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## Alternative Payment Models and Opportunities to Address Disparities in Kidney Disease

Sri Lekha Tummalapalli and Said A. Ibrahim

Health and health care disparities are pervasive across the spectrum of kidney disease.<sup>1</sup> Kidney failure disproportionately affects Black and Hispanic persons, those with low socioeconomic status, and homeless and housing insecure individuals.<sup>2-5</sup> The cause of these disparities stems from complex interrelationships between social disadvantage, medical comorbid conditions, genetic factors, and historical/structural racism. In the context of the disproportionate impact of coronavirus disease 2019 (COVID-19) on Black and Hispanic communities,<sup>6</sup> its bidirectional association with kidney disease,<sup>7,8</sup> and heightened awareness of racial injustices in this country, correcting health disparities in kidney disease is all the more crucial.

On June 3, 2020, the Centers for Medicare and Medicaid Services (CMS) Innovation Center announced COVID-19–related adjustments to 2 kidney-focused alternative payment models (APMs): (1) an extension of End-Stage Renal Disease (ESRD) Seamless Care Organizations (ESCOs) until March 31, 2021; and (2) the establishment of the Kidney Care Choices (KCC) Model starting in April 2021 with a deferral option.<sup>9</sup>

This promising news reflects a national commitment to redesign kidney care and achieve the goals of the Advancing American Kidney Health (AAKH) Executive Order. However, notably, a discussion surrounding kidney health disparities has been largely absent in federal communications surrounding AAKH. Although other policy-level interventions such as Medicaid Expansion may be effective in reducing disparities, the current role of APMs to address disparities remains limited.<sup>10</sup> Moving forward, it is imperative that new payment models and care delivery strategies be thoughtfully and intentionally designed to address disparities in kidney care.

This editorial outlines current knowledge and proposed solutions such that APMs can mitigate rather than potentiate disparities in kidney care.

### Potential Impact of APMs on Disparities in Kidney Disease

APMs are reimbursement mechanisms that reward clinicians and health systems for high-quality cost-efficient care. APMs often incorporate financial incentives and penalties and have been shown to reduce costs across a variety of settings.<sup>11,12</sup> Nephrology has long been an early adopter of APMs, including the ESRD Prospective Payment System (PPS), ESRD Quality Incentive Program (QIP), and ESCOs, which involve differing levels of financial risk sharing, moving away from solely fee-for-service–driven care (Fig 1). Within the new voluntary KCC model, the Kidney Care First option introduces capitated payments for nephrology clinicians while the Comprehensive Kidney Care Contracting options incorporate shared savings and losses, offering a high level of financial risk sharing and the greatest potential for flexibility in care delivery.

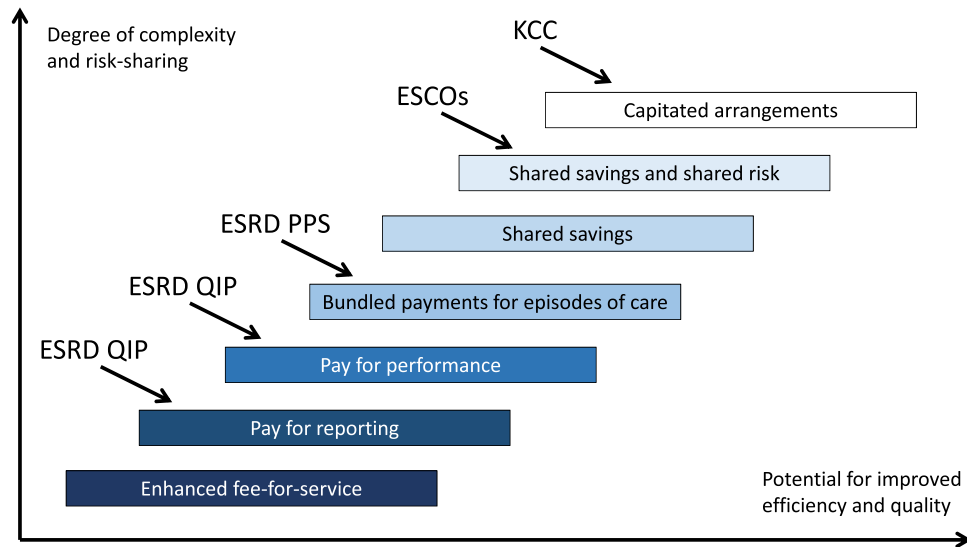
APMs can serve to reduce disparities if resources are targeted toward disadvantaged populations or if these populations differentially benefit from care delivery interventions. For example, accountable care organizations, one of CMS's largest APMs, may have reduced certain disparities for surgical care related to spinal fractures.<sup>13</sup> To date, the impact of APMs on kidney care disparities has been understudied. One analysis found that differences in erythropoietin doses or laboratory values between Black and non-Black patients did not widen or narrow between August 2010 and December 2011 after bundled payments in the ESRD PPS were implemented.<sup>14</sup> Independent dialysis facilities serving fewer patients with employer-based insurance had a higher prevalence of hemoglobin levels < 10 g/dL under the ESRD PPS compared with independent facilities with more commercially insured patients, providing evidence that bundled payments may have contributed to socioeconomic disparities in anemia management.<sup>15</sup>

In the ESRD QIP, dialysis facilities serving higher proportions of patients with dual-

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*Policy Forum highlights aspects of nephrology relating to payment and social policy, legislation, regulation, demographics, politics, and ethics, contextualizing these issues as they relate to the lives and practices of members of the kidney community, including providers, payers, and patients.*



**Figure 1.** Kidney disease alternative payment models and level of risk sharing. Reproduced in modified form from Mann et al<sup>30</sup> with permission of the copyright holder (The Commonwealth Fund). Abbreviations: ESCO, End-Stage Renal Disease Seamless Care Organization; ESRD, End-Stage Renal Disease; KCC, Kidney Care Choices; PPS, Prospective Payment System; QIP, Quality Incentive Program.

eligibility status, Black race, and lower neighborhood-level income had lower quality scores and were more likely to be penalized.<sup>16,17</sup> Although lower QIP scores are associated with higher mortality,<sup>18</sup> the impact of the QIP program itself on disparities in care or health outcomes for patients on dialysis is unclear. Regarding ESCOs, these accountable care organizations were associated with fewer hospitalizations and less catheter use,<sup>19</sup> and ESCO-aligned patients were more likely to be Black.<sup>20</sup> Black participants in ESCOs had significant reductions in costs and increases in fistula use compared with those in matched comparison facilities, whereas White participants did not have significant changes in costs or fistula use.<sup>21</sup> Taken together, the findings of these initial studies are mixed and do not yet suggest an overall conclusion of the impact of APMs on kidney care disparities.

### The Role of Disparities-Sensitive Quality Measures in APMs

The new KCC Model incentivizes performance on quality measures related to patient activation, depression remission, hypertension control, and vascular access.<sup>22</sup> Other measures are under development, including a standardized mortality ratio and a measure of delayed progression to kidney failure. As a first step to better understand disparities in care delivery, quality measures in KCC and other APMs should be stratified by race/ethnicity and socioeconomic status, as recommended by the National Quality Forum.<sup>23</sup> Using these “disparities-sensitive measures” can allow health systems and CMS to monitor relative and absolute health disparities over time, more appropriately target care management resources, and ensure that care

delivery interventions do not exacerbate disparities. KCC and other APMs could test strategies for rewarding improvement on quality measures, including closing disparities.

### Accounting for Social Risk Factors in APMs

APMs measure the quality and cost of care using risk adjustment to account for differences in patient populations. Risk adjustment for CMS programs traditionally uses Hierarchical Condition Categories, which account for patient comorbid conditions but do not incorporate social risk factors, which are defined as adverse social conditions associated with poor health, such as low socioeconomic position, being in a disadvantaged racial/ethnic group, lack of social relationships, and adverse residential and community context.<sup>24</sup> Social risk factors are highly prevalent among patients with kidney disease and are associated with adverse outcomes.<sup>1</sup> Not accounting for social risk factors results in higher penalties to nephrology practices and dialysis facilities that serve disadvantaged populations, who typically score less well on quality measures. Thus, designing socially informed payment models is critical to ensure that APMs do not have unintended consequences of exacerbating disparities in kidney disease.

However, there is also concern that adjusting for social risk factors would mask and institutionalize disparities, and currently there is an active debate whether APMs should adjust for social risk factors. Thus, future research should evaluate different approaches to incorporate social risk factors in new kidney APMs. For example, the proposed ESRD Treatment Choices Model would incentivize home

dialysis rates, which would result in greater penalties to dialysis facilities serving a higher proportion of homeless or housing insecure, Black or Hispanic, and low socioeconomic status patients.<sup>25</sup> Not adjusting for social risk factors may incentivize dialysis facilities to preferentially select patients who are likely to be candidates for home dialysis and transplantation. Additionally, further research should evaluate which quality measures should be adjusted for social risk factors because some measures may be less influenced by patient social factors.<sup>16</sup>

### Universal Social Determinants of Health Assessments in Dialysis Facilities

For social factors to be incorporated in kidney APMs, payment models could rely on the limited social determinants found in claims data or collect more granular individual-level social determinants, which are currently not being systematically captured. Social determinants—the environmental determinants or conditions into which people are born, grow, live, work and age—have a substantial impact on health-related outcomes. A myriad of social determinants are associated with limited health care access, low health status, and poor health outcomes.<sup>26</sup>

Kidney disease quality of care is highly influenced by social determinants and social needs. There are now structured tools to screen for social needs, including the Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool, recently developed by CMS in conjunction with the National Academy of Medicine.<sup>27</sup> The AHC HRSN is a 10-item self-administered tool assessing 5 core domains (housing instability, food insecurity, transportation problems, utility help needs, and interpersonal safety), in addition to 8 supplemental domains.

We propose that universal social needs screening be implemented and studied in dialysis facilities with the AHC HRSN or other tools.<sup>28</sup> Dialysis facilities may be highly feasible sites to collect individual-level social needs using existing staff and resources, given the high frequency of patient visits and embedded multidisciplinary care teams. Much of these data are already collected by social workers in dialysis facilities, but the use of a structured assessment tool has 2 key advantages. First, a systematic approach would ensure that unmet social needs are universally collected and intervened upon as part of medical care. For example, connecting housing insecure individuals with community resources for permanent housing may facilitate greater home dialysis uptake, in line with AAKH goals. Second, screening tools would capture this information in structured data formats, facilitating research and information sharing in the electronic health record. Ultimately, existing CROWNWeb infrastructure could be used to report social factors to CMS for potential performance and payment adjustment. Future research would estimate the additional staff time and costs associated with social needs

collection and reporting and the optimal frequency of collection, which could start with yearly.

In summary, amid long-standing disparities in kidney care, APMs carry the potential to mitigate these disparities and should be immediately leveraged for this purpose. Disparities-sensitive quality measures, social risk factor adjustment, and universal social needs screening are potential solutions that should be further evaluated in new voluntary and mandatory payment models in AAKH. It is critical that APMs and other policies and care delivery interventions work to promote health equity,<sup>23</sup> shifting toward third- and fourth-generation disparities research that provides solutions to eliminate disparities.<sup>29</sup>

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