

Controlling High Blood Pressure

Measure Information

General eCQM Information	
CMS eCQM ID	CMS165v11
NQF Number	Not Applicable
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 (<140/90mmHg) during the measurement period
Initial Population	Patients 18-85 years of age by the end of the measurement period who had a visit 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	<p>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.</p> <p>Exclude patients who are in hospice care for any part of the measurement period.</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • Advanced illness with two outpatient encounters during the measurement period or the year prior • OR advanced illness with one inpatient encounter during the measurement period or the year prior • OR taking dementia medications during the measurement period or the year prior <p>Exclude patients 81 and older by the end of the measurement period with an indication of frailty for any part of the measurement period.</p> <p>Exclude patients receiving palliative care for any part of the measurement period.</p>

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	Not Applicable
Denominator Exceptions	None
Measure Steward	National Committee for Quality Assurance
Measure Scoring	Proportion measure
Measure Type	Intermediate Clinical Outcome measure
Improvement Notation	Higher score indicates better quality
Guidance	<p>In reference to the numerator element, only blood pressure readings performed by a clinician or a remote monitoring 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 a remote monitoring device and conveyed by the patient to the clinician are also acceptable. It is the clinician's responsibility and discretion to confirm the remote monitoring 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.</p> <p>Do not include BP readings taken during an acute inpatient stay or an ED visit.</p> <p>If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed "not controlled".</p> <p>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.</p> <p>This eCQM is a patient-based measure.</p>

	This version of the eCQM uses QDM version 5.6. Please refer to the QDM page for more information on the QDM.
MIPS Quality ID	236
Telehealth Eligible	Yes
Next Version	No Version Available
Previous Version	CMS165v10

Specifications and Data Elements

Attachment	Size
CMS165v11.html	108.56 KB
CMS165v11.zip	127.13 KB
CMS165v11-TRN.xlsx	22.93 KB

Data Element Repository

- [Data Elements contained within CMS165v11](#)

Value Sets

- [Value Sets to be used with CMS165v11](#)

Release Notes

- [CMS165v11-TRN.xlsx](#)

Header

- Updated copyright.
Measure Section: Copyright
Source of Change: Annual Update
- Updated the rationale to align with recently published evidence.
Measure Section: Rationale
Source of Change: Measure Lead
- Updated the clinical recommendation statement to align with recently published evidence.
Measure Section: Clinical Recommendation Statement
Source of Change: Measure Lead
- Updated references.

Last Updated: August 29, 2022

Measure Section: Reference

Source of Change: Measure Lead

- Added blood pressure reading guidance to clarify that numeric results are required.

Measure Section: Guidance

Source of Change: Measure Lead

- Removed blood pressure reading guidance not specified in the logic to reduce confusion.

Measure Section: Guidance

Source of Change: Measure Lead

- Updated version number of the Quality Data Model (QDM) used in the measure specification to v5.6.

Measure Section: Guidance

Source of Change: Standards/Technical Update

- Revised denominator exclusion narrative from living long term in an institution for more than 90 consecutive days language to living long term in a nursing home to reflect revised logic.

Measure Section: Denominator Exclusions

Source of Change: Measure Lead

- Added detail to the frailty and advanced illness exclusion language to clarify the measure requirements.

Measure Section: Denominator Exclusions

Source of Change: ONC Project Tracking System (JIRA): CQM-4971

- Revised the palliative care exclusion language to clarify the timing requirement.

Measure Section: Denominator Exclusions

Source of Change: Measure Lead

- Updated grammar and punctuation to improve readability.

Measure Section: Multiple Sections

Source of Change: Measure Lead

- Added age anchor specification to the initial population and denominator exclusion descriptions to clarify measure requirements.

Measure Section: Multiple Sections

Source of Change: Measure Lead

Logic

- Combined AdultOutpatientEncounters, 'Qualifying Encounters', 'Online Assessments', and 'Telephone Visits' encounters into a single definition to improve stylistic consistency across measures.

Measure Section: Initial Population

Source of Change: Measure Lead

- Replaced QDM datatype Encounter, Performed with Assessment, Performed and new modeling to improve data capturing of patients receiving long-term care.

Measure Section: Denominator Exclusions

Source of Change: Measure Lead

- Updated the order of appearance of systolic and diastolic blood pressure reading definitions to align with clinical workflow.

Measure Section: Numerator

Source of Change: Measure Lead

- Added QDM datatypes Encounter, Performed and Assessment, Performed and associated logic to the Hospice, 'Has Hospice Services' definition to provide additional approaches for identifying patients receiving hospice services.

Measure Section: Definitions

Source of Change: Measure Lead

- Updated the timing precision of advanced illness encounter definitions by replacing the syntax '2 years or less on or before' with an interval.

Measure Section: Definitions

Source of Change: Measure Lead

- Updated the timing precision in the definitions from datetime to date by adding 'day of', 'date from', and/or function 'ToDateInterval' to align with the measure intent.

Measure Section: Definitions

Source of Change: Measure Lead

- Updated the order of appearance of systolic and diastolic blood pressure reading definitions to align with clinical workflow.

Measure Section: Definitions

Source of Change: Measure Lead

- Replaced the retired QDM datatype Device, Applied with Assessment, Performed for identifying frailty device usage.

Measure Section: Definitions

Source of Change: Measure Lead

- Replaced QDM datatype Encounter, Performed with Assessment, Performed and new modeling to improve data capturing of patients receiving long-term care.

Measure Section: Definitions

Source of Change: Measure Lead

- Replaced CQL keyword 'ascending' with 'asc' to improve readability.

Measure Section: Definitions

Source of Change: Measure Lead

- Combined AdultOutpatientEncounters.'Qualifying Encounters', 'Online Assessments', and 'Telephone Visits' encounters into a single definition to improve stylistic consistency across measures.

Measure Section: Definitions

Source of Change: Measure Lead

- Added QDM datatype Diagnosis to provide an alternate approach for identifying patients receiving palliative care.

Measure Section: Definitions

Source of Change: Measure Lead

- Updated the version number of the Palliative Care Exclusion Library to v2.0.000.

Measure Section: Multiple Sections

Source of Change: Measure Lead

- Updated the version number of the Hospice Library to v4.0.000.

Measure Section: Multiple Sections

Source of Change: Measure Lead

- Updated the version number of the Advanced Illness and Frailty Exclusion ECQM Library to v7.0.000.

Measure Section: Multiple Sections

Source of Change: Measure Lead

- Updated the version number of the Adult Outpatient Encounters Library to v3.0.000.

Measure Section: Multiple Sections

Source of Change: Measure Lead

- Updated the version number of the Measure Authoring Tool (MAT) Global Common Functions Library to v7.0.000.
Measure Section: Multiple Sections
Source of Change: Standards/Technical Update
- Updated the names of CQL definitions, functions, and/or aliases for clarification and to align with the CQL Style Guide.
Measure Section: Multiple Sections
Source of Change: Standards/Technical Update
- Replaced the Global.CalendarAgeInYearsAt function with the native CQL function AgeInYearsAt to take advantage of existing CQL features and increase human readability. As a result of this change, the LOINC code 21112-8 is no longer required and has been removed from the Terminology section of the human readable specification.
Measure Section: Multiple Sections
Source of Change: Measure Lead
- Revised the long-term care denominator exclusion logic to improve readability and clarity.
Measure Section: Multiple Sections
Source of Change: Measure Lead
- Revised the initial population and denominator exclusions age anchor from the 'start of the measurement period' to the 'end of the measurement period' to align with the measure intent and CQL style best practices.
Measure Section: Multiple Sections
Source of Change: Measure Lead
- Updated the version of the Quality Data Model (QDM) to 5.6 and Clinical Quality Language (CQL) to 1.5.
Measure Section: Multiple Sections
Source of Change: Standards/Technical Update

Value set

The VSAC is the source of truth for the value set content, please visit the VSAC for downloads of current value sets.

- Added direct reference code LOINC code (98181-1) based on review by technical experts, SMEs, and/or public feedback.
Measure Section: Terminology
Source of Change: Measure Lead
- Added direct reference code SNOMED CT code (160734000) based on review by technical experts, SMEs, and/or public feedback.
Measure Section: Terminology
Source of Change: Measure Lead
- Added direct reference code LOINC code (71802-3) based on review by technical experts, SMEs, and/or public feedback.
Measure Section: Terminology
Source of Change: Measure Lead
- Added direct reference code LOINC code (45755-6) based on review by technical experts, SMEs, and/or public feedback.
Measure Section: Terminology
Source of Change: Measure Lead
- Added direct reference code ICD-10-CM code (Z51.5) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Removed direct reference code LOINC code (21112-8) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Value set Outpatient (2.16.840.1.113883.3.464.1003.101.12.1087): Deleted 2 SNOMED CT codes (30346009, 37894004) based on validity of code during timing of look back period.

Measure Section: Terminology

Source of Change: Measure Lead

- Removed value set Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Value set Palliative Care Intervention (2.16.840.1.113883.3.464.1003.198.12.1135): Added 3 SNOMED CT codes (305686008, 305824005, 441874000) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Value set Dementia Medications (2.16.840.1.113883.3.464.1003.196.12.1510): Added 3 RxNorm codes (1858970, 996572, 996624) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Value set Advanced Illness (2.16.840.1.113883.3.464.1003.110.12.1082): Added 108 SNOMED CT codes based on review by technical experts, SMEs, and/or public feedback. Deleted 122 SNOMED CT codes based on terminology update. Added 2 ICD-10-CM codes (C79.63, G35) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Removed value set Care Services in Long-Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Added value set Hospice Encounter (2.16.840.1.113883.3.464.1003.1003) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Replaced value set Hospice Care Ambulatory (2.16.840.1.113762.1.4.1108.15) with value set Hospice Care Ambulatory (2.16.840.1.113883.3.526.3.1584) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Value set Frailty Symptom (2.16.840.1.113883.3.464.1003.113.12.1075): Deleted 1 SNOMED CT code (459821000124104) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead

- Added direct reference code SNOMED CT code (373066001) based on review by technical experts, SMEs, and/or public feedback.

Measure Section: Terminology

Source of Change: Measure Lead