Advanced chronic kidney disease (CKD): percent of patients treated with an erythropoietin or analogue.


Primary Measure Domain
Clinical Quality Measures: Process

Secondary Measure Domain
Does not apply to this measure

This measure assesses the percent of patients treated with an erythropoietin or analogue among patients with advanced chronic kidney disease (CKD) who were anemic, had an anemia work-up and are on iron therapy for three months or are iron replete.

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.

Many patients in this population have erythropoietin-responsive anemia and treatment of such anemia with erythropoietin is associated with improved intermediate measures.
### Evidence for Rationale

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Primary Health Components

Advanced chronic kidney disease; anemia; iron replete; erythropoietin
Denominator Description

The number of adult patients with advanced chronic kidney disease (CKD) for at least three months, not currently receiving renal replacement therapy who were anemic, had an anemia work-up, and are on iron therapy for three months or are iron replete.

Numerator Description

The number of patients from the denominator treated with an erythropoietin or analogue.

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

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

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

Diagnostic Evaluation

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 m²) for at least three months not currently receiving renal replacement therapy who were anemic*, had an anemia work-up** and are on iron therapy for 3 months (90 days) or are iron replete

*Hemoglobin [Hb] level less than 12 g/dL for women and less than 13 g/dL for men

**Operationally defined as at least one test in each of the following categories:

Tests to detect anemia
Hemoglobin (HgB)
Hematocrit (Hct)
Tests to detect iron deficiency
Serum iron
Total Iron Binding Capacity (TIBC),
Percent transferrin saturation (TSAT [serum iron X 100 divided by TIBC])
Test for occult blood in stool

Exclusions
Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
The number of patients from the denominator who are treated with an erythropoietin or analogue

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 treated with an erythropoietin or analogue / number of patients who were anemic, had an anemia work-up and are on iron therapy for 3 months or are iron replete.

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

Measure Set Name
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

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2002 Oct

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

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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Production

Source(s)


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