EDITORIAL AND COMMENT

Racism Conscious Approaches to Quality Improvement and Implementation Science Cardiovascular Research: Where Do We Go from Here?

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J Gen Intern Med 38(10):2231–3
DOI: 10.1007/s11606-023-08260-x

Black patients have higher age-adjusted heart failure–related cardiovascular disease deaths, hospitalizations, and costs of care compared to White patients, with rates of death in young Black men and women 2.6- and 2.97-fold higher than White men and women, respectively.[1] In addition, Black patients are less likely to be hospitalized for congestive heart failure (CHF), regardless of acuity, and have disparate access to cardiologists and admission to cardiology (vs. general medicine) services,[2] the latter of which is associated with higher in-hospital survival and decreased 30-day readmission.[3,4] While traditional risk factors like hypertension and diabetes have long been cited, the impacts of historic disinvestment in racially segregated neighborhoods, unequal economic and educational opportunities, and implicit bias are increasingly recognized as structural drivers of inequities in cardiovascular disease care and outcomes.[4] Reducing CHF inequities at a population level will require healthcare organizations to implement quality improvement (QI) and implementation science (IS) initiatives that account for the everyday racism that Black and Latinx patients encounter as they seek care. Yet, few examples of race-consciousness informed QI/IS research exist. In a recent JGIM article,[5] Osuagwu et al. systematically identified drivers of racial and ethnic disparities in CHF outcomes and used a race-consciousness-informed QI approach to target social and structural determinants of health (SSDOH). This study provides important lessons about race-consciousness informed QI efforts and offers an opportunity for clinicians and researchers to examine how to better integrate race-consciousness into QI/IS initiatives.

Integral to this work is the selection of theoretical frameworks to guide the self-reflection and intervention design process. To inform their QI initiative, Osuagwu and colleagues used the Public Health Critical Race Praxis (PHCRP) framework. PHCRP has been applied to public health but to our knowledge rarely, if ever, to QI. PHCRP, developed in 2010 by Chandra Ford and Collins Airhihenbuwa,[6] is a flexible and iterative approach that allows clinicians and researchers to use critical race theory in health services research. The framework focuses on increasing race-consciousness among public health initiative designers and leaders, which involves developing an awareness of one's own racial position and biases and of everyday racism's affect on minoritized patients. PHCRP has 4 foci (and 10 affiliated principles) which the authors apply in this study: (1) *contemporary patterns of racial relations* (e.g., structurally racist factors such as insurance status affect access to outpatient cardiology and inpatient triage), (2) *knowledge production* (e.g., race-neutral QI initiatives continue to incorrectly assume improvement in quality will equally impact all patients), (3) *conceptualization and measurement* (e.g., applying an intersectionality lens revealed that women and older patients have greater odds of GMS admissions), and (4) *action* (e.g., the proposed intervention used by Osuagwu et al. to target SSDOH).

As part of this process, the authors identified receipt of equitable high-quality CHF care for Black and Latinx patients on GMS vs. cardiology services as a QI target, engaged key stakeholders from the healthcare system and the local community, and assessed key SSDOH driving readmission disparities. For the PHCRP action step, the authors used Evidence-Based Quality Improvement (EBQI) principles[7] and leveraged existing hospital infrastructures/resources to develop the Longitudinal Equity Action Plan (LEAP) intervention, which targeted three care domains: (1) admission (e.g., consultation with social work), (2) discharge planning (e.g., electronic referral system used to schedule follow-up), and (3) post-discharge (e.g., clinical pharmacist phone calls to patients).

Evaluation results were mixed. The authors found significant improvements in 30-day readmission rates between the pre- and post-intervention GMS groups (24.8% vs. 18.9%, $P=0.024$), with no differences in readmission rates between the post-intervention GMS and post-period cardiology comparison group. The authors also found a significant improvement in rates of 14-day cardiology post-discharge follow-up

Published online June 8, 2023

scheduling between the pre- and post-intervention GMS groups (24.8% vs. 36.7%, $P=0.005$), but GMS group cardiology scheduling rates remained lower than rates for the cardiology group (36.7% vs. 53.8%; $P=0.032$). Additionally, there was no significant difference pre- versus post-intervention in actual cardiology visit attendance rates for GMS patients, despite provision of rideshare vouchers.

This study highlights both the opportunities and challenges of integrating racism conscious frameworks into conventional QI/IS efforts. Osuagwu and colleagues demonstrate the feasibility of pairing equity-informed frameworks like PHCRP with traditional QI methods like EBQI to inform routine QI efforts in healthcare settings. In fact, the authors applied PHCRP to a non-research-funded, healthcare system QI initiative (e.g., authors created a CHF sub-committee within the Department of Medicine Health Equity Committee to oversee this initiative). Their initiative underscores the opportunity for conducting racism conscious QI/IS initiatives with intentionality and existing resources—integral components of sustainability. Challenges, however, include limited resources for mixed methods aimed at understanding whether and how the intervention worked, including possible mechanisms of action, as well as inability to rigorously assess elements of structural racism and their impacts on outcomes. For example, integral to PHCRP's *conceptualization and measurement* focus is the use of qualitative methods to "compare conventional and novel measures to determine the adequacy [of capturing a] study's racial equity concepts." Funded research could further investigate these and other aspects of using of race-conscious frameworks as part of QI/IS initiatives. Emerging measures of SSDOH or the use of the consolidated framework for implementation research that integrates PHCRP may allow researchers to qualitatively investigate racism-related aspects of intervention uptake more fully.[8] Additionally, the LEAP evaluation was underpowered to examine outcomes by race and ethnicity; future studies of race-conscious frameworks should consider addressing this limitation. Finally, future studies of applying race-conscious frameworks as part of QI/IS efforts should describe (1) the rationale for framework selection (e.g., frameworks more focused on SSDOH or multi-level interventions like Health Equity Implementation Framework[9] may be a better fit for some studies) and (2) how the chosen framework was used in selecting intervention components not just in understanding root causes of inequities.

This study also prompts discussion about how best to engage diverse healthcare system and community stakeholders in QI/IS efforts. The authors acknowledge the need for greater inclusion of minoritized populations in future efforts to improve their intervention. PHCRP emphasizes the importance of exploring racialized experiences from those who have suffered them as a foundation for intervention design process. LEAP leveraged an existing departmental equity committee and community stakeholders, including community-based social workers, but the authors do not provide details on whether racially minoritized patients were included in intervention development. Unaddressed, racialized experiences of Black and Latinx patients may, for example, have contributed to the lack of increased cardiology follow-up attendance despite improvements in scheduling and transportation support.

Finally, this study by Osuagwu and colleagues highlights that despite using race-conscious frameworks and engaging stakeholders, it may be challenging to explicitly address everyday racism within traditional QI/IS intervention components. Some might argue that despite using the PHCRP, the authors arrived at a race-neutral intervention that targets key SSDOH (e.g., transportation vouchers, social work consults). There is little precedent for the application of race-consciousness frameworks in QI, and this study represents a launching pad for rich discussions and future research. On one hand, LEAP targets underlying causes of CHF inequities that are modifiable and feasible. On the other hand, pairing PHCRP with QI methods (here EBQI) may have resulted in a more traditional, race-neutral intervention (vs. e.g., promoting equitable triage to cardiology services or targeting upstream factors like insurance status, which the authors posit is a key structural driver of inequities in inpatient and outpatient processes). Integrating PHCRP into routine QI/IS efforts may force us to balance traditional, race-neutral QI approaches with the counternarrative of race-consciousness found in PHRCP. For example, the PHCRP principle of *social construction of knowledge* guides us to examine ways that a discipline's conventions (here QI/IS) may limit efforts to study inequities. In LEAP, the PHCRP principle of *ordinariness of racism* even within intervention components may have influenced authors' findings of low post-discharge follow-up attendance rates. For example, the authors sought to target transportation (via vouchers and SW support), as a key SSDOH, but even if scheduled, transportation may be delayed/canceled in neighborhoods where Black and/or Latinx patients live.

Overall, the Osuagwu et al. study demonstrates that it is feasible and effective to incorporate race-conscious frameworks into usual QI efforts. This study provides a novel answer to the question we've been asking ourselves since the COVID-19 pandemic spotlighted racial inequities in healthcare—where should we go from here? PHCRP is an approach we've only begun to use in identifying and confronting the impacts of everyday racism on CHF care, and more evaluation is needed. Studies that document and evaluate the PHCRP aim of enhancing race-consciousness are needed, as are studies that investigate how to feasibly engage minoritized patients in QI intervention development. For example, future studies should consider that using PHCRP requires integrating race-consciousness into all project phases including intervention development, evaluation, and interpretation of findings. Osuagwu et al.'s innovative,

timely, and paradigm shifting study suggests that to improve equitable access to care and advance equity-focused QI/IS work, clinicians and researchers must continue to apply and study tools such as PHCRP and similar frameworks that name and tackle the effects of racism head on.

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Data Availability *Not applicable.*

Declarations

Conflict of Interest *The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this editorial.*

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