General

Title

Advanced chronic kidney disease (CKD): percent of patients who have been referred for a transplant evaluation.

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 who have been referred for a transplant evaluation among patients with advanced chronic kidney disease (CKD), who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the United Network for Organ Sharing (UNOS) criteria for transplant candidacy.

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.

Transplantation as the first mode of RRT results in better graft survival and decreased mortality. A study has concluded that patient survival is
better for patients not dialyzed than those dialyzed, regardless of the type of kidney donor. Another study has also determined that the duration of dialysis is positively associated with the occurrence of acute rejection.

As reflected in the United Network for Organ Sharing (UNOS) Ethics Committee recommendations, transplant candidate criteria are required because there is a shortage of available organs for transplantation. The probability of a good outcome must be highly emphasized to achieve the maximum benefit for all transplants, and therefore the best potential recipients should be identified.

Transplant requires a well-prepared patient. Therefore it may be beneficial to anticipate and prepare for an early transplant. However, renal transplant may not be the best choice for all patients and a transplant evaluation may be wasteful for those who choose not to be transplanted or are considered to be at excessive surgical risk, or are highly likely to have a failed transplant.

Primary Clinical Component
Advanced chronic kidney disease; kidney transplant; evaluation

Denominator Description
The number of adult patients with advanced chronic kidney disease (CKD) not currently receiving renal replacement therapy who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the United Network for Organ Sharing (UNOS) criteria for transplant candidacy

Numerator Description
The number of patients from the denominator who have been referred for a transplant evaluation

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
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) who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the United Network for Organ Sharing (UNOS) criteria for transplant candidacy.

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, who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the United Network for Organ Sharing (UNOS) criteria* for transplant candidacy.

*The UNOS Ethics Committee recommends that several factors be considered in assessment for transplant candidates. These include:

- Substantially shortened life expectancy (with successful transplant)
- Organ failure caused by behavior
- Poor adherence to treatment
- Previous transplantation
- Availability of alternative medical or surgical procedures

Exclusions
See above.

Relationship of Denominator to Numerator
All cases in the denominator are equally eligible to appear in the numerator.
Denominator (Index) Event

Clinical Condition

Patient Characteristic

Denominator Time Window

Time window precedes index event

Numerator Inclusions/Exclusions

Inclusions
The number of patients from the denominator who have been referred for a transplant evaluation

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
Patient survey

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 who have been referred for a transplant evaluation / number of patients with advanced CKD, who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the UNOS criteria for transplant candidacy.

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
Renal Physicians Association - Medical Specialty Society

Funding Source(s)
Ortho Biotech Products, LP
Composition of the Group that Developed the Measure

W. Kline Bolton, MD, Working Group Chair, University of Virginia School of Medicine, Charlottesville, VA; William F. Owen, Jr., MD, President, RPA, Duke University School of Medicine Durham, NC; Baxter Healthcare Corp., McGaw Park, IL; Dale Singer, MHA, Executive Director, RPA.

Content Experts: Jack Coburn, MD, UCLA School of Medicine, West Los Angeles V.A. Healthcare Center, West Los Angeles, CA; William Haley, MD, Mayo Clinic, Jacksonville, FL; Anamaria Kausz, MD, New England Medical Center, Boston, MA; Adeera Levin, MD, St. Paul's Hospital, Vancouver, BC; William Mitch, MD, University of Texas Medical Branch, Galveston, TX; Patricia Painter, PhD, University of California, San Francisco, CA; Michael Rocco, MD, MSCE, Wake Forest University School of Medicine, Winston-Salem, NC.

Association Representatives: Carolyn Atkins, RN, BS, CCTC, National Kidney Foundation, Medical City Dallas Hospital, Dallas, TX; Shelley Clark, RN, National Renal Administrators Association, FMC North Roanoke Dialysis, Roanoke, VA; Paul Eggers, PhD, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Bethesda, MD; Lori Fedje, RD, LD, NKF Council on Renal Nutrition, Pacific Northwest Renal Services, Portland, OR; Richard Goldman, MD, Renal Physicians Association, Renal Medicine Associates, Emeritus Albuquerque, NM; Joel Greer, PhD, Centers for Medicare and Medicaid Services, Baltimore, MD; Richard Lafayette, MD, American Society of Nephrology, Stanford University School of Medicine, Stanford, CA; Eugene Z. Oddone, MD, American College of Physicians - American Society of Internal Medicine, Durham VA Medical Center, Durham, NC; Victoria Norwood, MD, American Society of Pediatric Nephrology, University of Virginia, Charlottesville, VA; Paul M. Palevsky, MD, Forum of ESRD Networks, University of Pittsburgh School of Medicine, VA Pittsburgh Health Care System, Pittsburgh, PA; Sandy Peckens, MSW, NKF Council on Nephrology Social Workers, Merrimack Valley Nephrology, Methuen, MA; Venkateswara Rao, MD, American Society of Transplantation, Hennepin County Medical Center, Minneapolis, MN; Charlotte Thomas Hawkins, PhD, RN, CNN, American Nephrology Nurses Association, Rutgers, The State University of New Jersey, Burlington, NJ; Joseph White, American Association of Kidney Patients.

Methodologists: David B. Matchar, MD, FACP, Director, Duke Center for Clinical Health Policy Research and Co-Director, Duke Evidence-based Practice Center, Durham, NC; Douglas C. McCrory, MD, MHS, Co-Director Duke Evidence-based Practice Center, Durham, NC; Joseph A. Coladorato, MD, Duke Institute of Renal Outcomes Research & Health Policy, Durham, NC; Preston S. Klassen, MD, MHS, Duke Institute of Renal Outcomes Research & Health Policy, Durham, NC; Meenal B. Patwardhan, MD, MHSA, Duke Center for Clinical Health Policy Research and Duke Evidence-based Practice Center, Durham, NC; Doral N. Reddan, MD, MHS, Duke Institute of Renal Outcomes Research & Health Policy, Durham, NC; Olivier T. Rutschmann, MD, MPH, Duke Center for Clinical Health Policy Research, Durham, NC; William S. Yancy, Jr., MD, MHS, Duke University Medical Center, Durham, NC.

Medical Editor: Rebecca N. Gray, DPhil, Duke Evidence-based Practice Center, Durham, NC.

Project Manager and Editor: Emily G. Shurr, MA, Duke Evidence-based Practice Center, Durham, NC.

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 who have been referred for a transplant evaluation / number of patients with advanced CKD, who are willing for a transplant, do not have an unacceptable level of surgical risk, and satisfy the UNOS criteria for transplant candidacy," 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 site: www.renalmd.org; e-mail: rpa@renalmd.org.

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.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

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.

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouseâ„ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.