

Practice Guidelines for the Management of End Stage Renal Disease (ESRD)

MVP Health Care®, as part of its continuing Quality Improvement Program, adopted guidelines for End Stage Renal Disease (ESRD) based on the National Kidney Foundation's Kidney Disease Outcome Quality Initiative (NKF KDOQI™).

Statistics – Morbidity & Mortality

According to the United States Renal Data System's (USRDS) Annual Report:

- The number of patients with incident ESRD in 2018 was 131,636, an increase of 2.3% since 2017. Between 2017 and 2018, unadjusted ESRD incidence per million increased by 1.5%, while adjusted ESRD incidence per million increased by only 0.2%.
- The number of patients with incident ESRD who initiated in-center hemodialysis ranged from 111,000 to 113,000 for the fourth consecutive year in 2018. Meanwhile, the number of patients who initiated peritoneal dialysis and who received a preemptive transplant reached an all-time high of 18,631.
- Across the 18 ESRD Networks, adjusted incidence of ESRD in 2018 ranged from 284.6 cases per million in Network 1 (New England) to 434.6 cases per million in Network 14 (Texas).
- The adjusted incidence of ESRD among Blacks fell 1.7% between 2017 and 2018. The ratio of adjusted incidence in Blacks versus Whites was 2.7, the lowest value since at least 1980.
- The adjusted prevalence of ESRD increased to a new high of 2,242 cases per million people in 2018.
- At the end of 2018, there were 554,038 (70.7%) patients undergoing dialysis and 229,887 (29.3%) patients with a functioning kidney transplant.
- Across the 18 ESRD Networks, adjusted prevalence of ESRD in 2018 ranged from 1,871 cases per million in Network 1 (New England) to 2,483 cases per million in Network 10 (Illinois).
- The adjusted prevalence of ESRD was 3.4 times higher in Blacks than Whites in 2018.
- The number of incident ESRD patients who received a preemptive transplant or selected home dialysis increased to 18,631 in 2018, or 14.2% of all incident ESRD patients.
- Approximately 25% of patients with glomerulonephritis and 40% of patients with polycystic kidney disease received a preemptive transplant or selected home dialysis in 2018, whereas corresponding values in patients with diabetes or hypertension as the primary cause of ESRD were between 11% and 12%.
- At the end of 2018, there were nearly 69,000 patients performing dialysis in the home, or 12.5% of all patients undergoing dialysis. Nearly 85% of patients on home dialysis performed peritoneal dialysis.
- Whereas 57% of White patients with prevalent ESRD received in-center hemodialysis at the end of 2018, 72% of Black patients received in-center hemodialysis.

- Pediatric patients were most likely to receive pre-ESRD nephrology care (75.5%), and patients aged 18–44 years were least likely (61.2%).
- Incident ESRD patients without pre-ESRD nephrology care were unlikely to have received pre-ESRD dietary care (0.3%) or an erythropoiesis-stimulating agent (2.3%) and had greater than 80% probability of initiating hemodialysis with a catheter.
- Between 2010 and 2018, the distribution of estimated glomerular filtration rate (eGFR) among incident ESRD patients was nearly unchanged.
- Whereas 58% of White patients were diagnosed with ESRD at an eGFR less than 10 mL/min/1.73 m², 74% of Black patients were diagnosed with ESRD at this level of eGFR .
- More than 1 in 7, that is 15% of US adults or 37 million people, are estimated to have Chronic Kidney Disease (CKD)
- As many as 9 in 10 adults with chronic kidney disease **do not know** they have CKD.
- About 2 in 5 adults with severe chronic kidney disease **do not know** they have CKD.
- CKD is more common in people aged 65 years or older (38%) than in people aged 45–64 years (12%) or 18–44 years (6%).
- CKD is slightly more common in women (14%) than men (12%).
- CKD is more common in non-Hispanic Black adults (16%) than in non-Hispanic White adults (13%) or non-Hispanic Asian adults (13%).
- About 14% of Hispanic adults have CKD.

Sources:

United States Renal Data System. USRDS annual data report: Epidemiology of kidney disease in the United States. National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2019. Available: [Annual Data Report | USRDS](#)

[Chronic Kidney Disease in the United States, 2021 \(cdc.gov\)](#)

Guideline Summary

In 1997, the National Kidney Foundation began the Kidney Disease Outcome Quality Initiative (KDOQI) with a goal to create clinical management guidelines for health care professional for all stages of chronic kidney disease and related complications, from diagnosis to monitoring and management. The National Kidney Foundation has published numerous Clinical Practice Guidelines through its KDOQI process. Topics covered include:

- [Acute Kidney Injury \(AKI\)](#)
- [Anemia](#)
- [Bone Metabolism in CKD](#)
- [Cardiovascular Disease in CKD](#)
- [Classifying Chronic Kidney Disease](#)
- [Diabetes mellitusmellitus](#)
- [Glomerulonephritis](#)

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2006, 2008, 2010, 2014, 2016, 2018, 2020, 2021

- Hemodialysis Adequacy
- Hepatitis C
- Nutrition in CKD
- Peritoneal Dialysis Adequacy
- Transplant
- Vascular Access

For all KDOQI Guidelines for Chronic Kidney Disease (CKD) Care and KDOQI Guidelines for Dialysis Care please go to the National Kidney Foundation website at:

http://www.kidney.org/professionals/kdoqi/guidelines_commentaries.cfm#.

In conjunction with these guidelines, MVP Health Care offers Case Management for members with End Stage Renal Disease who are preparing for or receiving dialysis. If you would like to refer one of your patients to the Case Management program, please call the Population Health Management Department at **866-942-7966**.

This guideline is not intended to replace the role of clinical judgment by the physician in the management of this, or any other disease entity. It is an educational guideline to assist in the delivery of good medical care. All treatment decisions are ultimately up to the physician. Where medication recommendations are made, please refer to each health plan's formulary for coverage considerations.

MVP Health Care updates its clinical guidelines at least every two years. The review process is also initiated when new scientific evidence or national standards are published. Practitioners are alerted via the web site and by written notices from the plan via fax or newsletter. A hard copy of the clinical guideline can be requested by calling the MVP Quality Improvement Department at **800-777-4793**.