

## Editorial

## Structural racism and inequity in cancer clinical trial participation: time for solutions

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In this issue of the Journal, Guadamuz et al. (1) report on the relationship between social determinants of health (SDOH) and cancer clinical trial participation among Black and Latinx patients in the Flatiron Health database, which includes data on more than 250 000 patients from 2011 to 2023. Unsurprisingly, they reaffirm substantial disparities in clinical trial participation. Black and Latinx patients are 40%-50% less likely to participate in clinical trials than White patients, despite clear US laws, such as the 1993 National Institutes of Health Revitalization Act (2) and laws mandating insurance coverage for trials. This study, however, provides quantifiable estimates of the contribution of different mediators to these disparities, which is a notable step forward in the trial participation literature. As shown in previous studies (3), it does not appear that patients from minoritized populations decline offers of trial participation—rather, they are not provided with the opportunity to participate because of where they reside or health-care professional biases. Similar to their previous research (4), the authors link trial data to American Community Survey and US Census Bureau data and relate area-level SDOH factors to the outcome of interest. This database linkage enables the authors to explore the disparity thoroughly through mediation analysis. They demonstrate that area-level SDOH, particularly measures of structural racism and practical obstacles, account for the majority of inequity in trial participation. Neighborhood racial and ethnic composition, a proxy for segregation, was considered the most substantial mediator and explained one-third of the inequities between Black, Latinx, and White patients. The authors point to site factors such as clinician bias and institutional racism and to sponsor factors such as their preference for partnering with well-resourced cancer care facilities, which tend not to serve minority populations. At the patient level, the authors (1) show that area-level vehicle ownership was an important mediator, highlighting a tangible opportunity to

improve equity by providing transportation assistance. Limited proficiency in English was an important mediator of Latinx-White inequity and provides further evidence of the importance of providing reliable interpreter access and translated materials.

After decades on the periphery, equity in cancer research has gained attention in the past 5 years, with the American Association for Cancer Research releasing the first *Cancer Disparities Progress Report* in 2020 (5) and the American Society of Clinical Oncology releasing an equity, diversity, and inclusion plan in 2021 (6). Cancer clinical trial participation is a readily identifiable moment in a cancer journey and widely recognized as a key performance milestone for cancer care. Many groups in many settings have demonstrated ongoing differences in clinical trial participation when comparing minoritized populations with White populations (7-9) with a corresponding call to action. It is evident that the inequity in this crucial point in the cancer journey raises more complex and challenging questions about the experiences of individuals from minoritized backgrounds within cancer care systems. It also highlights how their historical, social, and political contexts affect their participation in clinical research. Ultimately, clinical trial participation is akin to the canary in a coal mine, and the disparity is a stark reminder of the multiple challenges that patients from minoritized groups face in their standard-of-cancer care journey (4,10,11). Even if individuals overcome multiple obstacles to be considered for a clinical trial, they often fall outside standard eligibility criteria (12).

At the patient and clinician levels, intersectionality (13) can be used to understand how multiple vulnerabilities can lead to poor health-care outcomes—or, in this case, lower rates of clinical trial participation. As Guadamuz et al. (1) show, ethnicity, economic circumstances, neighborhood disadvantage, proficiency in English, and vehicle ownership all affect an individual's ability to participate in clinical research. These patient factors may be

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successfully overcome with outreach interventions such as trial navigators (14), translated materials (15), and transportation assistance. Clinician behavior is fundamental, and the literature shows that health-care professionals hold implicit and explicit biases regarding patients and trial participation (16) that can be addressed through cultural competency and bias training (17,18). For scientific and ethical reasons, the trial sponsor and institutional leadership at the trial site should provide funding for engagement of priority populations.

Sponsors have a responsibility when designing protocols to make them as inclusive as possible. Simple steps toward this end include designing all protocols with allowances for individuals who have limited facility with English; sponsors can provide translated instruments or budgeting for interpreters to help these individuals complete their patient-reported outcomes. Failing to plan is planning to fail: Without deliberate and intentional equity strategies at trial conception, we will continue to have inequity in our trials. More complex steps involve increasing the speed of implementation of broadened eligibility criteria, knowing that strict eligibility criteria disproportionately affect marginalized groups (12).

Sponsors also play a fundamental role in determining where they conduct their trials. Guadamuz and others (19) have shown in previous work that individuals from minoritized groups are more likely to be treated at community practices with limited or no access to trials. Wang et al. (9) have shown that counties with higher proportions of Black residents have less access to cancer facilities, and in those communities with cancer facilities, Black residents take part in fewer prostate cancer trials per capita. There is a clear interaction between the lack of trials conducted close to minoritized communities, lack of vehicle ownership among residents of such communities, and these individuals' underrepresentation in clinical trials. The result is a self-fulfilling inequity prophecy, with trial sponsors repeatedly partnering with key opinion leaders in large academic cancer centers, which tend to be located in areas of privilege and wealth. Sponsors and professional cancer societies must actively build skills among clinicians and encourage community oncology centers to conduct clinical trials. Clinical trials should be for everyone, not just for people lucky enough to live close to an academic cancer center (or who have the means of transportation to get to one).

The authors (1) should be applauded for having measured and reported these data. More cancer centers should be reporting their equity and diversity data. Complete and accurate data are pivotal in the effort to achieve equity (20). We measure what we care about, and leaders in cancer care must make this measurement an institutional priority. The substantial variations in care we observe for different groups in our communities is a moral and a medical issue, and we are all responsible for recording these data. It is highly significant that 20% of the cohort in the Guadamuz et al. (1) study was recorded as "other/unknown race or ethnicity," but this uncertainty is known to be a common issue with health databases (21,22). Ideally, cancer centers should collect thorough, prospective data on their patients, including factors such as income, ancestry, and English-language proficiency, and track this information against key cancer outcome measures, such as time to treatment initiation or trial participation.

This dataset is US-centric, and there is a question about the generalizability of research conducted in the United States to the rest of the world. The fundamental principle of identifiable subgroups missing out on key cancer care milestones will be

**Table 1.** Practical strategies at the trial site and sponsor levels to improve equity in cancer clinical trials

Cancer center trial site	<ul style="list-style-type: none"> <li>Require implicit bias training for clinicians.</li> <li>Appoint a diversity officer to identify priority populations and track their progress (23).</li> <li>Provide transportation assistance (1).</li> <li>Ensure interpreters are easily and reliably available (15).</li> <li>Invest in community engagement to build trust.</li> <li>Employ patient navigators (14).</li> <li>Encourage diversity in leadership.</li> </ul>
Trial sponsor (industry/cooperative group)	<ul style="list-style-type: none"> <li>Increase clinical trial activity at community centers that serve priority populations (1).</li> <li>Provide additional funding to centers recruiting priority populations (eg, support with transport and translation).</li> <li>Require clinical trials to have thorough demographic data collection in the protocol or electronic case report form.</li> <li>Prohibit clinical trial protocols from excluding patients with limited proficiency in English.</li> <li>Consider broadening eligibility criteria (12).</li> <li>Encourage diversity in leadership.</li> </ul>

relatable to all oncologists, and Guadamuz et al. (1) provide an example of how that analysis can be conducted to elucidate the reason for the disparities. We have published health-care professional and clinical trial coordinator views on barriers and solutions to trial participation in Australia (15) and found similar themes with respect to transport, cost, and literacy. In the United States, the Black and Latinx populations are 2 large, identifiable minoritized groups, whereas in Australia, we have a diverse range of smaller migrant communities, highlighting the importance of accurate and granular data collection. Traditionally, all non-White individuals in Australia have been put into a category called *culturally and linguistically diverse*, but there is recognition that this reductive term homogenizes and simplifies a complex multigenerational population. We believe that narrowing this group to more coherent subsets, such as recently arrived migrants or individuals with limited proficiency in English, is the best way forward to plan research projects.

The cancer clinical trials industry leadership exercises considerable power in selecting oncologists and institutions. Cancer clinical trials are widely held to be part of good cancer care, and we cannot achieve this ideal with the current system of trial distribution, where most of these trials are concentrated in well-resourced academic medical centers. In this system, minority voices have been marginalized, and we must work collectively to ensure that these minority voices are heard at the top echelons of institutions and the clinical trial industry—and that those voices are translated into tangible actions, such as those listed in Table 1. Ideally, sites and sponsors should work hand in hand with minoritized communities and engage in respectful co-design so that they can invest in durable and effective strategies.

Finally, although disparity documentation must continue, there is an urgent need for solutions to be tested and published. Our group is working on an innovative site solution, a co-designed, scalable, bilingual trial navigator for our large Arabic-speaking community in South West Sydney (Australia), and we

look forward to sharing these results when they become available. We hope that more groups from both academia and industry will publish findings on interventions that have advanced equity so that they can be widely implemented.

## Data availability

No new data were generated or analyzed for this editorial.

## Author contributions

Abhijit Pal, MBBS FRACP PhD (Writing—original draft; Writing—review & editing); Rayan Saleh Moussa, PhD (Writing—review & editing); Ben Smith, PhD (Writing—review & editing); Bernadette Brady, PhD (Writing—review & editing); Deme Karikios, MBBS FRACP PhD (Writing—review & editing); Frances Boyle, MBBS FRACP PhD (Writing—review & editing); Wei Chua, MBBS FRACP PHD (Writing—review & editing).

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