



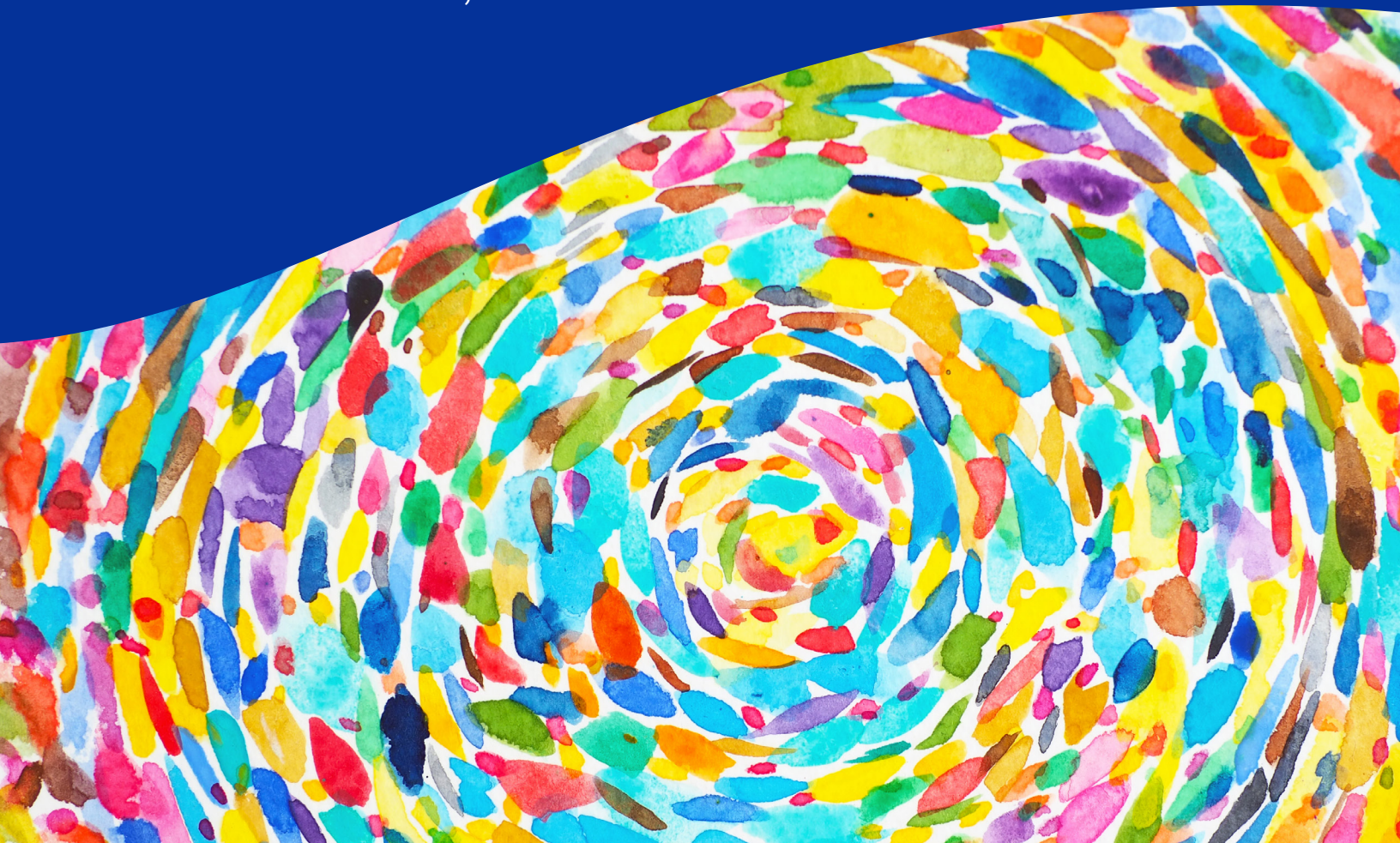
MILKEN
INSTITUTE

October 2024

HEALTH EQUITY IN SCIENCE

A Stakeholder and Funding Analysis

BY SAMANTHA SHERRILL, PHD, ISHITA DAS, PHD,
AGNES STEPHENS, AND ERIN ROSS



ABOUT US

About the Milken Institute

The Milken Institute is a nonprofit, nonpartisan think tank focused on accelerating measurable progress on the path to a meaningful life. With a focus on financial, physical, mental, and environmental health, we bring together the best ideas and innovative resourcing to develop blueprints for tackling some of our most critical global issues through the lens of what's pressing now and what's coming next.

About Milken Institute Strategic Philanthropy

Milken Institute Strategic Philanthropy advances the strategic deployment of philanthropic capital to create a better, more equitable world.

About SPARC

The Milken Institute's Science Philanthropy Accelerator for Research and Collaboration (SPARC) works to develop, launch, and lead initiatives that propel scientific and medical research. We target investments that accelerate the development of tools and treatments, bringing better health to millions of people.

©2024 Milken Institute

This work is made available under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International, available at <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

CONTENTS

Introduction.....	1
Global Efforts to Advance Health Equity	3
Building International Consensus on Health Equity	3
US Federal Initiatives and Funding for Health Equity in Science.....	8
Recent US Federal Directives and Legislation to Support Health Equity	8
Federal Agencies within HHS Working at the Intersection of Biomedical Research and Health Equity	11
Challenges Related to US Federal Government Funding Structures.....	26
Philanthropic and Nonprofit Organizations	27
Philanthropic Organizations with Large Initiatives in the Field	29
Foundations and Nonprofit Organizations	35
Nonprofit Research Institutes	42
University Initiatives	45
Historically Black Colleges and Universities and Minority-Serving Institutions	45
Columbia University Mailman School of Public Health	46
Harvard T.H. Chan School of Public Health	46
Johns Hopkins Bloomberg School of Public Health.....	47
University of California, San Francisco	48
University of Michigan School of Public Health	48
Wake Forest University School of Medicine, Maya Angelou Center for Health Equity	49
Summary.....	49
Pharmaceutical Companies and Medical Technology Firms.....	50
Summary.....	52
Professional Organizations	52
Summary.....	55
Patient Advocacy Groups	55
Summary.....	58
Community-Based Organizations	58
Summary.....	60
Cross-Sector Partnerships	60
All In: Data for Community Health	61
BUILD Health Challenge.....	61

Civic Science Fellows	62
Encoding Equity.....	62
Partnership for a Healthier America	62
STEMM Opportunity Alliance	63
Together for CHANGE	63
Other Key Stakeholders.....	64
Conclusion.....	65
Endnotes	67
About the Authors	68

INTRODUCTION

An August 2023 report from Equity Quotient, *The Health Equity Imperative*, detailed the implications of expanded US mandates for all health-care finance leaders and the steps they can take to enhance outcomes and automate compliance. According to the report, in 2021, the US allocated 17.8 percent of its GDP to health care, almost double the average expenditure of countries in the Organisation for Economic Co-operation and Development, which includes 38 of the most developed nations. Despite leading in spending, the US ranks poorly in health outcomes, with the lowest life expectancy at birth, highest rates of deaths from preventable conditions, and highest maternal and infant mortality, along with some of the highest suicide rates. Socioeconomic health disparities are a major factor contributing to these poor outcomes, imposing significant costs on the health-care system and the broader economy.

A 2023 National Institutes of Health (NIH)-funded study highlighted that racial and ethnic health disparities cost the US \$451 billion in 2018, up 41 percent from \$320 billion in 2014. Education-related health disparities for those without a college degree amounted to \$978 billion in 2018, nearly double the annual growth rate of the US economy.

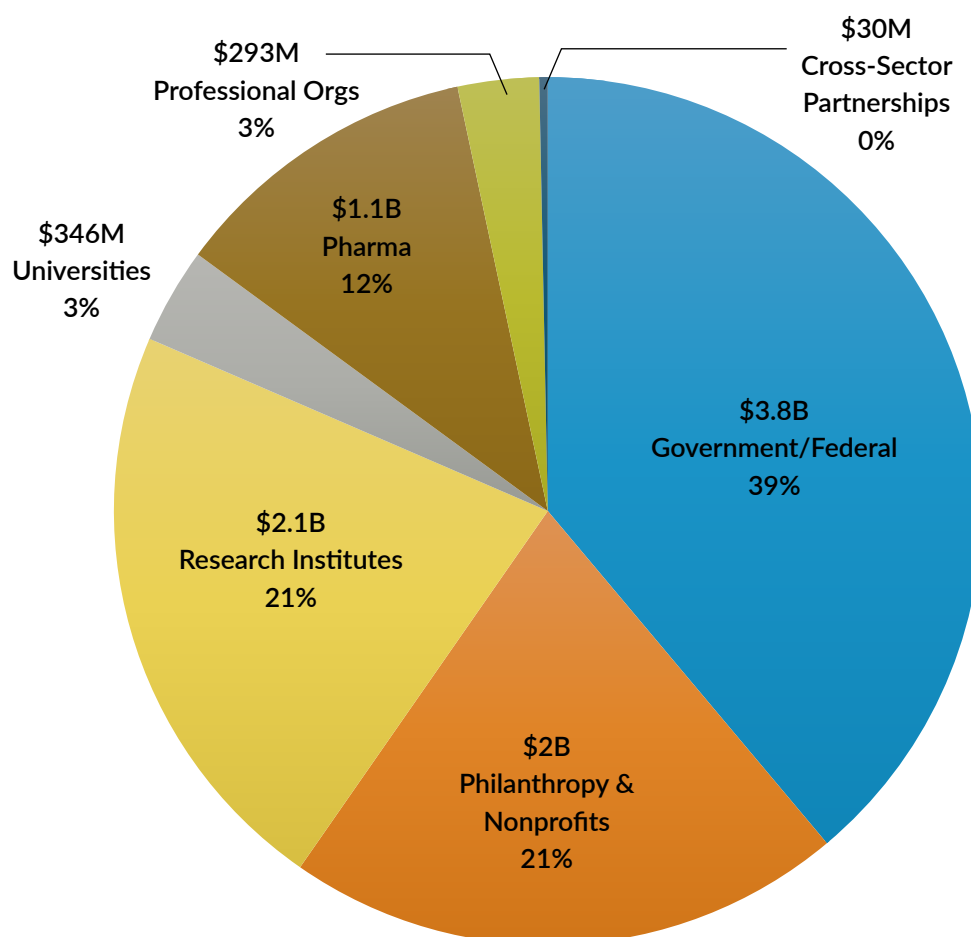
These disparities are intertwined with other significant issues in the health-care sector. For example, there is currently a shortage of 27,000 physicians, which is expected to exceed 100,000 by 2030. And the nurse workforce decreased by 100,000 from 2021 to 2022, with hospitals facing shortages in other essential roles. Labor costs have increased by 37 percent since pre-pandemic levels due to high demand and low supply. Health-care worker turnover has risen to 25.9 percent annually, with increasing disenfranchisement and transience among workers. Health-care supply chain costs have surged by 18 percent per patient from 2019 to 2022, outpacing inflation by 30 percent. Homelessness rates have been increasing by approximately 6 percent annually, exacerbating health and economic challenges. Over 50 million adults experienced mental illness in 2019–2020, with significant percentages considering suicide. Drug-related deaths more than doubled from 2000 to 2020, with further increases in 2020 and 2021. In addition, obesity rates increased from 30 percent to over 40 percent between 2000 and 2020, with extreme obesity rates nearly doubling. Addressing health equity is crucial for improving health outcomes and reducing economic burdens, making it a priority for the US health-care system.

Scientific research plays a pivotal role in advancing health equity by providing the evidence base necessary to understand and address health disparities. Rigorous research and data analysis help identify the root causes of inequities, whether they stem from socioeconomic factors, environmental conditions, or systemic biases. When conducted in line with community needs, research also develops new treatments and approaches to reduce disparities and bias. Innovations in medical research and technology, such as genomics, artificial intelligence, and telemedicine, offer new tools to tailor interventions and improve access to quality care for underserved populations. Furthermore, science informs policy development and public health strategies, ensuring they are grounded in empirical evidence and effectively target the needs of marginalized communities.

By fostering a deeper understanding of health determinants and outcomes, science enables the development of more inclusive health-care practices and policies, ultimately driving progress toward a more equitable health system for all.

The Milken Institute Science Philanthropy Accelerator for Research and Collaboration (SPARC) conducted a comprehensive review of key stakeholders and the current funding landscape of initiatives at the intersection of health equity and science. Stakeholders in this interdisciplinary field represent multiple organizations across various sectors, including government, philanthropic and nonprofit organizations, universities, pharmaceutical companies, professional organizations, patient advocacy groups, and community-based organizations (CBOs). To evaluate existing gaps and new areas of opportunity effectively, it is essential that we understand the unique benefits each stakeholder provides, the currently available funding mechanisms, and how each sector affects the biomedical ecosystem. **Figure 1** provides an overview of recent funding initiatives outlined in this document across stakeholder groups.

Figure 1. Summary of Health Equity Funding through Selected Programs by Sector



Source: Milken Institute (2024)

This document highlights key stakeholders focusing on health equity within the biomedical ecosystem and includes relevant, publicly available funding information (released through summer 2024). The sections below outline various programs and funding initiatives within the health equity space from stakeholders within government, philanthropic and nonprofit organizations, universities, pharmaceutical companies, professional organizations, patient advocacy groups, and CBOs.

GLOBAL EFFORTS TO ADVANCE HEALTH EQUITY

Health equity is a growing global priority, driven by the understanding that addressing health disparities is essential for improving overall health outcomes and achieving economic stability. The COVID-19 pandemic highlighted and exacerbated health inequities, leading to a stronger global call for equitable access to vaccines, treatments, and health-care resources. Furthermore, the global climate crisis has exposed the disproportionate effect of extreme weather events, changing disease patterns, food and water insecurity, and displacement on the health of marginalized communities, including low-income populations, Indigenous peoples, and those in developing countries. This has been a significant focus of international cooperation and funding for international organizations, governments, and nongovernmental organizations (NGOs). This section describes global regulatory efforts and a summary of selected recent initiatives that international organizations have introduced to incorporate health equity within their research.

Building International Consensus on Health Equity

There is a growing body of research and policy development focused on understanding and addressing the social determinants of health (SDOH) that contribute to health inequities. In addition, many NGOs and philanthropic organizations are working globally to address health inequities. These organizations often focus on marginalized and underserved populations to ensure they receive necessary health services and support. Countries are increasingly incorporating health equity into their national health policies and programs, recognizing that reducing health disparities can lead to better health outcomes and sustainable development.

International Organizations

International organizations such as the United Nations (UN) and its specialized agency, the World Health Organization (WHO), have stressed the importance of reducing health inequities, particularly focusing on social determinants like poverty, education, food and water insecurity, and gender equality. These and other prominent stakeholders are outlined below.

European Commission

The European Commission's health equity funding initiatives are primarily carried out through the EU4Health program, which is the largest health program ever funded by the EU, with a **budget of €5.3B for the period 2021–2027**. This program aims to improve health in the EU by addressing various health-related challenges, including those exacerbated by the COVID-19 pandemic. Key components include enhancing crisis preparedness, funding health promotion and disease

prevention strategies, strengthening health systems and the health-care workforce, investing in digital health solutions, and funding cancer prevention programs. Additional EU programs include:

- European Social Fund Plus, which supports social inclusion and equal access to health care by funding projects that improve job opportunities and fair employment;
- European Regional Development Fund and Cohesion Fund, which focus on reducing disparities among EU regions, including investments in health-care infrastructure and digital health approaches; and
- Horizon Europe, the EU's research and innovation program that finances health-related research projects, including addressing SDOH and reducing health disparities across member states.

United Nations

In 2015, the UN adopted 17 Sustainable Development Goals (SDGs) as an urgent call to end poverty and develop strategies for improving health and education, reducing inequality, and spurring economic growth while also tackling climate change to achieve a better and more sustainable future for all by 2030. The SDGs emphasize the importance of partnerships and collaboration among governments, the private sector, civil society, and individuals to drive progress and ensure that no one is left behind.

The Division for Sustainable Development Goals (DSDG) within the UN Department of Economic and Social Affairs provides critical support and capacity-building for the SDGs and their associated thematic areas, such as water, energy, climate, oceans, urbanization, transport, science and technology, the Global Sustainable Development Report, partnerships, and Small Island Developing States. DSDG plays a vital role in evaluating the UN's systemwide implementation of the 2030 Agenda and in advocacy and outreach activities related to the SDGs. To make the 2030 Agenda a reality, it is essential for all stakeholders to strongly commit to the global goals. DSDG aims to facilitate this widespread engagement. According to the 2024 SDG Progress Report, only 17 percent of SDG targets are on track to be achieved, nearly half are showing minimal or moderate progress, and progress on over a third has stalled or even regressed. Despite these seeming setbacks, governments remain united behind the 2030 Agenda.

United Nations Children's Fund

The United Nations Children's Fund (UNICEF), a UN agency, works around the world to improve health outcomes for children and address health inequities that affect young populations, particularly in underdeveloped and developing countries. Funded through its flexible, thematic funding approach, UNICEF has several key initiatives aimed at promoting health equity globally. Its Digital Health Initiatives focus on leveraging technology to enhance health systems. These initiatives include platforms such as RapidPro, which uses mobile technology to improve vaccine management and disease tracking, and FamilyConnect, which sends health-related SMS messages

to parents and caregivers. These digital solutions aim to ensure that vital health information and services reach the most disadvantaged children and their families.

UNICEF also emphasizes Strengthening Health Systems, which involves enhancing the capacity of health systems to provide equitable, high-quality care. This approach includes investing in infrastructure, workforce training, and policy development to create resilient health systems that can better serve vulnerable populations.

World Health Organization

The WHO is the foremost international health body, working to promote health, keep the world safe, and serve the vulnerable. It operates global health equity initiatives aimed at ensuring all people can access quality health services without financial hardship. WHO also conduct research and releases guidance for monitoring and taking action on inequities. For example, in response to the 74th World Health Assembly held in 2021, which encouraged member states to integrate SDOH into public policies and programs and adopt multisectoral approaches, WHO released a report on January 18, 2024, containing an operational framework for monitoring SDOH equity. The framework provides countries with essential guidance on tracking SDOH and implementing actions to address them while leveraging data for policy initiatives across various sectors to enhance health equity.

While the US government has historically been one of the largest funders of WHO,¹ with **annual contributions ranging from \$163 million to \$816 million over the last decade**, the Trump administration temporarily suspended funding for WHO in 2020 and initiated a process to end US membership. These actions were reversed by the Biden administration in 2021; however, the outcome of the 2024 US election will likely have significant consequences regarding the US' continuation as a member state and funder of WHO.

Global Health Initiatives

In addition to government-based initiatives, several global initiatives rely on partnerships among government, civil society, technical agencies, the private sector, and people affected by diseases. Some of these are described below.

EuroHealthNet

EuroHealthNet is a not-for-profit partnership of organizations, agencies, and statutory bodies working on public health, disease prevention, promoting health, and reducing inequalities. EuroHealthNet's mission is to improve and sustain health among and within European states through action on SDOH and to tackle health inequalities. EuroHealthNet influences national and European policy related to health, social rights, and wider issues affecting health and well-being. This includes advocating for the integration of health equity impact assessments into EU regulations and promoting policies that consider the well-being economy principles, which balance economic, social, and environmental factors.

The organization helps its members build capacity and share knowledge about effective practices in public health. This is facilitated through networking, collaboration, and the use of EU funding instruments for implementing sustainable health practices and programs. EuroHealthNet's research platform supports evidence-based approaches to health equity and well-being, helping to inform policies and practices that tackle health inequalities. The organization promotes collaboration among researchers, policymakers, and other stakeholders to build a strong evidence base for health interventions. EuroHealthNet has signed agreements with entities such as the WHO Regional Office for Europe to enhance collaboration on health promotion, health equity, and sustainable development. These partnerships aim to align efforts and leverage resources for greater impact on reducing health disparities. Its health inequalities portal provides resources on EU funding mechanisms that can be used to advance public health and health equity initiatives. Through programs like the European Social Fund Plus and the European Regional Development Fund, EuroHealthNet supports projects that improve health infrastructure, promote health equity, and enhance social inclusion. These funds are instrumental in addressing regional disparities and supporting vulnerable populations across Europe.

Gavi, the Vaccine Alliance

Since its inception in 2000, Gavi, the Vaccine Alliance, has invested significant resources in promoting global health equity through vaccination programs. The public-private partnership has raised and **invested over \$20 billion** to increase access to vaccines in lower-income countries, helping to vaccinate more than 1 billion children and preventing more than 17.3 million future deaths. Gavi's efforts include innovative strategies and partnerships to reach "zero-dose" children who have not received any routine vaccines, particularly in marginalized and hard-to-reach communities. The organization aims to immunize an additional 300 million children and save up to 8 million lives by 2025.

The Global Fund

The Global Fund plays a pivotal role in promoting health equity by **investing over \$5 billion annually** to combat HIV, tuberculosis, and malaria, and fight emerging threats such as COVID-19, with a strong emphasis on addressing the inequities that contribute to their prevalence, primarily in low- and middle-income countries.² It supports the development of resilient and sustainable health systems, ensuring that the most vulnerable populations have access to necessary health services. The Global Fund's approach includes strengthening formal and community health systems, integrating community health workers into primary care, and enhancing the quality of care and data use for decision-making. Additionally, it emphasizes the importance of partnerships and innovative solutions to address health disparities and improve overall health outcomes globally.

Oxfam International

Oxfam International is a global confederation of 20 independent charitable organizations focused on alleviating global poverty. Founded in 1942 in Oxford, England, as the Oxford Committee for

Famine Relief, Oxfam has grown to become a major international organization working in over 90 countries. The organization's mission is to tackle the root causes of poverty and injustice and to create lasting solutions that empower individuals and communities.

Oxfam is actively engaged in promoting health equity through various funding initiatives. One of its primary focuses is achieving universal health coverage, advocating for financing health care through progressive taxation and international aid rather than insurance schemes that exclude the poor. It estimates that improving tax collection in 52 developing countries could **raise an additional \$269 billion**, which could significantly increase health budgets and expand coverage to the most marginalized populations.

In addition to universal health coverage, Oxfam funds initiatives aimed at preventing gender-based violence and enhancing sexual and reproductive health and rights (SRHR). For instance, in Lebanon, Oxfam supports projects that address the intersection of economic, political, and social crises and their impact on gender-based violence and SRHR services. These initiatives also involve critical evaluations of how funding strategies affect women's human rights defenders and activists.³

Another notable initiative is the Stand Up project funded by Global Affairs Canada, which supports community-based SRHR initiatives in Canada, Mozambique, and Uganda. This project provides financial support for activities that raise awareness and improve knowledge on SRHR, targeting diverse groups including women, LGBTQIA+ individuals, and youth-led organizations.⁴

Partners in Health

Partners In Health (PIH) is a nonprofit organization committed to providing high-quality health care to impoverished and marginalized populations in 11 countries, operating on the principle that health is a human right. Founded in 1987, PIH focuses on strengthening health systems through investments in infrastructure, medical supplies, and health-care worker training. Its community-based programs employ local health workers to extend services directly to patients, ensuring accessible and comprehensive care. PIH also partners with local governments and international bodies to advocate for equitable health policies and universal health care coverage. In addition to these efforts, PIH supports education and research initiatives aimed at addressing health disparities. Its funding initiatives include significant investments in building sustainable health systems and fostering collaborations to enhance health care delivery and equity.

Summary

As detailed above, the primary focus areas for many global health equity initiatives include health system strengthening, digital health solutions, crisis preparedness and disease prevention, SDOH, vaccine access and immunization programs, health equity research and policy development, universal health coverage, climate and health, community health initiatives, sexual and reproductive health rights, and international cooperation and partnerships. There is less focus on biomedical and clinical research to affect health equity.

US FEDERAL INITIATIVES AND FUNDING FOR HEALTH EQUITY IN SCIENCE

The US government has instituted several legislative initiatives and programs across federal agencies that promote equity in health and health sciences. This section first describes recent national directives and legislation that support and guide the promotion of equity across various sectors and then summarizes funding initiatives at the intersection of health equity and science occurring within key federal agencies that are doing the work to implement this legislation.

Recent US Federal Directives and Legislation to Support Health Equity

In response to the COVID-19 pandemic and social justice movements of 2020–2021, which spotlighted deep-seated inequities and health disparities, the Biden administration issued several executive orders (EOs). Eight EOs were issued in 2021 alone. These and other legislation are detailed below in **Table 1**.

Table 1. 2021 and 2023 Executive Orders Impacting Health Equity

Executive Order	Description
<u>13985: <i>Advancing Racial Equity and Support for Underserved Communities through the Federal Government</i></u>	Issued on January 20, 2021, this EO mandates federal agencies to conduct equity assessments, develop action plans to address barriers, and improve data collection to better represent underserved populations. The EO establishes the Federal Equitable Data Working Group to enhance data practices and requires agencies to allocate resources to address systemic inequities. Additionally, it emphasizes community engagement to understand and address challenges faced by underserved groups, with the Office of Management and Budget overseeing these efforts. The goal is to create inclusive and equitable policies, programs, and services benefiting all Americans.
<u>13988: <i>Prevent and Combat Discrimination Based on Gender Identity or Sexual Orientation</i></u>	Issued on January 20, 2021, this EO directs agencies to review and revise existing policies to ensure compliance with antidiscrimination laws, providing protections for LGBTQ+ individuals in areas such as employment, housing, health care, and education. The order emphasizes the federal government's commitment to upholding equality and eliminating discrimination, reinforcing the protections guaranteed under the Supreme Court's decision in <i>Bostock v. Clayton County</i> , which extends Title VII protections to LGBTQ+ employees.
<u>13995: <i>Ensuring an Equitable Response and Recovery from the COVID-19 Pandemic</i></u>	Issued on January 21, 2021, this EO mandates the establishment of a COVID-19 Health Equity Task Force to address disparities in public health and economic impacts of the pandemic on underserved communities. The EO directs federal agencies to improve data collection, expand vaccine access, and ensure that pandemic-related resources are distributed equitably. It emphasizes prioritizing the needs of communities hardest hit by the pandemic, including racial and ethnic minorities, and aims to eliminate barriers to health care and economic support to achieve a fair and effective pandemic response and recovery.

<p><u>14035: Diversity, Equity, Inclusion, and Accessibility within the Federal Workforce</u></p>	<p>Issued on June 25, 2021, this EO directs federal agencies to develop strategic plans to advance diversity, equity, inclusion, and accessibility (DEIA), enhance recruitment and hiring practices, and create supportive workplace environments for employees from all backgrounds. It emphasizes the importance of addressing barriers faced by underrepresented groups, including people of color, women, LGBTQ+ individuals, formerly incarcerated individuals, persons with disabilities, and veterans. The order also mandates the collection and analysis of workforce data to inform DEIA efforts, and the establishment of a chief diversity officer in each agency to oversee implementation and progress. The goal is to build a federal workforce that reflects the diversity of the American public and fosters an inclusive and equitable work environment.</p>
<p><u>14041: White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity through Historically Black Colleges and Universities</u></p>	<p>Issued on September 3, 2021, this EO aims to promote the strength and sustainability of historically Black colleges and universities (HBCUs) by enhancing their capacity to provide high-quality education, fostering innovation, and ensuring equitable economic opportunities for their students. It mandates federal agencies to partner with HBCUs, improve funding access, and eliminate barriers that hinder their participation in federal programs. Additionally, it creates an Interagency Working Group and an advisory board to support these institutions, ultimately aiming to increase their contributions to the nation's talent pool and economic growth.</p>
<p><u>14045: White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity for Hispanics</u></p>	<p>Issued on September 13, 2021, this EO aims to improve educational and economic outcomes for Hispanic and Latino students by addressing systemic barriers and promoting policies that enhance their educational opportunities. It directs federal agencies to work collaboratively with Hispanic-serving institutions (HSIs), community organizations, and the private sector to develop and implement strategies that support Hispanic students from early childhood through higher education and into the workforce. The initiative also focuses on increasing access to resources, improving data collection on educational outcomes, and promoting equity in education to ensure that Hispanic students can achieve their full potential and contribute to the nation's prosperity.</p>
<p><u>14049: White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity for Native Americans and Strengthening Tribal Colleges and Universities</u></p>	<p>Issued on October 11, 2021, this EO aims to enhance educational opportunities and economic prospects for Native American students by addressing systemic barriers and supporting tribal education. It mandates federal agencies to collaborate with tribal colleges and universities (TCUs), tribal organizations, and community partners to improve access to resources, increase funding, and develop strategies that support Native American students from early education through higher education and into the workforce. The initiative focuses on promoting equity, preserving Native languages and cultures, and ensuring that Native American students can achieve academic excellence and economic success.</p>

<p><u>14050: <i>White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity for Black Americans</i></u></p>	<p>Issued on October 19, 2021, this EO aims to enhance educational and economic outcomes for Black students by addressing systemic inequities and promoting policies that provide greater opportunities for success. It directs federal agencies to work with Black-serving institutions, community organizations, and the private sector to develop and implement strategies that support Black students from early childhood through higher education and into the workforce. The initiative focuses on increasing access to resources, improving educational environments, and eliminating barriers to ensure Black students can achieve their full potential and contribute significantly to the nation's prosperity.</p>
<p><u>14091: <i>Further Advancing Racial Equity and Support for Underserved Communities through the Federal Government</i></u></p>	<p>Issued on February 16, 2023, this EO builds upon previous efforts to advance racial equity and support underserved communities through the federal government, particularly EO 13985. The order directs federal agencies to continue and expand their work in identifying and addressing barriers to equal opportunity in their policies and programs. It mandates the creation of Agency Equity Teams to ensure a sustained focus on equity, the development of Equity Action Plans with measurable goals, and enhanced data collection to track progress. The order emphasizes the need for continuous engagement with underserved communities to understand and address their specific challenges. It also requires agencies to allocate resources more equitably, fostering inclusive and accessible programs and services. The ultimate goal is to institutionalize equity across the federal government, ensuring that all Americans have fair access to opportunities and benefits.</p>

Recent Legislation

The majority of recent federal activity influencing health equity has come in the form of EOs rather than legislation, which leaves them vulnerable to being overturned by subsequent administrations. However, some recent legislation has been introduced in this space.

On September 21, 2020, the US House of Representatives passed the Maternal Health Quality Improvement Act. The act aimed to reduce maternal mortality rates and address racial and ethnic disparities in maternal health outcomes by implementing measures such as rural obstetric networks, maternal telehealth programs, staff-focused implicit bias training, and integrated health-care services for pregnant and postpartum women. The legislation also included provisions for improving data collection, supporting maternity care providers, and expanding access to care to ensure better health outcomes for all mothers and their babies. However, the bill was not enacted into law.

In December 2022, President Biden signed the Food and Drug Omnibus Reform Act into law as part of the Consolidated Appropriations Act of 2023. This legislation included measures aimed at enhancing clinical trial diversity and modernization. It amended the Food, Drug, and Cosmetic Act to mandate that sponsors of specific clinical studies submit Diversity Action Plans to the Food and Drug Administration (FDA). Additional guidance on the form, content, and manner of diversity action plans, the applicable medical products, clinical studies for which a diversity action plan is required, the timing and process for submitting diversity action plans, and the criteria and process by which the FDA will evaluate sponsors' requests for waivers from these plans was released in June 2024.

Federal Agencies within HHS Working at the Intersection of Biomedical Research and Health Equity

A broad spectrum of federal agencies provides critical expertise to support the advancement of health equity in science. This section focuses on US government agencies within the Department of Health and Human Services (HHS) working at the intersection of health equity and biomedical research, with the National Institutes of Health as the primary funder of these initiatives. **Figure 2** shows a breakdown of major funding initiatives by focus area and agency.



Figure 2. Summary of Large Federal Initiatives at the Intersection of Health Equity and Science *Notes: This figure excludes NIH's All of Us Research Program, whose budget is significant compared to other efforts. Projects shown represent initiatives that are ongoing with different, multiyear timelines. According to this analysis, a majority of funding has gone into research on health disparities and enhancing biomedical workforce development and diversity.*

Source: Milken Institute (2024)

As the principal federal agency for protecting the health of all Americans, HHS oversees numerous offices and programs aimed at reducing health disparities. In the FY2024 and 2025 budgets, HHS requested \$25 million and \$15 million, respectively, to advance health equity as part of its program operations. This \$10 million decrease underscores the recent shift in prioritization away from funding health equity measures.

The cross-agency Healthy People 2030 initiative is a comprehensive set of health objectives for the US to achieve over the decade, designed to improve the health and well-being of all Americans. It builds on the successes and lessons learned from previous iterations of the Healthy People initiative, which began in 1979. Managed by the HHS Office of Disease Prevention and Health Promotion, Healthy People 2030 sets data-driven national objectives to improve health and reduce health disparities. Across agencies, some of HHS's most significant accomplishments include lowering health-care costs, expanding health-care coverage, improving health outcomes, bolstering rural and tribal health-care providers, and advancing civil rights and nondiscrimination in health care. HHS' Health Equity Action Plan builds on the EOs described above.

HHS has also played a central role in advancing data equity. Efforts along these lines involve standardizing SDOH and sexual orientation and gender identity (SOGI) data, an HHS-wide SOGI data action plan, collecting information to improve our understanding of the drivers of inequities in maternal mortality, transparent use of equity-related health information, efforts to examine bias in health-care algorithms, intellectual and developmental disabilities counts, and health equity science principles. More detailed information on relevant offices and agencies within HHS is outlined below.

Office of Minority Health

The HHS Office of Minority Health (OMH) offers several funding opportunities aimed at improving health equity in science, with a **FY2024 budget of \$86 million**. From 2017 to 2022, its Partnerships to Achieve Health Equity program focused on building multi-partner collaborations that address SDOH and have a nationwide or regional impact. It aimed to improve access to care for minority and disadvantaged populations, increase the diversity of the health workforce, and enhance data utilization for health equity activities. The program **awarded six grants totaling \$2.3 million** over the course of five years.

The 2023 Health Equity Leadership Development Initiative aims to address the gap in federal fellowship opportunities for advancing health equity. It provides funding for training early-career individuals in health equity and leadership to improve health outcomes for racial and ethnic minority and disadvantaged populations. Award amounts ranged from \$600,000 to \$700,000, with **a total estimated funding of \$2 million**.

Established in 2021, the Center for Indigenous Innovation and Health Equity supports research, education, service, and policy development to address health disparities among American Indian, Alaska Native, Native Hawaiian, and Pacific Islander populations. The initiative awarded a **total of \$4 million in 2023**—\$2 million to the Oklahoma State University Center for Health Sciences

and \$2 million to the University of Hawaii to continue its work over a five-year period to develop, implement, and evaluate culturally appropriate approaches for reducing and eliminating these disparities through partnerships with academic institutions, Indigenous leaders, and community members.

OMH recently solicited applications for projects that aim to demonstrate how community-level innovations addressing SDOH can enhance the use of preventive health services and progress toward Leading Health Indicator (LHI) targets. LHIs, part of the high-priority objectives of Healthy People 2030, focus on improving health and well-being. An **anticipated \$8 million** is available for up to 14 awards, ranging from \$475,000 to \$600,000 annually, for up to two years.

Office of the National Coordinator for Health Information Technology

The HHS Office of the National Coordinator for Health Information Technology (ONC) funds health equity research through various initiatives and programs. One of the primary programs is the Leading Edge Acceleration Projects (LEAP) in Health IT. This program aims to address health equity and SDOH by developing innovative, open-source technology tools and improving electronic health records (EHRs).

In 2022, the LEAP in Health IT funding opportunity specifically sought to address health equity through (1) projects aimed at improving health equity by integrating SDOH into health-care delivery using technology or (2) projects demonstrating how patient-generated health data can be used to enhance clinical care and research, focusing on underserved communities. The 2024 funding call has drifted somewhat from explicit health equity aims, seeking applications that (1) develop innovative ways to improve health-care data quality to support the responsible development of AI tools in health care or (2) accelerate the adoption of health IT in behavioral health settings.

ONC supports other health equity-focused initiatives, such as the Health IT Certification Program, which ensures that certified health IT can capture and exchange specific health data in a standardized way to support equity considerations from the start. In September 2021, the ONC launched the Public Health Informatics & Technology Workforce Development Program, which allocated **over \$75 million to 10 higher education institutions to enhance public health IT initiatives in the US**, improve COVID-19 data collection, and expand the public health IT workforce. The recipients, comprising HBCUs, HSIs, Asian American and Native American Pacific Islander-serving institutions, and other institutions of higher education, will form multiple consortia to collectively train more than 5,000 individuals over a four-year period through an interdisciplinary approach in public health informatics and technology. The consortia will create curricula, recruit and train participants, arrange paid internships, and support career placement in public health agencies, nonprofits, or other public health-focused organizations. These efforts aim to increase the number of trained public health professionals and enhance the capacity of minority-serving institutions (MSIs) to educate underrepresented students, both during and beyond the project period, even after federal funding ends.

Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) supports research to improve the quality of health care, reduce its costs, and address issues such as racial and ethnic disparities in health care. In a [report from March 2024](#), AHRQ outlined a number of ongoing initiatives to improve health equity through research and action. Among these is the Learning Health System Embedded Scientist Training and Research Centers initiative, a **five-year, \$80 million effort** to train researchers and scientists to conduct system-focused research to advance health equity and enhance workforce diversity. **AHRQ awarded seven research grants in the fall of 2023 totaling \$15 million** on “Dissemination and Implementation of Equity-Focused Evidence-Based Interventions in Healthcare Delivery Systems.”

In addition to funding research, AHRQ develops tools, training, and resources to translate scientific evidence into practice, helping health systems and clinicians improve care. For example, it published the [Digital Healthcare Equity Framework](#), which guides the equitable development of digital health-care tools. It also expanded the [Social Determinants of Health Database](#) to provide community-level SDOH data for research to inform health equity interventions. Continuing efforts will include prioritizing patient-centered and participatory methods that center equity and ensure that stakeholders and community members from underserved populations are represented at every stage of the research process.

Advanced Research Projects Agency for Health

Since March 2022, the Advanced Research Projects Agency for Health ([ARPA-H](#)) has been on a mission to [accelerate better health outcomes for everyone](#). Several programs and initiatives are directly aimed at improvements for those who have been historically underserved and underrepresented in biomedical research, which are described below. Awards without funding amounts are in the process of launching.

- Platform Accelerating Rural Access to Distributed and InteGrated Medical care ([PARADIGM](#)) aims to improve health-care access for rural populations by developing a scalable mobile platform capable of delivering advanced medical services outside hospital settings. Leveraging recent advancements in satellite communication and the miniaturization of medical devices, this mobile care platform will enable health-care providers to reach and treat rural patients in their own communities.
- Novel Innovations for Tissue Regeneration in Osteoarthritis ([NITRO](#)) aims to improve osteoarthritis treatment and ensure equitable access by developing innovative joint repair methods. It focuses on three areas: injectable bone regeneratives, injectable cartilage regeneratives, and human cell-based replacement joints. With osteoarthritis affecting over 32 million Americans, especially women and Black and Hispanic populations, NITRO incorporates equity in its clinical trials to ensure diverse patient representation.

- The Sprint for Women's Health Research is a key initiative of the White House Initiative on Women's Health Research, in which ARPA-H is dedicating **\$100 million to transformative research and development in women's health**. The initiative aims to support groundbreaking research and accelerate the development of tools, products, and platforms with commercialization potential to improve women's health outcomes. ARPA-H's focus includes six key areas: Women's Health at Home, Prioritizing Ovarian Health through Mid-Life to Prevent Disease, Advancing Research through Enhanced Models for Investigating the Influence of Sex Differences on Health Outcomes, Advancing Women's Brain Health via Lymphatic Targeting, Objective and Quantitative Measurement of Chronic Pain in Women, and Revolutionary Breakthroughs in Women's Health.
- Healthcare Rewards to Achieve Improved Outcomes (HEROES) seeks to test and validate an innovative strategy for creating incentives for preventive care in the health market. This strategy includes providing direct payments to "health catalysts," such as nonprofits or care consortiums, that successfully implement preventive care campaigns to improve health outcomes across entire geographic populations. HEROES aims to stimulate investment in community-level preventive care resources, particularly in areas with historically limited access to medical and health care advancements.

Centers for Disease Control and Prevention

Introduced in 2021, the Centers for Disease Control and Prevention's (CDC) CORE Health Equity Strategy aims to embed health equity and diversity, equity, inclusion, accessibility, and belonging into all CDC operations. Building health equity into research at the CDC is a critical aspect of CORE. In 2023, the CDC published the Health Equity Science Principles, which guide the development and use of health equity science. In the same year, the CDC collaborated with multiple community partners through its Communities in Context program in the Greater Detroit area to pilot a public health monitoring framework and track structural drivers of inequities at the local level to identify areas to improve community health. Additionally, the Health Equity Science Manuscript Development Program was established to mentor and train CDC scientists in the development of impactful health equity scientific publications.

The CDC has also designed interventions to address health equity (e.g., using webinars to equip CDC offices with health equity strategies for responding to a public health crisis in real time, including lessons learned from a 12-month COVID-19 monitoring and evaluation study of seven local communities). The 2022 Health Equity Intervention and Action Principles outline critical focus areas to guide public health interventions and systems change.

In 2022, the CDC conducted message testing to understand various audiences' perceptions of health equity and how to craft effective messages for these groups. This testing led to the development of three communication principles that shift the focus from merely identifying and quantifying health disparities to addressing health equity. To further promote health equity, the CDC created a series of videos explaining health equity concepts, such as SDOH, racism, and

intersectionality. In 2021, the CDC developed the Health Equity Guiding Principles for Inclusive Communication, highlighting the need to address all individuals inclusively and respectfully. This guide offers principles, resources, and specific suggestions for communicating with a health equity perspective, adapting to the unique cultural, linguistic, environmental, and historical contexts of each audience.

In response to Executive Order 14035 on Diversity, Equity, Inclusion, and Accessibility in the Federal Workplace and the 2021 release of the Government-wide Strategic Plan to Advance DEIA in the Federal Workforce, the CDC created an agency-specific DEIA Strategic Plan. This plan underscores the CDC's commitment to fostering a workforce and workplace that embody equity principles, aiding in the pursuit of its public health mission. In 2022, the CDC launched the Antiracism and Health Sprint Team to enhance institutional expertise and equity infrastructure as part of the DEIA Strategic Action Plan. This team works to implement best practices for intersectional racial equity throughout the CDC.

Despite the CDC's **\$100 million** request in FY2024 for increased support to implement SDOH plans through community ACTION (Addressing Conditions to Improve Health) and to continue building the evidence base through applied research, data collection, and evaluation, it received **\$8 million**, the same as in 2023. This has led CDC leaders to request the same \$8 million for 2025.

Centers for Medicare & Medicaid Services

The Centers for Medicare & Medicaid Services (CMS) strives to integrate health equity into all aspects of its work. With programs covering nearly one in two Americans, or more than 160 million people across the US, CMS is critical to ensuring that everyone has access to quality health care.

Along these lines, CMS **invested almost \$100 million in grant funding** to health-care coverage navigator organizations for the 2024 open enrollment period to provide increased enrollment assistance and outreach to underserved communities. It also **awarded over \$1 million in 2023** to support three MSIs conducting research in underserved communities through the Minority Research Grant Program. CMS further awarded three Health Equity Data Access Program grants to facilitate researchers' access to the CMS Virtual Data Research Center for conducting health services research focused on underserved communities. Additionally, CMS funded a one-year pilot program, the Tribal Data Learning Community, which grants Tribal Epidemiology Centers access to CMS claims datasets.

Since 2021, the CMS Innovation Center has pursued a vision of equitable, high-quality, affordable, and person-centered care, with health equity as a core objective. To achieve this, the center has designed value-based care models that include sociodemographic data collection, health equity

plans, and support for underserved populations. Recent initiatives have focused on increasing safety-net provider participation, enhancing data collection for whole-person care, and developing innovative payment policies to narrow health disparities, all while continuously refining approaches based on emerging insights and progress.⁵

Food and Drug Administration

The FDA has a variety of innovative initiatives aimed at advancing health equity in science. In 2022, the FDA's Office of Minority Health and Health Equity (OMHHE) allocated more than \$8 million to support multiple projects aimed at advancing health equity-focused regulatory science research and increasing understanding of diverse patient perspectives. The OMHHE Enhance Equity initiative focuses on improving equity in clinical trials by supporting efforts to increase diversity among participants. It promotes equitable data collection by expanding research on diverse groups, considering factors such as ethnicity, race, age, disability, and geography. The initiative also amplifies the FDA's communication with diverse communities to ensure that stakeholders, including consumers, are informed about the FDA's efforts and understand the perspectives, preferences, and unmet needs of diverse patients. **The annual FDA OMHHE Health Equity Innovation Award: Enhance Equity Funding Opportunity grants \$1 million** in support of collaborative scientific research projects with various organizations, aiming to continuously advance the Enhance Equity Initiative.

The Office of Women's Health developed the Diverse Women in Clinical Trials Initiative in collaboration with the NIH Office of Research on Women's Health. This initiative aims to raise awareness about the participation of women of various ages, races, ethnic backgrounds, and health conditions in clinical trials. It also shares best practices for clinical research design, recruitment, and subpopulation analyses. The initiative includes a consumer awareness campaign and provides resources and workshops for health professionals and researchers.

Additionally, the FDA's Racial and Ethnic Minority Acceleration Consortium for Health Equity, established in 2023, focuses on research to address health disparities among racial and ethnic minority populations. This initiative is part of the FDA's broader effort to integrate health equity into regulatory science and innovation.

National Institutes of Health

NIH is the primary federal agency that funds medical research through its 27 Institutes and Centers (ICs), as well as the central Office of the Director (OD), and plays an essential role in advancing health equity in science. This section highlights key initiatives and funding levels across the institutes, centers, and offices (ICOs).

Office of the Director

Many entities within the OD focus on and emphasize NIH's commitment to advancing health equity.⁶ For example, the Office of Research on Women's Health (ORWH), the Sexual & Gender

Minority Research Office, the Tribal Health Research Office, and the Chief Officer for Scientific Workforce Diversity (COSWD) work collaboratively with all NIH ICOs. The FY2024 budget was **\$76.5 million for ORWH and \$22.4 million for COSWD**, both remaining near stable from FY2023.

The NIH-wide UNITE initiative exemplifies the key role NIH plays in advancing racial equity and inclusion within the biomedical and behavioral workforce. The focus areas include elevating health disparities and minority health research across ICs, promoting equity in the NIH intramural and extramural research ecosystem, and improving the accuracy and transparency of racial and ethnic equity data. The latest progress report was released in June 2024 and highlights progress made since the initiative launched in 2021.

Additionally, the establishment of the Artificial Intelligence/Machine Learning (AI/ML) Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) program in the Office of Data Science Strategy was driven by the lack of diversity in the AI/ML workforce and data. This program aims to coordinate partnerships that increase the participation of currently underrepresented communities in model development.

Persistent gaps in the workforce and data pose a significant risk of exacerbating health disparities and inequities in these communities. To address this, AIM-AHEAD actively engages the untapped potential within these communities to expand current datasets and training efforts. In the fall of 2021, the University of North Texas Health Science Center was awarded **\$50 million** to lead consortium efforts involving eight other coordinating centers. Additionally, three institutions—the National Alliance Against Disparities in Patient Health, Harvard Medical School, and Vanderbilt University Medical Center—received funding for infrastructure cores to enhance interoperability. Howard University serves as the data science training core. OCHIN, a nonprofit organization that connects health-care delivery sites nationwide, coordinates with multidisciplinary community health partners as the data and research core to establish inclusive research priorities and develop AI tools.

All of Us Research Program

The All of Us Research Program aims to collect study data from 1 million people living in the United States to create a diverse database. This database includes participants from various races, ethnicities, age groups, and regions across the country. The program collects a wide range of health data, including whole genome sequencing, blood, urine, and saliva samples; physical measurements; EHR data; family medical histories; surveys; and data from wearables. By integrating these extensive data, *All of Us* aims to advance precision medicine using computational tools that analyze health based on well-trained models for individualized care.

Congress allocated a **\$1.5 billion budget to support data collection from 2016 to 2026**, alongside the development of custom tools and software to help researchers analyze the generated data. As of summer 2024, over 790,000 people across the US and its territories have joined the program. Of the 540,000 who have completed the programs' initial steps, 87 percent are from communities that have been historically left out of research.

Funding for *All of Us* decreased from \$419 million in 2023 to \$235 million in 2024. This recent **budget cut of \$184 million** (a 34 percent decrease) is likely to hit front-line staff involved in recruitment the hardest, losing 600 of 3,000 full-time positions. In response, *All of Us* has delayed enrollment of a pediatric cohort of at least 100,000 children.⁷

Common Fund

The NIH Common Fund is an entity within the OD that funds innovative scientific programs designed to drive discoveries across all areas of biomedical and behavioral research. The Common Fund has several ongoing programs centered on health equity, which are outlined in **Table 2**. **Collective funding for these programs includes almost \$1.4 billion over five years.**

Table 2. Current NIH Common Fund Programs Focused on Health Equity

Initiative	Description
<u>Bridge to Artificial Intelligence</u> (Bridge2AI)	<p>Aims to advance biomedical and behavioral research by leveraging AI to address complex biomedical challenges.</p> <ul style="list-style-type: none">• Will invest \$130 million over four years starting September 2022 to support the creation of AI-ready datasets, tools, and resources.• Brings together diverse teams from various disciplines to ensure that AI tools and data are accurate, reliable, and ethically sourced.• Emphasizes the importance of ethical considerations in data collection and aims to avoid perpetuating biases or inequities. <p>By integrating AI with biomedical research, Bridge2AI seeks to uncover insights into how genetic, behavioral, and environmental factors influence health, ultimately improving decision-making in health care and advancing the understanding of complex biological processes.</p>
<u>Communities Advancing Research Equity for Health</u> (CARE for Health™)	<p>Aims to engage communities that are historically underrepresented in biomedical research and to create a sustainable infrastructure that bridges research with routine clinical care.</p> <ul style="list-style-type: none">• Designed to address health equity by integrating clinical research into primary care settings.• Will invest \$30 million over fiscal years 2024 and 2025.• Involves multiple elements, such as Clinical Science Centers, Operations Centers, and Network Research Hubs. These components work together to ensure the studies are well-managed, ethically conducted, and community-focused. The CARE for Health program also emphasizes the importance of engaging industry partners and leveraging existing research networks to support its goals.

	<p>The overarching aim is to reduce health disparities by ensuring that research includes diverse populations and directly addresses the SDOH affecting these groups. By doing so, the program seeks to enhance the generalizability and applicability of research findings, ultimately advancing health equity across the nation.</p>
<p><u>Community Partnerships to Advance Science for Society</u> (ComPASS)</p>	<p>ComPASS focuses on community-led research to address structural factors affecting health within communities, such as access to healthy food, safe spaces, childcare, transportation, employment opportunities, and health care. It provides approximately \$171 million over five years, starting from September 2023 to 2026, to community organizations to enable research into sustainable solutions that promote health equity.</p>
<p><u>Diversity Program Consortium (DPC), also known as the Enhancing the Diversity of the NIH-Funded Workforce</u></p>	<p>Funded by the NIH Common Fund and managed by the National Institute of General Medical Sciences (NIGMS), DPC aims to enhance the diversity of the NIH-funded workforce by developing and implementing innovative approaches to research training and mentoring. With approximately \$500 million in support from the NIH Common Fund, the DPC began in 2014 and will run through 2024.⁸ It aims to transform the culture and effectiveness of biomedical research training nationwide by promoting the participation and persistence of individuals from diverse backgrounds in biomedical careers. The DPC focuses on three key areas: engaging and mentoring students, enhancing faculty development, and strengthening institutional research training infrastructure. The program involves several interconnected initiatives, including:</p> <ul style="list-style-type: none"> • Building Infrastructure Leading to Diversity involves multiple awards to undergraduate institutions to develop strategies for engaging and retaining students from diverse backgrounds in biomedical research. • National Research Mentoring Network provides a national network of mentors and mentees across biomedical disciplines to offer mentorship, professional development, and networking opportunities. • Coordination and Evaluation Center, located at the University of California, Los Angeles (UCLA), coordinates and evaluates DPC activities, supports consortium-wide working groups, and manages the dissemination of effective training and mentoring interventions.
<p><u>Faculty Institutional Recruitment for Sustainable Transformation</u> (FIRST)</p>	<p>The FIRST program, managed in collaboration with multiple NIH institutes, including the National Cancer Institute, the National Institute on Minority Health and Health Disparities, and the National Heart, Lung, and Blood Institute, aims to enhance and sustain cultures of inclusive excellence in the biomedical research community. The program is designed to transform institutional cultures at NIH-funded extramural institutions by implementing a cohort faculty recruitment model and fostering a self-reinforcing community of scientists committed to diversity and inclusive excellence.</p>

	<ul style="list-style-type: none"> • Key objectives of the FIRST program include diverse, early-career cohort hiring, building and maintaining scientific environments that support diverse talent and foster inclusive excellence, and providing mentorship, sponsorship, and career development opportunities to support faculty progression, retention, and promotion. <p>The NIH allocated approximately \$241 million to support the initiative over a period of up to 10 years starting in September 2021. This funding supports both the recruitment of faculty and the development of institutional practices that promote diversity and inclusion.</p>
<u>Global Health</u>	<p>This program focuses on improving health outcomes in low- and middle-income countries through innovative research and capacity-building efforts. The program aims to address critical global health challenges by fostering collaborations between researchers in the United States and their counterparts in other countries.⁹</p>
<u>Harnessing Data Science for Health Discovery and Innovation in Africa (DS-I Africa)</u>	<p>Launched in 2020, this program aims to leverage data science technologies to address major public health challenges in Africa, which carries a disproportionate share of the global burden of disease. The program builds on previous NIH investments and seeks to develop a robust ecosystem of partners from academic, government, and private sectors.</p> <ul style="list-style-type: none"> • Key components of the program include data science research hubs, addressing the ethical, legal, and social aspects of data science applications in health research, training and capacity building, and an open data science platform to integrate and share data across various sources, including genomic, clinical, and environmental data. <p>The NIH has committed approximately \$58 million over five years to support the DS-I Africa program, which includes funding for research projects, training initiatives, and infrastructure development.</p>
<u>Nutrition for Precision Health program, powered by the All of Us Research Program</u>	<p>This program aims to advance our understanding of how nutrition affects health and disease at the individual level. With \$170 million in funding over five years starting in 2022, this initiative seeks to leverage diverse data from the <i>All of Us</i> Research Program, which includes genetic, environmental, and lifestyle information from over 200,000 participants, to develop personalized nutrition strategies. This program is part of a broader effort by the NIH to harness the power of big data and innovative research to transform health care and promote health equity.</p>
<u>Transformative Research to Address Health Disparities and Advance Health Equity Initiative</u>	<p>This initiative is a significant effort by the NIH to support innovative and transformative research aimed at preventing, reducing, or eliminating health disparities and advancing health equity. This initiative has allocated a total of \$58 million over five years, beginning with grants awarded in October 2021. The funded projects are designed to test new interventions, evaluate policy changes, and conduct dissemination and implementation research focusing on SDOH.</p>

National Institute on Minority Health and Health Disparities

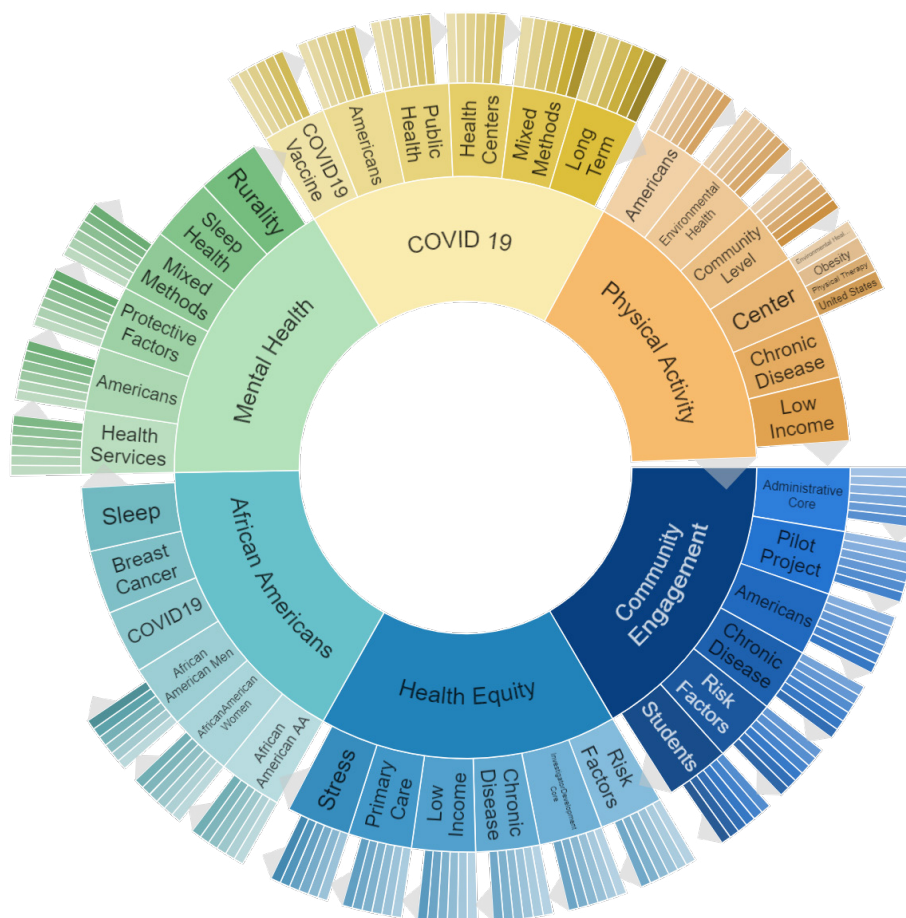
The NIH established the Office of Minority Programs within the OD, which evolved over the years and through legislation, and became the National Institute on Minority Health and Health Disparities (NIHMD) in 2010. NIMHD leads scientific research to improve minority health, reduce health disparities, and promote health equity, coordinating these efforts across the agency. NIMHD also provides funding through its Research Centers in Minority Institutions program to develop and strengthen the research infrastructure at MSIs and HBCUs. The FY2024 NIH budget included **\$524 million to NIMHD**, an overall drop of over \$700,000 from 2023, with the largest reduction being made to its Research Project Grants.

Figure 3A. NIMHD Funding, FY2018–2024



Figure 3B. NIMHD 2024 Funding by Project Focus Area

As shown, health equity is a major topic area, along with mental health, community engagement, and research focused on marginalized groups such as African Americans.



Source: Milken Institute (2024), using data from [NIMHD Congressional Justification Report for FY2024](#) and [NIH RePORTER](#)

National Institute of Environmental Health Sciences

While NIMHD focuses directly on health disparities research, the National Institute of Environmental Health Sciences (NIEHS) is committed to reducing environmental health disparities—defined as inequities in population health stemming from disproportionate adverse exposures associated with the physical, chemical, social, and built environments. This is demonstrated by several key [initiatives](#).¹⁰ As part of the NIH-wide Climate Change and Human Health Initiative, NIEHS explores how climate change affects health outcomes in marginalized communities, developing adaptive strategies to mitigate these impacts. Its Environmental Health Language Collaborative is a new initiative to advance community development and the use of harmonized language for describing environmental health science research. Additionally, the Women's Health Awareness Program provides education, health screenings, and resources to improve health

outcomes for women in underserved communities. These initiatives are crucial in addressing the environmental factors contributing to health disparities.

Another significant initiative is the Specialized Centers of Excellence on Environmental Health Disparities Research program, in collaboration with NIMHD and the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development. Centers were awarded \$950,000 annually for up to five years starting in 2020. Three of these centers focused on understanding and reducing or eliminating environmental health disparities. Ongoing efforts at these centers are working to address environmental health disparities through community engagement, multidisciplinary research, and research capacity building. On May 29, 2024, an additional Notice of Intent to Publish a Funding Opportunity Announcement for Environmental Health Disparities Centers was released.

NIEHS has a long history of supporting community involvement in research and continues to promote innovative research methods that enhance collaboration between communities and scientists while also building capacity to address environmental health issues. Its Partnerships for Environmental Public Health (PEHP) program is a collaborative network that connects scientists, community members, educators, health-care providers, public health officials, and policymakers to enhance the impact of environmental public health research at various levels. In this context, environmental public health refers to the science of translating research into practical actions to address environmental exposures and related health risks of public concern. Along these lines, the PEHP program aims to coordinate and integrate initiatives that involve collaboration between communities and scientists on environmental public health research, develop and assess strategies to effectively communicate environmental public health messages to diverse groups, create and disseminate materials to boost awareness and understanding of environmental health risks, and evaluate the program's effectiveness in advancing the field of environmental public health. NIEHS is also a part of the Data Informed, Place-Based Community-Engaged Research to Advance Health Equity program, which supports localized, data-driven research to develop targeted health equity strategies.

Additional IC Initiatives

Additional examples of ICs that have shown a commitment to diversity and health equity efforts include the National Institute of Nursing Research, with a **\$10 million budget for health disparities research** in 2024. Recent funding opportunities include projects aimed at understanding the intersection of social inequities to optimize health and reduce health disparities, improving health outcomes in rural populations, and conducting transformative research to address health disparities and advance health equity. NIGMS's leadership in building a diverse workforce was mentioned above through its management of the trans-NIH Diversity Program Consortium. The National

Institute of Neurological Disorders and Stroke developed the Office of Programs to Enhance the Neuroscience Workforce to increase access and opportunities for underrepresented individuals. Finally, the National Human Genome Research Institute started the Training, Diversity and Health Equity Office to champion a diverse genomics workforce and address health disparities.

NIH's Engaging the Public as Partners in Clinical Research (ENGAGE) is an initiative under the NIH's Office of Science Policy. It aims to incorporate public voices into all phases and types of clinical research to ensure that the outcomes are meaningful and actionable, especially for those who could benefit from or be affected by the research. ENGAGE focuses on early and continuous public engagement to enhance the transparency and relevance of NIH-funded research. The ENGAGE Working Group, part of the Novel and Exceptional Technology and Research Advisory Committee, includes a diverse array of members, such as patients, advocates, researchers, and clinicians. This initiative reflects NIH's commitment to enhancing transparency and responsiveness in clinical research through early and frequent public engagement.

Substance Abuse and Mental Health Services Administration

The Substance Abuse and Mental Health Services Administration (SAMHSA) is committed to advancing behavioral health equity by promoting mental health, preventing substance misuse, and providing treatments to foster recovery, with a focus on equitable access and improved outcomes for all populations. Guided by the principles of equity, trauma-informed approaches, recovery, and data-driven practices, SAMHSA integrates these values into all its activities, as outlined in its 2023–2026 Strategic Plan.

Key initiatives include the Disparity Impact Strategy 2.0, which requires grantees to identify and develop quality improvement plans for underserved populations, aiming to enhance outcomes by addressing SDOH. SAMHSA's Guide to Equity Terminology aims to clarify equity-related terms for behavioral health stakeholders. The organization also focuses on embedding equity in the 988 Suicide & Crisis Lifeline, conducting listening sessions with underserved communities to improve accessibility.

Additionally, SAMHSA's Language Access and Justice initiative aims to develop a Language Access Plan by summer 2024 to ensure non-English speakers have access to translated materials and services. The Elevate Community-Based Organizations initiative provides training to CBOs to improve their business practices, secure funding, and enhance their capacity to serve underserved communities.

Workforce development initiatives are supported through programs such as the Minority Fellowship Program, which aims to increase the number of culturally competent behavioral health professionals. SAMHSA also funds technical assistance centers like the new Refugee and Migrant Behavioral Health Technical Assistance Center, established in November 2023, which provides training and resources for providers serving these populations.

Significant funding efforts include the Behavioral Health Equity Challenge to identify and highlight outreach and engagement strategies used by CBOs to increase access to behavioral health services for racial and ethnic underserved communities. Ten winners received \$50,000 each in April 2023 for their innovative outreach strategies. The Mental Health Services Block Grant Transformation Transfer Initiative program allocates **\$250,000 to community-based programs** to improve equitable access to suicide prevention and crisis care for underserved communities.

Challenges Related to US Federal Government Funding Structures

Traditional government funding mechanisms are not always conducive to supporting the needs of health equity research. One major issue is the complexity of the application processes. These processes are often intricate and lengthy, creating barriers for smaller organizations and community-based groups that have limited administrative resources. This complexity can discourage these organizations from applying for grants or result in incomplete or unsuccessful applications.

Additionally, the short-term nature of many federal grants, which are typically allocated on an annual basis, can leave projects incomplete or lacking adequate resources to continue. This short-term funding can hinder long-term planning and the sustainability of health equity initiatives, as these issues often require sustained, multiyear efforts to produce meaningful change.

There are also often strict restrictions on how federal funds can be used, limiting the ability of grantees to respond to emerging needs or adapt their projects based on community feedback. This inflexibility can reduce the effectiveness of interventions aimed at addressing health disparities.

Similarly, funding for interdisciplinary work can be challenging because conventional funding mechanisms are still siloed in individual disciplines, which can be a significant barrier. Funding models do not always facilitate the interdisciplinary work needed in health equity research, and the budget structure often hinders bringing various communities together. Furthermore, many federal grants require recipients to secure matching funds from other sources, which can be a significant barrier for organizations serving marginalized communities that may struggle to find additional funding. This issue is particularly pronounced in projects focused on health equity, where resources are already scarce.

Shifts in political priorities and changes in administration can also lead to fluctuations in funding for health equity initiatives. This inconsistency can undermine long-term projects and create uncertainty for organizations that rely on federal support. Lastly, despite the emphasis on community-based research, the structure of federal funding programs inadequately supports genuine community engagement. This can result in projects that are not fully aligned with the needs and priorities of the communities they aim to serve.

Addressing these challenges requires reforms in federal funding processes to make them more accessible, flexible, and responsive to the unique needs of health equity initiatives.

Summary

As detailed above and summarized in Figure 2, since 2020, health equity has been an emerging priority across government agencies, with significant shifts in how research is conducted and funded. The NIH and other HHS agencies have several ongoing initiatives spanning critical areas for health equity in research, including diversifying datasets for research and AI/ML models, capacity building, increasing accessibility, diverse workforce development, and community engagement. However, the challenges related to federal funding are notable, particularly in the current political climate, in which some have taken an offensive stance on DEI initiatives. In many cases, funding for health equity efforts is showing a decline from 2023 to 2024. Therefore, nongovernment funders have an opportunity to enhance the rigor, accountability, and support of these movements.

PHILANTHROPIC AND NONPROFIT ORGANIZATIONS

Health equity is both a social and a scientific imperative, and philanthropic funding can uniquely focus on opportunities to support this work. As mentioned above, traditional government funding mechanisms are not always conducive to supporting the type of long-term, interdisciplinary research and nontraditional funds needed to advance health equity. Health equity and related DEI initiatives are also vulnerable to the shift in funding priorities that occurs with changes in political administrations.

As a result, philanthropy has an opportunity to step in where the financial needs of researchers within health equity are unmet. For example, philanthropic funding can support workforce development, capacity-building, and community engagement, which are central to expanding health equity work. Furthermore, philanthropy can facilitate the pursuit and implementation of transformative solutions by developing initiatives that bring together interdisciplinary teams, foster collaborations across sectors, and accelerate the deployment of health equity resources and tools.

The examples summarized in **Table 3** and expanded on below highlight initiatives supported by some philanthropic organizations that are focused on advancing health equity within biomedical research and clinical care. While these funding initiatives are important, there is ample opportunity for additional philanthropic organizations to provide support and fill in gaps in the health equity space.

Table 3. Summary of Focus Areas for US-Based Philanthropic and Nonprofit Organizations Working on Health Equity

	Community-Based Participatory Research	Community Investing	Data Systems	Health Education	Interdisciplinary Research	Outcomes	SDOH	Systems Change	Technology	Workforce Development
Philanthropic Organizations with Large Initiatives in the Field										
Chan Zuckerberg Initiative		X	X		X			X	X	X
Doris Duke Foundation		X					X	X		X
Ford Foundation		X	X					X	X	X
Kresge Foundation		X					X			
MacArthur Foundation		X	X			X		X		
Rockefeller Foundation										
Robert Wood Johnson Foundation	X	X	X	X	X	X	X	X		X
Other Foundations and Nonprofit Organizations										
Annie E. Casey Foundation		X		X		X	X			
Atrius Health Equity Foundation		X					X	X		
Gates Foundation					X	X			X	
California Endowment		X					X	X		X
CDC Foundation		X	X				X			X
Commonwealth Fund				X				X		X
Conrad Prebys Foundation		X		X		X		X		
Grantmakers in Health		X		X		X		X		
Kaiser Family Foundation				X			X	X		
Philadelphia Health Partnership		X				X	X			X
Reagan-Udall Foundation			X	X				X		X

W. K. Kellogg Foundation		X					X			X
Nonprofit Research Institutes										
Broad Institute	X		X		X			X		X
Howard Hughes Medical Institute					X					X
Patient-Centered Outcomes Research Institute	X			X	X	X				

Notes: As most initiatives are multi-focus, funding amounts are excluded here. “Community Investing” refers to direct funding of community programs, organizations, and/or businesses; “Systems Change” includes policy reform and social justice work; and “Workforce Development” includes capacity building, STEM education, and investing in future leaders.

Source: Milken Institute (2024)

Philanthropic Organizations with Large Initiatives in the Field

This section highlights several organizations that have made health equity a priority in their approach to funding and have created significant shifts in the questions being asked and the barriers being addressed.

Chan Zuckerberg Initiative

The Chan Zuckerberg Initiative (CZI) has several prominent funding initiatives at the intersection of health equity and science, with specific programs and significant investments made over the years. In December 2019, CZI **invested nearly \$7 million** in grants to programs and initiatives that identify, develop, and support diverse education leaders, aiming to help eliminate race and income as predictors of student success. In September 2022, CZI announced the Accelerate Precision Health Program to **award \$11.5 million to each of four historically Black medical colleges**—Charles Drew University College of Medicine in Los Angeles; Howard University College of Medicine in Washington, DC; Meharry Medical College in Nashville, Tennessee; and Morehouse School of Medicine in Atlanta—to support cutting-edge genomics research.

Also in 2022, CZI began a new series of Racial Equity Grants to fund organizations that aim to accelerate racial equity, diversity, and inclusion across various sectors, including science. This effort was exemplified by grants directed toward cultivating leadership among people of color, changing systems and policies that negatively affect these communities, and building their economic, cultural, and political power.

In addition to these efforts, CZI’s Open Science program is dedicated to the universal and immediate sharing of scientific knowledge, processes, and outputs. Toward this aim, it has **invested over \$38 million** in tools, platforms, and organizations that expand participation and access to the scientific process by making it open and reproducible and by helping scientists build on each other’s work. CZI has also **invested over \$40.3 million** in essential open-source software for science, with

dedicated funding going to support the maintenance, growth, and community engagement of critical open-source scientific tools. Its programs also focus on education and capacity building to increase awareness about open science benefits and ensure researchers are trained in open science practices.

Doris Duke Foundation

The Doris Duke Foundation (DDF) has recently launched several significant initiatives aimed at advancing health equity. One significant project is the Encoding Equity in Clinical Research & Practice: Rethinking Race in Clinical Algorithms initiative, announced in June 2024, which is described in more detail below in the section on “Cross-Sector Partnerships.”

Prior to this, in June 2023, DDF **invested \$10 million** as part of its Racial Equity in Clinical Equations initiative—the largest investment to date to provide data that can affect progress on this issue. Five health organizations, including the American Academy of Pediatrics, the American Heart Association, the American Society of Hematology, the Coalition to End Racism in Clinical Algorithms, and the National Academy of Sciences—were supported to address racial biases in medical algorithms. Well-positioned to unite large medical and research communities in high-impact disease areas, these organizations were selected to rigorously examine the misuse of race in current clinical algorithms. They will disseminate their findings, establish norms, and issue recommendations to influence research, clinical practice, and policy.

In collaboration with the East-West Center, DDF launched the Equitable Futures Fellowship in March 2024, a program designed to cultivate a network of emerging global leaders focused on creating equitable futures. The fellowship aims to enhance the knowledge, leadership capacities, and networks of participants across various sectors, including government, communities, advocacy groups, media, technology, arts, and entrepreneurship.

Furthermore, DDF is involved in the Opportunities for Prevention & Transformation Opt-in for Families initiative, a **three-year, \$33 million project** launched in March 2024. This initiative aims to transform the child welfare system by providing early support and prevention services to families at risk of abuse and neglect. The funding is distributed among four sites: Washington, DC, Kentucky, Oregon, and South Carolina, with each site receiving approximately \$9 million to enhance technical assistance and direct family support services.

Ford Foundation

With broad interests in equality and social justice, the Ford Foundation has committed significant resources that are relevant to health equity, focusing on both immediate impacts and long-term systemic changes. Since 2022, the foundation has made 1,797 grants to 1,470 grantees, **totaling \$715 million in funding**. The foundation invests in several key areas aimed at addressing systemic inequality and promoting social justice:

- Civic Engagement and Government: The foundation supports efforts to strengthen democratic institutions and processes, ensuring that marginalized communities have a voice in public decision-making.

- **Creativity and Free Expression:** This area focuses on supporting artists, filmmakers, and other cultural creators who challenge injustice and inspire action through their work.
- **Disability Rights:** The foundation promotes the rights of people with disabilities, advocating for policies and practices that ensure their full participation in society.
- **Future of Work(ers):** Investments in this area aim to address the challenges and opportunities of the evolving labor market, particularly for workers in low-wage sectors.
- **Gender, Racial, and Ethnic Justice:** This area supports initiatives that address systemic discrimination and promote equality for women, people of color, and other marginalized groups.
- **Global Governance:** The foundation works to enhance international cooperation and governance structures to better address global challenges such as climate change and migration.
- **Mission Investments:** Through mission-related investments, the foundation aims to align its endowment with its mission, supporting enterprises and funds that generate social and environmental benefits.
- **Natural Resources and Climate Change:** This area focuses on promoting sustainable development and addressing the impacts of climate change, particularly on vulnerable communities.
- **Technology and Society:** The foundation supports efforts to ensure that technological advancements benefit all members of society, addressing issues such as digital inclusion and the ethical use of data.

These areas reflect the Ford Foundation's holistic approach to tackling inequality by addressing its root causes and supporting transformative ideas, individuals, and institutions.

Kresge Foundation

The Kresge Foundation works to expand opportunities in America's cities through grantmaking and social investing in arts and culture, education, environment, health, human services, and community development. Its health program specifically aims to promote health equity by addressing the conditions that lead to poor health outcomes.

Recently, Kresge made significant strides in advancing health equity through various funding initiatives. One of the key efforts is the Advancing Health Equity Through Housing initiative, which has allocated over **\$8 million since its inception in 2018 to support 32 organizations**. This initiative aims to address housing instability by connecting the housing and health sectors, focusing on community-driven solutions to improve housing affordability and quality through policy and practice changes.

Additionally, Kresge has been active in promoting climate resilience and health equity. The Climate Change, Health & Equity initiative mobilizes health-care institutions, public-health practitioners, and community advocates to address the health impacts of climate change. This initiative supports building the capacity of health institutions, transforming health-care practices, and strengthening community-based leadership to implement equitable climate resilience policies.

Kresge's commitment to health equity also includes a focus on community investments. Its Community Investment for Health Equity initiative seeks to reverse the effects of historic disinvestment in urban communities by creating robust community investment ecosystems. This approach aims to close the racial wealth gap and improve health equity through mission-driven investments and community governance roles in development projects. These initiatives underscore Kresge's holistic approach to health equity, addressing both the SDOH and the systemic barriers that contribute to health disparities.

MacArthur Foundation

The MacArthur Foundation recently launched several initiatives to advance health equity. In 2021, the foundation announced an **\$80 million** investment focused on racial and ethnic justice, funded by social bonds issued in response to the pandemic and ongoing racial inequities. This funding supports several areas, including public health equity, racial justice field support, self-determination of Indigenous peoples, and equitable housing projects. The goal is to improve access to health care, combat anti-Blackness, and support Indigenous communities in their recovery efforts.

Additionally, the MacArthur Foundation has **awarded \$18 million in grants** as part of the Safety and Justice Challenge. This initiative aims to reduce over-incarceration and advance racial equity in local justice systems. The foundation supports cities and counties developing data-driven strategies to reduce jail populations and address racial disparities within the justice system.

Moreover, **the foundation provided an \$800,000 grant** to the National Collaborative for Health Equity to leverage health data and improve health outcomes in local communities, particularly those affected by racial inequities. This funding is part of the broader equitable recovery effort and aims to use data from the HOPE Initiative to inform local health equity strategies and policy changes.

Rockefeller Foundation

The Rockefeller Foundation supports work that expands access to health care and works to reduce health disparities with a focus on sustainable development goals that also include health initiatives. Recently, the foundation has initiated several substantial health equity funding initiatives aimed at improving nutrition and health outcomes. In 2024, the foundation announced a significant partnership with HHS to advance the Food is Medicine program. This initiative aims to integrate food-based interventions into health care to address diet-related diseases, particularly among vulnerable populations. The Rockefeller Foundation has committed to increasing its investment in

Food is Medicine programs to over **\$100 million**, which includes up to \$51 million to the American Heart Association to support research and program expansion across the US.

In addition to its domestic efforts, the Rockefeller Foundation has pledged **\$100 million over five years** to test and scale climate-health solutions globally. This funding is part of a broader \$1 billion climate strategy announced in September 2023, focusing on community-driven innovation, sustainable financing, and policy partnerships to address health impacts exacerbated by climate change.

Moreover, the foundation supports the Innovation Institute for Food and Health at UC Davis and the Periodic Table of Food Initiative. This project, which received **nearly \$500,000 in grants in early 2024**, aims to enhance the understanding of agricultural practices and their impact on human health through comprehensive molecular food composition data.

Overall, these initiatives reflect the Rockefeller Foundation's ongoing commitment to using science, technology, and partnerships to promote health equity and sustainable food systems worldwide.

Robert Wood Johnson Foundation

As the largest US foundation focused solely on health, the Robert Wood Johnson Foundation (RWJF) supports a wide variety of initiatives aimed at building a national Culture of Health that provides everyone in America a fair and just opportunity for health and well-being. Thus, health equity is at the core of RWJF's mission. Its vision encompasses thriving communities where everyone enjoys access to clean and safe drinking water, secure and stable housing, jobs that provide a living wage, and equitable opportunities to flourish.

Since 2010, RWJF has allocated **\$625 million toward impact investments** to advance this vision, aiming to improve health and economic prospects for underinvested groups, such as rural areas, communities of color, and low-income households. RWJF aims to attract at least \$1 billion from other investors, including banks, commercial lenders, insurance companies, private investors, and other philanthropic organizations by the end of 2025. This capital will be used to co-invest in and provide financial support to communities that have historically been underinvested, particularly those affected by structural racism.

Since 2013, the Culture of Health Prize has recognized more than 60 communities for their efforts in creating conditions that promote the best health and well-being for their residents, including initiatives related to healthy foods, transportation, housing, economic opportunity, clean water, air, reproductive justice, and Indigenous sovereignty. RWJF emphasizes the need to dismantle structural racism and the hierarchy of human value to achieve health equity, envisioning a future where health is a right for everyone. The prize celebrates communities working toward this goal,

demonstrating that a more just and equitable world is achievable. **For 2024, up to 10 awards of \$250,000 each will be granted** to place-based communities that are evaluated based on their contributions to addressing structural racism and other injustices to advance health and equity; committing to lasting changes in policy, systems, and financing that improve community conditions; working in partnership across sectors and elevating the expertise of those directly affected by inequities; engaging in cultural activities that preserve and celebrate community; using resources effectively to ensure sustainability; and measuring and sharing progress in culturally relevant ways. Award funds are discretionary but cannot be used for clinical trials of unapproved drugs or devices, construction or renovation of facilities, or lobbying/political activities.

In addition to these programs, RWJF currently has two active funding opportunities at the intersection of health equity and science. Its Pioneering Ideas: Exploring the Future to Build a Culture of Health is seeking innovative proposals that will affect health equity, focusing on four key areas: Future of Evidence, Future of Social Interaction, Future of Food, and Future of Work. The initiative invites contributions from a wide range of disciplines, including science, anthropology, art, urban planning, and community leadership, recognizing that diverse perspectives are essential for creating significant change. The **average grant in 2019 was \$315,031**, with flexible grant periods typically ranging from one to three years. Proposals are evaluated based on their focus on health equity, their ability to anticipate and influence future trends, and their pioneering nature.

RWJF's Evidence for Action: Innovative Research to Advance Racial Equity prioritizes research evaluating interventions aimed at counteracting the harms of structural and systemic racism to improve health, well-being, and equity outcomes. The focus is on racial equity, addressing the impacts of structural racism on communities of color and its intersection with other forms of marginalization, such as low income, immigration status, disability, and LGBTQ+ identity. The funding targets studies on the upstream causes of health inequities, including systems, structures, laws, policies, norms, and practices that influence resource distribution and opportunities. RWJF focuses on research that addresses the needs and experiences of communities with the greatest health burdens and provides actionable insights to establish beneficial practices. While various health equity aspects are considered, priority is given to studies reducing race-based disparities, particularly those developing healthy, equitable communities; supporting children, families, and caregivers; and aligning health care, public health, and social services.

Summary

As detailed above, these large philanthropic initiatives focus on creating lasting change by addressing systemic issues, such as racism and bias and investing in communities, diverse future leaders, climate issues, social justice, and nutrition. However, strategies for incorporating health equity across the entire research ecosystem are missing.

Foundations and Nonprofit Organizations

This section highlights other nonprofit organizations and foundations that have smaller initiatives at the intersection of health equity and science.

Annie E. Casey Foundation

Known for its work in improving the future of children at risk, the Annie E. Casey Foundation (AECF) also focuses on health determinants as part of its broader strategy to improve long-term outcomes in education, employment, and income. In 2023, AECF celebrated its 75th year of service and continued to sharpen its focus on key areas critical for young people to thrive: basic needs, permanent relationships, financial stability, early care, education and credentials, and community and youth leadership. Some recent funding initiatives include:

- AECF supports the Act and Adapt program, which addresses the mental health crisis among adolescents in underserved communities. Developed at DePaul University, this program uses cognitive behavioral therapy techniques to help middle schoolers manage depression and anxiety. With funding from AECF, the program expanded significantly, serving over 2,300 students across 158 schools (as of 2023) and developing an online platform to facilitate broader implementation.
- AECF has continued its efforts in housing equity. In 2023, it supported the Atlanta Neighborhood Development Partnership to construct and finance over 300 affordable housing units and provide home repairs for elderly and low-income residents. This initiative aims to enhance housing stability and improve living conditions for vulnerable populations.
- Commitment to racial equity is evident in its Race for Results report, which tracks 12 indicators of child and youth well-being across different racial and ethnic groups. The 2024 report highlights progress in some areas but emphasizes persistent disparities, urging targeted investments to address long-standing barriers faced by children of color. The foundation recommends expanding federal and state child tax credits and Medicaid coverage and designing programs that reduce racial disparities.

Atrius Health Equity Foundation

This Atrius Health Equity Foundation focuses on addressing health inequities through large-scale grants, especially in Eastern Massachusetts. It prioritizes community-led solutions and collaborates with other funders to support comprehensive and sustainable change.

In 2023, the foundation **awarded two \$500,000 partnership grants to the Health Equity Compact and the New Commonwealth Racial Equity and Social Justice Fund**. These grants support organizations led by people of color and are focused on closing health and economic inequities caused by systemic racism.

In 2024, the foundation **announced a \$10 million initiative** to eliminate nearly \$500 million in medical debt for lower-income residents of Eastern Massachusetts. This initiative targets communities of color, which are disproportionately burdened by medical debt. The foundation has partnered with RIP Medical Debt, Health Care For All, and Health Law Advocates to execute this initiative. RIP Medical Debt will receive up to \$5.5 million to acquire and abolish medical debt, while Health Care For All and Health Law Advocates will receive a combined \$3.4 million to increase legal representation and support community awareness and policy solutions to prevent medical debt.

Additionally, the foundation's focus for 2024 includes supporting youth development programs under the Youth as Health Care Change Agents initiative and continuing efforts to close the life expectancy gap across neighborhoods in Eastern Massachusetts.

Bill & Melinda Gates Foundation

Primarily focused on global health, the Bill & Melinda Gates Foundation aims to reduce inequities by developing and delivering health interventions, such as vaccines and treatments for diseases that disproportionately affect people in lower-income countries. Recently, the foundation launched several significant health equity funding initiatives. For example, in October 2023, the **foundation announced a \$30 million investment in an AI platform to support African scientists and innovators**. This initiative aims to develop scalable health solutions that are relevant, affordable, and accessible to low- and middle-income countries. In addition to its global health focus, the Gates Foundation has put significant funding toward HBCUs,¹¹ including a **\$100 million** grant in 2022 to the United Negro College Fund to increase enrollment, retention, and graduation rates.

The Gates Foundation's commitment to health equity also involves partnerships with other philanthropic organizations. To this end, in May 2024 the foundation joined forces with the Novo Nordisk Foundation and Wellcome to advance global health research and development, focusing on climate change, infectious diseases, and the interplay between nutrition and health.

The California Endowment

The California Endowment recently launched several notable health equity funding initiatives aimed at addressing systemic inequities and improving the health of underserved communities in California. In 2023, it announced it would **allocate its entire \$4 billion endowment toward impact investments**. This strategic shift aims to expand access to quality health care, support community development, and create wealth-building opportunities for low-income communities. In 2023, the endowment published a report, Building Trust and Equity, which highlights its decade-long impact investing efforts. These efforts include program-related investments and mission-related investments that focus on SDOH, such as affordable housing, access to healthy foods, and small business development.

A key component of this initiative is the issuance of a **\$300 million social bond** designed to enhance grantmaking capacity and support nonprofit organizations focused on racial justice and health

equity. These funds are intended to create statewide infrastructure for policy advocacy, support Black, Indigenous, and people of color (BIPOC)-led grassroots organizations, and strengthen community governance. Through these comprehensive initiatives, The California Endowment is making significant strides toward achieving health equity and fostering sustainable community development across California.

CDC Foundation

The CDC Foundation is a nonprofit organization established by Congress to support the CDC's mission. Founded in 1995, it mobilizes philanthropic partners and private-sector resources to advance public health initiatives. It facilitates collaboration between the CDC and philanthropies, corporations, organizations, and individuals to enhance health protection, safety, and security in the US and globally.

Health equity is one of the CDC Foundation's primary focus areas, with a number of ongoing initiatives. One such initiative is the Strategies to Repair Equity and Transform Community Health initiative, with support from RWJF, which helps state agencies address health inequities and leverage federal funding for long-term systems change. This initiative focuses on strengthening relationships between governmental public health and communities to address the root causes of health inequities.

The CDC Foundation also emphasizes building workforce capacity, employing over 60 health equity project managers who support health departments nationwide. Another key project is the Pregnancy Outcome and Death Surveillance, with support from the Gates Foundation, which works to improve maternal and perinatal death data systems in countries like Cameroon, Chad, and Burkina Faso.

The foundation also partners with community organizations. For example, in partnership with the National Alliance Against Disparities in Patient Health, it is enhancing community engagement in data collection to better understand SDOH. Additionally, with support from Kaiser Permanente, the foundation is developing recommendations to strengthen partnerships between public health agencies and CBOs, aiming to improve responses to public health emergencies and promote equitable health solutions in routine practice.

Through cross-sector collaboration, the CDC Foundation has also developed the Principles for Using Public Health Data to Drive Equity, ensuring that data collection and analysis are conducted with an equity lens. The Alliance for Million Hearts® is another example of a cross-sector collaboration, focusing on preventing cardiovascular events through national campaigns targeting high-risk populations.

The CDC Foundation works closely with CBOs to help them build capacity and resources. A current initiative involves proposals from CBOs in Texas, Louisiana, Florida, Alabama, and Mississippi, particularly focusing on coastal areas. **Eight CBOs will receive up to \$100,000 in funding** to support

their participation in the Climate and Health Community Support cohort from July 2024 through December 2024, with potential extensions into 2025 and 2026. This initiative, in partnership with the CDC's National Center for Environmental Health (NCEH), aims to help select CBOs develop climate adaptation and data collection plans, participate in peer learning opportunities, and receive technical assistance from the CDC Foundation and NCEH staff.

Commonwealth Fund

The Commonwealth Fund is a private foundation that aims to promote a high-performing health-care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, and people of color. In April 2024, the Commonwealth Fund released the *State Health Disparities Report*, which highlights pervasive racial and ethnic disparities in health-care access, quality, and outcomes across the United States. This report aims to inform state and local policymakers and stakeholders about the extent of these disparities and serves as a basis for targeted research and policy development.

The fund's *Advancing Health Equity* program, established in 2021, focuses on eliminating unequal treatment and outcomes in health care for people of color. The program promotes models that drive health and racial equity within health-care systems and supports the implementation of policies that advance health equity. Specific funding priorities for 2024 include testing and implementing equity-centric care delivery models, understanding new health-care reimbursement models, and identifying effective Medicaid policies that advance maternal health equity.

In addition to these initiatives, the Commonwealth Fund has supported legislative reforms to improve behavioral health services, particularly for Medicaid beneficiaries. The recent appropriations package for 2024 includes several provisions to enhance access to mental health and substance use disorder services, bolster the behavioral health workforce, and stabilize Medicaid coverage for individuals entering and exiting incarceration.

Conrad Prebys Foundation

The Prebys Foundation is a private foundation dedicated to enhancing the quality of life in San Diego through strategic philanthropy. The foundation's mission is to support initiatives that create a more equitable and vibrant community. Its recent health equity initiatives include significant investments in improving access to health care, mental health services, and youth well-being.

In January 2024, the foundation announced the *Leaders in Belonging* initiative, **providing unrestricted awards of \$100,000** each to five community advocates dedicated to advancing inclusion, justice, and sustainability. This initiative aims to empower leaders who are making significant impacts in their communities through cultural connection, health-care access, and youth empowerment.

Additionally, the foundation launched the **\$10 million Strengthening Health Access, Resources, and Excellence Initiative**, which provides two-year, unrestricted grants of up to \$250,000 per year to health clinics serving underserved communities. This initiative focuses on enhancing health-care services for Indigenous, immigrant, and border communities, ensuring that culturally competent care is accessible to those in need.

In May 2024, in conjunction with Mental Health Awareness Month, the foundation announced **\$6 million in grants to 23 local organizations focusing on the mental and emotional well-being of youth and young adults**. These grants support a wide range of programs, from preventive care strategies to services for diverse groups, including Native Americans, LGBTQ+ youth, and immigrant communities.

Grantmakers in Health

Grantmakers in Health (GIH) is dedicated to assisting grantmakers in enhancing the health of all individuals. GIH aims to expand the knowledge and skills of health funders, improve organizational efficiency, and facilitate connections among grantmakers and potential collaborators. It educates funders on current health issues, the impact of changes in the health sector and health policy, and effective strategies for making a positive difference. GIH provides learning opportunities through meetings, publications, networking, and technical assistance, enabling funders to gain insights from both GIH and their peers. GIH's key initiatives include:

- **Community Empowerment and Engagement:** GIH emphasizes community-driven solutions, particularly those that involve partnerships between state and community-level organizations. For instance, the Core Consultants program, launched in May 2023 by the REACH Healthcare Foundation, supports grassroots Black-led nonprofits with technical assistance rather than direct funding. This program allows nonprofits to choose from consultants in strategic planning, program development, marketing, financial services, and grant proposal writing. This model grew out of its Centering Black Voices pilot, which emphasized decreasing infrastructural barriers for Black-led and Black-serving nonprofits, providing unrestricted funding, and prioritizing trust-based philanthropy. In 2022, GIH **invested over \$1.3 million** into these and related efforts, such as advocacy strategies, healthy eating, and population health.
- **Health Equity and Social Justice:** GIH hosts numerous events and programs aimed at addressing health disparities. For example, the Birth Equity Funders Summit, held June 11–13, 2024, provided comprehensive strategies and tools to improve birth outcomes among marginalized communities. In 2022, GIH **invested more than \$422,000** into projects like this. Additionally, the 2024 GIH Annual Conference on Health Philanthropy, held June 4–6, 2024, in Portland, Oregon, brought together experts to discuss innovative approaches to health equity.

- The GIH Annual Conference is the largest gathering of health funders, offering attendees the chance to learn from diverse perspectives, discuss current issues in health funding, and network with peers. Additionally, the Fall Forum provides specialized programming for funders deeply interested in health policy, focusing on contemporary issues, engaging with leading experts, and connecting with fellow grantmakers. Impactful events like this make up a significant portion of GIH's budget, with over \$292,000 going towards the 2022 convenings.
- **Mental Health and Policy Advocacy:** The Healthy Minds Policy Initiative, launched in 2019, focuses on reforming mental health policy through bipartisan efforts. Since its inception, Healthy Minds has published 60 pieces of research and influenced the signing of 12 bills, securing public investments in Oklahoma's mental health system.
- **Support for Aging Populations:** In collaboration with Grantmakers In Aging, GIH addresses the needs of older adults through initiatives like the Age + Action 2024 conference held May 6–8, 2024. This session focused on bridging connections between the public and private sectors to improve the health and well-being of older adults.
- **Philanthropic Growth and Impact:** GIH's programming in this area focuses on identifying, sharing, and supporting best practices in the ongoing operations of health funding organizations. This encompasses aspects such as governance, grantmaking, evaluation, and communications. GIH's efforts in this field also address the various ways health funders are advancing public policy, advocacy, and civic engagement goals, promoting diverse initiatives to enhance their impact on health equity. **GIH invested more than \$354,000 in 2022** on efforts in this area.

Kaiser Family Foundation

Kaiser Family Foundation (KFF) is a nonprofit organization that focuses on national health issues and global health policy. Established in 1948, KFF is renowned for its comprehensive health policy analysis, public opinion research, and in-depth health journalism through its editorially independent program, Kaiser Health News. KFF aims to provide reliable, nonpartisan information to policymakers, the media, the health-care community, and the public. Its initiatives include detailed studies on health insurance, health-care costs, and public health programs, as well as efforts to advance health equity by researching disparities in health and health care. KFF also offers educational resources to help individuals understand complex health issues and policy debates.

KFF has several initiatives focused on advancing health equity through scientific research and policy analysis. Its Racial Equity and Health Policy Program explores how racism and discrimination impact health and health-care access. It includes comprehensive studies and surveys that highlight racial disparities and inform policies aimed at reducing these inequities. For example, KFF conducts surveys on racism and trust in US institutions and produces extensive reports on health disparities across different racial and ethnic groups.

KFF also emphasizes the role of social determinants in promoting health equity. Its research highlights how factors like socioeconomic status, education, and environment influence health outcomes. KFF supports initiatives that address these determinants, such as linking primary care with community services and prevention programs.

Philadelphia Health Partnership

Philadelphia Health Partnership (PHP) has recently funded several health equity initiatives aimed at improving health outcomes and addressing disparities in Philadelphia. In 2023, PHP **awarded over \$1.5 million in grants to 28 nonprofit organizations** through its strategic initiatives: Nurture, Connect, Advocate, and Lead. One notable initiative is a three-year \$525,000 grant to the Thriving Pa collaborative, which focuses on improving early intervention services for infants and toddlers with developmental delays. Another significant grant includes \$200,000 over three years to support the Philly Joy Bank, a guaranteed income pilot project designed to address racial disparities in infant mortality by promoting perinatal and early childhood health.

In the winter of 2023, **PHP distributed \$620,215 to 13 organizations** working on various fronts, such as immigrant and refugee health access, mental and behavioral health services, and reproductive justice. This includes a \$150,000 three-year grant to AccessMatters to protect and expand access to sexual and reproductive health care and \$65,000 to the African Family Health Organization for culturally sensitive services for African and Caribbean immigrants. PHP also emphasizes capacity building and leadership within the health and human service sectors. For example, it provided \$45,000 to The Village of Arts and Humanities to support leadership programs for youth and \$25,000 to the Philanthropy Network Greater Philadelphia for capacity-building services.

Reagan-Udall Foundation for the FDA

The Reagan-Udall Foundation for the FDA has several key funding initiatives at the intersection of health equity and science aimed at enhancing regulatory science and addressing health disparities. One significant initiative is the Regulatory Science, Innovation, and Health Equity Fellowship Program. Started in 2022, this program aims to increase diversity in regulatory science by providing career development opportunities for individuals from underrepresented groups. The fellowship focuses on advancing health equity within the regulatory science workforce and has received support from sponsors such as BeiGene, Burroughs Wellcome Fund, and Roche Diagnostics.

Another notable project is Real-World Accelerator to Improve the Standard of collection and curation of race and Ethnicity data in healthcare (RAISE), developed in collaboration with the FDA's Office of Minority Health and Health Equity. Started in early 2023, this initiative seeks to improve the collection and curation of race and ethnicity data in health-care settings. By hosting a series of 11 community workshops, RAISE engaged leaders across the health ecosystem to develop strategies to capture data better, aiming to enhance the quality of health care and medical products for all patients, particularly people of color.

The W.K. Kellogg Foundation

The W.K. Kellogg Foundation (WKKF) supports children, families, and communities in creating and maintaining conditions where vulnerable children can realize their full potential in school, work, and life. Its health initiatives often focus on early childhood and maternal health, integrating a health equity perspective. In 2024, WKKF awarded \$225,000 to Clark Atlanta University's HBCU Executive Leadership Institute to enhance the development of future HBCU leaders. In 2022, WKKF **awarded a \$1.2 million grant to the Black Women's Health Imperative** to improve preconception and postpartum care for Black mothers. This grant supports the expansion of programs on HBCUs to create a workforce pipeline of Black doulas and improve maternal mental health awareness and advocacy.

In October 2022, the foundation announced the Racial Equity 2030 Challenge, **committing \$80 million** over the next eight years to five awardees. These initiatives include projects such as Healing Through Justice, which focuses on community-led strategies for mental health in Chicago, and the Indigenous Lands Initiative, which aims to secure land ownership rights for Indigenous communities in the Americas. Additionally, WKKF has been active in impact investing. For instance, it supported Navajo Power, a Native American-owned Public Benefit Corporation, which is addressing energy injustice in the Navajo Nation by providing clean power to local communities and major US cities.

Summary

Overall, the foundations and nonprofits working in this area are focused on initiatives aimed at improving the health, education, and financial stability of children and families, focusing on vulnerable populations; efforts to eliminate health and economic disparities, particularly those affecting communities of color and other marginalized groups; investments in global health interventions and innovative technologies to address health disparities in low- and middle-income countries; strategic use of financial resources to promote health equity and support sustainable community development through impact investments and social bonds; and health policy reforms, research on health disparities, and improving data systems to inform and drive equitable health outcomes. Although there is some emphasis on more equitable data collection and analysis procedures, additional strategy is needed around this point. There is also an opportunity to increase focus on integrating health equity concepts across the entire research lifecycle, which is central to ensuring the sustainability of these efforts.

Nonprofit Research Institutes

Scientific research institutes are similar to academic universities but are established and funded differently, which allows for unique and specialized research and learning opportunities around specific disciplines. This section describes three research institutes working to promote health equity throughout their work.

Broad Institute

The Broad Institute has launched several significant funding initiatives that intersect health equity and science. One notable effort is the Broad Global Health Initiative, which aims to improve global health by fostering international collaborations and addressing health disparities. This initiative emphasizes ethical and organizational issues in low-resource settings and builds connections with academic, governmental, and policy agencies globally to support health equity research and capacity building. The Eric and Wendy Schmidt Center catalyzes interdisciplinary research at the intersection of data science and life science, aimed at improving human health. This center supports projects that integrate computational and biological approaches to tackle complex health challenges, fostering innovation through significant funding but without specified amounts for individual grants.

The Broad Institute also emphasizes equity in biomedical research through initiatives led by its Office of Inclusion, Diversity, Equity, and Allyship. Its mission is to cultivate a fully inclusive culture and community, expand scientific endeavors to thoroughly encompass underserved populations, and enhance and expedite the diversification of future scientists.

Howard Hughes Medical Institute

The Howard Hughes Medical Institute (HHMI) has launched several significant funding initiatives aimed at advancing health equity and science.

The cornerstone of these efforts is a **\$2 billion, 10-year commitment to promote racial, ethnic, and gender diversity in science**. This initiative, announced in 2022, aims to foster inclusive and equitable environments across various stages of academic and research careers, from undergraduate education to tenured faculty positions. The initiative emphasizes culturally aware mentorship, professional development, and community-building efforts to support scientists from diverse backgrounds.

Another major funding effort is the Inclusive Excellence 3 initiative, which allocates **\$60 million over six years** to support 104 colleges and universities. This initiative focuses on creating inclusive educational environments in STEM fields by developing learning communities, reforming introductory courses, and providing research-based learning experiences. Institutions such as Georgia Tech and Middlebury College have received grants to enhance inclusive teaching practices and support students' belonging in the sciences. Additionally, HHMI's Driving Change program, launched in 2019, awarded **\$2.5 million** to universities like UCLA to expand programs that promote inclusion and success for students in STEM. This funding supports initiatives such as department-based equity action plans, living-learning communities, and holistic advising programs aimed at supporting historically excluded students.

Patient-Centered Outcomes Research Institute

The Patient-Centered Outcomes Research Institute (PCORI) is an independent, nonprofit organization authorized by Congress in 2010. PCORI's mission is to fund research that provides patients, caregivers, and health-care practitioners with evidence-based information needed to make informed health-care decisions. The research funded by PCORI emphasizes patient-centered outcomes and comparative clinical effectiveness to improve health-care delivery and outcomes. PCORI focuses on involving patients and stakeholders throughout the research process to ensure the relevance and application of the findings.

PCORI regularly supports research aimed at advancing health equity. Recent examples include a 2023 commitment of up to **\$63 million** for studies focused on reducing maternal health inequities and up to **\$50 million** for research on using telehealth to manage multiple chronic conditions. These initiatives are part of a broader strategy to address SDOH and improve clinical and social outcomes in underserved communities. Additionally, as of September 2023, PCORI has funded 125 clinical effectiveness research studies and related projects seeking to help patients at risk for disparities and those who care for them make better-informed decisions about their options for improving their health.

One of PCORI's national priorities for health, Dissemination and Implementation, includes making funded research results accessible and relevant for practical health and health-care decisions, emphasizing real-world application in clinical settings. By leveraging traditional dissemination channels, such as professional health organizations and media outlets, PCORI supports initiatives that enhance the impact of its research. It has developed resources like PCORI Evidence Updates and Evidence Synthesis Reports to aid stakeholders in making informed clinical and policy decisions. PCORI's approach is guided by best practices in dissemination and implementation science, aiming to understand and address the varying needs of different population subgroups to inform patients and caregivers effectively.

Summary

As described above, research institutes prioritizing health equity are largely focused on interdisciplinary and inclusive research and collaborations to address health disparities, mentorship, professional development, community-building, inclusive STEM educational environments, and patient-centered clinical effectiveness research. As these institutions are key to ensuring health equity concepts permeate throughout the research ecosystem, many more research institutes and universities will need to focus on and obtain funding for health equity efforts to drive impact at scale.

UNIVERSITY INITIATIVES

NIH is the primary funding source for academic research focused on the intersection of health equity and the biomedical sciences. Academia provides integral research that forms the foundation of our understanding of health disparities and also allows us to build evidence-based strategies for mitigating health disparities. Below are some institutions with significant health equity efforts.

Historically Black Colleges and Universities and Minority-Serving Institutions

Many HBCUs and MSIs are at the forefront of addressing health disparities in terms of expertise but have historically lacked adequate funding. Since 2021, federal agencies, private foundations, and philanthropic organizations have increasingly recognized the importance of supporting these institutions. In May 2024, the White House announced a new record in federal funding for HBCUs, totaling **more than \$16 billion** from FY2021 through currently available data for FY2024—up from the over \$7 billion reported as of September 2023. Of this, **NIH funding totaled \$147.5 billion** to support research, training, research capacity building, and outreach efforts. Organizations such as CZI, RWJF, the Kellogg Foundation, and the Gates Foundation have provided similar types of support.

Below are examples of HBCUs and MSIs with large health equity initiatives.

- Howard University is notable for its College of Medicine, which focuses on addressing health disparities through advancing genomics research, particularly in African American communities.
- Morehouse School of Medicine houses the Cancer Health Equity Institute, dedicated to reducing cancer outcome disparities in African American and Hispanic communities throughout Georgia. It is also part of the Health Equity Leadership & Exchange Network, a national collaborative forum for health equity champions to share and analyze information on relevant policy issues, promote dialogue, monitor the impact of health laws and programs, engage communities, and demystify legislative processes to address health disparities and inequities.
- Meharry Medical College has a Center for Health Policy that educates physicians, dentists, researchers, public health professionals, and health policy experts to tackle health policy issues affecting underserved communities. It also has a Center for AIDS Health Disparities Research focused on biology, behavior, and community outreach.
- Initiatives at North Carolina Agricultural and Technical State University, such as the Center of Excellence for Integrative Health Disparities and Equity Research and the new Doctor of Nursing Practice program—which will incorporate health equity and social justice components—showcase the institution’s commitment to research and workforce development.

While some MSIs and HBCUs have seen increases in health equity research funding, certain challenges persist. These include the need for long-term, sustainable funding to ensure ongoing research and program implementation and enhance the research capacity at these institutions to manage and use the funds effectively. Additionally, ensuring equitable distribution of funding to a diverse range of institutions, including smaller and less visible MSIs and HBCUs, remains a significant issue.

Columbia University Mailman School of Public Health

The Columbia University Mailman School of Public Health has several key funding initiatives aimed at promoting health equity in scientific research. One prominent initiative is the Pandemic Response Institute (PRI), established in the fall of 2021 with the support of the New York City Economic Development Corporation, with **\$20 million in city capital funding**, \$2.75 million from Columbia University over five years, and \$1 million each from City University of New York School of Public Health and Health Policy, Cepheid, and Amazon, over five years. This institute aims to prepare for and respond to public health emergencies, emphasizing equity in interventions and addressing SDOH to mitigate racial disparities. The PRI operates with a comprehensive framework to enhance community resilience and public health infrastructure.

Another significant effort is the Stand Up To Cancer® (SU2C) Health Equity Breakthrough Team. In March 2021, this team was awarded a four-year, **\$6 million grant** from SU2C to address the inclusion of underrepresented groups in cancer clinical trials. The initiative aims to reform recruitment and retention practices to ensure more equitable participation in clinical research.

Additionally, the Mailman School's focus on implementation science is evident through the Advancing Research on Community Health Systems program. With funding from several donors, including the Bill & Melinda Gates Foundation, the Doris Duke Foundation, NIH, and the US Agency for International Development, this program integrates implementation and delivery science to enhance health systems and population health, supporting interventions at scale and driving rigorous evaluation and improvement efforts.

Harvard T.H. Chan School of Public Health

The Harvard T.H. Chan School of Public Health undertakes numerous funding initiatives aimed at advancing health equity in science. The Equity, Diversity, Inclusion & Belonging Committee in the Department of Biostatistics focuses on promoting diversity and inclusion within the department. This includes mentorship programs, workshops, and events to foster an inclusive environment for students and faculty.

Another notable initiative is the Leadership Development to Advance Equity in Health Care program, which empowers health-care leaders to facilitate crucial conversations and implement strategies to advance health equity within their organizations.

The Harvard Center for Population and Development Studies at the Harvard T.H. Chan School of Public Health focuses on advancing population science through interdisciplinary research on demographic shifts, health, and social policies. Key research areas include aging societies, youth and social mobility, work and well-being, and the population dynamics of climate change. The center brings together experts from various fields to address critical population health challenges and inform policy decisions. A major initiative is the Health and Aging in Africa: A Longitudinal Study in South Africa, which received **\$27 million in 2023** from the National Institute on Aging to expand research on cognitive health and aging in rural South Africa. This study aims to provide insights into aging populations in low- and middle-income countries and assess interventions to improve health outcomes.

Additionally, the center focuses on understanding the SDOH, such as the impact of workplace policies on health, particularly for women, and the well-being of marginalized populations. This broad research agenda aims to produce evidence that can influence public health policies and practices to improve population health globally.

Johns Hopkins Bloomberg School of Public Health

Known for its Center for Health Disparities Solutions, Johns Hopkins is a leader in research aimed at identifying and eliminating health disparities through public policy, health care, and community-based solutions. In 2023, Johns Hopkins University launched the Nexus Awards, a grant competition to envision activities for its new Washington, DC, campus. The Center for Health Disparities Solutions proposed the Health Opportunities for Policy Equity (HOPE) Challenge, aiming to use federal policy to address racial and ethnic health disparities. This initiative was among the winners of the prestigious Nexus Awards. The HOPE Challenge focuses on engaging policymakers and other influential stakeholders to create equitable health policy solutions.

The Bloomberg School of Public Health also has several funding initiatives that focus on health equity and science, supporting diverse research and educational opportunities. One of the major initiatives is the Bloomberg American Health Initiative, launched with a **\$300 million donation** from Bloomberg Philanthropies. This initiative aims to tackle significant health challenges in the US through five focus areas: addiction and overdose, adolescent health, environmental challenges, obesity and the food system, and violence. The initiative supports various projects and fellowships designed to address these issues through innovative research and community engagement.

Another significant program is the Vivien Thomas Scholars Initiative, which provides comprehensive support for PhD students from HBCUs and MSIs studying in departments of biochemistry and molecular biology, biostatistics, environmental health and engineering, and molecular microbiology and immunology. The initiative offers up to six years of full tuition support, a stipend, health insurance, travel funding, and extensive mentorship and professional development opportunities. This initiative is a key part of Johns Hopkins' commitment to increasing diversity in the biomedical sciences. Additional funding opportunities at the school include the Leadership and Education

in Academic Research and Networking for Enhancing Diversity (LEARNED) travel award, which provides \$800 of funding to support underrepresented PhD students and postdoctoral fellows in attending professional meetings, and a \$5,000 LEARNED Discovery Fellowship, which supports hands-on training in external professional settings.

The Johns Hopkins Center for Health Equity also plays a crucial role in promoting health equity through research, community engagement, education, and policy translation. This center focuses on identifying and removing barriers to optimal health and developing resources and support systems to help marginalized communities achieve better health outcomes.

University of California, San Francisco

The University of California, San Francisco (UCSF) supports numerous initiatives aimed at advancing health equity and science. These initiatives span various research fields and focus on fostering diversity, equity, and inclusion in health research. It is home to the Action Research Center (ARC) for Health Equity, which conducts research to prevent and treat chronic diseases in populations at risk and works on health communication strategies to address disparities. The Partnerships for Research in Implementation Science for Equity program at ARC, part of the National Heart, Lung, and Blood Institute's effort to increase diversity in health-related research, provides training and funding opportunities for scientists to enhance the diversity of the biomedical research workforce. This includes a two-week Summer Institute focused on implementation science and career development.

One notable program is the Population Health and Health Equity Scholars Program, which **provides \$20,000 awards** to junior faculty at the assistant professor level to accelerate research on population health and health equity. This funding is designed to supplement existing resources and support preliminary data collection, potentially leading to future funding opportunities.

The Center for Health Equity in Surgery and Anesthesia aims to advance equity in surgical and anesthetic care worldwide through academic engagement and advocacy. This center supports various projects, including the Open Oximetry Project, which improves access to safe pulse oximeters globally by developing standards that account for skin color. The center also offers the Perioperative Health Equity Fellowship to train future leaders in global surgery and anesthesia who use research, education, and advocacy to address disparities in perioperative care.

UCSF's Research Action Group for Equity (RAGE) program at the Clinical & Translation Science Institute supports researchers in diversifying study populations and promoting health equity. RAGE offers consultations, recruitment support, and capacity-building activities to ensure that research more equitably promotes well-being. The program also addresses institutional barriers to diversity and inclusion in the research enterprise.

University of Michigan School of Public Health

In October 2021, the University of Michigan School of Public Health launched two initiatives under their Public Health Interdisciplinary Discovery, Engagement + Actions for Society (IDEAS)

umbrella. With a **\$1 million investment** to increase collaboration and advance research and engagement in key areas to achieve meaningful, lasting impact, two programs were established, namely Public Health IDEAS for Creating Healthy and Equitable Cities and Public Health IDEAS for Preventing Firearm Injuries. In 2023, two new initiatives were announced: Public Health IDEAS for Building Health Equity and Public Health IDEAS for Combatting Infectious Diseases. The first program builds on existing collaborations to dismantle systemic racism and promote health equity across populations by addressing the effects of historic policies such as redlining, which have disproportionately affected minority communities.

Wake Forest University School of Medicine, Maya Angelou Center for Health Equity

The Maya Angelou Center for Health Equity at Wake Forest University School of Medicine focuses on various funding initiatives to advance health equity and scientific research. One significant project is a **\$46 million grant** from the NIH National Institute on Aging for an international genetic study of Alzheimer's disease in people of African and Hispanic ancestry. This five-year, multisite initiative, which started in December 2022, aims to expand genetic studies and address SDOH, ultimately leading to new therapeutic targets for Alzheimer's disease.

Another key initiative is the Medical Careers and Technology Pipeline, which creates a structured pipeline to engage American Indian and Appalachian high school students in health and biomedical science careers. This program is a collaborative effort among the Maya Angelou Center for Health Equity, the Center for Native Health, the Eastern Band of Cherokee Indians, and the Mountain Area Health Education Center. The goal is to increase knowledge and educational preparation for these students, addressing gaps and supporting the pursuit of careers in health and biomedical sciences.

Additionally, the Maya Angelou Center for Health Equity conducts community-engaged research, health promotion, and literacy programs, and advocates for social justice. These efforts are part of the center's commitment to fostering trusting relationships with underserved communities and delivering culturally relevant education and training.

Summary

Overall, the above universities with significant health equity research efforts are focusing on clinical trial diversity, implementation science, DEI in academia, leadership development, interdisciplinary research, health equity and health disparities research, community-based solutions and public policy change, fellowships for students from MSIs, health communication strategies, and community-engaged research and health promotion programs. Importantly, much of this work is being done in public health and medical schools, with less happening in biomedical research and life science schools.

PHARMACEUTICAL COMPANIES AND MEDICAL TECHNOLOGY FIRMS

Pharmaceutical companies play a crucial role in health equity initiatives due to their comprehensive involvement in the health-care ecosystem, spanning drug development, clinical trials, and medication adherence programs. Their extensive reach enables them to address disparities by ensuring that new drugs and treatments are accessible to diverse populations, promoting inclusive clinical trials that represent all demographics, and supporting initiatives that enhance health-care delivery in underserved communities. During the COVID-19 pandemic, pharmaceutical companies highlighted their ability to develop vaccines and treatments rapidly, focusing on susceptible populations and addressing systemic vulnerabilities in developed nations. By prioritizing health equity as both a moral and business imperative, these companies can embed equitable practices throughout the product life cycle, significantly affecting global health outcomes. **Table 4** includes companies with broad health equity initiatives relevant to science.

Table 4. Examples of Pharmaceutical Companies with Broad Health Equity Initiatives

Organization	Initiatives
Bristol Myers Squibb	In August 2020, Bristol Myers Squibb and Bristol Myers Squibb Foundation announced a <u>combined investment of \$300 million</u> as part of a five-year commitment designed to address health disparities through awareness and education programs, increasing clinical trial diversity, increasing diversity within the company, and increasing the company's spending with diverse suppliers.
Gilead Sciences	In December 2020, Gilead committed \$10 million over a three-year period through its <u>Racial Equity Community Impact Fund</u> to support 20 organizations fighting social injustice and promoting health equity in Black communities. Gilead is also known for its efforts in combating HIV/AIDS and hepatitis C, particularly among communities that are most affected. Its initiatives include programs to improve access to treatment and preventative therapies in underserved populations.
Johnson & Johnson (J&J)	In 2020, J&J announced \$100 million in commitments and collaborations over the subsequent five years to <u>invest in and promote health equity solutions for BIPOC communities in the US</u> . Focusing on healthier communities, enduring alliances, and diverse and inclusive corporate culture, J&J set a goal of achieving 50 percent growth of African American talent at the manager and above levels. More broadly, J&J has committed to enhancing health equity through initiatives such as improving representation in clinical trials, addressing racial and social justice within health care, and increasing transparency in reporting health outcomes across demographics.

<p>Merck</p>	<p>Merck has a strong commitment to advancing health equity through various funding initiatives and programs. Some key efforts include:</p> <ul style="list-style-type: none"> • <u>Health Equity Catalyst Fund</u>: This \$1 million fund from 2022 supports 15 initiatives across 13 countries, aiming to improve health outcomes by removing barriers to care and strengthening health systems. Projects funded include community-based vaccination support, cancer screenings, and transportation assistance for patients. • <u>Merck for Mothers</u>: Since 2011, \$650 million has been committed to reducing maternal mortality and improving maternal health outcomes globally. The program supports numerous projects, including the Safer Childbirth Cities initiative, which collaborates with local organizations to address maternal health disparities in high-risk US cities. The program aims to reach 25 million women by 2025. • <u>Merck Foundation</u>: With over \$1 billion contributed since its inception in 1957, the foundation supports programs that build stronger health systems and address barriers to high-quality care. The foundation's focus areas include cancer, cardiovascular disease, diabetes, and HIV/AIDS, particularly in underserved communities.
<p>Novartis</p>	<p>Novartis is actively involved in promoting health equity through various funding initiatives. One notable effort is the \$25 million commitment in 2020 by the <u>Novartis US Foundation</u> to reduce health disparities, with a focus on diversity in clinical trials in the US. This funding supports partnerships and community organizations working to address systemic health inequities.</p> <p>In 2021, Novartis and Novartis US Foundation launched <u>Beacon of Hope</u>, a 10-year, \$33.7 million collaboration with 27 historically Black colleges, universities, medical schools, and other organizations to create actionable solutions for targeting systemic racism that drives health inequities in the US.¹²</p> <p>Driven by estimates that only 10–20 percent of health outcomes are influenced by the medical care individuals receive, but environments where people are born, grow, and work account for 80–90 percent of their health,¹³ Novartis aims to use advancements in technology to analyze and understand the key factors affecting health. The <u>AI4HealthyCities</u> program, in collaboration with Microsoft AI for Health, uses advanced analytics and AI to uncover cardiovascular risk factors within populations, across disconnected datasets, helping to provide insights for decision-makers to improve public health outcomes.</p> <p>In 2017, Novartis launched the <u>Solutions to Empower Patients</u> Program to fund innovative projects from US-based nonprofit patient advocacy organizations that help address some of the most pressing gaps between best practices and the care a patient actually receives. Since 2017, approximately \$1.9 million in funding has gone to 26 recipients, many of whom focus on diseases such as breast cancer and sickle cell disease that disproportionately affect marginalized communities.</p>

Pfizer	<p>Pfizer has <u>several initiatives</u> focused on advancing health equity through funding and partnerships. One prominent program started in 2024 is the <u>Communities in Action for Health Equity</u> grant program, which recently awarded over \$2 million to 11 nonprofit organizations. These grants support community-driven projects addressing systemic drivers of racial and ethnic health disparities through interventions in health-care delivery, workforce development, policy advocacy, and research.</p> <p>Pfizer's <u>Multicultural Health Equity Collective</u> (The Collective), established in 2014, collaborates with over 40 nonprofit partners to address health disparities through various programs and initiatives. The Collective has reached 1.5 million people through community health events and continues to foster partnerships to tackle systemic drivers of health inequities.</p>
---------------	--

Source: Milken Institute (2024)

In addition to pharmaceutical companies, medical technology firms are vital for health equity initiatives because they drive health-care innovation and access, use data analytics and AI to identify and address disparities, ensure diverse representation in clinical trials, and engage in community partnerships. These firms influence health policy, advocate for equitable regulations, and contribute to economic development by investing in education and workforce programs. Examples of groups that are leading the charge for health equity include Medtronic, Philips, GE Healthcare, and Siemens Healthineers.

Summary

As outlined above, these pharmaceutical companies are focusing on addressing health disparities through awareness programs, clinical trial diversity, workforce representation, spending with diverse suppliers, improving access to treatment, increasing transparency in health outcome reporting, addressing maternal mortality and systemic racism, investing in community health events and partnerships, and advocating for equitable regulations. However, many of these commitments were made in 2020, and without federal incentives, it is left to the leadership of these companies to decide whether to continue funding such work.

PROFESSIONAL ORGANIZATIONS

Professional organizations are crucial for health equity initiatives because they provide a structured platform for collaboration, advocacy, and the dissemination of best practices among researchers and health-care professionals. They play a significant role in advancing research, offering education and training, and influencing policy to address health disparities. These organizations often have the resources and networks necessary to drive large-scale initiatives and promote standards that ensure equitable health-care access and outcomes for diverse populations. Their involvement helps to create a unified approach to tackling systemic inequities in the biomedical ecosystem. **Table 5** outlines societies with large health equity initiatives in science.

Table 5. Professional Societies with Large Health Equity Initiatives in Science

Organization	Initiatives
American Cancer Society (ACS)	<p>ACS recently launched several health equity funding initiatives aimed at addressing cancer disparities and improving outcomes for underserved communities. In 2023, it provided funding to support the formation of Cancer Health Equity Research Centers, which are funded through grants totaling over \$16 million, with each institution receiving \$4.08 million over four years. These centers aim to address cancer health disparities through interdisciplinary research and community engagement.</p> <p>In addition, the ACS has funded a variety of targeted research projects through its Extramural Discovery Science research and career development grants, totaling \$64.5 million. These grants support groundbreaking research across several priority areas, including cancer etiology, screening and diagnosis, treatment, survivorship, and health equity.</p>
American Diabetes Association (ADA)	<p>ADA recently launched several health equity funding initiatives aimed at addressing diabetes disparities in underserved communities. One key initiative is the Collaboration for Equitable Health, a four-year project in 11 cities, powered by Bank of America. This initiative involves partnerships with organizations such as the ACS, the American Heart Association (AHA), and the University of Michigan School of Public Health. It focuses on improving health outcomes in communities of color by providing educational resources, health screenings, and advocacy for policy changes.</p> <p>Additionally, the ADA's Pathway to Stop Diabetes program has awarded over \$4.8 million in grants in 2024 to support innovative research in diabetes care and potential cures. This program funds early-career scientists who explore new ideas in diabetes research without traditional constraints, thus fostering groundbreaking advancements in the field.</p> <p>The ADA also highlighted progress in health equity through its 2023 Health Equity Impact Report, showcasing initiatives like providing eye health services in Birmingham, Alabama, and distributing continuous glucose monitors in Franklin County, Ohio. These programs have significantly improved diabetes management and health outcomes in these communities.</p>
American Heart Association (AHA)	<p>AHA has launched several significant health equity funding initiatives aimed at addressing disparities in cardiovascular health and related areas. Key initiatives include:</p> <ul style="list-style-type: none"> • 2024 Health Equity Impact Goal: The AHA is committed to advancing cardiovascular health for all by identifying and removing barriers to health-care access and quality. This includes investing in new scientific research programs and community-led solutions to address health inequities and structural racism, with a total investment of \$100 million in scientific research and another \$100 million in community-based initiatives through its Social Impact Fund and Bernard J. Tyson Social Impact Fund.

	<ul style="list-style-type: none"> • <u>Health Equity Research Network (HERN)</u>: In partnership with the Robert Wood Johnson Foundation, the AHA launched the HERN on Community-Driven Research Approaches. This network focuses on building infrastructure to support community-driven health organizations, aiming to develop new models for community-engaged research that can be scaled to address health disparities effectively. • <u>Food is Medicine Initiative</u>: In January 2024, the AHA announced grants totaling \$7.8 million to 19 research projects nationwide as part of its <u>Health Care by Food</u> initiative. Supported by the Rockefeller Foundation and other partners, it aims to mobilize \$250 million toward integrating healthy food into health-care delivery. This initiative includes research projects that explore the efficacy of food as a treatment for chronic health conditions, aiming to reduce health-care costs and improve health outcomes in underserved communities.
American Psychiatric Association (APA)	<p>APA recently initiated several health equity funding initiatives aimed at addressing mental health disparities, particularly among young people of color. One of the key programs is the <u>MOORE Equity in Mental Health Community Grants Program</u>, which was established to support community organizations that provide innovative awareness programs and services to improve mental health outcomes for marginalized youth. In 2024, the APA and APA Foundation announced 10 new grantees, distributing a total of \$100,000 to these organizations over two years. This program focuses on scalable and sustainable initiatives that address mental health and substance use disorder inequities experienced by young people of color.</p> <p>Additionally, the APA Foundation promotes mental health literacy and connects underserved communities to services and supports through various programs, such as the <u>Notice. Talk. Act.® at School</u> initiative, which aims to expand mental health training in schools nationwide. Another significant effort is the <u>Mental Health and Faith Partnership</u>, which works to integrate mental health support within community faith settings.</p>
American Society of Hematology (ASH)	<p>ASH recently initiated several health equity funding initiatives aimed at addressing disparities in hematological care and research. One significant project is the <u>Absolute Neutrophil Count by Duffy Status Project</u>, which involves 24 health and hospital systems across the United States. Funded by the Doris Duke Foundation as part of its <u>Racial Equity in Clinical Equations</u> initiative, this project aims to establish new blood reference ranges for Duffy status, particularly benefiting individuals of African and Middle Eastern genetic ancestry. This initiative addresses a critical health equity concern by preventing the misdiagnosis of neutropenia in these populations and reducing unnecessary medical procedures.</p> <p>Additionally, ASH launched the <u>Health Equity Collective</u>, a comprehensive program designed to dismantle inequitable practices within the health-care community. This initiative focuses on recruitment, retention, education, and clinical trials, building on ASH's 20-year history of combating health inequity. The collective involves partnerships with multiple organizations to drive substantive change and improve health outcomes in hematology.</p>

	ASH also supports the Health Equity Studio , part of its annual meeting program, which provides a platform for discussing and promoting health equity in hematology. This program aims to engage researchers, clinicians, and policymakers in efforts to address and mitigate health disparities through collaborative discussions and shared best practices.
American Society of Human Genetics (ASHG)	<p>ASHG has recently undertaken several health equity funding initiatives aimed at promoting diversity and inclusion in human genetics research. One notable initiative is the Human Genetics Scholars Initiative, which was developed to support early-career researchers from underrepresented groups. This program, supported by funding from the National Human Genome Research Institute, Biogen, GlaxoSmithKline, Merck & Co., and Roche, provides mentorship and training to help these scholars advance in their careers and contribute to the field of genetics.</p> <p>Additionally, ASHG focuses on community engagement through its Towards Health Equity: Prioritizing Community Partnerships in Human Genetics Research webinar series. This series emphasizes responsible and meaningful community engagement approaches across the research lifecycle, aiming to address health inequalities, avoid potential harms, and build trustworthy relationships with underrepresented communities in genetics and genomics research.</p>

Summary

The professional societies mentioned above advance health equity in science by funding health disparities research, measuring and reporting health equity impacts, collaborating to improve health outcomes in underserved communities, committing to community-based initiatives addressing health disparities, promoting literacy, and supporting underrepresented researchers. However, mental health and chronic condition initiatives continue to suffer from fewer large-scale, long-term funding efforts compared to cancer and cardiovascular diseases. In addition, there is an opportunity to integrate SDOH into broader health initiatives, consider the geographic distribution of resources, and develop sustainable and robust community-driven research frameworks.

PATIENT ADVOCACY GROUPS

Patient advocacy groups and grassroots organizations are crucial for advancing health equity because they represent the direct voices and needs of marginalized communities affected by systemic disparities. They raise awareness, provide education, and offer essential support services to patients, helping them navigate the health-care system and access necessary resources. These organizations also play a significant role in policy advocacy, pushing for legislative changes that promote equitable health care.

Their deep community engagement allows them to build trust and mobilize local populations effectively. Additionally, they contribute to research and data collection, providing valuable insights that inform targeted health equity interventions. **Table 6** describes four large patient advocacy organizations with significant health equity initiatives.

Table 6. Examples of Large Patient Advocacy Organizations with Significant Health Equity Initiatives

Organization	Initiatives
<p>Families USA</p>	<p>Families USA is a national, nonprofit, nonpartisan advocacy organization dedicated to achieving high-quality, affordable health care and improved health for all Americans. The organization works through public policy initiatives, advocacy, and partnerships with state and local organizations. Families USA focuses on health equity, health-care affordability, and access to care, striving to influence health policy at both the state and federal levels to ensure that health-care systems serve everyone, particularly marginalized and underserved communities.</p> <p>Families USA has launched <u>several health equity initiatives</u> to address systemic health disparities:</p> <ul style="list-style-type: none"> • Health Equity Task Force for Delivery and Payment Transformation brings together national and state leaders to reform health-care delivery and payment systems to benefit marginalized communities. The task force has developed a framework to assess the impact of initiatives on health equity and propose policy options to reduce inequities. This includes focusing on equitable payment systems, supporting safety net providers, building community partnerships, and ensuring transparent and representative evidence bases. • Center on Health Equity Action for System Transformation targets the development and advancement of patient-centered health system transformation policies designed to reduce racial, ethnic, and geographic inequities. • Community Health Worker (CHW) Sustainability Collaborative works with leaders across the country to secure sustainable, long-term funding for CHWs and improved integration into health-care teams. • Evidence for Equity Initiative focuses on translating and disseminating evidence to help community leaders and decision-makers in developing and implementing effective health equity policies and programs, particularly patient-centered outcomes research and comparative effectiveness research. • Health Equity Academy for System Transformation provides training, ongoing learning opportunities, strategic guidance, and technical support to leaders from communities of color and other marginalized communities.
<p>National Alliance on Mental Illness (NAMI)</p>	<p>NAMI recently initiated several significant health equity funding initiatives to address mental health disparities. Key efforts include:</p> <ul style="list-style-type: none"> • <u>KPMG US Foundation Grant</u>: In May 2024, NAMI received a three-year \$750,000 grant from the KPMG US Foundation to improve mental health care, resources, and support for young adults and diverse populations. This funding will enhance youth leadership programs, campus initiatives, and peer-support programs, such as the NAMI HelpLine and support groups. It also aims to improve mental health care access for African American communities through the Community Health Equity Alliance and provide education to faith leaders through NAMI FaithNet.

	<ul style="list-style-type: none"> • <u>Justice, Equity, Diversity, and Inclusion (JEDI) Initiative</u>: NAMI's JEDI Initiative focuses on incorporating cultural competency and equity throughout its programs. This includes revamping community outreach programs like Sharing Hope and Compartiendo Esperanza, standardizing demographic data collection, and improving cultural responsiveness and linguistic competency in mental health services. • <u>Federal Funding Advocacy</u>: NAMI has actively advocated for increased federal funding for mental health programs. The FY2024 appropriations include significant increases for mental health research and services, such as the National Institute of Mental Health and the 988 Suicide & Crisis Lifeline. NAMI continues to push for legislative changes to improve access to mental health care, particularly for underserved populations.
National Health Law Program (NHeLP)	<p>NHeLP is a nonprofit organization dedicated to improving health-care access and outcomes for underserved and marginalized populations. Founded in 1969, NHeLP works through advocacy, litigation, and education to protect and advance the health rights of low-income individuals and communities. The organization focuses on a wide range of issues, including Medicaid, health reform, reproductive health, and civil rights within health care.</p> <p>NHeLP engages in policy analysis, develops educational materials, provides training, and participates in legal actions to address systemic barriers to health care. It works closely with other advocacy groups, policymakers, and community organizations to create a more equitable health-care system.</p> <p>One notable project is the <u>Doula Medicaid Project</u>, which focuses on improving maternal health outcomes by advocating for Medicaid coverage for doula services. This initiative targets reducing racial disparities in maternal health, particularly for women of color, by ensuring access to culturally appropriate, patient-centered care during pregnancy and childbirth.</p>
PatientsLikeMe	<p><u>PatientsLikeMe</u> is one of the largest global patient communities and digital health management platforms. With a rapidly growing membership of over 850,000 individuals across 2,800+ conditions, the platform allows members to share personal stories, health information, symptoms, and treatment experiences. The goal is to enhance patient lives through the collective knowledge gained from shared real-world experiences and outcomes. PatientsLikeMe is designed to empower patient communities, offering them personal agency and establishing itself as a clinically robust resource validated by more than 100 studies in peer-reviewed medical and scientific journals.</p> <p>As a personalized health network, PatientsLikeMe focuses on integrating community health management with real-world data to improve patient outcomes. Initiatives include expanding the platform's reach to underrepresented populations, enhancing the collection of diverse health data, and fostering partnerships with health-care organizations to address SDOH.</p>

Summary

These patient advocacy groups are furthering health equity by emphasizing health-care access and affordability through public policy initiatives and partnerships, incorporating cultural competency into programs, advocating for federal funding and legislation changes, educating community members, and providing communication platforms. However, persistent gaps will require coordinated efforts to ensure equitable funding, enhance cultural competency training, increase access to relevant health data, advocate for consistent policy support, expand maternal health services, integrate patient-reported outcomes, and bolster support for grassroots organizations.

COMMUNITY-BASED ORGANIZATIONS

Many CBOs operate at the intersection of health equity and research to reduce health disparities. Their focus areas include training and technical assistance, policy advocacy, research, and community outreach and accessibility. **Table 7** highlights several CBOs that participate in research and focus on data equity.

Table 7. Community-Based Organizations Focusing on Health Equity in Research and Data

Organization	Primary Focus Area
Algorithmic Justice League (AJL)	Although not exclusively community-based, AJL works extensively with communities to raise awareness about the social implications of AI and data-driven technologies and advocate for equitable and accountable AI. The Ford Foundation and the MacArthur Foundation provide AJL's core funding. In 2023, these organizations gave \$1.33 million and \$500,000 , respectively, for projects with Code for Science and Society .
Asian & Pacific Islander American Health Forum (APIAHF)	APIAHF aims to improve the health and well-being of Asian Americans, Native Hawaiians, and Pacific Islanders through policy advocacy, research, and community outreach. APIAHF's work focuses on eliminating health disparities and ensuring that these communities have access to high-quality health care.
Association of Black Foundation Executives (ABFE)	ABFE is dedicated to promoting effective and responsive philanthropy in Black communities. It provides leadership, education, and advocacy to address health disparities, supporting initiatives that improve health outcomes for Black populations through research and community engagement.
Black Women's Health Imperative (BWHI)	BWHI advances health equity and social justice for Black women through research, advocacy, and health education. BWHI's programs focus on addressing the unique health challenges faced by Black women, ensuring they receive equitable care and support.
Center for Urban Pedagogy (CUP)	CUP uses design and art to increase meaningful civic engagement, with a focus on making data and information accessible and actionable for marginalized communities.

Community-Campus Partnerships for Health (CCPH)	CCPH focuses on promoting health equity and social justice through partnerships between communities and academic institutions. CCPH conducts research, provides training, and offers resources to support Community-Based Participatory Research (CBPR). CCPH has collaborated with NIH on many initiatives, including co-leading the <u>Rapid Acceleration of Diagnostics (RADx) for Underserved Populations Coordinating and Data Collection Center</u> , working with CEAL to address COVID-19 health disparities, and partnering with the <u>All of Us Researcher Academy</u> .
Data for Black Lives (D4BL)	D4BL is dedicated to using data science to create concrete and measurable change in the lives of Black people. It advocates for data that are just, ethical, and representative of the community.
Data Justice Lab	Based at Cardiff University, this lab collaborates with community organizations to understand and address the impacts of data-driven technologies on society, especially in terms of equity and justice.
Detroit Community Technology Project (DCTP)	This <u>project</u> promotes digital literacy, internet access, and data justice in Detroit. It works with residents to develop community-led solutions and ensure data practices are equitable and beneficial to the community.
Center for Health Equity Research (CHER)	The University of North Carolina CHER addresses health disparities through research and community engagement. It conducts CBPR and partners with communities to develop interventions that reduce health disparities and improve health outcomes.
National Association of Community Health Centers (NACHC)	NACHC has been instrumental in advocating for and securing increased funding for community health centers across the US. In March 2024, NACHC successfully supported the passage of a bipartisan spending package that provided a significant funding boost, a prospective \$4.4 billion annually for health centers, the first in nearly a decade. This funding is aimed at enhancing the operation and capacity of health centers to serve more patients, particularly in underserved areas. In 2022, HHS awarded nearly \$90 million to community health centers through the American Rescue Plan to <u>advance health equity by improving data collection and reporting</u> . This initiative supports better identification and response to the needs of patients and communities, especially in the context of the COVID-19 pandemic and future public health emergencies.
Native BioData Consortium (NBDC)	NBDC is a groundbreaking 501(c)(3) nonprofit research institute led by Indigenous scientists and tribal members, based in the Cheyenne River Sioux Reservation in South Dakota. Established in 2018, NBDC focuses on using health data to improve the quality of life for Indigenous people, ensuring that advances in genetics and health research benefit these communities.

	<p>One of NBDC’s key initiatives is the <u>Rapid Acceleration of Diagnostics (RADx) Tribal Data Repository (TDR)</u>, funded by a \$9 million grant from the NIH. TDR was launched to address COVID-19 disparities among underserved populations. The project aims to uphold Indigenous data sovereignty by facilitating ethical data sharing, analysis, and policy development in collaboration with multiple research universities and health sites.</p> <p>NBDC has received a \$2 million grant from the MacArthur Foundation as part of its <u>Equitable Recovery</u> initiative. This funding supports NBDC’s broader mission of advancing racial and ethnic justice by empowering Indigenous communities to control and benefit from its data. The consortium also conducts research in areas like pharmacogenomics and public health, provides educational programs, and hosts workshops to build STEM capacity among Indigenous students.</p>
--	--

Summary

As described above, these CBOs are working to enhance health equity by raising awareness, improving health education and digital literacy, advocating for more equitable data and AI, promoting philanthropy in underserved communities, supporting community-engaged research, increasing civic engagement, making data accessible to communities, advocating for community health centers, and eliminating disparities through improved health-care access, policy advocacy, research, and community outreach. Notably, there is limited emphasis on mental health services tailored to marginalized communities and a lack of programs targeting intergenerational health needs. Few organizations explicitly address the intersectional health disparities experienced by individuals who belong to multiple marginalized groups, such as LGBTQ+ individuals within racial minority communities. Additionally, while digital literacy is a focus, there is less effort in bridging the digital divide by providing access to technology and training.

In terms of funding, many organizations rely on grants and donations that may not be sustainable long term, and there is a need for more stable, consistent funding sources that cover operational costs and support the scalability of successful pilot programs. There is also less emphasis on building robust technological infrastructure to support data initiatives and on integrating funding across different areas to support holistic approaches to health equity. Addressing these gaps through increased funding for mental health initiatives, intergenerational programs, intersectional health research, digital inclusion efforts, and operational support would enhance the comprehensive and long-term impact of CBOs in advancing health equity.

CROSS-SECTOR PARTNERSHIPS

Broad, systemic goals like achieving health equity require interdisciplinary approaches and cross-sector partnerships to be successful. Organizations are increasingly understanding this and building coalitions, alliances, networks, and collaborations to tackle the major barriers to health equity.

Below are examples of partnerships spanning different sectors and focus areas within health equity and science.

All In: Data for Community Health

Founded in 2016, All In: Data for Community Health is a nationwide coalition of organizations and practitioners invested in advancing health equity through multisector data sharing. It involves health-care providers, government agencies, community organizations, and others, all working together to use data to address health disparities and improve public health. Participants work together to build evidence, enhance practices, identify gaps, emphasize investment needs, and shape policy in the realm of multisector data sharing for health equity. All In has partnered substantially with Data Across Sectors for Health (DASH) to support equity in data sharing through funding, technical assistance, mentoring, and peer learning. Co-led by the Illinois Public Health Institute and Michigan Public Health Institute, DASH is **funded by an \$800,000 award** from RWJF.

- Its current initiative, the Incubator, is an 18-month program from spring 2024 to summer 2025 designed to provide funding and support to established local collaborations with a multisector or multifocal approach aimed at enhancing and advancing equitable data-sharing ecosystems. Eight participating organizations, along with community members with lived experience, collaboratively design the impactful projects they will implement, while DASH staff, technical assistance advisors, and peers offer the necessary structure and support, including with grant proposal writing.
- Prior initiatives included the 2021–2022 Learning and Action in Policy and Partnerships program, **which provided up to \$100,000 in the first round and \$80,000 in the second round to community partners** engaged in data-sharing projects. In 2021–2022, this initiative supported six states to enhance community data-sharing capabilities and foster relationships among state governments, CBOs, and community members.
- In addition, the Asset-Based Community Development program **supported 11 communities in 2022 with \$20,000 each** to leverage local strengths and assets for health equity work, especially resident engagement costs. These programs collectively aim to build local capacity for data sharing, inform policy changes, and address systemic health barriers.

BUILD Health Challenge

The Bold, Upstream, Integrated, Local, and Data-Driven (BUILD) Health Challenge® is an innovative funding collaborative and award program that supports community-driven, cross-sector partnerships to advance health equity. Launched by several funding partners in 2015, BUILD has invested over **\$30 million in 74 partnerships** across 27 states and Washington, DC. These partnerships focus on addressing the SDOH, such as housing, food security, and mental health, to drive sustainable improvements in community health.

BUILD's funding model awards up to \$300,000 over three years to communities implementing BUILD plans. Each partnership includes local health departments, hospitals, health systems, and health plans, which provide matching funds and in-kind support. The fourth cohort, announced in 2023, includes 13 new communities that received a total of \$8.5 million to further these initiatives.

Civic Science Fellows

The Civic Science Fellows Program, established in 2020, is designed to connect science and society by embedding emerging leaders in organizations that work at the interface of these fields. This program aims to foster a culture of civic science where scientific research and practice are deeply integrated with community engagement and societal needs. Supported by partners such as the Rita Allen Foundation, Burroughs Wellcome Fund, and the Chan Zuckerberg Initiative, among others, the program connects scientists with diverse communities to cocreate innovative solutions and build trust in science.

Civic Science Fellows work on multidisciplinary projects addressing a wide range of issues, including climate communication, neuroscience ethics, and the application of race in clinical algorithms. These projects are codesigned with their host organizations to ensure they are relevant and impactful. Fellows spend 18 months piloting these projects and engaging in a shared learning experience with other fellows and partners through regular virtual convenings and in-person meetings. The program aims to develop new leaders who can navigate the complexities of science communication and public engagement, fostering collaborations across sectors, such as journalism, public policy, and academia. By the end of their fellowship, participants are expected to produce substantial civic science work products that contribute new knowledge and practices to their fields.

Encoding Equity

In June 2024, the Council of Medical Specialty Societies (CMSS) announced a new alliance, Encoding Equity in Clinical Research & Practice: Rethinking Race in Clinical Algorithms, with support from a **\$3 million grant from the Doris Duke Foundation**. This alliance aims to embed equity into clinical algorithms by ensuring they reflect unbiased evidence. It seeks to change how race is considered in research, improve patient outcomes, and share best practices. This program involves a series of convenings, publications, and educational outreach activities to raise awareness and implement best practices in medical research and clinical settings. CMSS will leverage its existing networks to coordinate efforts across sectors to design better tools for medicine.

Partnership for a Healthier America

The Partnership for a Healthier America (PHA) is a national nonprofit organization dedicated to transforming the food landscape to promote health equity. Established in conjunction with, but independent from, former First Lady Michelle Obama's Let's Move! initiative, PHA collaborates with private-sector, government, nonprofit, and other stakeholders to ensure access to healthy, affordable food. PHA's initiatives include the Healthy Hunger Relief program, which has partnered

with over 30 food banks to provide healthier food options, affecting millions of Americans. Additionally, PHA is committed to providing 100 million servings of fruits and vegetables to food-insecure families by 2025, enhancing food equity across the nation.

STEMM Opportunity Alliance

In December 2022, the White House Office of Science and Technology Policy, the American Association for the Advancement of Science, and DDF announced the launch of the STEMM Opportunity Alliance (SOA). This multi-stakeholder initiative is dedicated to increasing diversity in the fields of science, technology, engineering, mathematics, and medicine (STEMM).

In May 2024, SOA released a National Strategy for STEMM Equity and Excellence 2050 with input from over 1,500 community members. This comprehensive strategy is aimed at diversifying and expanding the US STEMM workforce by leveraging cross-sector partners, with the overarching goal to help 20 million people from historically excluded and marginalized communities enter, contribute to, and thrive in STEMM fields—across all jobs and sectors—by 2050. This initiative aims to invest **\$15 billion** in research infrastructure and capacity building at HBCUs, TCUs, and other MSIs by 2040.

For example, in 2022, the Heising-Simons Foundation committed to giving \$7 million annually to SOA, focusing on broadening participation and supporting underrepresented groups in STEMM. This initiative **will total \$42 million by 2028** and aims to increase scientific excellence and create professional networks across diverse institutions.¹⁴ The foundation will also fund efforts to increase scientific excellence by forming a professional network of students, postdoctoral researchers, and professors from four different institutions and diverse areas of expertise.

Together for CHANGE

Together for CHANGE™ is an initiative established to address health disparities and promote health equity in Black communities across the United States, with a particular focus on improving the STEM talent pipeline. The program is supported by Nashville-based Meharry Medical College, the Diaspora Human Genomics Institute, and several biopharmaceutical companies, including Regeneron. In 2023, Regeneron committed \$5 million over five years to support Nashville's STEM ecosystem, aiming to inspire the next generation of scientific leaders and innovators through high-quality engagement programs for students and teachers. This initiative is part of Regeneron's broader commitment, which includes a **10-year, \$100 million sponsorship** of the Regeneron Science Talent Search and a **five-year, \$24 million sponsorship** of the Regeneron International Science and Engineering Fair.

OTHER KEY STAKEHOLDERS

In addition to the major stakeholder groups covered in this document, several other groups bear mentioning. First, as health-care systems are the primary point of contact for most individuals, they play an important role in advancing health equity within research. Organizations like Whitman-Walker, Mayo Clinic, Cleveland Clinic, Massachusetts General Hospital, and Johns Hopkins Medicine spearhead health equity efforts through research, workforce diversity programs, culturally competent care, and community health initiatives. Community health centers and specialty care providers such as Planned Parenthood are also at the frontlines of reducing inequities for underserved communities by fostering relationships to improve access and care for those most in need.

Health insurance companies also play a significant role in the health equity landscape.

- Kaiser Permanente has launched several initiatives, such as providing **\$1.38 million in grants in 2023 to reduce disparities in maternal health** and establishing a comprehensive strategy to address SDOH. It focuses on culturally competent care and access to preventive services.
- Many of the Blue Cross Blue Shield companies have specific programs aimed at health equity. Blue Cross Blue Shield of Massachusetts launched a Health Equity Business Accelerator program to support start-ups focusing on reducing health disparities.
- UnitedHealth has multiple initiatives focused on health disparities, including partnerships with CBOs to address SDOH, and data analytics programs to identify and address gaps in care for underserved populations.
- Cigna's health equity services include initiatives to address disparities in mental health services, efforts to improve outcomes for maternal health, and programs designed to reduce racial and ethnic disparities in health outcomes.
- Aetna has undertaken efforts to address SDOH by partnering with local communities to provide resources and support. It also focuses on targeted interventions for conditions that disproportionately affect minority groups, such as diabetes and heart disease.
- Humana has a strong focus on senior populations and has initiated several programs aimed at addressing the needs of socially vulnerable populations. It uses data to track and improve conditions like food security, social isolation, and access to health services. **In 2023, it contributed \$10 million in community investments** as part of its Healthy Horizons plan to support and fund equity-focused programs and community organizations.

Besides health-care services, policymakers and legislators play a crucial role in advancing health equity in science. For example, in addition to support from individual Senate and House members, the Congressional Tri-Caucus advocates for policies that address health disparities in underrepresented groups, as in the Health Equity and Accountability Act of 2022, a comprehensive

legislative effort aimed at eliminating racial and ethnic health disparities in the United States. Introduced in the House on April 26, 2022, but not passed, the bill directed HHS and other agencies to undertake various initiatives to reduce health disparities. These included enhancing demographic and health disparities data reporting, improving health workforce diversity, and addressing SDOH.

Ultimately, the individuals and communities who are directly affected by health inequities are crucial stakeholders. Their experiences and unique perspectives provide invaluable insights that can significantly shape and inform health equity initiatives. By actively engaging these communities in the planning, implementation, and evaluation stages of health equity strategies, we can ensure that these initiatives not only are relevant but also address the actual needs and challenges faced by those most affected. Engaging impacted communities fosters trust and collaboration, creating a sense of ownership and empowerment among community members.

This participatory approach enhances the likelihood of successful interventions as it leverages local knowledge and culturally appropriate solutions. Furthermore, it promotes transparency and accountability, ensuring that health equity efforts are responsive and adaptive to evolving community needs. Moreover, incorporating the voices of marginalized communities helps identify gaps and barriers in existing health systems that might otherwise be overlooked. It also highlights the SDOH that contribute to disparities. By addressing these underlying factors, we can develop more comprehensive and sustainable strategies that promote health equity.

CONCLUSION

The 2024 Health Equity Outlook Report by the EY Center for Health Equity highlights the increased prioritization and investment in health equity across various sectors, including providers, payers, life sciences, government, and nonprofit organizations. Based on a survey of 500 health equity leaders, the report notes that 73 percent expect health equity to become a higher priority in the next year, with most organizations anticipating an increase in investments despite competing priorities being a major barrier. Many organizations are already seeing quantifiable benefits in both organizational performance and health outcomes. Key areas of focus include improving access and quality of care, developing health equity strategies, and a shift from addressing downstream outcomes rather than upstream social determinants.

Larger organizations with more resources tend to have more mature strategies and invest heavily in technology, workforce development, and community partnerships. Data and technology are crucial for advancing health equity goals, though many organizations are still in the early stages of leveraging advanced analytics and AI. There is a need for improved data collection and usage to tailor interventions. Workforce competency in health equity is improving, but translating knowledge into action remains challenging. DEI efforts are vital, with 71 percent of organizations evaluating workforce diversity as a critical factor in achieving health equity goals. Community engagement and collaboration are essential, with a focus on reducing stigmas and financial barriers and improving language accessibility.

Government and nonprofit organizations are leading in community engagement efforts. The report underscores the importance of continued investment, high levels of collaboration within and across sectors, and strategic initiatives to bridge resource gaps and build broader system-level capacity, with a particular emphasis on meeting expanding regulatory requirements.

As the research community works toward health equity, the stakeholders mentioned above are making impressive changes to the biomedical ecosystem. This report outlines initiatives, partnerships, and extensive funding investments that have affected health equity research and highlights each stakeholder's expansive potential. Specifically, philanthropic stakeholders are doubling down on health equity, supporting bold initiatives in the face of significant pushback. The increased awareness of disparities within research and health-care systems fosters the opportunity for philanthropists to help shape research discussions, support equitable solutions, convene experts, and facilitate cross-sector collaborations for innovative solutions. At the current intersection of health equity and science, the development of more community-based research approaches, equitable digital health technology and AI/ML tools, and a diverse STEM workforce have the potential for high-impact changes in research and clinical care, and philanthropy can play a significant role in funding unmet needs in the medical and research communities.

ENDNOTES

- ¹ “FACT SHEET: The Biden Administration’s Commitment to Global Health,” The White House, February 2, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/02/fact-sheet-the-biden-administrations-commitment-to-global-health/>.
- ² “The Global Fund and the WHO Pandemic Agreement,” The Global Fund, March 19, 2024, <https://www.theglobalfund.org/en/updates/2024/2024-03-19-global-fund-who-pandemic-agreement/>.
- ³ Yara Tarabulsi, “Funding Schemes and Support towards Gender-Based Violence Prevention and Sexual and Reproductive Health in Lebanon: A Critical Analysis of Their Impacts on Human Rights Defenders,” *Oxfam Policy & Practice* (May 23, 2023), <https://policy-practice.oxfam.org/resources/funding-schemes-and-support-towards-gender-based-violence-prevention-and-sexual-621510/>.
- ⁴ “Four Things You Should Know About Our Funding for SRHR Initiatives in Canada,” *Oxfam Canada*, August 4, 2023, <https://www.oxfam.ca/story/four-things-you-should-know-about-our-funding-for-srhr-initiatives-in-canada/>.
- ⁵ P. Rawal, S. Seyoum, and E. Fowler, “Advancing Health Equity through Value-Based Care: CMS Innovation Center Update” (*Health Affairs Forefront*, June 4, 2024), doi:[10.1377/forefront.20240603.385559](https://doi.org/10.1377/forefront.20240603.385559).
- ⁶ “What Is Health Equity?” National Institute on Minority Health and Health Disparities, accessed August 27, 2024, <https://www.nimhd.nih.gov/resources/understanding-health-disparities/health-equity.html>.
- ⁷ Jocelyn Kaiser, “Major Budget Cuts to Two High-Profile NIH Efforts Leave Researchers Reeling,” *ScienceInsider*, April 30, 2024, <https://www.science.org/content/article/major-budget-cuts-two-high-profile-nih-programs-leave-researchers-reeling>.
- ⁸ Marie A. Bernard, “Developing Biomedical Research Capacity through the Diversity Program Consortium,” National Institutes of Health, July 13, 2022, <https://diversity.nih.gov/disseminate/blog/2022-07-13-developing-biomedical-research-capacity-through-diversity-program>.
- ⁹ Robert I. Glass, “This Is Why NIH Invests in Global Health Research,” National Institutes of Health, December 13, 2022, <https://www.nih.gov/why-nih-invests-global-health-research>.
- ¹⁰ “Environmental Health Disparities and Environmental Justice,” National Institute of Environmental Health Sciences, accessed August 19, 2024, <https://www.niehs.nih.gov/research/supported/translational/justice>.
- ¹¹ Nathan M. Greenfield, “Gates’ Gift to HBCUs: A \$100m Investment in Diversity,” *University World News*, September 21, 2022, <https://www.universityworldnews.com/post.php?story=20220921161104128>.
- ¹² “Novartis Pledges \$33.7 Million to HBCUs for Health Equity,” *Philanthropy News Digest*, July 22, 2021, <https://philanthropynewsdigest.org/news/novartis-pledges-33.7-million-to-hbcus-for-health-equity>.
- ¹³ Sanne Magnan, “Social Determinants of Health 101 for Health Care: Five Plus Five,” *NAM Perspectives* (October 9, 2017), doi:[10.31478/201710c](https://doi.org/10.31478/201710c).
- ¹⁴ “FACT SHEET: Biden Harris Administration Announces Bold Multi-Sector Actions to Eliminate Systemic Barriers in STEMM,” The White House, December 12, 2022, <https://www.whitehouse.gov/ostp/news-updates/2022/12/12/fact-sheet-biden-harris-administration-announces-bold-multi-sector-actions-to-eliminate-systemic-barriers-in-stemm/>.

About the Authors

Samantha Sherrill, PhD, is a senior associate with Strategic Philanthropy at the Milken Institute. As a member of the Science Philanthropy Accelerator for Research and Collaboration (SPARC), she analyzes biomedical research areas in partnership with philanthropists to fund innovative projects and ensure that investments make equitable, transformative impact in science and health. She received her PhD in neuroscience and psychology from Indiana University, where her research focused on using computational approaches to reveal patterns of information processing in high-dimensional neural data. She then completed a postdoctoral research fellowship in clinical neuroscience at the University of Sussex Brighton and Sussex Medical School. This broadened her expertise to include clinical research practices and ethics, with an emphasis on the relationship between brain-body interactions and mental health. Sherrill also holds a BS in mathematics from North Carolina State University. She is based in the Institute's Washington, DC office.

Ishita Das, PhD, is an associate director on the Science Philanthropy Accelerator for Research and Collaboration (SPARC) team at the Milken Institute, where she leads cross-disciplinary projects. Her expertise lies within biomedical research, science/health policy, stakeholder engagement, workforce diversity, strategic planning, and project management. At the Milken Institute, she uses this knowledge to guide philanthropic investments to have a meaningful impact on science and health. In her role, Das advises individual philanthropists, families, and foundations and implements strategies to deploy philanthropic capital to advance health research priorities. Previously, Das was a project manager at Ripple Effect, a management consulting firm, where she led cross-functional teams to implement various science/health initiatives for federal agencies, nonprofits, and public-private partnerships, including the National Institutes of Health, the Office for Human Research Protections, the National Human Genome Research Institute, the National Institute of Environmental Health Sciences, the Patient-Centered Outcomes Research Institute, and the Centers for Medicare & Medicaid Services. Das received her bachelor's degree in biology from the University of North Carolina, Chapel Hill, and her doctorate in cellular and molecular biology from the University of Michigan—Ann Arbor.

Aggie McMahon Stephens is an associate director on the Science Philanthropy Accelerator for Research and Collaboration (SPARC) team at the Milken Institute. With a background in clinical neuroscience, she specializes in science philanthropy, research sector development, and global collaborations that maximize the impact of investments in science. At Milken Institute Strategic Philanthropy, she advises on giving strategies and implementation tactics that holistically benefit the research ecosystem. Prior to joining the Institute, she was a science program specialist at The Kavli Foundation, where she acted as program director for the International Brain Initiative, facilitating cross-sector collaborations for large-scale neuroscience projects. Stephens was

previously the program manager for ENIGMA, an international consortium in neuroimaging and genomics. She earned a BS from the University of North Carolina and an MSc in clinical science from the University of Colorado. Stephens additionally serves as a board member for the Institute of Neuroethics. She is based in the Institute's Washington, DC office.

Erin Ross is a director on the Science Philanthropy Accelerator for Research and Collaboration (SPARC) team at the Milken Institute. She applies her expertise in health systems, analyzing the role scientific evidence plays in health policy implementation and identifying ways the scientific and policy communities can collaborate. She provides guidance to philanthropists, families, and foundations to strategically deploy philanthropic capital to advance research and health priorities. Ross has published work on health policy and implementation strategies for topics such as type 1 diabetes, dementia, and tauopathies. Prior to joining the Milken Institute, Ross worked in the life science industry for more than 17 years, building strong skills in scientific research, writing, facilitation, and communication.

