

Screening for chronic kidney disease:

reducing the financial burden through early identification

For 26 million Americans, kidney function has declined to the point that their kidneys cannot filter blood effectively. Those 26 million Americans have chronic kidney disease (CKD), a condition that progresses slowly over time, but can be debilitating in late stages. When it continues to progress, individuals with CKD must prepare for end stage renal failure, dialysis, and possible kidney transplantation.

According to national surveys, 90% of those with CKD are unaware they have the condition. Until later stages, CKD does not prompt outward-facing symptoms, leaving a large part of the American population in the dark about their kidney health. There are risk factors for CKD, but the only way to detect CKD and measure overall kidney function is through a creatinine and estimated glomerular filtration rate (eGFR) screening, according to the National Kidney Foundation.¹ Creatinine in the blood gives insight into how well the kidneys are functioning in filtering out this waste. Creatinine is generated from muscle, so muscle mass affects test interpretation. The eGFR equation makes adjustments that reflect differences in muscle mass. For example, higher muscle mass is typically observed more often in younger adults than older adults, and in men than women. The eGFR equation generates results that directly correspond to levels of kidney function.

Risk factors for chronic kidney disease include

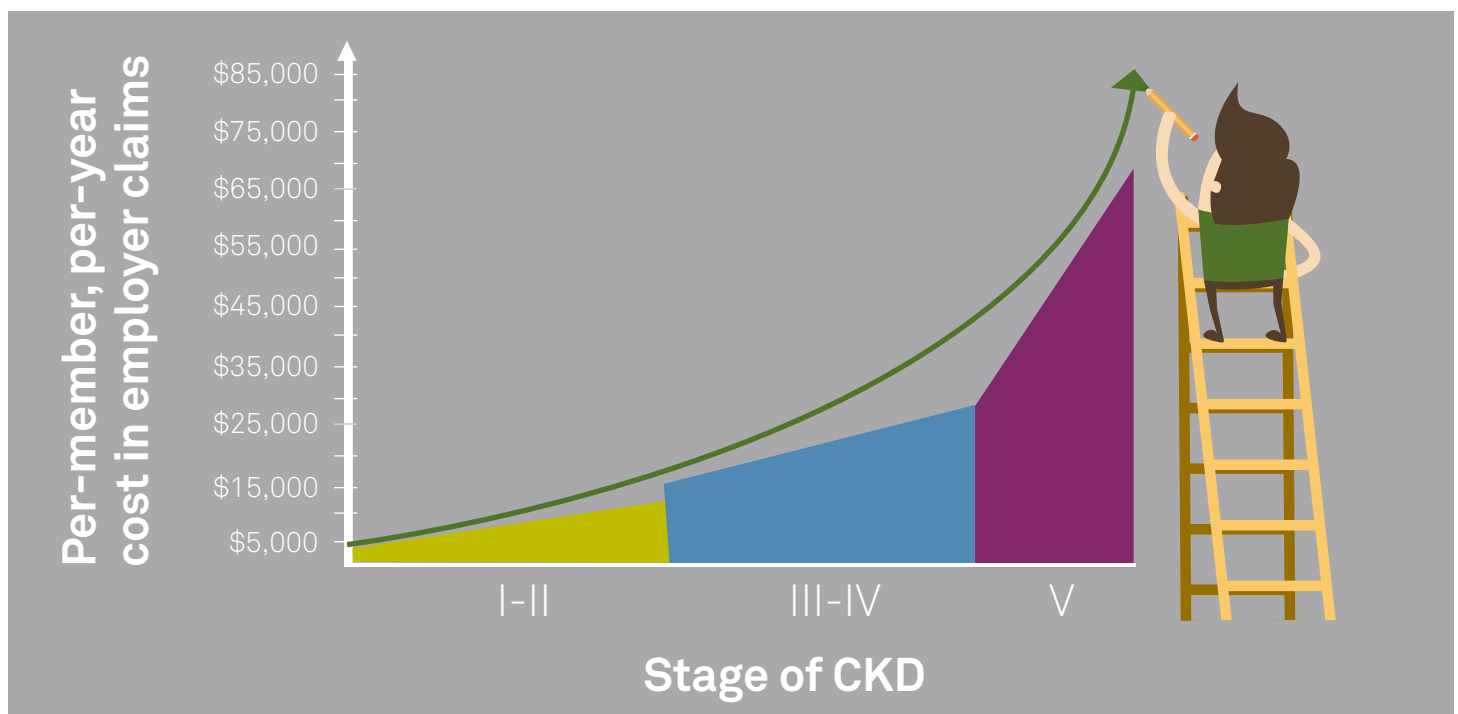
- **Diabetes.** Diabetes is the leading cause of CKD. High blood glucose, also called blood sugar, can damage the blood vessels in your kidneys. Nearly 1 in 3 people with diabetes has CKD.
- **High blood pressure.** High blood pressure is the second leading cause of CKD. Like high blood glucose, high blood pressure also can damage the blood vessels in your kidneys. Nearly 1 in 5 adults with high blood pressure has CKD.
- **Heart disease.** Research shows a link between kidney disease and heart disease. People with heart disease are at higher risk for kidney disease, and people with kidney disease are at higher risk for heart disease. Researchers are working to better understand the relationship between kidney disease and heart disease.
- **Family history of kidney failure.** If your mother, father, sister, or brother has kidney failure, you are at risk for CKD. Kidney disease tends to run in families. If you have kidney disease, encourage family members to get tested.



If caught early, through a eGFR screening, progression of kidney disease to kidney failure can be prevented. In turn, that means that both the health burdens and financial burdens of CKD can be alleviated.

The economic burden for CKD is high, and continues to rise. For example, in the United States, the average amount of medical care claims for someone without CKD is \$8,500 per person, per year. Kidney disease in an early stage (1-2) increases the financial burden on the individual to approximately \$10,500 per year. As CKD progresses, the financial burden increases. An individual with stage 5 kidney disease could exceed \$30,000 in managed care claims for dialysis and other related services each year.²

Individuals with multiple chronic conditions spend even more per year on health services. One study estimated that individuals with prediabetes and early-stage CKD (pre-dialysis) reach over \$70,000 in managed care claims each year.



By offering eGFR screenings for their employees, employers can identify individuals at risk for CKD and intervene before individuals become high-cost claimants. This alleviates the cost burden on employees while also saving the organization money on healthcare costs in the long run. Additionally, employers see increased absenteeism for those with CKD. By offering screening alongside health intervention options for prediabetes and kidney disease, employers can keep their population healthy and productive.

For more information about eGFR and other additional testing options, call us at 1.800.654.7824 or reach out to your account manager.

¹ "About Chronic Kidney Disease." National Kidney Foundation. 15 February 2017. <https://www.kidney.org/atoz/content/about-chronic-kidney-disease>.

^{2,3} Sood, Vipin, et al. "Chronic Kidney Disease Burdens Patients, Health Care Systems, and Employers." RTI Health Solutions. 2011. https://www.rtihs.org/sites/default/files/BraunL_ISPOR_Nov2011.pdf