General

Title
Advanced chronic kidney disease (CKD): percent of patients with antihypertensive therapy intensified.

Source(s)

Measure Domain

Primary Measure Domain
Clinical Quality Measures: Process

Secondary Measure Domain
Does not apply to this measure

Brief Abstract

Description
This measure assesses the percent of patients with antihypertensive therapy intensified among patients with advanced chronic kidney disease (CKD) with blood pressure greater than 130/80 mmHg and on antihypertensive medications.

Rationale
Patients with advanced chronic kidney disease (CKD) are situated at a crossroads between patients with less severe chronic kidney disease, where strict blood pressure control is a well-established mainstay of therapy, and patients on dialysis, where blood pressure goals are not well understood. In the absence of strong scientific data to define therapeutic targets, blood pressure goals in dialysis patients remain extrapolated from the general population. Because of significantly increased cardiovascular risk in patients with both advanced CKD and diabetes, management of patients with both conditions deserves special attention.

Based on data from patients with advanced CKD as well as extrapolation from those with less severe
CKD, lowering blood pressure is an important goal in the advanced CKD population.

Elevated blood pressure is clearly an important risk factor for rapid progression of kidney disease and for cardiac hypertrophy.

Lifestyle modifications improve blood pressure control in the general population and this evidence was deemed by the measure developer to be applicable to patients with advanced CKD.

Studies that specifically examine the use of pharmacological antihypertensive therapy in patients with glomerular filtration rate (GFR) less than or equal to 30 mL/min/1.73 m$^2$ show that blood pressure can be lowered in this population. In a small number of studies, reduction in blood pressure with antihypertensive medication has been shown to improve measures of renal disease progression and cardiac hypertrophy in patients with advanced CKD.

This recommendation is also based on extrapolation from patients with less severe CKD (GFR greater than 30 mL/min/1.73 m$^2$). Reduction in blood pressure with antihypertensive medication clearly improves measures of kidney function, slows the progression to end-stage renal disease (ESRD), and improves clinical outcomes such as clinical cardiovascular events and mortality in these individuals.

**Evidence for Rationale**


Primary Health Components

Advanced chronic kidney disease; hypertension; antihypertensive therapy

Denominator Description

The number of adult patients with advanced chronic kidney disease (CKD), not currently receiving renal replacement therapy, with blood pressure greater than 130/80 mmHg, and on antihypertensive medications

Numerator Description

The number of patients from the denominator with antihypertensive therapy intensified

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

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

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

A systematic review of the clinical research literature (e.g., Cochrane Review)

Additional Information Supporting Need for the Measure

Elevated blood pressure is clearly an important risk factor for rapid progression of kidney disease and for cardiac hypertrophy.
Evidence for Additional Information Supporting Need for the Measure


Extent of Measure Testing
Unspecified

State of Use of the Measure

State of Use
Current routine use

Current Use
not defined yet

Application of the Measure in its Current Use

Measurement Setting
Ambulatory/Office-based Care
Hospital Outpatient

Professionals Involved in Delivery of Health Services
not defined yet

Least Aggregated Level of Services Delivery Addressed
Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size
Target Population Age
Age greater than or equal to 18 years

Target Population Gender
Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim
Better Care

National Quality Strategy Priority
Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need
Living with Illness

IOM Domain
Effectiveness

Data Collection for the Measure

Case Finding Period
Unspecified

Denominator Sampling Frame
Patients associated with provider

Denominator (Index) Event or Characteristic
Clinical Condition

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Adult patients age 18 years and older with chronic kidney disease stage 4 or 5 (glomerular filtration rate [GFR] less than or equal to 30 mL/min/1.73 m^2), not currently receiving renal replacement therapy, with blood pressure greater than 130/80 mmHg, and on antihypertensive medications

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of patients from the denominator with antihypertensive therapy intensified*

*Intensification of antihypertensive therapy: increasing medication dosage and/or adding medications

Exclusions

Unspecified

Numerator Search Strategy

Episode of care

Data Source

Administrative clinical data

Laboratory data

Paper medical record

Pharmacy data

Type of Health State

Does not apply to this measure
Instruments Used and/or Associated with the Measure
Unspecified

**Computation of the Measure**

Measure Specifies Disaggregation
Does not apply to this measure

**Scoring**
Rate/Proportion

**Interpretation of Score**
Desired value is a higher score

**Allowance for Patient or Population Factors**
not defined yet

**Standard of Comparison**
not defined yet

**Identifying Information**

**Original Title**
Number of patients with antihypertensive therapy intensified / number of patients with advanced CKD, with blood pressure greater than 130/80 mmHg, and on antihypertensive medications.

**Measure Collection Name**
Clinical Performance Measures on Appropriate Patient Preparation for Renal Replacement Therapy

**Measure Set Name**
Hypertension Recommendations

**Submitter**
Renal Physicians Association - Medical Specialty Society
Funding Source(s)

Ortho Biotech Products, LP

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Financial Disclosures/Other Potential Conflicts of Interest

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Unspecified

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Unspecified

Measure Status
This is the current release of the measure.
The measure developer reaffirmed the currency of this measure in March 2016.

Measure Availability
Source not available electronically.
For more information, contact the Renal Physicians Association (RPA) at 1700 Rockville Pike, Suite 220, Rockville, MD 20852; Phone: 301-468-3515; Fax: 301-468-3511; Web site: www.renalmd.org; E-mail: rpa@renalmd.org.

NQMC Status
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For more information, contact RPA at 1700 Rockville Pike, Suite 220, Rockville, MD 20852; phone: 301-468-3515; fax: 301-468-3511; Web site: www.renalmd.org; E-mail: rpa@renalmd.org.

Production
Source(s)

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