Measure #236 (NQF 0018): Controlling High Blood Pressure – National Quality Strategy Domain: Effective Clinical Care

<u>2017 OPTIONS FOR INDIVIDUAL MEASURES:</u>
CLAIMS ONLY

<u>MEASURE TYPE:</u>
Intermediate Outcome

<u>DESCRIPTION:</u>
Percentage of patients 18 - 85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement period

<u>INSTRUCTIONS:</u>
This measure is to be reported a minimum of **once per performance period** for patients with hypertension seen during the performance period. The performance period for this measure is 12 months. The most recent quality code submitted will be used for performance calculation. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

NOTE: *In reference to the numerator element, only blood pressure readings performed by a clinician in the provider office are acceptable for numerator compliance with this measure. Do not include blood pressure readings that meet the following criteria:*

- *Blood pressure readings from the patient's home (including readings directly from monitoring devices).*
- *Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).*
- *Obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).*

If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed "not controlled".

Measure Reporting:
The listed denominator criteria is used to identify the intended patient population. The numerator quality-data codes included in this specification are used to submit the quality actions allowed by the measure. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

<u>DENOMINATOR:</u>
Patients 18-85 years of age who had a diagnosis of essential hypertension within the first six months of the measurement period or any time prior to the measurement period

> <u>Denominator Criteria (Eligible Cases):</u>
> Patients18 to 85 years of age on date of encounter
> <u>AND</u>
> **Diagnosis for hypertension (ICD-10-CM):** I10
> <u>AND</u>
> **Patient encounter during performance period (CPT or HCPCS):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0402, G0438, G0439

<u>NUMERATOR:</u>
Patients whose blood pressure at the most recent visit is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period

Numerator Instructions: To describe both systolic and diastolic blood pressure values, <u>each must be reported separately.</u> If there are multiple blood pressures on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the representative blood pressure.

NUMERATOR NOTE: In reference to the numerator element, only blood pressure readings performed by a eligible clinician in the provider office are acceptable for numerator compliance with this measure. Blood pressure readings from the patient's home (including readings directly from monitoring devices) are not acceptable.

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.

<u>Numerator Quality-Data Coding Options:</u>
Patient receiving Hospice Services, Patient Not Eligible:
Denominator Exclusion: G9740:   Hospice services given to patient any time during the measurement period

<u>OR</u>
Patient not Eligible for Recommended Blood Pressure Parameters for Documented Reasons
Denominator Exclusion: G9231:   Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period

<u>OR</u>

Most Recent Blood Pressure Measurement Performed
Systolic pressure *(Select one (1) code from this section):*
Performance Met: G8752:   Most recent systolic blood pressure < 140 mmHg

<u>OR</u>

Performance Not Met: G8753:   Most recent systolic blood pressure ≥ 140 mmHg

<div align="center"><u>AND</u></div>

Diastolic pressure *(Select one (1) code from this section):*
Performance Met: G8754:   Most recent diastolic blood pressure < 90 mmHg

<u>OR</u>

Performance Not Met: G8755:   Most recent diastolic blood pressure ≥ 90 mmHg
<u>OR</u>
Blood Pressure Measurement not Documented, Reason not Given
Performance Not Met: G8756:   No documentation of blood pressure measurement, reason not given

RATIONALE:
Hypertension, or high blood pressure, is a very common and dangerous condition that increases risk for heart disease and stroke, two of the leading causes of death for Americans (Farley et al., 2010). Compared with other dietary, lifestyle, and metabolic risk factors, high blood pressure is the leading cause of death in women and the second-leading cause of death in men, behind smoking (Danaei et al., 2011). Approximately 1 in 3 U.S. adults, or about 70 million people, have high blood pressure but only about half (52%) of these people have their high blood pressure under control. Additionally, data from NHANES 2011 to 2012 found that 17.2% of U.S. adults are not aware they have hypertension (Nwankwo et al., 2013). Projections show that by 2030, approximately 41.4% of US adults will have hypertension, an increase of 8.4% from 2012 estimates (Heidenreich et al., 2011).

The estimated direct and indirect cost of high blood pressure for 2011 is $46.4 billion. This total includes direct costs such as the cost of physicians and other health professionals, hospital services, prescribed medications and home health care, as well as indirect costs due to loss of productivity from premature mortality (Mozaffarian et al., 2015). Projections show that by 2030, the total cost of high blood pressure could increase to an estimated $274 billion (Heidenreich et al., 2011).

Better control of blood pressure has been shown to significantly reduce the probability that undesirable and costly outcomes will occur. In clinical trials, antihypertensive therapy has been associated with reductions in stroke incidence (35-40%), myocardial infarction (20-25%) and heart failure (>50%) (Chobanian et al., 2003). Thus, the relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established.

CLINICAL RECOMMENDATION STATEMENTS:
The United States Preventive Services Task Force (2007) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003):

Treating systolic blood pressure and diastolic blood pressure to targets that are < 140/90 mmHg is associated with a decrease in cardiovascular disease complications.
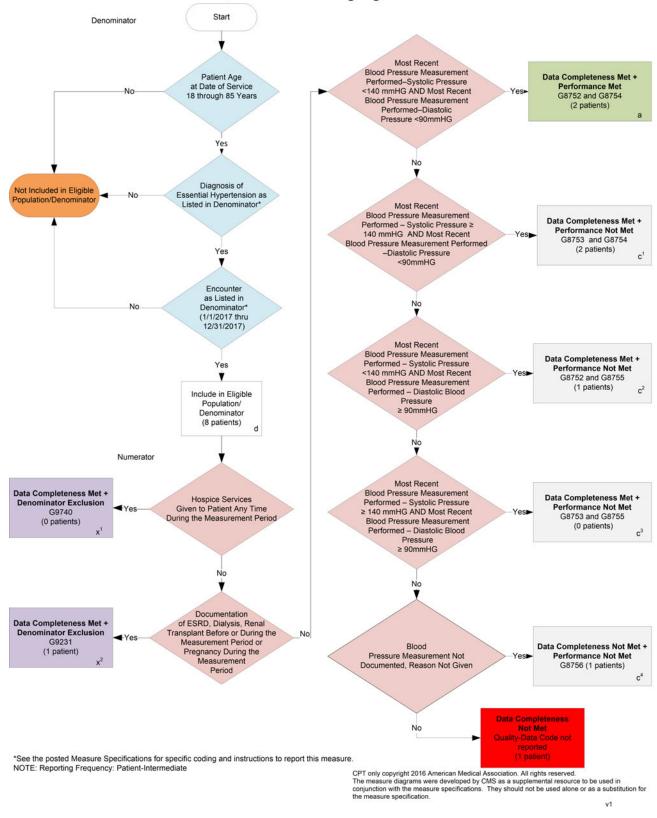
COPYRIGHT:

2017 Claims Individual Measure Flow
#236 NQF #0018: Controlling High Blood Pressure

Denominator

Start

Patient Age at Date of Service 18 through 85 Years — No → **Not Included in Eligible Population/Denominator**

Yes ↓

Diagnosis of Essential Hypertension as Listed in Denominator* — No → **Not Included in Eligible Population/Denominator**

Yes ↓

Encounter as Listed in Denominator* (1/1/2017 thru 12/31/2017) — No → **Not Included in Eligible Population/Denominator**

Yes ↓

Include in Eligible Population/Denominator (8 patients) d

Numerator

Hospice Services Given to Patient Any Time During the Measurement Period — Yes → **Data Completeness Met + Denominator Exclusion G9740 (0 patients)** x^1

No ↓

Documentation of ESRD, Dialysis, Renal Transplant Before or During the Measurement Period or Pregnancy During the Measurement Period — Yes → **Data Completeness Met + Denominator Exclusion G9231 (1 patient)** x^2

No →

Most Recent Blood Pressure Measurement Performed–Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed–Diastolic Pressure <90mmHG — Yes → **Data Completeness Met + Performance Met G8752 and G8754 (2 patients)** a

No ↓

Most Recent Blood Pressure Measurement Performed – Systolic Pressure ≥ 140 mmHG AND Most Recent Blood Pressure Measurement Performed –Diastolic Pressure <90mmHG — Yes → **Data Completeness Met + Performance Not Met G8753 and G8754 (2 patients)** c^1

No ↓

Most Recent Blood Pressure Measurement Performed – Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed – Diastolic Blood Pressure ≥ 90mmHG — Yes → **Data Completeness Met + Performance Not Met G8752 and G8755 (1 patients)** c^2

No ↓

Most Recent Blood Pressure Measurement Performed – Systolic Pressure ≥ 140 mmHG AND Most Recent Blood Pressure Measurement Performed – Diastolic Blood Pressure ≥ 90mmHG — Yes → **Data Completeness Met + Performance Not Met G8753 and G8755 (0 patients)** c^3

No ↓

Blood Pressure Measurement Not Documented, Reason Not Given — Yes → **Data Completeness Not Met + Performance Not Met G8756 (1 patients)** c^4

No ↓

Data Completeness Not Met Quality-Data Code not reported (1 patient)

*See the posted Measure Specifications for specific coding and instructions to report this measure.
NOTE: Reporting Frequency: Patient-Intermediate

SAMPLE CALCULATIONS:

Data Completeness=

$$\frac{\text{Denominator Exclusion } (x^1+x^2= 1 \text{ patient}) + \text{Performance Met } (a = 2 \text{ patients}) + \text{Performance Not Met } (c^1+c^2+c^3+c^4 = 4 \text{ patients}) = 7 \text{ patients}}{\text{Eligible Population / Denominator } (d=8 \text{ patients}) = 8 \text{ patients}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met } (a=2 \text{ patients}) = 2 \text{ patients}}{\text{Data Completeness Numerator } (7 \text{ patients}) - \text{Denominator Exclusion } (x^1+x^2= 1 \text{ patient}) = 6 \text{ patients}} = 33.33\%$$

*See the posted Measure Specifications for specific coding and instructions to report this measure.
NOTE: Reporting Frequency: Patient-Intermediate

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator

2. Check Patient Age:

    a. If the Age is equal to 18 to 85 years of age on Date of Service equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.

    b. If the Age is equal to 18 to 85 years of age on Date of Service equals Yes during the measurement period, proceed to Check Patient Diagnosis.

3. Check Patient Diagnosis:

    a. If Diagnosis of Essential Hypertension as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.

    b. If Diagnosis of Essential Hypertension as Listed in the Denominator equals Yes, proceed to Check Encounter Performed.

4. Check Encounter Performed:

    a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.

    b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population.

5. Denominator Population:

    a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.

6. Start Numerator

7. Check Hospice Services Given to Patient Any Time During the Measurement Period:

    a. If Hospice Services Given to Patient Any Time During the Measurement Period equals Yes, include in Data Completeness Met and Denominator Exclusion.

    b. Data Completeness Met and Denominator Exclusion letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter x1 equals 0 patients in Sample Calculation.

    c. If Hospice Services Given to Patient Any Time During the Measurement Period equals No, proceed to Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period.

8. Check Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period:

a. If Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period equals Yes, include in Data Completeness Met and Denominator Exclusion.

b. Data Completeness Met and Denominator Exclusion letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter x2 equals 1 patient in Sample Calculation.

c. If Documentation of end stage renal disease (ESRD), dialysis, renal transplant before or during the measurement period or pregnancy during the measurement period equals No, proceed to Most Recent Blood Pressure Measurement Performed - Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed -Diastolic Pressure <90 mmHG.

9. Check Most Recent Blood Pressure Measurement Performed - Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed -Diastolic Pressure <90 mmHG:

a. If Most Recent Blood Pressure Measurement Performed - Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed -Diastolic Pressure <90 mmHG equals Yes, include in Data Completeness Met and Performance Met.

b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 2 patients in Sample Calculation.

c. If Most Recent Blood Pressure Measurement Performed - Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed -Diastolic Pressure <90 mmHG equals No, proceed to Most Recent Blood Pressure Measurement Performed- Systolic Pressure ≥140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure <90 mmHG.

10. Check Most Recent Blood Pressure Measurement Performed- Systolic Pressure ≥140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure <90 mmHG:

a. If Most Recent Blood Pressure Measurement Performed- Systolic Pressure ≥140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure <90 mmHG equals Yes, include in Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c1 equals 2 patients in the Sample Calculation.

c. If Most Recent Blood Pressure Measurement Performed- Systolic Pressure ≥140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure <90 mmHG equals No, proceed to Most Recent Blood Pressure Measurement Performed- Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure ≥90 mmHG.

11. Check Most Recent Blood Pressure Measurement Performed- Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure ≥90 mmHG:

a. If Most Recent Blood Pressure Measurement Performed- Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic Pressure ≥90 mmHG equals Yes, include in Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c2 equals 1 patient in the Sample Calculation.

c. If Most Recent Blood Pressure Measurement Performed- Systolic Pressure <140 mmHG AND Most Recent Blood Pressure Measurement Performed- Diastolic **Pressure ≥90 mmHG equals No, proceed to** Most Recent Blood Pressure Measurement Performed- **Systolic Pressure ≥140 mmHG AND Most Recent Blood Pressure Measurement Performed-** Diastolic Pressure ≥90 mmHG.

12. Check Most Recent Blood Pressure Measurement Performed- **Systolic Pressure ≥140 mmHG AND Most** Recent Blood Pressure Measurement Performed- **Diastolic Pressure ≥90 mmHG:**

   a. If Most Recent Blood Pressure Measurement Performed- **Systolic Pressure ≥140 mmHG AND Most Recent** Blood Pressure Measurement Performed- **Diastolic Pressure ≥90 mmHG equals Yes, include in** Data Completeness Met and Performance Not Met.

   b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c3 equals 0 patient in the Sample Calculation.

   c. If Most Recent Blood Pressure Measurement Performed- **Systolic Pressure ≥140 mmHG AND Most Recent** Blood Pressure Measurement Performed- Diastolic **Pressure ≥90 mmHG equals No, proceed to**Blood Pressure Measurement Not Documented, Reason Not Given .

13. Check Blood Pressure Measurement Not Documented, Reason Not Given:

   a. If Blood Pressure Measurement Not Documented, Reason Not Given equals Yes, include in the Data Completeness Met and Performance Not Met.

   b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c4 equals 1 patient in the Sample Calculation.

   c. If Blood Pressure Measurement Not Documented, Reason Not Given equals No, proceed to Data Completeness Not Met.

14. Check Data Completeness Not Met

   a. If Data Completeness Not Met equals No, Quality Data Code was not reported. 1 patient has been subtracted from the Data Completeness numerator in the sample calculation.

SAMPLE CALCULATIONS:

Data Completeness=

$$\frac{\text{Denominator Exclusion } (x^1 + x^2 = 1 \text{ patient}) + \text{Performance Met } (a = 2 \text{ patients}) + \text{Performance Not Met } (c^1 + c^2 + c^3 + c^4 = 4 \text{ patients}) = 7 \text{ patients}}{\text{Eligible Population / Denominator } (d = 8 \text{ patients}) = 8 \text{ patients}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met } (a = 2 \text{ patients}) = 2 \text{ patients}}{\text{Data Completeness Numerator } (7 \text{ patients}) - \text{Denominator Exclusion } (x^1 + x^2 = 1 \text{ patient}) = 6 \text{ patients}} = 33.33\%$$