

An Equity Agenda for the Field of Health Care Quality Improvement

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September 15, 2021

On the occasion of the 20th anniversary of the publication of *To Err Is Human: Building a Safer Health System* (IOM, 2000) and *Crossing the Quality Chasm: A New Health System for the 21st Century* (IOM, 2001), the National Academy of Medicine convened the leaders of seven prominent U.S. health care quality organizations to discuss and author a paper identifying the most important priorities for the health care quality movement in the next 20 years. The authors identified equity as the area of most urgent and cross-cutting concern for the field. This paper summarizes the authors’ conclusions about key barriers and strategies to advancing equity in health care quality.

Introduction

Despite decades of accumulating evidence and policy recommendations, deep racial and other inequities remain in health care and outcomes in the United States. The existing health care quality infrastructure has not adequately addressed this issue, even though equity has been identified as one of the core domains of quality [1,2].

The authors of this paper strongly believe the U.S. health system must take action to centralize equity, particularly racial equity (including ethnicity), in discussions of quality. While all quality improvement initiatives face challenges, substantial improvements in quality, patient outcomes, and health system function could be made by revisiting existing recommendations; improving data collection and reporting; engaging and partnering with communities; and re-evaluating our current care delivery and payment infrastructures.

The 2001 report from the Institute of Medicine (now the National Academy of Medicine) *Crossing the Quality*

Chasm: A New Health System for the 21st Century defined quality in health care as “the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” [1]. To improve the U.S. health care system, the report went on to identify six core domains of quality health care: care is safe, effective, patient-centered, timely, efficient, and equitable [1]. Equitable care is when “quality does not vary because of personal characteristics such as gender, race, ethnicity, geographic location, and socioeconomic status” [1]. The integral status of equity to quality is apparent in its formulation as a cross-cutting topic in the Institute of Medicine’s 2010 report *Future Directions for the National Healthcare Quality and Disparities Reports* [97].

In 2003, the Institute of Medicine published the report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, which provided specific recommendations to reduce disparities by improving financing, allocation of care, communication, and com-

munity-based care, among other actions [2]. However, almost two decades after the report's release, some of the report's key recommendations have yet to be fully implemented—in particular, those for promoting equitable care and for collecting and reporting data on disparities in care.

The outsized impact of the COVID-19 pandemic on Black, Indigenous, and People of Color (BIPOC) demonstrated how little progress has been made since the publication of *Unequal Treatment*. For example, people who are Black/African American, Hispanic/Latino, or American Indian/Alaska Native were about three times as likely to be hospitalized after contracting COVID-19, and about twice as likely to die from the illness [3] (see *Figure 1*). These unequal outcomes were compounded by longstanding disparities in life expectancy, morbidity, and access to care driven by social determinants of health [4,5,6].

This is not acceptable. For care to be considered high quality, it must be equitable. Inequitable care is low-quality care and must be treated as such.

In this paper, the authors present a path to advance equity as an essential aim of health care quality. This paper focuses on two axioms. First, what gets measured gets improved. Second, communities' perspectives, preferences, and goals must be directly integrated into quality improvement efforts—in other words, “nothing about me without me.” Community perspectives are reflected in the words and actions of community leaders and organizations. In addition, many traditional and non-traditional partners are emerging as stakeholders renew the call for progress, including researchers, public health officials, private and public

payers, businesses and employers, and community organizations [7,8,9,10,11,12].

Current State: Impediments to Equity in Health Care Quality

In this section, the authors of this paper outline current key barriers to equity in health care – including the impact of racism and discrimination, inadequate attention to social determinants of health, lack of data, and lack of trust – before turning to strategies to advance equity in health care quality.

The Impact of Racism and Discrimination

Health care in the United States has a long history of institutionalized and interpersonal racism and discrimination that continues to impact BIPOC today. Some of the starkest examples of how care delivery has exemplified many forms of systemic racism include reprehensible experimentation on Black bodies from the era of slavery – as demonstrated by the work of physicians such as J. Marion Sims – through the Jim Crow period, such as the Tuskegee Study (see *Box 1*). Since then, access to high-quality care has continued to be limited for BIPOC, as noted later in this section. Even elements of the social safety net have been chronically under-resourced and yielded inequitable outcomes for racial and ethnic minority groups. Despite the achievement of greater civil rights, BIPOC have continued to have significantly worse outcomes across many health indicators [4].

Structural racism, the lack of supportive social policy [43], and implicit bias within care delivery settings have all contributed to these demonstrably unequal outcomes. Structural racism is “racism that is embedded

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases ¹	1.6x	0.7x	1.1x	2.0x
Hospitalization ²	3.3x	1.0x	2.9x	2.8x
Death ³	2.4x	1.0x	1.9x	2.3x

FIGURE 1 | COVID-19 Cases, Hospitalizations, and Death by Race/Ethnicity

SOURCE: U.S. Centers for Disease Control and Prevention. 2019. *Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity*. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html> (accessed May 26, 2021).

BOX 1 | Examples of Medical Experimentation on Black Bodies

J. Marion Sims was an Alabama physician active in the mid-1800s. He performed experimental operations, without anesthesia, on a group of enslaved Black women in order to perfect a surgical technique for repairing vesicovaginal fistula. Sims later opened a women's hospital in New York City, where he performed the surgery on White women, with anesthesia, to considerable acclaim. For this and other accomplishments, he was long hailed as "the father of modern gynecology." In 2018, a statue of Sims that had stood across from the New York Academy of Medicine since the 1890s was removed after protests by activists [a].

The Tuskegee Study of Untreated Syphilis in the Negro Male was a U.S.-government-sponsored research project involving Black men in Macon County, Alabama, beginning in 1932. Researchers did not disclose to participants that they had syphilis and withheld lifesaving treatment. The majority of study participants died of syphilis or related complications by the time the study was shut down in 1972 after a *New York Times* exposé, and many of their wives and children had been infected. In 1997, President Bill Clinton apologized for the study on behalf of the U.S. government [b,c].

[a] Lynch, S. 2020. Fact check: Father of modern gynecology performed experiments on enslaved Black women. *USA Today*. Available at: <https://www.usatoday.com/story/news/factcheck/2020/06/19/fact-check-j-marion-sims-did-medical-experiments-black-female-slaves/3202541001/> (accessed March 18, 2021).

[b] McVean, A. 2019. *40 years of human experimentation in America: The Tuskegee Study*. McGill University Office for Science and Society. Available at: <https://www.mcgill.ca/oss/article/history/40-years-human-experimentation-america-tuskegee-study> (accessed March 18, 2021).

[c] Clinton, W. 1997. *Remarks by the president in apology for study done in Tuskegee*. The White House, Office of the Press Secretary. Available at: <https://www.cdc.gov/tuskegee/clintonp.htm> (accessed March 18, 2021).

in laws, policies, and institutions and provides advantages to the dominant racial group while oppressing, disadvantaging, or neglecting other racial groups" [44]. Within health care organizations and systems, structural racism manifests as "institutional racism" and discrimination that contributes to poorer outcomes for BIPOC. An element that reinforces institutional racism is implicit bias, defined as "unconscious or unacknowledged preferences that can affect a person's beliefs or behaviors, and in particular, an unconscious favoritism toward or prejudice against people of a certain race, gender, or group that influences one's own actions or perceptions" [45]. In health care, implicit bias has been found to impact quality of care [46].

Structural and institutional racism and implicit bias are often overshadowed by the dialogue around social determinants of health (SDOH), which can obscure racism and discrimination as the root causes of racial and ethnic health disparities. Numerous studies have clearly shown differences in diagnostic rates, treatment approaches, and even pain management between patients of color and their white peers [47]. The outcomes include higher rates of mortality throughout

the lifespan—tragically, even among healthy children (see *Figure 2*) [48]. A recent notable case was that of Dr. Susan Moore, a Black physician who died from COVID-19 after complaining of racist treatment in a hospital [49]. While SDOH are often identified as a driver of racial and ethnic differences in outcomes, health care delivery has not adequately grappled with the role that institutional racism and implicit bias play in worsening disparities and lack of equity.

Unfortunately, emerging technologies have the potential to reinforce inequities in health care quality. The implementation of artificial intelligence, for example, can reinforce racial and ethnic disparities due to its reliance on historical patterns that arise from a biased and inequitable health care system and algorithms [50]. Data used to "train" AI systems may be further entrenching disparate care through algorithms that are supposedly dispassionate but likely reflect pre-existing and well-established human prejudices. For example, "despite mounting evidence that race is not a reliable proxy for genetic difference" some physicians use "race-adjusted algorithms" to perform patient risk assessments and guide clinical decisions [51].

A more equitable health care system will not emerge from any new payment model, delivery approach, or technology unless equity across race and ethnicity is an explicit outcome identified, measured, and pursued by the system. Assuming that disparities will be addressed by overall improvements in access, quality, and value without rigorous data, measurement, identification of mechanistic ties to racism effects on health outcomes, and interventions focused on BIPOC will likely only lead to growing inequity over time. Attention to leadership and culture are critical to making this happen.

Inadequate Integration of Social Determinants of Health

The relationships between social, economic, and environmental risk factors and health and health-related outcomes – and the unequal burden of these risks across racial and other sociodemographic groups – have become ever more apparent. As noted above, structural racism is a driver of many SDOH. Disparities in access to employment, housing, transportation, nutritious food, potable water, education, and social inclusion have driven differential health and health-

related outcomes, including outcomes related to COVID-19 such as morbidity, mortality, and vaccine access [52,53]. Multiple studies have shown that the majority of health outcomes are attributable to behavior, social and economic factors, and the physical environment, rather than to interactions with the health care system [54]. Pronounced racial inequities exist within these domains, with disproportionately higher percentages of BIPOC living in poverty and poor-quality housing, for example [55,56].

However, the tremendous influence of SDOH on health does not reduce the role of the health care system in confronting inequitable outcomes. This is because health outcomes are not simply the consequence of SDOH acting in isolation but result instead from their complex interplay – including how the health care system responds to SDOH [52]. Recognizing this interdependence is critical in mitigating health inequities fueled by SDOH, as is recognizing the political determinants of health created by government policies and actions [57].

The Accountable Health Communities Model from the Centers for Medicare & Medicaid Services (CMS)

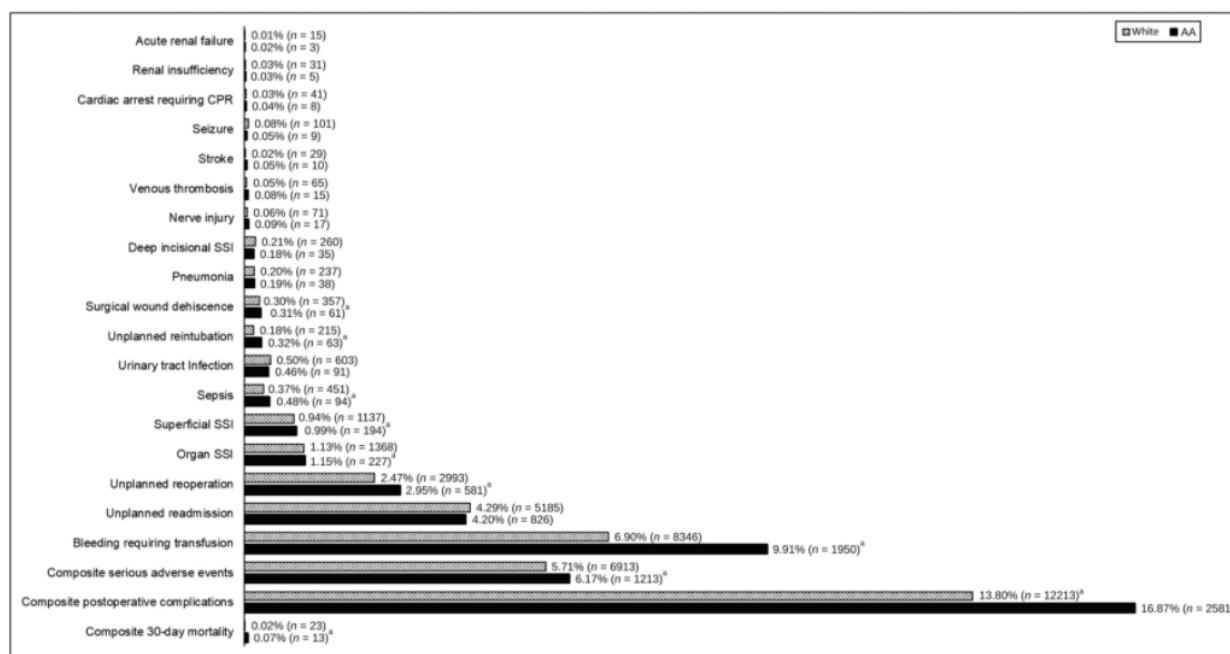


FIGURE 2 | The incidence of postoperative mortality and complications varied according to race among 140,666 apparently healthy children (13.9% African American children; 86.1% White children) who underwent operations **NOTES:** CPR, cardiopulmonary resuscitation; SSI, surgical site infection. * Indicates that the difference in the incidence was significant at an α level of .05.

SOURCE: Nafiu, O. O., C. Mpody, S. S. Kim, J. C. Uffman, and J. D. Tobias. 2020. Race, Postoperative Complications, and Death in Apparently Healthy Children. *Pediatrics* 146 (2) e20194113. <https://doi.org/10.1542/peds.2019-4113>.

– which tests if health care quality or savings can be improved by “systematically identifying and addressing the health-related social needs of Medicare and Medicaid beneficiaries” – is an example of an effort to integrate attention to SDOH into the health care system [58]. In addition, numerous partnerships between health care organizations and community-based organizations are under way across the country to address social needs, but few have examined the impact these initiatives have had on health equity. Without an explicit focus on health equity, work within the health care system to address SDOH will miss the mark. While structural racism drives many SDOH, economic inequities are also significant contributors to disparate outcomes.

Lack of Reliable Health Care Data for BIPOC

Even as health care leaders and policy makers advocate for strategies to improve health equity for BIPOC, there are significant obstacles stemming from a lack of data. Specifically, daunting challenges remain in collecting accurate and comprehensive health services data on BIPOC, even as these populations are considerably more likely to experience inadequate episodes of care. (It should be noted that there are also significant gaps in data collection for lesbian, gay, bisexual, trans, and queer (LGBTQ+) individuals, a group that experiences health inequities in its own right and has intersectional implications for BIPOC [59].)

For population health surveys used in federal health programs like Medicare and Medicaid, Section 4302 of the Affordable Care Act (ACA) requires the collection and reporting of race, ethnicity, primary language, and other demographic data to aid in the understanding and reduction of health care disparities [60]. However, this legislation is limited by the lack of corresponding appropriations. Incomplete classification of member race and ethnicity in the administrative data sources used by decision- and policymakers is often overlooked and constitutes a significant limitation in health disparities research [61]. Many health systems do collect some of this data directly from patients, which is included in the electronic medical record. However, this is generally not shared in an interoperable manner, nor used for payment or public reporting. Policy actions such as use of the Transformed Medicaid Statistical Information System initiative (a Medicaid and Children’s Health Insurance Program dataset) show great promise but have not yet succeeded in reforming the collection of direct data [62]. As expanded on in “Lack of Trust in the Health Care System,” beneficiaries may

also choose to not report racial or ethnic data, further exacerbating the data gap. The Office of the National Coordinator released USCDI Version 2, which has defined further standardized data elements around race, ethnicity, and social determinants of health, which should aid in the standardization and interoperability of this data [98].

Overall, health care quality data on race, ethnicity, and linguistic minority groups remain incomplete [63]. The data are not routinely publicly reported by population; nor do payment incentive programs reflect observed differences. For example, the misclassification of administrative Medicare data from self-identified groups (for example, Hispanics and Asian American/Pacific Islanders) varies widely from state to state [64]. Failure to collect more granular data on ethnicity can mask inequities in these and other racial/ethnic aggregate categories. Data regarding other influencers for quality (such as disability, LGBTQ+) have not routinely been corrected.

The reasons for the data gap are complex and multifold. They include an absence of standardized data categories, insufficient institutional incentives, a lack of patient trust, reluctance of clinicians to ask for and record data, and inadequate explanations to both patients and staff regarding the importance and purpose of collecting demographic information. Additional education and support to build confidence and trust among both those being asked to provide these data, and those doing the asking, is a critical step towards improving collection.

Another response to this challenge has been growing acceptance of and reliance on imputation, in which statistical imputation methods are used to supplement incomplete or missing administrative information [64]. However, although imputation can work as a temporary strategy to start building evidence and transparency, it also can perpetuate systemic issues. For example, imputation can correct for known flaws in self-reported data, such as evidence that African American and Hispanic populations are more likely than non-Hispanic whites to not self-report their race/ethnicity [65]. Yet this can spark resentment and mistrust if an organization overrides people’s stated self-identification to describe them differently on the basis of imputation. Data collection for race, ethnicity, and other equity factors should be collected directly from patients for the most accurate data. There are challenges to this approach that require a standardized approach to the practices involved in collecting the data directly from patients.

Lack of Trust in the Health Care System

Trust in health care has been eroding for decades in the United States. Between the mid-1960s and 2010s, the percentage of American adults who reported having confidence in health care leaders declined from 73 percent to 34 percent [66]. Especially among marginalized patient populations, including BIPOC, discrimination and malfeasance in medical care and research (as described earlier in this paper) have created a legacy of distrust [67,68]. One in five U.S. adults reports experiencing discrimination in the health care system, with racial and ethnic discrimination the most reported form [68]. For vulnerable and marginalized communities, distrust of the health care system can be seen as a wise and necessary mechanism for identifying threats and creating change [69]. However, lack of trust in health care professionals and the health care system is also associated with underutilization of health services and disparities in health outcomes [70,71]. When asked, health care professionals both recognize this lack of trust and understand that it is a significant barrier to equitable care [72].

The COVID-19 pandemic may have further eroded trust in the health care system. As noted, access to testing, treatment, and vaccines has been limited for BIPOC, contributing to disproportionately high rates of COVID-19 hospitalizations and deaths [73]. The national failure to overcome inequities during the pandemic, which may have added to vaccine hesitancy among marginalized communities, will reverberate into the future.

For health care quality and safety professionals, lack of trust creates a conundrum. Patients who distrust the system may be less likely to share self-identified data on racial and ethnic status and asking for this information during health care encounters may erode trust further. Yet, as addressed in the previous section, without this information health care systems may be unable to analyze care quality and outcomes to identify and mitigate inequities. As discussed, while the use of imputed data may offer a starting place for action, algorithms are subject to the same biases that create inequities [50]. Self-reported information is crucial for long-term and lasting improvement and obtaining this information will require a deep financial and cultural commitment to establishing trust.

The past several years have seen increased attention to reestablishing patients' trust in the health care system, including particular attention to partnering with people and communities of color. Proposed solutions

include increasing the quality of personal interactions; expanding diversity in the workforce; enhancing the respect with which patients are treated; respecting cultural contexts; and aligning incentives, including those between patients and systems [69,74]. While some research indicates that increased conflict-of-interest disclosures by health care systems and professionals may further hamper trust, enhanced transparency may be essential to addressing distrust in health care organizations [75]. After hosting national forums on building trust in 2018 and 2019, the American Board of Internal Medicine conducted a Trust Practice Challenge with the goal of identifying tested, scalable practices for strengthening trust across health care systems and with patients and communities. A series of foundational articles on trust were published in the *Journal of the American Medical Association* based on the Forums and a Compendium of Trust Practices has been made freely available [69,76]. Many of these solutions can be seen as part of broader effort to re-enter the healthcare system around patients and communities.

Future State: Strategies to Improve Racial Equity in Health Care Quality

In this section, the authors of this paper outline key actions that could be taken by health care leaders and the quality improvement community to enhance equity in care quality and outcomes, particularly for BIPOC. These include increasing patient trust and involvement; strengthening community engagement; incentivizing equity at the organizational level; and improving data and measurement.

Increasing Patient Trust and Involvement

To build trust, individuals must be engaged both in their own care and in quality improvement and governance [13,14]. While the quality and health care infrastructure cannot solve all the underlying structural issues that lead to poorer health outcomes for BIPOC, there are critical actions that health care must take. These include improving cultural and linguistic humility, addressing implicit bias, and increasing diversity and representation among health care workers and health care leaders [15,16,17]. Clinicians need support to implement evidence-based best practices and reduce barriers [2]. Frank discussions about bias and discrimination are needed between clinicians and their patients as well as between health care leaders and the clinicians they employ.

Whether the current approach to evaluating care experiences meets the needs of patients must also be examined. Discrimination and disparities start long before a patient walks into a clinician's office [18]. Standardized patient experience questionnaires should be evaluated to determine if they capture elements key to addressing inequities and bias, and they should be updated if they do not. At the same time, the burden of additional surveys should be minimized, and tools should be kept brief. Qualitative methods should be evaluated and selected to promote and allow for frank input and follow-up. Survey design should consider the complicated and intersectional nature of identity [19]. Design and data collection should facilitate segmentation of survey results by race, ethnicity, and other dimensions, and this segmentation should be incorporated into feedback mechanisms so that clinicians and systems have the information they need to take action. Leadership commitment, resources, and infrastructure are needed to gather information and to act on this information. Leadership should be diverse and reflective of the communities served. Organizations should be held accountable for providing mechanisms for continuous feedback. Throughout, communities must be invited into this effort to guide and direct the evaluation.

As an example of a patient-informed approach to building trust, in 2018 UnityPoint Health (a regional health care system serving Iowa, Illinois, and Wisconsin) opened its first health clinic offering dedicated services for LGBTQ+ communities [20].

Acknowledging limitations in their knowledge, clinic leadership adopted an approach of cultural humility. They reached out to LGBTQ+ community leaders and members to understand challenges, barriers, and what the health system could do to serve the community's needs. To ensure they are providing a welcoming and identity-affirming care environment, clinic staff regularly participate in Safe Zone training [21]. They also focus on having consistent routines, such as asking for and providing pronouns, to build trust. In response to positive feedback from the LGBTQ+ community, UnityPoint has since established additional clinics and is examining how to expand LGBTQ+-inclusive training across its network [20].

Later sections of this paper will address financial incentives to achieve equity in health care quality, as well as improved measurement strategies to assess outcomes. In both areas, patients' self-described goals, values, must be a critical part of the calculus. In other words, patients must be engaged in the design and

evaluation of efforts to increase the quality and equity of their experiences and outcomes [22,23,24]. Such consistent and meaningful involvement will help to foster patients' trust.

Increasing Community Engagement and Truly Valuing the Health of Populations

Calls to address health disparities have echoed a need to implement interdisciplinary approaches that reach outside the traditional health care system [25,26,27]. Engaging with communities and community organizations is a powerful tool to address unmet health-related social needs and SDOH. The role of community engagement in health promotion is well documented, including the positive relationship between engagement and improved health outcomes [28]. This can include informal or formal partnerships among health system stakeholders (including plans, clinicians, payers, and anchor institutions), community-based organizations (CBOs), as well as less traditional stakeholders of quality, such as the public health infrastructure.

These relationships can be complex and require ongoing planning and case management as well as clear accountability [29,30]. Equitable distribution of resources is necessary while recognizing the value CBOs bring as well as their financial constraints. In places where community resources are limited, undue burden can be placed on individual community partners, which should be considered when designing programs and setting expectations. In particular, the role of CBOs should be taken into account when developing and implementing value-based payment initiatives, especially since requirements may call specifically for their integration [31]. Finally, care must be taken to avoid overmedicalizing social and community needs.

To cite a specific example of health care organizations engaging and valuing community to advance equitable health outcomes, the mission of West Side United (WSU) in Chicago is to reduce the 14-year life expectancy gap between the Loop and West Side neighborhoods by building health and economic wellness to support vibrant communities. Originally formed in 2017 as a collaboration between Rush University Medical Center, Cook County Health and Hospitals System, and the University of Illinois Hospital and Health Sciences System, WSU has grown to include over 100 organizational partners and an active Community Advisory Council of neighborhood residents [32]. The organization recognizes that to address health inequities, institutions that may typically compete for resources

must collaborate in their efforts. WSU proves the power of cross-sector partnerships and a place-based strategy, with a clear measurement framework to track local health and health care outcomes.

Achieving equity in care quality and health outcomes requires listening to and learning from communities to devise systemic solutions that solve multiple problems, also known as “multisolving” [33]. Organizational governance must engage with communities and other key partners at the highest levels to ensure maximum accountability. In particular, funding streams need to be set aside to support engagement with and investment in local community organizations that support marginalized populations – thereby truly valuing their health.

As trusted members of their communities with a close understanding of the people they serve, diverse community health workers (CHWs) are critical partners in this effort [34]. Strong evidence demonstrates that integrating CHWs into team-based care can improve health outcomes, particularly for chronic diseases, while reducing unnecessary utilization of resources [35,36,37]. CHWs can also facilitate successful care transitions, thereby connecting patients to services, improving the quality of hospital discharge and access to primary care, and reducing readmissions [38,39]. As health care organizations move to address equity and SDOH under expanding value-based payment models, CHWs are likely to play an increasing role and need to be supported by delivery systems and payers to help navigate and address unmet social needs [40,41]. CHW models are also being broadly adopted by states, though with varying financing models and requirements for education, certification, and expected roles [42].

Communities need adequate resources and alignment on expectations in order to achieve the full potential of CHWs in an equitable way. Payment models addressing care coordination and community engagement to achieve health equity should incorporate sustainable funding for CHWs as part of care teams. Standards for hiring, education, training, and accountability should be designed and implemented to ensure that CHWs are empowered to do their best work.

Rewarding Organizations for Equity

Since the ACA was signed into law in 2010, CMS has made significant progress in developing and applying payment incentives to quality benchmarks through the Hospital Value-Based Purchasing Program (VBP) and the Hospital-Acquired Condition (HAC) Reduction

Program. The HAC Reduction Program reduces Medicare fee-for-service payment amounts for the bottom quartile of acute care hospitals each year based on performance scores on safety measures. The Hospital VBP Program provides both positive and negative payment adjustments based on specified performance thresholds, including patient safety performance. The effectiveness of these programs in driving improvement appears to be mixed, in part because dollar amounts are marginal with regard to patient safety, with 1% of Medicare reimbursements at risk for the bottom quartile of hospital performers, as opposed to upwards of 9% at stake for all hospitals in performance on broader quality metrics [99]. At the very least, payment incentives should avoid contradicting goals for patient safety, which happens when payment is strictly fee-for-service and all services, even those related to or causing avoidable harm, are reimbursed equally. This applies equally to federal, state, and private value-based contracting programs.

Payment models should reward optimal outcomes equitably for everyone walking through an institution's door. However, payment policies do not always differentiate by population group to reward progress toward equity. Safety and equity must both be in place for success. For state and federal programs, this may require evaluating and updating statutes and regulations to achieve these goals. Private and commercial contracts should also be re-evaluated on these criteria.

The first step in leveraging rewards and reimbursements to improve outcomes is creating accurate benchmarking that applies to different groups served. This is not easy. Flexibility is needed to evolve benchmarking as the science and experience grow, since the effort remains fledgling [78]. Risk adjustment models allow for benchmarking between vastly different health care organizations. However, adjustment of benchmarks also have the potential to hide rather than highlight disparities. In all cases, benchmarks should be transparent about actual differences among population groups. This maintains an understanding of the safety of different populations while allowing for payment incentives to drive improvement with different strategies for different groups.

While transparency is critical, it must be recognized that the differences observed in benchmarking data may not be fully explained by interventions, actions, and best practices organizations put in place to improve patient outcomes. For instance, such practices might not explain why Black patients at one hospital

have a higher rate of hospital-acquired conditions or infections than other patient populations at the same hospital. A 2020 report to Congress by the U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation highlights this issue, noting the critical need for tools to measure equity and facilitate improved outcomes through incentives [79]. The goal of equity-focused quality measurement should be to reduce gaps, provide support for improvement, and reward improvement. Evolving methods and approaches to social risk stratification and adjustment provide a path towards both fair and transparent evaluation of quality performance [79,87,100]. This includes methods for simultaneously evaluating multiple vectors of disparity simultaneously, such as race/ethnicity and socioeconomic status.

Among the many downsides of a fee-for-service payment model in health care is that it does little to explicitly encourage improvements to health equity. Risk-based population-level payment systems, on the other hand, may improve health equity because managing population-level risk requires attending to existing disparities and inequities [79]. Innovative models for payment reform that address inequities in patient safety and health care quality exist, but they have not been broadly adopted or consistently implemented [44,80].

Improving Data

As noted earlier, significant shortfalls in actionable clinical-quality data that capture race, ethnicity, and language are impeding progress toward health equity. When the COVID-19 pandemic hit the United States in the first half of 2020, anecdotal evidence immediately suggested that the virus was disproportionately infecting and sickening BIPOC. Yet when governments and other groups sought to clearly understand the pandemic's inequitable toll, they were stymied by inadequate data [81]. Months later, after the Centers for Disease Prevention and Control (CDC) released the most comprehensive dataset available related to the racial inequities of the pandemic, the data were still woefully incomplete. More than 50 percent of the cases documented in the CDC dataset were missing race and ethnicity information—an unfortunately common story across many clinical conditions [82].

The health care delivery system must understand and address the root causes of inequitable health outcomes that are disproportionately faced by BIPOC, as well as people with disabilities, sexual and gender minorities, individuals with limited English proficiency,

and rural populations. The urgency of the problem demands short-term measures even as the enduring importance of improving health equity requires long-term solutions. Although the limitations of algorithms and imputed data have been noted, they offer a potential short-term solution. Possible sources for imputed data include population-level datasets based on surname and geography [64], as well as existing resources, such as the University of Wisconsin School of Medicine and Public Health's Neighborhood Atlas [83].

In the longer term, better data are necessary – data collected directly from patients, upon admission, for example, instead of through indirect estimation – to make policy and resource determinations. Sustainable improvement in capturing race and ethnicity data requires regulatory enforcement, process and system changes, and culture change. The health care delivery system must also recognize that current standardized categories do not reflect evolving self-understanding of race, ethnicity, gender, disability status, and identity. New data collection frameworks should also be developed. As mentioned, the ACA already contains provisions to guide federal data collection efforts on race and ethnicity, sex, primary language, and disability status information. Reliable enforcement of this provision is an effective and necessary step. States and smaller municipalities should also abide by these requirements and should enact legislation or regulatory changes to affect this change if needed. In addition, resumed collection of these data by the Social Security Administration would be enormously helpful, since the enumeration at birth change in 1989 has resulted in the Social Security Administration receiving no race or ethnicity data when an individual is born [95].

Clinicians and facilities should collect and analyze their internal data and create action plans for improvement, such as measuring quality and stratifying indicators by sociodemographic variables. Changes in practice and in the electronic tools now used to capture patient data may be needed. One study concluded that changing the electronic health record system's "Unknown" option for "Race?" to "Refused/Don't Know" and allowing for multiple races to be selected will improve the quality of data [84]. In addition, staff responsible for collecting race and ethnicity information should be trained, encouraged, and in some cases incentivized to capture necessary data. Such incentives are just one tool that can help embed the need for these data in an organization's culture. Patient education is also critical so that patients understand why the information is be-

ing collected and how it will be used, which in turn will strengthen trust.

Payers also need to collect data whenever possible on sociodemographic variables and incentivize others to collect these data. For example, payers should give clinicians incentives to capture Race, Ethnicity, and Language (REaL) data and then feed those data back to clinicians. Delivery systems in turn should invest in systems that allow for easy self-reporting of REaL data that then can be verified by clinicians during the encounter. In addition, they should invest in developing standard reports that allow clinicians to see their variation in performance on key measures stratified by race, ethnicity, and language.

As an example of the steps that can be taken to improve data in support of equity, early in 2021 Blue Cross Blue Shield of Massachusetts (BCBSMA) launched a set of initiatives to reduce health inequities and improve racial justice. These included charitable investments in local organizations working to address inequities, the convening of a Health Equity Council, and, crucially, a comprehensive drive to solicit and collect REaL data from all BCBSMA members. BCBSMA will use this data to improve the health plan's programs and services, including the quality of care its members receive, their experiences as patients, and their experiences with the insurer. Leaders at BCBSMA also pledged to transparently share all that they learn and are doing to address inequities. Another example is CMS' Office of Minority Health Mapping Medicare Disparities Tool, which "identifies areas of disparities between subgroups of Medicare beneficiaries such as racial and ethnic groups" [96]. The Leapfrog Group introduced a standard for hospitals and ASCs to stratify quality data for use by employers and payors in reporting and payment.

Problems must be named before they can be solved. Those who have worked to improve equity know that progress is not possible without first telling the truth about existing inequities. Truth-telling cannot happen when data are obscured. Accelerating ongoing efforts to improve the capture and availability of data on race and ethnicity is an indispensable step in all efforts to improve health equity.

New Measurement Strategies

Once race, ethnicity, and other data (such as language, sexual orientation and gender identity, and food insecurity, as examples) are captured more effectively, existing quality measures (both process and outcomes) need to be segmented to understand where dispari-

ties exist (see *Figure 3* for an example of such an approach). In addition, new measures may be needed. For instance, patients and the health care workforce should routinely be asked about any bias or inequity that they may be experiencing, with organizational resources established to respond to those concerns. The authors focus on effective collection of race and ethnicity data in this paper but acknowledge that these data are only a starting point and many other data points are also necessary to ensure that all health disparities are addressed.

Segmentation by race and ethnicity (as well as other factors, including gender identification and sexual orientation) must be the norm rather than the exception. All data (not just a few) should be stratified—for example, patient experience *and* quality/safety outcomes to identify statistically significant differences between subgroups. Data on engagement, burnout, retention, promotion, and perceptions of bias and inequity among the health care workforce should be segmented as well to address not just patient inequities but also workforce inequities. To do this segmentation, organizations must have the relevant analytics expertise and capabilities to learn from qualitative and more traditional quantitative measures. For example, patient comments on patient experience surveys can be analyzed with algorithms that identify themes related to bias or inequity.

The next requirement is to develop overall ways of summarizing equity issues at all levels. Equity dashboards can be created, but equity also needs to be embedded into existing quality dashboards. For example, for hospitals, the equity lens should be incorporated into existing unit-, department-, entity-, and board-level quality dashboards (as well as financial dashboards and balanced scorecards). As an example, the University of Chicago has created an equity lens for its quality dashboard that covers over 70 measures. Each measure can be looked at with segmentation by race, ethnicity, gender, zip code, and other key variables and is accessible across the institution [85].

Regional, state, national, and federal organizations should also ensure that an equity lens is part of their measurement strategies. The Agency for Healthcare Research and Quality is focused on this issue through its National Healthcare Quality and Disparities Reports, which currently segment quality and safety measures by race, ethnicity, sex, health status, economic status, and geography [86]. All publicly funded health programs must incorporate data segmentation by race

and ethnicity into performance measures. Issues of risk adjustment and the potential unintended consequences of doing so should be considered in the development of measures as well as measure analysis, presentation, and incentives. Finally, methods to summarize outcomes need further development (for example, the Health Equity Summary Score [87]), as do methods of summarizing “exposure” to inequities (recognizing that structural inequity is multifactorial, as evidenced by the Entropy Index, the Entropy Score, the Neighborhood Deprivation Index, and so on [88]. Such summaries may be particularly relevant to community-level strategies for quality [89].

Once data are captured, segmented, and analyzed, structures must be in place to understand potential causes of the disparities, and interventions should be undertaken to narrow these gaps. This is the critical step—data should drive improvement rather than existing simply for their own sake (see *Figure 4*). Multidisciplinary quality improvement committees and teams

(on diversity, quality, safety, workforce, and other key issues) are essential. The equity lens needs to be applied to all improvement work across all domains of quality. Equity must not be siloed but rather embedded, so that every improvement initiative (whether related to safety, access, or experience) uses segmentation to understand how to eliminate inequities for each specific issue.

In particular, safety efforts around cause analysis must ensure that inquiries get to true underlying causes. For instance, quality and safety staff should be educated on how to systematically incorporate equity-related prompts into process mapping, root cause analysis, and other quality improvement tools [89]. Finally, and importantly, the voices of patients, communities, and clinicians must be embedded into improvement efforts to ensure that interventions will be optimally effective.

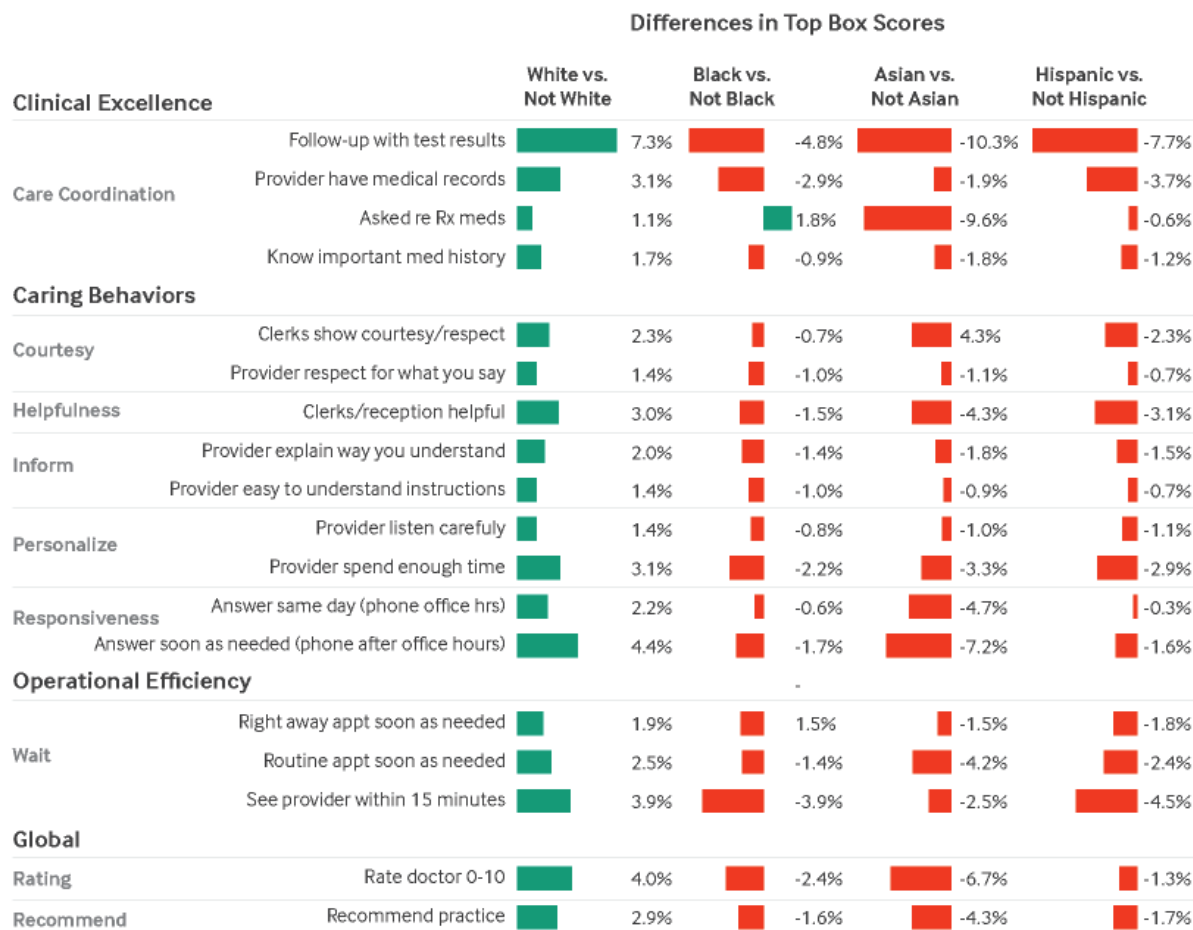


FIGURE 3 | Patient experience measures segmented by race can guide and motivate change

SOURCE: Press Ganey Associates LLC

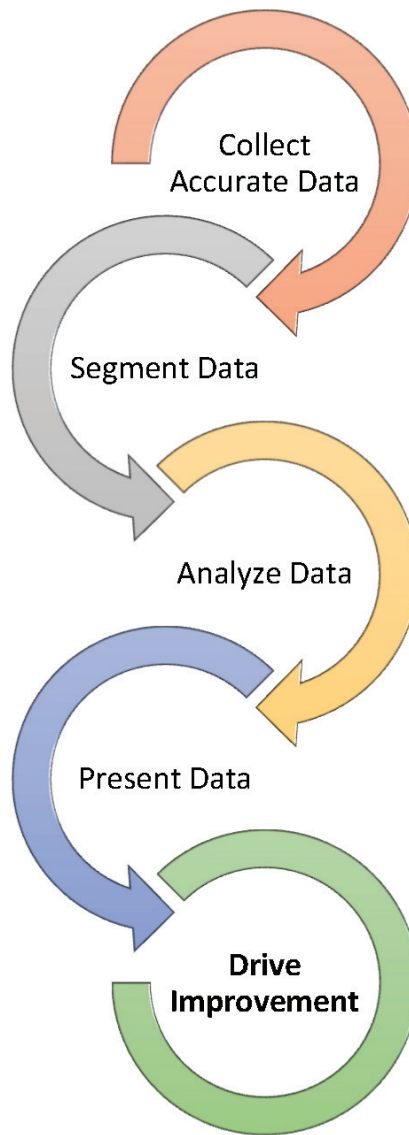


FIGURE 4 | Measurement strategies underlie steps to advance equity in health care

SOURCE: Created by authors

Improving Leadership and Culture

Effective and diverse leadership is crucial for every aspect of performance in health care organizations [90,91,92]. Leadership should also reflect and represent the diversity in the community being served. This representation will build and fortify trust, especially when coupled with an explicit commitment to improve equity. Without consistent attention and commitment from leadership, efforts to improve health equity will not succeed or be sustained.

This commitment should take two forms. First, leaders should make it very clear to their entire organiza-

tions and to the communities they serve that they are serious about improving equity. This can be accomplished by making health equity a strategic priority for the organization. Second, leaders need to support this rhetorical focus by allocating the necessary resources to improving equity.

The late Bernard Tyson, chairman and CEO at Kaiser Permanente (KP) from 2013 to 2019, modeled this kind of leadership commitment. Improving equity and reducing disparities were a focus of nearly every speech he gave and every interaction he had both within his organization and among his peers in the health care sec-

tor. KP followed suit by devoting significant resources to closing racial and ethnic disparities. This leadership approach enabled KP to make real progress, such as reducing the disparity in hypertension control between Black and white patients by 71 percent – an achievement recognized by the American Hospital Association’s 2017 Equity of Care Award. The specific program employed by KP included reliable and sustainable collection of race, ethnicity, and language data; proven population care management programs; and the cultural tailoring of team-based approaches [93].

Making health equity an immediate strategic priority is a pre-condition for long-term success. But priorities can shift, and ensuring sustainability is best served by inculcating equity into the culture of an organization—that is, by making it a core value. Delivery systems need to make equity a strategic priority and back up that priority with investments in infrastructure, including data systems, quality improvement, and training on unconscious bias, to make improvements possible. Quality and safety staff should be trained in equity concepts, and systems should participate in learning forums to identify best practices from other organizations. Linking development, advancement, and in some cases compensation to health equity goals are supportive strategies. Further culture change can be achieved through consistent messaging from leaders, celebrating improvement, and contextualizing these efforts within the much larger societal project of dismantling structural racism.

Two additional supports are governance attention to equity and changes in the external payment environment. Decades of work to improve the quality and safety of health care have revealed the critical importance of the board’s role [94]. The same is true for improving health equity. Holding the CEO accountable for improvement against clear and quantifiable equity goals is an essential duty for health care governance. One way to motivate such steps would be to modify executive compensation to ensure that a meaningful portion of overall compensation is connected to improving health equity metrics.

Improving health equity requires a holistic approach. Change is needed everywhere – from the bedside to the board room to how payers pay for care to health policy changes. Making equity a strategic priority, a key piece of organizational culture, and a core value will support and accelerate approaches to eliminating intractable and unacceptable racial and ethnic disparities.

Conclusion

On the basis of the foregoing analysis, the key elements of our racial equity agenda for the field of health care quality improvement are as follows:

- Embed an equity lens into all quality and safety improvement activities.
- Create an equity dashboard and embed equity into quality dashboards to ensure that equity data are presented to health system leaders.
- Ensure that leadership commitment, resources, and infrastructure are adequate and sustained.
- Ensure diverse leadership at all levels.
- Empower and equip quality officers within health care systems to take on this work.
- Improve the quality of data collected on race and ethnicity (as well as language, sexual orientation and gender identity, and other variables).
- Routinely stratify and report data by race and ethnicity in order to identify the greatest opportunities for improvement, set goals, and direct resources there.
- Normalize a culturally affirming approach to care, including implementation of the necessary tools, training, and staff time.
- Update measures of patient experience to include evaluation and accountability for the experience of bias and/or discrimination.
- Engage patients and communities as partners in improvement efforts.
- Increase community involvement by fostering formal and informal partnerships among health systems and community-based organizations and by allocating adequate resources to support community health workers.
- Foster greater trust in health care by increasing the quality of personal interactions, expanding diversity in the workforce, improving cultural and linguistic humility, and addressing implicit bias.

The COVID-19 pandemic has drawn back the curtain on pervasive and often deadly health inequities for BIPOC and other minority groups. The health care system, acting alone, cannot eliminate all factors that drive disproportionately poorer outcomes for these communities. But it can take many steps that would advance equity – both within the system, by improving the quality and safety of care and patient experience, and outside the system, through engaging with other sectors to address social needs. Perhaps most importantly, it can

lead the way for other sectors by establishing a measurable and transparent racial equity agenda and holding itself accountable.

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DOI

<https://doi.org/10.3147/202109b>

Suggested Citation

O’Kane, M., S. Agrawal, L. Binder, V. Dzau, T. K. Gandhi, R. Harrington, K. Mate, P. McGann, D. Meyers, P. Rosen, M. Schreiber, and D. Schummers. 2021. An Equity Agenda for the Field of Health Care Quality Improvement. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. <https://doi.org/10.31478/202109b>.

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Acknowledgments

The authors would like to thank **Marshall Chin**, Richard Parrillo Family Professor of Healthcare Ethics, Department of Medicine, University of Chicago; **Nakela Cook**, Executive Director, PCORI; **Rainu Kaushal**, Nannette Laitman Distinguished Professor of Population Health Sciences, New York-Presbyterian Hospital/Weill Cornell Medical Center; and **Jacquelyn Y. Taylor**, Helen F. Petit Professor of Nursing and Executive Director of the Center for Research on People of Color, Columbia University School of Nursing for their thoughtful contributions to this paper.

Mary Barton, National Committee for Quality Assurance; **Laura DeStefano**, National Academy of Medicine; **James Gillespie**, The Leapfrog Group; **Steve Olson**; and individuals from the **CMS Office of Minority Health** provided valuable assistance in developing this paper.

Conflict-of-Interest Disclosures

None to disclose.

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