Healthy Workforces, Sustainable Futures: Why Employers Should Invest in Early Kidney Care

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National Alliance of Healthcare Purchaser Coalitions
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EXECUTIVE SUMMARY

Recent advancements in the screening, diagnosis, and treatment of chronic kidney disease (CKD) have created an unprecedented opportunity for employers to be a part of vital efforts to intervene earlier to delay or prevent progression to kidney failure (also known as end-stage renal disease or ESRD). Despite these improvements, CKD is placing a significant and largely underrecognized burden on American businesses and working families. Data shows that 9 in 10 Americans are unaware they have CKD and nearly 40% of patients learn of their condition after it has progressed to the most serious stages of disease.[1] What's more, with improvements in screening and diagnostic tools, including new genetic tests, there will likely be a wave of newly diagnosed, younger individuals.[2]

Employers have long recognized the importance of investing in chronic disease management and prevention to support the health of employees and their families. As the primary sponsors of health insurance coverage in the US, employers are uniquely positioned to enable earlier and more effective prevention and treatment of CKD. By implementing prevention-centered benefits that prioritize early screening and detection, foster timely and effective care coordination, and provide access to comprehensive treatments and services for patients with CKD and rare forms of kidney disease, employers can fundamentally alter the trajectory of this disease for millions of Americans. They can also achieve substantial cost savings for themselves and taxpayer-funded insurance, including the Medicare program.

To demonstrate the potential savings employers stand to realize, the American Kidney Fund and the National Alliance of Healthcare Purchaser Coalitions partnered with Health Capital Group to develop an original analysis that uses a range of data from government and peer-reviewed sources to estimate the current impact of CKD on the US workforce and model how earlier intervention could reduce employer health care spending and improve productivity. Our analysis also goes one step further to illustrate the specific economic benefits of investing in upstream kidney care on a diverse range of employers based on assumptions about their workforce demographics.

> **Our findings suggest there is a substantial opportunity for employers to disrupt the current dire trajectory of CKD in the US.**

We estimate that CKD currently affects over 11 million workers, accounting for 7.4% of the US workforce. This is likely an underestimate due to the prevalence of early-stage CKD, which often goes undetected; about 1 in 7 US adults have CKD, with millions more at risk.[3,4] While employees with moderate- to late-stage CKD (stages 3-5) represent only 1% of the workforce, our analysis found that they drive 8% of annual employer health care costs—a staggering $107 billion each year, including the costs for associated comorbidities. Beyond these direct health costs, our analysis further found that moderate- to late-stage CKD also results in lost productivity due to absenteeism and reduced performance, adding another $30 billion in employer burden annually.

> **If employers could intervene earlier by providing employees with treatment and prevention-centered benefits to delay progression to moderate- to late-stage CKD, we estimate that they could save up to $35 billion annually in health care costs, or over 3% of their total health care costs each year, not including improvements in productivity.**

It is worth noting that this figure does not take into account the costs associated with more screening and higher utilization of kidney care services and treatments. It also does not account for the potentially significant long-term quality of life impacts that would likely result from improvements in kidney health.

Our analysis also illustrates the range of potential gains across different employer types. Additionally, it shows that the savings potential is particularly robust for those with a workforce whose demographics suggest they are more likely to be affected by CKD and related conditions. Those attributes include lower education attainment, greater representation of people of color, and being located in geographic regions where CKD incidence is higher.

In addition to reducing health care costs and fostering a healthier, more resilient workforce, employer action on CKD can also generate significant downstream savings for Medicare, given that individuals living with ESRD are eligible for coverage through the program, regardless of age. Currently, ESRD results in tens of billions of dollars in Medicare spending each year, accounting for nearly 6% of Medicare fee-for-service expenditures.[5] By making investments to delay or reduce the number of individuals who progress to ESRD, employers can make a meaningful impact on Medicare spending every year, with gains increasing over time. Policymakers have an opportunity to incentivize employers to adopt prevention-focused benefits targeting CKD by advancing legislation that allows Medicare to share a portion of savings generated from delayed ESRD with private health plans.

> **This forward-thinking approach would empower employers to invest in early kidney care, helping keep our nation's workforce healthier and enabling a sustainable future for the US health system.**

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We are in a new era of kidney care, with innovative tools expanding our ability to detect and treat this devastating disease earlier on. Still, far too many people are suffering from CKD in this country, and almost 9 in 10 of them don't even know they have it. Later stages of the disease make it particularly difficult for a person to remain engaged and productive at work. We can no longer ignore the substantial impact that CKD has on an individual's ability to continue working. That's why we need employers to pioneer innovative strategies that improve kidney health.

LAVARNE A. BURTON
President and CEO,
American Kidney Fund

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Employers have a unique opportunity—and responsibility—to support the health and well-being of employees by investing in proactive measures that prevent serious chronic conditions like CKD. Access to preventive care is critical to improving health outcomes, increasing worker productivity, and reducing long-term health care costs. Prioritizing the prevention, early detection, and delayed progression of CKD is one way employers can create healthier workplaces and drive meaningful change in the way health care is delivered.

SHAWN GREMMINGER
President and CEO,
National Alliance of Healthcare Purchaser Coalitions

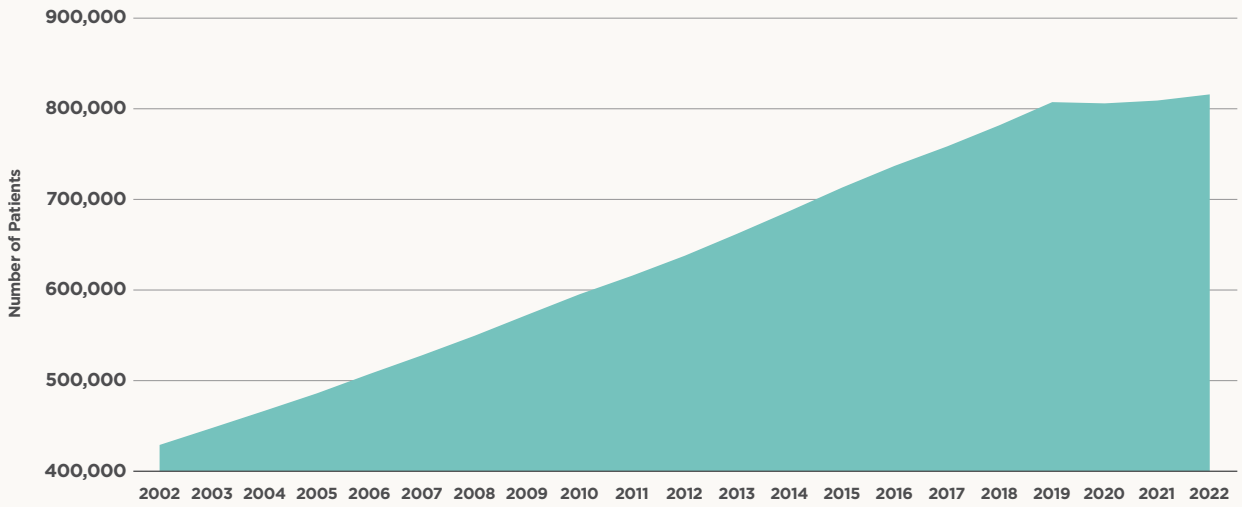
INTRODUCTION: THE BURDEN OF CKD IN THE US

CKD is a progressive condition that damages the kidneys, leading to the eventual loss of their ability to filter waste and fluids out of the blood. It is the fastest growing non-communicable disease in the US, affecting more than 35 million people, or roughly 1 in 7 American adults.[6] Diabetes and high blood pressure are the most common underlying causes of CKD, causing three-quarters of all cases, with diabetes causing 45% and high blood pressure causing 30% of new cases of kidney failure.[7] CKD progresses through five stages, indicating the level of damage to the kidneys. The disease culminates in kidney failure or ESRD, at which point the kidneys can no longer filter waste from the blood. Since 2002, the prevalence of ESRD in the US has nearly doubled, rising from over 429,000 to nearly 816,000 in 2022 (see Figure 1).[8] While rates of early-stage CKD are similar across people of different socioeconomic status, race, and ethnicity, people of color and rural Americans face disproportionately higher rates of kidney failure and mortality from the disease.[1]

Many cases of CKD are preventable with the proper treatment and management of underlying conditions; once diagnosed, the progression of CKD to kidney failure can be slowed or stopped entirely with appropriate treatments, many of which are only recently available. An estimated 9 in 10 patients are unaware of their condition as early-stage CKD is often asymptomatic, resulting in silent damage to the kidneys over time.[6] In fact, nearly 40% of CKD patients only learn of their condition after it progresses to ESRD, leaving dialysis and transplant as the only treatment options for survival.[1] Because the later stages of CKD are significantly more expensive to treat than the earlier stages, early interventions that could delay or prevent more people from reaching kidney failure could significantly reduce health care expenditures.[9] Finally, later intervention results in patients experiencing more aggressive disease progression, as research shows patients with late-stage CKD are nearly two times more likely to advance to a worsened disease state within one year compared to patients in earlier stages.[9]

The economic burden of CKD is staggering, with direct spending exceeding $126 billion each year.[1] This does

FIGURE 1 | Prevalence of ESRD in the US, 2002–2022



not include the over $45 billion that Medicare spends on dialysis for patients with ESRD.[5] In fact, Medicare spends nearly $81,000 per ESRD patient per year, or six times the average annual Medicare beneficiary cost of $14,000.[8]

In 2023, the American Kidney Fund and Health Capital Group published "Reimagining Kidney Care: From Crisis to Opportunity," which examined the economic opportunity of identifying and treating earlier stages of CKD. The analysis found that reducing the share of people living with stages 3, 4, and 5 by 25% each could save Medicare an estimated $9 billion annually and commercial payers and employers an added $2.8 billion annually, before accounting for any costs associated with increased screening and use of treatments.

Building on this research, our new analysis explores the unique economic impact of CKD on employers and the significant savings possible through earlier intervention. By prioritizing preventive kidney care and early treatment in their employee health benefits, employers can change the trajectory of CKD, reduce costs, improve the health of the workforce, and contribute to a more sustainable health care system.

THE CHANGING KIDNEY CARE LANDSCAPE

Numerous challenges have contributed to the lack of early detection and treatment of CKD, including limited public awareness of risk factors, lack of widespread screening, knowledge gaps among providers, and limited access to genetic testing. And until recently, the treatment landscape for earlier stages of CKD was also quite limited. Additionally, employers have historically lacked appropriate incentives to cover upstream care, given that, by law, most individuals with ESRD qualify for Medicare coverage regardless of their age, resulting in Medicare paying for the vast majority of ESRD-related treatment costs in the US.[1]

However, the evolving landscape of kidney care is creating new opportunities to diagnose and treat the disease earlier. Kidney care experts believe that significant progress on multiple fronts will enable earlier diagnosis and intervention with innovative treatments to slow and eventually prevent CKD progression.[10] And while we do not expect the United States Preventive Services Task Force to make a CKD screening recommendation, seeking other ways to increase screening and early detection will be crucial and could result in new diagnoses in asymptomatic patients.[2] By prioritizing upstream kidney care now, we can ensure our health system is prepared to empower these individuals to properly manage their disease.

NEW TOOLS AND TREATMENTS FOR KIDNEY DISEASE

Advances in screening, diagnosis, treatment, and care delivery provide powerful tools for early and accurate detection of CKD.

- **Urinalysis (uACR)** detects protein levels in urine, a key indicator of kidney damage.
- **Blood tests (eGFR)** measure kidney function.
- **Genetic testing** identifies hereditary kidney disorders and stratifies risk.
- **Imaging** provides structural insights into kidney health.
- **Biopsies** confirm diagnoses and inform targeted treatment planning.

New FDA-approved and emerging therapies are transforming the treatment landscape and preventing progression to more serious and costly stages of disease that require dialysis and transplant.

These treatments include:

- **SGLT-2 inhibitors** that prevent reabsorption of glucose from the kidneys and lower blood sugar levels.
- **Complement inhibitors** (e.g., Factor B, Factor D, C5, and C3) that block specific parts of the immune system's complement pathway to prevent it from damaging or attacking the body's cells.
- **GLP-1 agonists** that regulate blood sugar and appetite.

THE IMPACT OF CKD ON US EMPLOYERS AND THE ECONOMIC CASE FOR PRIORITIZING EARLIER INTERVENTION

Our new analysis reveals the significant economic burden of CKD on US employers and the potential savings opportunity from earlier intervention. Efforts to estimate the potential opportunities of improved CKD management often focus either on Medicare patients (because of the voluminous data available through the United States Renal Data System—USRDS–Annual Report) or on specific aspects of CKD for particular subpopulations. Our approach aims to illustrate and quantify the broader opportunity for employers to drive improved CKD management and prevention given their central role in providing health insurance coverage to the vast majority of Americans. While prior studies have primarily assessed the impact of specific, well-understood improvements in late-stage CKD patients, we do not specify which particular interventions or approaches would be most effective.

Using data from the US Bureau of Labor Statistics (BLS), USRDS, the Centers for Disease Control and Prevention (CDC), and individual studies from recent literature, we analyzed the prevalence of CKD in the US workforce. From there, we developed 2024 dollar-adjusted estimates of employer economic burden and applied them to various employer archetypes to illustrate how a typical employer would experience CKD. For additional details on our methodology, refer to the Appendix.

Today, 150 million people between ages 20 through 64 are in the US workforce.[11] Based on our analysis leveraging data sources noted previously, we estimate that at least 11 million of these workers, or 7.4% of the US workforce, have CKD (see Appendix Chart 1 for estimated demographic breakdown of CKD in the US workforce). Despite being a staggering number, this is likely an underestimate due to the often undetected, undiagnosed nature of early-stage CKD. Applying prevalence data from the general population, our analysis drew the following conclusions about the impact of CKD on the US workforce:

- Prevalence of CKD is higher among female workers than male workers.
- Black workers are disproportionately impacted by CKD.
- CKD is more prevalent among workers with lower educational attainment.
- Higher income workers have significantly lower prevalence of CKD.
- Significant geographic variations exist in prevalence of CKD.

Our analysis found that individuals in stages 3, 4, and 5 currently only make up 1% of the workforce, but costs associated with moderate- to late-stage CKD and comorbidities account for 8% of total employer health costs or an estimated $107 billion each year (see Figure 2).

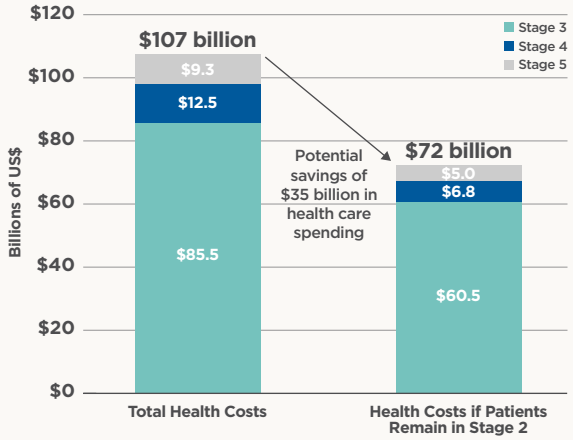
FIGURE 2 | Estimated Moderate- to Late-Stage CKD Health Costs and Productivity Impacts on Total US Workforce, 2024

KIDNEY DISEASE STAGE	TOTAL WORKERS WITH CKD	HEALTH COSTS PER MEMBER PER YEAR	TOTAL HEALTH COSTS	ABSENTEEISM		PRESENTEEISM	
				RATE	COST	RATE	COST
3	1.6 million	$54,939	$85.5 billion	6%	$5.7 billion	19%	$17.9 billion
4	174,000	$71,010	$12.5 billion	8%	$865 million	28%	$2.9 billion
5	126,000	$71,532	$9.3 billion	13%	$975 million	21%	$1.6 billion
TOTAL	**1.9 million**		**$107.3 billion**		**$7.5 billion**		**$22.4 billion**

While the nearly $107 billion figure is substantial, it is not the only cost associated with moderate- to late-stage CKD; productivity losses also must be considered. As individuals progress to stages 3, 4, and 5 of disease, their ability to perform at their usual level often declines, leading to missed work or diminished performance or eventual exit from the labor force (though not always from the employer's health plan). These associated costs are categorized as absenteeism, when an employee has an unscheduled absence from work, and presenteeism, when an employee is physically present but not as productive. Together, we estimate that moderate- to late-stage CKD-related presenteeism and absenteeism cost employers at least $30 billion annually (see Figure 2).

To estimate the savings opportunity from earlier intervention, we model the cost impact of preventing progression of CKD to later stages. Our analysis shows that if employers could intervene earlier by providing treatment and prevention-centered benefits to stop or slow progression to moderate- and late-stage CKD, they could save up to an estimated $35 billion in annual health care spending, which translates to 3% of total employer health care costs per year, before considering the costs of interventions (see Figure 3). While 100% prevention of progression to later stages of disease is likely not feasible, this estimate nonetheless illustrates the significant potential for cost savings. This estimate also does not include the potential productivity improvements from preventing progression to later stages of CKD.

FIGURE 3 | Estimated Savings in Employer Health Costs if Progression to Moderate- to Late-Stage CKD is Prevented, 2024



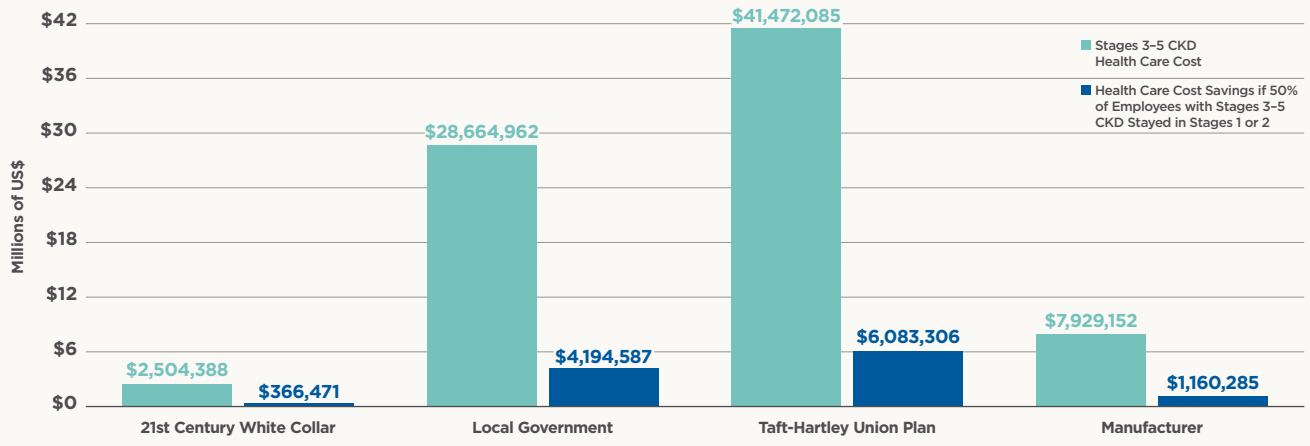
Taking this a step further, we illustrate how these results might vary across employers by applying these findings to typical profiles of US employers (see Figures 4 and 5). In this analysis, we use a more moderate estimate of 50% prevention of progression to later stages of disease, as opposed to 100% as shown in Figure 3. This estimate is once again meant to be illustrative of the opportunity for savings, not to suggest with certainty that employers will be able to achieve this reduction.

We find that while all employers stand to benefit from early CKD treatment and prevention of disease progression in their workforce, this is especially true for employers that have a greater share of workers from demographics disproportionately impacted by CKD, including those with a workforce comprised of individuals with lower education attainment, greater representation of people of color, and those in geographic regions where CKD incidence is higher.

FIGURE 4 | Illustrative Snapshot of Moderate- to Late-Stage CKD Associated Costs Across Four Types of Employers, 2024

	21ST CENTURY WHITE COLLAR	LOCAL GOVERNMENT	TAFT-HARTLEY UNION PLAN	MANUFACTURER
MEDIAN AGE	35	42	45	47
GEOGRAPHIC LOCATION	50% of the workforce on the West Coast	Primarily located in the Midwest	Primarily located in the Northeast	70% of the workforce in the South
DEMOGRAPHICS	Primarily college educated, male, and white	Approximately equal rates of college educated vs not; male vs female Racially diverse	65% do not have a college degree 50% Black and Hispanic	Primarily not college educated, male, and white
COVERED LIVES	25,000	40,000	50,000	10,000
ESTIMATED EMPLOYEES WITH CKD (ALL STAGES)	244	2,789	4,044	771
RATE OF CKD IN WORKFORCE	1.2%	9.8%	11.4%	10.9%
ESTIMATED EMPLOYEES WITH STAGE 3-5 CKD	41	471	683	130
STAGES 3-5 CKD PRODUCTIVITY COST	$1,937,568	$8,237,245	$12,865,217	$1,577,453
STAGES 3-5 CKD HEALTH COSTS	$2,504,388	$28,664,962	$41,472,085	$7,929,152
TOTAL STAGES 3-5 CKD COST	**$4,441,956**	**$36,902,207**	**$54,337,302**	**$9,506,605**

FIGURE 5 | Estimated Health Care Cost Savings Across Four Types of Employers if Progression to Moderate- to Late-Stage CKD is Prevented, 2024



SEIZING THE OPPORTUNITY TO PREVENT CKD PROGRESSION THROUGH EARLIER INTERVENTION

As our findings clearly demonstrate, employers stand to benefit tremendously by helping to prevent the progression of CKD through earlier intervention. Beyond the more immediate benefits accruing to employers, investments in kidney health will eventually translate to direct savings for the Medicare program—which currently spends tens of billions on ESRD patients—as fewer individuals will progress to ESRD and require costly and burdensome interventions such as transplant and dialysis.

As the primary sponsor of health insurance benefits in the US, employers are uniquely positioned to meaningfully change the trajectory of CKD by implementing prevention-centered benefits with a focus on disease management. With advancements in genetic testing and new disease-modifying treatments for CKD, employers can take proactive steps to prevent disease progression, reduce health care costs, and promote workforce productivity and retention.

Many employers have already made significant investments in chronic disease prevention and treatment within their offered health benefits. Expanding these benefits to include CKD screening, diagnostics, and comprehensive care and treatment seizes upon cost-saving opportunities and aligns employer benefits with broader national goals aimed at preventing chronic disease. By acting now, employers can ensure healthier outcomes for their employees while addressing an expensive, challenging, and growing disease area.

Now is the time for employers to implement prevention-centered benefits and formulary design that:

Prioritize early screening and detection for CKD, using the latest screening tools and diagnostic technologies;

Foster timely collaboration and referrals among health plans, primary care providers, nephrologists, pharmacists, and community health workers to improve care coordination; and,

Provide affordable access to comprehensive treatments and services at all stages of CKD, including FDA-approved therapies and nutritional services.

Beyond ensuring comprehensive prevention-focused health benefits, employers can take additional steps to assess their workforce's CKD risk by tracking prevalence of primary risk factors, including diabetes and hypertension, in addition to actual CKD diagnoses. Furthermore, they can invest in efforts to build awareness of CKD among employees and educate about prevention measures, early screening and intervention, and new treatment options. Lastly, they can partner with innovative care delivery companies providing personalized, value-based approaches to enable individuals to better manage their disease.

Congress can create incentives for employers to prioritize upstream kidney care by establishing a voluntary legislative demonstration that allows private health plans to share in the savings they create for Medicare by preventing or delaying ESRD. This forward-thinking approach would enable the private market to drive savings for Medicare, empower employers to keep employees healthy and in the workforce longer, and help address one of the most costly and deadly chronic diseases in our nation.

With innovative diagnostics and therapies now available and improved kidney care delivery possible, now is the time to prioritize novel solutions that will enable our health care system to better tackle the enormous burden of CKD.

APPENDIX: METHODOLOGY

Using data from the US BLS, USRDS, CDC, and individual studies from recent literature, we analyzed the prevalence of CKD in the US workforce and developed 2024 dollar-adjusted estimates of employer economic burden and applied them to various employer archetypes to illustrate how a typical employer would experience CKD. We used the following methodology:

1. Using BLS data, we examined the total number of US workers aged 20-44 and 45-64, totaling approximately 150 million full-time workers. We further segmented that workforce by sex, age, and race, finding that women comprise an estimated 47% of the workforce; Black workers are about 13%; Hispanic/Latino workers account for 19%; and white workers account for 57% (see Appendix Chart 1).

2. We applied the CKD rates from CDC/USRDS to each age and race category and calculated the implied number of total people with CKD by stage within each category. Using prevalence data across CKD categories from USRDS, we assign those with CKD proportionately to either stages 1-2, 3, 4, or 5. We assumed a 65% labor force participation rate for working-aged people within each category using estimates from Alma et al[12] to estimate the number of workers with CKD in each category. Data on labor force participation rates by CKD stage is limited, and it is possible we are overestimating the later-stage labor force participation rate (or underestimating the earlier stage participation rate). However, if later-stage participation rates are overestimated, then we are also underestimating the dependency rate (i.e., the likelihood that a non-working person will be covered by a family member's employer-based plan). In that case, we would be underestimating the health costs and overestimating the productivity costs. Since health care costs typically surpass productivity losses, our approach reflects a conservative assumption.

3. Leveraging membership data from the National Alliance of Healthcare Purchaser Coalitions, we created four illustrative employer archetypes (see Appendix Chart 2). The archetypes include assumptions about workforce age, sex, family status, educational level, industry, race, and location.

APPENDIX CHART 1 | Demographic Breakdown of Workers with CKD

DEMOGRAPHIC	TOTAL WORKERS (AGE 20–64)	DEMOGRAPHIC SHARE OF US WORKFORCE	CKD INCIDENCE RATE	ESTIMATED WORKERS WITH CKD (SHARE OF US WORKFORCE)	DEMOGRAPHIC SHARE OF WORKERS WITH KIDNEY DISEASE
US Population	149,555,000	100%	8.8%	11,013,000 (7.4%)	100%
GENDER BREAKDOWN					
Female	69,989,000	47%	13.3%	6,053,000 (4.1%)	55%
Male	79,566,000	53%	9.6%	4,960,000 (3.3%)	45%
RACIAL/ETHNIC BREAKDOWN					
Black	19,582,000	13%	19.5%	2,112,000 (1.4%)	19%
Hispanic	28,473,000	19%	13.7%	2,157,000 (1.4%)	20%
White	85,480,000	57%	11.7%	5,530,000 (3.7%)	50%
Other	16,020,000	11%	13.7%	1,214,000 (0.8%)	11%

APPENDIX CHART 2 | Employer Archetypes

21ST CENTURY WHITE COLLAR	LOCAL GOVERNMENT	TAFT-HARTLEY UNION PLAN	MANUFACTURER
• Publicly traded, for profit • 25,000 covered lives • Median age: 35 • 50% of the workforce on the West Coast • Primarily college educated, male and white	• 40,000 covered lives • Median age: 42 • Primarily located in the Midwest • Approximately equal rates of college educated vs not • Approximately equal rates of male/female • Racially diverse	• 50,000 covered lives • Median age: 45 • Primarily located in the Northeast • 65% do not have a college degree • 50% Black and Hispanic/Latino	• Privately owned, for-profit company • 10,000 covered lives • Median age: 47 • 70% of the workforce in the South • Primarily not college educated, male and white

4 We estimated the relative rate of CKD for workers by educational status using estimates from Vart et al.[13] We used USRDS data, as noted above, to calculate the relative CKD rate by race, sex, and age. We used CDC data to estimate relative CKD rates by region.

5 We applied estimates from Van Haalen et al on productivity loss by CKD stage to the employed CKD population.[14] Those estimates are calculated using a "lost hours" approach for both absenteeism (missing work) and presenteeism (being less productive at work). We apply annual wage data from BLS to the worker population assuming a 2,000-hour work year for each archetype to calculate the value of the lost hours. We used BLS salary data to estimate average wages for workers in each industry.

6 We estimated the total number of covered lives with CKD by calculating the rate of CKD for both employees and their estimated adult spouses. We applied total health costs by stage using estimates from Sanchez et al[15] on health care costs by CKD stage in 2019 and inflated to 2024 using the CPI-Medical price index.

Our approach is conservative in several ways. Importantly, we provide a point-in-time snapshot of potential outcomes within the CKD-only population, without accounting for long-term reductions in ESRD care that would naturally develop over time. We also do not consider potential reductions in comorbidities or other quality of life improvements that could result from better CKD management or prevention. Third, we exclude explicit cost estimates for the frictional costs of employee turnover (e.g., recruiting, training, etc.) that might decrease with improved CKD management or prevention. Additionally, our analysis likely underestimates the potential impact of addressing undiagnosed CKD patients, who significantly outnumber diagnosed cases. Finally, by allocating the un-staged patients to the earlier, less expensive disease stages, we are likely underestimating the total potential cost savings associated with pushing them into those earlier stages if they are in fact in the later stages already.

Our approach also has some important limitations. First, we do not specify the specific interventions or approaches that would achieve the envisioned reductions in CKD progression or related costs. Second, we do not incorporate the costs of such potential interventions (e.g., the costs of investments in better detection, treatment, innovative technologies, etc.). Finally, we do not untangle the specific cost contributions of CKD itself versus those associated with comorbidities. For example, while delaying CKD progression could reduce kidney-specific costs, the overall treatment burden of advancing comorbidities might mitigate the benefits of slowing CKD progression. Addressing these considerations would require a more complex economic analysis using detailed patient-level data, which is beyond the scope of this evaluation.

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ENDNOTES

1 American Kidney Fund, "Reimagining Kidney Care: From Crisis to Opportunity," 2023, https://www.kidneyfund.org/sites/default/files/media/documents/_WEB_AKF_%20Kidney%20Disease%20Impact%20Economic%20White%20Paper_FINAL.pdf

2 U.S. House of Representatives Letter to Agency for Healthcare Research and Quality and US Preventive Services Task Force, 2024, https://delbene.house.gov/uploadedfiles/support_screening_recommendation_for_ckd.pdf

3 Centers for Disease Control and Prevention, "Chronic Kidney Disease in the United States, 2023," 2023, https://www.cdc.gov/kidney-disease/php/data-research/index.html

4 See Appendix Chart 1

5 USRDS, "Healthcare Expenditures for Persons with ESRD," 2024, https://usrds-adr.niddk.nih.gov/2024/end-stage-renal-disease/9-healthcare-expenditures-for-persons-with-esrd

6 American Kidney Fund, "All About the Kidneys," 2024, https://www.kidneyfund.org/all-about-kidneys/quick-kidney-disease-facts-and-stats

7 United States Renal Data System (USRDS), "2024 Annual Data Report," 2024, https://usrds-adr.niddk.nih.gov/2024/reference-tables

8 USRDS, "Incidence, Prevalence, Patient Characteristics, and Treatment Modalities," 2023, https://usrds-adr.niddk.nih.gov/2024/end-stage-renal-disease/1-incidence-prevalence-patient-characteristics-and-treatment-modalities

9 Milliman, "The Impact of Earlier CKD Detection and Delayed Disease Progression," 2021, https://www.kidneyfund.org/sites/default/files/media/documents/7-13-21-The_impact_of_earlier_CKD_detection_and_delayed.pdf

10 Copur et al, "Novel Strategies in Nephrology: What to Expect From the Future?"2022, https://academic.oup.com/ckj/article/16/2/230/6706856#395186126

11 U.S. Bureau of Labor Statistics, "Labor Force Projections to 2024: The Labor Force is Growing, but Slowly," 2015, https://www.bls.gov/opub/mlr/2015/article/labor-force-projections-to-2024.htm

12 Alma et al, "Sustained Employment, Work Disability and Work Functioning in CKD Patients: A Cross-Sectional Survey Study," 2022, https://pubmed.ncbi.nlm.nih.gov/36315355/

13 Vart et al, "National Trends in the Prevalence of Chronic Kidney Disease Among Racial/Ethnic and Socioeconomic Status Groups, 1988-2016," 2020, https://pubmed.ncbi.nlm.nih.gov/32672828/

14 Van Haalen et al, "Impact of Chronic Kidney Disease and Anemia on Health-Related Quality of Life and Work Productivity: Analysis of Multinational Real-World Data," 2020, https://bmcnephrol.biomedcentral.com/articles/10.1186/s12882-020-01746-4

15 Sanchez et al, "Health Care Resource Utilization and Related Costs of Patients With CKD From the United States: A Report From the DISCOVER CKD Retrospective Cohort," 2023, https://pmc.ncbi.nlm.nih.gov/articles/PMC10105052/

American Kidney Fund®
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The American Kidney Fund (AKF) fights kidney disease on all fronts as the nation's leading kidney nonprofit. AKF works on behalf of the 1 in 7 Americans living with kidney disease, and the millions more at risk, with an unmatched scope of programs that support people wherever they are in their fight against kidney disease—from prevention through transplant. With programs that address early detection, disease management, financial assistance, clinical research, innovation and advocacy, no kidney organization impacts more lives than AKF. AKF is one of the nation's top-rated nonprofits, investing 97 cents of every donated dollar in programs, and it has received 24 consecutive 4-Star ratings from Charity Navigator as well as the Platinum Seal of Transparency from Candid, formerly known as GuideStar.

National Alliance
of Healthcare Purchaser Coalitions
Driving Health, Equity and Value

For over 30 years, the National Alliance has united business healthcare coalitions and their employer/purchaser members to achieve high-quality care that improves patient experience, health equity, and outcomes at lower costs. Its members represent private and public sector, nonprofit, and labor union organizations that provide health benefits for more than 45 million Americans and spend over $400 billion annually.

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