General

Title
Advanced chronic kidney disease (CKD): percent of patients referred for surgery for construction of an arteriovenous (AV) fistula on index date.

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 referred for surgery for construction of an arteriovenous (AV) fistula on index date (i.e., the date patient is first seen by practitioner and identified as having advanced advanced chronic kidney disease [CKD]) among patients with advanced CKD for whom hemodialysis is the chosen mode of renal replacement therapy.

Rationale
Utilizing conventional criteria for the initiation of renal replacement therapy (RRT), such as congestive heart failure, malnutrition, acidosis or uremia, can lead to patients being treated only when they have already suffered irreversible cumulative complications from chronic kidney disease (CKD). It is therefore imperative to properly time the initiation of RRT in order to minimize morbidity and mortality. The role of patient factors such as therapeutic preferences is also considered especially important in timing, initiation, and choice of modality of RRT.

Patients and healthcare professionals should be educated about the need to preserve veins to avoid loss of potential access sites. Repeated
venipuncture for vascular access may render arm vein sites unsuitable for construction of a primary arteriovenous (AV) fistula. In addition, subclavian vein catheterization should be avoided for temporary access due to the risk of central venous stenosis.

Primary Clinical Component

Advanced chronic kidney disease; arteriovenous fistula; surgery

Denominator Description

The number of adult patients with advanced chronic kidney disease (CKD) not currently receiving renal replacement therapy (RRT) for whom hemodialysis is the chosen mode of RRT

Numerator Description

The number of patients from the denominator referred for surgery for construction of an arteriovenous (AV) fistula on index date (i.e., the date patient is first seen by practitioner and identified as having advanced chronic kidney disease [CKD])

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
Unspecified

Association with Vulnerable Populations
Unspecified

Burden of Illness
Unspecified

Utilization
Unspecified

Costs
Unspecified
Institute of Medicine (IOM) Healthcare Quality Report Categories

IOM Care Need
Living with Illness

IOM Domain
Effectiveness
Patient-centeredness

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) for whom hemodialysis is the chosen mode of renal replacement therapy (RRT)

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), not currently receiving renal replacement therapy, for whom hemodialysis is the chosen mode of renal replacement therapy (RRT)

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
Therapeutic Intervention

Denominator Time Window
Time window precedes index event

Numerator Inclusions/Exclusions
Inclusions
The number of patients from the denominator referred for surgery for construction of an arteriovenous (AV) fistula on index date (i.e., the date patient is first seen by practitioner and identified as having advanced chronic kidney disease [CKD])

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
Episode of care

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
Evaluation of Measure Properties

Extent of Measure Testing
Unspecified

Identifying Information

Original Title
Number of patients referred for surgery for construction of an AV fistula on index date / number of patients with advanced CKD for whom hemodialysis is the chosen mode of RRT.

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

Measure Set Name
Clinical Performance Measures for Timing of Renal Replacement Therapy Recommendations

Submitter
Renal Physicians Association - Medical Specialty Society

Developer
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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 referred for surgery for construction of an AV fistula on index date / number of patients with advanced CKD for whom hemodialysis is the chosen mode of RRT," is published in "Renal Physicians Association Clinical Practice Guideline #3: Appropriate Patient Preparation for Renal Replacement Therapy."

For more information, contact RPA at 1700 Rockville Pike, Suite 220, Rockville, MD 20852; phone: 301-468-3515; fax: 301-468-3511; Web
NQMC Status
This NQMC summary was completed by ECRI on May 23, 2003. The information was verified by the Renal Physicians Association on June 17, 2003.

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