VIEWPOINT

Redressing the Harms of Race-Based Kidney Function Estimation

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Race-based medicine in the US, which has unjustly contributed to racial inequities in clinical care and health outcomes, has reinforced well-documented mistrust toward the health care enterprise.[1] The urgency of abolishing race-based medical practices, including the use of algorithms informing risk stratification, diagnosis, and treatment approaches, has fueled national efforts to identify and reform these practices.[2] The recent US Organ Procurement and Transplantation Network (OPTN) decision to modify kidney transplant wait times for Black individuals affected by race-based kidney function estimating equations provides an exemplar of how a focus on justice, reform, and repair can advance our efforts to pursue equity.

Racial disparities in the burden of kidney disease—including persistent 2- to 4-fold higher incidence of kidney failure among Black individuals compared with White individuals—have been emblematic of racism-mediated structural inequities in the US.[3] Although kidney transplant offers optimal survival, reduced morbidity, and higher quality of life, Black individuals have been less likely than others to be referred for kidney transplants, placed on the transplant waitlist, or to receive preemptive (before dialysis) kidney transplants. This cascade of inequities has been contributed to, in part, by guideline-recommended historical use of a Black race coefficient in equations commonly used to estimate kidney function. The coefficient raised the estimated glomerular filtration rate (eGFR) for Black individuals by as much as 21%, suggesting Black individuals' kidney function was systematically better than that of non-Black individuals. Overall, this resulted in an estimated 1.9-year median delay in the time Black individuals would achieve the threshold of eGFR 20 mL/min/1.73 m^2 or less, the kidney function required for kidney transplant wait-listing, when compared with others.[4] After critical multistakeholder engagement, the American Society of Nephrology and National Kidney Foundation recommended use of new race-free equations to estimate kidney function, paving a path toward more equitable clinical practice and health outcomes.[5]

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A potential delay in wait-listing for Black individuals is one among several potential harms resulting from the use of the race-based kidney function estimating equations.[1,3] Health care organizations are actively working to eliminate racialized kidney function estimating equations in clinical care. However, the roadmap for how to redress the harms of these historical race-based practices has not been clear. On July 27, 2022, the OPTN enacted the first of several important steps to implement a framework for justice pertaining to the effects of equations on waitlisting by mandating the required use of race-free eGFR equations to estimate all transplant candidates' kidney function. The OPTN promoted transparency and accountability around the recommendations for reforms by both naming the harms of equations incurred by Black individuals due to equation-mediated delays in wait-listing and seeking a mechanism to restore time lost by Black individuals. On December 5, 2022, the OPTN unanimously approved a plan requiring all transplant centers to identify and subsequently backdate waitlisting times for Black transplant candidates with "demonstrated disadvantage" in accrued waitlist time because of prior race-based equations. This restorative process was expressly intended to repair damage done by historical race-based practices. Prior to issuing a final policy decision, the OPTN invited open public commentary with key stakeholders including patients, transplant centers, and kidney health organizations. A central reparative stipulation of revised OPTN policy required that transplant centers take the initiative to identify time lost for each transplant candidate affected by race-based equations and that centers contact all candidates to inform them about waitlist time adjustments. These efforts could entail significant administrative work to identify and quantify time potentially lost by affected individuals. An analysis of 1999-2018 NHANES data[6] estimated nearly 70 000 Black adults could be reclassified as meeting a threshold for referral to transplant, all of whom could benefit from new OPTN policies.

Trust is sacred and foundational to improving patient and community engagement in care. Yet, repeated historical and current race-based medical policies and practices have contributed to an erosion of trust, particularly among Black individuals.[7] For the large population of Black individuals affected by this policy, reparative work to address harms due to historical race-based kidney function estimation represents an important mechanism through which trust might be earned.

The transparent and reform-based process OPTN has taken to establish these new policies has operationalized important tenets of restorative justice that promote victims and survivors having a critical voice in how harms that have affected them can be redressed. As transplant centers implement the OPTN policy change, there will be several opportunities for centers to further promote health equity and build trust. First, centers can leverage their outreach to affected Black individuals as an opportunity to provide high-quality education on waitlisting policies and the organ allocation process, which will help to address concerns[8] about fairness. Second, centers can directly ask affected Black individuals about how communicating new policies may affect their trust in the transplant process and monitor trust over time. Centers' outreach to affected individuals may help to strengthen connections with Black transplant candidates, particularly socioeconomically disadvantaged candidates who do not have frequent contact with health care. Centers can also use this process as a springboard to evaluate whether other transplant processes (eg, kidney offer decisions) may also benefit from greater transparency and equity-promoting actions. Collaborative efforts will be needed to share center practices and to assess whether policies are implemented consistently or helping produce equity across the nation. For health care institutions, responsive transplant center practices should ideally also contribute to collective longitudinal institutional actions that signal to disenfranchised communities a commitment to earning greater trustworthiness through community partnerships and justice-focused reform. This includes partnerships that invest in rectifying modifiable structural barriers (eg, housing, wealth) that lead to poor health. These actions are essential for ensuring a more equitable future in which the benefits of health-promoting treatments can reach all.

The OPTN policy reform provides a valuable model for how actions to reform and repair race-based medical practices, enhance health equity, and earn trust can be adopted across medicine. However, several additional race-based tools and algorithms still require attention, including pulmonary function testing[2] and continued use of clinical algorithms pertaining to kidney transplantation such as the Kidney Donor Profile Index,[9] which uses "African American ethnicity" as one of several factors to determine the quality of deceased donor organs. In our collective mission to advance justice and equity, we must demonstrate sustained, collaborative commitments to remove structural barriers and create a new paradigm for embedding equity in future policies. We can begin through several steps, including efforts to embed justice-focused and antiracist principles into all aspects of health care policy and decision-making. This includes identifying, interrogating, and reforming algorithms, beliefs, guidelines, investigations, predictive tools, educational materials, norms, and practices that reify the harmful notion that the social construct of race confers biological meaning.[10] When harmful practices are uncovered, efforts should be taken to transparently expose them, to engage harmed parties in the process of repair, and to establish justice. Ultimately, our patients and our communities will reward us with trust only when we earn it through these and other justice-promoting actions.

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