



Complete Summary

TITLE

Hypertension: percentage of patient visits during which either systolic blood pressure is greater than or equal to 140 mm Hg or diastolic blood pressure is greater than or equal to 90 mm Hg, with documented plan of care for hypertension.

SOURCE(S)

American College of Cardiology, American Heart Association, Physician Consortium for Performance Improvement. Clinical performance measures: hypertension. Tools developed by physicians for physicians. Chicago (IL): American Medical Association (AMA); 2003. 4 p.

Brief Abstract

DESCRIPTION

This measure assesses the percentage of patient visits with documented plan of care for hypertension, among all patient visits for patients aged greater than or equal to 18 years with diagnosed hypertension during which either systolic blood pressure is greater than or equal to 140 mm Hg or diastolic blood pressure is greater than or equal to 90 mm Hg.

RATIONALE

According to the American Heart Association, nonpharmacological therapy is recommended for hypertension and may include weight reduction, decreased sodium and alcohol intake, and exercise.

According to the American Heart Association, selection of pharmacological therapy should be based on the presence of comorbidities, severity of hypertension, presence of risk factors, and target organ damage.

According to World Health Organization - International Society of Hypertension guidelines, frequent follow-up visits are recommended.

According to Department of Veteran Affairs (US) guidelines, after initiation of the initial therapy, a follow-up visit is recommended within 1 to 2 months, to assess hypertension control, patient compliance to treatment, and adverse effects.

PRIMARY CLINICAL COMPONENT

Hypertension; plan of care

DENOMINATOR DESCRIPTION

All patient visits for patients aged greater than or equal to 18 years with diagnosed hypertension during which either systolic blood pressure is greater than or equal to 140 mm Hg or diastolic blood pressure is greater than or equal to 90 mm Hg

NUMERATOR DESCRIPTION

Patient visits with documented plan of care for hypertension

Evidence Supporting the Measure

PRIMARY MEASURE DOMAIN

Process

SECONDARY MEASURE DOMAIN

Not applicable

EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Diagnosis and management of hypertension in the primary care setting.](#)
- [Primary prevention of hypertension. Clinical and public health advisory from the National High Blood Pressure Education Program.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Wide variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

Oliveria SA, Lapuerta P, McCarthy BD, L'Italien GJ, Berlowitz DR, Asch SM. Physician-related barriers to the effective management of uncontrolled hypertension. Arch Intern Med 2002 Feb 25; 162(4):413-20. [PubMed](#)

The state of health care quality, 2002. [internet]. National Committee for Quality Assurance; [cited 2003 Jan 01].

State of Use of the Measure

STATE OF USE

Pilot testing

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Community Health Care
Managed Care Plans
Physician Group Practices/Clinics
Rural Health Care

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Fifty million, or approximately 1 in 5 Americans (1 in 4 adults), have hypertension.

Despite potential risks and established clinical guidelines, recent data suggest that some patients are not being managed optimally for this disease. It has been reported that:

- Approximately 15% of individuals who are aware that they have hypertension are not receiving therapy, and about 26% are receiving inadequate therapy and treatment.
- In 2001, only 55% of individuals aged 46-85 years in Health Plan Employer Data & Information Set (HEDIS®) participating managed care plans had their hypertension adequately controlled.
- In 2000, only 47% of Medicare beneficiaries had their hypertension adequately controlled.

EVIDENCE FOR INCIDENCE/PREVALENCE

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

Oliveria SA, Lapuerta P, McCarthy BD, L'Italien GJ, Berlowitz DR, Asch SM. Physician-related barriers to the effective management of uncontrolled hypertension. Arch Intern Med 2002 Feb 25; 162(4):413-20. [PubMed](#)

The state of health care quality, 2002. [internet]. National Committee for Quality Assurance; [cited 2003 Jan 01].

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Hypertension, the most treatable form of cardiovascular disease, has been identified as a major risk factor for coronary heart disease, the leading cause of death in the United States. Untreated hypertension can also result in stroke, kidney failure, and blindness. Nearly one-third of adults with hypertension are unaware of it, which therefore increases the risk of associated complications and diseases.

From 1989 to 1999, the mortality rate from hypertension increased 21%.

EVIDENCE FOR BURDEN OF ILLNESS

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

UTILIZATION

Unspecified

COSTS

The total direct and indirect costs of hypertension in the United States are estimated at more than \$50 billion annually.

EVIDENCE FOR COSTS

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patient visits for patients aged greater than or equal to 18 years with diagnosed hypertension during which either systolic blood pressure is greater than or equal to 140 mm Hg or diastolic blood pressure is greater than or equal to 90 mm Hg

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR (INDEX) EVENT

Clinical Condition
Diagnostic Evaluation

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patient visits for patients aged greater than or equal to 18 years with diagnosed hypertension during which either systolic blood pressure is greater than or equal to 140 mm Hg or diastolic blood pressure is greater than or equal to 90 mm Hg*

*If blood pressure measurement is repeated during the visit in the same arm and the same position, use the last blood pressure reading. If the sequence of readings is unknown, use the lowest blood pressure reading.

Exclusions
None

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Patient visits with documented plan of care* for hypertension

*Plan of care may include rechecking blood pressure at later date, initiating or altering medical therapy, or initiating or altering nonpharmacological therapy. Nonpharmacological therapy may include weight reduction, decreased sodium and alcohol intake, and exercise.

Exclusions
None

DENOMINATOR TIME WINDOW

Time window follows index event

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

None

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Hypertension plan of care.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement Measurement Sets](#)

MEASURE SET NAME

[American College of Cardiology, American Heart Association, and Physician Consortium for Performance Improvement: Hypertension Core Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the American College of Cardiology, the American Heart Association, and the Physician Consortium for Performance Improvement

DEVELOPER

American College of Cardiology
American Heart Association
Physician Consortium for Performance Improvement

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2003 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

American College of Cardiology, American Heart Association, Physician Consortium for Performance Improvement. Clinical performance measures: hypertension. Tools developed by physicians for physicians. Chicago (IL): American Medical Association (AMA); 2003. 4 p.

MEASURE AVAILABILITY

The individual measure, "Hypertension Plan of Care," is published in the "Clinical Performance Measures: Hypertension." This document is available from the American Medical Association (AMA) Division of Clinical Quality Improvement Web site: www.ama-assn.org/go/quality.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

COMPANION DOCUMENTS

The following are available:

- Physician Consortium for Performance Improvement. Introduction to physician performance measurement sets. Tools developed by physicians for physicians. Chicago (IL): American Medical Association (AMA); 2001 Oct. 21 p. This document is available from the American Medical Association (AMA) Clinical Quality Improvement Web site: www.ama-assn.org/go/quality.
- Physician Consortium for Performance Improvement. Principles for performance measurement in health care. A consensus statement. [online]. Chicago (IL): American Medical Association (AMA), Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), National Committee for Quality Assurance (NCQA); [3 p]. This document is available from the AMA Clinical Quality Improvement Web site: www.ama-assn.org/go/quality.
- Physician Consortium for Performance Improvement. Desirable attributes of performance measures. A consensus statement. [online]. American Medical Association (AMA), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), National Committee for Quality Assurance (NCQA); 1999 Apr 19 [cited 2002 Jun 19]. [5 p]. This document is available from the AMA Clinical Quality Improvement Web site: www.ama-assn.org/go/quality.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI on March 3, 2004. The information was verified by the measure developer on September 17, 2004.

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Date Modified: 10/25/2004

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