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Value based care in nephrology: the Kidney Care Choices Model and other Reforms

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Key Points:

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Disclosures: D. Weiner reports the following: Consultancy Agreements: Participated in Medical Advisory Boards for Janssen Biopharmaceuticals (2019), Akebia (2020, 2021), Cara Therapeutics (2020), and Tricida (2019). Honoraria for Akebia were paid to DCI. Research Funding: All compensation paid to Tufts MC: Dialysis Clinic, Inc (site PI for trials contracted with DCI including Ardelyx (ongoing) and Cara Therapeutics (completed)); Janssen Biopharmaceuticals (site PI, completed 2019); AstraZeneca (site PI, completed 2020); Goldfinch Bi (site PI, ongoing); CSL Behring (site PI, ongoing) Honoraria: National Kidney Foundation for editorial positions at Kidney Medicine and AJKD; Elsevier for royalties from the NKF's Primer on Kidney Diseases Scientific Advisor or Membership: Co Editor-in-Chief, NKF Primer on Kidney Diseases, 8th Edition; Editor-in-Chief, Kidney Medicine; Medical Director of Clinical Research, Dialysis Clinic Inc; Member, ASN Quality and Policy Committees and ASN representative to KCP; Scientific Advisory Board, National Kidney Foundation Other Interests/Relationships: Chair, adjudications committee, VALOR Trial (George Institute, CRO, sponsored by Tricida); Member, Data Monitoring Committee, “Feasibility of Hemodialysis with GARNET? in Chronic Hemodialysis Patients with a Bloodstream Infection” Trial (Avania CRO). The remaining author has nothing to disclose.

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Value based care in nephrology: the Kidney Care Choices Model and other Reforms

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Abstract

The Advancing American Kidney Health (AAKH) initiative has reinvigorated the focus on improving the care of patients with advanced chronic kidney disease. Multiple interventions have been planned, with focus on education campaigns for both clinicians and patients, delaying the progression of kidney disease and improving utilization of home dialysis modalities and kidney transplantation. Value-based care models for patients with advanced kidney disease are being rolled out, with the ESRD treatment choices model starting in January 2021, and the Kidney Care choices model planned to start in January 2022. There is increasing emphasis on the role of the nephrologist as the “captain of the ship”, leading efforts in care coordination as physician leaders. The transplant reforms have focused on changes to organ procurement organizations aiming to increase availability of organs, as well as transplants performed, both deceased donor as well as living donor, and removing financial disincentives from live organ donation. The American Society of Nephrology (ASN) and the National Kidney Foundation (NKF) are partnering with the Department of Health and Human Services to develop educational material for clinicians and patients. In this review, we discuss these reforms, as well as potential challenges that have risen, and potential solutions, with emphasis on the Kidney Care Choices model.
The care of patients with advanced kidney disease in the United States remains siloed, with multiple incentives resulting in greater focus on care delivery to the highly vulnerable dialysis patient population than to other chronic kidney disease (CKD) populations (1, 2). In contrast to the highly structured processes in place for dialysis care, there are few organized, well-funded programs that target preventing or slowing progression of kidney disease among individuals with CKD, promote a smooth transition to kidney replacement therapy if necessary and desired by the patient, and encourage kidney transplantation and home dialysis. The Advancing American Kidney Health (AAKH) initiative, released by the Department of Health and Human Services (HHS) in July 2019, outlined three major policy goals: (1) a 25% decrease in kidney failure incidence by 2030; (2) a marked increase (to 80%) in the number of new patients with End-Stage Renal Disease (ESRD) treated with either home dialysis or receiving a transplant by the end of 2025; and (3) doubling of the available kidneys for transplant by 2030 (3).

To address these major policy goals, HHS has taken a multipronged approach: increasing kidney transplant with organ procurement organization (OPO) and living donor reimbursement reforms; informing the public with enhanced education and outreach programs to patients and to clinicians; increasing home dialysis and transplant with the ESRD Treatment Choices (ETC) Model that targets dialysis facilities and clinicians; and addressing siloes while empowering nephrology clinicians to slow kidney disease progression and achieve optimal kidney replacement starts with the voluntary Kidney Care Choices (KCC) models (Figure 1). Each of these programs has exciting potential benefits, but also risks, and a brief discussion of each
aspect of this multipronged approach forms the remainder of this review, with a focus on the KCC models.

**Kidney Transplant Reforms**

CMS introduced changes to the OPOs, including annual reviews of the OPOs, publicly available rankings, and changes in how the donation rate and transplantation rates are measured, with overarching goals of increasing both organ availability and actual transplants (4, 5). There currently are 57 OPOs in the United States, and performance on these rates relative to other OPOs will determine whether an OPO is able to keep its contract; based on the current rule, it is almost certain that multiple OPOs will lose their contracts with the remaining OPOs expanding to cover broader swaths of the country. Given the establishment of this competitive environment, the survival of any individual OPO requires maximizing these rates, providing a tremendous incentive for these organizations to increase transplantation. The Department of Health and Human Services, through the Health Resources and Services Administration (HRSA), also took steps to increase donation from living donors, expanding the qualified reimbursable expenses for live donors to include lost wages, child-care and elder-care expenses, in an effort to reduce financial disincentives to living organ donation (6).

**Education**

As part of a public awareness executive outlined in the executive order for AAKH, the National Kidney Foundation and American Society of Nephrology have partnered with HHS to develop education campaigns for people with kidney disease and clinicians, respectively to help
transform kidney health. Campaigns such as the “Are you the 33%?” from NKF and “We’re United 4 Kidney Health” from ASN have been launched, and others are being developed (7, 8).

The ESRD Treatment Choices Model

The ETC, a mandatory participation model that includes dialysis facilities and managing clinicians in randomly selected Hospital Referral Regions across the nation, provides strong financial incentives for home dialysis and kidney transplantation and started in January 2021. For the ~30% of dialysis facilities and nephrology clinicians randomized to the model, there are substantial financial implications based on the home dialysis rate, defined by the proportion of dialysis patients who are treated at home or engage in self-care dialysis within a dialysis facility, as well as the transplant rate, which incorporates both transplant waitlisting and living donor transplantation for dialysis patients under 75-years-old. For pre-emptive transplants, managing clinicians but not dialysis facilities can receive credit. In order to help build home dialysis programs, the early years of the model include a home dialysis payment adjustment bonus of 1-3% of the Prospective Payment System (PPS) claim for facilities and of the monthly capitated payment (MCP) for managing physicians that phases out in 2023. Financially, the model is asymmetric negative, such that maximum risk exceeds maximum reward, with up to 8% bonus and 10% penalty on PPS claims for facilities and 8% bonus and 9% penalty on clinician MCP claims; accordingly, CMS anticipates direct cost savings as a result of the ETC model.
In the 2021 proposed rule, to address inequity in care, CMS has proposed a health equity incentive for improved utilization of kidney transplantation and home dialysis among dual eligible (Medicare and Medicaid) and low-income-subsidy recipients. In addition, a new stratification of performance based on proportion of dual-eligible beneficiaries is aimed at reducing financial disincentives for facilities that have a high proportion of these patients(9). A final rule, expected in November 2021, should discuss plans to address health equity in more detail.

The Kidney Care Choices Model

While the programs and reforms discussed above address many of the barriers to increasing transplant and home dialysis, they do not substantially address the siloes that exist in kidney care. The KCC model is a voluntary program intended to reinforce the leadership role of nephrology clinicians and incentivize patient centered care to promote transplant, optimal dialysis starts and efforts to slow progression of CKD. The KCC model payment changes, quality measures and incentives will begin in January 2022. Viewed in conjunction with the reforms discussed above, clinicians and organizations in nephrology are challenged by a rapidly changing landscape of payment policy and incentives in the care of people with advanced chronic kidney disease, including those receiving dialysis or with a kidney transplant (10).

KCC, and in particular, the Kidney Care First (KCF) option within KCC discussed below, brings the nephrologist to the center of the care continuum of patients with advanced CKD. The goal of the KCC model is to align financial incentives to promote educating individuals with advanced
CKD in a timely manner, empowering them to prevent progression of kidney disease, and, should kidney failure occur, optimizing transitions into the best kidney failure treatment modality for that individual, including non-dialysis comprehensive medical care.

As an Advanced Alternative Payment Model (AAPM), with quality metrics that include measures of depression, patient activation, optimal dialysis initiation, and total cost of care as well as bonuses for successful kidney transplants, the KCC model hopes to expand on some of the successes from the prior value-based care model in nephrology, the ESRD Seamless Care Organization (ESCO). Major criticisms of the ESCO model were the inclusion of only dialysis-dependent individuals and a de facto disincentive for kidney transplantation as transplant removed the healthiest and most treatment adherent patients from the shared-savings ESCO.

The KCC focuses not only on patients treated with dialysis but also on patients with advanced CKD not receiving dialysis (Figure 2). The financial structure of the KCC aims to realign incentives to maximize non-dialysis kidney care, including kidney transplantation, recognizing that most patients with advanced CKD want to avoid dialysis and that delaying progression to kidney failure and increasing transplantation may be cost saving over the longer term. The KCC model includes 4 different options, three of which are designated as Comprehensive Kidney Care Contracting (CKCC) options with varying degrees of financial risk, while the fourth option, the KCF option, specifically targets nephrology clinicians, excluding dialysis providers as formal participants.
The CKCC models must include nephrology practices and transplant providers and, although not mandated, will also require extensive involvement of a dialysis organization as a partner in order to be successful. Both models incorporate capitated payments, increasing the MCP to clinicians for home dialysis to match the 4 or more visits per month threshold for in-center patients and adding a new quarterly capitated payment (QCP) for beneficiaries with CKD stage 4-5 that is equivalent to the prior 2-3 visit monthly MCP for in-center hemodialysis patients. Where these models differ is in how these capitated payments are modified: the CKCCs use a shared savings-loss mechanism, similar to that used in the ESCO model and by other advanced accountable care organizations (ACOs), while the KCF model incorporates performance-based adjustment (PBA) to the CKD QCP and the adjusted MCP based on predetermined quality and utilization measures.

**Beneficiary alignment, eligibility requirements and associated challenges:**

Patients 18 and above, who reside in the US, and are enrolled in Medicare A or B, with non-dialysis CKD stage 4-5 or receiving maintenance dialysis are eligible for inclusion in the model. Of note, individuals enrolled in a Medicare Advantage plan, an increasingly common option for individuals receiving dialysis, are not eligible for the KCC model. The beneficiaries are aligned to a KCC based on Medicare claims and Medicare administrative data. Prior recipients of a kidney transplant who have CKD stage 4-5D can be aligned to participating KCC practices if they are more than a year post transplantation. Recipients of a kidney transplant who are included in a KCC practice at the time of transplant do not remain in the model but inform the kidney transplant bonus, discussed below. Critically, if a beneficiary is already in another payment
model, such as a Next Generation ACO where attribution is based on the primary care provider, they will not be eligible for attribution to a KCC.

In order to participate in KCC, a CKCC practice must have 750 Medicare fee-for-service beneficiaries with non-dialysis CKD stage 4-5 and 350 beneficiaries receiving dialysis, while a KCF group requires 350 and 200 beneficiaries, respectively. For the CKCC options, participants form a kidney contracting entity that must include at least one nephrologist or nephrology group and at least one transplant provider. Dialysis providers will be key partners within the CKCC options; of note, all dialysis facilities in a single KCE must be owned by the same company to avoid anticompetitive practices. While minimum beneficiary counts are mandated to help determine reliability of the quality and utilization measures, difficulty achieving these beneficiary thresholds has posed a major challenge nationwide for many nephrology practices, particularly small practices who were an early target for KCF participation. To increase participation, CMS allows practices to “aggregate” to meet the beneficiary counts, such that quality and utilization measures will be viewed as a single value for these aggregated practices while payments will remain separate for each member practice. CMMI provides the option for practices to suggest aggregation partners or, potentially, will assign aggregation partners for groups that may not have sufficient Medicare beneficiaries to meet these thresholds.

Quality Assessment

Like all alternative payment models, the goal is to improve care while maintaining or reducing costs. To do this requires a robust quality performance evaluation system. A limited number of
metrics will be present for the first performance year in the KCC models, including Depression Remission and the Patient Activation Measure (PAM) (Figure 2). The KCF models define a Quality Gateway, such that performance on both the PAM metric and on the Depression Remission metric must exceed a specific threshold, defined as 3 point or greater positive change on the PAM and intervention reporting for 100% of patients with a PHQ-9 score greater than 9. Failure to cross this Quality Gateway results in an automatic negative 20% performance-based adjustment to both the CKD-QCP and the adjusted MCP amounts. Of note, there is an opportunity for performance improvement, such that a significant improvement that falls short of the Quality Gateway will not result in marked losses. For the CKCC models, poor performance on quality metrics, including failure to cross the quality gateway, will result in an up to 5% reduction in payments in the form of a ‘Quality Withhold’.

Depression Remission is measured among patients with a diagnosis of major depression, based on a PHQ-9 score of greater than 9, and progression towards remission is defined as a 50% or greater decrease in the PHQ-9 score within 12 months from the index visit. During the initial year of the model, the Depression Remission measure is reporting only, while subsequent years require an improvement in the PHQ-9 score. While there are conflicting data on the benefits of screening for depression in the general population, depression is common in the advanced CKD population and appears associated with mortality and hospitalization in individuals with advanced CKD (11-14). The KCC could provide an opportunity to test whether depression is modifiable on a dialysis population level, although many practices will likely face logistic challenges in establishing a good workflow, which will need to incorporate an initial assessment
of PHQ-9 scores with identification of patients who deserve attention, easy and timely availability of mental health services, ability to re-measure the PHQ-9 in a timely fashion and an easy transmission of PHQ-9 score information to CMMI.

PAM, the other Quality Gateway measure in KCC, assesses an individual patient’s self-reported knowledge, skill and confidence in managing their own health care condition. Greater patient activation is associated with improved quality of care in patients with chronic illnesses like diabetes mellitus and HIV, though similar results have not been demonstrated in the CKD population (15). The National Quality Forum endorsed the PAM to assess patient activation in chronic illnesses, including advanced CKD. There are substantial concerns with the use of PAM, including lack of proven benefit in the advanced CKD population, a short time to evaluate change in patient activation with mandated twice-yearly assessment, costs associated with administering PAM, and no consideration for adjusting payments based on different demographic factors like socio-economic status and education. While it is exciting to consider a dedicated effort at educating and empowering kidney patients with the nephrologist at the helm, further data and additional experience with the PAM in this population would be reassuring given the financial implications of poor performance on the PAM measure.

The utilization measures for KCC include Optimal (ESRD) Starts and Total Cost of Care (Figure 2). The Optimal ESRD Starts measure rewards initiating kidney replacement therapy with a pre-emptive transplant, an arteriovenous fistula or a peritoneal dialysis catheter. Arteriovenous grafts occupy a middle ground, with only 10% of incident hemodialysis patients able to initiate
with a graft before resulting in increased potential for a negative score on this metric. The
devaluation of AV grafts may be a particular limitation of this measure, as grafts may be an
equivalent option to AV fistulas among older dialysis patients who comprise most of the
Medicare population at the time of dialysis initiation (16). As with Quality Measures, the
absence of adjustment for Utilization Measures based on practice size, location, socio-
economic and educational status of beneficiaries may lead to inequity, and a methodology to
address these concerns would be the best next step, ideally before program implementation.

Payment Policies
The payment changes proposed under KCC are outlined in Figure 2. Critically, with the
exception of the CKCC Graduated Option, the options within the KCC qualify as an AAPM for
clinician participants, meaning that clinicians in these models do not need to participate in the
Merit-based Incentive Payment System and that participating clinicians will receive the
maximum annual 5% lump-sum bonus on the previous year’s Medicare Part B payments, not
just payments related to the care of KCC participants.

All four KCC options include for the Transplant Bonus, the capitated fees for CKD 4/5 and
dialysis, as well as the Home Dialysis True-Up, defined below. The CKCC has 3 options of varying
level of cost sharing and shared savings/losses, while the KCF has a robust model of
performance-based adjustments to payments. As of a KCC model update in July 2021, the
capitated payment for non-dialysis CKD stage 4 and 5 patients no longer will subsume the
‘facility fees’ that are paid to “hospital-based” clinics, reducing revenue loss for hospitals with
hospital-based nephrology practices.
Though initially proposed that the MCP, regardless of the number of encounters per month, would pay at the 2-3 visit rate for in-center hemodialysis-dependent beneficiaries, the final payment policy maintains the varied MCP for 1, 2-3, or 4 or more in-center hemodialysis encounters. In contrast, within the model, a ‘Home Dialysis True-Up’ payment raises the MCP for home dialysis to equal the MCP for 4 or more visits for in-center hemodialysis, which is a welcome change. The Transplant Bonus is a novel innovation in the KCC, disbursing up to $15,000 dollars for every aligned beneficiary who undergoes a kidney transplant. This bonus is paid in a stepwise fashion over 3 years, as long as the beneficiary maintains allograft function, with $2,500 after the first year of the graft, an additional $5,000 after the second year, and an additional $7,500 after the third year. The Transplant Bonus is not assigned to the cost of care for any of the 4 model options. Of note, the Transplant Bonus is the strength of this program, and it may be the driving factor in the financial success, or lack thereof, for participating nephrology practices.

While many of these changes are encouraging, there is concern among nephrology practices regarding payment methodology. CMS plans to withhold 30% of the CKD capitated payments, to be reconciled at the end of the financial year, which can be a major barrier for cash flow for smaller nephrology practices. Also, the Transplant Bonus payments do not start until the middle of the second performance year, while the costs of the program to the practice start on day one, again leading to a financial burden. Critically, transplant rates vary widely across the nation, and this variability may be exacerbated in the next several years due to changes in
geographic allocation of deceased-donor kidneys, potentially resulting in inequity in the allocation of the transplant bonus. Lastly, crossing the gateway threshold for quality metrics, particularly the PAM, may be extremely challenging and expensive to operationalize, resulting in a high risk for practices of negative performance-based adjustments.

Achieving model goals

KCC aims to be a patient-centered program, promoting patient activation and mental health, and includes multiple benefit enhancements (Figure 2) as well as a focus on slowing progression of CKD and optimal transitions to kidney failure treatment modalities should kidney failure occur. The benefits enhancements target improved education, easy access, and coordinated care to reduce admissions and readmissions and decrease the cost of care. One concern, specifically in regard to kidney disease education, has been that the cost sharing does not change for the beneficiaries under KCC; a waiver of this copay could enhance beneficiary education and is worth further evaluation.

KCC is also designed as a nephrology clinician-centered program, resourcing nephrology clinicians to enhance advanced CKD care and achieve patient-centered goals. In contrast to the ESCO model, none of the KCC models require participation from the dialysis providers, although strong partnerships will enhance success in these models, particularly within the CKCC model, where a dialysis provider will likely be a partner and share risk. Importantly, within the KCC models, CMMI has emphasized the need for a central decision-making role for the nephrologist in improving patient reported outcomes and guiding silo-spanning care. Many of these new
endeavors will require time and effort as well as the use of allied health professionals, as has been proven to work in the United Kingdom (15). The KCC model has upfront administrative and clinical costs, such as support from a coordinator, data analytics, quality metric data collection, psychology support and medical director time, which has caused reluctance to participate in this model on a more widespread basis. The CKD QCP, the Transplant Bonus and the PBA (or shared savings for the KCEs) are all downstream dividends that can cover these upfront costs, and should help improve kidney care, if planned well.

Conclusions

The key concepts within all of these changes in kidney care, including the KCC model, represent welcome changes that will hopefully improve outcomes for patients with advanced kidney disease: the nephrologist assuming a central role in a patient-centered collaborative care model where self-management of disease complications is promoted among increasingly empowered patients. The challenges nephrology practices face while considering participation in KCC and if assigned to the ETC Model are substantial, and these challenges will need to be addressed to promote high participation in the KCC model by nephrology practices and success in the ETC, with a resultant missed opportunity to improve the care of people with advanced chronic kidney disease.

Particularly with the voluntary KCC model, CMMI has engaged in constant and open communication with participants, and there has been ongoing high interest in this model from nephrology practices. The delayed implementation of the KCC models in the setting of the
turmoil associated with the COVID-19 public health emergency provides additional time to identify and correct ongoing challenges (Figure 3). In the short term, the beneficiary counts for KCC need to be reconsidered to allow nephrology practices of all sizes to participate. The costs of participation in the program should carefully evaluate the need for resources, such as hiring a care coordinator, allocation of physician leader’s time, survey and instrument administration costs, data analytics and consultants, as well as collaboration with a team of mental health professionals. Eliminating the copay for KDE and home health visits would help remove barriers to collaborative and patient centered care. CMMI also could consider adjustment of the performance-based adjustment based on disease severity and socio-economic status of patients.

As nephrologists, we have an immediate opportunity to partner with CMS in improving the care of patients with advanced kidney disease. We need to advocate with a unified voice to optimize these models for success, working iteratively to offer potential solutions as issues arise. Let’s sail this ship right.
Disclosures:

D. Weiner reports the following: Consultancy Agreements: Participated in Medical Advisory Boards for Janssen Biopharmaceuticals (2019), Akebia (2020, 2021), Cara Therapeutics (2020), and Tricida (2019). Honoraria for Akebia were paid to DCI. Research Funding: All compensation paid to Tufts MC: Dialysis Clinic, Inc (site PI for trials contracted with DCI including Ardelyx (ongoing) and Cara Therapeutics (completed)); Janssen Biopharmaceuticals (site PI, completed 2019); AstraZeneca (site PI, completed 2020); Goldfinch Bio (site PI, ongoing); CSL Behring (site PI, ongoing) Honoraria: National Kidney Foundation for editorial positions at Kidney Medicine and AJKD; Elsevier for royalties from the NKF’s Primer on Kidney Diseases Scientific Advisor or Membership: Co Editor-in-Chief, NKF Primer on Kidney Diseases, 8th Edition; Editor-in-Chief, Kidney Medicine; Medical Director of Clinical Research, Dialysis Clinic Inc; Member, ASN Quality and Policy Committees and ASN representative to KCP; Scientific Advisory Board, National Kidney Foundation Other Interests/Relationships: Chair, adjudications committee, VALOR Trial (George Institute, CRO, sponsored by Tricida); Member, Data Monitoring Committee, "Feasibility of Hemodialysis with GARNET? in Chronic Hemodialysis Patients with a Bloodstream Infection" Trial (Avania CRO). The remaining author has nothing to disclose.

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Gaurav Jain: Writing - original draft; Writing - review and editing
Daniel Weiner: Writing - review and editing
References

Table 1. Overview of key care models emerging from the Advancing American Kidney Health Initiative

<table>
<thead>
<tr>
<th>Model</th>
<th>ESRD Treatment Choices (ETC)</th>
<th>Kidney Care Choices (KCC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kidney Care First</td>
<td>Comprehensive Kidney Care Contracting</td>
</tr>
<tr>
<td>Type</td>
<td>Mandatory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Participants</td>
<td>Nephrology providers</td>
<td>Nephrology providers</td>
</tr>
<tr>
<td></td>
<td>Dialysis facilities</td>
<td>Transplant centers*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dialysis providers*</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>Dialysis patients only</td>
<td>CKD Stage 4 and 5 and dialysis patients</td>
</tr>
<tr>
<td>Financial Incentives</td>
<td>Positive adjustment on home-dialysis related claims early in the model designed to build home dialysis infrastructure</td>
<td>Kidney Transplant Bonus</td>
</tr>
<tr>
<td></td>
<td>Positive or negative adjustment based on rates of home dialysis, self-care dialysis and transplant</td>
<td>Capitated payments for CKD stage 4/5 (CKD Quarterly Capitated Payment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home Dialysis True Up</td>
</tr>
<tr>
<td></td>
<td>No cost sharing option</td>
<td>Three different options for cost sharing and shared savings/losses</td>
</tr>
<tr>
<td>Kidney Transplant Bonus</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Quality and utilization measures</td>
<td>ESRD Quality Incentive Program only</td>
<td>ESRD Quality Incentive Program, plus 1. KCC-Specific Quality measures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Depression remission within the calendar year</td>
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<tr>
<td></td>
<td></td>
<td>• Gains in patient activation within the calendar year</td>
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<tr>
<td></td>
<td></td>
<td>2. Utilization Measures</td>
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<tr>
<td></td>
<td></td>
<td>• Optimal ESRD starts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Total per capita costs (Kidney Care First only)</td>
</tr>
</tbody>
</table>

*For dialysis providers, only one large dialysis organization can be represented within an entity, such that an entity cannot include both Fresenius and Davita facilities for example. A transplant provider needs to be included as a participant in the CKCC options.

†The initial years of the graduated option in the CKCC do not qualify as an Advanced Alternative Payment Model.

Figures

Figure 1: AAKHI: Multipronged approach to kidney care
Figure 2: Details of the KCC model
Figure 3: Kidney Care Choices: Lessons learned
Figure 1: Advancing American Kidney Health: Multipronged approach to improve kidney care


- OPO reforms
  - Increase organ availability
  - Increase rate of transplants
  - HRSA changes
  - Reduce financial disincentives to live organ donation

- Educational campaigns to diagnose and treat CKD through strategic partnerships with NKF and ASN

- Increase utilization of home dialysis and kidney transplantation

- Reduce Total cost of care
- Increase utilization of home dialysis and kidney transplantation
- Improve CKD stage 4-5D care
- Emphasis on
  - Mental health and patient activation
  - Optimal dialysis starts
  - Delayed progression to KRT

Figure 1
• CKD stage 4, 5 and ESRD
• Aligned patients who undergo transplant
• Patients identified from claims data
• Minimum number of beneficiaries
  CKCC: 750 CKD, 350 ESRD
  KCF: 400 CKD, 200 ESRD

Beneficiaries

• Expanded coverage for Kidney Disease Education
  • Includes Stage 5 CKD and first 6 months of ESRD
  • Improve access to care through telehealth expansion
  • Emphasis on mental health, and patient activation
  • Expanded coverage for post discharge home visits
  • Waiver of home bound status for home health care**
  • Allow concurrent care for patients who choose hospice care**

Changes for Patients

• Quality Gateway
  • Depression remission at 12 months
  • Gains in patient activation at 12 months

• Utilization Measures
  • Optimal ESRD Starts
    • Preemptive kidney transplant
    • Starting dialysis with a home modality
    • Starting dialysis with a fistula or graft
  • Total per capita cost of care*

Quality Metrics

• Financial Incentives
  • Qualifies as Advanced Alternative Payment Model
  • Transplant Bonus of $15k paid over 3 years
  • Home Dialysis True Up***
  • Quarterly Capitated Payment for care of CKD patients
  • Payment adjustment based on quality metrics*
  • Shared losses and savings in the CKCC model**

Figure 2: Details of the KCC model

*KCF model only  **CKCC model only  ***Home Dialysis True Up: $35 per patient per month for patients on home dialysis
Determine ways to encourage participation from nephrology practices of varying sizes, including small practices.

Re-consider payment structure with emphasis on costs of the program and cashflow to the practices.

Eliminate co-pay for kidney disease education to remove financial disincentives to education.

Consider health and socio-economic disparities in performance-based adjustment measures.

Figure 3: Kidney Care Choices: Lessons Learnt Prior to Model Implementation