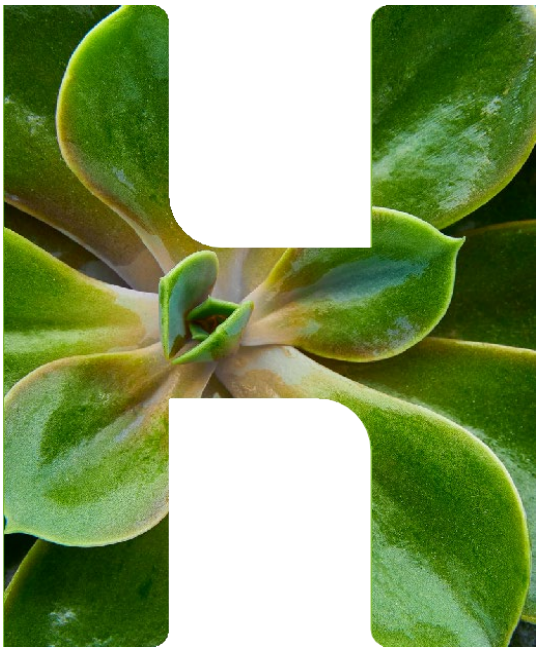
Issue brief

Value-based care in nephrology

Table of Contents

linked for your convenience



Humana

478203ALL0524

A national movement to address and improve kidney care

Patients diagnosed with chronic kidney disease (CKD) often find it difficult to understand their diagnosis, navigate health systems, afford costly treatments, and manage their overall health. Pain points across patients, clinicians, policymakers, and payers are driving a national movement to improve chronic kidney disease.

More than 1 in 7 have CKD

According to the Centers for Disease Control and Prevention, CKD affects an estimated 37 million Americans. The risk is greatest for those diagnosed with chronic diseases such as diabetes or high blood pressure.

CKD is also an expensive disease to treat. 13.5% of Medicare fee-for-service (FFS) beneficiaries ages 66 or older have a diagnosis of CKD, yet they accounted for more than a quarter of the total Medicare FFS spending for this age group which totals around $76.8 billion, according to the USRDS 2021 Annual Data Report.

13.5% of Medicare FFS beneficiaries

25% of total Medicare fee-for-service spending

CKD treatments are focused on controlling modifiable risk factors to prevent worsening of the condition over time. If left untreated, CKD leads to end stage renal disease (ESRD), also known as kidney failure. According to the USRDS 2021 Annual Data Report, the number of patients with newly registered ESRD increased from 97,856 in 2001 to 135,972 by 2021, a 39% increase.

Once a patient has progressed to complete kidney failure, 2 options remain: dialysis or transplant.

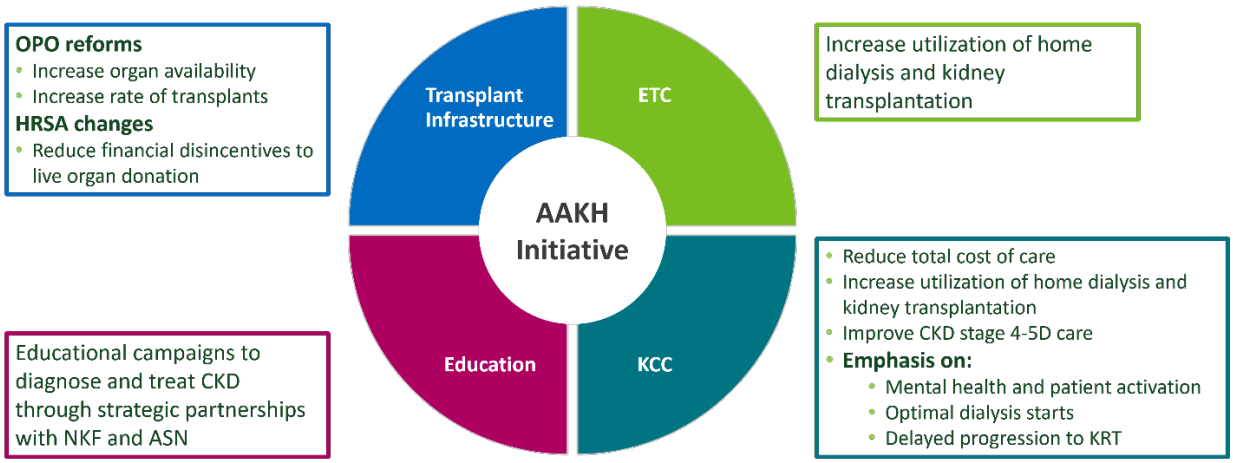
Dialysis "is far from sustainable," according to Alex M. Azar II, former Secretary of Health and Human Services, in his introduction of the 2019 Advancing American Kidney Health (AAKHI) initiative. A JAMA Internal Medicine study reports poor outcomes within 1 year according to a JAMA Internal Medicine article. In fact, 22.5% of people die within 30 days of being placed on dialysis. People on dialysis can also have mental health challenges. The National Kidney Foundation reports that 60% of dialysis patients report depression.

22.5% died within 30 days of being placed on dialysis

14 people die each day waiting on a transplant

The second and best treatment option for those with kidney failure is a kidney transplant. The American Journal of Transplantation reports that kidney transplant recipients, on average, experience excellent 1-year survival rates exceeding 95%. They report a better quality of life than treatment with ongoing dialysis, but the waitlist for a transplant is long. Roughly 14 people die each day while waiting for a kidney, according to the Health Research Funding Organization.

Due to the rising human and financial burden in American kidney health, the Centers for Medicare & Medicaid Services (CMS) is placing a fresh focus on improving the value of nephrology through the Advancing American Kidney Health Initiative (AAKHI). In response, Humana is innovating around kidney care through value-based care (VBC) arrangements.



AAKHI: Multi-pronged approach to kidney care. OPO, organ procurement organization; HRSA, Health Resources and Services Administration; NKF, National Kidney Foundation; ASN, American Society of Nephrology; AAKHI, Advancing American Kidney Health Initiative; ETC, ESKD treatment.

Let's consider the perspective of the patient and her care team.

Sara is a 75-year-old woman with type 2 diabetes and high blood pressure who loves to play piano, garden, and spend time with friends. Her ability to enjoy these activities is reduced as she ages and her health declines.

She sometimes has difficulty finding transportation and doesn't always remember everything that has been discussed during her office visits, but Sara likes and trusts her primary care physician (PCP). She doesn't always take her medications as prescribed due to side effects and feeling overwhelmed by the number of pills. For months, Sara's PCP has counseled her about her rising blood sugar and declining kidney function, advising her to see a nephrologist.

Sara is reluctant to see another doctor and her son, who is her only health ally, puts off helping her find an in-network nephrologist due to his busy work schedule. Sara forgets she is supposed to see one until her PCP reminds her at a follow-up appointment months later.

A year after her initial discussion with her PCP, a neighbor discovers Sara vomiting and confused, with swelling in her legs and face. A scary, costly ambulance ride later, Sara is diagnosed with complete kidney failure due to poorly controlled high blood pressure and diabetes. She is admitted to the ICU and urgently started on dialysis through a catheter in her upper chest. Due to the severity of the situation, she is "crashing" into dialysis.

Sara is terrified and her son feels overwhelmed with the urgency of the situation. Her PCP, who gets word of the crisis, feels defeated. Sadly, Sara's story is common. Approximately 23-38% of patients "crash" into dialysis, and 33-63 % of patients initiate dialysis in an unplanned fashion.

Crashing consists of the emergent need for dialysis without prior nephrology care, counseling, vascular access and/or coordination with the patient's PCP. Crashing creates higher costs to the healthcare system, higher patient morbidity and mortality, and lower quality of life scores according to an article in *Systematic Reviews.*

Value-based care delivers a better kidney care experience

Let's review how Sara's crisis could have been avoided in a VBC system which realigns physician incentives from payment for quantity of services to payment for prevention of disease and better health outcomes. Clinicians working together and focused on patient outcomes such as adherence to evidence-based medication guidelines, control of chronic disease and preparation for the future with plenty of time for education and counseling changes everything. Joann's story has a much more positive outcome because her clinicians were focused on understanding her individual needs, optimizing management of her chronic health conditions through proactive care coordination, and making it easier for Joann to stay engaged and do her part.

Joann is a middle-aged patient with type 2 diabetes, hypertension, peripheral vascular disease, and a family history of kidney failure. She had stage 4 kidney disease, was engaged with a nephrologist and had recently been hospitalized for a week with pneumonia and an acute kidney injury (AKI).

When Joann first met Amanda, her nurse practitioner, Joann shared how she had been given a lot of information about her kidneys but felt completely overwhelmed and confused. She heard doctors say her kidneys were failing and she would be on dialysis soon. This news scared her because of a long family history of ESRD with many complications. Joann told Amanda she was unwilling to discuss dialysis further. Amanda, as Joann's primary care provider, took time with Joann to understand her experience with her family, reviewed and explained her bloodwork/laboratory results, connected her to resources for transportation to appointments and follow-through on her health goals, and ensured Joann had a good understanding of her kidney disease.

Joann began to trust nurse practitioner Amanda and better understand her own health. Soon, an interdisciplinary team led by Amanda's collaborating nephrologist, Dr. Rizvon Chaudhary, allowed all of Joann's care team to help Joann face the challenges ahead. Joann met with the team to identify ways to control her blood pressure, including a salt-restricted diet and adherence to her medication regimen. Controlling Joann's blood pressure was critical in delaying the progression of her kidney disease and preventing heart disease. The clinicians kept one another informed, such as when Amanda contacted Joann's nephrologist to let him know Joann's Angiotensin Converting Enzyme Inhibitor (ACEI) was discontinued during her hospitalization for AKI. Recognizing the importance of reducing protein in the urine to slow progression of Joann's kidney disease, Amanda and Dr. Chaudhary started her on an Angiotensin Receptor Blocker (ARB) and optimized the dosage. Joann's urine protein levels declined by more than 50%, delaying the need for dialysis.

"Our teams worked together with Joann and her husband, offering targeted education and counseling on healthy lifestyle changes. By repeating the same messages and keeping notes, they gained a full understanding of how to delay dialysis as long as possible; but they also learned how to prepare for what could eventually come," said Chaudhary, who practiced nephrology for 13 years in Michigan, 9 in Kentucky and is now a leader at Strive Health, an organization aligning patients and partners (including payers) around value-based care initiatives.

Joann was able to delay progression to End Stage Renal Disease by a year. Once it became clear that she would need dialysis, she explored long-term options and decided to prepare for in-center hemodialysis (ICHD). Her care team coordinated placement of a fistula for vascular access several months before she needed treatments. In the two years she has been enrolled in Strive's Kidney Disease Management Program, Joann kept frequent visits with her PCP, has managed other symptoms, completed advanced care planning, and reported an improvement in quality of life. This patient experience occurred because the physicians involved in her care are financially incentivized to provide high quality, coordinated care with positive outcomes. Joann told NP Amanda that if it were not for her, Strive Health, and Dr. Chaudhary, she "wouldn't be where she is today."

Contrary to Sara's story, Joann avoided the prohibitive cost of hospitalization and the complications and stress associated with inpatient care. "Joann felt like she was given choices and a voice in her own healthcare. Value-based care enables providers to give patients the best possible care; to get to know the patients and do what they need most," said Amanda, noting "...it's much more rewarding for me as her primary care provider and the specialists, too, because we know our work makes a difference every day in the best ways for our patients."

CMS and Humana actions to improve kidney care

CMS offers 2 VBC models, both of which incentivize healthcare providers to manage the care for Medicare beneficiaries with CKD stages 4 and 5 and end stage renal disease (ESRD). These models aim to delay the onset of dialysis and increase kidney transplantation.

1. **End Stage Renal Disease (ESRD) Treatment Choices (ETC) Model:** Medicare program effective January 1, 2021, through mid-2027. The ETC Model issued by CMS encourages more home dialysis and transplant. ETC will do this by impacting reimbursement rates for nephrologists and dialysis providers who increase home dialysis and transplant adoption, first by a positive adjustment to home dialysis claims, then by gradually introducing positive and negative payment adjustments over the last five years of the program.

2. **Kidney Care Choices (KCC) Model:** Effective January 1, 2022, through December 31, 2026, the Kidney Care Choices (KCC) Model builds upon the ETC Model by adding financial incentives for healthcare providers to manage the total cost of care for Medicare beneficiaries with CKD stage 4, CKD stage 5, and ESRD. Within the KCC Model there are 2 participation options:
   - **Kidney Care First (KCF):** Participating nephrologists receive adjusted capitation payments for managing care of aligned beneficiaries. There are incentives for delaying the onset of kidney disease, delaying the onset of dialysis, and increasing kidney transplantation.
   - **Comprehensive Kidney Care Contracting (CKCC):** In this model, a Kidney Care Entity (KCE), which is similar to an ACO concept, will be responsible for the aligned beneficiaries' kidney care from the late stage of CKD or ESRD through dialysis, kidney transplantation, and even post-transplant care.

Both KCC and ETC models for original Medicare align financial incentives for physicians with proactive chronic disease care, better patient education and improved health outcomes for individuals with advanced kidney disease. These models led to innovation and scalability for Medicare Advantage (MA) payors to align value-based approaches with nephrology-focused partners. One nephrologist may be working with the same nephrology-focused partner across original Medicare and MA.

How Humana supports VBC nephrology models

Humana partners with a variety of kidney-focused healthcare management companies to ensure that nephrologists are engaged with patients who have late-stage CKD or ESRD. Our VBC model directly aligns financial reimbursement with positive health outcomes, which makes the way clinicians work and what patients experience, fundamentally different from FFS norms.

Current partners include Evergreen Nephrology, Interwell, Monogram Health and Strive Health, along with dialysis providers DaVita Integrated Kidney Care and Fresenius, to manage the total cost of care for more than 77,000

kidney patients across the nation. Each of these companies serves Humana-covered patients by collaborating with/managing kidney care providers while providing wrap-around support and staffing, patient and family education, preventative measures and in-home services, and medication reviews. They are also ever mindful of the financial risks associated with the uncertainty of kidney disease.

Through what is called a "total cost of care contract," Humana, the kidney-focused healthcare management companies, nephrologists, and other providers agree to key performance metrics on which financial incentives are based. Partners have access to billing claims for hospitalizations, medications, procedures and labs on each patient, which enables a patient care episode with a transparent window for coordination of care, improved health outcomes and increased cost containment.

Instead of rewarding and compensating healthcare providers based on the volume of patients seen or number of procedures performed (as seen in FFS contracts), nephrology VBC programs create financial incentives for providers who both care for their patients and improve their health outcomes. The better the patient's health outcomes, the higher the financial rewards can be for the provider.

In most nephrology VBC cases, the provider is compensated to deliver care during the whole patient care episode. Additional financial rewards can be earned if certain quality metrics are met. Examples include total cost of care, guideline-specific medication adherence, control of diabetes and blood pressure (2 of the leading preventable causes of kidney disease), delay in start of dialysis (but when the time comes, appropriate permanent dialysis access placement), controlled start of dialysis and number of successful kidney transplants. These extra metric-based financial incentives allow providers to take more time with their patients who need the extra time for education, contemplation of treatment options and discussion with their providers—all resulting in a better patient experience.

Measures matter because incentives matter

Just as clinicians should ensure patients have permanent access for dialysis with lower risk of infection and complications, another key aspect of care is good control of blood glucose and blood pressure, and use of guideline-recommended therapies to slow CKD progression. By effectively controlling modifiable risk factors and taking recommended medications, patients may slow the progression of their disease. In return for stabilizing these comorbid conditions and providing guideline-concordant care, nephrology providers may receive financial rewards for providing higher value care at lower cost.

LDOs	CKD/ESRD Vendors	Nephrology/MSOs
Primarily **telephonic engagement** to answer questions/provide information • **Care coordination** • **Predictive analytics**	• **High-touch** care model with **in-home visit capabilities** • **Care management** • **Care coordination** • **Predictive analytics** and risk models	• Wraparound services for nephrology practices, including **care management** capabilities and **analytics** • Embed within and take risk for nephrology practices
	Vendor partners vary by need, area and time but may include:	
DaVita	monogram health	Carolina Kidney Partners evergreen nephrology panoramic HEALTH
interwell health	strive HEALTH	

Humana is positioned to grow VBC partnerships, accelerate development of value-based capabilities and align good clinical models with proper economic incentivization—all with the goal of continuous improvement of both clinician and patient experiences.

"Humana recognized an opportunity to align our members dealing with kidney problems to nephrology partners who have value-based principles. The motive of quality care over quantity of procedures works in both primary and high-volume specialty care," said Brandon Spicer, who leads VBC strategy in the nephrology specialty area.

Patient experiences amplify the purpose: better health

Watch Mary's story: Watch Mary's story to see how, while initially stunned to learn she had CKD, her providers and payer helped her prepare and recover well. After a preemptive transplant, she enjoys a "new lease on life."

Watch the Folse couple's story: Dr. Shaminder Gupta, a nephrologist with Monogram Health, helped this Louisiana couple find a successful way to manage kidney care. "We thought our lives were over," said Mrs. Folse, but Dr. Gupta helped us learn to do dialysis at home. "He was a very courageous doctor," she said. "He wants to make this work for me," said Mr. Folse, who has now gone more than 5 years without missing a treatment and without having his symptoms worsen.

Effectiveness of kidney care models

There are early indications of improved quality within value-based care kidney disease models. The Comprehensive ESRD Care (CEC) Model is a value-based model launched in 2015 by CMS. This initiative brought together dialysis centers and other kidney care providers to form ESRD Seamless Care Organizations (ESCOs). These ESCOs were akin to primary care Accountable Care Organizations (ACOs) and operated to improve quality and lower the cost of kidney care. In January 2022, The Lewin Group analyzed the work of the ESCOs and found that over the first 5 years of the CEC model, unnecessary **hospitalizations declined by 3%** relative to the pre-CEC period. While overall, the results of the CEC and ESCO models were mixed, they created a platform now used in both KCC and ETC CMS programs.

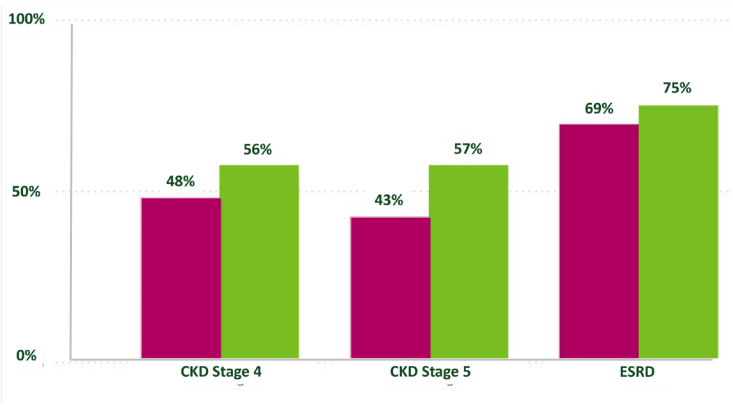
3-5% fewer unnecessary hospital admissions

In another study, published in the Clinical Journal of the American Society of Nephrology, Baker and co-authors examined the association of ACOs alignment with spending for patients with ESRD, finding that "ACO-aligned patients had $572 per year lower spending than non-ACO patients in adjusted analyses."

$572/year savings

Humana's MA value-based kidney care partnerships have noted similar positive results when it comes to hospitalizations. When comparing 2023 Humana MA patients aligned to VBC nephrology programs versus patients aligned to fee-for-service clinicians, there were **5% fewer unnecessary hospital admissions**. Since the engagement of our members in VBC nephrology practices, we have seen improvements in patient engagement and more sustainable medical expense management of kidney disease. **In 2019, Humana CKD patients had a Medical Expense Ratio (MER) over 100%, but as VBC engagement has increased, MER dropped to 88% over 5 years.**

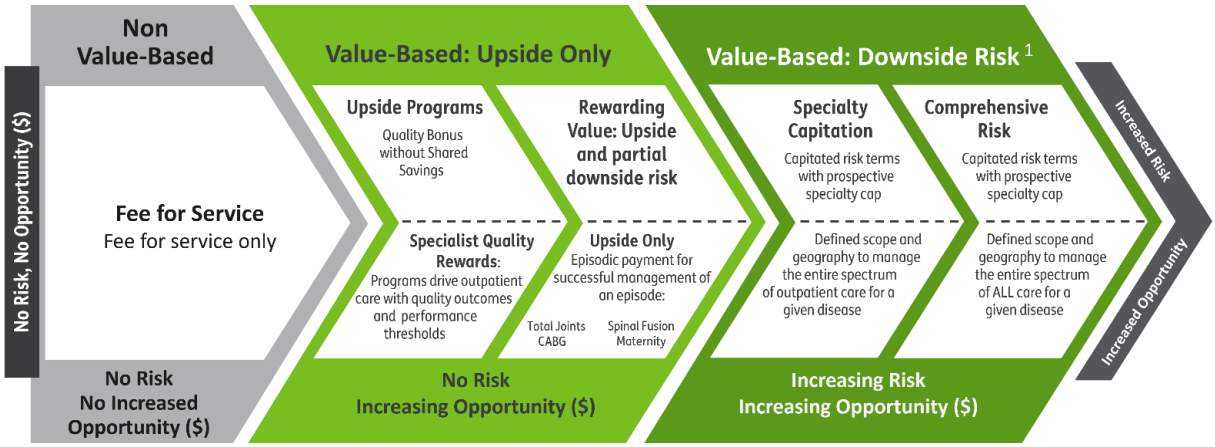
Rates of Nephrology Care Follow-Up



Being under a nephrologist's care **reduces the risk of unnecessary emergency department (ED) utilization** in the first year of dialysis treatment, according to the *International Journal of Environmental Research and Public Health*. By increasing nephrology visits, patients have better access to specialty care and use the ED less while engaging with their providers more. With patients in VBC nephrology programs, Humana has shown consistently **higher rates of nephrology follow-up visits** when compared to patients in a strictly FFS payment structure.

Understanding how specialty value-based care works

As clinicians move from FFS to VBC, they assume increasing accountability for cost and quality. Higher levels of risk mean the financial incentives are more closely aligned with the provision of high-quality care and patient health outcomes; stated plainly, clinicians are financially incentivized to "do the right thing."



[1]Risk contracts include quality and access to care standards; risk contract may delegate UM and/or claims.

In value-based care, healthcare providers work together to manage a person's overall health, considering an individual's personal health goals. In this risk continuum, providers commit to delivering high quality, coordinated and efficient care.

Humana's strategy for specialty VBC is centered around improved patient health and experiences.

1. Align members with physicians who meaningfully engage in evidence-based clinical care programs and leverage technology to support better health outcomes and a better patient experience.
2. Develop reimbursement methods that strengthen value-based care clinicians' practices while encouraging investment in resources (such as care support teams and population health management tools) that drive best-in-class patient care.
3. Deploy efficiency-aiding technologies that reduce administrative burden, align care with evidence-based guidelines and communicate the patient's journey to their healthcare team to ensure optimal coordination of care.

The growing prevalence and prohibitive cost of CKD has created an opportunity to focus on improving care through value-based models for this vulnerable population. Shifting to a clinical care model that aligns payment to nephrologists and other kidney care specialists with the provision of high-quality care that can delay or avoid dialysis and other poor health outcomes can be career-changing for clinicians.

Working within a financial model that allows for investment in the right resources to best take care of patients with kidney disease can bring purpose and professional satisfaction that is sometimes missing in the traditional FFS system. For patients, receiving reliable high-quality care from a care team focused entirely on maintaining their well-being and quality of life means getting to spend more of life doing the things they love. Specialty value-based care models, including in nephrology, are less mature than those in primary care, but the early results are promising, and we continue to learn and improve.

"Many of my nephrologist colleagues still practice fee-for-service for predictable revenue, highly dependent on partnerships with large dialysis organizations to drive most of their income. This is compounded by their poor understanding of the variability of their care and its impact on quality. I want readers to understand that VBC kidney programs eliminate these issues. VBC is a paradigm that puts the patient at the center and also rewards physicians and health plans for doing what is right for the patient. It encourages physicians to understand the cost implications of their decision and rewards value and outcomes and not consumption. More is not always better. Better is better," said Dr. Shaminder Gupta, a nephrologist with Monogram Health featured earlier in the Folse couple's story.

Humana's 10th annual Value-based Care Report reached many readers including physicians, healthcare administrators, legislators and even curious patients. Its detail and data defining how VBC benefits clinicians, members and the healthcare system overall are compelling, as noted, not just for PCPs and MA, but beyond that into Medicaid and specialty care.

As we continue to partner with specialty providers and discover important insights, this *VBC Issue Brief* is intended to help the industry think more extensively about value-based care in specialty (specifically nephrology-focused) care.

Authored by Humana's Dr. Alex Ding, Brandon Spicer, Dr. Jessie Mueller, and Laurie Taylor.
Discover more at Humana.com/VBC.