General

Title
Advanced chronic kidney disease (CKD): percent of patients with hemoglobin measured at least every 3 months.

Source(s)

Measure Domain

Primary Measure Domain

Process
The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

Secondary Measure Domain
Does not apply to this measure

Brief Abstract

Description
This measure assesses the percent of patients with advanced chronic kidney disease (CKD) who have their hemoglobin measured at least every three months.

Rationale
Anemia is common in patients with advanced chronic kidney disease (CKD) and can lead to a variety of detrimental effects. In addition to the direct effects of anemia on performance and ischemic symptoms, it has also been suggested that mortality and major complications during end-stage renal disease (ESRD) are associated with anemia that develops early in the course of CKD. Correcting anemia before the initiation of renal replacement therapy (RRT) may improve health outcomes.

Primary Clinical Component
Advanced chronic kidney disease; anemia; hemoglobin measurement

Denominator Description
The number of adult patients with advanced chronic kidney disease (CKD) for at least three months, not currently receiving renal replacement therapy

Numerator Description
The number of patients from the denominator with hemoglobin (Hb) measured at least every 3 months (90 days)

Evidence Supporting the Measure

Evidence Supporting the Criterion of Quality
A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
A systematic review of the clinical literature

Evidence Supporting Need for the Measure

Need for the Measure
Unspecified

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
Physician Group Practices/Clinics
Professionals Responsible for Health Care
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
Two studies have identified anemia as being prevalent in patients with advanced chronic kidney disease and it is also clear that the severity of anemia increases considerably with worsening renal function.

Evidence for Incidence/Prevalence

<table>
<thead>
<tr>
<th>Reference</th>
<th>Details</th>
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Association with Vulnerable Populations
Unspecified

Burden of Illness
Anemia is associated with increased mortality, detrimental effects on cardiac function, exercise capacity, quality of life, and cognitive function.
Evidence for Burden of Illness


Utilization

Unspecified

Costs

Unspecified

Institute of Medicine (IOM) 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

Adult patients 18 years and older with advanced chronic kidney disease (CKD)

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 m²) for at least three months, not currently receiving renal replacement therapy

Exclusions
Unspecified

Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

Denominator (Index) Event

Clinical Condition

Denominator Time Window

Time window precedes index event

Numerator Inclusions/Exclusions

Inclusions
The number of patients from the denominator with hemoglobin (Hb) measured at least every three months (90 days)

Exclusions
Unspecified

Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

Numerator Time Window

Fixed time period

Data Source

Administrative data
Laboratory data
Medical record
Level of Determination of Quality

Individual Case

Pre-existing Instrument Used

Unspecified

**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**

Number of patients with Hb measured at least every 3 months / number of patients with advanced CKD.

**Measure Collection Name**

Renal Physicians Association Clinical Performance Measures on Appropriate Patient Preparation for Renal Replacement Therapy

**Measure Set Name**

Clinical Performance Measures for Anemia Recommendations
Submitter
Renal Physicians Association - Medical Specialty Society

Developer
Renal Physicians Association - Medical Specialty Society

Funding Source(s)
Ortho Biotech Products, LP

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Financial Disclosures/Other Potential Conflicts of Interest

There were none disclosed.

Adaptation
Measure was not adapted from another source.

Release Date

2002 Oct

Measure Status

This is the current release of the measure.

Source(s)


Measure Availability

The individual measure, "Number of patients with Hb measured at least every 3 months / number of patients with advanced CKD," is published in "Renal Physicians Association Clinical Practice Guideline #3: Appropriate Patient Preparation for Renal Replacement Therapy."

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NQMC Status

This NQMC summary was completed by ECRI on May 2, 2003. The information was verified by the Renal Physicians Association on May 27, 2003.

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