Deloitte.



Health equity

Social determinants of health

Great disparities based on age, location, gender, income, race, ethnicity, religion, and sexual orientation persist in the global health ecosystem despite significant efforts to eliminate them by health care providers, insurers, government agencies, aid organizations, and others.

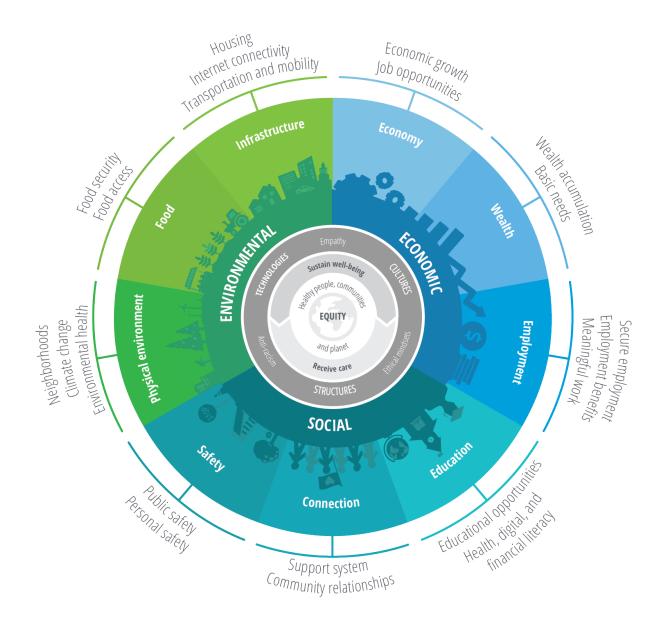
More than a quarter of the world's population has no access to essential medicines, and for more than 2 billion people worldwide, medicines may be unaffordable, unavailable, inaccessible, or of poor or unregulated quality.¹

Income, education, and living and working conditions can shape physical and behavioral health. In many cases, individuals may have little or no control over factors that can directly or indirectly affect their health — such as living in proximity to lead paint, polluted air and water, scarce food sources, dangerous neighborhoods, and few outlets for physical activity.

Characteristics such as secure housing, age, ethnicity, gender, and economic resources often correlate to differences in access to medical facilities and services and variation in the rates of disabilities and disease occurrence (Figure 1).

Figure 1. The broad social and economic circumstances that together determine the quality of the health of the population are known as the 'drivers of health'

Health care organizations can impact DOH for their patients and members, employee populations, and in their larger communities



Source: Deloitte analysis.

These social, economic, and environmental "drivers of health," or social determinants of health, can have a greater impact on health outcomes than the care provided by clinicians — accounting for about 80 percent of health outcomes.²

The problems are not new. Five decades ago, public health organizations in the US began documenting maternal mortality disparities between white and Black women. In the ensuing decades, research has developed many other links between these nonclinical factors and long-term health outcomes.

For example, children who experience stressful circumstances, especially on a daily basis, are more likely later in life to adopt—and less likely to discontinue—risky health behaviors like smoking and drug and/or alcohol abuse that may function as coping mechanisms.³ Studies also have found that depriving infants of a loving environment causes lasting damage to their emotional well-being, intelligence, and development capacity.⁴

Yet efforts to systemically reduce or eliminate these disparities have proven difficult. This is largely because they require a coordinated approach not only across government agencies but also across the commercial sector. Early programs such as the Total Place initiatives in the UK, which was designed to tackle seemingly intractable issues such as teenage pregnancy, did not necessarily benefit those with the greatest need. Nor was it effective in addressing the root causes of health inequity.⁵

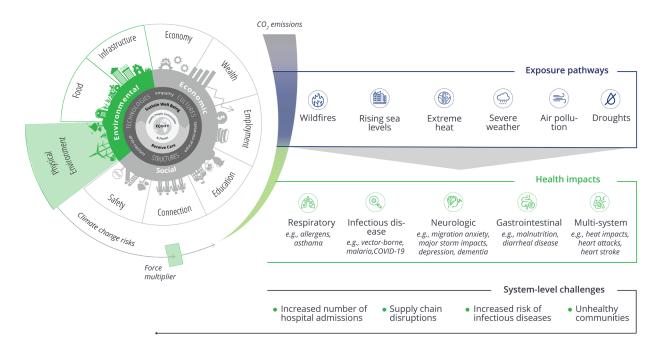
Many of the disparities such as Total Place and others like it attempted to address have causes that extend far beyond the health care system, requiring changes in environmental policies, employment practices, training schemes, tax laws, regulations, and civil rights legislation. They also require breaking down institutional discrimination and prejudices.

The COVID-19 pandemic underscored the pervasiveness of health inequity. The virus disproportionally affected the most vulnerable groups, and focused public attention on how communities are only as strong as their most compromised members. As a result, many health organizations are rethinking how to address health inequity.

The growing impact of climate change could further amplify global health inequities by putting clean air, safe drinking water, adequate food supplies and secure shelter in jeopardy. Rising temperatures are expected to cause about a quarter million more deaths worldwide from malnutrition, malaria, diarrhea, and heat stress between 2030 and 2050 (Figure 2).⁶

Figure 2. Rising temperatures multiply the risk to human health

 $As CO2\ emissions\ rise, the\ impacts\ on\ the\ physical\ environment\ excerbate\ the\ other\ social\ determinants\ of\ health.$



Longevity equity

A key measure of health equity is life expectancy. If people living in the same geographical areas have significant differences in the life expectancies, it can spotlight the drivers of health inequities.

Ethiopia, for example, has an average life expectancy of 65.6 years, about three years longer than neighboring Kenya. In recent years, Ethiopia has adopted community-based health strategies, improved access to safe water, and expanded female education and gender empowerment. Similarly, Brazil has an average life expectancy of 73.4 years, compared with 64.9 for neighboring Bolivia and 70.5 for Paraguay. Brazil has reduced inequality improved female education and health care coverage and expanded political participation.⁸

Perhaps most alarming, life expectancy in the US has fallen for the past three years — to an average of 76.1 years from 78.8 in 2019.9 In some regions, lower life expectancies can vary by postcode and correspond with higher instances of certain diseases. Environmental factors in these areas can have a significant impact on longevity. For instance, air pollution causes about 7 million premature deaths every year. Twenty-three million US homes—the majority of which are in impoverished and marginalized communities of color—contain lead-based hazards.

Worldwide, household air pollution (HAP) — primarily from a lack of clean energy such as electricity or natural gas for cooking and heating — causes 4.3 million premature deaths annually. HAP contributes to higher levels of strokes, heart disease, lung cancer, and chronic obstructive pulmonary disease in low- and middle-income countries.¹²

These environmental hazards, combined with limited access to health services are among the reasons that life expectancy in low-income counties can be almost 20 years less than in high-income ones.¹³ In urban areas, life expectancy can differ by city blocks or neighborhoods, with variance in life expectancy of as many as 25 years. Similar gaps exist in infant mortality, obesity, violence, and chronic disease.¹⁴ Quite simply, where a person lives will determine how long they live.

Health equity disparities often follow other social and economic divides, especially among racial lines. As of 2020, white Chicagoans were living as much as 10 years longer than Black Chicagoans, and the gap widened from 8.8 years in 2017. For the first time in decades, life expectancy for Black residents of Chicago fell below 70 years.

In Australia, the burden of disease for Aboriginal and Torres Strait Islander people is 2.3 times that of non-indigenous Australians. Rates of psychological distress and chronic disease are higher, and health access is lower because of cost and lack of available services.¹⁵

The same is true in Canada, where indigenous people have a life expectancy that is 14 years less than non-indigenous Canadians. Twenty-five percent of indigenous Canadians suffer from addiction, compared with 17 percent for the general population. Suicide rates among indigenous youth are six times higher.¹⁶

The pandemic added to the health equity divide, affecting access to food, childcare, stable housing, and income. Fifty-nine percent of Black US residents and 50 percent of Latinos held jobs requiring them to work in person at the height of the pandemic when vaccines were not yet available.¹⁷ What's more, two-thirds of low-wage US workers still lack access to paid sick days.¹⁸

At the same time, many of these communities have historically been under-diagnosed in terms of common life-threatening diseases such as cardiovascular illness, and many don't have access to basic care or screenings for heart attacks, cancer, obesity-related health issues, and other ailments.

Half of US adults with lower income don't get needed care because it's too costly — they often skip visits, recommended tests, treatments, follow-up visits, or prescription medications. In contrast, the number was 12 percent to 15 percent for lower-income adults in Germany, the UK, Norway, and France.¹⁹

Indeed, the limited social safety net, market-based health care, limited public health regulation, and increases in health inequity have caused average US life expectancy to fall by almost 3 years.²⁰

Globally, 94 percent of all maternal deaths occur in low-and-middle income countries, but at a time when maternal mortality has been declining globally, the US was one of only two countries (the Dominican Republic was the other) in which it rose.²¹ The US maternal mortality ratio of 17.4 per 100,000 pregnancies is the highest among industrialized nations.²²

In the UK, poor diet and obesity are two of the main contributors to premature death. Those living in deprived areas often face significant barriers to accessing affordable nutritious food.²³ In India, where longevity is defined by factors such as caste, religion, and indigenous identity, the poorest households have a life expectancy of 65.1 years, compared with 72.7 years for the wealthiest.²⁴

Heath justice

Access and care delivery disparities are part of a larger system of prejudice, racism, and bias that pervades the health ecosystem at many levels. In the summer of 2020, for example, 75 percent of new COVID-19 cases in Saudi Arabia and 95 percent of those in Singapore were migrant workers. This follows a pattern seen in other disease outbreaks in which abuse and discrimination toward migrants or other nationalities reinforce barriers to health care access.²⁵

Health inequity also influences where facilities are located and gaps in physician training and diversity. Care coordination algorithms may direct resources to those using the most services, who are disproportionately higher income. This disparity highlights the health conundrum between health need and health demand.

Unnecessary health care spending from structural inequities and biases is well documented. Research shows that spending tends to be higher among certain populations because of delayed care, access challenges, missed diagnoses, and limited access to the latest scientific advances as well as proper preventive services.

Racism and bias also threaten the adoption of new technologies that could provide better care delivery to these underserved populations. Telemedicine is a key component of the digital transformation of health care since the COVID-19 pandemic, but it hasn't been adopted by all populations equally.

In the US, Blacks and Hispanics are 35 percent and 51 percent less likely, respectively, than whites to use telemedicine. Again, economic and environmental issues come into play. Poorer households are more likely to lack the technology to access telemedicine. Only one in four families earning \$30,000 or less have a smartphone, tablet, or laptop computer, compared with almost three in four for families earning \$100,000 or more. In addition, only 66 percent of Black and 61 percent of Hispanic households have access to broadband internet, compared with 79 percent of white households. In this case, the digital divide begets a health services divide.

These inequities are not just a public health or social problem, they are also an economic one, potentially adding to cycles of poverty that reinforce additional health inequities. More than 30 percent of direct medical costs faced by Blacks, Hispanics, and Asian-Americans in the US can be linked to health inequities.²⁷

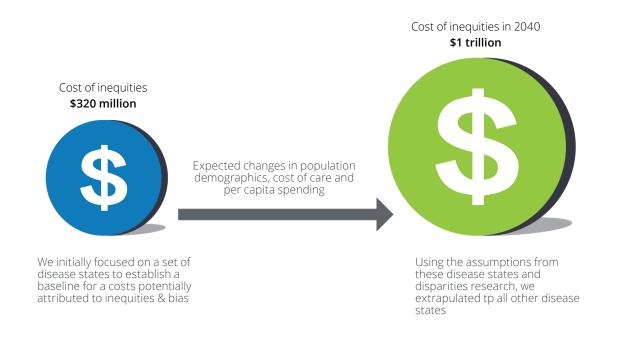
Inequity also falls disproportionately on other underserved groups, such as the elderly, mentally ill, and disabled. Worldwide, disabled people face lower economic participation, higher poverty rates, and increased dependency. Across the 27 countries in the Organization for Economic Co-operation and Development (OECD), average employment for the disabled was 44 percent, compared with 75 percent for non-disabled people. Worldwide, the disabled face greater food insecurity, poor housing, and a lack of access to clean water and sanitation. This is especially true in low-income countries, where the disabled are 50 percent more likely to experience catastrophic health expenditures than non-disabled people.²⁸

The cost of health inequities

Inequities across the health ecosystem limit underserved people's access to affordable, high-quality care, create avoidable costs and financial waste that span society, and impact every individual's potential to achieve health and well-being.

In the US health system, for example, inequities cost about \$320 billion and could exceed \$1 trillion in annual spending by 2040 if left unaddressed (Figure 3). This projected rise in health care spending could cost the average American at least \$3,000 annually, up from current costs of \$1,000 per year.²⁹

Figure 3: Modeling the cost of US health inequities in 2040



Note: All values are in US dollars.

Source: Deloitte analysis.

Meanwhile, the European Parliament estimated that health inequities in the European Union cost about 1.4 percent of GDP each year, almost matching defense spending of 1.6 percent of GDP.³⁰

The pressure to reduce costs

Globally, the health care sector is under pressure to reduce health care spending while increasing quality of care. Persistent health inequities have a substantial impact on health outcomes and spending. However, the industry hasn't yet found systemic and sustainable solutions to address this complex challenge.

To address these disparities, health organizations must work outside of the traditional health care system and address the social, economic, and environmental factors that lead to healthy or unhealthy outcomes.

There is some light ahead. There are several global initiatives that are committed to making a change.

For example, Google is working with several health care organizations to develop a health equity tracker that can be used to create actionable, evidence-based policy changes to help disproportionately impacted communities receive equitable resources and support.

The tracker has several key features:

- Highlight the impact of COVID-19 and other diseases on the Black, Indigenous, Latin, Asian, Pacific Islander, and other vulnerable and marginalized communities
- Record COVID-19 cases, deaths, and hospitalizations across race and ethnicity, sex, and age
- Measure comorbidities associated with COVID-19, including COPD, diabetes, and social and political determinants of health, including uninsured and poverty rates

The companies are working to expand the tracker's ability to include additional conditions such as mental and behavioral health, and social and political determinants of health that impact vulnerable communities, including LGBTQ+ individuals and people with disabilities and lower socioeconomic status.

In the future, the tracker will also be able to ingest multiple data sets ranging from social and political determinants of health, demographics, and other variables, creating a novel, comparative approach to assessing and conceptualizing health and social inequities.³¹

Some European and Asian experts are taking a more fundamental approach to addressing health equity. In October 2022, experts from nine countries — Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Tajikistan, Ukraine and Uzbekistan — met in Tbilisi, Georgia, to examine the level of financial hardship from catastrophic or impoverishing medical expenses and discuss protections. The group established guidelines for the scope and qualifications of public benefit packages and processes for countries to identify gaps in health coverage that can lead to financial hardship.³²

Addressing health inequity

Achieving health equity requires leaders to design and build systems that advance health equity as an outcome from the outset and not as an afterthought. To bring greater equity to health care, organization should:

- Dismantle the racism and bias built into the foundation of the health care system over centuries
- Expand access to coverage and care for communities and populations that have historically lacked it
- Look outside of the traditional health care system to address the social, economic, and environmental factors that lead to healthy or unhealthy outcomes.

In the past few years, health care companies announced various initiatives to mitigate health and social inequities and provide quality treatment to every individual irrespective of race, ethnicity, socioeconomic status, gender identity, sexual orientation, or cultural background.

But despite well-intentioned efforts, trust remains an issue. In the past, health organizations often made assumptions on what their communities needed and wanted, instead of asking. In light of the imperative for health equity, they now have an opportunity to build trust based on a wide range of perspectives in their communities and direct input from consumers. Organizations must understand what experiences led to the loss of trust, how they might re-earn it, and how they can prevent those events from happening again.³³

In January 2022, the National Committee for Quality Assurance launched its Health Equity Accreditation Plus evaluation initiative. The program establishes processes and cross-sector partnerships that identify and address social risk factors in their communities and the social needs of the people they serve.³⁴

Similarly, the health maintenance organization Oscar announced its Culturally Competent Care Grant program in May 2021. The grants are focused on providing care to patients with diverse values, beliefs, and behaviors, including tailoring delivery to meet patients' social, cultural, and linguistic needs.³⁵

For organizations, addressing biases and advancing health equity is not merely a moral imperative but also a competitive advantage. Proving the business case and using this as a point of competitive advantage will be critical to sustainable focus and scale.

By targeting these issues, employers can attract and retain the best talent and elevate their brand and reputation in the market. What's more, healthier workers have fewer sick days, are more productive on the job, and have lower medical care costs.

Every organization should plan to address health inequities by designing and enabling the future of health care around people and equity. Health care incumbents, industry disruptors, community organizations, and government agencies each have a role to play in removing the barriers that lead to health inequities and turning unaffordable costs into opportunities.

As companies develop products and services, invest in their communities, partner with others, and improve the diversity, equity, and inclusion of their workforce, they should consider designing for equitable health. This can help ensure the health and well-being of all individuals and provide access to affordable, high-quality care in all communities.

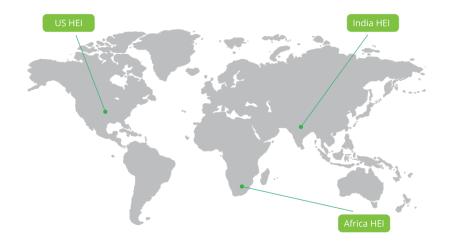
Addressing social and health equity is one of the greatest challenges of our time. We are in the midst of a social, political, and economic movement that can see the value and moral imperative to do so. Health care companies must take a leadership role and abide by the Hippocratic oath of "first do no harm." However, only a coordinated effort among policy makers, industry executives, government officials, social influencers, and community organizers to close the widening global health equity gap.

The Deloitte Health Equity Institutes

Deloitte has established The Deloitte Health Equity Institutes (DHEIs) to advance health equity through cross-border collaboration, philanthropic investment, and research activity. The three institutes — located in the United States, India, and Africa — share Deloitte's commitment to tackling the unique forces that create health inequities in each region. (Figure 4).

Figure 4: Health equity institutes

We have established 3 **Deloitte Health Equity Institutes (DHEIs)...**



Our DHEIs are looking to address **three root causes** that prevent equitable health outcomes:

- 1. Racial, socioeconomic, gender& other **biases**
- 2. Disparate circumstances in drivers of health
- 3. Inadiquately designed **health** care systems

...to drive through 3 key reinforcing capabilities



Action & Impact

Pro bono consulting service to support with health equity initiatives or hard dollar donation to key collaborators



Knowledge & Evidence

Publicly-available eminance and playbooks to assist both public and private sector efforts to address gaps in health equity



Date & Analytics

Combining data on health disparities and our data equity to enable insights to inform impactful auction The DHEIs collaborate with local and national organizations across the public, private, and social sectors to advance health equity and achieve better health outcomes. The following are examples of recent projects that DHEIs are conducting in each region:

United States: The DHEI is collaborating with New Profit, a national venture philanthropy organization, to support the Catalyze Cohort program for social entrepreneurs focused on mental health equity. The program, launched in 2022, supports early-stage organizations with funding and technical assistance. Members receive \$100,000 in unrestricted funds and capacity-building and strategy support over the course of a year. A second Catalyze Cohort will launch in 2023 to address the mental and behavioral health crisis in the US.

Africa: The DHEI implemented the Expand the Ward initiative to assist local government health departments with addressing the worst effects of the COVID-19 pandemic. We leveraged Deloitte technology assets, logistics expertise, and project management experience to assist healthcare workers in monitoring and tracking patients in remote, under-resourced communities. In addition, we monitored worker capacity at healthcare facilities.

As the pandemic shifts to endemic stage, the DHEI is working with local health departments to apply the technology and processes developed for COVID-19 to support other treatment areas, such as mental health. The DHEI is piloting a program at a district healthcare facility to provide the tools to monitor and track medication adherence. In addition, we are supporting collaboration among the government, pharmaceuticals and medical devices sectors, patient advocacy groups, and funders to ensure the sustainability of patient access to innovative treatment under the National Health Insurance (NHI) program in South Africa. We facilitate round tables on critical areas of policy such as the impact of the implementation of the NHI on the current healthcare system; its effect on access to affordable innovative treatment; and how treatment will be funded under the new policy.

India: To understand the mental well-being of corporate employees in India and determine how to mitigate issues, the DHEI conducted a quantitative survey of about 4,000 employees across 12 sectors and performed more than 60 interviews with human resource executives, and mental health experts. The study found that more than 80 percent of employees suffer from one or more mental health symptoms, with workplace and financial stress being the leading causes. Most said they have not sought professional help. About 39 percent said they had taken no steps to manage their mental health issues either because of the associated stigma or lack of awareness and access to resources. Fifty-six percent said they were unwilling to discuss mental health with HR or team leaders, and most are either not aware of workplace resources or do not find them highly effective. Also, few employers have in-house or third-party resources to manage employee mental health, and the efficacy of these programs continues to be limited.

The study found that unresolved mental health issues among employees costs employers as much as \$14 billion annually in lost productivity, absenteeism, and employee turnover. Given the scale of the problem, the DHEI determined that employers should create a comprehensive workplace mental health policy that addresses the need for both curative and preventative interventions.

Here are five underlying mechanisms that heath care leaders should consider in addressing health inequity: ³⁶

- 1. Be intentional: Stakeholders across the health care ecosystem should approach health care's future with intentionality and engage in continuous thinking on health equity. Infusing equity-centered thinking into business choices now is something that should be prioritized to build wellness-focused, outcomes-driven prevention and delivery systems that serve everyone, regardless of race, ethnicity, and socio-economic status.
- 2. Form cross-sector partnerships: The current set of health care stakeholders can't solve for this on their own because the magnitude and complexity of the problem is too significant. To truly enable health equity, organizations should form partnerships across the industry. It likely will require current actors, new participants, and the government to collectively make a change. Health care organizations should collaborate with agencies, non-governmental organizations, and coalitions that work on initiatives to address the root causes of health inequities.
- 3. Measure progress: Accessible, platform-agnostic, and inclusive data and technology infrastructure paired with representative data collection, key performance indicators, and ongoing evaluation will be necessary to define and track progress in tackling health equity.

- 4. Address individual and community-level barriers: Addressing the social determinants of health by removing barriers to access and creating healthy environments will require investments in data, technology, and public health infrastructure at the federal, state, and local levels.
- 5. Build trust: Trust across the system, from individual practitioners to institutions and in data and technology, is crucial. It will be important to rebuild trust with people and communities intentionally by understanding needs, improving experiences, and building a more diverse and inclusive workforce.

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Interested in learning more about health equity and its impact on global health care? Check out these Deloitte publications:

US health care can't afford health inequities

Mind matters: A perspective on the mental health landscape in India

Advancing health equity through community-based ecosystems

Mental health equity and creating an accessible system

The health care CFO's expanded role

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