco Use and Dependence: 2008 Update. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK63943/'

Reference

Reference Type: CITATION

Reference Text: 'US Preventive Services Task Force. (2021). Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons. US Preventive Services Task Force Recommendation Statement. JAMA, 325(3), 265-279. doi:10.1001/jama.2020.25019'

Reference

Reference Type: CITATION

Reference Text: 'US Preventive Services Task Force. (2020). Primary Care Interventions for Prevention and Cessation of Tobacco Use in Children and Adolescents. US Preventive Services Task Force Recommendation Statement. JAMA, 2020;323(16):1590-1598. doi:10.1001/jama.2020.4679'

Definition

Tobacco Use - Use of any tobacco product

The 2021 USPSTF recommendation references the US Food and Drug Administration definition of tobacco which includes "any product made or derived from tobacco intended for human consumption (except products that meet the definition of drugs), including, but not limited to, cigarettes, cigars (including cigarillos and little cigars), dissolvables, hookah tobacco, nicotine gels, pipe tobacco, roll-your-own tobacco, smokeless tobacco products (including dip, snuff, snus, and chewing tobacco), vapes, electronic cigarettes (e-cigarettes), hookah pens, and other electronic nicotine delivery systems."

The 2021 USPSTF recommendation describes smoking as generally referring to "the inhaling and exhaling of smoke produced by combustible tobacco products such as cigarettes, cigars, and pipes."

The 2021 USPSTF recommendation describes vaping as "the inhaling and exhaling of aerosols produced by e-cigarettes." In addition, it states, "vaping products (i.e., e-cigarettes) usually contain nicotine, which is the addictive ingredient in tobacco. Substances other than tobacco can also be used to smoke or vape. While the 2015 USPSTF recommendation statement used the term 'electronic nicotine delivery systems' or 'ENDS,' the USPSTF recognizes that the field has shifted to using the term 'e-cigarettes' (or 'e-cigs') and uses the term e-cigarettes in the current recommendation statement. e-Cigarettes can come in many shapes and sizes, but generally they heat a liquid that contains nicotine (the addictive drug in tobacco) to produce an aerosol (or 'vapor') that is inhaled ('vaped') by users."

Tobacco Cessation Intervention - Includes brief counseling (3 minutes or less), and/or pharmacotherapy

Note: Concepts aligned with brief counseling (e.g., minimal and intensive advice/counseling interventions conducted both in person and over the phone) are included in the value set for the numerator. Other concepts such as written self-help materials (e.g., brochures, pamphlets) and complementary/alternative therapies are not included in the value set and do not qualify for the numerator. Counseling also may be of longer duration or be performed more frequently, as evidence shows that higher-intensity interventions are associated with higher tobacco cessation rates (U.S. Preventive Services Task Force, 2021).

Guidance

The requirement of two or more visits is to establish that the eligible clinician has an existing relationship with the patient for certain types of encounters.

To satisfy the intent of this measure, a patient must have at least one tobacco use screening during the measurement period. If a patient has multiple tobacco use screenings during the measurement period, only the most recent screening, which has a documented status of tobacco user or tobacco non-user, will be used to satisfy the measure requirements.

If a patient uses any type of tobacco (i.e., smokes or uses smokeless tobacco), the expectation is that they should receive tobacco cessation intervention: either counseling and/or pharmacotherapy.

As noted above in the 2021 USPSTF recommendation statement, the current evidence is insufficient to recommend electronic cigarettes (e-cigarettes) for tobacco cessation. However, as noted above in the Definition section, the 2021 USPSTF recommendation also references the US Food and Drug Administration definition of tobacco, which includes e-cigarettes, hookah pens and other electronic nicotine delivery systems. Therefore, the measure does consider the use of e-cigarettes and other electronic nicotine delivery systems to be tobacco use.

If a patient's tobacco use status is unknown, the patient does not meet the screening requirement and does not meet the numerator for populations 1 or 3. Instances where tobacco use status of "unknown" include: 1) the patient was not screened; or 2) the patient was screened and the patient (or caregiver) was unable to provide a definitive answer.

In order to promote a team-based approach to patient care, the tobacco cessation intervention can be performed by another healthcare provider; therefore, the tobacco use screening and tobacco cessation intervention do not need to be performed by the same provider or clinician.

This measure contains three reporting rates which aim to identify patients who were screened for tobacco use (rate/population 1), patients who were identified as tobacco users and who received a tobacco cessation intervention (rate/population 2), and a comprehensive look at the overall performance on tobacco screening and cessation intervention (rate/population 3). By separating this measure into various reporting rates, the eligible clinician will be able to better ascertain where gaps in performance exist, and identify opportunities for improvement. The overall rate (rate/population 3) can be utilized to compare performance to published versions of this measure prior to the 2018 performance year, when the measure had a single performance rate. For accountability reporting in the CMS MIPS program, the rate for population 2 is used for performance.

The denominator of population criteria 2 is a subset of the resulting numerator for population criteria 1, as population criteria 2 is limited to assessing if patients identified as tobacco users received an appropriate tobacco cessation intervention. For all patients, population criteria 1 and 3 are applicable, but population criteria 2 will only be applicable

	for those patients who are identified as tobacco users. Therefore, data for every patient that meets the initial population criteria will only be submitted for population 1 and 3, whereas data submitted for population 2 will be for a subset of patients who meet the initial population criteria, as the denominator has been further limited to those who were identified as tobacco users. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All patients aged 12 years and older seen for at least two visits or at least one preventive visit during the measurement period
Denominator	Population 1: Equals Initial Population. Population 2: Equals Initial Population who were screened for tobacco use during the measurement period and identified as a tobacco user. Population 3: Equals Initial Population.
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period
Numerator	Population 1: Patients who were screened for tobacco use at least once during the measurement period. Population 2: Patients who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period. Population 3: Patients who were screened for tobacco use at least once during the measurement period AND who received tobacco cessation intervention during the measurement period or in the six months prior to the measurement period if identified as a tobacco user.
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Table of Contents

Population Criteria

Population Criteria 1

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 12
  and ( Count("Qualifying Visit During Measurement Period") >= 2
     or exists "Preventive Visit During Measurement Period"
  )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
```

Numerator

```
"Most Recent Tobacco Use Screening Indicates Tobacco Non User" is not null
  or "Most Recent Tobacco Use Screening Indicates Tobacco User" is not null
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Population Criteria 2

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 12
  and ( Count("Qualifying Visit During Measurement Period") >= 2
     or exists "Preventive Visit During Measurement Period"
  )
```

Denominator

```
"Initial Population"
  and "Most Recent Tobacco Use Screening Indicates Tobacco User" is not null
```

Denominator Exclusions

Hospice."Has Hospice Services"

Numerator

exists "Tobacco Cessation Counseling Given"
  or exists "Tobacco Cessation Pharmacotherapy Ordered"
  or exists "Active Pharmacotherapy for Tobacco Cessation"

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Population Criteria 3

Initial Population

AgeInYearsAt(date from start of "Measurement Period") >= 12
  and (Count("Qualifying Visit During Measurement Period") >= 2
     or exists "Preventive Visit During Measurement Period"
)

Denominator

"Initial Population"

Denominator Exclusions

Hospice."Has Hospice Services"

Numerator

"Most Recent Tobacco Use Screening Indicates Tobacco Non User" is not null
  or ("Most Recent Tobacco Use Screening Indicates Tobacco User" is not null
     and (exists "Tobacco Cessation Counseling Given"
        or exists "Tobacco Cessation Pharmacotherapy Ordered"
        or exists "Active Pharmacotherapy for Tobacco Cessation"
)
)

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Active Pharmacotherapy for Tobacco Cessation

["Medication, Active": "Tobacco Use Cessation Pharmacotherapy"] TakingCessationPharmacotherapy
  where Global."NormalizeInterval" (TakingCessationPharmacotherapy.relevantDatetime, TakingCessationPharmacotherapy.relevantPeriod) during day of Interval[start of "Measurement Period" - 6 months, end of "Measurement Period"]

Denominator 1

"Initial Population"

Denominator 2

"Initial Population"
  and "Most Recent Tobacco Use Screening Indicates Tobacco User" is not null

Denominator 3

"Initial Population"

Denominator Exclusion

Hospice."Has Hospice Services"

Hospice.Has Hospice Services

exists (["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where (InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
       or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
)
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists (["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
     where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
)
  or exists (["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
     where HospiceAssessment.result ~ "Yes (qualifier value)"

```
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
    )
    or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
        where HospiceOrder.authorDatetime during day of "Measurement Period"
    )
    or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
        where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
    )
  or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
        where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
    )
```

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 12
  and ( Count("Qualifying Visit During Measurement Period") >= 2
      or exists "Preventive Visit During Measurement Period"
    )
```

Most Recent Tobacco Use Screening Indicates Tobacco Non User

```
( Last(["Assessment, Performed": "Tobacco Use Screening"] TobaccoUseScreening
    where Global."NormalizeInterval"(TobaccoUseScreening.relevantDatetime, TobaccoUseScreening.relevantPeriod) during day of "Measurement Period"
    sort by start of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)
) ) MostRecentTobaccoUseScreening
  where MostRecentTobaccoUseScreening.result in "Tobacco Non User"
```

Most Recent Tobacco Use Screening Indicates Tobacco User

```
( Last(["Assessment, Performed": "Tobacco Use Screening"] TobaccoUseScreening
    where Global."NormalizeInterval"(TobaccoUseScreening.relevantDatetime, TobaccoUseScreening.relevantPeriod) during day of "Measurement Period"
    sort by start of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)
) ) MostRecentTobaccoUseScreening
  where MostRecentTobaccoUseScreening.result in "Tobacco User"
```

Numerator 1

```
"Most Recent Tobacco Use Screening Indicates Tobacco Non User" is not null
  or "Most Recent Tobacco Use Screening Indicates Tobacco User" is not null
```

Numerator 2

```
exists "Tobacco Cessation Counseling Given"
  or exists "Tobacco Cessation Pharmacotherapy Ordered"
  or exists "Active Pharmacotherapy for Tobacco Cessation"
```

Numerator 3

```
"Most Recent Tobacco Use Screening Indicates Tobacco Non User" is not null
  or ( "Most Recent Tobacco Use Screening Indicates Tobacco User" is not null
      and ( exists "Tobacco Cessation Counseling Given"
          or exists "Tobacco Cessation Pharmacotherapy Ordered"
          or exists "Active Pharmacotherapy for Tobacco Cessation"
      )
  )
```

Preventive Visit During Measurement Period

```
( ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care, Established Office Visit, 0 to 17"]
  union ["Encounter, Performed": "Preventive Care Services, Initial Office Visit, 0 to 17"]
  union ["Encounter, Performed": "Preventive Care Services Group Counseling"]
  union ["Encounter, Performed": "Preventive Care Services Individual Counseling"]
  union ["Encounter, Performed": "Unlisted preventive medicine service"]
  union ["Encounter, Performed": "Postoperative follow-up visit, normally included in the surgical package, to indicate that an evaluation and management service was
performed during a postoperative period for a reason(s) related to the original procedure"]
  union ["Encounter, Performed": "Nutrition Services"] ) PreventiveEncounter
  where PreventiveEncounter.relevantPeriod during day of "Measurement Period"
```

Qualifying Visit During Measurement Period

```
( ["Encounter, Performed": "Health behavior intervention, individual, face-to-face; initial 30 minutes"]
  union ["Encounter, Performed": "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision
making)"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Occupational Therapy Evaluation"]
  union ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Physical Therapy Evaluation"]
  union ["Encounter, Performed": "Psych Visit Diagnostic Evaluation"]
  union ["Encounter, Performed": "Psych Visit Psychotherapy"]
  union ["Encounter, Performed": "Psychoanalysis"]
  union ["Encounter, Performed": "Speech and Hearing Evaluation"]
  union ["Encounter, Performed": "Telephone Visits"]
  union ["Encounter, Performed": "Virtual Encounter"] ) OfficeBasedEncounter
  where OfficeBasedEncounter.relevantPeriod during day of "Measurement Period"
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "Federal Administrative Sex"]
```

Tobacco Cessation Counseling Given

```
( ["Intervention, Performed": "Tobacco Use Cessation Counseling"] TobaccoCessationCounseling
    where Global."NormalizeInterval" ( TobaccoCessationCounseling.relevantDatetime, TobaccoCessationCounseling.relevantPeriod ) during day of Interval[start of "Measurement Period" - 6 months, end of "Measurement Period"]
  )
  union ( ["Diagnosis": "Tobacco abuse counseling"] TobaccoCounseling
      where ( TobaccoCounseling.prevalencePeriod ) starts during day of Interval[start of "Measurement Period" - 6 months, end of "Measurement Period"]
  )
```

Tobacco Cessation Pharmacotherapy Ordered

```
["Medication, Order": "Tobacco Use Cessation Pharmacotherapy"] CessationPharmacotherapyOrdered
  where CessationPharmacotherapyOrdered.authorDatetime during day of Interval[start of "Measurement Period" - 6 months, end of "Measurement Period"]
```

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)" ("CPT Code (96156)")
- code "Health behavior intervention, individual, face-to-face; initial 30 minutes" ("CPT Code (96158)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Postoperative follow-up visit, normally included in the surgical package, to indicate that an evaluation and management service was performed during a postoperative period for a reason(s) related to the original procedure" ("CPT Code (99024)")
- code "Tobacco abuse counseling" ("ICD10CM Code (Z71.6)")
- code "Unlisted preventive medicine service" ("CPT Code (99429)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)
- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Nutrition Services" (2.16.840.1.113883.3.464.1003.1006)
- valueset "Occupational Therapy Evaluation" (2.16.840.1.113883.3.526.3.1011)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Physical Therapy Evaluation" (2.16.840.1.113883.3.526.3.1022)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Group Counseling" (2.16.840.1.113883.3.464.1003.101.12.1027)
- valueset "Preventive Care Services Individual Counseling" (2.16.840.1.113883.3.464.1003.101.12.1026)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Preventive Care Services, Initial Office Visit, 0 to 17" (2.16.840.1.113883.3.464.1003.101.12.1022)
- valueset "Preventive Care, Established Office Visit, 0 to 17" (2.16.840.1.113883.3.464.1003.101.12.1024)
- valueset "Psych Visit Diagnostic Evaluation" (2.16.840.1.113883.3.526.3.1492)
- valueset "Psych Visit Psychotherapy" (2.16.840.1.113883.3.526.3.1496)
- valueset "Psychoanalysis" (2.16.840.1.113883.3.526.3.1141)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Speech and Hearing Evaluation" (2.16.840.1.113883.3.526.3.1530)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)
- valueset "Tobacco Non User" (2.16.840.1.113883.3.526.3.1189)
- valueset "Tobacco Use Cessation Counseling" (2.16.840.1.113883.3.526.3.509)
- valueset "Tobacco Use Cessation Pharmacotherapy" (2.16.840.1.113883.3.526.3.1190)
- valueset "Tobacco Use Screening" (2.16.840.1.113883.3.526.3.1278)
- valueset "Tobacco User" (2.16.840.1.113883.3.526.3.1170)
- valueset "Virtual Encounter" (2.16.840.1.113883.3.464.1003.101.12.1089)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Assessment, Performed: Tobacco Use Screening" using "Tobacco Use Screening (2.16.840.1.113883.3.526.3.1278)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Diagnosis: Tobacco abuse counseling" using "Tobacco abuse counseling (ICD10CM Code Z71.6)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)" using "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making) (CPT Code 96156)"
- "Encounter, Performed: Health behavior intervention, individual, face-to-face; initial 30 minutes" using "Health behavior intervention, individual, face-to-face; initial 30 minutes (CPT Code 96158)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Nutrition Services" using "Nutrition Services (2.16.840.1.113883.3.464.1003.1006)"
- "Encounter, Performed: Occupational Therapy Evaluation" using "Occupational Therapy Evaluation (2.16.840.1.113883.3.526.3.1011)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Physical Therapy Evaluation" using "Physical Therapy Evaluation (2.16.840.1.113883.3.526.3.1022)"
- "Encounter, Performed: Postoperative follow-up visit, normally included in the surgical package, to indicate that an evaluation and management service was performed during a postoperative period for a reason(s) related to the original procedure" using "Postoperative follow-up visit, normally included in the surgical package, to indicate that an evaluation and management service was performed during a postoperative period for a reason(s) related to the original procedure (CPT Code 99024)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Group Counseling" using "Preventive Care Services Group Counseling (2.16.840.1.113883.3.464.1003.101.12.1027)"
- "Encounter, Performed: Preventive Care Services Individual Counseling" using "Preventive Care Services Individual Counseling (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Preventive Care Services, Initial Office Visit, 0 to 17" using "Preventive Care Services, Initial Office Visit, 0 to 17 (2.16.840.1.113883.3.464.1003.101.12.1022)"
- "Encounter, Performed: Preventive Care, Established Office Visit, 0 to 17" using "Preventive Care, Established Office Visit, 0 to 17 (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Encounter, Performed: Psych Visit Diagnostic Evaluation" using "Psych Visit Diagnostic Evaluation (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit Psychotherapy" using "Psych Visit Psychotherapy (2.16.840.1.113883.3.526.3.1496)"
- "Encounter, Performed: Psychoanalysis" using "Psychoanalysis (2.16.840.1.113883.3.526.3.1141)"
- "Encounter, Performed: Speech and Hearing Evaluation" using "Speech and Hearing Evaluation (2.16.840.1.113883.3.526.3.1530)"

- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Encounter, Performed: Unlisted preventive medicine service" using "Unlisted preventive medicine service (CPT Code 99429)"
- "Encounter, Performed: Virtual Encounter" using "Virtual Encounter (2.16.840.1.113883.3.464.1003.101.12.1089)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Tobacco Use Cessation Counseling" using "Tobacco Use Cessation Counseling (2.16.840.1.113883.3.526.3.509)"
- "Medication, Active: Tobacco Use Cessation Pharmacotherapy" using "Tobacco Use Cessation Pharmacotherapy (2.16.840.1.113883.3.526.3.1190)"
- "Medication, Order: Tobacco Use Cessation Pharmacotherapy" using "Tobacco Use Cessation Pharmacotherapy (2.16.840.1.113883.3.526.3.1190)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

◢ SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

◢ SDE Payer

["Patient Characteristic Payer": "Payer Type"]

◢ SDE Race

["Patient Characteristic Race": "Race"]

◢ SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Controlling High Blood Pressure**		
CMS ID	165	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	abdc37cc-bac6-4156-9b91-d1be2c8b7268
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Endorsed By	None		
Description	Percentage of patients 18-85 years of age who had a diagnosis of essential hypertension starting before and continuing into, or starting during the first six months of the measurement period, and whose most recent blood pressure was adequately controlled (<140/90 mmHg) during the measurement period		
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Disclaimer	The performance Measure is not a clinical guideline and does not establish a standard of medical care, and has not been tested for all potential applications. THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].		
Measure Scoring	Proportion		
Measure Type	Intermediate Outcome		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	High blood pressure (HBP), also known as hypertension, is when the pressure in blood vessels is higher than normal (Centers for Disease Control and Prevention [CDC], 2023). The causes of hypertension are multiple and multifaceted and can be based on genetic predisposition, environmental risk factors, being overweight and obese, sodium intake, potassium intake, physical activity, and alcohol use. High blood pressure is common; according to the American Heart Association, between 2013-2016, approximately 121.5 million US adults >= 20 years of age had HBP and the prevalence of hypertension among US adults 65 and older was 77.0 percent (Virani et al., 2021). In an analysis of adults with hypertension in National Health and Nutrition Examination Survey (NHANES), the estimated age-adjusted proportion with controlled blood pressure (BP) increased from 31.8 percent in 1999 to 53.8 percent in 2014. However, that proportion declined to 43.7 percent in 2017 to 2018 (Tsao et al., 2022). HBP increases risks of heart disease and stroke which are two of the leading causes of death in the US (CDC, 2023). A person who has HBP is four times more likely to die from a stroke and three times more likely to die from heart disease (CDC, 2021). The National Center for Health Statistics reported that in 2020 there were over 670,000 deaths with HBP as a primary or contributing cause (CDC, 2022). Between 2009 and 2019 the number of deaths due to HBP rose by 65.3 percent (Tsao et al., 2022). Managing and treating HBP would reduce cardiovascular disease mortality for males and females by 30.4 percent and 38.0 percent, respectively (Patel et al., 2015). Age-adjusted death rates attributable to HBP in 2019 were more than twice as high in non-Hispanic Black males (56.7 percent) when compared to rates for non-Hispanic White males (25.7 percent) (Tsao et al., 2022). HBP costs the U.S. approximately 131 billion dollars each year, averaged over 12 years from 2003 to 2014 (Kirkland et al., 2018). A study on cost-effectiveness on treating hypertension found that controlling HBP in patients with cardiovascular disease and systolic blood pressures (SBP) of >= 160 mmHg could be effective and cost-saving (Moran et al., 2015). Many studies have shown that controlling high blood pressure reduces cardiovascular events and mortality. The Systolic Blood Pressure Intervention Trial (SPRINT) investigated the impact of obtaining a SBP goal of <120 mmHg compared to a SBP goal of <140 mmHg among patients 50 and older with established cardiovascular disease and found that the patients with the former goal had reduced cardiovascular events and mortality (SPRINT Research Group et al., 2015). Controlling HBP will significantly reduce the risks of cardiovascular disease mortality and lead to better health outcomes like reduction of heart attacks, stroke, and kidney disease (James et al., 2014). Thus, the relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established.		

	U.S. Preventive Services Task Force (USPSTF) (2021): - The USPSTF recommends screening for hypertension in adults 18 years or older with office blood pressure measurement (OBPM). The USPSTF recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment. This is a grade A recommendation. American College of Cardiology/American Heart Association (2017): - For adults with confirmed hypertension and known cardiovascular disease (CVD) or 10-year atherosclerotic cardiovascular disease (ASCVD) event risk of 10 percent or higher, a blood pressure target of less than 130/80 mmHg is recommended (Level of evidence: B-R (for systolic blood pressures), Level of evidence: C-EO (for diastolic blood pressure)) - For adults with confirmed hypertension, without additional markers of increased CVD risk, a blood pressure target of less than 130/80 mmHg may be reasonable (Note: clinical trial evidence is strongest for a target blood pressure of 140/90 mmHg in this population. However, observational studies suggest that these individuals often have a high lifetime risk and would benefit from blood pressure control earlier in life) (Level of evidence: B-NR (for systolic blood pressure), Level of evidence: C-EO (for diastolic blood pressure)).
Clinical Recommendation Statement	American Academy of Family Physicians (2022): - Treat adults who have hypertension to a standard blood pressure target (less than 140/90 mm Hg) to reduce the risk of all-cause and cardiovascular mortality (strong recommendation; high-quality evidence). Treating to a lower blood pressure target (less than 135/85 mm Hg) does not provide additional benefit at preventing mortality; however, a lower blood pressure target could be considered based on patient preferences and values. (Grade: strong recommendation, Quality of evidence: high) - Consider treating adults who have hypertension to a lower blood pressure target (less than 135/85 mm Hg) to reduce risk of myocardial infarction (weak recommendation; moderate-quality evidence). Although treatment to a standard blood pressure target (less than 140/90 mm Hg) reduced the risk of myocardial infarction, there was a small additional benefit observed with a lower blood pressure target. There was no observed additional benefit in preventing stroke with the lower blood pressure target. (Grade: weak recommendation, Quality of evidence: low) American Diabetes Association (2022): - For individuals with diabetes and hypertension at higher cardiovascular risk (existing atherosclerotic cardiovascular disease or 10-year atherosclerotic cardiovascular disease risk >=15 percent), a blood pressure target of <130/80 mmHg may be appropriate, if it can be safely attained (Level of evidence: B) - For individuals with diabetes and hypertension at lower risk for cardiovascular disease (10-year atherosclerotic cardiovascular disease risk <15 percent), treat to a blood pressure target of <140/90 mmHg (Level of evidence: A)
Improvement Notation	Higher score indicates better quality
	Reference Type: CITATION
Reference	Reference Text: 'American Diabetes Association. (2022). 10. Cardiovascular disease and risk management: Standards of medical care in diabetes—2022. Diabetes Care 2022, 44(Suppl. 1), S144-S175. https://doi.org/10.2337/dc22-S010'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2021). Team-based care for high blood pressure. Retrieved from https://www.cdc.gov/policy/polaris/healthtopics/highbloodpressure/tbctool.html'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention. (2023). Facts about hypertension. Retrieved from https://www.cdc.gov/bloodpressure/facts.htm'
	Reference Type: CITATION
Reference	Reference Text: 'Centers for Disease Control and Prevention, National Center for Health Statistics. (2022). About Multiple Cause of Death, 1999–2020. CDC WONDER Online Database website. Atlanta, GA: Centers for Disease Control and Prevention. Available from http://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm#Mortality_Multiple'
	Reference Type: CITATION
Reference	Reference Text: 'James, P.A., Oparil, S., Carter, B.L., et al. (2014). 2014 Evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). JAMA. 2014;311(5):507-520. doi: 10.1001/jama.2013.284427'
	Reference Type: CITATION
Reference	Reference Text: 'Kirkland, E. B., Heincelman, M., Bishu, K. G., Schumann, S. O., Schreiner, A., Axon, R. N.,...Moran, W. P. (2018). Trends in Healthcare Expenditures Among US Adults With Hypertension: National Estimates, 2003–2014. Journal of the American Heart Association, 7(11), e008731. https://doi.org/10.1161/JAHA.118.008731'
	Reference Type: CITATION
Reference	Reference Text: 'Moran, A. E., Odden, M. C., Thanataveerat, A., et al. (2015). Cost-effectiveness of hypertension therapy according to 2014 guidelines. [published correction appears in N Engl J. Med. 2015;372:1677]. New England Journal of Medicine. 2015;372, 447-455. doi: 10.1056/NEJMsa1406751. [published correction appears on page 1677]'
	Reference Type: CITATION
Reference	Reference Text: 'Patel, S. A., Winkel, M., Ali, M. K., et al. (2015). Cardiovascular mortality associated with 5 leading risk factors: National and state preventable fractions estimated from survey data. Annals of Internal Medicine, 163(4), 245-253. doi: 10.7326/M14-1753'
	Reference Type: CITATION
Reference	Reference Text: 'Qaseem, A., Wilt, T. J., Rich, R., et al. (2017). Pharmacologic treatment of hypertension in adults aged 60 years or older to higher versus lower blood pressure targets: A clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. Annals of Internal Medicine, 166(6), 430-437. Retrieved from https://annals.org/aim/fullarticle/2598413/pharmacologic-treatment-hypertension-adults-aged-60-years-older-higher-versus'
	Reference Type: CITATION
Reference	Reference Text: 'SPRINT Research Group, Wright, J. T., Jr., Williamson, J. D., et al. (2015). A randomized trial of intensive versus standard blood-pressure control. New England Journal of Medicine, 373(22), 2103–2116.'
	Reference Type: CITATION
Reference	Reference Text: 'Tsao, C. W., Aday, A. W., Almarzooq, Z. I., Alonso, A., Beaton, A. Z., Bittencourt, M. S.,...Kissela, B. M. (2022). Heart Disease and Stroke Statistics—2022 Update: A Report From the American Heart Association. Circulation, 145(8), e153–e639. https://doi.org/10.1161/CIR.0000000000001052'
Reference	Reference Type: CITATION

	Reference Text: 'U.S. Preventive Services Task Force. Screening for hypertension in adults: U.S. Preventive Services Task Force reaffirmation recommendation statement. JAMA, 325(16), 1650. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hypertension-in-adults-screening' Reference Type: CITATION
Reference	Reference Text: 'Virani, S.S., Alonso, A., Aparicio, H.J., et al.; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. (2021). Heart disease and stroke statistics—2021 update: a report from the American Heart Association. Circulation. 2021;143:e254–e743. doi: 10.1161/CIR.0000000000000950' Reference Type: CITATION
Reference	Reference Text: 'Whelton, P. K., Carey, R. M., Aronow, W. S., et al. (2017). 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: A report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Journal of the American College of Cardiology. Hypertension. 71(6). https://doi.org/10.1161/HYP.0000000000000065' Reference Type: CITATION
Reference	Reference Text: 'Coles, S., Fisher, L., Lin, K. W., Lyon, C., Vosooney, A. A., & Bird, M. D. (2022). Blood Pressure Targets in Adults With Hypertension: A Clinical Practice Guideline From the AAFP. American family physician, 106(6). Retrieved from https://www.aafp.org/pubs/afp/issues/2022/1200/practice-guidelines-aafp-hypertension-full-guideline.html'
Definition	None
Guidance	In reference to the numerator element, only blood pressure readings performed by a clinician or an automated blood pressure monitor or device are acceptable for numerator compliance with this measure. This includes blood pressures taken in person by a clinician and blood pressures measured remotely by electronic monitoring devices capable of transmitting the blood pressure data to the clinician. Blood pressure readings taken by an automated blood pressure monitor or device and conveyed by the patient to the clinician are also acceptable. It is the clinician's responsibility and discretion to confirm the automated blood pressure monitor or device used to obtain the blood pressure is considered acceptable and reliable and whether the blood pressure reading is considered accurate before documenting it in the patient's medical record. Do not include BP readings taken during an acute inpatient stay or an emergency department (ED) visit. If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed "not controlled". If there are multiple blood pressure readings on the same day, use the lowest systolic and the lowest diastolic reading as the most recent blood pressure reading. Ranges and thresholds do not meet criteria for this measure. A distinct numeric result for both the systolic and diastolic BP reading is required for numerator compliance. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Patients 18-85 years of age by the end of the measurement period who had a visit during the measurement period and diagnosis of essential hypertension starting before and continuing into, or starting during the first six months of the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period. Patients with evidence of end stage renal disease (ESRD), dialysis or renal transplant before or during the measurement period. Also exclude patients with a diagnosis of pregnancy during the measurement period. Exclude patients 66-80 by the end of the measurement period with an indication of frailty for any part of the measurement period who also meet any of the following advanced illness criteria: - Advanced illness diagnosis during the measurement period or the year prior - OR taking dementia medications during the measurement period or the year prior Exclude patients 81 and older by the end of the measurement period with an indication of frailty for any part of the measurement period. Exclude patients 66 and older by the end of the measurement period who are living long term in a nursing home any time on or before the end of the measurement period. Exclude patients receiving palliative care for any part of the measurement period.
Numerator	Patients whose most recent blood pressure is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 85]
  and exists "Essential Hypertension Diagnosis"
  and exists AdultOutpatientEncounters."Qualifying Encounters"
```

Denominator

"Initial Population"

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or exists ( "Pregnancy or Renal Diagnosis" )
  or exists ( "End Stage Renal Disease Procedures" )
  or exists ( "End Stage Renal Disease Encounter" )
  or AIFrailLTCF."Is Age 66 to 80 with Advanced Illness and Frailty or Is Age 81 or Older with Frailty"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Numerator

```
"Has Systolic Blood Pressure Less Than 140"
  and "Has Diastolic Blood Pressure Less Than 90"
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

AdultOutpatientEncounters.Qualifying Encounters

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Virtual Encounter"]
  union ["Encounter, Performed": "Telephone Visits"] ) ValidEncounter
  where ValidEncounter.relevantPeriod during day of "Measurement Period"
```

AIFrailLTCF.Has Advanced Illness in Year Before or During Measurement Period

```
exists ( ["Diagnosis": "Advanced Illness"] AdvancedIllnessDiagnosis
    where AdvancedIllnessDiagnosis.prevalencePeriod starts during day of Interval[start of "Measurement Period" - 1 year, end of "Measurement Period"]
)
```

AIFrailLTCF.Has Criteria Indicating Frailty

```
exists ( ["Device, Order": "Frailty Device"] FrailtyDeviceOrder
    where FrailtyDeviceOrder.authorDatetime during day of "Measurement Period"
)
  or exists ( ["Assessment, Performed": "Medical equipment used"] EquipmentUsed
      where EquipmentUsed.result in "Frailty Device"
        and Global."NormalizeInterval" ( EquipmentUsed.relevantDatetime, EquipmentUsed.relevantPeriod ) ends during day of "Measurement Period"
  )
  or exists ( ["Diagnosis": "Frailty Diagnosis"] FrailtyDiagnosis
      where FrailtyDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Frailty Encounter"] FrailtyEncounter
      where FrailtyEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Symptom": "Frailty Symptom"] FrailtySymptom
      where FrailtySymptom.prevalencePeriod overlaps day of "Measurement Period"
  )
```

AIFrailLTCF.Has Dementia Medications in Year Before or During Measurement Period

```
exists (["Medication, Active": "Dementia Medications"] DementiaMedication
  where Global."NormalizeInterval" ( DementiaMedication.relevantDatetime, DementiaMedication.relevantPeriod ) overlaps day of Interval[start of "Measurement Period"
- 1 year,
  end of "Measurement Period"])
```

AIFrailLTCF.Is Age 66 or Older Living Long Term in a Nursing Home

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  )>= 66
)
  and ( ( Last(["Assessment, Performed": "Housing status"] HousingStatus
      where Global."NormalizeInterval"(HousingStatus.relevantDatetime, HousingStatus.relevantPeriod) ends on or before day of
      end of "Measurement Period"
      sort by
      end of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)asc
    )) LastHousingStatus
      where LastHousingStatus.result ~ "Lives in nursing home (finding)"
  ) is not null
```

AIFrailLTCF.Is Age 66 to 80 with Advanced Illness and Frailty or Is Age 81 or Older with Frailty

```
( AgeInYearsAt(date from
    end of "Measurement Period"
  )in Interval[66, 80]
    and "Has Criteria Indicating Frailty"
    and ( "Has Advanced Illness in Year Before or During Measurement Period"
        or "Has Dementia Medications in Year Before or During Measurement Period"
    )
```

```
)
  or ( AgeInYearsAt(date from
      end of "Measurement Period"
    )>= 81
      and "Has Criteria Indicating Frailty"
  )
```

Blood Pressure Days

```
( "Qualifying Diastolic Blood Pressure Reading" DBPExam
    return date from Global."LatestOf" ( DBPExam.relevantDatetime, DBPExam.relevantPeriod )
)
  intersect ( "Qualifying Systolic Blood Pressure Reading" SBPExam
      return date from Global."LatestOf" ( SBPExam.relevantDatetime, SBPExam.relevantPeriod )
  )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or exists ( "Pregnancy or Renal Diagnosis" )
  or exists ( "End Stage Renal Disease Procedures" )
  or exists ( "End Stage Renal Disease Encounter" )
  or AIFrailLTCF."Is Age 66 to 80 with Advanced Illness and Frailty or Is Age 81 or Older with Frailty"
  or AIFrailLTCF."Is Age 66 or Older Living Long Term in a Nursing Home"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

End Stage Renal Disease Encounter

```
["Encounter, Performed": "ESRD Monthly Outpatient Services"] ESRDEncounter
  where ESRDEncounter.relevantPeriod starts on or before end of "Measurement Period"
```

End Stage Renal Disease Procedures

```
( ["Procedure, Performed": "Kidney Transplant"]
  union ["Procedure, Performed": "Dialysis Services"] ) ESRDProcedure
  where end of Global."NormalizeInterval" ( ESRDProcedure.relevantDatetime, ESRDProcedure.relevantPeriod ) on or before end of "Measurement Period"
```

Essential Hypertension Diagnosis

```
["Diagnosis": "Essential Hypertension"] Hypertension
  where Hypertension.prevalencePeriod overlaps Interval[start of "Measurement Period", start of "Measurement Period" + 6 months )
```

Has Diastolic Blood Pressure Less Than 90

```
"Lowest Diastolic Reading on Most Recent Blood Pressure Day".result < 90 'mm[Hg]'
```

Has Systolic Blood Pressure Less Than 140

```
"Lowest Systolic Reading on Most Recent Blood Pressure Day".result < 140 'mm[Hg]'
```

Hospice.Has Hospice Services

```
exists ( ["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where ( InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
        or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
    )
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists ( ["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
      where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
      where HospiceAssessment.result ~ "Yes (qualifier value)"
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
      where HospiceOrder.authorDatetime during day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
      where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
  )
or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
      where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) in Interval[18, 85]
  and exists "Essential Hypertension Diagnosis"
  and exists AdultOutpatientEncounters."Qualifying Encounters"
```

Lowest Diastolic Reading on Most Recent Blood Pressure Day

```
First("Qualifying Diastolic Blood Pressure Reading" DBPReading
    where Global."LatestOf"(DBPReading.relevantDatetime, DBPReading.relevantPeriod) same day as "Most Recent Blood Pressure Day"
    sort by(result as Quantity)
)
```

Lowest Systolic Reading on Most Recent Blood Pressure Day

```
First("Qualifying Systolic Blood Pressure Reading" SBPReading
    where Global."LatestOf"(SBPReading.relevantDatetime, SBPReading.relevantPeriod) same day as "Most Recent Blood Pressure Day"
    sort by(result as Quantity)
)
```

Most Recent Blood Pressure Day

```
Last("Blood Pressure Days" BPDays
    sort asc
```

```
)
```

Numerator

```
"Has Systolic Blood Pressure Less Than 140"
  and "Has Diastolic Blood Pressure Less Than 90"
```

PalliativeCare.Has Palliative Care in the Measurement Period

```
exists ( ["Assessment, Performed": "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)"] PalliativeAssessment
    where Global."NormalizeInterval" ( PalliativeAssessment.relevantDatetime, PalliativeAssessment.relevantPeriod ) overlaps day of "Measurement Period"
)
  or exists ( ["Diagnosis": "Palliative Care Diagnosis"] PalliativeDiagnosis
      where PalliativeDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Palliative Care Encounter"] PalliativeEncounter
      where PalliativeEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Palliative Care Intervention"] PalliativeIntervention
      where Global."NormalizeInterval" ( PalliativeIntervention.relevantDatetime, PalliativeIntervention.relevantPeriod ) overlaps day of "Measurement Period"
  )
```

Pregnancy or Renal Diagnosis

```
( ["Diagnosis": "Pregnancy"]
  union ["Diagnosis": "End Stage Renal Disease"]
  union ["Diagnosis": "Kidney Transplant Recipient"]
  union ["Diagnosis": "Chronic Kidney Disease, Stage 5"] ) PregnancyESRDDiagnosis
  where PregnancyESRDDiagnosis.prevalencePeriod overlaps "Measurement Period"
```

Qualifying Diastolic Blood Pressure Reading

```
["Physical Exam, Performed": "Diastolic blood pressure"] DiastolicBP
  without ( ["Encounter, Performed": "Encounter Inpatient"]
    union ["Encounter, Performed": "Emergency Department Evaluation and Management Visit"] ) DisqualifyingEncounter
    such that Global."LatestOf" ( DiastolicBP.relevantDatetime, DiastolicBP.relevantPeriod ) during day of DisqualifyingEncounter.relevantPeriod
  where DiastolicBP.result.unit = 'mm[Hg]'
    and Global."LatestOf" ( DiastolicBP.relevantDatetime, DiastolicBP.relevantPeriod ) during day of "Measurement Period"
```

Qualifying Systolic Blood Pressure Reading

```
["Physical Exam, Performed": "Systolic blood pressure"] SystolicBP
  without ( ["Encounter, Performed": "Encounter Inpatient"]
    union ["Encounter, Performed": "Emergency Department Evaluation and Management Visit"] ) DisqualifyingEncounter
    such that Global."LatestOf" ( SystolicBP.relevantDatetime, SystolicBP.relevantPeriod ) during day of DisqualifyingEncounter.relevantPeriod
  where SystolicBP.result.unit = 'mm[Hg]'
    and Global."LatestOf" ( SystolicBP.relevantDatetime, SystolicBP.relevantPeriod ) during day of "Measurement Period"
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "Federal Administrative Sex"]
```

Functions

Global.HasEnd(period Interval<DateTime>)

```
not (
  end of period is null
    or
    end of period = maximum DateTime
)
```

Global.Latest(period Interval<DateTime>)

```
if ( HasEnd(period)) then
end of period
  else start of period
```

Global.LatestOf(pointInTime DateTime, period Interval<DateTime>)

```
Latest(NormalizeInterval(pointInTime, period))
```

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Diastolic blood pressure" ("LOINC Code (8462-4)")
- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" ("LOINC Code (71007-9)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Housing status" ("LOINC Code (71802-3)")
- code "Lives in nursing home (finding)" ("SNOMEDCT Code (160734000)")
- code "Medical equipment used" ("LOINC Code (98181-1)")
- code "Systolic blood pressure" ("LOINC Code (8480-6)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")

- valueset "Advanced Illness" (2.16.840.1.113883.3.464.1003.110.12.1082)
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Chronic Kidney Disease, Stage 5" (2.16.840.1.113883.3.526.3.1002)
- valueset "Dementia Medications" (2.16.840.1.113883.3.464.1003.196.12.1510)
- valueset "Dialysis Services" (2.16.840.1.113883.3.464.1003.109.12.1013)
- valueset "Emergency Department Evaluation and Management Visit" (2.16.840.1.113883.3.464.1003.101.12.1010)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "End Stage Renal Disease" (2.16.840.1.113883.3.526.3.353)
- valueset "ESRD Monthly Outpatient Services" (2.16.840.1.113883.3.464.1003.109.12.1014)
- valueset "Essential Hypertension" (2.16.840.1.113883.3.464.1003.104.12.1011)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Frailty Device" (2.16.840.1.113883.3.464.1003.118.12.1300)
- valueset "Frailty Diagnosis" (2.16.840.1.113883.3.464.1003.113.12.1074)
- valueset "Frailty Encounter" (2.16.840.1.113883.3.464.1003.101.12.1088)
- valueset "Frailty Symptom" (2.16.840.1.113883.3.464.1003.113.12.1075)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)
- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Kidney Transplant" (2.16.840.1.113883.3.464.1003.109.12.1012)
- valueset "Kidney Transplant Recipient" (2.16.840.1.113883.3.464.1003.109.12.1029)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Palliative Care Diagnosis" (2.16.840.1.113883.3.464.1003.1167)
- valueset "Palliative Care Encounter" (2.16.840.1.113883.3.464.1003.101.12.1090)
- valueset "Palliative Care Intervention" (2.16.840.1.113883.3.464.1003.198.12.1135)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Pregnancy" (2.16.840.1.113883.3.526.3.378)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)
- valueset "Virtual Encounter" (2.16.840.1.113883.3.464.1003.101.12.1089)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" using "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal) (LOINC Code 71007-9)"
- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Assessment, Performed: Housing status" using "Housing status (LOINC Code 71802-3)"
- "Assessment, Performed: Medical equipment used" using "Medical equipment used (LOINC Code 98181-1)"
- "Device, Order: Frailty Device" using "Frailty Device (2.16.840.1.113883.3.464.1003.118.12.1300)"
- "Diagnosis: Advanced Illness" using "Advanced Illness (2.16.840.1.113883.3.464.1003.110.12.1082)"
- "Diagnosis: Chronic Kidney Disease, Stage 5" using "Chronic Kidney Disease, Stage 5 (2.16.840.1.113883.3.526.3.1002)"
- "Diagnosis: End Stage Renal Disease" using "End Stage Renal Disease (2.16.840.1.113883.3.526.3.353)"
- "Diagnosis: Essential Hypertension" using "Essential Hypertension (2.16.840.1.113883.3.464.1003.104.12.1011)"
- "Diagnosis: Frailty Diagnosis" using "Frailty Diagnosis (2.16.840.1.113883.3.464.1003.113.12.1074)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Diagnosis: Kidney Transplant Recipient" using "Kidney Transplant Recipient (2.16.840.1.113883.3.464.1003.109.12.1029)"
- "Diagnosis: Palliative Care Diagnosis" using "Palliative Care Diagnosis (2.16.840.1.113883.3.464.1003.1167)"
- "Diagnosis: Pregnancy" using "Pregnancy (2.16.840.1.113883.3.526.3.378)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Emergency Department Evaluation and Management Visit" using "Emergency Department Evaluation and Management Visit (2.16.840.1.113883.3.464.1003.101.12.1010)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: ESRD Monthly Outpatient Services" using "ESRD Monthly Outpatient Services (2.16.840.1.113883.3.464.1003.109.12.1014)"
- "Encounter, Performed: Frailty Encounter" using "Frailty Encounter (2.16.840.1.113883.3.464.1003.101.12.1088)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Palliative Care Encounter" using "Palliative Care Encounter (2.16.840.1.113883.3.464.1003.101.12.1090)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Encounter, Performed: Virtual Encounter" using "Virtual Encounter (2.16.840.1.113883.3.464.1003.101.12.1089)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Palliative Care Intervention" using "Palliative Care Intervention (2.16.840.1.113883.3.464.1003.198.12.1135)"
- "Medication, Active: Dementia Medications" using "Dementia Medications (2.16.840.1.113883.3.464.1003.196.12.1510)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Physical Exam, Performed: Diastolic blood pressure" using "Diastolic blood pressure (LOINC Code 8462-4)"
- "Physical Exam, Performed: Systolic blood pressure" using "Systolic blood pressure (LOINC Code 8480-6)"
- "Procedure, Performed: Dialysis Services" using "Dialysis Services (2.16.840.1.113883.3.464.1003.109.12.1013)"
- "Procedure, Performed: Kidney Transplant" using "Kidney Transplant (2.16.840.1.113883.3.464.1003.109.12.1012)"
- "Symptom: Frailty Symptom" using "Frailty Symptom (2.16.840.1.113883.3.464.1003.113.12.1075)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Use of High-Risk Medications in Older Adults**		
CMS ID	156	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	a3837ff8-1abc-4ba9-800e-fd4e7953adbd
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Endorsed By	None		
Description	Percentage of patients 65 years of age and older who were ordered at least two high-risk medications from the same drug class. Three rates are reported. 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. 3. Total rate (the sum of the two numerators divided by the denominator, deduplicating for patients in both numerators).		
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Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	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 & Paauw, 2017). Long-term use of benzodiazepines in older adults has been associated with increased risk of dementia (Zhong, Wang, Zhang, & Zhao, 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 (Fu, Liu, & Christensen, 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 & 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 (Institute of Medicine, 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 & Gardner, 2009).		
Clinical Recommendation Statement	The measure is based on recommendations from the American Geriatrics Society Beers Criteria[R] for Potentially Inappropriate Medication Use in Older Adults (2023). The criteria were developed through key clinical expert		

	consensus processes by Beers in 1997, Zhan in 2001, Fick et al. 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 measure based upon the recommendations in the Beers Criteria.
Improvement Notation	Lower score indicates better quality
Reference	Reference Type: CITATION Reference Text: 'Agrawal, R. (2020). Careful Prescribing of Benzodiazepines during COVID-19 Pandemic: A Review. Journal of Mental Health & Clinical Psychology, 4(4). Retrieved from https://www.mentalhealthjournal.org/articles/careful-prescribing-of-benzodiazepines-during-covid-19-pandemic-a-review.html'
Reference	Reference Type: CITATION Reference Text: 'Fick, D. M., Semla, T., Beizer, J., et al. (2015). American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Journal of the American Geriatrics Society, 63(11), 2227-2246.'
Reference	Reference Type: CITATION Reference Text: 'Beers, M. H. (1997). Explicit criteria for determining potentially inappropriate medication use by the elderly. Archives of Internal Medicine, 157, 1531-1536.'
Reference	Reference Type: CITATION Reference Text: 'Fick, D., Semla, T., Beizer, J., et al. (2012). American Geriatrics Society updated Beers criteria for potentially inappropriate medication use in older adults: The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. Journal of the American Geriatrics Society, 60(4), 616.'
Reference	Reference Type: CITATION Reference Text: 'Fick, D. M., Cooper, J. W., Wade, W. E., et al. (2003). Updating the Beers criteria for potentially inappropriate medication use in older adults. Archives of Internal Medicine, 163(22), 2716-2724.'
Reference	Reference Type: CITATION Reference Text: 'Fick, D. M., Mion, L. C., Beers, M. H., et al. (2008). Health outcomes associated with potentially inappropriate medication use in older adults. Research in Nursing & Health, 31(1), 42-51.'
Reference	Reference Type: CITATION Reference Text: 'Fu, A. Z., Liu, G. G., & Christensen, D. B. (2004). Inappropriate medication use and health outcomes in the elderly. Journal of the American Geriatrics Society, 52(11), 1934-1939.'
Reference	Reference Type: CITATION Reference Text: 'Fu, A. Z., Jiang, J. Z., Reeves, J. H., Fincham, J. E., Liu, G. G., & Perri, M. (2007). Potentially Inappropriate Medication Use and Healthcare Expenditures in the US Community-Dwelling Elderly. Medical Care, 45(5), 472–476. Retrieved from http://www.jstor.org/stable/40221449'
Reference	Reference Type: CITATION Reference Text: 'Gray, C. L., & Gardner, C. (2009). Adverse drug events in the elderly: An ongoing problem. Journal of Managed Care & Specialty Pharmacy, 15(7), 568-571.'
Reference	Reference Type: CITATION Reference Text: 'Hagstrom, K., Nailor, M., Lindberg, M., Hobbs, L., & Sobieraj, D. M. (2015). Association Between Potentially Inappropriate Medication Use in Elderly Adults and Hospital-Related Outcomes. Journal of the American Geriatrics Society, 63(1), 185-186.'
Reference	Reference Type: CITATION Reference Text: 'Institute of Medicine, Committee on Identifying and Preventing Medication Errors. (2007). Preventing medication errors. Aspden, P., Wolcott, J. A., Bootman, J. L., & Cronenwatt, L. R. (Eds.). Washington, DC: National Academy Press.'
Reference	Reference Type: CITATION Reference Text: 'Kaufman, M. B., Brodin, K. A., & Sarafian, A. (2005, April/May). Effect of prescriber education on the use of medications contraindicated in older adults in a managed Medicare population. Journal of Managed Care & Specialty Pharmacy, 11(3), 211-219.'
Reference	Reference Type: CITATION Reference Text: 'Lau, D.T., J.D., Kasper, D.E., Potter, & A. Lyles. (2004). Potentially Inappropriate Medication Prescriptions Among Elderly Nursing Home Residents: Their Scope and Associated Resident and Facility Characteristics. Health Services Research, 39(5), 1257-1276.'
Reference	Reference Type: CITATION Reference Text: 'MacKinnon, N. J., & Hepler, C. D. (2003). Indicators of preventable drug-related morbidity in older adults: Use within a managed care organization. Journal of Managed Care & Specialty Pharmacy, 9(2), 134-141.'
Reference	Reference Type: CITATION Reference Text: 'Merel, S.E., & Paauw, D.S. Paauw. (2017). Common Drug Side Effects and Drug-Drug Interactions in Elderly Adults in Primary Care. Journal of the American Geriatrics Society, 65(7), 1578-1585.'
Reference	Reference Type: CITATION Reference Text: 'Rothberg, M. B., Perkow, P. S., Liu, F., et al. (2008). Potentially inappropriate medication use in hospitalized elders. Journal of Hospital Medicine, 3(2), 91-102.'
Reference	Reference Type: CITATION Reference Text: 'Takada, M., M. Fujimoto, & K. Hosomi. (2016). Association between benzodiazepine use and dementia: data mining of different medical databases. International Journal of Medical Sciences, 13(11), 825-834.'
Reference	Reference Type: CITATION Reference Text: 'Tampi, R.R., D.J. Tampi, S. Balachandran, & S. Srinivasan. (2016). Antipsychotic use in dementia: a systematic review of benefits and risks from meta-analyses. Therapeutic Advances in Chronic Disease, 7(5), 229-245.'
Reference	Reference Type: CITATION Reference Text: 'Zhan, C., Sangl, J., Bierman, A. S., et al. (2001). Potentially inappropriate medication use in the community-dwelling elderly. JAMA, 286(22), 2823-2868.'
Reference	Reference Type: CITATION

	Reference Text: 'Zhong, G., Wang, Y., Zhang, Y., & Zhao, Y. (2015). Association between benzodiazepine use and dementia: a meta-analysis. PLoS One, 10(5).' Reference Type: CITATION
Reference	Reference Text: 'Fick, D. M., Semla, T. P., Steinman, M., et al. (2019). American Geriatrics Society 2019 Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Journal of the American Geriatrics Society, 67(4), 674-694.' Reference Type: CITATION
Reference	Reference Text: 'Riester, M. R., Goyal, P., Steinman, M. A., et al. (2023). Prevalence of Potentially Inappropriate Medication Prescribing in US Nursing Homes, 2013–2017. Journal of General Internal Medicine, 38(6), 1563-1566.' Reference Type: CITATION
Reference	Reference Text: '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.'
Definition	Index Prescription Start Date (IPSD). The start date of the earliest prescription ordered for a high-risk medication during the measurement period. A high-risk medication is identified by any one of the following: a. A prescription for medications classified as high risk at any dose and for any duration. b. A prescription for medications classified as high risk at any dose with greater than a 90 day supply. c. A prescription for medications classified as high risk exceeding average daily dose criteria. An order is identified by either a prescription order or a prescription refill.
Guidance	The intent of the measure is to assess if the patient has been ordered at least two high-risk medication prescriptions from the same drug class on different days. The intent of the measure is to assess if the reporting 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 reporting provider also ordered a high-risk medication from the same drug class for them. 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. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Patients 65 years and older at the end of the measurement period who had a visit during the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period. Exclude patients receiving palliative care for any part of the measurement period.
Numerator	Rate 1: Patients with at least two orders of high-risk medications from the same drug class on different days. a. At least two orders of high-risk medications from the same drug class. b. At least two orders of high-risk medications from the same drug class with summed days supply greater than 90 days. c. At least two orders of high-risk medications from the same drug class each exceeding average daily dose criteria. Rate 2: Patients with at least two orders of high-risk medications from the same drug class (i.e., antipsychotics and benzodiazepines) on different days except for appropriate diagnoses. a. Patients with two or more antipsychotic prescriptions ordered on different days, and who did not have 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. b. Patients with two or more benzodiazepine prescriptions ordered on different days, and who did not have 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. Total rate (the sum of the two previous numerators, deduplicated).
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Table of Contents

Population Criteria

◢ Population Criteria 1

◢ Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) >= 65
  and exists ( "Qualifying Encounters" )
```

◢ Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Numerator

```
exists ( "Same High Risk Medications Ordered on Different Days" )
  or ( "Two High Risk Medications with Prolonged Duration" )
  or ( "High Risk Medications with Average Daily Dose Criteria" )
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Population Criteria 2

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) >= 65
  and exists ( "Qualifying Encounters" )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Numerator

```
( "More than One Antipsychotic Order"
    and ( not exists ( ( ["Diagnosis": "Schizophrenia"]
         union ["Diagnosis": "Bipolar Disorder"] ) AntipsychoticTreatedDiagnoses
         where AntipsychoticTreatedDiagnoses.prevalencePeriod overlaps Interval[start of "Measurement Period" - 1 year, "Antipsychotic Index Prescription Start Date"]
      )
    )
)
  or ( "More than One Benzodiazepine Order"
      and ( not exists ( ( ["Diagnosis": "Seizure Disorder"]
           union ["Diagnosis": "REM Sleep Behavior Disorder"]
           union ["Diagnosis": "Benzodiazepine Withdrawal"]
           union ["Diagnosis": "Alcohol Withdrawal"]
           union ["Diagnosis": "Generalized Anxiety Disorder"] ) BenzodiazepineTreatedDiagnoses
           where BenzodiazepineTreatedDiagnoses.prevalencePeriod overlaps Interval[start of "Measurement Period" - 1 year, "Benzodiazepine Index Prescription Start
Date"]
        )
      )
  )
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Population Criteria 3

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) >= 65
  and exists ( "Qualifying Encounters" )
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

Numerator

```
"Numerator 2"
  or ( "Numerator 1"
     and not "Numerator 2"
  )
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Antipsychotic Index Prescription Start Date

```
First(["Medication, Order": "Potentially Harmful Antipsychotics for Older Adults"] AntipsychoticMedication
    where AntipsychoticMedication.authorDatetime during "Measurement Period"
    return AntipsychoticMedication.authorDatetime
    sort asc
)
```

Benzodiazepine Index Prescription Start Date

```
First(["Medication, Order": "Potentially Harmful Benzodiazepines for Older Adults"] BenzodiazepineMedication
    where BenzodiazepineMedication.authorDatetime during "Measurement Period"
    return BenzodiazepineMedication.authorDatetime
    sort asc
)
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
  or PalliativeCare."Has Palliative Care in the Measurement Period"
```

High Risk Medications with Average Daily Dose Criteria

```
exists ( "More Than One Order"(["Medication, Order": "Digoxin Medications"] DigoxinOrdered
      where "Average Daily Dose"(DigoxinOrdered) > 0.125 'mg/d'
  )
)
  or exists ( "More Than One Order"(["Medication, Order": "Doxepin Medications"] DoxepinOrdered
       where "Average Daily Dose"(DoxepinOrdered) > 6 'mg/d'
    )
  )
```

Hospice.Has Hospice Services

```
exists ( ["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where ( InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
        or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
    )
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists ( ["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
      where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
      where HospiceAssessment.result ~ "Yes (qualifier value)"
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
      where HospiceOrder.authorDatetime during day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
      where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
  )
or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
      where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Initial Population

```
AgeInYearsAt(date from
  end of "Measurement Period"
) >= 65
  and exists ( "Qualifying Encounters" )
```

More than One Antipsychotic Order

```
exists ( "More Than One Order"(["Medication, Order": "Potentially Harmful Antipsychotics for Older Adults"]) )
```

More than One Benzodiazepine Order

```
exists ( "More Than One Order"(["Medication, Order": "Potentially Harmful Benzodiazepines for Older Adults"]) )
```

Numerator 1

```
exists ( "Same High Risk Medications Ordered on Different Days" )
  or ( "Two High Risk Medications with Prolonged Duration" )
  or ( "High Risk Medications with Average Daily Dose Criteria" )
```

Numerator 2

```
( "More than One Antipsychotic Order"
    and ( not exists ( ( ["Diagnosis": "Schizophrenia"]
          union ["Diagnosis": "Bipolar Disorder"] ) AntipsychoticTreatedDiagnoses
          where AntipsychoticTreatedDiagnoses.prevalencePeriod overlaps Interval[start of "Measurement Period" - 1 year, "Antipsychotic Index Prescription Start Date"]
      )
    )
)
  or ( "More than One Benzodiazepine Order"
```

```
        and ( not exists ( ( ["Diagnosis": "Seizure Disorder"]
             union ["Diagnosis": "REM Sleep Behavior Disorder"]
             union ["Diagnosis": "Benzodiazepine Withdrawal"]
             union ["Diagnosis": "Alcohol Withdrawal"]
             union ["Diagnosis": "Generalized Anxiety Disorder"] ) BenzodiazepineTreatedDiagnoses
             where BenzodiazepineTreatedDiagnoses.prevalencePeriod overlaps Interval[start of "Measurement Period" - 1 year, "Benzodiazepine Index Prescription Start Date"]
           )
         )
    )
```

Numerator 3

```
"Numerator 2"
  or ( "Numerator 1"
     and not "Numerator 2"
  )
```

PalliativeCare.Has Palliative Care in the Measurement Period

```
exists ( ["Assessment, Performed": "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)"] PalliativeAssessment
    where Global."NormalizeInterval" ( PalliativeAssessment.relevantDatetime, PalliativeAssessment.relevantPeriod ) overlaps day of "Measurement Period"
)
  or exists ( ["Diagnosis": "Palliative Care Diagnosis"] PalliativeDiagnosis
     where PalliativeDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Encounter, Performed": "Palliative Care Encounter"] PalliativeEncounter
     where PalliativeEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Palliative Care Intervention"] PalliativeIntervention
     where Global."NormalizeInterval" ( PalliativeIntervention.relevantDatetime, PalliativeIntervention.relevantPeriod ) overlaps day of "Measurement Period"
  )
```

Qualifying Encounters

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Discharge Services Nursing Facility"]
  union ["Encounter, Performed": "Nursing Facility Visit"]
  union ["Encounter, Performed": "Care Services in Long Term Residential Facility"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Telephone Visits"]
  union ["Encounter, Performed": "Virtual Encounter"]
  union ["Encounter, Performed": "Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional"] ) ValidEncounters
  where ValidEncounters.relevantPeriod during "Measurement Period"
```

Same High Risk Medications Ordered on Different Days

```
"More Than One Order"(["Medication, Order": "Potentially Harmful Antihistamines for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Antiparkinsonian Agents for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Gastrointestinal Antispasmodics for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Dipyridamole Medications"])
  union "More Than One Order"(["Medication, Order": "Guanfacine Medications"])
  union "More Than One Order"(["Medication, Order": "Nifedipine Medications"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Antidepressants for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Barbiturates for Older Adults"])
  union "More Than One Order"(["Medication, Order": "ergoloid mesylates, USP 1 MG Oral Tablet"])
  union "More Than One Order"(["Medication, Order": "Meprobamate Medications"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Estrogens for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Sulfonylureas for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Desiccated Thyroid Medications"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Nonbenzodiazepine Hypnotics for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Skeletal Muscle Relaxants for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Potentially Harmful Pain Medications for Older Adults"])
  union "More Than One Order"(["Medication, Order": "Megestrol Medications"])
  union "More Than One Order"(["Medication, Order": "Meperidine Medications"])
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "Federal Administrative Sex"]
```

Two High Risk Medications with Prolonged Duration

```
Sum(("More Than One Order"(["Medication, Order": "Potentially Harmful Antiinfectives for Older Adults"])) AntiInfectives
    let DaysSupply: Coalesce(AntiInfectives.daysSupplied, AntiInfectives.supply.value /(AntiInfectives.dosage.value * CMD.ToDaily(AntiInfectives.frequency))) *(1 + Coalesce(AntiInfectives.refills, 0))
    return all DaysSupply
) > 90
```

Functions

Average Daily Dose(MedicationOrder "Medication, Order")

```
MedicationOrder Order
  let MedicationStrength: "MedicationStrengthPerUnit"(Order.code),
  DaysSupplied: Coalesce(Order.daysSupplied, Order.supply.value /(Order.dosage.value * CMD.ToDaily(Order.frequency)))
  return if DaysSupplied is not null
    and ( MedicationStrength.unit = 'mg'
       or ( MedicationStrength.unit = 'mg/mL'
          and Order.supply.unit = 'mL'
       )
```

```
  ) then ( ( Order.supply * MedicationStrength ) / Quantity { value: DaysSupplied, unit: 'd' } )
  else null
```

CMD.CodeToDaily(Frequency Code)

```
case
  when Frequency ~ "Once daily (qualifier value)" then 1.0
  when Frequency ~ "Twice a day (qualifier value)" then 2.0
  when Frequency ~ "Three times daily (qualifier value)" then 3.0
  when Frequency ~ "Four times daily (qualifier value)" then 4.0
  when Frequency ~ "Every twenty four hours (qualifier value)" then 1.0
  when Frequency ~ "Every twelve hours (qualifier value)" then 2.0
  when Frequency ~ "Every thirty six hours (qualifier value)" then 0.67
  when Frequency ~ "Every eight hours (qualifier value)" then 3.0
  when Frequency ~ "Every four hours (qualifier value)" then 6.0
  when Frequency ~ "Every six hours (qualifier value)" then 4.0
  when Frequency ~ "Every seventy two hours (qualifier value)" then 0.33
  when Frequency ~ "Every forty eight hours (qualifier value)" then 0.5
  when Frequency ~ "Every eight to twelve hours (qualifier value)" then 3.0
  when Frequency ~ "Every six to eight hours (qualifier value)" then 4.0
  when Frequency ~ "Every three to four hours (qualifier value)" then 8.0
  when Frequency ~ "Every three to six hours (qualifier value)" then 8.0
  when Frequency ~ "Every two to four hours (qualifier value)" then 12.0
  when Frequency ~ "One to four times a day (qualifier value)" then 4.0
  when Frequency ~ "One to three times a day (qualifier value)" then 3.0
  when Frequency ~ "One to two times a day (qualifier value)" then 2.0
  when Frequency ~ "Two to four times a day (qualifier value)" then 4.0
  else null
end
```

CMD.QuantityToDaily(Frequency Quantity)

```
case Frequency.unit
    when 'h' then (24.0 / Frequency.value)
    when 'min' then (24.0 / Frequency.value) * 60
    when 's' then (24.0 / Frequency.value) * 60 * 60
    when 'd' then (24.0 / Frequency.value) / 24
    when 'wk' then (24.0 / Frequency.value) / (24 * 7)
    when 'mo' then (24.0 / Frequency.value) / (24 * 30) /* assuming 30 days in month */
    when 'a' then (24.0 / Frequency.value) / (24 * 365) /* assuming 365 days in year */
    when 'hour' then (24.0 / Frequency.value)
    when 'minute' then (24.0 / Frequency.value) * 60
    when 'second' then (24.0 / Frequency.value) * 60 * 60
    when 'day' then (24.0 / Frequency.value) / 24
    when 'week' then (24.0 / Frequency.value) / (24 * 7)
    when 'month' then (24.0 / Frequency.value) / (24 * 30) /* assuming 30 days in month */
    when 'year' then (24.0 / Frequency.value) / (24 * 365) /* assuming 365 days in year */
    when 'hours' then (24.0 / Frequency.value)
    when 'minutes' then (24.0 / Frequency.value) * 60
    when 'seconds' then (24.0 / Frequency.value) * 60 * 60
    when 'days' then (24.0 / Frequency.value) / 24
    when 'weeks' then (24.0 / Frequency.value) / (24 * 7)
    when 'months' then (24.0 / Frequency.value) / (24 * 30) /* assuming 30 days in month */
    when 'years' then (24.0 / Frequency.value) / (24 * 365) /* assuming 365 days in year */
    else null
  end
```

CMD.ToDaily(Frequency Choice<Quantity, Code>)

```
case
  when Frequency is Quantity then QuantityToDaily(Frequency as Quantity)
  else CodeToDaily(Frequency as Code)
end
```

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

MedicationStrengthPerUnit(Strength Code)

```
case
  when Strength ~ "digoxin 0.05 MG/ML Oral Solution" then 0.05 'mg/mL'
  when Strength ~ "digoxin 0.0625 MG Oral Tablet" then 0.0625 'mg'
  when Strength ~ "1 ML digoxin 0.1 MG/ML Injection" then 0.1 'mg/mL'
  when Strength ~ "digoxin 0.125 MG Oral Tablet" then 0.125 'mg'
  when Strength ~ "digoxin 0.25 MG Oral Tablet" then 0.25 'mg'
  when Strength ~ "2 ML digoxin 0.25 MG/ML Injection" then 0.25 'mg/mL'
  when Strength ~ "doxepin 3 MG Oral Tablet" then 3 'mg'
  when Strength ~ "doxepin 6 MG Oral Tablet" then 6 'mg'
  when Strength ~ "doxepin 10 MG Oral Capsule" then 10 'mg'
  when Strength ~ "doxepin 10 MG/ML Oral Solution" then 10 'mg/mL'
  when Strength ~ "doxepin 25 MG Oral Capsule" then 25 'mg'
  when Strength ~ "doxepin 50 MG Oral Capsule" then 50 'mg'
  when Strength ~ "doxepin 75 MG Oral Capsule" then 75 'mg'
  when Strength ~ "doxepin 100 MG Oral Capsule" then 100 'mg'
  when Strength ~ "doxepin 150 MG Oral Capsule" then 150 'mg'
  else null end
```

More Than One Order(Medication List<"Medication, Order">)

```
"Medication" OrderMedication1
  with "Medication" OrderMedication2
    such that ( OrderMedication1.authorDatetime during "Measurement Period"
        and OrderMedication1.refills >= 1
    )
      or ( date from OrderMedication1.authorDatetime !~ date from OrderMedication2.authorDatetime
          and OrderMedication1.authorDatetime during "Measurement Period"
          and OrderMedication2.authorDatetime during "Measurement Period"
      )
      or ( date from OrderMedication1.authorDatetime ~ date from OrderMedication2.authorDatetime
          and OrderMedication1.authorDatetime during "Measurement Period"
          and date from start of OrderMedication1.relevantPeriod !~ date from start of OrderMedication2.relevantPeriod
          and start of OrderMedication1.relevantPeriod during "Measurement Period"
          and start of OrderMedication2.relevantPeriod during "Measurement Period"
      )
  return OrderMedication1
```

Terminology

- code "1 ML digoxin 0.1 MG/ML Injection" ("RXNORM Code (204504)")
- code "2 ML digoxin 0.25 MG/ML Injection" ("RXNORM Code (104208)")
- code "digoxin 0.05 MG/ML Oral Solution" ("RXNORM Code (393245)")
- code "digoxin 0.0625 MG Oral Tablet" ("RXNORM Code (245273)")
- code "digoxin 0.125 MG Oral Tablet" ("RXNORM Code (197604)")
- code "digoxin 0.25 MG Oral Tablet" ("RXNORM Code (197606)")
- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "doxepin 10 MG Oral Capsule" ("RXNORM Code (1000048)")
- code "doxepin 10 MG/ML Oral Solution" ("RXNORM Code (1000054)")
- code "doxepin 100 MG Oral Capsule" ("RXNORM Code (1000058)")
- code "doxepin 150 MG Oral Capsule" ("RXNORM Code (1000064)")
- code "doxepin 25 MG Oral Capsule" ("RXNORM Code (1000070)")
- code "doxepin 3 MG Oral Tablet" ("RXNORM Code (966787)")
- code "doxepin 50 MG Oral Capsule" ("RXNORM Code (1000076)")
- code "doxepin 6 MG Oral Tablet" ("RXNORM Code (966793)")
- code "doxepin 75 MG Oral Capsule" ("RXNORM Code (1000097)")
- code "ergoloid mesylates, USP 1 MG Oral Tablet" ("RXNORM Code (318179)")
- code "Every eight hours (qualifier value)" ("SNOMEDCT Code (307469008)")
- code "Every eight to twelve hours (qualifier value)" ("SNOMEDCT Code (396140003)")
- code "Every forty eight hours (qualifier value)" ("SNOMEDCT Code (396131002)")
- code "Every four hours (qualifier value)" ("SNOMEDCT Code (225756002)")
- code "Every seventy two hours (qualifier value)" ("SNOMEDCT Code (396143001)")
- code "Every six hours (qualifier value)" ("SNOMEDCT Code (307468000)")
- code "Every six to eight hours (qualifier value)" ("SNOMEDCT Code (396139000)")
- code "Every thirty six hours (qualifier value)" ("SNOMEDCT Code (396126004)")
- code "Every three to four hours (qualifier value)" ("SNOMEDCT Code (225754004)")
- code "Every three to six hours (qualifier value)" ("SNOMEDCT Code (396127008)")
- code "Every twelve hours (qualifier value)" ("SNOMEDCT Code (307470009)")
- code "Every twenty four hours (qualifier value)" ("SNOMEDCT Code (396125000)")
- code "Every two to four hours (qualifier value)" ("SNOMEDCT Code (225752000)")
- code "Four times daily (qualifier value)" ("SNOMEDCT Code (307439001)")
- code "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" ("LOINC Code (71007-9)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional" ("CPT Code (99211)")
- code "Once daily (qualifier value)" ("SNOMEDCT Code (229797004)")
- code "One to four times a day (qualifier value)" ("SNOMEDCT Code (396109005)")
- code "One to three times a day (qualifier value)" ("SNOMEDCT Code (396108002)")
- code "One to two times a day (qualifier value)" ("SNOMEDCT Code (396107007)")
- code "Three times daily (qualifier value)" ("SNOMEDCT Code (229798009)")
- code "Twice a day (qualifier value)" ("SNOMEDCT Code (229799001)")
- code "Two to four times a day (qualifier value)" ("SNOMEDCT Code (396111001)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")
- valueset "Alcohol Withdrawal" (2.16.840.1.113883.3.464.1003.105.12.1209)
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Benzodiazepine Withdrawal" (2.16.840.1.113883.3.464.1003.105.12.1208)
- valueset "Bipolar Disorder" (2.16.840.1.113883.3.67.1.101.1.128)
- valueset "Care Services in Long Term Residential Facility" (2.16.840.1.113883.3.464.1003.101.12.1014)
- valueset "Desiccated Thyroid Medications" (2.16.840.1.113883.3.464.1003.1060)
- valueset "Digoxin Medications" (2.16.840.1.113883.3.464.1003.1065)
- valueset "Dipyridamole Medications" (2.16.840.1.113883.3.464.1003.1051)
- valueset "Discharge Services Nursing Facility" (2.16.840.1.113883.3.464.1003.101.12.1013)
- valueset "Doxepin Medications" (2.16.840.1.113883.3.464.1003.1067)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Generalized Anxiety Disorder" (2.16.840.1.113883.3.464.1003.105.12.1210)
- valueset "Guanfacine Medications" (2.16.840.1.113883.3.464.1003.196.11.1252)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)
- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Megestrol Medications" (2.16.840.1.113883.3.464.1003.1247)
- valueset "Meperidine Medications" (2.16.840.1.113883.3.464.1003.1248)
- valueset "Meprobamate Medications" (2.16.840.1.113883.3.464.1003.1057)
- valueset "Nifedipine Medications" (2.16.840.1.113883.3.464.1003.1053)
- valueset "Nursing Facility Visit" (2.16.840.1.113883.3.464.1003.101.12.1012)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Palliative Care Diagnosis" (2.16.840.1.113883.3.464.1003.1167)
- valueset "Palliative Care Encounter" (2.16.840.1.113883.3.464.1003.101.12.1090)
- valueset "Palliative Care Intervention" (2.16.840.1.113883.3.464.1003.198.12.1135)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Potentially Harmful Antidepressants for Older Adults" (2.16.840.1.113883.3.464.1003.1054)
- valueset "Potentially Harmful Antihistamines for Older Adults" (2.16.840.1.113883.3.464.1003.1043)
- valueset "Potentially Harmful Antiinfectives for Older Adults" (2.16.840.1.113883.3.464.1003.196.12.1481)
- valueset "Potentially Harmful Antiparkinsonian Agents for Older Adults" (2.16.840.1.113883.3.464.1003.1049)
- valueset "Potentially Harmful Antipsychotics for Older Adults" (2.16.840.1.113883.3.464.1003.196.12.1523)
- valueset "Potentially Harmful Barbiturates for Older Adults" (2.16.840.1.113883.3.464.1003.1055)
- valueset "Potentially Harmful Benzodiazepines for Older Adults" (2.16.840.1.113883.3.464.1003.196.12.1522)
- valueset "Potentially Harmful Estrogens for Older Adults" (2.16.840.1.113883.3.464.1003.1058)
- valueset "Potentially Harmful Gastrointestinal Antispasmodics for Older Adults" (2.16.840.1.113883.3.464.1003.1050)
- valueset "Potentially Harmful Nonbenzodiazepine Hypnotics for Older Adults" (2.16.840.1.113883.3.464.1003.196.12.1480)
- valueset "Potentially Harmful Pain Medications for Older Adults" (2.16.840.1.113883.3.464.1003.1063)
- valueset "Potentially Harmful Skeletal Muscle Relaxants for Older Adults" (2.16.840.1.113883.3.464.1003.1062)
- valueset "Potentially Harmful Sulfonylureas for Older Adults" (2.16.840.1.113883.3.464.1003.1059)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "REM Sleep Behavior Disorder" (2.16.840.1.113883.3.464.1003.105.12.1207)
- valueset "Schizophrenia" (2.16.840.1.113883.3.464.1003.105.12.1205)
- valueset "Seizure Disorder" (2.16.840.1.113883.3.464.1003.105.12.1206)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)
- valueset "Virtual Encounter" (2.16.840.1.113883.3.464.1003.101.12.1089)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal)" using "Functional Assessment of Chronic Illness Therapy - Palliative Care Questionnaire (FACIT-Pal) (LOINC Code 71007-9)"
- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Diagnosis: Alcohol Withdrawal" using "Alcohol Withdrawal (2.16.840.1.113883.3.464.1003.105.12.1209)"
- "Diagnosis: Benzodiazepine Withdrawal" using "Benzodiazepine Withdrawal (2.16.840.1.113883.3.464.1003.105.12.1208)"
- "Diagnosis: Bipolar Disorder" using "Bipolar Disorder (2.16.840.1.113883.3.67.1.101.1.128)"
- "Diagnosis: Generalized Anxiety Disorder" using "Generalized Anxiety Disorder (2.16.840.1.113883.3.464.1003.105.12.1210)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Diagnosis: Palliative Care Diagnosis" using "Palliative Care Diagnosis (2.16.840.1.113883.3.464.1003.1167)"
- "Diagnosis: REM Sleep Behavior Disorder" using "REM Sleep Behavior Disorder (2.16.840.1.113883.3.464.1003.105.12.1207)"
- "Diagnosis: Schizophrenia" using "Schizophrenia (2.16.840.1.113883.3.464.1003.105.12.1205)"

- "Diagnosis: Seizure Disorder" using "Seizure Disorder (2.16.840.1.113883.3.464.1003.105.12.1206)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Care Services in Long Term Residential Facility" using "Care Services in Long Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Discharge Services Nursing Facility" using "Discharge Services Nursing Facility (2.16.840.1.113883.3.464.1003.101.12.1013)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional" using "Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional (CPT Code 99211)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Palliative Care Encounter" using "Palliative Care Encounter (2.16.840.1.113883.3.464.1003.101.12.1090)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Encounter, Performed: Virtual Encounter" using "Virtual Encounter (2.16.840.1.113883.3.464.1003.101.12.1089)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Palliative Care Intervention" using "Palliative Care Intervention (2.16.840.1.113883.3.464.1003.198.12.1135)"
- "Medication, Order: Desiccated Thyroid Medications" using "Desiccated Thyroid Medications (2.16.840.1.113883.3.464.1003.1060)"
- "Medication, Order: Digoxin Medications" using "Digoxin Medications (2.16.840.1.113883.3.464.1003.1065)"
- "Medication, Order: Dipyridamole Medications" using "Dipyridamole Medications (2.16.840.1.113883.3.464.1003.1051)"
- "Medication, Order: Doxepin Medications" using "Doxepin Medications (2.16.840.1.113883.3.464.1003.1067)"
- "Medication, Order: ergoloid mesylates, USP 1 MG Oral Tablet" using "ergoloid mesylates, USP 1 MG Oral Tablet (RXNORM Code 318179)"
- "Medication, Order: Guanfacine Medications" using "Guanfacine Medications (2.16.840.1.113883.3.464.1003.196.11.1252)"
- "Medication, Order: Megestrol Medications" using "Megestrol Medications (2.16.840.1.113883.3.464.1003.1247)"
- "Medication, Order: Meperidine Medications" using "Meperidine Medications (2.16.840.1.113883.3.464.1003.1248)"
- "Medication, Order: Meprobamate Medications" using "Meprobamate Medications (2.16.840.1.113883.3.464.1003.1057)"
- "Medication, Order: Nifedipine Medications" using "Nifedipine Medications (2.16.840.1.113883.3.464.1003.1053)"
- "Medication, Order: Potentially Harmful Antidepressants for Older Adults" using "Potentially Harmful Antidepressants for Older Adults (2.16.840.1.113883.3.464.1003.1054)"
- "Medication, Order: Potentially Harmful Antihistamines for Older Adults" using "Potentially Harmful Antihistamines for Older Adults (2.16.840.1.113883.3.464.1003.1043)"
- "Medication, Order: Potentially Harmful Antiinfectives for Older Adults" using "Potentially Harmful Antiinfectives for Older Adults (2.16.840.1.113883.3.464.1003.196.12.1481)"
- "Medication, Order: Potentially Harmful Antiparkinsonian Agents for Older Adults" using "Potentially Harmful Antiparkinsonian Agents for Older Adults (2.16.840.1.113883.3.464.1003.1049)"
- "Medication, Order: Potentially Harmful Antipsychotics for Older Adults" using "Potentially Harmful Antipsychotics for Older Adults (2.16.840.1.113883.3.464.1003.196.12.1523)"
- "Medication, Order: Potentially Harmful Barbiturates for Older Adults" using "Potentially Harmful Barbiturates for Older Adults (2.16.840.1.113883.3.464.1003.1055)"
- "Medication, Order: Potentially Harmful Benzodiazepines for Older Adults" using "Potentially Harmful Benzodiazepines for Older Adults (2.16.840.1.113883.3.464.1003.196.12.1522)"
- "Medication, Order: Potentially Harmful Estrogens for Older Adults" using "Potentially Harmful Estrogens for Older Adults (2.16.840.1.113883.3.464.1003.1058)"
- "Medication, Order: Potentially Harmful Gastrointestinal Antispasmodics for Older Adults" using "Potentially Harmful Gastrointestinal Antispasmodics for Older Adults (2.16.840.1.113883.3.464.1003.1050)"
- "Medication, Order: Potentially Harmful Nonbenzodiazepine Hypnotics for Older Adults" using "Potentially Harmful Nonbenzodiazepine Hypnotics for Older Adults (2.16.840.1.113883.3.464.1003.196.12.1480)"
- "Medication, Order: Potentially Harmful Pain Medications for Older Adults" using "Potentially Harmful Pain Medications for Older Adults (2.16.840.1.113883.3.464.1003.1063)"
- "Medication, Order: Potentially Harmful Skeletal Muscle Relaxants for Older Adults" using "Potentially Harmful Skeletal Muscle Relaxants for Older Adults (2.16.840.1.113883.3.464.1003.1062)"
- "Medication, Order: Potentially Harmful Sulfonylureas for Older Adults" using "Potentially Harmful Sulfonylureas for Older Adults (2.16.840.1.113883.3.464.1003.1059)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

◢ SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

◢ SDE Payer

["Patient Characteristic Payer": "Payer Type"]

◢ SDE Race

["Patient Characteristic Race": "Race"]

◢ SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Falls: Screening for Future Fall Risk**		
CMS ID	139	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	bc5b4a57-b964-4399-9d40-667c896f31ea
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	National Committee for Quality Assurance		
Measure Developer	National Committee for Quality Assurance		
Measure Developer	American Medical Association (AMA)		
Endorsed By	None		
Description	Percentage of patients 65 years of age and older who were screened for future fall risk during the measurement period		
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Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	As the leading cause of both fatal and nonfatal injuries for older adults, falls are one of the most common and significant health issues facing people aged 65 years or older (Schneider, Shubert, & Harmon, 2010). Moreover, the rate of falls increases with age (Dykes et al., 2010). Older adults are five times more likely to be hospitalized for fall-related injuries than any other cause-related injury. It is estimated that one in every four adults over 65 will fall each year (Centers for Disease Control and Prevention, 2023). In those over age 80, the rate of falls increases to fifty percent (Doherty et al., 2009). Falls are also associated with substantial cost and resource use, approaching $30,000 per fall hospitalization (Woolcott et al., 2011). Identifying at-risk patients is the most important part of management, as applying preventive measures in this vulnerable population can have a profound effect on public health (al-Aama, 2011). Family physicians have a pivotal role in screening older patients for risk of falls, and applying preventive strategies for patients at risk (al-Aama, 2011).		
Clinical Recommendation Statement	All older persons who are under the care of a heath professional (or their caregivers) should be asked at least once a year about falls. (American Geriatrics Society/British Geriatric Society/American Academy of Orthopaedic Surgeons (AGS/BGS/AAOS), 2010) Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should have a fall evaluation performed. This evaluation should be performed by a clinician with appropriate skills and experience, which may necessitate referral to a specialist (e.g., geriatrician). (AGS/BGS/AAOS, 2010)		
Improvement Notation	A higher score indicates better quality		
Reference	Reference Type: CITATION Reference Text: 'al-Aama, T. (2011). Falls in the elderly: spectrum and prevention. Can Fam Physician 57(7),771-6. Retrieved from https://pubmed.ncbi.nlm.nih.gov/21753098/'		
Reference	Reference Type: CITATION Reference Text: 'American Geriatrics Society and British Geriatrics Society. (2010). Prevention of Falls in Older Persons AGS BGS Clinical Practice Guideline 2010. Accessed December 8. 2023. Available at https://geriatricscareonline.org/toc/updated-american-geriatrics-societybritish-geriatrics-society-clinical-practice-guideline-for-prevention-of-falls-in-older-persons-and-recommendations/CL014/'		

Reference	Reference Type: CITATION Reference Text: 'Centers for Disease Control and Prevention. (2023). "Facts about Falls" (May 12, 2023) https://www.cdc.gov/falls/facts.html'
Reference	Reference Type: CITATION Reference Text: 'Doherty, M., and J. Crossen-Sills. (2009). Fall Risk: Keep your Patients in Balance. The Nurse Practitioner: The American Journal of Primary Health Care 34(12),46-51.'
Reference	Reference Type: CITATION Reference Text: 'Dykes, P.C., Carrollf, D.L., Hurley, A., et al. (2010). Fall Prevention in Acute Care Hospitals: A Randomized Trial. JAMA, 304(17), 1912-1918.'
Reference	Reference Type: CITATION Reference Text: 'Schneider, E.C., Shubert, T.E., & Harmon, K.J. (2010). Addressing the Escalating Public Health Issue of Falls Among Older Adults. NC Med J, 71(6), 547-52.'
Reference	Reference Type: CITATION Reference Text: 'Woolcott, J.C., Khan, K.M., Mitrovic, S., et al. (2011). The Cost of Fall Related Presentations to the ED: A Prospective, In-Person, Patient-Tracking Analysis of Health Resource Utilization. Osteporos Int [Epub ahead of print].'
Definition	Screening for Future Fall Risk: Assessment of whether an individual has experienced a fall or problems with gait or balance. A specific screening tool is not required for this measure, however potential screening tools include the Morse Fall Scale and the timed Get-Up-And-Go test. Fall: A sudden, unintentional change in position causing an individual to land at a lower level, on an object, the floor, or the ground, other than as a consequence of sudden onset of paralysis, epileptic seizure, or overwhelming external force.
Guidance	This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Patients aged 65 years and older at the start of the measurement period with a visit during the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Exclude patients who are in hospice care for any part of the measurement period
Numerator	Patients who were screened for future fall risk at least once within the measurement period
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 65
  and exists "Qualifying Encounter"
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
Hospice."Has Hospice Services"
```

Numerator

```
exists ( ["Assessment, Performed": "Falls Screening"] FallsScreening
    where Global."NormalizeInterval" ( FallsScreening.relevantDatetime, FallsScreening.relevantPeriod ) during day of "Measurement Period"
)
```

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Denominator

"Initial Population"

Denominator Exclusions

Hospice."Has Hospice Services"

Hospice.Has Hospice Services

```
exists ( ["Encounter, Performed": "Encounter Inpatient"] InpatientEncounter
    where ( InpatientEncounter.dischargeDisposition ~ "Discharge to home for hospice care (procedure)"
        or InpatientEncounter.dischargeDisposition ~ "Discharge to healthcare facility for hospice care (procedure)"
    )
      and InpatientEncounter.relevantPeriod ends during day of "Measurement Period"
)
  or exists ( ["Encounter, Performed": "Hospice Encounter"] HospiceEncounter
      where HospiceEncounter.relevantPeriod overlaps day of "Measurement Period"
  )
  or exists ( ["Assessment, Performed": "Hospice care [Minimum Data Set]"] HospiceAssessment
      where HospiceAssessment.result ~ "Yes (qualifier value)"
        and Global."NormalizeInterval" ( HospiceAssessment.relevantDatetime, HospiceAssessment.relevantPeriod ) overlaps day of "Measurement Period"
  )
  or exists ( ["Intervention, Order": "Hospice Care Ambulatory"] HospiceOrder
      where HospiceOrder.authorDatetime during day of "Measurement Period"
  )
  or exists ( ["Intervention, Performed": "Hospice Care Ambulatory"] HospicePerformed
      where Global."NormalizeInterval" ( HospicePerformed.relevantDatetime, HospicePerformed.relevantPeriod ) overlaps day of "Measurement Period"
  )
or exists ( ["Diagnosis": "Hospice Diagnosis"] HospiceCareDiagnosis
      where HospiceCareDiagnosis.prevalencePeriod overlaps day of "Measurement Period"
  )
```

Initial Population

```
AgeInYearsAt(date from start of "Measurement Period") >= 65
  and exists "Qualifying Encounter"
```

Numerator

```
exists ( ["Assessment, Performed": "Falls Screening"] FallsScreening
    where Global."NormalizeInterval" ( FallsScreening.relevantDatetime, FallsScreening.relevantPeriod ) during day of "Measurement Period"
)
```

Qualifying Encounter

```
( ["Encounter, Performed": "Office Visit"]
  union ["Encounter, Performed": "Annual Wellness Visit"]
  union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
  union ["Encounter, Performed": "Home Healthcare Services"]
  union ["Encounter, Performed": "Ophthalmological Services"]
  union ["Encounter, Performed": "Preventive Care Services Individual Counseling"]
  union ["Encounter, Performed": "Discharge Services Nursing Facility"]
  union ["Encounter, Performed": "Nursing Facility Visit"]
  union ["Encounter, Performed": "Care Services in Long Term Residential Facility"]
  union ["Encounter, Performed": "Audiology Visit"]
  union ["Encounter, Performed": "Telephone Visits"]
  union ["Encounter, Performed": "Virtual Encounter"]
  union ["Encounter, Performed": "Physical Therapy Evaluation"]
  union ["Encounter, Performed": "Occupational Therapy Evaluation"] ) ValidEncounters
  where ValidEncounters.relevantPeriod during day of "Measurement Period"
```

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Discharge to healthcare facility for hospice care (procedure)" ("SNOMEDCT Code (428371000124100)")
- code "Discharge to home for hospice care (procedure)" ("SNOMEDCT Code (428361000124107)")
- code "Hospice care [Minimum Data Set]" ("LOINC Code (45755-6)")
- code "Yes (qualifier value)" ("SNOMEDCT Code (373066001)")
- valueset "Annual Wellness Visit" (2.16.840.1.113883.3.526.3.1240)
- valueset "Audiology Visit" (2.16.840.1.113883.3.464.1003.101.12.1066)
- valueset "Care Services in Long Term Residential Facility" (2.16.840.1.113883.3.464.1003.101.12.1014)
- valueset "Discharge Services Nursing Facility" (2.16.840.1.113883.3.464.1003.101.12.1013)
- valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Falls Screening" (2.16.840.1.113883.3.464.1003.118.12.1028)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Home Healthcare Services" (2.16.840.1.113883.3.464.1003.101.12.1016)
- valueset "Hospice Care Ambulatory" (2.16.840.1.113883.3.526.3.1584)

- valueset "Hospice Diagnosis" (2.16.840.1.113883.3.464.1003.1165)
- valueset "Hospice Encounter" (2.16.840.1.113883.3.464.1003.1003)
- valueset "Nursing Facility Visit" (2.16.840.1.113883.3.464.1003.101.12.1012)
- valueset "Occupational Therapy Evaluation" (2.16.840.1.113883.3.526.3.1011)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Physical Therapy Evaluation" (2.16.840.1.113883.3.526.3.1022)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Individual Counseling" (2.16.840.1.113883.3.464.1003.101.12.1026)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)
- valueset "Virtual Encounter" (2.16.840.1.113883.3.464.1003.101.12.1089)

Data Criteria (QDM Data Elements)

- "Assessment, Performed: Falls Screening" using "Falls Screening (2.16.840.1.113883.3.464.1003.118.12.1028)"
- "Assessment, Performed: Hospice care [Minimum Data Set]" using "Hospice care [Minimum Data Set] (LOINC Code 45755-6)"
- "Diagnosis: Hospice Diagnosis" using "Hospice Diagnosis (2.16.840.1.113883.3.464.1003.1165)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Audiology Visit" using "Audiology Visit (2.16.840.1.113883.3.464.1003.101.12.1066)"
- "Encounter, Performed: Care Services in Long Term Residential Facility" using "Care Services in Long Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Discharge Services Nursing Facility" using "Discharge Services Nursing Facility (2.16.840.1.113883.3.464.1003.101.12.1013)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospice Encounter" using "Hospice Encounter (2.16.840.1.113883.3.464.1003.1003)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Occupational Therapy Evaluation" using "Occupational Therapy Evaluation (2.16.840.1.113883.3.526.3.1011)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Physical Therapy Evaluation" using "Physical Therapy Evaluation (2.16.840.1.113883.3.526.3.1022)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Individual Counseling" using "Preventive Care Services Individual Counseling (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Encounter, Performed: Virtual Encounter" using "Virtual Encounter (2.16.840.1.113883.3.464.1003.101.12.1089)"
- "Intervention, Order: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Intervention, Performed: Hospice Care Ambulatory" using "Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None

eCQM Title	**Closing the Referral Loop: Receipt of Specialist Report**		
CMS ID	50	**eCQM Version Number**	14.0.000
CBE Number	Not Applicable	**GUID**	f58fc0d6-edf5-416a-8d29-79afbfd24dea
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	Centers for Medicare & Medicaid Services (CMS)		
Measure Developer	American Institutes for Research (AIR)		
Endorsed By	None		
Description	Percentage of patients with referrals, regardless of age, for which the referring clinician receives a report from the clinician to whom the patient was referred		
Copyright	This electronic clinical quality measure (Measure) and related data specifications are owned and stewarded by the Centers for Medicare & Medicaid Services (CMS). CMS contracted (Contract # 75FCMC18D0027/ Task Order #: 75FCMC24F0144) with the American Institutes for Research (AIR) to develop this electronic measure. AIR is not responsible for any use of the Measure. AIR makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and AIR has no liability to anyone who relies on such measures or specifications. Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. AIR disclaims all liability for use or accuracy of any third-party codes contained in the specifications. CPT(R) contained in the Measure specifications is copyright 2004-2024 American Medical Association. LOINC(R) is copyright 2004-2024 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2024 International Health Terminology Standards Development Organisation. This performance Measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications.		
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Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Problems in the outpatient referral and consultation process have been documented, including inadequate care pathways between specialty and primary care. Studies suggest that both specialists and primary care providers (PCPs) are not satisfied with current processes (Institute for Healthcare Improvement / National Patient Safety Foundation, 2017; Greenwood-Lee et. al, 2018). Breakdowns in referral communication leads to worse health outcomes, increased cost, and appointment delays (Patel et. al, 2018; Odisho et. al, 2020). A 2018 analysis of primary care referrals to specialists found that of the 103,737 referral scheduling attempts analyzed, only 36,072 (34.8%) resulted in documented complete appointments, defined by the specialty clinician providing report to the PCP after the referral visit (Patel et. al, 2018). Technological and process-based updates can improve the referral loop process and increase rates of closing the referral loop. Ramelson et. al (2018) enhanced an EHR's Referral Manager module to meet the Controlled Risk Insurance Company's best practice steps and the requirements of both the CMS EHR Incentive Program and the National Committee for Quality Assurance Patient-Centered Medical Home program. Following the updates, 76.8% of referrals were completed and all defined referral process steps were easier to accomplish. Odisho et. al (2020) developed a referrals automation software to simplify the fax to referral process. Feedback from key stakeholder interviews noted that the software enhanced the referrals process by further streamlining and organizing the patient referral process. The Institute for Healthcare Improvement and the National Patient Safety Foundation (2017) reviewed the referrals process in the ambulatory care setting and found that organizational leaders, EHR vendors, regulatory agencies, clinicians, and patients all play a role in creating a referrals system that is effective, safe, convenient, and patient-centered.		
Clinical Recommendation Statement	None		
Improvement Notation	Higher score indicates better quality		
Reference	Reference Type: CITATION Reference Text: 'Greenwood-Lee, J., Jewett, L., Woodhouse, L., & Marshall, D. A. (2018). A categorisation of problems and solutions to improve patient referrals from primary to specialty care. BMC health services research, 18(1), 986. https://doi.org/10.1186/s12913-018-3745-y'		
Reference	Reference Type: CITATION Reference Text: 'Institute for Healthcare Improvement / National Patient Safety Foundation. (2017). Closing the Loop: A Guide to Safer Ambulatory Referrals in the EHR Era. https://www.ihi.org/resources/Pages/Publications/Closing-the-Loop-A-Guide-to-Safer-Ambulatory-Referrals.aspx'		
Reference	Reference Type: CITATION Reference Text: 'Odisho, A. Y., Lui, H., Yerramsetty, R., Bautista, F., Gleason, N., Martin, E., Young, J. J., Blum, M., & Neinstein, A. B. (2020). Design and development of referrals automation, a SMART on FHIR solution to improve patient access to specialty care. JAMIA open, 3(3), 405–412. https://doi.org/10.1093/jamiaopen/ooaa036'		
Reference	Reference Type: CITATION Reference Text: 'Patel, M. P., Schettini, P., O'Leary, C. P., Bosworth, H. B., Anderson, J. B., & Shah, K. P. (2018). Closing the Referral Loop: an Analysis of Primary Care Referrals to Specialists in a Large Health System. Journal of general internal medicine, 33(5), 715–721. https://doi.org/10.1007/s11606-018-4392-z'		
Reference	Reference Type: CITATION Reference Text: 'Ramelson, H., Nederlof, A., Karmiy, S., Neri, P., Kiernan, D., Krishnamurthy, R., Allen, A., & Bates, D. W. (2018). Closing the loop with an enhanced referral management system. Journal of the American Medical Informatics Association: JAMIA, 25(6), 715–721. https://doi.org/10.1093/jamia/ocy004'		
Definition	Referral: A request from one clinician to another clinician for evaluation, treatment, or co-management of a patient's condition. This term encompasses referral and consultation as defined by Centers for Medicare & Medicaid Services. Report: A written document prepared by the eligible clinician (and staff) to whom the patient was referred and that accounts for his or her findings, provides summary of care information about findings, diagnostics, assessments and/or plans of care, and is provided to the referring eligible clinician.		

Guidance	The clinician who refers the patient to another clinician is the clinician who should be held accountable for the performance of this measure. Only the first referral made between January 1 – October 31 of the measurement period will be considered for this measure to allow adequate time for the referring clinician to collect the consult report by the end of the measurement period. If there are multiple referrals for a patient during the measurement period, use the first referral. The clinician to whom the patient was referred is responsible for sending the consultant report that will fulfill the communication. Note: this is not the same clinician who would report on the measure. The consultant report that will successfully close the referral loop should be related to the first referral for a patient during the measurement period. If there are multiple consultant reports received by the referring clinician which pertain to a particular referral, use the first consultant report to satisfy the measure. Eligible clinicians reporting on this measure should note that all data for the measurement period is to be submitted by the deadline established by CMS. Therefore, eligible clinicians who refer patients towards the end of the measurement period (i.e., October), should request that clinicians to whom they referred their patients share their consult reports as soon as possible in order for those patients to be counted in the measure numerator during the measurement period. When clinicians to whom patients are referred communicate the consult report as soon as possible with the referring clinician, it ensures that the communication loop is closed in a timely manner and that the data are included in the submission to CMS. A procedural report received from a specialist for an exam or procedure conducted (e.g., diabetic eye exam, colonoscopy, etc.) can satisfy the numerator requirement and successfully close the referral loop. A separate consultant note or consultant report is not required to close the referral loop in these circumstances. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	Number of patients, regardless of age, who had an encounter during the measurement period and were referred by one clinician to another clinician on or before October 31
Denominator	Equals Initial Population
Denominator Exclusions	None
Numerator	Number of patients with a referral on or before October 31, for which the referring clinician received a report from the first clinician to whom the patient was referred
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

("Has Encounter during Measurement Period"
  or "Has Intervention during Measurement Period"
)
  and "First Referral during First 10 Months of Measurement Period" is not null

Denominator

"Initial Population"

Denominator Exclusions

None

Numerator

"Referring Clinician Receives Consultant Report to Close Referral Loop"

Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Denominator

"Initial Population"

First Referral during First 10 Months of Measurement Period

```
First((["Intervention, Performed": "Referral"] ReferralPerform
      where Global."NormalizeInterval"(ReferralPerform.relevantDatetime, ReferralPerform.relevantPeriod) ends during day of Interval[start of "Measurement Period",
Date(year from start of "Measurement Period", 10, 31)]
      return {
        identification: ReferralPerform.id,
        dateIntervention:
        end of Global."NormalizeInterval"(ReferralPerform.relevantDatetime, ReferralPerform.relevantPeriod)
      }
  )
    union(["Intervention, Order": "Referral"] ReferralOrder
      where ReferralOrder.authorDatetime during day of Interval[start of "Measurement Period", Date(year from start of "Measurement Period", 10, 31)]
      return {
        identification: ReferralOrder.id,
        dateIntervention: ReferralOrder.authorDatetime
      }
    )) ReferralInterventions
    sort by dateIntervention ascending
)
```

Has Encounter during Measurement Period

```
exists ( ( ["Encounter, Performed": "Office Visit"]
    union ["Encounter, Performed": "Ophthalmological Services"]
    union ["Encounter, Performed": "Preventive Care Services Established Office Visit, 18 and Up"]
    union ["Encounter, Performed": "Preventive Care Services, Initial Office Visit, 0 to 17"]
    union ["Encounter, Performed": "Preventive Care Services Initial Office Visit, 18 and Up"]
    union ["Encounter, Performed": "Preventive Care, Established Office Visit, 0 to 17"] ) Encounter
    where Encounter.relevantPeriod during day of "Measurement Period"
)
```

Has Intervention during Measurement Period

```
exists ( ( ["Intervention, Performed": "Behavioral or Neuropsych Assessment"]
    union ["Intervention, Performed": "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision
making)"]
    union ["Intervention, Performed": "Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or
more tests, any method; first 30 minutes"]
    union ["Intervention, Performed": "Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30
minutes"]
    union ["Intervention, Performed": "Psychotherapy for crisis; first 60 minutes"]
    union ["Intervention, Performed": "Psych Visit Diagnostic Evaluation"]
    union ["Intervention, Performed": "Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory
and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and
report; first hour"] ) Intervention
    where Global."NormalizeInterval" ( Intervention.relevantDatetime, Intervention.relevantPeriod ) ends during day of "Measurement Period"
)
```

Initial Population

```
( "Has Encounter during Measurement Period"
    or "Has Intervention during Measurement Period"
)
  and "First Referral during First 10 Months of Measurement Period" is not null
```

Numerator

```
"Referring Clinician Receives Consultant Report to Close Referral Loop"
```

Referring Clinician Receives Consultant Report to Close Referral Loop

```
exists ( ["Communication, Performed": "Consultant Report"] ConsultantReportCommunicated
    with "First Referral during First 10 Months of Measurement Period" FirstReferral
      such that FirstReferral.identification in ConsultantReportCommunicated.relatedTo
        and ConsultantReportCommunicated.receivedDatetime after FirstReferral.dateIntervention
        and ConsultantReportCommunicated.receivedDatetime during day of "Measurement Period"
)
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "Federal Administrative Sex"]
```

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>
```

Terminology

- code "Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and report; first hour" ("CPT Code (96112)")
- code "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)" ("CPT Code (96156)")
- code "Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes" ("CPT Code (96136)")

- code "Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30 minutes" ("CPT Code (96138)")
- code "Psychotherapy for crisis; first 60 minutes" ("CPT Code (90839)")
- valueset "Behavioral or Neuropsych Assessment" (2.16.840.1.113883.3.526.3.1023)
- valueset "Consultant Report" (2.16.840.1.113883.3.464.1003.121.12.1006)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Preventive Care Services Established Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1025)
- valueset "Preventive Care Services Initial Office Visit, 18 and Up" (2.16.840.1.113883.3.464.1003.101.12.1023)
- valueset "Preventive Care Services, Initial Office Visit, 0 to 17" (2.16.840.1.113883.3.464.1003.101.12.1022)
- valueset "Preventive Care, Established Office Visit, 0 to 17" (2.16.840.1.113883.3.464.1003.101.12.1024)
- valueset "Psych Visit Diagnostic Evaluation" (2.16.840.1.113883.3.526.3.1492)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Referral" (2.16.840.1.113883.3.464.1003.101.12.1046)

Data Criteria (QDM Data Elements)

- "Communication, Performed: Consultant Report" using "Consultant Report (2.16.840.1.113883.3.464.1003.121.12.1006)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Preventive Care Services Established Office Visit, 18 and Up" using "Preventive Care Services Established Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services Initial Office Visit, 18 and Up" using "Preventive Care Services Initial Office Visit, 18 and Up (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Preventive Care Services, Initial Office Visit, 0 to 17" using "Preventive Care Services, Initial Office Visit, 0 to 17 (2.16.840.1.113883.3.464.1003.101.12.1022)"
- "Encounter, Performed: Preventive Care, Established Office Visit, 0 to 17" using "Preventive Care, Established Office Visit, 0 to 17 (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Intervention, Order: Referral" using "Referral (2.16.840.1.113883.3.464.1003.101.12.1046)"
- "Intervention, Performed: Behavioral or Neuropsych Assessment" using "Behavioral or Neuropsych Assessment (2.16.840.1.113883.3.526.3.1023)"
- "Intervention, Performed: Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and report; first hour" using "Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and report; first hour (CPT Code 96112)"
- "Intervention, Performed: Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)" using "Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making) (CPT Code 96156)"
- "Intervention, Performed: Psych Visit Diagnostic Evaluation" using "Psych Visit Diagnostic Evaluation (2.16.840.1.113883.3.526.3.1492)"
- "Intervention, Performed: Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes" using "Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes (CPT Code 96136)"
- "Intervention, Performed: Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30 minutes" using "Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30 minutes (CPT Code 96138)"
- "Intervention, Performed: Psychotherapy for crisis; first 60 minutes" using "Psychotherapy for crisis; first 60 minutes (CPT Code 90839)"
- "Intervention, Performed: Referral" using "Referral (2.16.840.1.113883.3.464.1003.101.12.1046)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	Not Applicable

eCQM Title	**Screening for Abnormal Glucose Metabolism in Patients at Risk of Developing Diabetes**		
CMS ID	1154	**eCQM Version Number**	1.0.000
CBE Number	Not Applicable	**GUID**	20a0b54a-4973-4d5c-9518-59139eb7d334
Measurement Period	January 1, 2026 through December 31, 2026		
Measure Steward	American Medical Association (AMA)		
Measure Developer	Health Services Advisory Group		
Measure Developer	American Medical Association (AMA)		
Endorsed By	None		
Description	Percentage of adult patients with risk factors for type 2 diabetes who are due for glycemic screening for whom the screening process was completed during the measurement period.		
Copyright	Prediabetes Quality Measures (C) 2018-2025. American Medical Association. All rights reserved. CPT (R) 2025 American Medical Association ("AMA"). All rights reserved. You cannot, without express written permission from the AMA, copy, modify, distribute, display, or use CPT for any commercial purpose, including for productive use in a clinical setting. Any such use requires a separate license from the AMA. You agree that you shall not remove, obscure, or alter any proprietary rights notices (including copyright and trademark notices) which may be affixed to or contained within the measure. Current Procedural Terminology (CPT [R] code(s) ("CPT Codes") information provided in the Measures is intended for reference and informational purposes only. Decisions regarding which CPT Code is appropriate must be made by physicians and/or their staff considering the clinical facts, circumstances, applicable coding and published AMA coding guideline and payor policies. The AMA does not dictate payer reimbursement policy and does not substitute for the professional judgment of the practitioner performing a procedure, who remains responsible for correct coding. The AMA is not engaged in the practice of medicine or dispensing medical services. Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of the CPT code set, and the AMA is not recommending their use. Information contained in the measure includes information protected by intellectual property rights which are owned by the AMA. The Measures may also contain proprietary code sets not owned by the AMA. The AMA disclaims all liability for the use or accuracy of any such information. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. LOINC [R] copyright 2004-2025 Regenstrief Institute, Inc., SNOMED CLINICAL TERMS (SNOMED CT[R]) copyright 2004-2025, The International Health Information Standards Development Organisation (IHTSDO). ICD-10 is copyright 2024 World Health Organization. All Rights Reserved.		
Disclaimer	The Prediabetes Quality Measure set descriptions and specifications (collectively, "Measures") are not clinical guidelines, do not establish a standard of medical care, and have not been tested for all potential applications. The Measures are not intended to diagnose or treat disease or other conditions. The Measures are not a medical device and have not been evaluated by the Food and Drug Administration. Information provided through the Measures is not intended to direct or substitute for the independent assessment or judgment of a qualified healthcare professional. The American Medical Association ("AMA") assumes no liability for use of the Measures, or data contained or not contained in the Measures. The AMA consents to the use, reproduction and distribution of the Measures for non-commercial purposes only (e.g., for use by health care providers in a professional setting). You cannot, without the express written consent of the AMA, use the Measures for any commercial purpose. Unauthorized commercial use of the Measures is expressly prohibited. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed, or distributed for commercial gain. These requirements apply to both you as an individual and to the corporate entity that you represent as an employee or agent, to the extent applicable. To request to make a commercial use of the Measures, please email: AMA.IHO.QualityMeasures@ama-assn.org. Any commercial use of the Measures requires a separate license from the AMA. Any use, publication or other dissemination of these Measures shall include the following attribution: "This [publication, etc.] was prepared using clinical quality measures developed by the American Medical Association. The content reflects the views of [name of author(s)]." USE OF THE MEASURES (INCLUDING ANY CPT CODES) IS AT YOUR SOLE RISK. THE MEASURES ARE PROVIDED "AS IS" WITHOUT EXPRESS OR IMPLIED WARRANTIES OF ANY KIND, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. AMA EXPRESSLY DISCLAIMS ANY AND ALL RESPONSIBILITY OR LIABILITY FOR DAMAGES OF ANY KIND ARISING OUT OF USE, REFERENCE TO, OR RELIANCE ON THE MEAUSURES. These requirements apply to both you as an individual and to the corporate entity that you represent as an employee or agent, to the extent applicable. Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM].		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment			
Rate Aggregation	None		
Rationale	This measure is critical to identifying patients with prediabetes who may benefit from interventions to prevent type 2 diabetes and identification of undiagnosed type 2 diabetes. The Centers for Disease Control and Prevention (CDC) estimates that approximately 97.6 million American adults have prediabetes (CDC, 2024). They note that more than 80% of adults with prediabetes are not aware that they have the condition. Regular screening for prediabetes is a critical first step to helping patients avoid the disability and costs associated with progression to type 2 diabetes. The measure gives credit for three types of tests that can be used to detect abnormal glucose metabolism: HbA1c, oral glucose tolerance, and fasting plasma glucose. When considering which plasma glucose screening codes to include in the measure, the measure development team carefully considered two potential unintended consequences related to the limited use of accompanying fasting status codes. If the measure specified plasma glucose screening too narrowly, it could incentivize over screening, which would impose added burden on clinicians and increased costs to some patients. Alternatively, if the measure specified plasma glucose screening too broadly, it could give credit for non-fasting plasma glucose tests that are not adequate for diagnostic purposes.		
Clinical Recommendation Statement	The U.S. Preventive Services Task Force (USPSTF) recommends screening for prediabetes and type 2 diabetes in adults aged 35 to 70 years who have overweight or obesity. Clinicians should offer or refer patients with prediabetes to effective preventive interventions (B recommendation) (USPSTF, 2021). Evidence on the optimal screening interval for adults with an initial normal glucose test result is limited. Cohort and		

	modeling studies suggest that screening every 3 years may be a reasonable approach for adults with normal blood glucose levels (USPSTF, 2021). Prediabetes and type 2 diabetes can be detected by measuring fasting plasma glucose or HbA1c level, or with an oral glucose tolerance test. A fasting plasma glucose level of 126 mg/dL (6.99 mmol/L) or greater, an HbA1c level of 6.5% or greater, or a 2-hour post-load glucose level of 200 mg/dL (11.1 mmol/L) or greater are consistent with the diagnosis of type 2 diabetes. A fasting plasma glucose level of 100 to 125 mg/dL (5.55-6.94 mmol/L), an HbA1c level of 5.7% to 6.4%, or a 2-hour post-load glucose level of 140 to 199 mg/dL (7.77-11.04 mmol/L) are consistent with prediabetes (USPSTF, 2021).
Improvement Notation	Increased score indicates improvement - Higher score equals better quality
Reference	Reference Type: CITATION Reference Text: 'Centers for Disease Control and Prevention. (2024, July 23). National Diabetes Statistics Report. Retrieved November 15, 2024, from Diabetes website: https://www.cdc.gov/diabetes/php/data-research/'
Reference	Reference Type: CITATION Reference Text: 'U.S. Preventive Services Task Force. (2021). Screening for Prediabetes and Type 2 Diabetes: US Preventive Services Task Force Recommendation Statement. JAMA, 326(8), 736–743. https://doi.org/10.1001/jama.2021.12531'
Definition	None
Guidance	The measure is limited to patients aged 35 to 70 with overweight or obesity because it is recommended that all patients with those risk factors be screened for diabetes at least once every three years. However, this measure is not intended to discourage screening at younger ages, which the USPSTF recommends considering for adults with overweight or obesity and any of the following risk factors: - Race/ethnicity with disproportionately high incidence and prevalence of diabetes (American Indian/Alaska Native, Asian American, Black, Hispanic/Latino, or Native Hawaiian/Pacific Islander persons) - Family history of diabetes - History of gestational diabetes - History of polycystic ovarian syndrome It is recommended that every patient evaluated by this measure also identify payer, race, ethnicity, and sex. This eCQM is a patient-based measure. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.
Transmission Format	TBD
Initial Population	All patients with at least two outpatient clinical encounters or one preventive clinical encounter during the measurement period who have the following risk factors for type 2 diabetes: - Most recent BMI ≥25 kg/m2 (BMI ≥23 kg/m2 for Asian patients) during measurement period, AND - Age 35-70 at start of measurement period.
Denominator	All patients in the initial population.
Denominator Exclusions	- Patient's pregnancy overlaps measurement period. - Patient with diagnosis of advanced illness or limited life expectancy overlaps measurement period. - Patient with diagnosis of diabetes overlaps 2-year look-back period. - Patient with diagnosis of prediabetes overlaps 2-year look-back period. - Patient with glycemic screening performed during 2-year look-back period.
Numerator	Patients who had a glycemic screening test performed during the measurement period.
Numerator Exclusions	None
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex.

Table of Contents

Population Criteria

◢ Initial Population

"Patients Aged 35 to 70 with an Office Visit During the Measurement Period"
  and ("Most Recent BMI Equal to or Greater Than 25 and Is Not Asian"
    or "Most Recent BMI Equal to or Greater Than 23 and Is Asian")

◢ Denominator

"Initial Population"

◢ Denominator Exclusions

exists "Has Pregnancy Diagnosis During Measurement Period"
  or exists "Has Advanced Illness or Limited Life Expectancy"
  or exists "Diabetes Diagnosis Overlaps 2 Year Look Back Period"
  or exists "Prediabetes Diagnosis Overlaps 2 Year Look Back Period"
  or "Has Glycemic Laboratory Test Performed During 2 Year Look Back Period"

◢ Numerator

exists "Glycemic Laboratory Test Performed During Measurement Period"

◢ Numerator Exclusions

None

Denominator Exceptions

None

Stratification

None

Definitions

Aged 35 to 70 at Start of Measurement Period

```
"AgeInYearsAt"(date from start of "Measurement Period") >= 35
and "AgeInYearsAt"(date from start of "Measurement Period") <= 70
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
exists "Has Pregnancy Diagnosis During Measurement Period"
  or exists "Has Advanced Illness or Limited Life Expectancy"
  or exists "Diabetes Diagnosis Overlaps 2 Year Look Back Period"
  or exists "Prediabetes Diagnosis Overlaps 2 Year Look Back Period"
  or "Has Glycemic Laboratory Test Performed During 2 Year Look Back Period"
```

Diabetes Diagnosis Overlaps 2 Year Look Back Period

```
( ["Diagnosis": "Diabetes"] ) PriorDiabetes
  where PriorDiabetes.prevalencePeriod overlaps "Look Back Period"
```

Glycemic Laboratory Test Performed During Measurement Period

```
( ["Laboratory Test, Performed": "Glycemic Screening Tests"] ) LabTestPerformed
 where Global."NormalizeInterval" (LabTestPerformed.relevantDatetime, LabTestPerformed.relevantPeriod )  during "Measurement Period"
```

Has Advanced Illness or Limited Life Expectancy

```
( ["Diagnosis": "Advanced Illness"]
  union ["Diagnosis": "Limited Life Expectancy"] ) AdvancedIllness
  where AdvancedIllness.prevalencePeriod overlaps "Measurement Period"
```

Has Glycemic Laboratory Test Performed During 2 Year Look Back Period

```
exists ( ["Laboratory Test, Performed": "Glycemic Screening Tests"] ) TestingPerformed
  where TestingPerformed.relevantPeriod during "Look Back Period"
```

Has Pregnancy Diagnosis During Measurement Period

```
["Diagnosis": "Pregnancy"] PregnancyDx
  where PregnancyDx.prevalencePeriod overlaps "Measurement Period"
```

Initial Population

```
"Patients Aged 35 to 70 with an Office Visit During the Measurement Period"
  and ("Most Recent BMI Equal to or Greater Than 25 and Is Not Asian"
     or "Most Recent BMI Equal to or Greater Than 23 and Is Asian")
```

Look Back Period

```
Interval[start of "Measurement Period" - 2 years, start of "Measurement Period"]
```

Most Recent BMI Equal to or Greater Than 23 and Is Asian

```
exists from ["Physical Exam, Performed": "Body mass index (BMI) [Ratio]"] BMI
let RecentBMI: (Last(["Physical Exam, Performed": "Body mass index (BMI) [Ratio]"] MostRecentBMI
   where Global."NormalizeInterval"(MostRecentBMI.relevantDatetime, MostRecentBMI.relevantPeriod) during "Measurement Period"
      sort by start of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)))
   where RecentBMI.result >= 23 'kg/m2'
   and exists ["Patient Characteristic Race": "Asian"]
```

Most Recent BMI Equal to or Greater Than 25 and Is Not Asian

```
exists from ["Physical Exam, Performed": "Body mass index (BMI) [Ratio]"] BMI
let RecentBMI: (Last(["Physical Exam, Performed": "Body mass index (BMI) [Ratio]"] MostRecentBMI
   where Global."NormalizeInterval"(MostRecentBMI.relevantDatetime, MostRecentBMI.relevantPeriod) during "Measurement Period"
      sort by start of Global."NormalizeInterval"(relevantDatetime, relevantPeriod)))
   where RecentBMI.result >= 25 'kg/m2'
   and not exists ["Patient Characteristic Race": "Asian"]
```

Numerator

```
exists "Glycemic Laboratory Test Performed During Measurement Period"
```

Office Visit During the Measurement Period

```
["Encounter, Performed": "Outpatient Clinical Encounters"] OfficeVisit
  where OfficeVisit.relevantPeriod during "Measurement Period"
```

Patients Aged 35 to 70 with an Office Visit During the Measurement Period

```
exists "Preventive Care Outpatient Visits During Measurement Period"
  or Count("Office Visit During the Measurement Period") >= 2
  and "Aged 35 to 70 at Start of Measurement Period" is true
```

Prediabetes Diagnosis Overlaps 2 Year Look Back Period

(["Diagnosis": "Prediabetes (Borderline Diabetes)"]) PriorPrediabetes
  where PriorPrediabetes.prevalencePeriod overlaps "Look Back Period"

Preventive Care Outpatient Visits During Measurement Period

["Encounter, Performed": "Preventative Clinical Encounters"] PreventiveCare
  where PreventiveCare.relevantPeriod ends during "Measurement Period"

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

if pointInTime is not null then Interval[pointInTime, pointInTime]
  else if period is not null then period
  else null as Interval<DateTime>

Terminology

- code "Asian" ("CDCREC Code (2028-9)")
- code "Body mass index (BMI) [Ratio]" ("LOINC Code (39156-5)")
- valueset "Advanced Illness" (2.16.840.1.113883.3.464.1003.110.12.1082)
- valueset "Diabetes" (2.16.840.1.113883.3.464.1003.103.12.1001)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Federal Administrative Sex" (2.16.840.1.113762.1.4.1021.121)
- valueset "Glycemic Screening Tests" (2.16.840.1.113762.1.4.1160.5)
- valueset "Limited Life Expectancy" (2.16.840.1.113883.3.526.3.1259)
- valueset "Outpatient Clinical Encounters" (2.16.840.1.113762.1.4.1160.24)
- valueset "Payer" (2.16.840.1.114222.4.11.3591)
- valueset "Prediabetes (Borderline Diabetes)" (2.16.840.1.113762.1.4.1222.419)
- valueset "Pregnancy" (2.16.840.1.113883.3.526.3.378)
- valueset "Preventative Clinical Encounters" (2.16.840.1.113762.1.4.1160.13)
- valueset "Race" (2.16.840.1.114222.4.11.836)

Data Criteria (QDM Data Elements)

- "Diagnosis: Advanced Illness" using "Advanced Illness (2.16.840.1.113883.3.464.1003.110.12.1082)"
- "Diagnosis: Diabetes" using "Diabetes (2.16.840.1.113883.3.464.1003.103.12.1001)"
- "Diagnosis: Limited Life Expectancy" using "Limited Life Expectancy (2.16.840.1.113883.3.526.3.1259)"
- "Diagnosis: Prediabetes (Borderline Diabetes)" using "Prediabetes (Borderline Diabetes) (2.16.840.1.113762.1.4.1222.419)"
- "Diagnosis: Pregnancy" using "Pregnancy (2.16.840.1.113883.3.526.3.378)"
- "Encounter, Performed: Outpatient Clinical Encounters" using "Outpatient Clinical Encounters (2.16.840.1.113762.1.4.1160.24)"
- "Encounter, Performed: Preventative Clinical Encounters" using "Preventative Clinical Encounters (2.16.840.1.113762.1.4.1160.13)"
- "Laboratory Test, Performed: Glycemic Screening Tests" using "Glycemic Screening Tests (2.16.840.1.113762.1.4.1160.5)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer" using "Payer (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Asian" using "Asian (CDCREC Code 2028-9)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: Federal Administrative Sex" using "Federal Administrative Sex (2.16.840.1.113762.1.4.1021.121)"
- "Physical Exam, Performed: Body mass index (BMI) [Ratio]" using "Body mass index (BMI) [Ratio] (LOINC Code 39156-5)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "Federal Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None