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On the Path to Health Justice

Opportunities for Academic Medicine to Accelerate the Equitable Health System of the Future

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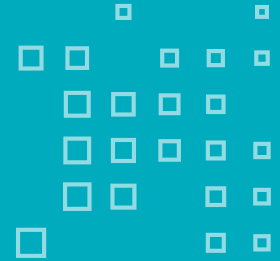


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Introduction and Intent

As the country re-emerges from a pandemic that has had a disproportionate impact on communities of color, academic medical centers (AMCs) are shifting out of crisis-response mode and reflecting on opportunities to intentionally promote equity across their tripartite mission, advance antiracist policies, and bring science to bear on the challenge of eliminating health disparities in access to and outcomes of care. Organizations are at various stages of dialogue and engagement on the topic, with many having a long history of engagement, others renewing their commitment and others just starting the conversation.

This paper is intended to support AMCs on that journey by describing strategies in nine areas of focus that can position AMCs to be leaders in eliminating disparities in their organizations and their communities. It is organized around mission-specific strategies (education, research and clinical care), internal strategies (Leadership and Governance, People and Culture, and Data and Analytics) and external strategies (Purchasing Power, Community Partnership, and Policy and Government Relations), and includes an appendix slide pack highlighting successful initiatives around the country.

By implementing and resourcing a broad-based health equity action agenda—within their organizations and in partnership with their communities—AMCs can lead the way to a more just and equitable delivery system.

Notes and Limitations:

- The paper focuses on AMCs because of their pivotal role in shaping the future of medicine. Many of the strategies are applicable for health systems more broadly.
- The framework and vignettes are focused on racial equity efforts. Several strategies are applicable for advancing gender equity and LGBTQ diversity and inclusion efforts, but a more detailed look at those issues and relevant strategies to address them is needed for a truly intersectional approach to driving health equity.

Health Disparities Defined

Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

Health Equity Defined

“Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.” —**The Robert Wood Johnson Foundation**

Background

Pillars of clinical care delivery, medical research and education, AMCs have a complicated history when it comes to health equity and structural racism. AMCs are major contributors to their communities, often serving as safety net hospitals, partnering with community clinics to serve the indigent, reinvesting in local communities through community benefit initiatives, and shedding light on health disparities through research initiatives. Yet, like all health care stakeholders, AMCs are complicit in the structural racism that exists within our health care ecosystem.¹

Most discussed is their role over the years in unethical research practices that targeted African American communities—from the Tuskegee experiments to the use of Henrietta Lacks’s cancer cells to myriad other examples of abuse.² The history of medical experimentation on Black, indigenous and people of color (BIPOC) has resulted in a deep mistrust of academic medicine by communities of color that continues to play out as a lack of diversity in clinical trials and a lack of information about the effectiveness of novel diagnostics and treatments for communities of color, which ultimately reinforces disparities in health outcomes.

But research is just one aspect of AMC activities that can either reinforce or combat structural racism. As educators, through their admissions policies and curricular priorities, AMCs shape the demographics, culture and knowledge base of the next generation of health care providers. As providers of the highest-quality, most cutting-edge care, their strategies on sites of service, relationships with payers and policies on access play a part in determining who gets access to the best medicine. And as major economic engines in their communities, their hiring and contracting policies influence the economic development of their communities.

AMCs have considered health equity within the purview of their community benefit programs—a requirement for tax-exempt hospitals to invest a portion of margin into their communities. By taking a more expansive view of opportunities to advance health equity—across all missions, internal policies and external relationships—AMCs can begin to unwind some of the structural inequities in access to and outcomes of care. However, they are part of a larger ecosystem with highly inequitable health insurance coverage and reimbursement structures—and those must also be addressed to achieve a vision of true health justice.

Structural Racism Defined

“A system in which public policies, institutional practices, cultural representations, and other norms work in various, often reinforcing ways to perpetuate racial group inequity. It identifies dimensions of our history and culture that have allowed privileges associated with “whiteness” and disadvantages associated with “color” to endure and adapt over time. Structural racism is not something that a few people or institutions choose to practice. Instead, it has been a feature of the social, economic and political systems in which we all exist.” —[The Aspen Institute](#)

AMC Levers for Advancing Health Equity



Mission-Specific Strategies

Education: Shaping the Providers and Culture of Care of the Future

As educators of the next generation of clinicians and leaders, AMCs can bring an equity lens to their educational missions to ensure that they are not passively perpetuating systemic biases, but rather proactively shaping a more racially/ethnically representative, culturally humble workforce and a more equitable delivery system.

a. Invest in Educational Pathways (often referred to as “pipeline programs”)

As a first step to building a more representative workforce, AMCs can invest in programs that support minoritized populations in building up the foundational science and academic skills required to pursue a higher education in health care. See the [University of Maryland’s CURE Scholars Program](#)—the first middle school program funded by the National Cancer Institute’s Continuing Umbrella of Research Experiences (CURE)—which prepares sixth- to 12th-grade students in West Baltimore for careers in research, science, technology, engineering and mathematics (STEM) and health care.

b. Bring an Equity Lens to the Admissions Process

While great strides have been made in gender equity in the admissions process, the proportion of Black males entering medical school has actually declined over time, with the growth of Black or African American applicants, matriculants and graduates lagging behind that of other groups.³ As with workforce recruiting efforts, the admissions process can be subject to bias and should be reviewed to ensure that eligible diverse candidates are included for consideration. The Ohio State University College of Medicine and Wexner Medical Center is one example of an organization that was able to achieve greater diversity in matriculants.

c. Support Underrepresented Minorities in Funding Their Training

AMCs should also be deliberate in setting up policies and programs that support diverse candidates in starting and completing their training. This can include enhancing full-tuition scholarship programs, developing or strengthening mentorship programs, and ensuring students from families with low incomes have access to emergency funding to overcome food or housing insecurity that may contribute to their lower rates of completion.^{4,5}

d. Bring an Equity Lens to the Curriculum

Forty percent of first- and second-year medical students espouse false beliefs about biological differences between Black and white patients, such as that Black people’s skin is thicker, that they are less sensitive to pain and that their blood coagulates more quickly.⁶ AMCs must review their curriculum and training processes to proactively dispel these myths early in training to avoid perpetuating

undertreatment and mistreatment that result in health disparities. Additionally, cultural humility and implicit bias training should be embedded in the curriculum to ensure future providers are equipped to effectively treat patients from culturally, linguistically and socioeconomically diverse backgrounds.

e. Support the Retention and Advancement of Diverse Faculty

Please see [Internal Strategies](#) → [People and Culture](#) → [\(b\) Enhance Diversity Retention and Leadership Development Programs](#) for relevant actions AMCs can take to diversify the faculty body.

Research: Advancing the Knowledge Base on Effective Strategies to Eliminate Disparities

The research faculty at AMCs have played a critical role in documenting health disparities and are designing and testing innovative strategies to combat them. AMCs can amplify these efforts.

a. Invest in the Science of Health Disparities Intervention

Research centers—such as the UC Davis Center for Reducing Health Disparities, Henry Ford Health System’s Institute on Multicultural Health and the recently founded Dalio Center for Health Justice at New York-Presbyterian—are critical to bringing to light the disparities in access to and outcomes of care and designing and implementing interventions in collaboration with the communities impacted in order to eliminate these disparities and advocate for changes to their structural root causes.

b. Engage in Community Trust-Building Activities to Achieve Greater Diversity in Clinical Trials

Many AMCs seek clinical trial participation rates that are representative of their general patient population and community served, but due to a variety of challenges—including the historic mistrust from BIPOC of research initiatives by AMCs discussed earlier—the numbers have remained low. Without doing the hard work of engaging with the community to foster greater trust, these numbers are likely to remain unchanged.

c. Engage in Community-Based Participatory Research and Co-Design

Per the adage “those closest to the problem are closest to the solution,” AMCs have the opportunity to engage community stakeholders in the design and testing of initiatives aimed at eliminating disparities in care. Best practices include engaging the community in all stages of the research process, including defining the area of inquiry early in the design stage, and closing the loop with community stakeholders to review research findings in the analysis and synthesis stage.

Care Delivery: Dismantling Inequities in Access, Quality, Experience and Outcomes of Care

In the second Internal Strategy, [People and Culture: Building and Supporting a Diverse, Local, Culturally Competent Clinical Workforce](#), we highlight the need for widespread training to prevent implicit bias, dispel false beliefs about biological differences between Black patients and white patients, and ensure clinicians at all levels of the organization are trained in cultural competency and cultural humility. Those efforts are necessary but not sufficient to root out structural racism and bias in care delivery. Additional actions are required.

a. **Embed Health Equity Metrics Into Quality Improvement Strategy and Set Bold Goals on Eliminating Disparities**

AMCs are judged on their quality—it is made publicly available, it is tracked by the board of directors, leadership is financially incentivized to improve it and it serves as an organizing force for aligning operational efforts. AMCs are well-versed in improvement work—they bring together teams to look at performance—whether it be mortality rates, infection rates or patient experience—and design strategies to address deficiencies. AMCs should take the same intentional, disciplined and team-based approach to advancing health equity. And as in quality improvement work—guided by the maxim “you can’t improve what you don’t measure”—the first step for advancing equity is collecting data, starting with race, ethnicity and language (REAL) data, and establishing a set of metrics that are useful and reflective of the AMC’s specific areas of disparities. Dr. Mark Smith, founder of the California Health Care Foundation, provides a compelling argument for why equity improvement efforts should be tied to quality improvement efforts.⁷

b. **Eliminate Race-Based Adjustments That Have No Medical Basis From Clinical Decision Support Algorithms**

There are examples in cardiology, nephrology, obstetrics and urology, and likely others, of “race-based medicine” rather than “evidence-based medicine”—that is, where racial adjustments are made that suggest Black people presenting with the same symptoms as white people are at lower risk for certain conditions. Examples include Blacks being deemed at lower risk of heart failure death when hospitalized, or at lower risk of kidney stones when presenting with flank pain—even though there is no biological or empirical evidence for the adjustment.⁸ We are able to capture more data than ever before on patients through electronic health records (EHRs), claims and other data sources—and AMCs should be at the forefront of using this data to test the assumptions that are baked into clinical decision support guidelines and redesign those that have no empirical basis.

c. **Bring an Equity Lens to Care Delivery Processes and Access Strategies (sites of care strategies, payer contracting strategies)**

This is likely the hardest strategy to implement as it pits an AMC’s desires to advance health equity against its need for financial growth and sustainability. It is also in trying to implement this strategy that the limits of any one organization’s capacity to overcome structural racism manifest themselves. With

vast differences between commercial and government reimbursement rates (Medicaid in particular), payer mix is often considered in deciding where to build out new facilities, and as a result, new health care capacity tends to be built in affluent neighborhoods, rather than in health care deserts. Having medical students rotate through community clinics certainly helps bring quality care to under-resourced communities, but it also perpetuates a two-tiered system of care—with commercially insured patients generally receiving higher-quality, more convenient care than Medicaid or uninsured patients with low incomes. Increasing health system consolidation and the ensuing market competition, and a decline in other funding sources for education and research missions, mean that AMCs are increasingly economically incentivized to maximize services to commercial patients and to invest in high-margin specialties.

Bringing an equity lens to care delivery strategies entails asking whether access and capital expansion strategies inadvertently reinforce health inequities, implementing deliberate strategies to promote greater access to care for under-resourced communities, investing in bridging the digital divide in virtual care strategies and taking a balanced portfolio approach to growth. Importantly, it is also in their role as advocates for coverage and reimbursement policy change that AMCs can influence the structural market dynamics that entrench inequities in U.S. health care.

d. Screen Patients for Unmet Social Needs and Connect to Community Resources

Many of the social factors that lead to poor health outcomes—such as poverty, housing instability and food insecurity—are the result of systemic racism and economic policies that have historically marginalized communities of color and prevented opportunities for wealth creation. Health systems can play a part in connecting people in need with social services and community-based resources. Several [standardized screening tools](#) have emerged to support clinicians in screening patients for unmet social needs, and there are several technology companies that have digitized rosters of community-based organizations (CBOs) and social service providers and enabled digital referrals for social determinants of health-related services.

Internal Strategies

Leadership and Governance: Setting the Tone for Combating Structural Racism and Advancing Health Equity

Boards of directors and boards of trustees play a critical role in defining the organizational and performance priorities of leadership and in holding them accountable, and should consider how they can use their important governance roles to combat structural biases, both within the organization and within the community served. Action steps are required.

a. Define, and Affirm the Importance of, Health Equity for the Organization

Board members may be at varying stages of engaging with and understanding the concepts of structural racism, cultural competency, cultural humility and implicit bias as well as their individual responsibility in promoting an antiracist agenda. Board trainings, and expertly facilitated conversations about these topics, are an important place to start to drive a unified vision of the board's role in advancing equity and articulating explicitly the nature of that commitment.

b. Adjust Performance Dashboards and Compensation Models to Promote Equity

Boards define the performance expectations and financial incentives that guide the management team. By requiring that diversity, equity and inclusion (DEI) and measures of health disparities be part of the performance dashboard—alongside traditional financial and quality indicators—the board can signal its commitment to advancing equity and holding management teams accountable for achieving progress. Collecting the requisite data, and ensuring it is valid and can drive improvement, will take work, but measurement is a critical step toward improvement.

c. Diversify the Board and Leadership Teams

Academic medicine has experienced similar trends to those of corporate America—with some progress in gender diversity (aided by regulatory policies requiring female representation)—and racial and ethnic diversity lagging.^{9,10} AMCs with more diverse boards are better positioned to understand the needs of the communities being served, promote greater trust within those communities and consider the impact of organizational strategies on BIPOC. Through a highly intentional approach—including setting targets and timelines for greater diversity on boards—an AMC board can become more representative of the community it serves. Doing so will require new recruitment strategies to identify members from underrepresented groups as the appointments turn over, new screening processes to eliminate implicit bias from the nomination processes and potentially expanding the board to bring in new voices. A true commitment to board diversity might even prompt some members to give up their seats to make space for members from minoritized groups.

d. Ensure Leaders of Equity Initiatives Are Appropriately Recognized and Resourced

Health systems often rely on people who self-select as advocates of health equity to drive initiatives and mentor underrepresented minorities. However, doing this work involves trading off time that could otherwise be spent on other activities—a trade-off that can negatively impact career progression if it is not appropriately valued, recognized or resourced. Several Black faculty have shared their stories of stepping back because of the unrealistic expectations placed upon them to lead diversity initiatives while having full research, teaching and clinical care commitments.¹¹ And while it is critical to have dedicated leaders, it is also important that advancing equity be considered everyone’s responsibility and be embedded in the culture.

People and Culture: Building and Supporting a Diverse, Local, Culturally Competent Clinical Workforce

BIPOC have better engagement with their health care and better outcomes when their caregivers share some aspect of race or ethnicity. For instance, studies have shown that BIPOC are more likely to follow preventive care recommendations¹² and adhere to medications¹³ and have lower rates of infant mortality¹⁴ if their provider shares some aspect of race or ethnicity. Building a clinical workforce that is more representative of the patient population is part of the solution to reducing health disparities and, as more research is showing, improving business performance too.¹⁵ Achieving greater diversity requires the development of institutional policies on DEI; a commitment to antiracist hiring, retention and promotion strategies; and, importantly, a culture of inclusion.

a. Strengthen Diversity Recruitment Efforts

AMCs should review their recruitment strategies and pipelines for ways to connect with diverse candidates. Strategies might include:

- Developing relationships with historically Black colleges and universities (HBCUs) and public universities to diversify the candidate pool
- Setting diversity expectations for the interview pool
- Training interviewers on implicit bias
- Modifying the interview process to eliminate the risk of bias
- Setting and tracking recruitment metrics at every step of the process to ensure diverse candidates are progressing through the pipeline (e.g., diversity of the candidate pool, the interview pool, those extended offers, those who accept)

Setting quantitative targets can help drive change, but attainment is only meaningful if the diverse hires feel safe, included and able to grow their careers—hence the need for retention and leadership development programs.

b. Enhance Diversity Retention and Leadership Development Programs

For AMCs, like many organizations, diversity rates decline at the higher echelons of the organization. Medical school faculty are predominantly white males, especially so at the professor and associate professor ranks.¹⁶ And a study of 16 medical specialties showed that Black and Hispanic individuals have become less represented in faculty positions in AMCs in recent years compared with 1990, across all ranks and specialties, except for Black women in obstetrics and gynecology.¹⁷ There are a variety of strategies that can support greater retention and promotion of diverse talent, including:

- Creating expertly facilitated employee affinity groups
- Elevating and appropriately resourcing DEI initiatives on par with other major strategic initiatives
- Instilling a culture and expectation of sponsorship (versus mentorship) among senior leaders
- Updating the review process to recognize diverse staff for their leadership in organization-sponsored diversity efforts (these efforts have historically gone under-resourced and unrecognized¹⁸) and to value the research efforts of faculty who study health disparities on par with those who study more traditional biomedical fields

c. Shape an Inclusive Culture Through Mandatory Training and Facilitated Conversations About Cultural Competency, Humility and Implicit Bias

An [event that received national media attention](#)—in which a Black physician diagnosed with COVID-19 complained her white physician was not appropriately treating her pain—brought into sharp focus two longstanding problems: that Black pain is treated differentially than white pain and, more generally, that physicians harbor false beliefs about biological differences between Black people and white people. In fact, a meta-analysis of 20 years of studies found that Black/African American patients were 22% less likely than white patients to receive pain medication. Unchecked, these false beliefs lead to very real differences in health outcomes, and AMCs must ensure they are not perpetuated within their walls. AMCs must engage in training and ongoing conversations to deliberately shape a more inclusive, culturally competent, and culturally humble work force.

Data and Analytics: Measuring Progress and Community Impact

“Researchers and clinicians must distinguish between the use of race in descriptive statistics, where it plays a vital role in epidemiologic analyses, and in prescriptive clinical guidelines, where it can exacerbate inequities.”¹⁹

a. Refine the Data Collection and Reporting Tools to Support Goal Setting and Tracking of Equity Measures, in support of:

- Embedding health equity metrics into quality improvement strategy ([Care Delivery Strategy \(a\)](#))

- Adjusting performance dashboards and compensation models to promote equity ([Leadership and Governance Strategy \(b\)](#))

AMCs have the opportunity to refine their data collection and reporting tools to support goal setting and tracking of equity measures and the delivery of culturally competent care. For example, after Northwell Health launched REAL data collection, use of translation services increased 465% between 2009 and 2018; and Northwell has made 119 vital documents available in 22 languages, large print and braille to better support the identified needs of its patients.

Refining data collection and reporting tools will require overcoming a variety of challenges—including, at best, a lack of understanding and, at worst, a lack of trust—for patients to disclose REAL data to health care providers. The data collection tools themselves may be imperfect and require attention—to allow for the breadth of possible racial and ethnic definitions that describe our increasingly diverse population²⁰ and to ensure the interoperability needed for analysis and design of effective solutions.²¹

b. Harness the Power of Big Data, Artificial Intelligence (AI) and Machine Learning (ML) to Root Out Bias in Health Care

AMCs—often part of larger universities with computer engineering and informatics programs—are at the leading edge of using big data to develop algorithms for more rapid diagnosis and treatment. The value of big data analytical tools depends on the data used to train them, and algorithms trained using inaccurate, poor quality or nondiverse data will yield erroneous results and reinforce biases in care delivery.²² Best practices in preventing bias in AI and ML include:

- **Collecting robust and representative data** by including a diverse range of race, gender and geographies to avoid biased algorithms
- **Practicing data diligence when building analytical tools** by learning the data source, how the data was collected, what it was originally collected for and whether certain populations may not be represented in the dataset
- **Making algorithms transparent** so that users of analytical tools can assess models to understand and validate underlying assumptions to prevent perpetuation of inherent bias
- **Testing data and algorithms in the real world and measuring results against equity criteria**, such as false negative and false positive distribution among demographic groups or the proportion of each demographic group that is assigned to a treatment

The Hastings Center is currently building an ethics framework for biomedical data modeling that should help health systems and researchers ensure their AI and ML efforts do not inadvertently exacerbate inequities in health care.²³

External Strategies

Purchasing Power: Embracing the Anchor Institution Role to Build Community Wealth

AMCs have the ability to use their purchasing and investing power as major regional economic engines to impact their communities for the better. Many are embracing their role as “[anchor institutions](#)”—that is, “large, usually nonprofit organizations tethered to their communities [... that] have significant economic and social impact on their communities, and [...] also have an economic self-interest in making sure these communities are healthy and safe.”²⁴ Several specific strategies are required.

a. Establish Requirements and Targets for Hiring Locally

Health care systems often face shortages of skilled providers, while members of their communities may struggle to find employment that offers skill building and a path out of poverty. By making a commitment to hiring and training local community members to serve in skilled labor roles in the health system, AMCs can achieve the dual objectives of meeting their workforce needs and enabling community skill and wealth building.

b. Work With Local Vendors and Minority-Owned Businesses

Public institutions, including state-funded public university health systems, have been leading the way in building into their procurements more explicit requirements that vendors have diverse teams and/or be women- or minority-owned businesses. Private AMCs can follow suit.

c. Partner With Other Anchor Organizations in the Community to Align Wealth-Building Initiatives

As an example, in 2017, major academic, county, and community health systems and community clinics in Chicago formed a collaborative called [West Side United](#) to coordinate community engagement and build community health and economic wellness. To date, the collaborative has coordinated \$6.5 million in impact investments into Chicago’s West Side.²⁵

From Community Benefit to Community Partnership: Building Long-Term, Bidirectional, Trusting Relationships

As nonprofits, AMCs' tax-advantaged status carries with it a duty to reinvest in communities, and for many AMCs, the community benefit program is the primary vehicle for addressing health disparities. More AMCs are recognizing the opportunity to use their community benefit programs and community health needs assessments (CHNAs) as vehicles for developing longer-term, bidirectional, trusting relationships with community stakeholders. Specifically, AMCs should consider opportunities to:

a. **Develop Partnerships With Community-Based Organizations to Address Unmet Social Needs**

Access to stable housing, healthy foods, safe neighborhoods, reliable transportation, educational resources and other nonmedical drivers of health—often called social determinants (or, more recently, “drivers”) of health (SDOH)—have a profound impact on health and longevity, driving as much as 80% of health outcomes. By assessing unmet social needs, and connecting patients to community resources, AMCs can support upstream solutions that can mitigate the downstream impacts on health they encounter when patients present in their clinics and emergency rooms. As one example, in 2015, the University of Illinois partnered with the nonprofit Center for Housing and Health to reduce health care costs and improve the health of individuals who are chronically homeless by providing them with stable housing. The program has housed 75 individuals and resulted in significant reductions in emergency room utilization (41%) and health care-associated cost (21%) for those who have been housed.

b. **Engage in Co-Design With Communities to Address Issues Identified by Community Needs Assessments**

The Affordable Care Act requires all nonprofit hospitals to submit a CHNA every three years. Some AMCs have approached this requirement as a “check the box” exercise, while others have used it as an opportunity to partner with Federally Qualified Health Centers (held to a comparable requirement) to work collaboratively to assess needs, engage the community in co-designing solutions to issues surfaced and coordinating implementation efforts. For example, Howard University, in conjunction with other local hospitals and Federally Qualified Health Centers, formed the DC Health Matters Collaborative to combine efforts and resources to assess and address community needs. Once community-defined needs are identified, the DC Health Matters Collaborative uses a prioritization process to rank areas of need based on four factors: importance to the community, capacity to address the issue, alignment with the mission of member organizations, and strength of existing interventions and collaborations.²⁶

c. **Invest in Social Determinants of Health (SDOH) Programs and Measure Impact**

Some health systems are investing directly in the built environment that impacts health outcomes in their communities. For example, University of Alabama at Birmingham (UAB) is launching a Healthy Alabama 2030 initiative, designed to move Alabama from the bottom ten in national health system rankings and make Alabama a model of healthy living by expanding proven innovations and changing policies, neighborhoods, schools and workplaces. Investments will be made via a public-private partnership model.²⁷

Policy/Government Relations: Advocating for Equity-Driven Policies

AMCs can make great strides within their organizations and in partnership with communities in advancing health equity, but they are one part of a large interdependent health care ecosystem and federal, state and local policies outside of their direct control are also major contributors to health inequities. As such, they must use their political power to:

a. Advocate for Universal Coverage

People of color are more likely to be uninsured, which is associated with underutilization of necessary preventive and treatment services. Health coverage is a necessary first step in promoting access to care but on its own is not sufficient. Despite gains in health coverage thanks to the Affordable Care Act, racial and ethnic disparities in health access, care and outcomes persist even when controlling for socioeconomic status (e.g., education, income).

b. Advocate for Equitable Coverage Design

Elements of every single health policy—including eligibility criteria, enrollment requirements, services and treatments covered, and cost-sharing requirements—have the potential to reinforce structural racism. State and federal policymakers should be urged by AMCs to bring an equity lens to coverage design policies by looking closely at the data about whom their programs cover and access and outcomes metrics by racial, ethnic and other demographics in order to surface potential biases.

c. Advocate for New Reimbursement Models That Support Equitable Care Delivery

Ideally, moving to value-based payment over the past ten years would have promoted health equity, but there is evidence that it did not.²⁸ Health equity must therefore be a more explicit objective of reimbursement policies. Today, reimbursement varies considerably across Medicaid, Medicare and commercial insurance. Until those differences in reimbursement are negligible—and in particular, until Medicaid reimbursement is sufficient to cover reasonable costs—providers will be hard-pressed to have truly payer-blind access policies.

Importantly, it is through collective action that AMCs can best amplify their advocacy efforts, with the [Association of American Medical Colleges \(AAMC\)](#) being a vehicle for that collective voice. The AAMC was an early and strong proponent of the Affordable Care Act, which extended health insurance to over 30 million people.²⁹ More recently, the AAMC released a ten-point plan to support “[A Healthier Future for All](#)” that calls for improving access to health care for all.

Conclusion

By implementing a broad-based health equity action agenda—across all three missions, within their organizations and in partnership with their communities—AMCs can lead the way to a more just and equitable delivery system. Importantly, though, direct action must also be coupled with advocacy for changes to the structural policies that engrain racial inequities in the health care delivery system. Until more equitable access to health insurance and more equitable reimbursement policies are secured, AMCs can mitigate, but not eliminate, disparities in access to and outcomes of care.

Lever		Strategies for Advancing Health Equity
Mission-Specific Strategies	Education	<ul style="list-style-type: none"> a. Invest in educational pathways b. Bring an equity lens to the admissions process c. Support underrepresented minorities in funding their training d. Bring an equity lens to the curriculum e. Support the retention and advancement of diverse faculty (see Internal Strategies → People and Culture → (b))
	Research	<ul style="list-style-type: none"> a. Invest in the science of health disparities intervention b. Engage in community trust-building activities to achieve greater diversity in clinical trials c. Engage in community-based participatory research and co-design
	Care Delivery	<ul style="list-style-type: none"> a. Embed health equity metrics into quality improvement strategy and set bold goals on eliminating disparities b. Eliminate race-based adjustments that have no medical basis from clinical decision support algorithms c. Bring an equity lens to care delivery processes and access strategies (sites of care, payer contracting strategies) d. Screen patients for unmet social needs and connect to community resources
Internal Strategies	Leadership and Governance	Board and leadership team to: <ul style="list-style-type: none"> a. Define, and affirm importance of, health equity for the organization b. Adjust performance dashboards and compensation models to promote equity c. Diversify the board and leadership teams d. Ensure leaders of equity initiatives are appropriately recognized and resourced
	People and Culture	<ul style="list-style-type: none"> a. Strengthen diversity recruitment efforts (see External Strategies → Purchasing Power) b. Enhance diversity retention and leadership development programs c. Shape an inclusive culture through mandatory training and facilitated conversations about cultural competency, humility and implicit bias
	Data and Analytics	<ul style="list-style-type: none"> a. Refine the data collection and reporting tools to support goal setting and tracking of equity measures in support of other strategies, e.g., <ul style="list-style-type: none"> ▪ Care Delivery Strategy (a) Embed health equity metrics into quality improvement strategy ▪ Governance Strategy (b) Adjust performance dashboards and compensation models to promote equity b. Harness the power of big data, AI and ML to root out bias in health care
External Strategies	Purchasing Power	<ul style="list-style-type: none"> a. Establish requirements and targets for hiring locally b. Establish requirements and targets for working with local vendors and minority-owned businesses c. Partner with other anchor organizations in the community to align wealth-building initiatives
	From Community Benefit to Community Partnership	<ul style="list-style-type: none"> a. Develop partnerships with community-based organizations to address unmet social needs b. Engage the community in co-designing solutions to issues identified by CHNA c. Invest in SDOH programs and measure impact
	Policy/Government Relation	<ul style="list-style-type: none"> a. Advocate for universal coverage b. Advocate for equitable coverage design c. Advocate for new reimbursement models that support equitable care delivery

¹ For more on the topic of complicity, see Dr. Mark Smith's address, "[What Can We Do To Help?](#)"

² Washington, Harriet. *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present*. New York: Doubleday, 2006.

³ "Diversity in Medicine: Facts and Figures 2019." AAMC. Accessed August 14, 2020. <https://www.aamc.org/data-reports/workforce/report/diversity-medicine-facts-and-figures-2019>.

⁴ "Current Trends in Medical Education." AAMC Diversity Facts and Figures 2016. Accessed August 14, 2020. <https://www.aamcdiversityfactsandfigures2016.org/report-section/section-3/>.

⁵ Startups are emerging to simplify the process for universities to connect students to emergency funds and resources that can make the difference between staying enrolled and dropping out. See, for example, Edquity (www.edquity.co), which administers emergency cash grants in partnership with universities and provides social service referrals for students dealing with financial insecurity.

⁶ Sabin, Janice A. "How We Fail Black Patients in Pain." AAMC, January 6, 2020. <https://www.aamc.org/news-insights/how-we-fail-black-patients-pain>.

⁷ Dr. Mark Smith's 2020 address, "[What Can We Do To Help?](#)"

⁸ Vyas, Darshali A., Leo G. Eisenstein, and David S. Jones. "Hidden in Plain Sight - Reconsidering the Use of Race Correction in Clinical Algorithms." *New England Journal of Medicine*, August 27, 2020. <https://doi.org/10.1056/nejmms2004740>.

⁹ Papadopoulos, Kosmas, and Subodh Mishra. "U.S. Board Diversity Trends in 2019." The Harvard Law School Forum on Corporate Governance, June 18, 2019. <https://corpgov.law.harvard.edu/2019/06/18/u-s-board-diversity-trends-in-2019/>.

¹⁰ "Hospital Boards Still Playing Catch-up on Diversity." *Modern Healthcare*, April 12, 2014.

¹¹ For examples, see:

- Cyrus, Kali. "Why I Gave up My Dream of Leading Diversity Efforts in Medicine." AAMC, August 10, 2020. <https://www.aamc.org/news-insights/why-i-gave-my-dream-leading-diversity-efforts-medicine>.
- Blackstock, Uché. "Why Black Doctors like Me Are Leaving Faculty Positions in Academic Medical Centers." STAT, January 16, 2020. <https://www.statnews.com/2020/01/16/black-doctors-leaving-faculty-positions-academic-medical-centers/>.

¹² Alsan, Marcella, Owen Garrick, and Grant Graziani. "Does Diversity Matter for Health? Experimental Evidence from Oakland." Stanford Institute for Economic Policy Research, September 2018. <https://siepr.stanford.edu/sites/default/files/publications/18-030.pdf>.

¹³ Traylor, Ana H., Julie A. Schmittdiel, Connie S. Uratsu, Carol M. Mangione, and Usha Subramanian. "Adherence to Cardiovascular Disease Medications: Does Patient-Provider Race/Ethnicity and Language Concordance Matter?" *Journal of General Internal Medicine* 25, no. 11 (June 23, 2010): 1172–77. <https://doi.org/10.1007/s11606-010-1424-8>.

¹⁴ Greenwood, Brad N., Rachel R. Hardeman, Laura Huang, and Aaron Sojourner. "Physician–Patient Racial Concordance and Disparities in Birthing Mortality for Newborns." *Proceedings of the National Academy of Sciences* 117, no. 35 (July 16, 2020): 21194–200. <https://doi.org/10.1073/pnas.1913405117>.

¹⁵ Dixon-Fyle, Sundiatu, Kevin Dolan, Vivian Hunt, and Sara Prince. "Diversity Wins: How Inclusion Matters." McKinsey & Company, May 19, 2020. <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-how-inclusion-matters>.

¹⁶ "Diversity in Medicine: Facts and Figures 2019." AAMC. Accessed August 14, 2020. <https://www.aamc.org/data-reports/workforce/report/diversity-medicine-facts-and-figures-2019>.

¹⁷ Lett, Lanair Aamad, Whitney U. Orji, and Ronnie Sebro. "Declining Racial and Ethnic Representation in Clinical Academic Medicine: A Longitudinal Study of 16 US Medical Specialties." *PLOS ONE* 13, no. 11 (November 16, 2018). <https://doi.org/10.1371/journal.pone.0207274>.

¹⁸ Page, Kathleen Raquel, Laura Castillo-Page, and Scott M. Wright. "Faculty Diversity Programs in U.S. Medical Schools and Characteristics Associated with Higher Faculty Diversity." *Academic Medicine: Journal of the Association of American Medical Colleges*. U.S. National Library of Medicine, October 2011. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3184185/#R6>.

¹⁹ Vyas, Darshali A., Leo G. Eisenstein, and David S. Jones. "Hidden in Plain Sight - Reconsidering the Use of Race Correction in Clinical Algorithms." *New England Journal of Medicine*, August 27, 2020. <https://doi.org/10.1056/nejmms2004740>.

²⁰ The Nation Is Diversifying Even Faster than Predicted, According to New Census Data." Brookings, July 1, 2020. <https://www.brookings.edu/research/new-census-data-shows-the-nation-is-diversifying-even-faster-than-predicted>.

²¹ McAvey, Kevin. "Investing In The Data Systems We Need To Create The Health System We Deserve." Web log. *Health Affairs* (blog), June 4, 2021. <https://www.healthaffairs.org/doi/10.1377/hblog20210528.555489/full/>.

²² For examples of how bias is embedded in clinical decision support tools, see [Care Delivery Strategy \(b\): Eliminate Race-Based Adjustments That Have No Medical Basis From Clinical Decision Support Algorithms](#).

²³ "Building an Ethics Framework for Biomedical Data Modeling." The Hastings Center, January 20, 2021. <https://www.thehastingscenter.org/who-we-are/our-research/current-projects/big-data-in-health-care/>.

²⁴ Weinstein, James N., Amy (Amy B.) Geller, Yamrot Negussie, and Alina Baciu, eds. "Communities in Action: Pathways to Health Equity." *National Academies of Sciences, Engineering, and Medicine*, 2017. <https://doi.org/10.17226/24624>.

²⁵ "Our Impact." West Side United, June 30, 2021. Accessed June 21, 2021. <https://westsideunited.org/our-impact/>.

²⁶ "About Us." DC Health Matters. Accessed June 21, 2021. <https://www.dchealthmatters.org/tiles/index/display?alias=aboutus>.

²⁷ Windsor, Matt. "Healthy Alabama 2030 Team Charts Changes to Lift State Rankings." UAB Reporter. The University of Alabama at Birmingham, April 4, 2019. <https://www.uab.edu/reporter/know-more/research/item/8673-healthy-alabama-2030-team-charts-changes-to-lift-state-rankings>.

²⁸ Liao, Joshua, Risa Lavizzo-Mourey, and Amol Navathe. "A National Goal to Advance Health Equity Through Value-Based Payment." *JAMA* 325, no. 24 (June 4, 2021): 2439–40. <https://doi.org/10.1001/jama.2021.8562>.

²⁹ "New HHS Data Show More Americans than Ever Have Health Coverage through the Affordable Care Act: 31 Million People Currently Enrolled in Marketplace or Medicaid Expansion." *HHS.gov*, June 5, 2021. U.S. Department of Health & Human Services. <https://www.hhs.gov/about/news/2021/06/05/new-hhs-data-show-more-americans-than-ever-have-health-coverage-through-affordable-care-act.html>.

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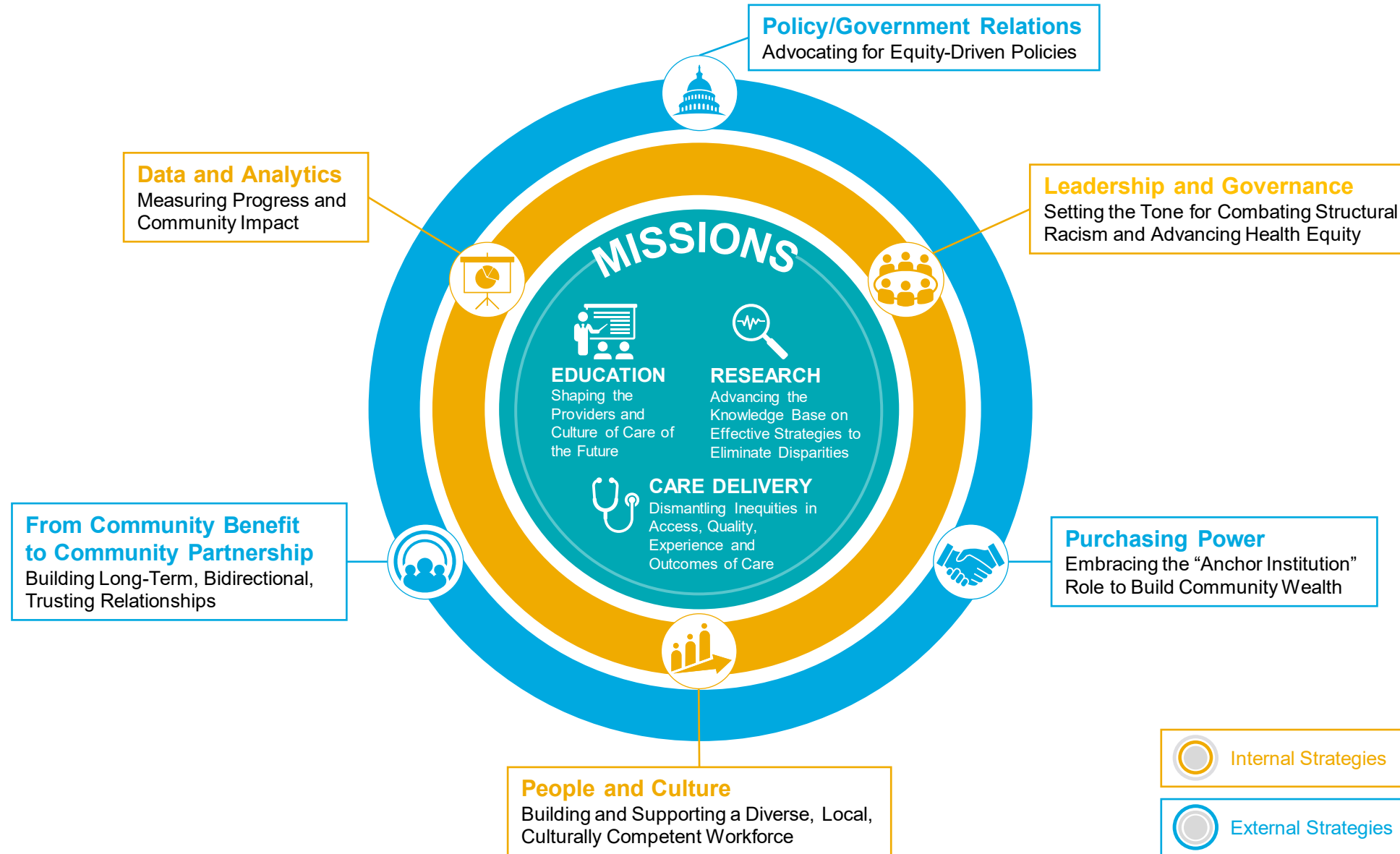
San Francisco




Washington, D.C.

AMC Levers for Advancing Health Equity

- As the country re-emerges from a pandemic that has had a disproportionate impact on communities of color, academic medical centers (AMCs) are shifting out of crisis-response mode and reflecting on opportunities to intentionally promote equity across their tripartite mission, advance anti-racist policies, and bring science to bear on the challenge of eliminating health disparities in access to and outcomes of care. Organizations are at various stages of dialogue and engagement on the topic, with many having a long history of engagement, others renewing their commitment and others just starting the conversation.
- The framework and case studies herein are intended to support AMCs on that journey by describing strategies in nine areas of focus that can position AMCs to be leaders in eliminating disparities in their organizations and their communities. It is organized around mission-specific strategies (Education, Research and Clinical Care), internal strategies (Leadership and Governance, People and Culture, and Data and Analytics) and external strategies (Purchasing Power, Community Partnership, and Policy and Government Relations) and highlights successful initiatives around the country.
- By implementing and resourcing a broad-based health equity action agenda—within their organizations and in partnership with their communities—AMCs can lead the way to a more just and equitable delivery system.
- Profile Methodology:
 - The profiles are meant to be illustrative, not comprehensive. Many of the AMCs profiled are engaging in health equity initiatives and diversity, equity, inclusion and justice activities beyond those for which they are spotlighted in this report.
 - Profiles were developed using publicly available materials

AMC Levers for Advancing Health Equity



 Education Shaping the Providers and Culture of Care of the Future	 Research Advancing the Knowledge Base on Effective Strategies to Eliminate Disparities	 Care Delivery Dismantling Inequities in Access, Quality, Experience and Outcomes of Care
<ul style="list-style-type: none"> a. Invest in educational pathways b. Bring an equity lens to the admissions process c. Support people who are underrepresented in medicine in funding their training d. Bring an equity lens to the curriculum e. Support the retention and advancement of diverse faculty (see Internal Strategies → People and Culture → (b)) 	<ul style="list-style-type: none"> a. Invest in the science of health disparities intervention b. Engage in community trust-building activities to achieve greater diversity in clinical trials c. Engage in community-based participatory research and codesign 	<ul style="list-style-type: none"> a. Embed health equity metrics into quality improvement strategy and set bold goals on eliminating disparities b. Eliminate race-based adjustments that have no medical basis from clinical decision support algorithms c. Bring an equity lens to care delivery processes and access strategies (sites of care, payer contracting strategies) d. Screen patients for unmet social needs and connect to community resources



Leadership and Governance

Setting the Tone for Combating Structural Racism and Advancing Health Equity

- Board and leadership team to:
- a. Define, and affirm importance of, health equity for the organization
 - b. Adjust performance dashboards and compensation models to promote equity
 - c. Diversify the board and leadership teams
 - d. Ensure leaders of equity initiatives are appropriately recognized and resourced



People and Culture

Building and Supporting a Diverse, Culturally Competent Workforce




- a. Strengthen diversity recruitment efforts (See External Strategies → Purchasing Power)
- b. Enhance diversity retention and leadership development programs
- c. Shape an inclusive culture through mandatory training and facilitated conversations about cultural competency, humility and implicit bias



Data and Analytics

Measuring Progress and Impact

- a. Refine the data collection and reporting tools to support goal setting and tracking of equity measures in support of other strategies, e.g.,
 - Care Delivery Strategy (a) Embed health equity metrics into quality improvement strategy
 - Governance Strategy (b) Adjust performance dashboards and compensation models to promote equity
- b. Harness the power of big data, AI and ML to root out bias in health care

 Purchasing Power Embracing the “Anchor Institution” Role to Build Community Wealth	 From Community Benefit to Community Partnership Building Long-Term, Bidirectional, Trusting Relationships	 Policy/Government Relations Advocating for Equity-Driven Policies
<ul style="list-style-type: none">a. Establish requirements and targets for hiring locallyb. Establish requirements and targets for working with local vendors and minority-owned businessesc. Partner with other anchor organizations in the community to align wealth-building initiatives	<ul style="list-style-type: none">a. Develop partnerships with community-based organizations to address unmet social needsb. Engage the community in codesigning solutions to issues identified by community health needs assessments (CHNAs)c. Invest in Social Drivers of Health (SDOH) programs and measure impact	<ul style="list-style-type: none">a. Advocate for universal coverageb. Advocate for equitable coverage designc. Advocate for new reimbursement models that support equitable care delivery

Definitions: Health Equity, Disparities, Inequities

Health Equity	Health Disparities	Health Inequities
<p>Means that everyone has a fair and just opportunity to attain their optimal health regardless of race, ethnicity, disability, gender identity, sexual orientation or socioeconomic status. Advancing health equity is a process of addressing limited access to economic resources, education, housing, etc.</p>	<p>Are avoidable differences in health outcomes experienced by people with one characteristic (race, gender, sexual orientation) as compared to the socially dominant group (e.g., white, male, cisgender and heterosexual). Measuring disparities can help benchmark progress toward equity.</p>	<p>Are differences that are unfair and unjust without comparison to another group (e.g., inequitable access to transportation means there is an unjust lack of transportation for the population being discussed; a disparity in access to transportation means that one group has less access than another).</p>

“Advancing Health Equity.”
Giving everyone the **opportunity** to be healthy, recognizing that many factors impact health.

“Addressing Health Disparities.” Working toward eliminating differences in health **outcomes** between racial or ethnic groups.

Inequities are unfair and unjust without comparison; **disparities** focus on differences between groups.

Source: Health Equity Solutions, Draft State Health and Value Strategies Internal Health Equity Language Guide.

Social Drivers of Health

The daily context in which people live, work, play, pray and age and that affect health. Social drivers of health encompass multiple levels of experience from factors such as socioeconomic status, education or employment (social risk factors) to the macro-level structural and environmental factors such as structural racism and poverty created by economic, political and social policies.

Race, Racism and SDOH

People of color experience health disparities even after controlling for economic and environmental factors.

Example: Maternal Mortality.

The maternal mortality rate for “black women with at least a college degree was 5 times as high as white women with a similar education” ([CDC](#)).

People of color are disproportionately impacted by the social and economic factors that affect health outcomes.

Example: COVID-19.

People of color have been disproportionately impacted by both the economic and health effects of COVID-19.

Addressing social drivers of health is an important part of larger efforts to promote health equity.

Source: Health Equity Solutions, Draft State Health and Value Strategies Internal Health Equity Language Guide. CDC, “Infographic: Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016.” <https://www.cdc.gov/reproductivehealth/maternal-mortality/disparities-pregnancy-related-deaths/infographic.html>.

Mission-Specific Strategies

Education

Research

Care Delivery

Invest in Educational Pathways

9



Issue

Black, Indigenous and People of Color (BIPOC) have better engagement with their health care and better outcomes when their caregivers share some aspect of race or ethnicity. AMC workforces are often not representative of the community they serve. A step to greater representation in the workforce is investing in programs that support students who are underrepresented in medicine to build up the foundational science and academic skills required to pursue higher education in health care.

Approach

The CURE (Continuing Umbrella of Research Experiences) program was established nationally in 1999 as part of the National Cancer Institute's effort to support underrepresented students in biomedical research and career development.

The University of Maryland Baltimore CURE Scholars Program exposes students, as early as middle school, to STEM (science, technology, engineering and math) programs and career development opportunities with the goal of exciting a new generation to work as health care providers and biomedical researchers.

The CURE Scholars Program has pioneered programming for middle school students, introducing them to STEM subjects through hands-on science workshops, field trips and experiments.¹

Results

The first CURE Scholars Program cohort, enrolled in 2015, is now entering 11th grade. The cohort's retention rate each year is above 80%.²

At the middle school level, participants have demonstrated improved academic results. When stratified by school, math performance improved by 61%–64% and reading performance improved by 25%–50%. At the high school level, 41% of participants have a 3.0 GPA or better.³

The program has recruited nearly 300 volunteers who teach and mentor participating students. Each participant has five mentors to guide them through the program's curriculum.²

Bring an Equity Lens to the Admissions Process

10



THE OHIO STATE UNIVERSITY

COLLEGE OF MEDICINE

Issue

The medical school admissions process can be subject to bias. Admissions processes should be reviewed to ensure that diverse candidates are being included for consideration.

In 2012, the Ohio State University (OSU) College of Medicine had all 140 of its admissions committee members complete implicit association tests (IATs). Committee members took race, heterosexual-homosexual and sex-career tests, which revealed implicit preference for white race, heterosexual and male individuals.^{4,5}

Approach

Based on the 2012 IAT results, OSU College of Medicine implemented the following strategies to reduce bias in the admissions process:⁶

- Applicant photos and academic metrics are removed from applications prior to review by the admissions committee.
- Admissions committee members participate in annual case-based implicit bias mitigation workshops.
- Committee members take IATs prior to interviewing candidates. It is expected that committee members will take at least two IATs prior to interviewing candidates.
- Committee members are given an implicit bias reduction cheat sheet, containing strategies to reduce implicit bias, to review immediately prior to interviewing candidates.

Results

During the 2012–2013 admission cycle, when the IAT strategy was implemented, the number of students underrepresented in medicine enrolled at OSU College of Medicine increased from 17% to 20%.⁷

In 2021, OSU was ranked the seventh most diverse medical school in the nation by U.S. News and World Report with 26% of the students being underrepresented in medicine for incoming class for the 2021-2022 school year. The College of Medicine is ranked second in the nation for highest percentage of African American students (excluding HBCUs).⁸

Support People Who Are Underrepresented in Medicine in Funding Their Training

11

Stanford Medicine

Issue

Students who are underrepresented in medicine are less likely to have the financial resources to pursue a medical education. Scholarships, access to emergency funding to overcome financial challenges, and debt forgiveness can help students complete their education.⁹

Despite numerous debt alleviation programs at Stanford, the average medical school student graduates with \$89,000 of debt.¹⁰

Approach

In 2019, a donor made a \$55 million donation aimed at eliminating medical school debt for qualified incoming students; through matching and other donations the funding pool has grown to \$90 million.¹¹

Stanford is using the funds to:

- Support access to medical education for students from low- and middle-income backgrounds who may not have been able to consider it before due to socioeconomic status.
- Eliminate the financial burden that pushes students away from less lucrative specialties.¹⁰

Results

Stanford reports that these funds may already have an impact on student body diversity. The Stanford Medical School class of 2019 was the first to receive the enhanced funds and was reported to be one of the school's most diverse cohorts.¹⁰

Twenty-three members of the 90-person class of 2019 (25.5%) come from groups that are traditionally underrepresented in medicine.¹⁰

Bring an Equity Lens to the Curriculum

12

Issue

A significant portion of medical school students espouse false beliefs about the biological differences between black people and white people and are unaware of their implicit biases.¹²

Approach

Medical schools are updating their curricula to dispel these beliefs and bring an equity lens to medical education.



In 2020, the Bridges curriculum expanded the social justice efforts to include comprehensive anti-oppressive strategies and devised a systematic strategy to support review of classroom didactic materials and simulated patient cases to eliminate bias and stereotyping, using contemporary views on the impact of structural racism on health and healthcare.¹³

Enhanced Faculty Development by training >3000 faculty and staff, including all educational program, course and clerkship directors in a 6-hour skill building workshop on allyship and equity and inclusion topics.¹⁴

UCSF SOM is engaging in a variety of other initiatives to advance its goal of becoming the most diverse, equitable and inclusive academic medical system in the country—including diversifying faculty and leadership, and supporting, through a \$100M scholarship fund, the recruitment and matriculation of students who are underrepresented in medicine.^{15, 16}



Boston University School of Medicine

In May 2019, Boston University's School of Medicine (BUSM) commissioned the formation of the Vertical Integration Group. The VIG is comprised of students and faculty who conducted a thorough analysis on how systemic racism has influenced the curriculum and cultural climate of the school.

Result: VIG findings were used to support the Medical Education Office's efforts to create a longitudinal health equity curriculum that will be integrated into the standard medical school curriculum in 2022. BUSM views the redesign of the medical curriculum as an innovative way to create greater equity in health care.¹⁷

The University of Texas at Austin Dell Medical School

Beginning in 2022, University of Texas Dell Medical School will add health equity as an eighth core competency of the medical school curriculum. In the health equity core competency, student will learn about the history of discrimination, how to recognize structural and social determinants of health, and structures of oppression within medicine.

Students will also learn how to identify their own biases and privileges, how to build relationships with diverse groups, and how to work in community-based partnerships. Students will also be taught how to advocate for inclusion and intervene when they see discrimination.¹⁴

Support the Retention and Advancement of Diverse Faculty

13

University of North Carolina (UNC) School of Medicine

Issue

In recent years, Black and Hispanic individuals have become more underrepresented in faculty positions at AMCs when compared to 1990.¹⁹

While programming existed at the University of North Carolina (UNC) School of Medicine (SOM) to support the recruitment, retention and development of diverse talent, the SOM's 2012 strategic plan aimed to achieve more diversity in top leadership and middle management positions.²⁰

Approach

UNC SOM launched the Academic Career Leadership Academy in Medicine (ACCLAIM) program in 2018 for female and underrepresented faculty.

The one-year program utilizes a cohort model, creating a collaborative learning environment that facilitates knowledge sharing among participants.

The ACCLAIM programming includes leadership and management development training; mentoring toward tenure or promotion; strategic career counseling; networking opportunities; enhanced strategic thinking; problem solving and negotiation skills; and the completion of a yearlong, mentored administrative project within the Dean's Office.²¹

Results

By 2018, 72 early-to-mid-career faculty members had completed the ACCLAIM program.

- 97% of participants have taken on new leadership opportunities since being in the program.
- 40% of ACCLAIM participants had advanced in professional rank.²¹

SOM leadership from faculty underrepresented in medicine increased by 2% from the school's 2019 reporting period to its 2020 period.²²

Invest in the Science of Health Disparities Intervention

14

Numerous academic medical centers have founded dedicated centers for health equity research and intervention.

Florida-California Health Equity Center

FL-CA Cancer Research, Education and Engagement (CaRE 2) Health Equity Center²³

Founded: 2018 as an initiative of Florida A&M University, University of Florida and USC Norris Comprehensive Cancer Center

Mission: Eliminate cancer health disparities among Blacks and Latinos living in California and Florida and contribute to paving the way to eliminate disparities in these populations across the United States.

Areas of Research Focus: Reducing cancer disparities among Blacks and Latinos.²³



Center for Health Equity Research Chicago

Founded: 2017

Mission: Make transformative contributions toward the elimination of structural violence through collaborative community partnerships, innovative research, and development and growth of researchers.²⁴

Areas of Research Focus: Social, economic, psychosocial, behavioral and biophysical processes linking structural violence and health equity.²⁵

Johns Hopkins Medicine

Center for Health Equity

Founded: 2010

Mission: To make health care institutions more equitable, communities more engaged, and health policies and practices more effective so as to eliminate disparities in health and health care in Baltimore, the United States and the world.

Areas of Research Focus: Intervention studies to improve the identification, treatment and outcomes of patients with chronic conditions.²⁶

Mayo Clinic

Center for Health Equity and Community Engagement Research

Founded: 2019

Mission: Develop and execute collaborative community-based research to address the most pressing health issues in the community, promoting disease prevention related to health disparities, rural health and social determinants of health.

Areas of Research Focus: Disparity-related health promotion and disease prevention, community-engaged research, rural health and SDOH.²³

Invest in the Science of Health Disparities Intervention

15

Other academic medical centers have founded centers that incorporate, and expand beyond, health equity research and intervention.

Henry Ford Health System

Institute on Multicultural Health

Founded: 1990s

Mission: Develop innovative approaches to providing quality health care to underrepresented racial and ethnic populations affected by serious and chronic medical conditions.

Areas of Research Focus: Early diagnosis and treatment of diseases, quality health care to underrepresented racial and ethnic populations.²⁸

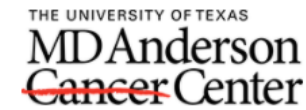


Center for Reducing Health Disparities

Founded: 2005

Mission: Promote the health and well-being of diverse communities by pursuing research, training, continuing education, technical assistance and information dissemination within a prevention, early intervention and treatment framework that recognizes the unique cultural and linguistic contexts of these populations.

Areas of Research Focus: Prevention and early intervention, culturally and linguistically appropriate services, and mental health.³⁰



Center for Community-Engaged Translational Research

Founded: 2010

Mission: Helps investigators implement their research in community settings and supports the recruitment and retention of minorities and women to clinical trials.

Areas of Research Focus: Innovative research areas, including physical activity and cancer prevention, lung cancer screening, treatment decision making, smoking cessation, obesity and community health.²⁹

New York-Presbyterian Dalio Center for Health Justice

Center for Health Justice

Founded: 2020

Mission: Our goal is to contribute to equal health care and equal education because we believe that these are the most fundamental building blocks of equal opportunity and a just society.

Areas of Research Focus: Health justice and health disparities of employees, patients and communities; SDOH; unconscious bias in medicine and clinical trials.³¹

Engage in Community Trust-Building Activities to Achieve Greater Diversity in Clinical Trials

16



Issue

Many AMCs seek clinical trial participation rates that are representative of their general patient population and community served, but due to a variety of challenges—including the historic mistrust from BIPOC of research initiatives by AMCs—the numbers have remained low.

Approach

Creating a Higher Understanding of Cancer Research and Community Health (Project CHURCH), a partnership between MD Anderson Cancer Center and Houston-area churches, was designed to understand the disparities in cancer risk factors for African Americans and engage the African American community as partners in the research process.

Project CHURCH focused on partnership and collaboration through the following steps:^{32,33}

- Partnership development and church engagement—building trust among the cohort population.
- Collaborative cohort study—developing study protocols with community input.
- Communications—Project CHURCH findings were shared with the church communities, including through newsletters and reports.
- Implementation of cancer prevention and control programs—demonstrating how the project research directly impacts the community and research participants.³³

Results

Project CHURCH recruited an initial cohort of 2,500 African American participants.³⁴

- Project CHURCH was able to obtain 1,200 biospecimen samples from participants for use in a national study aimed at understanding the genetics of lung cancer in African American populations.
- Since 2011, the Project CHURCH cohort has contributed to more than 25 published papers.³³

The program has since grown its partnerships with local churches, hosting a variety of initiatives at over 80 churches in the Houston area.³⁴

Engage in Community-Based Participatory Research and Codesign

17



Issue

Often, the voice of the community is left out of the research and the design of health interventions. By engaging with the communities the AMC serves directly through the research process, more culturally appropriate and representative research protocols and solutions may emerge.³⁵

The Center for Health Communities (CHC) at UC Riverside has committed to community-engaged research to connect with community organizations to achieve improved health in southern California.³⁶

In addition, the Center for Health Disparities Research (HDR) supports pilot projects in areas of health disparities, requiring a community engagement component. The center has established a Community Engagement and Dissemination Core and Investigator Development program to train emerging researchers in Community-Based Participatory Research.³⁷

Approach

Community-based participatory research (CBPR) is CHC's and HDR's preferred approach to community-engaged research, wherein community members and academics are viewed as equals in the research process.³⁵

CHC and HDR build collaborations and partnerships between researchers and local communities through:

- Service—CHC embeds itself in the community, becoming accessible and available to serve and engage with the community.
- Education—CHC offers training to equip community members with the skills to effectively lead and facilitate community transformation.
- Research—CHC leverages partnerships to design research that easily translates to real-world health settings, resulting in interventions that are culturally and linguistically appropriate for the community.³⁶ HDR supports pilot projects in health disparities in the community and trains researchers in CBPR methods.³⁷

Results

The Riverside Clean Air project is an example of an effective CBPR project facilitated by CHC. CHC partnered with three community organizations and engaged 157 community members in the project.³⁷ In 2019, CHC inventoried its community-engagement work and set goals for the Center over the following five years:

- CHC hosted six community engagement opportunities and 15 research training sessions.
- CHC had around 40 community partners. CHC aims to transition 50% of these partners into CBPR partnerships by 2024 to increase community-engaged research in local communities.³⁶

HDR supports several community-based research projects, including studies on asthma in immigrant communities in Eastern Coachella Valley and an environmental toxicology study among agricultural worker communities in California's Central Coast.³⁷

Embed Health Equity Metrics Into Quality Improvement Strategy and Set Bold Goals on Eliminating Disparities

18

Henry Ford Health System

Issue

AMCs are well-versed in improvement work—they bring together teams to look at performance—whether it be mortality rates, infection rates or patient experience—and design strategies to address deficiencies. AMCs should take the same intentional, disciplined and team-based approach to advancing health equity.³⁸

In 2008, the Detroit Regional Infant Mortality Reduction Task Force was formed in response to the observation that Detroit had an infant mortality rate that was twice the national average, with even greater disparities within Black communities.³⁹

Approach

Led by Henry Ford Health System, the Women-Inspired Neighborhood Network: Detroit (WIN Network) was developed to reduce infant mortality in the highest-need Detroit neighborhoods.³⁹

WIN Network operationalizes its intervention through three strategies:

- Leveraging Community Neighborhood Navigators to recruit African American women in highest-need neighborhoods to the WIN Network program.
- Providing health equity training sessions to physicians and providers, increasing their understanding of how life's circumstances impact health.
- Supplying educational and supportive products that engage the community in promoting good maternal health status prior to and during pregnancy.⁴⁰

Results

WIN Network has served 565 African American women to date, having zero preventable infant deaths and better than average rates of preterm and low-birthweight deliveries.⁴¹

WIN Network has helped 1,000 nonpregnant women improve their knowledge of infant mortality, health literacy, healthy living and family planning.

WIN Network educated over 500 providers and health professionals through WINN's Continuing Medical Education-approved health equity training.⁴²

Eliminate Race-Based Adjustments That Have No Medical Basis From Clinical Decision Support Algorithms

19

Multiple Schools of Medicine

Issue

There are examples in cardiology, nephrology, obstetrics and urology, and likely others, of “race-based medicine” rather than “evidence-based medicine”—that is, where racial adjustments are made that suggest Black people presenting with the same symptoms as white people are at lower risk for certain conditions.⁴³

One example of “race-based medicine” is the Modification of Diet in Renal Disease (MDRD) equation, which is used to calculate a patient’s estimated glomerular filtration rate (eGFR).⁴⁴

Approach

In 2018, the strength of the evidence underlying the inclusion of race in eGFR calculations was questioned by medical students and faculty at several universities.

Student advocacy led to iterative assessments of new approaches for eGFR testing. At one university, faculty from the Department of Family Medicine, the Department of Laboratory Medicine and the Division of Nephrology all participated in the assessment of eGFR approaches.

After investigation of eGFR calculations, the interdisciplinary team determined that the use of race in the biomedical environment is an imprecise tool and does not meet the scientific rigor the health enterprise expects of diagnostic tools.

Results

In 2020, laboratories at some universities transitioned from the MDRD equation to the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation to calculate eGFR. The new protocol for CKD-EPI excludes race as a variable.

Removal of race from the eGFR calculation at several medical institutions prompted the National Kidney Foundation and the American Society of Nephrology to convene a task force to assess the formal removal of race as a criterion in eGFR calculation.^{47,48}

Bring an Equity Lens to Care Delivery Processes and Access Strategies

20

NYU Langone Health

Issue

With the vast difference between commercial and government reimbursement rates, payer mix is often considered in deciding where to build out new facilities. This often results in new health care capacity being built in affluent neighborhoods. Bringing an equity lens to care delivery strategies requires AMCs to assess whether their expansion strategies unintentionally reinforce health inequities.

Approach

In 2015, Lutheran Medical Center in Brooklyn merged with New York University (NYU) Langone Health. To achieve one standard of care for all patients receiving care from NYU Langone, the health system made significant investments into its new Brooklyn hospital.⁴⁹

- Full-time faculty were hired to replace the existing voluntary physician workforce.⁵⁰
- New services were brought to Brooklyn, including advanced endoscopy, robotic surgery and enhanced cancer care.⁵¹

NYU Langone also invested in measuring the impact of the work the Brooklyn hospital was doing. Key metrics included mortality and hospital-acquired conditions. These metrics were used to measure the effect the Brooklyn hospital was having on the care delivery process for patients in that community.⁵²

Results

NYU Langone – Brooklyn tracks more than 800 quality and safety measures as part of a continual effort to evaluate and improve performance. In 2019, NYU Langone – Brooklyn reported one of the lowest mortality rates in the country. The rate of hospital-acquired infections decreased by 60% from 2016 to 2019.⁵²

Patients admitted to the emergency room receive care two times faster in NYU Langone – Brooklyn than any other hospital in Brooklyn. Similarly, inpatients go home faster than patients at other hospitals in New York City and are less likely to be readmitted within 30 days.⁵²

Screen Patients for Unmet Social Needs and Connect to Community Resources

21

New York-Presbyterian

Issue

Many of the social factors that lead to poor health outcomes are the result of systemic racism and economic policies that have historically marginalized communities of color and prevented opportunities for wealth creation. Health systems can play a part in connecting people in need with social service and community-based resources.

NewYork-Presbyterian (NYP) launched the Addressing the Needs of the Community through Holistic, Organizational Relationship (ANCHOR) program to identify the health-related needs of local Medicare and Medicaid members.⁵³

Approach

Patients are invited to participate in a self-directed SDOH screening when they visit NYP outpatient clinics or the emergency department. Patients' SDOH screening results are then available to physicians during the patient's exam and are stored in the patient's EHR. Patients received follow-up for their unmet social needs in one of two ways.

- Patients with two or more emergency department visits and at least one social need receive a follow-up phone call from a community resource coordinator who connects the patient with social support services via a web-based directory.
- Patients with fewer than two emergency department visits but at least one social need receive a printed list of social support resources tailored to their specific needs.⁵⁴

Results

From September 2018 to December 2019, more than 22,000 patients were screened for SDOH need. Of the patients screened, 25% screened positive for housing and food insecurity. Of the patients identified as high risk, 40% agreed to participate in social service navigation.

Increased attention to identifying SDOH needs allows providers to pinpoint patients who would benefit most from early SDOH intervention to mitigate social needs, which could result in fewer emergency department visits and avoidable readmissions.⁵⁴

Internal Strategies

Leadership and Governance

People and Culture

Data and Analytics

Define, and Affirm Importance of, Health Equity for the Organization

23



Issue

Board members may be at varying stages of engaging with and understanding the concepts of structural racism, cultural competency, implicit bias and their individual responsibility in promoting an anti-racist agenda. Boards of directors and boards of trustees should consider how they can use their governance roles to combat structural biases, within both the organization and the community served.

Approach

Northwell Health established the Center for Equity of Care to focus on eight key strategic priorities that heighten awareness and address the need to enhance health equity. The health system has established a board of trustees subcommittee focused on community health.

The Community Health subcommittee ensures that community benefit initiatives that promote the broader health of the community are developed within the health system.

The board of trustees requires an annual report on community benefits from the CEO. This report includes an inventory of current services and practices, funds expended toward health equity programs, and a description of collaborations with other community agencies.⁵⁵

Northwell has established seven diversity, equity and inclusion-focused committees, councils and steering committees. The seven bodies include leadership representation, with the chief diversity and inclusion officer holding positions on several committees.

Northwell has created the Executive Council on Diversity and Health Equity to provide executive oversight on diversity, inclusion, health literacy programs, language access services and other initiatives. The executive council is chaired by the president and chief executive officer of the health system.⁵⁵

Adjust Performance Dashboards and Compensation Models to Promote Equity

24

An AMC can signal its commitment to advancing equity by holding management teams accountable to achieving progress on diversity metrics via financial compensation and performance reporting.

Rush University Medical Center

- As part of their performance review process, managers at Rush University Medical Center must include at least one goal on diversity; for some positions, performance on these goals is tied to compensation incentives.
- Rush also maintains a diversity scorecard that assesses whether leaders are making progress toward completing their diversity goals.⁵⁶

Henry Ford Health System

- The Henry Ford Health System board of directors sets the organization's diversity-related goals and monitors metrics to ensure that the goals are being achieved and that leaders are being held accountable.
- Diversity-related goals are tied to the senior leadership bonus program that accounts for 10% of senior leaders' pay.⁵⁷



- In October 2020, Penn Medicine announced that the top 600 executives in the organization would have their pay tied to the system's performance on community health metrics.
- Executive pay in the organization is being tied to reducing maternal morbidity and mortality among Black and Brown populations and increasing colorectal screening among the Black population.⁵⁸
- Other health equity initiatives include over \$10M in practice plan funded endowed chairs, appointment and funded time for Vice chairs for DEI in each department, Wharton-Penn Medicine Social Impact Investing fund for start-ups, hiring through West Philly Skills Initiative and many more.

Diversify the Board and Leadership Teams

25

Henry Ford Health System

Issue

Like many other corporations, racial and ethnic diversity at the AMC board and leadership levels is lagging. AMCs with diverse boards are better positioned to understand the needs of their community.

In 2007, Henry Ford Health System's (HFHS') board of directors and leaders were mostly white. Recognizing that its board and leadership teams were not representative of the community it served, the health system developed a systematic approach to increasing diversity.⁵⁹

Approach

In 2007, HFHS launched a review of how the demographic makeup of its board aligned with the demographics in the communities the health system served. HFHS engaged in board diversity assessments, developed formal diversity policies and measured progress toward identified diversity goals to determine areas of improvement.⁵⁹

HFHS' system-level board meets annually with the chair and nominating committee members for each of its subsidiary organizations' boards to review how closely board membership reflects local community diversity and how recruiting may address any identified gaps. HFHS uses community demographic data to push subsidiary organizations to diversify their boards and actively intervenes in the recruiting process if diversity and inclusion goals are not being reached.⁶⁰

Results

As of March 2021, the board at HFHS has 17 members. Of these members, seven are people of color and six are women. Diversity efforts extend to the health system's senior leadership positions. As of 2020, 50% of senior leaders are women and 43% are nonwhite.^{61,62}

Henry Ford has been ranked in the top 5 by Diversity Inc every year since 2009. Rankings are determined by performance on metrics in six key areas of diversity: leadership accountability, human capital diversity, talent programs, workforce practices, supplier diversity and philanthropy.⁶²

Ensure Leaders of Equity Initiatives Are Appropriately Recognized and Resourced

26

AMCs often rely on people who self-select as advocates of health equity to drive initiatives and mentor people who are underrepresented in medicine. However, this work requires time that could be spent on other activities, which can negatively impact career progression if not appropriately valued and resourced by the AMC.

To ensure equity initiatives are appropriately resourced, consider the following actions:

- ✓ Establish C-level position to oversee organization-wide health equity efforts.⁶³
- ✓ Employ an equity lens across all strategic initiatives.⁶⁴
- ✓ Ensure adequate resources for executing equity initiatives, including supporting community engagement activities.⁶⁴
- ✓ Establish compensation models that reward diversity, equity, inclusion and justice scholarship, service and mentorship in a manner that is equal to compensation for research or other quality improvement efforts.⁶⁵
- ✓ Evaluate performance toward these goals, use collected data to catalyze action and report outcomes publicly.⁶⁵

Strengthen Diversity Recruitment Efforts

27

Baptist Health South Florida

Issue

BIPOC have better engagement with their health care and better outcomes when their caregivers share some aspect of race or ethnicity. Achieving greater workforce diversity requires policies and programs that promote anti-racist hiring, retention and promotion strategies, and a culture of inclusion.

Baptist Health South Florida has successfully hired a diverse frontline workforce that is reflective of its surrounding community. However, professional growth for frontline employees has been limited.^{66,67}

Approach

The Baptist Health Leadership Experience (BHLE) employee pipeline was launched to help elevate diverse talent to the director and associate vice president levels. The program is a long-term strategy to employ a more diverse leadership team, driven by the short-term priority of ensuring the system has a diverse pool of qualified applicants to be considered and interviewed for future job openings.⁶⁶

The program selects high-potential talent, who are reflective of Baptist Health's patient demographic mix, and assigns individuals to leadership development cohorts and "stretch" projects. Throughout the experience, participants are given exposure to senior executives within the organization who help develop their skills and talents.⁶⁶

Results

In addition to tracking metrics related to diversity among new hires, Baptist Health also measures the proportion of diverse employees being promoted in the health system.

Baptist Health defines success for its diversity and inclusion work as when the diversity of its leadership reflects the diversity of its frontline workforce and its patient community. In 2017, 58.3% of employees at the manager level or above were minorities. Among Baptist Health executives, 36% were minorities. Baptist Health also reports that 42% of executive roles are held by women.⁶⁶

Enhance Diversity Retention and Leadership Development Programs

28

Columbia University Vagelos College of Physicians and Surgeons

Issue

At AMCs, diversity rates decline at the upper levels of the organization, and medical school professors and associate professors are predominantly white males. To increase diversity in these positions, AMCs should implement strategies that support retention and promotion of diverse talent.⁶⁸

In 2018, two advisory committees were assembled at Columbia University Vagelos College of Physicians and Surgeons to assess the current environment for women and diverse faculty and make recommendations to support faculty success in the future.⁶⁹

Approach

The advisory committees concluded their reviews in February 2019 and presented findings to the dean. The committees identified the following needs to improve the organization's culture/climate and diminish faculty satisfaction gaps:⁷⁰

- Expand capacity in existing successful approaches (peer mentoring, diversity alliances, career coaching).⁷¹
- Use a dedicated office to increase outreach to women and diverse faculty members as a means of increasing mentorship, sponsorship and career development.
- Increase transparency of schoolwide processes for searches, promotions, honors, awards, salary equity, and appointment to key leadership positions and committees.⁷⁰

Results

The dean accepted all the committees' recommendations in full and committed the funding required for implementation. In response to the recommendations and the dean's decisions, new offerings were launched.

- A new Office for Women and Diverse Faculty to provide more effective outreach to women and diverse faculty.
- Office for Women and Diverse Faculty peer-mentoring groups, led by advisory deans, for new faculty launched in 2021.
- Increased transparency of committee membership and commitment to an annual diversity report.⁷⁰

Shape an Inclusive Culture

29



Issue

Disparities have been difficult to eradicate because the interventions that healthcare organizations have devised to address them too often ignore structural dynamics, which are the historical, economic, political, social, and cultural forces that produce inequities.⁷²

Approach

UChicago Medicine implemented five interconnected strategies that contribute to a culture of equity.

- 1) Grounded diversity, equity and inclusion efforts in critical theory, which aims to illuminate maladaptive social structures through critical analysis of power relations;
- 2) Ensured that training goes beyond cultural competency/humility to include critical consciousness, which is the ability to critically analyze social conditions of the organization and broader culture that produce health inequities and act to transform them;
- 3) Strengthened relationships as change vehicles;
- 4) Empowered an implementation team that models a culture of equity; and
- 5) Aligned equity-focused culture transformation with equity-focused operations transformation to support praxis.

These five strategies reduce the likelihood of ahistorical and power-blind approaches to equity initiatives, thereby providing some of the critical missing knowledge and skills that have hindered the ability of healthcare organizations to achieve health equity

Results

The Medical Center launched a four-part, multiyear series of cultural competence trainings that build on the CLAS Standards.⁷³

We evaluate our efforts for five characteristics of growth-fostering relationships.

Our annual operating plan integrates DEI goals into our people, patient, and quality and safety. We utilize human resource metrics to gain insight into culture change.

Our employee engagement and inclusion scores increased from 2013 to 2019. We added several subscales from the Diversity Engagement Survey as a diagnostic and benchmarking tool to assess our progress.

We stratify 82 quality measures by race, ethnicity, ZIP code, gender, language, and payer status and make that information available to the entire organization.

Refine the Data Collection and Reporting Tools to Support Goal Setting and Tracking of Equity Measures

30



Issue

AMCs can refine their data collection practices to support goal setting, equity measure tracking and delivery of culturally competent care.

Northwell Health identified an opportunity to link the tenets of diversity with the collection of race, ethnicity and language (REAL) data to improve the organization's health outcomes.

Approach

To make the collection of REAL data standard, select employees were required to complete education on REAL data collection. In 2018, Northwell Health launched the "We Ask Because We Care Campaign" to improve the collection of REAL data. The campaign educated providers on how to appropriately ask patients for their preferred language, race and ethnicity. Patients were educated on the value that REAL data adds to the care delivery experience.^{75,76}

Uniform collection of REAL data allows Northwell to stratify patient outcomes by REAL criteria and creates an opportunity to better understand disparities and identify groups that are most at risk for certain outcomes.⁷⁴

Results

Northwell has created a dashboard that compares community language-spoken data with the languages spoken by Northwell staff at local facilities. Northwell uses this data to assess patient language needs and ensure that the hospital is equipped to address them.⁷⁴

REAL data is stored within a patient's electronic medical record, and some data is displayed at the top of the patient's record. Since launching REAL data collection, use of interpretation services has increased 465% between 2009 and 2018, and Northwell has made 119 vital documents available in 22 languages, large print and Braille to better support the identified needs of its patients.⁷⁴

Refine the Data Collection and Reporting Tools to Support Goal Setting and Tracking of Equity Measures

31



Issue

In light of the inequities of Covid-19 burden among racial and ethnic minorities in the US, the importance of Race, Ethnicity and Language (REAL) data for AMCs and their public health partners to understand Covid-19 cannot be overstated. Without these data, AMCs are unable to identify disparities in Covid-19 testing, care, and outcomes. Unfortunately, race and ethnicity are missing in 20% to 30% of health records and, when available, can be insufficient for mitigating health inequities, which also requires SDOH data.

Approach

Vanderbilt University Medical Center embedded strategies to mitigate health inequities in its Covid-19 Command Center. A key strategy was the creation of interactive dashboards, which allowed disaggregation of metrics by race, ethnicity, language, and ZIP Code.

Dashboards were created for all patients tested for SARS-CoV-2. Data from dashboards are linked to community-level socioeconomic data. Reports generated are reviewed daily.

Recognizing the issues with missing REAL data and that there is no standardized collection of social determinants, a principal strategy in VUMC's work is to use the most reliable data available in the health record to disaggregate data, while simultaneously working to improve the quality and accuracy of REAL data.

Simultaneous to improving the quality of REAL data, the VUMC team worked to better understand the social and environmental context for patients most impacted by Covid-19. They mapped the ZIP Codes of patients who tested positive and found the highest number of cases in two adjacent ZIP Codes where more than 30% of residents' primary language is not English and adjusted gross income is \$36,384 compared with the county median of \$56,507. VUMC's vaccination strategy was informed by the CDC/ATDSR Social Vulnerability Index (SVI). An algorithm that incorporated SVI data by census tract as well as REAL data was included in the modeling.

Harness the Power of Big Data, Artificial Intelligence and Machine Learning to Root Out Bias in Health Care

32

Emerging trends in the field focus on reducing bias through increased attention to underlying data sets and more rigorous testing for equity

Strive for Diversity in Data

- The value of big data analytical tools depends on the data used to train them. Algorithms trained on inaccurate, poor-quality or nondiverse data will yield erroneous results.⁷⁸
- Collecting high-quality, inclusive data is the best way to develop unbiased analytical tools. Effective data sets include a diverse range of race, gender and geography to avoid biased algorithms.⁷⁹

Practice Data Diligence

- When building analytical tools using existing data, understand the context surrounding the data set. Learn where the data is coming from, how it was collected, what it was originally collected for and whether certain populations may not be represented in the data set.⁷⁹
- Make algorithms transparent so that users of analytical tools can assess underlying models to understand and validate underlying assumptions to prevent perpetuation of inherent bias.⁸⁰

Test Data and Algorithms

- Test analytical tools in the real world and measure results against equity criteria, such as false negative and false positive distribution among demographic groups or proportion of each demographic group that is assigned to a treatment.⁸⁰
- Data bias is often invisible; analytical tools should explicitly include fairness criteria as part of the model and should be built to optimize performance on these criteria.⁸⁰

External Strategies

Purchasing Power

**From Community Benefit to
Community Partnership**

Policy/Government Relations

Establish Requirements and Targets for Hiring Locally Across Organizational Levels

34

Rush University Medical Center

Issue

Health care systems often face shortages of skilled providers, while members of their communities may be struggling to find employment opportunities. By making a commitment to hiring locally, AMCs can meet their workforce needs while simultaneously enabling community wealth building.

Rush University Medical Center (RUMC) adopted an anchor mission strategy that focuses on hiring and developing local talent.

Approach

RUMC launched the West Side Resource Group to gather ideas and leverage the talent of RUMC employees who lived in the target neighborhoods on how to conduct community outreach. This group also raised awareness about RUMC's hiring initiatives with their fellow community members.

The human resources team at RUMC deepened relationships with community partners to support its local hiring strategy. Additional partners were leveraged to help RUMC develop career pathway programs to support candidates applying for patient care technician and medical assistant positions.⁸¹

Results

The RUMC human resources team launched 16 community hubs in nearby neighborhoods to connect residents directly with hiring opportunities. The work at these community hubs resulted in 400 new hires from the West Side community.

Hires identified through community hubs in West Side neighborhoods accounted for 18% of RUMC's hiring for fiscal year 2020.⁸¹

Establish Requirements and Targets for Working With Local Vendors, Women- and Minority-Owned Businesses

35



Issue

AMCs can use their economic power to support local, women-owned and minority-owned businesses.

In 2005, University Hospitals (UH) in northeast Ohio began a five-year, \$1.2 billion construction project known as Vision 2010. Recognizing that the construction spending outlined in the plan could spur local economic growth, UH set ambitious goals for purchasing from local, women-owned and minority-owned firms.⁸²

Approach

UH entered into an innovative project labor agreement and negotiated with the building trade unions to ensure that UH would meet its outlined diversity goals. UH hired a third party to monitor its progress toward diversity targets.^{83,84} To achieve these goals, UH implemented the following strategies:

1. Connected to existing inclusive economic development efforts and partnerships.
2. Supported inclusive business structures.
3. Leveraged large capital projects.
4. Established local and diverse spending goals and benchmarks.
5. Leveraged contracts with large vendors and group purchasing organizations to achieve procurement goals.⁸⁴

Results

By 2010, 92% of the Vision 2010 construction and procurement efforts were invested in the local and regional economy. One hundred ten minority- and women-owned business received contracts, and more than 5,000 jobs in construction and related fields were created during the five-year period.⁸³

In 2015, UH had spent \$832 million in goods and services. The organization's total spend was \$62 million with minority- or women-owned vendors, \$199 million with vendors from the Cleveland area, and \$363 million with vendors from Ohio.⁸³

UH continues to set diversity requirements for procurement contracts and expects vendors to meet those standards.

UH has the goal to grow minority and women owned business spending by 3% per year.⁸⁵

Partner With Other Anchor Organizations in the Community to Align Wealth-Building Initiatives

36

UC DAVIS HEALTH

Issue

AMCs have the power to use their purchasing and investing power as major regional economic engines that can positively impact their communities.

Given its position as a leading higher education and health care institution, UC Davis Health is committed to leveraging its economic power and human and intellectual resources to increase the economic vitality of its neighboring communities.^{86,87}

Approach

UC Davis Health aims to interrupt cycles of poverty and create a self-sustaining and vibrant region with culturally responsive health care, good jobs, and safe and affordable neighborhoods that have access to exercise and nutritious food.

UC Davis Health builds community wealth using the following strategies and relies on internal and external partnerships to achieve its mission.

- Hiring locally—hiring and developing local talent.
- Volunteering locally—encouraging employee volunteerism in local neighborhoods.
- Purchasing locally—purchasing goods and services from local vendors and underrepresented communities.
- Investing locally—investing portions of endowments into projects in vulnerable communities.⁸⁶

Internal stakeholders involved include procurement, human resources, construction and design, education, and public scholarship.

Results

As of 2021, UC Davis Health has partnered with four external organizations and two internal departments to implement its anchor organization mission. Examples of UC Davis Health impact include:

- Investing nearly \$1 million in regional food procurement, increasing use of local food vendors at the hospital by 16.5%.
- Creating live/learn/work/play centers on the UC Davis campus that connect the university to the community.
- Creating medical education pipeline programs to bring in candidates from across the neighborhoods served by UC Davis.⁸⁶

Develop Partnerships With Community-Based Organizations to Address Unmet Social Needs

37



Issue

Access to stable housing, health food, reliable transportation and other nonmedical drivers of health has a profound impact on health and longevity, driving as much as 80% of health outcomes. By supporting upstream solutions to unmet social needs, AMCs can mitigate their downstream impact on individuals' health.

In 2015, University of Illinois Hospital and the Center for Housing and Health formed a partnership aimed at reducing health care costs among the chronically homeless.

Approach

The Better Health through Housing program connects individuals experiencing homelessness with supportive housing. The process begins by identifying high emergency room utilizers who experience chronic homelessness.

Patients who accept housing through the program are moved to a hotel and assigned a housing case manager who helps the individual find permanent housing.

The program's impact is enhanced by cross-agency partnerships. The Center for Health and Housing has memoranda of understanding with 27 supportive housing agencies across Chicago, who assist with identifying potential residences for program participants.⁸⁹

Results

Since the program's launch in 2015, the partnership has resulted in significant reductions in emergency room utilization and health care cost among this population.

- Emergency room utilization has fallen by 41%.
- Inpatient admission has decreased by 52%.
- The program also induced 21% reduction in health care associated costs for housed individuals.

The program housed its first patients in 2015. With over 90 homeless patients placed into supportive housing, UI Health has provided more housing than any other hospital in the country.⁸⁸

Engage the Community in Codesigning Solutions to Issues Identified by Community Health Needs Assessments

Howard University Hospital

Issue

The ACA requires all nonprofit hospitals to submit a CHNA every three years. Some AMCs have used it as an opportunity to partner with Federally Qualified Health Centers (held to a comparable requirement) to work collaboratively to assess needs, engage the community in codesigning solutions to issues surfaced and coordinating implementation efforts.

Approach

Howard University, in conjunction with other local hospitals and community health centers, formed the DC Health Matters Collaborative to combine efforts and resources to assess and address community needs. The Collaborative undertakes its CHNA as a partnership, working together to achieve a larger collective impact.⁹⁰

The DC Health Matters Collaborative focuses on ensuring the CHNA is data-driven and that the community is engaged in its development. Once community needs are defined, the Collaborative uses a prioritization process to rank areas of need. Prioritization is based on four factors: importance to the community, capacity to address the issue, alignment with the mission of member organizations, and strength of existing interventions and collaborations.^{90,91}

The DC Health Matters Collaborative has been conducting joint CHNAs since 2013. The group's methods and strategies have become more robust as partnership has allowed for more effective use of resources to better meet community needs.

- In 2013, the Collaborative focused on quantitative and health outcome data.
- In 2016, the Collaborative expanded its focus to qualitative data, community engagement and the nonclinical determinants of health data.⁹⁰
- By 2019 the Collaborative included a deeper systems-level analysis of the needs areas identified in previous assessments.⁹²

Invest in SDOH Programs and Measure Impact

39



Issue

The Live HealthSmart Alabama project, the winning project in the University of Alabama at Birmingham's (UAB's) Grand Challenge, was launched in response to poor health outcomes in Alabama. The project is designed to move Alabama from the bottom in national health rankings and make the state a model of healthy living by expanding proven SDOH innovations.^{93,94}

Approach

The Live HealthSmart project's midterm objective is to improve health behavior. The Live HealthSmart project plans to achieve this objective through a variety of mechanisms, including:

- Policy initiatives.
- Changing structures within the community (such as schools and workplaces) through new programs.
- Changing places within the community through environmental improvements (like sidewalks and street lighting).⁹³

The project will launch demonstration zones at UAB and in four Birmingham communities, elevating and expanding existing health initiatives.⁹⁴

Conversations with 100 community leaders and partner organizations in five counties identified three main priorities for the Live HealthSmart project.^{93,94}

- Modify the built environment so that physical activity is more accessible.
- Change the food environment to promote good nutrition.
- Transform the health care setting to facilitate prevention and wellness.

UAB, in collaboration with 90 partners from government, business and education and others in the community will invest in a comprehensive approach to addressing the health challenges in Alabama and improving the state's key health metrics.⁹⁴

Advocate for Universal Coverage, Equitable Coverage Design, for New Reimbursement Models That Support Equitable Care Delivery

40

RWJ Barnabas Health

Issue

While AMCs can make strides toward greater health equity within their organizations and in partnership with their communities, there is a larger interdependent health care ecosystem that establishes policies outside of their direct control. Through advocacy, AMCs can advance policies that eliminate racial and ethnic disparities in health access, care and outcomes.

Approach

Robert Wood Johnson Barnabas Health (RWJBH) has pioneered a Social Impact and Community Investment (SICI) practice that integrates policy development into its mission to improve health for all New Jerseyans.

RWJBH believes that to have long-term, sustainable impact on community health and well-being, it is necessary to make long-term changes to systems and structures.

The SICI practice relies on evidence-based, data-driven research and analysis to inform its policy initiatives.

In order to effectively pursue social impact policy initiatives, the SICI policy team builds and maintains stakeholder relationships outside of those typically maintained in the health care arena.⁹⁵

In 2019, RWJBH set three key goals for the SICI practice:

1. Educate internal and external stakeholders (including policymakers, government officials and community-based organizations) about the interplay of health outcomes and social determinants.
2. Expand partnerships with state and national coalition-building efforts like the Healthcare Anchor Network and Root Cause Coalition.
3. Advocate for supportive policies at the federal, state and local levels that allow the SICI practice to meet its mission and create long-term change in the community.⁹⁵

Summary of Levers and Strategies for Advancing Health Equity

Lever		Strategies for Advancing Health Equity
Mission-Specific Strategies	Education Shaping the Providers and Culture of Care of the Future	a. Invest in educational pathways b. Bring an equity lens to the admissions process c. Support people who are underrepresented in medicine in funding their training d. Bring an equity lens to the curriculum e. Support the retention and advancement of diverse faculty (see Internal Strategies → People and Culture → (b))
	Research Advancing the Knowledge Base on Effective Strategies to Eliminate Disparities	a. Invest in the science of health disparities intervention b. Engage in community trust-building activities to achieve greater diversity in clinical trials c. Engage in community-based participatory research and codesign
	Care Delivery Dismantling Inequities in Access, Quality, Experience and Outcomes of Care	a. Embed health equity metrics into quality improvement strategy and set bold goals on eliminating disparities b. Eliminate race-based adjustments that have no medical basis from clinical decision support algorithms c. Bring an equity lens to care delivery processes and access strategies (sites of care, payer contracting strategies) d. Screen patients for unmet social needs and connect to community resources
Internal Strategies	Leadership and Governance Setting the Tone for Combating Structural Racism and Advancing Health Equity	Board and leadership team to: a. Define, and affirm importance of, health equity for the organization b. Adjust performance dashboards and compensation models to promote equity c. Diversify the board and leadership teams d. Ensure leaders of equity initiatives are appropriately recognized and resourced
	People and Culture Building and Supporting a Diverse, Culturally Competent Workforce	a. Strengthen diversity recruitment efforts (see External Strategies → Purchasing Power) b. Enhance diversity retention and leadership development programs c. Shape an inclusive culture through mandatory training and facilitated conversations about cultural competency, humility, and implicit bias
	Data and Analytics Measuring Progress and Impact	a. Refine the data collection and reporting tools to support goal setting and tracking of equity measures in support of other strategies, e.g., – Care Delivery Strategy (a) Embed health equity metrics into quality improvement strategy – Governance Strategy (b) Adjust performance dashboards and compensation models to promote equity b. Harness the power of big data, AI and ML to root out bias in health care
External Strategies	Purchasing Power Embracing the “Anchor Institution” Role to Build Community Wealth	a. Establish requirements and targets for hiring locally b. Establish requirements and targets for working with local vendors, women and minority-owned businesses c. Partner with other anchor organizations in the community to align wealth-building initiatives
	From Community Benefit to Community Partnership Building Long-Term, Bidirectional, Trusting Relationships	a. Develop partnerships with community-based organizations to address unmet social needs b. Engage the community in codesigning solutions to issues identified by CHNA c. Invest in SDOH programs and measure impact
	Policy/Government Relations Advocating for Equity-Driven Policies	a. Advocate for universal coverage b. Advocate for equitable coverage design c. Advocate for new reimbursement models that support equitable care delivery

1. About the Program - UMB CURE Scholars Program (umaryland.edu). <https://www.umaryland.edu/cure-scholars/about-the-program/>.
2. University of Maryland, Baltimore Creates STEM Pipeline Program, Community Engagement Center - Higher Education (diverseeducation.com). <https://diverseeducation.com/article/160797/>.
3. Outcomes - UMB CURE Scholars Program (umaryland.edu). <https://www.umaryland.edu/cure-scholars/outcomes/>.
4. Medical School Implicit Bias Training. Ohio State College of Medicine (osu.edu). <https://medicine.osu.edu/diversity/initiatives/implicit-bias-training>.
5. Rooting out implicit bias in admissions. AAMC. <https://www.aamc.org/news-insights/insights/rooting-out-implicit-bias-admissions>.
6. How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education (atsjournals.org). <https://www.atsjournals.org/doi/full/10.34197/ats-scholar.2020-0024PS>.
7. Implicit Racial Bias in Medical School Admissions: Academic Medicine (lww.com). https://journals.lww.com/academicmedicine/fulltext/2017/03000/implicit_racial_bias_in_medical_school_admissions.32.aspx.
8. OSU College of Medicine Diversity & Inclusion Brochure.
9. <https://www.aamcdiversityfactsandfigures2016.org/report-section/section-3/>.
10. <https://med.stanford.edu/news/all-news/2020/02/transformational-gift-helps-eliminate-medical-school-debt.html>.
11. <https://medicalgiving.stanford.edu/content/sm/medicalgiving/ways-to-give/med-challenge-gift.html/>.
12. <https://www.aamc.org/news-insights/how-we-fail-black-patients-pain>.
13. <https://meded.ucsf.edu/bridges-curriculum>.
14. UCSF School of Medicine Diversity, Equity, and Inclusion Champion Training. <https://meded.ucsf.edu/faculty-educators/faculty-development/diversity-equity-and-inclusion-champion-training>.
15. <https://medschool.ucsf.edu/differences-matter>.
16. <https://medschool.ucsf.edu/about/diversity-equity-and-inclusion/diversity-data-stories>.
17. <https://www.bu.edu/ihsip/2020/11/02/improving-equity-in-medicine-starts-in-the-classroom>.

18. <https://www.statesman.com/story/news/healthcare/2021/06/07/university-texas-dell-medical-school-adds-focus-health-equity-curriculum/7489892002/>.
19. Diversity in Medicine: Facts and Figures. <https://www.aamc.org/data-reports/workforce/report/diversity-medicine-facts-and-figures-2019>.
20. SOMStratPlan2012.pdf (unc.edu). <https://www.med.unc.edu/strategicplan/wp-content/uploads/sites/500/2018/10/SOMStratPlan2012.pdf>.
21. Academic Career Leadership Academy in Medicine (ACCLAIM). Office of Faculty Affairs and Leadership Development (unc.edu). <https://www.med.unc.edu/facultyaffairs/leadership-development/academic-career-leadership-academy-in-medicine-acclaim/>.
22. Data & Reports. Office of Faculty Affairs and Leadership Development (unc.edu). <https://www.med.unc.edu/facultyaffairs/data-reports/>.
23. Care 2 Florida-California Health Equity Center. <https://care2healthequitycenter.org/>.
24. CHER Chicago. <http://www.cherchicago.org/>.
25. Center for Health Equity Research (CHER) Project Details, NIH Report, 2017. <https://reporter.nih.gov/project-details/9484892>.
26. Research, Johns Hopkins Center for Health Equity. <https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-health-equity/what-we-do/research/>.
27. Center for Health Equity and Community Engagement Research, Mayo Clinic.
28. Institute on Multicultural Health Overview, Henry Ford Health System. <https://www.henryford.com/about/community-health/institute-on-multicultural-health>.
29. Center for Community-Engaged Translational Research, MD Anderson Cancer Center. <https://www.mdanderson.org/research/departments-labs-institutes/programs-centers/center-for-community-engaged-translational-research.html>.
30. UC Davis Center for Reducing Health Disparities. <https://health.ucdavis.edu/crhd/>.
30. NewYork-Presbyterian Launches Dalio Center for Health Justice, NewYork-Presbyterian, 2020. <https://healthmatters.nyp.org/newyork-presbyterian-launches-dalio-center-for-health-justice/>.
32. Preaching better health. MD Anderson Cancer Center. <https://www.mdanderson.org/publications/conquest/preaching-better-health.h37-1591413.html>.
33. Engaging Black Churches to Address Cancer Health Disparities: Project CHURCH (nih.gov). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6060541/>.
34. Making the innovative customary. MD Anderson Cancer Center. <https://www.mdanderson.org/publications/annual-report/annual-report-2010/project-church.html>.

35. What is Community-Engaged Research? School of Medicine Center for Healthy Communities (ucr.edu).
36. https://healthycommunities.ucr.edu/sites/g/files/rcwecm806/files/2019-10/chc_impact_report_2019.pdf.
37. <https://healthycommunities.ucr.edu/community-air-quality-project>. <https://healthdisparities.ucr.edu>.
38. Dr. Mark Smith's 2020 address, "[What Can We Do To Help?](#)"
39. WIN Detroit. Henry Ford Health System - Detroit, MI. <https://www.henryford.com/about/community-health/winnetwork>.
40. About Us (winnetworkdetroit.org). <https://www.winnetworkdetroit.org/about-us/>.
41. Our Outcomes (winnetworkdetroit.org). <https://www.winnetworkdetroit.org/our-outcomes/>.
42. Case Study: Improving Infant Mortality Rates for African-American Families. AHA. <https://www.aha.org/case-studies/2018-11-05-case-study-improving-infant-mortality-rates-african-american-families>.
43. <https://www.nejm.org/doi/full/10.1056/NEJMms2004740>.
44. Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms (nejm.org). <https://www.nejm.org/doi/full/10.1056/NEJMms2004740>.
45. *Removed.*
46. *Removed.*
47. Reassessing the Inclusion of Race in Diagnosing Kidney Diseases: An Interim Report from the NKF-ASN Task Force. American Society of Nephrology (asnjournals.org). <https://jasn.asnjournals.org/content/32/6/1305>.
48. Push to remove racist bias from kidney testing gains new ground (statnews.com). <https://www.statnews.com/2020/07/17/egfr-race-kidney-test/>.
49. The Wall Street Journal: Inside NYU Langone's Expansion in Brooklyn. NYU Langone News. <https://nyulangone.org/news/wall-street-journal-inside-nyu-langones-expansion-Brooklyn>.
50. NYU Langone Hospital—Brooklyn Raises the Bar for Care in a Borough Where Quality Has Fallen Short. NYU Langone News. <https://nyulangone.org/news/nyu-langone-hospital-brooklyn-raises-bar-care-borough-where-quality-has-fallen-short>.

51. 'We alone can do our part': How US News' top 10 hospitals are addressing health disparities (beckershospitalreview.com). <https://www.beckershospitalreview.com/hospital-management-administration/how-us-news-top-10-hospitals-work-to-limit-health-disparities-inequities.html>.
52. nyu-langone-health-in-the-community-report-2019.pdf (nyulangone.org). <https://nyulangone.org/files/nyu-langone-health-in-the-community-report-2019.pdf>, <https://nyulangone.org/files/complete-chna-csp-appendices-1.pdf>.
53. value-initiative-case-study-risk-new-payment-models-new-york-presbyterian-ny.pdf (aha.org). <https://www.aha.org/system/files/media/file/2021/01/value-initiative-case-study-risk-new-payment-models-new-york-presbyterian-ny.pdf>.
54. NYP-ACN-Community Programs-ANCHOR. NYP. <https://www.nyp.org/acn/community-programs/anchor>.
55. <https://www.northwell.edu/sites/northwell.edu/files/2018-11/Center-for-Diversity-Inclusion-and-Health-Equity-Report.pdf>.
56. https://www.aha.org/system/files/2018-01/eoc_case_studies.pdf.
57. <https://trustees.aha.org/articles/1300-henry-ford-health-system-board-essential-for-diversity>.
58. <https://www.hcinnoationgroup.com/population-health-management/social-determinants-of-health/article/21159931/time-to-tie-executive-pay-to-health-equity-metrics>. (Information about additional Penn Medicine initiatives provided via e-mail communication.)
59. Hospital boards still playing catch-up on diversity (modernhealthcare.com). <https://www.modernhealthcare.com/article/20140412/MAGAZINE/304129986/hospital-boards-still-playing-catch-up-on-diversity>.
60. Nancy Schlichting, CEO of Henry Ford Health System on reinvention and diversity (modernhealthcare.com).
61. Henry Ford Health System Names 4 New Members to Board of Directors - Detroit Regional Chamber (detroitchamber.com). <https://www.detroitchamber.com/henry-ford-health-system-names-4-new-members-to-board-of-directors/>.
62. AHA recognizes Cone Health with 2020 Carolyn Boone Lewis Equity of Care Award. AHA. <https://www.aha.org/press-releases/2020-08-26-aha-recognizes-cone-health-2020-carolyn-boone-lewis-equity-care-award>.
63. <https://www.aamc.org/news-insights/achieving-excellence-through-equity-diversity-and-inclusion>.
64. <https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0556>.

65. <https://www.nejm.org/doi/full/10.1056/NEJMp2032224>.
66. How to Build a Diverse Leadership Bench (advisory.com). <https://www.advisory.com/topics/leadership/2017/07/how-to-build-a-diverse-leadership-bench#measuring>.
67. Diversity and Inclusion. Baptist Health South Florida. <https://baptisthealth.net/about-baptist-health/diversity-and-inclusion>.
68. Diversity in Medicine: Facts and Figures 2019 AAMC, Accessed August 14, 2020. <https://www.aamc.org/data-reports/workforce/report/diversity-medicine-facts-and-figures-2019>.
69. https://www.vagelos.columbia.edu/sites/default/files/media/documents/2019-04/advisory_committees_report.pdf.
70. <https://www.vagelos.columbia.edu/file/37151/download?token=9ZwkxBZ7>.
71. <https://www.vagelos.columbia.edu/about-us/explore-vp-s/leadership-and-administration/academic-affairs/faculty-professional-development-diversity-and-inclusion>.
72. Paradis E, Nimmon L, Wondimagegn D, Whitehead CR. Critical Theory: Broadening our thinking to explore the structural factors at play in health professions education. *Academic Medicine*. 2020;95(6):842-845.
73. <https://thinkculturalhealth.hhs.gov/resources/presentations/2/the-national-clas-standards-in-action>.
74. Northwell Health EOC Case Study.pdf (aha.org). <https://ifdhe.aha.org/system/files/media/file/2020/05/Northwell%20Health%20EOC%20Case%20Study.pdf>.
75. We Ask Because We Care (northwell.edu). <https://jobs.northwell.edu/blog/2018/10/05/we-ask-because-we-care/>.
76. Center-for-Diversity-Inclusion-and-Health-Equity-Report.pdf (northwell.edu). <https://www.northwell.edu/sites/northwell.edu/files/2018-11/Center-for-Diversity-Inclusion-and-Health-Equity-Report.pdf>.
77. (a) A Systems Approach to Addressing Covid-19 Health Inequities, NEJM Catalyst. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0374>.

(b) Ng JH, Ye F, Ward LM, Haffer SC, Scholle SH. Data on race, ethnicity, and language largely incomplete for managed care plan members. *Health Aff (Millwood)* 2017;36:548-52. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.1044>. <https://www.ncbi.nlm.nih.gov/pubmed/28264958>. <https://doi.org/10.1377/hlthaff.2016.1044>.
78. <https://healthitanalytics.com/news/4-emerging-strategies-to-advance-big-data-analytics-in-healthcare>.
79. <https://www.himss.org/resources/uncovering-and-removing-data-bias-healthcare>.

80. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7133425/>.
81. <https://healthcareanchor.network/wp-content/uploads/2021/03/HAN-Rush-CwC-Case-Study-2020.pdf>.
82. Case Study: University Hospitals (Cleveland, OH) (democracycollaborative.org). <https://democracycollaborative.org/learn/publication/case-study-university-hospitals-cleveland-oh>.
83. University Hospitals - Hospitals Aligned for Healthy Communities: A toolkit to help hospitals and health systems build community wealth through inclusive hiring, investment, and purchasing (hospitaltoolkits.org). <https://hospitaltoolkits.org/purchasing/case-studies/university-hospitals/>.
84. UH-composite-online.pdf (community-wealth.org). <https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/UH-composite-online.pdf>.
85. Supplier Diversity. Diversity and Inclusion. About Us. University Hospitals. Cleveland, OH. University Hospitals (uhhospitals.org).
86. <https://health.ucdavis.edu/diversity-inclusion/anchor-institution-mission/index.html>.
87. <https://health.ucdavis.edu/diversity-inclusion/anchor-institution-mission/aim-economic-vitality.html>.
88. <https://advance.uic.edu/news-stories/better-health-through-housing/>.
89. <https://astho.org/ASTHOReports/Collaborations-Between-Health-Systems-Community-Based-Organizations/01-31-20/>.
90. DC Health Matters. <https://www.dchealthmatters.org/tiles/index/display?alias=aboutus>.
91. DC Health Matters - Moving Health Care Upstream. <https://www.movinghealthcareupstream.org/dc-health-matters/>.
92. New Community Health Needs Assessment Details Opportunities to Improve Health & Equity in DC – DC Health Matters Blog. <https://dchealthmattersblog.org/newly-released-2019-chna/>.
93. Healthy Alabama 2030 team charts changes to lift state rankings - The Reporter. UAB. <https://www.uab.edu/reporter/know-more/research/item/8673-healthy-alabama-2030-team-charts-changes-to-lift-state-rankings>.
94. A Healthier Alabama by 2030 - School of Medicine - Obesity Health Disparities Research Center. UAB. <https://www.uab.edu/medicine/obesity/news-events/center-news/88-a-healthier-alabama-by-2030>.
95. <https://www.rwjbh.org/why-rwjbarnabas-health-/social-impact/social-impact-and-community-investment-strategic/the-strategy/policy-systems-change/>.