

**BOARD OF
DIRECTORS**

ANNA Response to USPSTF Draft Research Plan for Chronic Kidney Disease
Screenings

OFFICERS

President

Angela Kurosaka

President-Elect

Jennifer Payton

Immediate Past President

Dave Walz

Secretary

Kristin Larson

Treasurer

Sara Kennedy

Director

Michelle Gilliland

Director

Faith Lynch

Director

Elizabeth St. John

**Emerging Professional
Fellow**

Tanisha Leonard

Executive Director

Tamara Kear

1. What are the harms of screening for CKD vs. no screening?

Chronic kidney disease (CKD) affects nearly 37 million Americans. As many as nine in 10 adults with CKD do not know they have CKD and about two in five adults with severe CKD do not know they have CKD.¹ CKD is expected to grow to 36 million over the next five years. The prevalence of end-stage renal disease (ESRD), the last and most harmful stage of CKD, continues to rise by nearly 21,000 every year as well.² In fact, In 2015, individuals with stage 4 CKD and stage 5 CKD were over six and eight times as likely, respectively, to progress to ESRD than those with stage 3 CKD.³ The cost of CKD and ESRD to the Medicare program is nearly \$80 million annually.⁴ These statistics demonstrate the alarming outcomes of not screening for CKD.

In April 2021, the Centers for Medicare and Medicaid (CMS) published Chronic Kidney Disease Disparities: Educational Guide for Primary Care, which outlines approaches identifying and treating CKD as well as approaches to ensuring patient-centered care. One of the best ways to accomplish all three of these approaches is to screen for CKD. According to the Centers for Medicare and Medicaid's document titled, *Chronic Kidney Disease Disparities: Educational Guide for Primary Care*, "Interventions that can slow progression of CKD include early identification, controlling blood pressure, controlling blood glucose, reducing albuminuria, eating a healthy diet, and maintaining a healthy lifestyle."⁵ The best forum for this screening is in the primary care setting because primary care practice teams have an opportunity to apply population health strategies that may improve the identification of individuals with CKD early on to improve care for people with CKD and slow the progression of the disease.⁶ Early detection is particularly

¹ CDC, Chronic Kidney Disease in the United States, 2021, *available at* <https://www.cdc.gov/kidneydisease/publications-resources/ckd-national-facts.html>. Last visited February 10, 2023.

² Steve Graff, The Underrecognized Epidemic of Chronic Kidney Disease, June 4, 2019, *available at* <https://www.pennmedicine.org/news/news-blog/2019/june/the-underrecognized-epidemic-of-chronic-kidney-disease#:~:text=Today%2C%20CKD%20%E2%80%93%20a%20disease%20where,cases%20every%20year%2C%20as%20well>. Last visited February 10, 2023.

³ NIH, Incident, Prevalence, Patient Characteristics, and Treatment Modalities, Chapter 1, *available at* <https://usrds-adr.niddk.nih.gov/2022/introduction>. Last visited February 15, 2023.

⁴ *Id.*

⁵ CMS, Chronic Kidney Disease Disparities: Educational Guide for Primary Care, p. 7, 2021, *available at* <https://www.cms.gov/files/document/chronic-kidney-disease-disparities-educational-guide-primary-care.pdf>. Last visited February 10, 2023.

⁶ *Id.*

important for CKD because symptoms usually do not present until the late stages of the disease.⁷

2. What disparities are present in the diagnosis of CKD and utilization of treatment, and what factors are associated with disparities?

Health care disparities are defined as “health outcomes seen to a greater or lesser extent between populations... that contribute to an individual’s ability to achieve good health”⁸ Individuals with CKD or CKD risk factors frequently encounter racial, ethnic and socioeconomic disparities. The Centers for Disease Control and Prevention (CDC) reports that 16% of non-Hispanic Black adults and 14% of Hispanic adults in the United States have CKD, compared to only 13% of non-Hispanic White or Asian adults in the United States.⁹ The NIH notes that higher risk for CKD among these groups is primarily due to higher risk for other conditions such as diabetes and high blood pressure, both of which are highly prevalent among Black, Latino, and Native American patients in the United States.¹⁰

Additionally, low-income and racial and ethnic minority individuals are less likely to seek and receive recommended care related to CKD risk factors and are less likely to reduce CKD risk through prescribed treatment goals (e.g., controlling blood pressure, diabetes, and cholesterol). Furthermore, these individuals may be less aware of the risks of CKD and therefore need to be evaluated when risk factors such as diabetes and hypertension are present.

Most alarming is the fact that racial and ethnic minorities are also more likely to progress from CKD to ESRD and are less likely to have been under the care of a nephrologist before starting dialysis.¹¹ One study by the National Institutes of Health demonstrated that approximately 22.0% of Black and 21.7% of Native Hawaiian/Pacific Islander individuals had an estimated glomerular filtration rate (eGFR) of less than five at initiation of kidney

⁷ *Id.*

⁸ CMS Framework for Health Equity, 2022-2023, *available at* <https://www.cms.gov/files/document/cms-framework-health-equity.pdf>. Last visited February 10, 2023.

⁹ Lynda Benton, Robyn Begley, and Debbie Hatmaker, Look to nurses to help accelerate the transformation of health care, Stat News, August 20, 2021.

¹⁰ *Id.*

¹¹ Derose, S.F., Rutkowski, M.P., Crooks, P.W., Shi, J.M., Wang, J.Q., Kalantar-Zadeh, K., Kovesdy, C.P., Levin, N.W., Jacobsen, S.J. (2013). Racial Differences in Estimated GFR Decline, ESRD, and Mortality in an Integrated System. *Am J. Kidney Dis.* 62(2): 236-44, *available at* <https://www.ncbi.nlm.nih.gov/pubmed/23499049/>. Last visited February 10, 2023.

replacement therapy, whereas the corresponding percentages were 17.6% for Hispanic, 16.8% for Asian, 11.0% for Native American, and 8.6% of White individuals.¹²

These disparities are systemic and further impacted by the individual, provider, and clinical factors.

- **System factors:** Limited access to care (including transportation and internet/broadband access) and lack of clinical decision support tools.
- **Individual factors:** Genetic predisposition (e.g., APOL1 risk variants), barriers to accessing care, low health literacy, cultural and attitudinal beliefs, such as mistrust of health care providers and language barriers.
- **Clinician factors:** Limited knowledge of CKD, discomfort with its clinical complexity, and communication challenges; conflicting guidance and lack of payment for CKD screening and the complexity of treating patients with multiple comorbid conditions.

Solutions to lessen disparities in CKD treatment include early identification, which has demonstrated slowing or preventing CKD progression, as well as controlling hypertension and diabetes, which have been shown to affect ethnic minorities and individuals of low economic statuses at a greater rate.¹³

¹² ¹² NIH, Incident, Prevalence, Patient Characteristics, and Treatment Modalities, Chapter 1, available at <https://usrds-adr.niddk.nih.gov/2022/introduction>. Last visited February 15, 2023.

¹³ Nee, R., Yuan, C. M., Hurst, F. P., Jindal, R. M., Agodoa, L. Y., & Abbott, K. C. (2016). Impact of Poverty on Race and Pre-End-Stage Renal Disease Care Among Dialysis Patients in the United States *Clin Kidney J.*, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5469551/>. Last visited February 10, 2023.