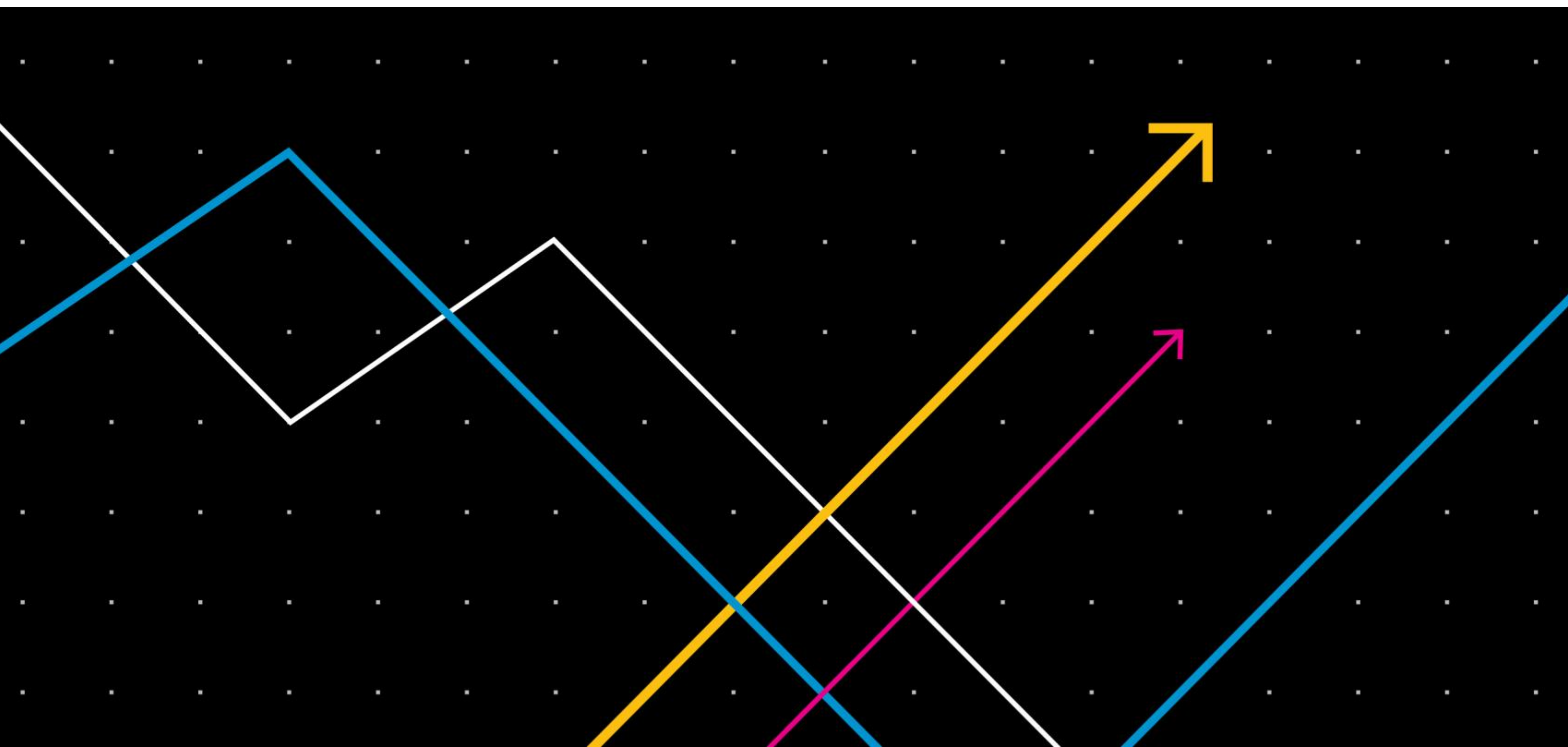


RESEARCH REPORT

Moving Upstream to Achieve Better and Equitable Health in Texas

Health System Strategies and Perspectives

Nadia J. Siddiqui
INDEPENDENT CONSULTANT

Sarah Morriss
URBAN INSTITUTE

Kimá Joy Taylor
URBAN INSTITUTE

Brian Smedley
URBAN INSTITUTE

March 2024

URBAN INSTITUTE · ELEVATE · THE · DEBATE

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

Copyright © March 2024. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Tim Meko.

Contents

Acknowledgments v

Executive Summary vii

Key Takeaways viii

Racial and Ethnic Health Disparities Are Deep, Persistent, and Affect All in Texas viii

Health Disparities Reflect Inequities in the Nonmedical Drivers of Health viii

Health System Players across Texas Have Made Some Strides to Address the Nonmedical Drivers of Health and Health Equity ix

Recommendations for Moving Forward xi

Frame Health Equity in Ways That Are Inclusive, Data-Driven, and Solutions-Oriented xii

Apply a Multilevel Systems Change Approach to Advancing Health Equity xii

Authentically Engage Communities as Partners in Advancing Health Equity xiii

Value and Invest in Achieving Better and Equitable Health xiii

Conclusion xiv

Moving Upstream to Achieve Better and Equitable Health in Texas: Health System Strategies and Perspectives 1

Methods 3

Racial and Ethnic Health Disparities Persist in Texas 6

The Pulse of Health Disparities 6

The Economic Cost of Health Disparities 11

Health Disparities Reflect Inequities in the Nonmedical Drivers of Health 12

Housing 13

Income and Poverty 14

Education 15

Food Insecurity 16

Health Care 17

The Health System Is Increasingly Addressing the Nonmedical Drivers of Health 18

Hospital and Health Care Systems 22

Community Health Centers 24

Health Payers 25

Health Philanthropy 27

Local Health Departments 28

State Health Agencies 30

Academic Health Institutions 31

Nonprofit Health Organizations 33

Moving Forward: Perspectives from Health Leaders Across Texas 35

Frame Health Equity in Ways that are Inclusive, Data-Driven, and Solutions-Oriented 36
Apply a Multi-level Systems Change Approach to Advancing Health Equity 38
Authentically Engage Communities as Partners in Advancing Health Equity 40
Value and Invest in Achieving Better and Equitable Health 43
Conclusion 44
Notes 46
References 50
About the Authors 53
Statement of Independence 55

Acknowledgments

This report was funded by Episcopal Health Foundation. The authors thank Shao-Chee Sim, C. J. Hager, Christy Serrano, and Briana Martin for their support and guidance. This report was prepared for the Urban Institute's "Unequal Treatment at 20" initiative with generous support from the Robert Wood Johnson Foundation (RWJF), the Commonwealth Fund, the Episcopal Health Foundation, the California Endowment, and the California Health Care Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

The authors also extend special thanks to health leaders and changemakers across Texas who participated in interviews and shared their invaluable perspectives on achieving better and equitable health in the state.

Karen Batory, Vice President of Population Health and Medical Education
Texas Medical Association

Kelenne Blake-Fallon, Executive Director
Black Mamas ATX
Maternal Health Equity Collaborative

Cliff Despres, Communications Director
UT Health San Antonio
Salud America!

Jana Eubank, Executive Director
Texas Association of Community Health Centers

Sean Haley, Executive Director
Center for Civic and Public Policy Improvement

Carol Huber, Deputy Chief Public Health and Equity Officer
University Hospital

Karen Love, President and CEO
Cook Children's Health Plan

Dr. Quianta Moore, Executive Director
Hackett Center for Mental Health
Meadows Mental Health Policy Institute

Quang Ngo, President
Texas Organization of Rural and Community Hospital Foundation

Amelie Ramirez, Director of Institute for Health Promotion Research and Chair of Population Health Sciences
UT Health San Antonio

Valerie Rios, Executive Director
Partners in Parenting
Maternal Health Equity Collaborative

Barbie Robinson, Executive Director
Harris County Public Health

Dr. David Lakey, Vice Chancellor for Health Affairs and Chief Medical Officer
University of Texas System

Margaret Spellings, President and Chief Executive Officer
Texas 2036

Carmen Llanes, Executive Director
Go Austin/Vamos Austin

Anna Stelter, Senior Policy Director
Texas Hospital Association

We also gratefully acknowledge helpful comments, suggestions, and guidance from UT@20 Advisory Committee members Dr. Jose Gaston Guillem, Dr. Risa Lavizzo-Mourey, Dr. Mary Awounda, and Ameina Mosley, and Urban Institute reviewers Elsa Falkenburger, Faith Mitchell, and Dashni Sathasivam.

Executive Summary

Twenty years ago, the Institute of Medicine, now the National Academy of Medicine, published a landmark report. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* revealed that racial and ethnic health disparities were deep and pervasive in the US, even after controlling for various socioeconomic factors (IoM 2003). Since then, little has changed nationally and in Texas. Home to the world's largest medical center and more hospitals than any state, Texas has poorer outcomes and wider disparities than the nation on many markers of health and well-being. This reality underscores what research has long shown: health care alone is not sufficient to guarantee health.

This report identifies how the Texas health system has advanced health equity over the last two decades by moving upstream to address the nonmedical drivers of health. The Robert Wood Johnson Foundation defines health equity as "everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care" (Braveman et al. 2017, 2).

Drawing on secondary data, a systematic literature scan, and in-depth interviews with health leaders and experts in Texas, this report highlights the following topics:

- **The state of racial and ethnic disparities** in health and the nonmedical drivers of health in Texas over time.
- **Promising programs and strategies** through which health system players in Texas address midstream and upstream nonmedical drivers of health as a pathway to health equity.
- **Perspectives and recommendations** on what it will take to achieve health equity and realize the vision of a healthier Texas for all.

We define the *health system* as all organizations, institutions, resources, and people whose primary purpose is to improve health. Our intended audience includes a range of players in the broader health ecosystem, including leaders and practitioners at hospitals, health centers, health plans, and public health agencies, as well as researchers, policymakers, and advocates committed to promoting equitable health conditions and outcomes for their communities.

Key Takeaways

Our review of data and initiatives over the last two decades indicates a stark reality of the Texas health landscape today: On the one hand, racial and ethnic disparities in health and the nonmedical drivers of health remain deeply entrenched. On the other hand, players across the health ecosystem are shifting upstream to improve health, not just health care. While this shift is promising, its impact is yet to be seen in health outcomes.

Racial and Ethnic Health Disparities Are Deep, Persistent, and Affect All in Texas

On average, infants, mothers, and adults in Texas live in poorer health and lead shorter lives than peers in most states. Black adults and infants face some of the most pervasive disparities. A Black person at birth can expect to live five fewer years than a white person. Black pregnant women and infants face mortality rates two times higher than white pregnant women and infants—a disparity that has persisted for decades. Other groups also face disparities—Hispanic adults have higher rates of fair or poor health status, obesity, and diabetes, and white adults have among highest rates of any cancer and depression in the state.

Health disparities carry a hefty price tag for the state's economy, affecting large and small businesses through lost job productivity, lost earnings from premature deaths, and excess health care spending that increases costs for patients, health care providers, and payers. In 2018, Texas had the highest cost burden attributable to health disparities in the nation—$40.6 billion for racial and ethnic health disparities (2.2 percent of state GDP) and $70.1 billion for education-related health disparities (3.9 percent of state GDP) (LaVeist et al. 2023).

Taken together, these data paint a grim reality of the state today: Texas is not reaching its full health potential. From longevity to quality of life to economic prosperity, Texas falls short of the outcomes many states are achieving.

Health Disparities Reflect Inequities in the Nonmedical Drivers of Health

Research demonstrates that outcomes in health and longevity reflect the conditions in which people are born, live, learn, work, and age—the nonmedical drivers of health. Similarly, racial and ethnic health disparities are driven by complex factors, including underlying inequities in the nonmedical drivers of health. Many of these drivers are rooted in a legacy of structural racism. For example, racial residential segregation, enforced by historical laws and policies, has left a lasting impact that has contributed to the

concentration of poverty and disinvestment in communities of color over generations, shaping today's inequitable access to quality neighborhoods, housing, schools, jobs, income, wealth, and health insurance coverage (Williams and Collins2001).

Building on this context, we found that Texas consistently ranks low among states on many measures of the nonmedical drivers of health, such as income, poverty, education, food insecurity, and housing. Communities of color in particular face great challenges. Black households, for instance, have a three times higher rate of food insecurity and severe housing problems than white households. Black children are also three times more likely to live in poverty than white children. For Hispanic households and children, rates of food insecurity, severe housing problems, and child poverty are two times higher than for white households and children. Hispanic adults are also six times less likely to have a high school education and three times more likely to be uninsured compared with white adults. These racial and ethnic disparities in the nonmedical drivers of health play out profoundly in health disparities previously described.

Health System Players across Texas Have Made Some Strides to Address the Nonmedical Drivers of Health and Health Equity

In the absence of robust state policy action supporting health in Texas, health system players have stepped up over the last two decades to innovate and address health disparities. Whereas early efforts had a predominantly downstream focus (e.g., improving quality of clinical care), the passage of the Affordable Care Act in 2010 incentivized a new wave of initiatives to move upstream and address the nonmedical drivers of health. Table ES1 summarizes programs and strategies that have recently emerged to address the nonmedical drivers of health at the midstream and upstream levels.

TABLE ES.1

Midstream and Upstream Strategies for Addressing the Nonmedical Drivers of Health and Advancing Health Equity in Texas, by Health System Player

Health system player	Midstream strategies[a]	Upstream strategies[b]
Hospitals *For-profit, nonprofit, and governmental*	▪ **Screening and addressing social needs:** 9 in 10 general acute care hospitals in Texas screen and address social needs of patients. ▪ **Hospital-food partnerships:** Food Is Medicine programs (e.g., medically tailored meals and groceries, food prescriptions, and "farmacies"), on-site and mobile food distribution, and pop-up events are examples. ▪ **Medical-legal partnerships:** Lawyers are included in care teams to address substandard housing conditions, unstable guardianship, lack of coverage, and similar problems.	▪ **Community health needs assessments and community health improvement plans:** conducted collaboratively and regionally with multiple hospitals and community partners to identify and tackle upstream NMDOH and health disparities. ▪ **Anchor institutions:** Large urban hospitals hire and invest in economically distressed communities. ▪ **Multisector collaboratives:** Some hospital systems participate in large-scale multisector systems change efforts, such as Collective Impact and ACH.
Health centers *Federally qualified health centers and other community health centers*	▪ **Screening and addressing social needs:** Texas Association of Community Health Centers partners with Unite Us for a statewide coordinated care network. ▪ **Health center–food partnerships, medical-legal partnerships, and other clinical-community linkages:** Health centers partner with social services and other community partners to address their patient's social needs.	▪ **Community-centered health homes:** a cohort of centers expand the patient-centered medical home model to address NMDOH in neighborhoods. ▪ **Multisector collaboratives:** Some health centers participate in Collective Impact, ACH, and other collaboratives.
Health payers *Private, public, and managed care organizations*	▪ **Federal incentives**: CMS funded three accountable health communities in Texas to screen and address social needs of Medicaid and Medicare patients. ▪ **Managed care organizations:** 14 of 16 MCOs in Texas screen and address members' social needs.	▪ **Community investments,** such as supporting training for community health workers and population health, expanding affordable housing, and addressing economic mobility of the community. ▪ **Multisector collaboratives:** Some health plans participate in and/or provide financial support for Collective Impact, ACH, and other collaboratives.
Health philanthropy *State, regional, and local health-focused philanthropy*	▪ **Coordinated care networks**: Supporting local and regional care coordination infrastructure for screening and referrals. ▪ **Learning collaboratives:** Supporting Texas MCO Non-Medical Drivers of Health Learning Collaborative.	▪ **Multisector collaboratives:** Supporting ACHs, Communities of Solutions, Collective Impact, and others. ▪ **Learning collaboratives** for equity-centered community capacity building, such as Prosperemos Juntos/Thriving Together. ▪ **Participatory grantmaking** with communities, such as a pilot launched by St. David's Foundation.

Health system player	Midstream strategies[a]	Upstream strategies[b]
Local health departments *Local public health agencies*	▪ **Coordinated care networks:** Implementing local and regional coordination of whole-person care.	▪ **Community health assessment** and improvement plan, conducted every five years, used to address community NMDOH. ▪ **Multisector collaboratives:** local health agencies serving as a backbone entity and/or partner in collaboratives. ▪ **Federal/state grants** include $19.5 million in CDC COVID-19 funds for community engagement and health equity.
State health agencies *HHSC and DSHS*	▪ **State NMDOH action plan** sets steps and goals for Texas Medicaid and CHIP to address food insecurity, housing, and transportation through health care providers and MCOs.	▪ **Federal grants include** $45.2 million from CDC for Health Disparities Improvement Initiative to design and test community interventions. ▪ **Multisector collaboratives**: such as the Healthy Families Initiative.
Academic organizations *Health education and research institutions*	▪ **Coordinated care networks:** serve as bridge/backbone entity. ▪ **Research and evidence** on the range of midstream strategies, including social needs screening and clinical-community partnerships. ▪ **Medical/health professional training** on social needs, screenings, and referrals.	▪ **Multisector collaboratives:** serve as bridge/backbone entity. ▪ **Community-based participatory research** to build evidence to drive structural and systemic change. ▪ **Strengthen the community health workforce** through training and systemic changes.
Nonprofit organizations *Think tanks, community, and advocacy organizations*	▪ **Coordinated care networks:** serve as bridge/backbone entity. ▪ **Research and evidence** on the range of midstream strategies.	▪ **Neutral convener:** for systems change initiatives, community health needs assessments, and multisector collaboration. ▪ **Advocate and champion** for policy change at legislature.

Source: Authors' analysis of secondary Texas health system data, literature review, and interviews with health leaders.
Notes: ACH = Accountable Communities for Health; CDC = Centers for Disease Control and Prevention; CHIP = Children's Health Insurance Program; CMS = Centers for Medicare & Medicaid Services; DSHS = Texas Department of State Health Services; HHSC = Texas Health and Human Services Commission; MCO = managed care organization; NMDOH = nonmedical drivers of health.
[a] Midstream strategies advance health equity by addressing NMDOH at an individual level (i.e., social needs).
[b] Upstream strategies advance health equity by addressing NMDOH at a community level (i.e., community conditions for health).

Recommendations for Moving Forward

Interviews with health leaders and experts across Texas provide insight into the ongoing challenges that impede health system efforts toward health equity and what it will take to progress. Below, we summarize the interviewee's considerations and recommendations for realizing the vision of better and equitable health in Texas.

Frame Health Equity in Ways That Are Inclusive, Data-Driven, and Solutions-Oriented

Nearly all the interviewed health leaders discussed the challenges surrounding the term *health equity* in Texas and the need to reframe how we talk about it to garner broader understanding and support for critical policy and action. The following are recommendations to consider when framing health equity:

- **Move away from words and jargon** to using data, maps, visuals, and storytelling to demonstrate health inequities—who is impacted, how, and why.
- **Make a business case** or value proposition for why achieving better and equitable health matters for different health system players.
- **Use a solutions-oriented approach** that moves beyond discussing problems to identifying innovative and evidence-based solutions for closing gaps between populations in the nonmedical drivers of health and health outcomes.
- **Ground health equity in shared American values,** such as advancing liberty and justice for all and promoting conditions that enable everyone to make healthful personal choices.
- **Be inclusive in messaging**. Disparities exist across intersectional identities and diverse communities, some enduring long-standing inequities based on historical systemic policies and others facing marginalization based on more recent policies or circumstances.

Apply a Multilevel Systems Change Approach to Advancing Health Equity

The consensus among the health leaders we interviewed is that addressing the nonmedical drivers of health presents a pathway for achieving health equity in Texas. However, leaders recognized that in doing so, health system players could serve as leaders, partners, and advocates in all levels of intervention—downstream (within health care), midstream (through clinical-community linkages), and upstream (by addressing community conditions for health). The following are key recommendations provided by interviewed leaders:

- **Leverage the momentum of midstream progress to move farther upstream.** In doing so, health system leaders can ask, which upstream actions would have the greatest impact on the health of the communities we serve? Which health, nonhealth, and community partners are needed to make a collective change?

- **Address the interconnections of nonmedical drivers of health**. Strategies may include screening and resolving multiple social needs; leading or participating in multisector collaborative initiatives that tackle multiple determinants of health; or colocating resources (food, housing, transportation, health care) in community resource hubs.
- **Explore the root causes of inequities in the nonmedical drivers of health.** Identify the role of structural factors in shaping uneven conditions and access to the nonmedical drivers of health in the community. Organizations may need to acknowledge their own systems of bias and the role and impact of historical laws and policies.
- **Expand health insurance coverage for low-income individuals.** All health leaders identified Medicaid expansion as a critical driver of health in Texas. They suggested that any systemic approach to achieving better and equitable health for everyone must push for coverage expansions for low-income individuals.

Authentically Engage Communities as Partners in Advancing Health Equity

Health leaders identified the importance of engaging communities in upstream efforts to achieve better and equitable health. The following are their points for consideration:

- **Recognize that community engagement is not a one-time activity** but a long-term, ongoing process of building relationships and trust.
- **Move from transactional to transformative partnerships** that engage community members as experts and partners in long-term solutions.
- **Remember, there is no one-size-fits-all approach.** Depending on the community, issues of focus, and scope and nature of work, the level of partnership and engagement will vary.
- **Value community expertise** by adequately paying community members for their time, similar to paid staff or consultants. Make community participation easy and accessible.

Value and Invest in Achieving Better and Equitable Health

Health leaders identified the importance of valuing and investing in long-term sustainable solutions for health equity and aligning financial incentives across the health ecosystem. In doing so, they offered the following recommendations:

- **Reestablish a state office of health equity.** Several health leaders discussed the need for a permanent, sustainable office of health equity that could pave the way for more sustainable funding, investment, and support of health equity priorities statewide.
- **Leverage philanthropic funding, hospital community benefits, and other support to invest in longer-term, systemic solutions.** This may involve support for cross-sector collaborative and place-based initiatives that address community conditions for health or building the capacity of community-based organizations to design and lead change in their communities.
- **Build on federal and state momentum to incentivize the health system to address nonmedical drivers of health.** Recent federal and state movements toward value-based care, including the Non-Medical Drivers of Health Action Plan (Texas HHSC 2023), serve as important leverage points for incentivizing health care providers and health plans to address and pay for the nonmedical drivers.
- **Generate an evidence base for what works to compel financial investment.** Some health leaders recognized the need for more evaluations to identify what works, in what contexts, and how to drive long-term systemic change. Without more research into upstream solutions to health equity, the leaders said, "there may not be adequate evidence to put money behind it."

Conclusion

Twenty years ago, *Unequal Treatment* provided groundbreaking scientific evidence for the long-standing racial and ethnic health disparities in the US. The report galvanized a movement to close gaps in health nationally and in Texas. Yet, two decades later, the disparities remain firmly entrenched. Our report glimpses into the state of racial and ethnic health disparities in Texas and the health system's role in promoting better health and health equity through upstream community-centered initiatives. While still too early to see the impact, Texas health leaders are cautiously optimistic that by addressing the root structural and nonmedical drivers of health through evidence-based strategies and the authentic engagement of communities in solutions, the state can come closer to realizing the vision of health equity.

Moving Upstream to Achieve Better and Equitable Health in Texas: Health System Strategies and Perspectives

In 2003, the Institute of Medicine, now the National Academy of Medicine, published a landmark report. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* revealed that disparities are "remarkably consistent," even after controlling for socioeconomic factors such as income, education, and insurance status (IoM 2003, 5). The report sought to uncover the extent of racial and ethnic disparities in health care, evaluate potential sources of disparities such as bias and discrimination, and recommend interventions to eliminate the disparities.

Commissioned by a Republican-led Congress with bipartisan support during the Clinton administration, *Unequal Treatment* received significant national attention and prompted new programs and policies. Yet, the nation has made little progress on eliminating racial and ethnic health disparities in the 20 years since its release. The unequal impact of the COVID-19 pandemic is a case in point, underscoring how much work is left in the nation, in Texas, and in other states where health disparities remain deep and persistent.

In Texas, on average, people lead shorter lives and live in poorer health than in the US, with communities of color and low-income and rural populations facing the poorest outcomes. Before the COVID-19 pandemic, the average life expectancy in Texas was lower than the national average and varied by as much as 30 years by zip code (UT Southwestern 2019). During the pandemic, the state experienced one of the nation's largest declines in life expectancy.[1] Texas has consistently ranked in the bottom half in state rankings of health and well-being over the last two decades. During this period, it remained the state with the highest uninsured rate while performing poorly on health care access (America's Health Rankings 2002, 2022).

At the same time, Texas is often seen as the "vanguard" of the nation's unfolding demographic and economic transformation.[2] The growth in its population and diversity, coupled with steep economic gains over the last few decades, have placed Texas as the 9th largest economy globally.[3] Texas is also home to the Texas Medical Center, the world's largest medical center, leading in health care innovation, research, and delivery. The state has more hospitals than any in the nation and the second-largest health care workforce nationwide.[4]

Unequal Treatment at 20

This work is part of a series of publications that commemorates the 20th anniversary of the 2003 Institute of Medicine report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. This report found that people of color received lower-quality health care than white patients, even when access-related factors were held constant. Two decades later, we still observe the same inequities, which has motivated thought leaders to imagine how to redesign the health care system so it works equitably.

Yet, despite this abundance of resources and health care, people in Texas lag on health and well-being. This is because health outcomes are shaped by factors beyond health care. Research shows that over 80 percent of health is shaped by the conditions in which people are born, live, learn, work, and age—commonly referred to as the social determinants of health or, more formally, as the nonmedical drivers of health (Hood et al. 2016). Nonmedical drivers include quality housing, a livable income, and access to nutritious foods. Racial and ethnic disparities in health are driven by inequities in the nonmedical drivers of health—both of which are deeply rooted in structural racism.

This report identifies how the Texas health system is advancing health equity by moving upstream to address the nonmedical drivers of health. Through a review of the last 20 years of health disparities data and health equity initiatives, we reflect on progress and promising practices for better and equitable health in Texas. Building on this progress, we share insights from health leaders and changemakers across the state on how health system players can continue bolstering community-centered upstream actions for health and health equity.

The Robert Wood Johnson Foundation defines health equity as "everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care" (Braveman et al. 2017, 2). For this report, we define *health system* according to the World Health Organization:

> A health system consists of all the organizations, institutions, resources, and people whose *primary purpose* is to improve health. This includes efforts to influence determinants of health as well as more direct health-improvement activities (2010, vi).

Why focus on the health system perspective in Texas? As a $43 billion and rising industry in Texas, the health system serves as a major economic engine in communities across the state. The industry has the power, influence, and resources to drive systemic change toward achieving better health for all.[5]

Furthermore, with the state's history of less robust state political action to support health and well-being, the health system is helping to transform how health is valued and delivered to achieve better and more equitable health outcomes and cost savings.

This report intends to inform, educate, and inspire upstream, community-centered action for health and health equity across various health system players in Texas and other states with a similar political landscape. This readership includes leaders and practitioners at hospitals, health centers, and public health agencies, as well as policymakers, payers, philanthropists, researchers, and advocates.

Methods

We used a multipronged approach to understand the state of racial and ethnic health disparities in Texas over the last two decades and to identify promising practices, lessons, and perspectives on upstream, community-centered actions for achieving better and equitable health. This approach involved the following three steps:

1. A **review and analysis of secondary data** was conducted to identify the context and the state of health disparities in Texas over time. Data were extracted from public sources for a subset of measures of health, health care, and the nonmedical drivers of health across the life course by race and ethnicity at the state and local levels, as available. While the intent was to capture data over the last 20 years coinciding with the release of *Unequal Treatment*, there were several limitations: the availability, reliability, and comparability of state disparities data over time. As such, point-in-time estimates for the most recent period and prior periods (as available) were extracted for selected measures.
2. A **review of peer-reviewed and grey literature** was conducted to identify the evolving landscape of upstream, community-centered programs and initiatives led by health system players in Texas to improve health and achieve health equity. We developed criteria for the inclusion of identified articles, papers, reports, and other content. Published literature and content meeting the following criteria were included for review:
   - Published over a 20-year period between March 2003 to March 2023.
   - Highlighted Texas-based initiatives and programs led by various health system players (e.g., hospitals, health centers, health plans, philanthropy, public health, academia, and nonprofits).

» Addressed health disparities or promoted health equity through efforts to address the midstream health-related social needs (individual level) or the upstream nonmedical drivers of health (community level).
» Demonstrated partnership or engagement with communities.

The literature search was conducted using a two-step process. First, we developed a list of keywords to systematically search for and identify relevant content through PubMed, Google Scholar, and Google. Keyword searches included a combination of various terms that built on the inclusion criteria. We reviewed titles and abstracts or other summary information for relevant results returned by search engines for various combinations of keyword searches. Literature and content meeting the criteria were included for a full review.

Second, we used a snowballing method to identify additional upstream community-centered health initiatives mentioned in the reviewed literature or in-depth interviews with health system leaders. More than 50 articles, reports, and other content were selected for inclusion. We extracted and categorized relevant initiatives by health sector and how far upstream they were in focus and reach. Initiatives addressing individual nonmedical or social needs were categorized as *midstream*, whereas initiatives addressing community-level nonmedical drivers of health were categorized as *upstream*.

3. **In-depth interviews** were conducted with health leaders to capture perspectives on the current and future role of the health system in Texas in achieving better and equitable health through upstream community-centered initiatives. Interviewees were identified by an initial scan of health equity initiatives focused on upstream approaches across the state combined with snowball sampling based on recommendations from other interviewees and Episcopal Health Foundation. Participants represented a range of sectors, geographies, communities, and perspectives, including health care, health payers, public health, academia, nonprofits, rural health, maternal health, mental health, and community health.

   We developed an interview protocol in collaboration with the Episcopal Health Foundation team. Questions asked health leaders to share their broad perspectives on health equity; reflect on promising ways in which the health system in Texas is promoting health equity by engaging communities and addressing the upstream drivers of health; discuss barriers and challenges to promoting health equity; and recommend actions to realize the vision of better and equitable health for all in Texas.

Fifteen interviews were conducted with a diverse group of 16 health leaders across the state between February and April 2023. Interviews were conducted virtually by two researchers (one based in Texas and the other in Washington, DC) using Zoom video conferencing. All interview participants verbally consented to their participation. The 45–to 60-minute interviews were recorded, transcribed using Otter.ai, and cleaned for data accuracy. Cleaned transcripts were coded and analyzed using ATLAS.ti 23 through a multistage process. In the first stage, two researchers independently coded one transcript using an inductive (open coding) approach. They met to reconcile differences in coding and reach consensus to generate an initial codebook of key topics and subtopics. In the second stage, the two researchers independently coded seven additional transcripts, deductively applying codes from the codebook and making additions or modifications where needed. The two researchers met to reconcile the coding of the second set of transcripts and update the codebook accordingly. Recognizing the strong agreement between the two researchers, the final stage of coding the remaining transcripts was completed deductively by one researcher. All qualitative data were thematically analyzed, identifying patterns and clusters of codes that ultimately generated the final themes discussed in this report.

Our research has some limitations:

- First, it is not an exhaustive review of health disparities data or health system strategies advancing health equity across Texas over the last two decades. It reflects data, initiatives, and work readily available in the public domain.
- Second, in some cases, data by race and ethnicity were limited to four groups: Black, Hispanic, other, and white. This was often attributed to small sample sizes or unreliable estimates for racial and ethnic groups with smaller population sizes. This posed a significant limitation to understanding the disparities affecting the Asian population, a rapidly growing group in Texas. When the Asian population was included in the data, this group typically performed better than others when taken as a whole. However, the Asian population is diverse and comprises varying needs, circumstances, and cultural customs not reflected in the findings.
- Finally, this report includes perspectives from a subset of leaders and stakeholders across a much larger health ecosystem in Texas. While interviewees represented a range of perspectives, sectors, and communities, most were concentrated in urban areas.

Despite these limitations, this report sheds light on where the health system has been, where it is now, and where it needs to go to move upstream, engage communities and cross-sector stakeholders, and achieve better and equitable health.

Racial and Ethnic Health Disparities Persist in Texas

According to America's Health Rankings (2002, 2022), Texas has ranked toward the bottom on overall health and well-being for the last two decades, ranking 34 in 2002 and dropping to 38 by 2022. A deeper dive into the state's data shows that the "breadth, depth, and persistence" of health disparities in Texas underlie these poor rankings nationally (America's Health Rankings 2021, 1). Although some people face far greater challenges than others, health disparities affect all people in Texas in some way—be it in terms of longevity, health outcomes, or economic costs.

The Pulse of Health Disparities

This section highlights the pervasive nature of racial and ethnic health disparities in Texas for select markers of population health and discusses the economic costs of these disparities.

LIFE EXPECTANCY

Based on the latest data from the Centers for Disease Control and Prevention (CDC 2022), Texas ranked 30—the bottom half of the nation—in average life expectancy at birth in 2020. The average life expectancy at birth in Texas was 76.5 years in 2020. People in Texas could expect to live almost three fewer years than people in Washington (79.2 years), Minnesota (79.1 years), California (79.0 years), and Massachusetts (79.0 years).

People in Texas also face wide gaps in longevity depending on where they live and who they are. A 2019 report showed that life expectancy at birth could vary by as much as 30 years by zip code, ranging from 66.7 years in Fort Worth to 97.0 years near Austin (UT Southwestern 2019). Life expectancy also varied by race and ethnicity: a Black person (72.1 years) could expect to live five and seven fewer years at birth, respectively, compared with white (77.2 years) and Hispanic persons (79.1 years). Furthermore, zip codes in Texas with a higher concentration of poverty had lower life expectancies. The COVID-19 pandemic further exacerbated these gaps in life expectancy: Texas experienced one of the nation's largest declines, dropping two years between 2019 and 2020 (CDC 2022).

INFANT HEALTH

Infant mortality is measured as the number of deaths that occur among infants before the age of 1 per 1,000 live births. The infant mortality rate in Texas was 5.4 per 1,000 births in 2019–20, which remains similar to the national rate (5.5 per 1,000 births).[6] Yet, Texas made some progress in reducing racial disparities in infant mortality. Among Black infants, the infant mortality rate decreased 20 percent from 12.2 per 1,000 births in 2003–06 to 10.1 per 1,000 births in 2015-18.[7] However, Black infants continued to have the highest infant mortality rate in the state, roughly two times higher than Asian/Pacific Islander, Hispanic, and white infants (figure 1).

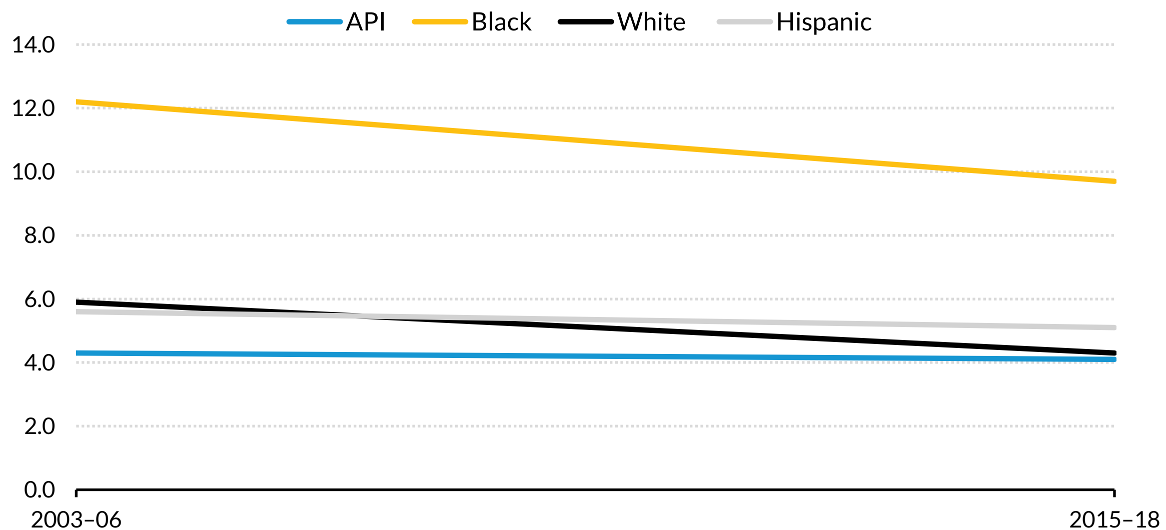
In 2019, preterm birth and low birth weight were the leading causes of infant mortality in Texas (Texas DSHS 2021). In 2016-19, Black babies (13.6 percent) had a two times higher prevalence of low birth weight than white (7.1 percent) and Hispanic (7.9 percent) babies—a trend that has remained stagnant since 2003–06 (figure 2).

Black babies in Texas have an infant mortality rate and a low birth-weight rate two times higher than white and Hispanic babies.

FIGURE 1

Infant Mortality in Texas by Race and Ethnicity, 2003–06 to 2015–18

Number of deaths before age 1 per 1,000 live births

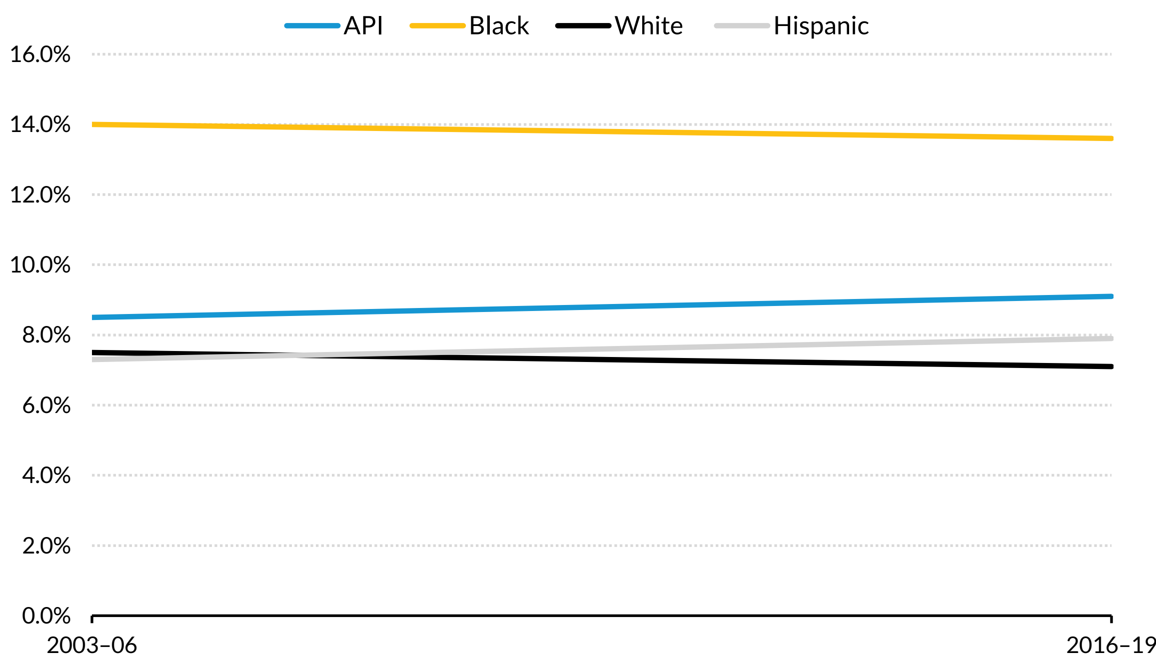


Source: "Infant Mortality," America's Health Rankings, https://www.americashealthrankings.org/.
Note: API = Asian/Pacific Islander. Data are from Centers for Disease Control and Prevention, National Vital Statistics System Linked Birth-Death Records, 2003–06 to 2015–18.

FIGURE 2

Low Birth Weight in Texas by Race and Ethnicity, 2003–06 to 2016–19

Percentage of infants weighing less than 2,500 grams at birth



URBAN INSTITUTE

Source: "Low Birth Weight," America's Health Rankings, https://www.americashealthrankings.org/.
Note: API = Asian/Pacific Islander. Data are from Centers for Disease Control and Prevention, National Vital Statistics System Public Use Natality Records, 2003–06 to 2016–19.

MATERNAL HEALTH

Maternal health is an important marker of the health and well-being of a society (Crear-Perry et al. 2021). Yet, the US has unacceptably poor maternal health when compared with other developed countries (Kassebaum et al. 2014). Texas performs even more dismally. It has a significantly higher maternal mortality rate than both the nation and more than 30 high-income countries.[8] In 2018–21, the maternal mortality rate in Texas was 28.1 per 100,000 live births compared with a national rate of 23.5.[9] Maternal health has declined nationally over the last two decades—a trend also reflected in Texas.

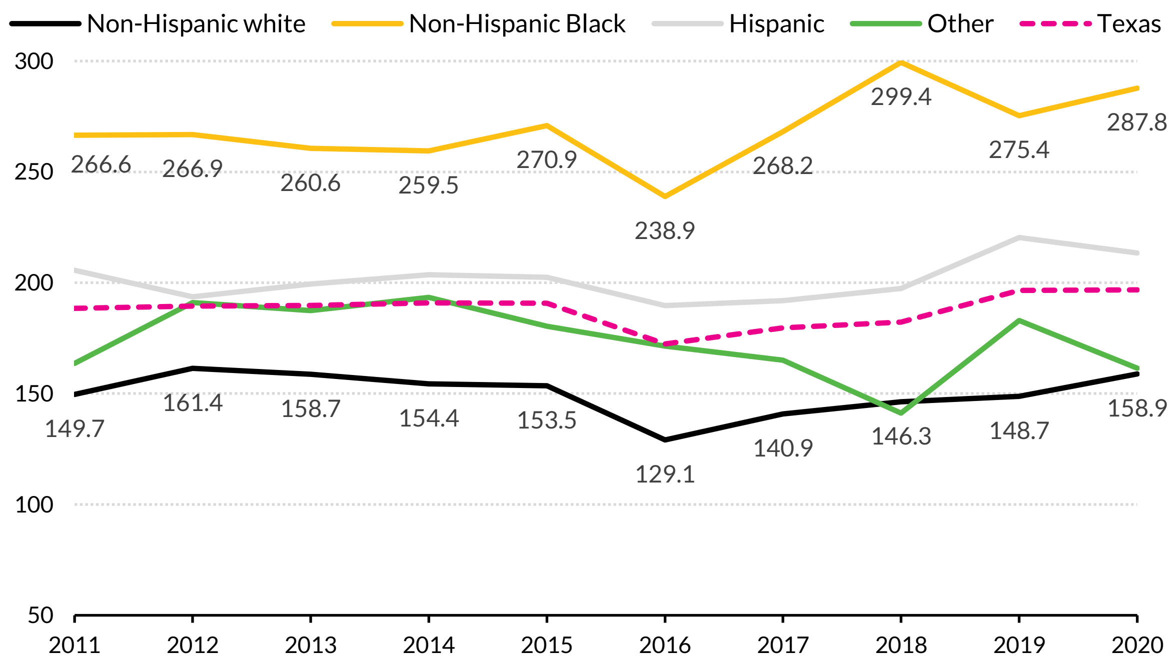
Racial disparities in maternal health remain deep and persistent as well. According to the Texas Maternal Mortality and Morbidity Review Committee's 2022 report, Black women had a four times higher rate of pregnancy-related mortality (47.6 per 100,000 live births) than Hispanic women (10.8) and a two times higher rate than white women (20.3) in 2013 (Texas DSHS 2022). A newly released addendum shows a decrease in pregnancy-related mortality ratios in Texas in 2019, though disparities

persist (Texas DSHS 2023). The report identified that 90 percent of pregnancy-related deaths were preventable and documented complex structural and systemic factors that contributed to these deaths (e.g., poor quality of care, lack of health care access, discrimination, community, and housing conditions), reinforcing national findings (Texas DSHS 2022; Valerio et al. 2023). Black mothers also had nearly double the rate of severe maternal morbidity than white mothers—a trend that has persisted for at least the last decade in Texas (Texas DSHS 2021; figure 3).

FIGURE 3

Severe Maternal Morbidity in Texas by Race and Ethnicity, 2011–20

Cases per 10,000 delivery hospitalizations



URBAN INSTITUTE

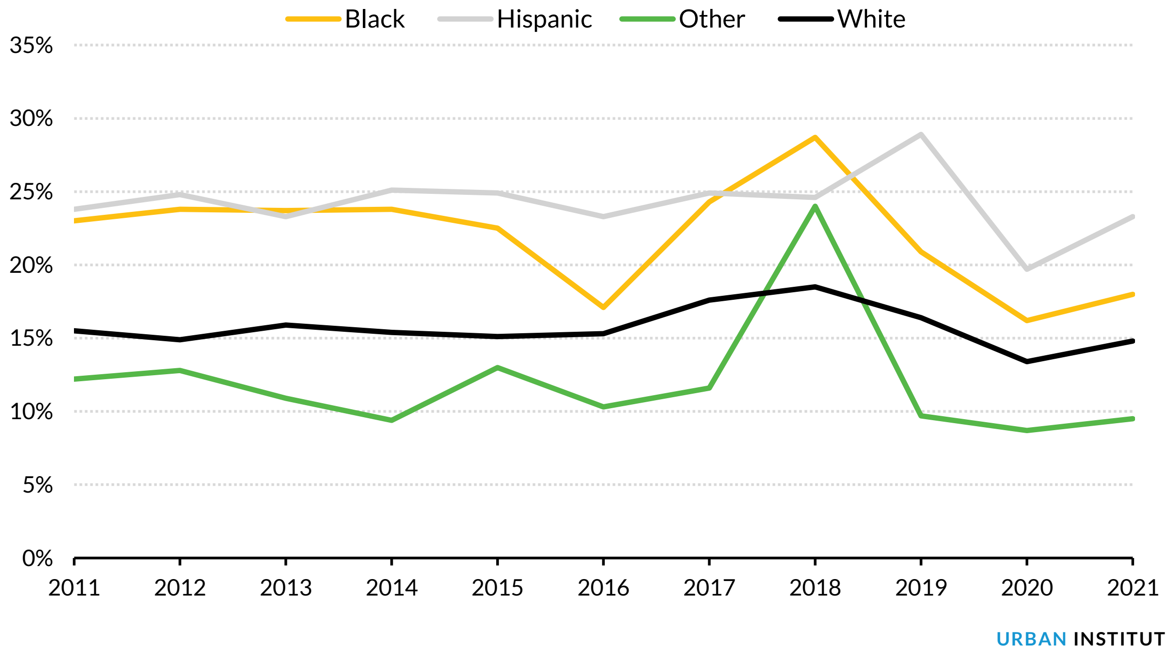
Source: Texas Department of State Health Services, *2021 Healthy Texas Mothers and Babies Data Book*, Austin: Texas DSHS, 2021.

PHYSICAL AND MENTAL HEALTH

Self-reported health status is a measure of health-related quality of life, and it captures how adults perceive their own health. Self-reported health status is an important predictor of various health outcomes, including mortality, morbidity, and functional status (DeSalvo 2006).[10] According to the 2022 America's Health Rankings, Texas ranked 40th nationally on self-reported "high" health status (United Health Foundation 2022). With respect to self-reported "fair or poor" health status, Hispanic (23.3 percent) and Black (18.0 percent) adults had higher rates compared with white adults (14.8

percent) and adults of another race (9.5 percent). These disparities have persisted over at least the last decade (figure 4).

FIGURE 4
Fair or Poor Health Status in Texas by Race and Ethnicity, 2011–21
Percent



Source: Texas Behavioral Risk Factor Surveillance System, Texas Department of State Health Services, 2011–21.

CHRONIC ILLNESS

Though Black and Hispanic adults reported poorer health status than white adults in Texas, disparities among specific chronic conditions varied (table 1). Black and Hispanic adults experienced significantly higher rates of obesity than white adults, and the overall rate of obesity increased over time. Similarly, the rate of diabetes in Texas increased significantly over time, with the highest rates among Black and Hispanic adults. These disparities have also been consistent over time, from 2011 to 2021.

White adults fared worse than other groups for some chronic illnesses (table 1). Rates of any cancer were three times higher for white Texas adults than all other groups in 2021, and their risk of cardiovascular disease was high as well. Rates of depression increased slightly in Texas overall from 2011 to 2021, but white adults had higher rates of depression than adults in Texas overall.

TABLE 1

Chronic Illness Prevalence in Texas by Race and Ethnicity, 2011–21

Percent

Chronic Illness	Population	2011 Prevalence	95% Confidence Interval, 2011	2021 Prevalence	95% Confidence Interval, 2021
Depression	Total	16.6	[15.6, 17.7]	18.6	[17.3, 19.9]
	Black	14.9	[11.9, 18.6]	15.5	[12.0, 19.8]
	Hispanic	13.4	[11.7, 15.2]	16.2	[14.1, 18.7]
	Other or Multiracial	14.5	[10.7, 19.3]	11.3	[8.1, 15.5]
	White	19.6	[18.0, 21.2]	23.0	[21.1, 25.0]
Obesity	Total	30.4	[29.1, 31.8]	36.1	[34.4, 37.8]
	Black	39.5	[34.7, 44.6]	43.5	[38.1, 49.1]
	Hispanic	34.4	[31.8, 37.2]	42.5	[39.2, 45.9]
	Other or Multiracial	18.7	[12.5, 27.1]	16.5	[11.9, 22.3]
	White	27.0	[25.4, 28.8]	31.5	[29.4, 33.7]
Diabetes	Total	10.2	[9.4, 11.0]	11.5	[10.5, 12.5]
	Black	12.1	[9.5, 15.3]	13.8	[11.0, 17.2]
	Hispanic	11.8	[10.4, 13.3]	12.5	[10.7, 14.5]
	Other or Multiracial	7.8	[5.1, 11.9]	7.6	[4.4, 13.1]
	White	8.8	[7.9, 9.7]	10.6	[9.4, 12.0] [0.0, 0.0]
Cardiovascular disease	Total	7.5	[6.9, 8.1]	7.3	[6.6, 8.0]
	Black	9.5	[7.2, 12.5]	6.7	[5.0, 9.0]
	Hispanic	5.1	[4.2, 6.2]	5.1	[4.0, 6.3]
	Other or Multiracial	5.9	[4.0, 8.6]	2.5	[1.4, 4.4]
	White	8.7	[8.0, 9.6]	10.1	[8.9, 11.4]
Any cancer	Total	10.4	[9.6, 11.2]	9.9	[9.0, 10.8]
	Black	6.5	[4.4, 9.5]	5.1	[3.7, 7.0]
	Hispanic	3.7	[3.0, 4.5]	4.5	[3.2, 6.2]
	Other or Multiracial	6.9	[4.9, 9.7]	5.1	[3.0, 8.4]
	White	16.4	[15.1, 17.7]	17.1	[15.6, 18.7]

Source: Texas Behavioral Risk Factor Surveillance System, Texas Department of State Health Services, 2011–21.

The Economic Cost of Health Disparities

Health disparities pose a substantial economic burden to society in the form of excess medical spending for patients, health care providers, and health payers; lost job productivity in the labor market; and earnings lost from premature (and preventable) deaths. Over at least the last decade these costs have risen sharply across the nation.

Estimates for 2018 show that the economic cost of racial and ethnic health disparities across the US was $421 billion, compared with 2006, when it was $309 billion (LaVeist et al. 2011, 2023). In 2018, the

cost of education-related health disparities was $940 billion for the nation—a cost more than double that of race-based disparities. Texas had a higher cost burden of health disparities than any state. In 2018, racial and ethnic health disparities cost the state $40.6 billion (2.2 percent of the Texas GDP), and education-related health inequities cost $71.1 billion (3.9 percent of the Texas GDP) (LaVeist et al. 2023).

In 2018, Texas had the highest cost burden of racial, ethnic, and educational health disparities nationally.

Health Disparities Reflect Inequities in the Nonmedical Drivers of Health

Research demonstrates that outcomes in health and longevity reflect the conditions in which people are born, live, learn, work, and age—the nonmedical drivers of health (Weinstein et al. 2017). Racial and ethnic disparities in health are driven by a complex interplay of inequities in the nonmedical drivers of health, which are rooted in our nation's legacy of structural racism—from past slavery and Indian removal to Jim Crow segregation, immigrant exclusion policies, and more.

Discriminatory housing policies are an example of structural racism that intentionally segregated communities along racial and ethnic lines for decades. While such policies were outlawed roughly 50 years ago, the impact of these policies continues to shape uneven opportunities today. Specifically, discrimination has contributed directly to the intergenerational concentration of poverty and disinvestment in communities of color, which in turn has shaped inequitable conditions and access to quality neighborhoods, housing, schools, jobs, income, wealth, health insurance coverage, and medical care, serving as a "fundamental cause" of racial health disparities (Williams and Collins 2001). About three in four neighborhoods that were redlined and racially segregated several decades ago continue to struggle economically today (Mitchell and Franco 2019).

Nationally, a robust body of research demonstrates that populations facing systemic marginalization have both poorer life opportunities and poorer health outcomes (Williams and Collins 2001). We found this to be true in our review of data. For instance, Texas's poor ranking on health reflects its poor ranking on myriad social and economic factors. Texas ranks toward the bottom

consistently on measures of income, poverty, education, food insecurity, and housing. Black and Hispanic people, in particular, face great challenges on these measures that translate to poorer health outcomes in a variety of ways. This section highlights the disparities people in Texas face on key nonmedical drivers of health.

Housing

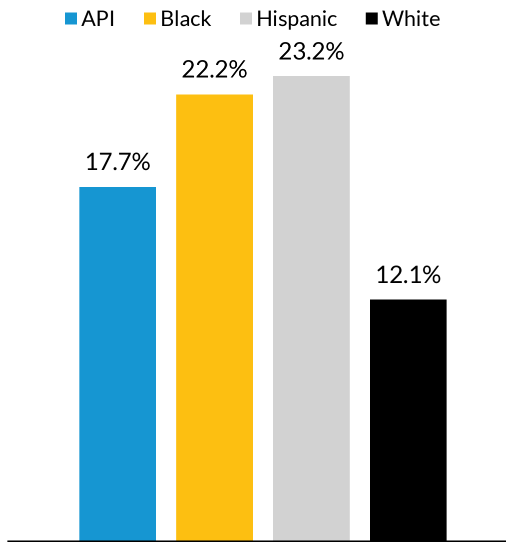
Housing—including quality, affordability, stability, and ownership—is an important nonmedical driver of health and well-being (Rolf et al. 2020). Research shows that housing is a “critical pathway” by which people achieve good health (Swope and Hernandez 2020, 2). It determines the quality of resources individuals and families can access, including schools, jobs, safety, food, transportation, and medical care.[11] Yet, Texas lags on many housing measures nationally, ranking in the bottom 10—specifically 40th on severe housing problems and 46th on homeownership in 2022.[12]

Racial disparities have also remained wide and persistent across measures of housing. For example, in 2015–19, Hispanic (23. 2 percent) and Black (22.2 percent) occupied housing units had almost two times the rate of severe housing problems (e.g., lack of kitchen or plumbing facilities, overcrowding, or severely cost-burdened) as white occupied housing units (12.1 percent; figure 5).[13] This disparity has remained consistent for more than a decade. Similarly, in 2021, white-occupied housing units in Texas had a markedly higher likelihood of being owned by the occupant than Black- and Hispanic-occupied housing units, with disparities remaining persistent over time (figure 6).[14] These disparities have strong roots in historical and current policies that have barred communities of color from owning homes, accumulating wealth, and moving to thriving communities (Williams and Collins 2001).

FIGURE 5

Percentage of Occupied Housing Units in Texas with Severe Housing Problems, by Race and Ethnicity, 2015–19

Percent

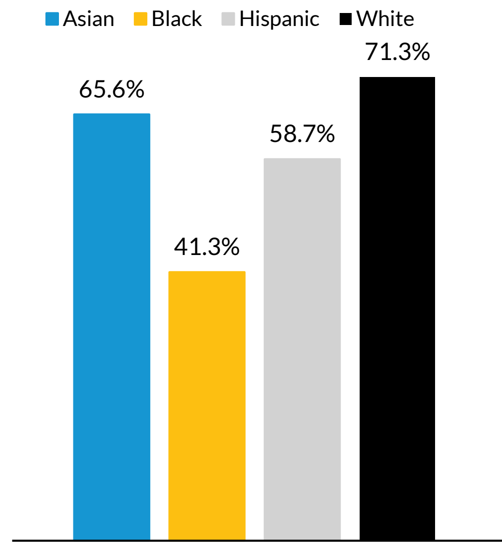


Source: "Severe Housing Problems," America's Health Rankings, https://www.americashealthrankings.org/.
Note: API = Asian/Pacific Islander. Data are from US Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy, 2015–19.

FIGURE 6

Percentage of Housing Units Owned by the Occupant in Texas, by Race and Ethnicity, 2021

Percent



Source: "Homeownership," America's Health Rankings, https://www.americashealthrankings.org/.
Note: Data are from US Census Bureau, American Community Survey, 2021.

URBAN INSTITUTE

Income and Poverty

Income and poverty are inextricably linked with health and well-being. Individuals and families with lower incomes, especially those below the federal poverty level, struggle to meet basic needs such as food, housing, and health care. As research shows, "the United States has among the largest income-based health disparities in the world: Poor adults are five times as likely as those with incomes above 400 percent of the federal poverty level to report being in poor or fair health" (Khullar and Chokshi 2018, 1).

Texas performs worse than the nation and most states on measures of income and poverty, ranking in the bottom quartile in 2022.[15] For example, over the last decade, child poverty rates have been consistently higher in Texas than in the nation.[16] Notwithstanding some progress, disparities have also

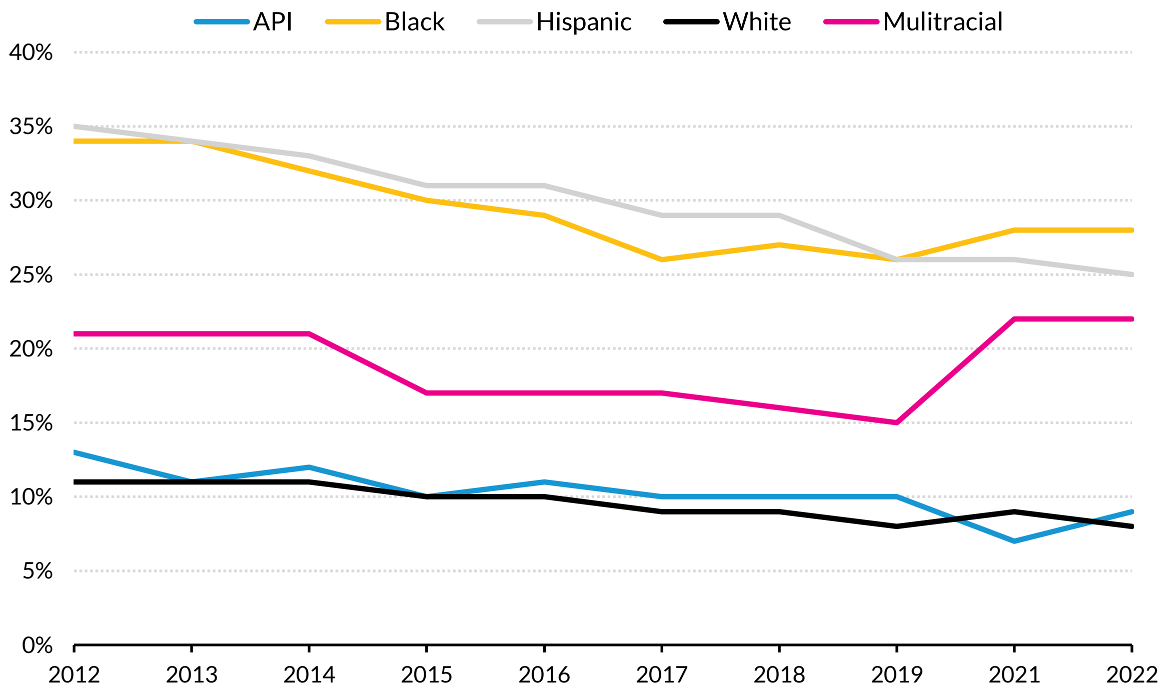
persisted over time. In 2022, Black (28 percent), Hispanic (25 percent), and Multiracial (22 percent) children faced a poverty rate three times higher than white (9 percent) children (figure 7).[17]

In 2022, Black, Hispanic, and multiracial children faced a poverty rate three times higher than white children in Texas.

FIGURE 7

Child Poverty in Texas by Race and Ethnicity, 2012 to2022

Percentage of children birth to age 17 living in poverty



URBAN INSTITUTE

Source: Kids Count Data Center, "Children in Poverty by Race and Ethnicity in Texas," Annie E. Casey Foundation, 2012–22, https://datacenter.aecf.org/data/tables/44-children-in-poverty-by-race-and-ethnicity.

Note: API = Asian /Pacific Islander.

Education

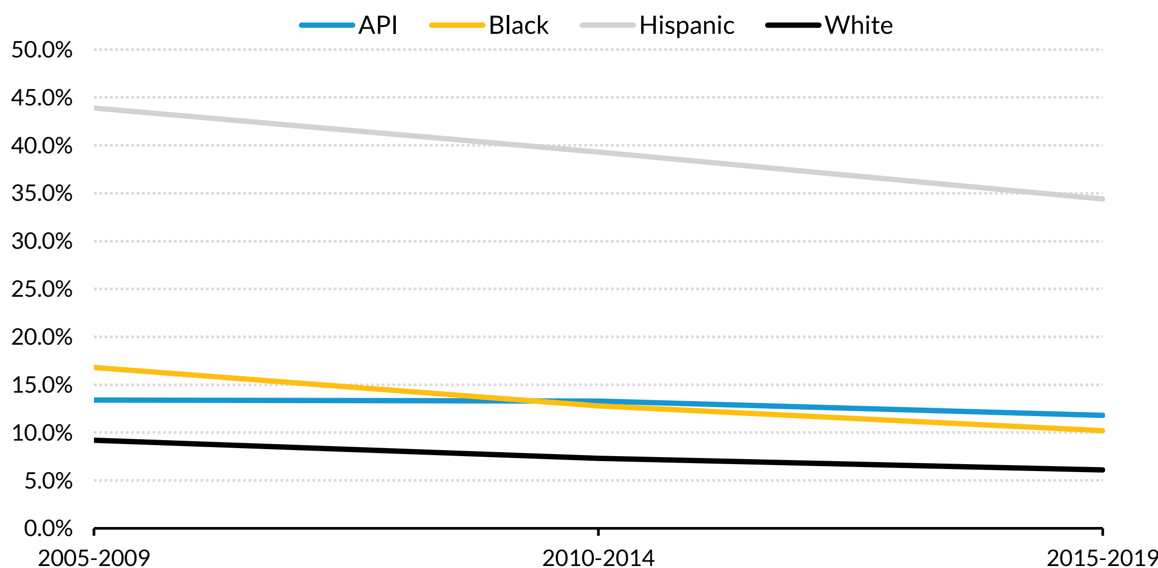
Education has a lifelong impact on health. Research shows that educational attainment increases access to good jobs with health insurance coverage, neighborhoods with health-promoting resources, and

knowledge of healthful behaviors (Center on Society and Health 2014). Individuals with lower levels of education have significantly poorer health than those with higher levels of education. In the 2018–19 school year, 90 percent of Texas high school students graduated with a regular high school diploma within four years of starting 9th grade, a higher graduation rate than the national average of 85.8 percent.[18] However, 14.6 percent of Texas adults had less than a high school education in 2021, higher than the national rate of 10.6 percent.[19] In 2021, Texas ranked 49th on this measure. According to America's Health Rankings *2021 Health Disparities Report* (America's Heath Rankings 2021), racial and ethnic disparities were particularly wide and persistent on this measure in Texas. Specifically, in 2015–19, Hispanic adults (34.4 percent) had less than a high school education at a rate nearly six times higher than white adults (6.1 percent) (figure 8).

FIGURE 8

Adults with Less Than High School Education in Texas by Race and Ethnicity, 2005–09 to 2015–19

Percent



Source: "Less Than High School Education," America's Health Rankings, https://www.americashealthrankings.org/.
Notes: API = Asian /Pacific Islander. Data are from US Census Bureau, American Community Survey PUMS, 2005–19.

Food Insecurity

Food insecurity is defined as an economic and social condition in which a person has limited or uncertain access to food.[20] Food insecurity leads to considerable stress for individuals and families. Inability to afford nutritious food is linked to diet-related chronic diseases such as high blood pressure

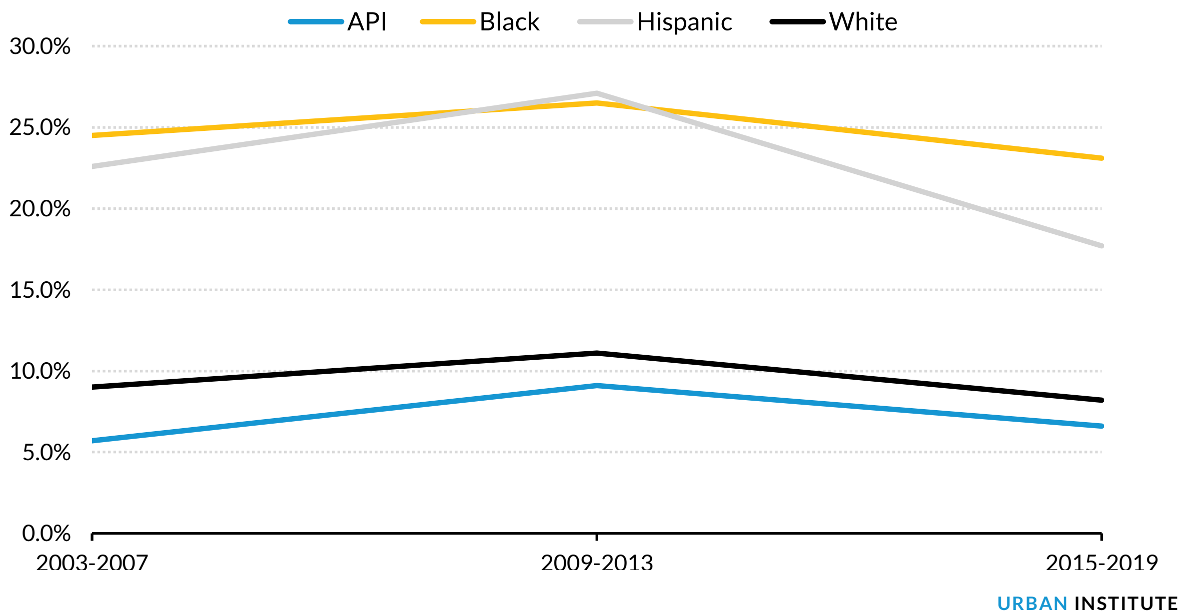
and diabetes, as well as depression, anemia, and behavioral problems in children. Food-insecure families often face difficult trade-offs between affording food, medical care, or housing.[21]

According to 2019–21 data, Texas had a higher rate of food insecurity than the national average, 13.7 percent compared with 10.4 percent, placing Texas in the bottom fifth of states nationally.[22] Disparities data from 2003–07 to 2015–19 show that rates of food insecurity were consistently higher for Black (23.1 percent) and Hispanic (17.7 percent) households than for Asian/Pacific Islander (6.6 percent) and white (8.2 percent) households (figure 9).

FIGURE 9

Households Experiencing Food Insecurity in Texas by Race and Ethnicity, 2003–07 to 2015–19

Percent



URBAN INSTITUTE

Source: "Food Insecurity," America's Health Rankings, https://www.americashealthrankings.org/.

Notes: API = Asian /Pacific Islander. Data from US Census Bureau, Current Population Survey Food Security Supplement, 2003–19.

Health Care

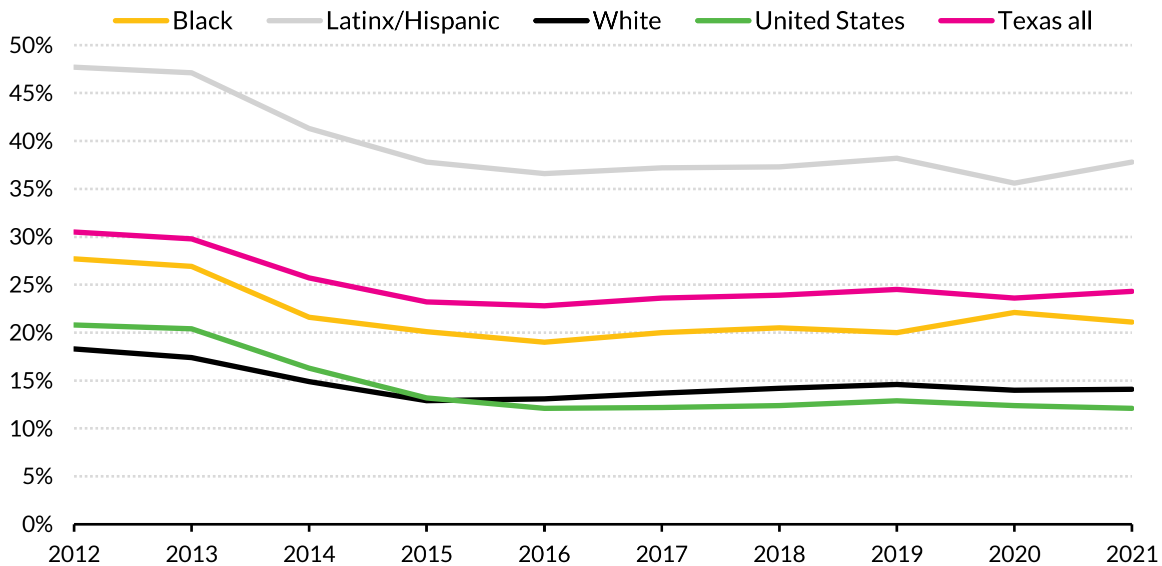
The Commonwealth Fund ranked Texas 48th overall on the 2023 State Health System Performance Rankings. People in Texas faced significant barriers to receiving health care despite some improvements owing to the Affordable Care Act (ACA). In 2021, one in four nonelderly adults in Texas (24.3 percent of adults 19–64 years old) were uninsured, compared with the US average of 12.1 percent (figure 10). In the same year, one in six (16.1 percent) Texas adults reported forgoing needed health

care because of cost compared with the US average of 10 percent.[23] Health care access was especially difficult for Hispanic adults (37.8 percent), who faced a rate of uninsurance nearly three times higher than white adults (14.1 percent).[24]

FIGURE 10

Adults Ages 19–64 Uninsured in Texas, by Race and Ethnicity, 2012–21

Percentage



Source: "Percent of adults ages 19–64 without health insurance coverage," State Health Data Center, The Commonwealth Fund, https://www.commonwealthfund.org/datacenter.

Notes: Data are from US Census Bureau, American Community Survey PUMS, 2012–21.

The Health System Is Increasingly Addressing the Nonmedical Drivers of Health

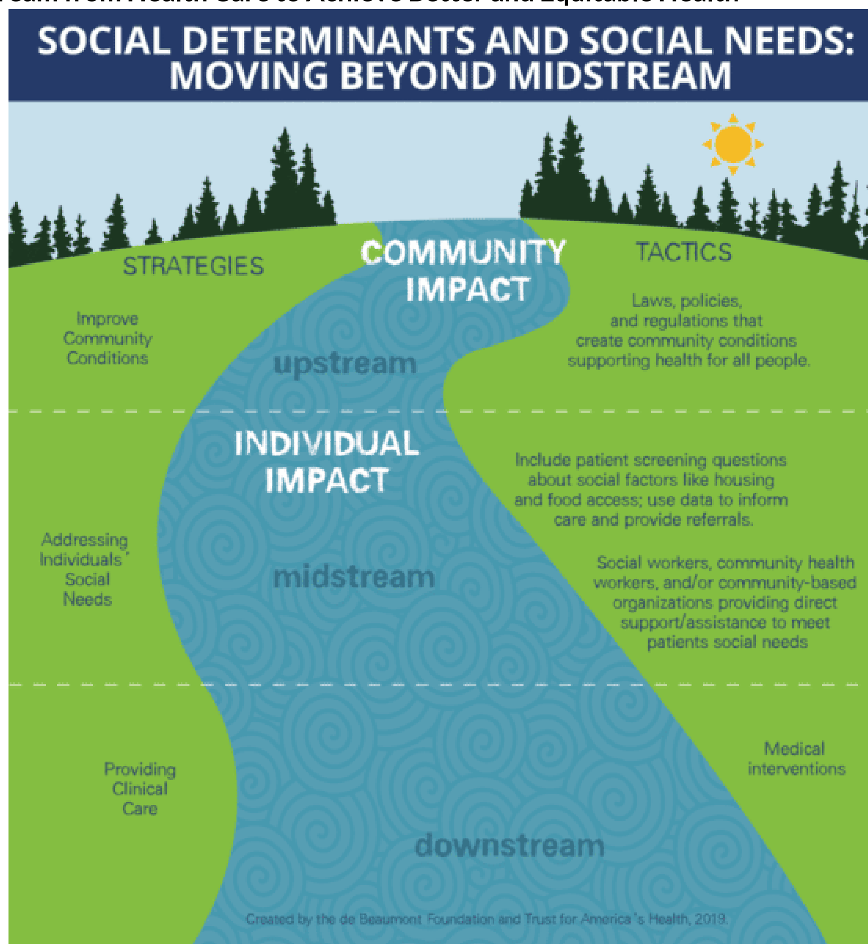
Addressing the nonmedical drivers of health is a pathway toward achieving health equity. Our review sought to understand the role the health system in Texas has played over the last two decades to advance health equity by addressing the nonmedical factors that shape health. We were particularly interested in promising programs, strategies, and lessons at two levels:

- **Midstream** initiatives addressing individual drivers of health, often referred to as health-related social needs or simply social needs.
- **Upstream** initiatives addressing community drivers of health or the broader community conditions for health.

These definitions build on the framework developed by the de Beaumont Foundation and Trust for America's Health in 2019 to guide health organizations and leaders in moving toward more transformative, upstream actions for achieving better and equitable health (figure 11).

FIGURE 11

Moving Upstream from Health Care to Achieve Better and Equitable Health



Source: Brian Castrucci and John Auerbach, "Meeting Individual Social Needs Falls Short of Addressing Social Determinants of Health," *Health Affairs* blog (Millwood), January 16, 2019, https://doi.org/10.1377/forefront.20190115.234942. Copyright © 2019 Health Affairs by Project HOPE – The People-to-People Health Foundation, Inc.

Our review found that the Texas health system's role in advancing health equity has evolved over the last two decades. Whereas early efforts had a predominantly downstream focus (e.g., improving quality of clinical care), more recent efforts have shifted upstream to address the nonmedical drivers of health and disparities and have sought to engage communities in solutions. Table 2 synthesizes and summarizes findings from our literature review of the health system's strategies to achieve health equity, organized by various health players at the forefront of transformation: hospitals, community

health centers, health plans and payers, health philanthropy, public health departments, other government organizations, academia, and nonprofits. Strategies and programs that move health systems beyond downstream (health care) tactics are categorized and described at midstream and upstream levels.

TABLE 2

Midstream and Upstream Strategies for Addressing the Nonmedical Drivers of Health and Advancing Health Equity in Texas, by Health System Player

Health system player	Midstream strategies[a]	Upstream strategies[b]
Hospitals *For-profit, nonprofit, and governmental*	▪ **Screening and addressing social needs:** 9 in 10 general acute care hospitals in Texas screen and address social needs of patients. ▪ **Hospital-food partnerships:** Food Is Medicine programs (e.g., medically tailored meals and groceries, food prescriptions, and "farmacies"), on-site and mobile food distribution, and pop-up events are examples. ▪ **Medical-legal partnerships:** Lawyers are included in care teams to address substandard housing conditions, unstable guardianship, lack of coverage, and similar problems.	▪ **Community health needs assessments and community health improvement plans:** conducted collaboratively and regionally with multiple hospitals and community partners to identify and tackle upstream NMDOH and health disparities. ▪ **Anchor institutions:** Large urban hospitals hire and invest in economically distressed communities. ▪ **Multisector collaboratives:** Some hospital systems participate in large-scale multisector systems change efforts, such as Collective Impact and ACH.
Health centers *Federally qualified health centers and other community health centers*	▪ **Screening and addressing social needs:** Texas Association of Community Health Centers partners with Unite Us for a statewide coordinated care network. ▪ **Health center–food partnerships, medical-legal partnerships, and other clinical-community linkages:** Health centers partner with social services and other community partners to address their patient's social needs.	▪ **Community-centered health homes:** a cohort of centers expand the patient-centered medical home model to address NMDOH in neighborhoods. ▪ **Multisector collaboratives:** Some health centers participate in Collective Impact, ACH, and other collaboratives.
Health payers *Private, public, and managed care organizations*	▪ **Federal incentives**: CMS funded three accountable health communities in Texas to screen and address social needs of Medicaid and Medicare patients. ▪ **Managed care organizations:** 14 of 16 MCOs in Texas screen and address members' social needs.	▪ **Community investments,** such as supporting training for community health workers and population health, expanding affordable housing, and addressing economic mobility of the community. ▪ **Multisector collaboratives:** Some health plans participate in and/or provide financial support for Collective Impact, ACH, and other collaboratives.

Health system player	Midstream strategies[a]	Upstream strategies[b]
Health philanthropy *State, regional, and local health-focused philanthropy*	▪ **Coordinated care networks**: Supporting local and regional care coordination infrastructure for screening and referrals. ▪ **Learning collaboratives:** Supporting Texas MCO Non-Medical Drivers of Health Learning Collaborative.	▪ **Multisector collaboratives:** Supporting ACHs, Communities of Solutions, Collective Impact, and others. ▪ **Learning collaboratives** for equity-centered community capacity building, such as Prosperemos Juntos/Thriving Together. ▪ **Participatory grantmaking** with communities, such as a pilot launched by St. David's Foundation.
Local health departments *Local public health agencies*	▪ **Coordinated care networks:** Implementing local and regional coordination of whole-person care.	▪ **Community health assessment** and improvement plan, conducted every five years, used to address community NMDOH. ▪ **Multisector collaboratives:** local health agencies serving as a backbone entity and/or partner in collaboratives. ▪ **Federal/state grants** include $19.5 million in CDC COVID-19 funds for community engagement and health equity.
State health agencies *HHSC and DSHS*	▪ **State NMDOH action plan** sets steps and goals for Texas Medicaid and CHIP to address food insecurity, housing, and transportation through health care providers and MCOs.	▪ **Federal grants include** $45.2 million from CDC for Health Disparities Improvement Initiative to design and test community interventions. ▪ **Multisector collaboratives**: such as the Healthy Families Initiative.
Academic organizations *Health education and research institutions*	▪ **Coordinated care networks:** serve as bridge/backbone entity. ▪ **Research and evidence** on the range of midstream strategies, including social needs screening and clinical-community partnerships. ▪ **Medical/health professional training** on social needs, screenings, and referrals.	▪ **Multisector collaboratives:** serve as bridge/backbone entity. ▪ **Community-based participatory research** to build evidence to drive structural and systemic change. ▪ **Strengthen the community health workforce** through training and systemic changes.
Nonprofit organizations *Think tanks, community, and advocacy organizations*	▪ **Coordinated care networks:** serve as bridge/backbone entity. ▪ **Research and evidence** on the range of midstream strategies.	▪ **Neutral convener:** for systems change initiatives, community health needs assessments, and multisector collaboration. ▪ **Advocate and champion** for policy change at legislature.

Source: Authors' analysis of secondary Texas health system data, literature review, and interviews with health leaders.

Notes: ACH = Accountable Communities for Health; CDC = Centers for Disease Control and Prevention; CHIP = Children's Health Insurance Program; CMS = Centers for Medicare & Medicaid Services; DSHS = Texas Department of State Health Services; HHSC = Texas Health and Human Services Commission; MCO = managed care organization; NMDOH = nonmedical drivers of health.

[a] Midstream strategies advance health equity by addressing NMDOH at an individual level (i.e., social needs).

[b] Upstream strategies advance health equity by addressing NMDOH at a community level (i.e., community conditions for health).

Hospital and Health Care Systems

Texas hospitals and health care systems have made important progress within the past 20 years to address racial and ethnic health disparities.[25] In the wake of the *Unequal Treatment* report, some large urban hospitals launched quality improvement programs focused on identifying and addressing disparities in health care delivery and outcomes. For example, in 2006, Baylor published a "comprehensive strategy for equitable care" that involved increasing awareness among medical providers and hospital decisionmakers of the importance of equity, integrating equity in quality improvement, developing a tracking system to document patient disparities, creating tailored interventions, and building a culturally competent health care system (Mayberry et al. 2006, table 1.A). Much of this early work at Baylor and other hospitals focused on addressing health disparities downstream, though recognition of the need to move "beyond the bricks and mortar" was also emerging (Mayberry et al. 2006, 117).

Below is a summary of hospital-led strategies to address midstream and upstream divers of health, with examples of programs provided in appendix table A.1.

MIDSTREAM STRATEGIES

- ***Screening and addressing social needs.*** Similar to national rates, 9 out of 10 general acute care hospitals across Texas systematically screen and address the social needs of patients. Texas hospitals screen and address an average of 5 out of 9 key social needs (housing, food insecurity/hunger, utility needs, interpersonal violence, transportation, employment/income, education, social isolation, and health behaviors) (Harvard 2023). Screening and resource referral approaches vary depending on community needs, funding and funder requirements, tools, and community resource platforms.
- ***Hospital-food partnerships.*** Many hospitals are forging new partnerships with the food system across Texas (Poulos 2022). This includes food insecurity screening using the standardized two-item Hunger Vital Sign screening tool and referring patients to food bank resources such as food pantries, education classes, and Supplemental Nutrition Assistance Program benefit enrollment. Some hospitals have launched Food is Medicine programs, which connect food-insecure patients who have diet-related health conditions to healthful food options (Sharma et al. 2023). Benefits include medically tailored meals and groceries, "food prescriptions" or

vouchers for free or reduced-cost healthful foods, and access to on-site "food farmacies" that provide fresh produce and healthful foods (Poulos et al. 2022). Other models involve bringing hospital and food partners together for pop-up events in community settings, providing both food distribution and health-related screenings.

- ***Medical-legal partnership*** is a health care delivery model that includes lawyers as part of the care team to address legal issues that contribute to poor health and health disparities. Medical-legal partnerships have proven successful in improving health outcomes, such as reducing asthma exacerbations and hospitalizations in vulnerable children facing substandard housing conditions with greater asthma triggers (e.g., pests, mold, and utility insecurity) (Mainardi et al., 2023).

UPSTREAM STRATEGIES

- ***Nonprofit community benefits, community health needs assessment, and improvement plans.*** The ACA strengthened the community benefit obligation of nonprofit, tax-exempt hospitals, requiring that they conduct a community health needs assessment every three years and adopt an implementation strategy to address health broadly, including the nonmedical drivers of health, and to engage community partners in the process. Early efforts across Texas were largely siloed check-the-box exercises. However, hospitals are now collaborating regionally with other health care sites, public health agencies, social services, and community partners to leverage the assessment process for broader community change (Austin Public Health 2022; Health Collaborative 2019).[26] National data show that regions with joint community health needs assessments are more proactive in catalyzing collaborative and transformative change across sectors and within communities (Carlton and Singh 2018). At the same time, there is room for nonprofit hospitals to do more. Based on 2017–20 tax filings, nonprofit hospitals in Texas spent less than 1 percent ($20.5 million per year) of total community benefit funds ($4.1 billion per year) to address the nonmedical drivers of health (Harvard 2023).
- ***Anchor institutions*** are place-based, mission-driven entities that leverage their economic power with their human and intellectual resources to improve the long-term health and well-being of their communities. Many hospital systems, such as CHRISTUS Health and Memorial Hermann Health System, have adopted anchor missions, hiring, purchasing, and investing locally in their communities.[27] Several hospitals are also part of the national Healthcare Anchor Network, comprised of more than 70 health care systems building more inclusive and sustainable local economies by addressing underlying economic and racial disparities and structural determinants of health in communities.[28]

- ***Multisector collaborative initiatives.*** Some hospitals also participate in transformative multisector collaborative initiatives, leveraging models such as Collective Impact, Accountable Communities for Health (discussed further under Health Philanthropy), and the BUILD Health Challenge.[29] Multisector collaborative initiatives bring together health and nonhealth partners to address multiple nonmedical factors and advance health equity through systems change efforts.

Community Health Centers

Community health centers are the cornerstone of community-based primary health care in Texas and nationally, working to bridge gaps in health care and health. They have a long history of serving as neighborhood health centers and, as such, have led efforts to advance health equity for decades. While many of their early initiatives were focused downstream, health centers are increasingly addressing individual social needs and broader community conditions for health. Below are highlights of ways community health centers advance health equity through community-centered midstream and upstream initiatives. A detailed inventory of examples of programs is provided in appendix table A.2.

MIDSTREAM STRATEGIES

- ***Social needs screening, referral, and navigation programs.*** Nationally, almost three in four federally qualified health centers screen and refer patients for social needs (Cole et al. 2022). Many health centers across Texas also systematically screen patients for health-related social needs and link them to resources for food access, housing, financial support, and other nonmedical needs.[30] Texas Association of Community Health Centers recently launched a partnership with Unite Us, a technology company connecting health care with social services, to expand a statewide coordinated care network to address unmet social needs and advance health equity.[31]
- ***Clinic–social service partnerships.*** Community health centers are also forging partnerships with the social service sector to deliver joint programming. Partnerships include working with the food system, including Food is Medicine programs, medical-legal partnerships, and those addressing other nonmedical drivers of health, such as transportation and housing services.[32]

UPSTREAM STRATEGIES

- ***Community-centered health homes.*** Originally developed by Prevention Institute, the Community-Centered Health Homes (CCHH) model extends and expands patient-centered

medical homes into communities. Launched in 2016 with support from Episcopal Health Foundation, Texas's Community-Centered Health Homes initiative comprises 13 health centers and clinics, addressing nonmedical drivers such as food access, nutrition, and safe active living in neighborhoods; implementing clinical-community linkages such as social needs screening and referral, medical-legal partnerships, and home visiting programs; and organizing collective impact for broader systems change (Mikkelsen and Baumgartner 2019).[33]

- ***Multisector collaborative initiatives.*** Health centers and clinics are leading or partnering in multisector collaborative initiatives such as Collective Impact and Accountable Communities for Health. Many are also forging partnerships with academic health centers and nonhealth partners to bridge health gaps in rural and underserved communities.[34]

Health Payers

The US health care system is financed by a complex web of public payers (federal, state, and local), private insurance, and individual payments. In Texas, these payers include Medicare, Medicaid, private insurers, and benefit programs for state employees, retirees, and individuals in the criminal justice system. The health payer landscape has evolved considerably, propelled by the ACA, which set forth new mechanisms and incentives to transform how health is valued and paid. Health payers are increasingly moving away from traditional fee-for-service models (that pay for volume of services) to more capitated and value-based payment models (that pay for better health outcomes). As part of this transition, many are moving farther upstream to address social needs and, to some extent, the broader community conditions for health that affect their members. Midstream and upstream health payer initiatives addressing nonmedical drivers of health and health equity are summarized below, with a detailed inventory of programs provided in appendix table A.3.

MIDSTREAM STRATEGIES

- ***Investing in social needs screening and referral demonstrations.*** Health payers, including commercial payers and state and federal agencies, are testing new models to address health-related social needs. For example, in 2017, the Centers for Medicare & Medicaid Services launched the Accountable Health Communities (AHC) initiative, a five-year pilot to test whether "systematically identifying and addressing health-related social needs of Medicare and Medicaid beneficiaries through screening, referral, and community navigation services will impact health care costs and reduce health care utilization."[35] The Centers for Medicare & Medicaid Services awarded three sites in Dallas, Houston, and San Antonio to serve as

community bridge organizations for AHCs. Following the five-year pilot, the Dallas AHC demonstrated improved health care outcomes for participating patients, including reduced emergency department visits, and a positive return on investment of 1.3 to 1, with gross savings exceeding $1.25 million (Naeem et al. 2022).

- ***Managed care's investment in addressing social needs.*** Managed care organizations (MCOs) are private insurers that provide Medicaid health benefits and services through contracts with state Medicaid agencies. In Texas, MCOs provide services for over 95 percent of Medicaid beneficiaries—a large majority of whom are children and Hispanic. In 2018, 11 of the 16 MCOs were screening their members for nonmedical needs. By 2022, this increased to 14 of 16 MCOs (Vanhoose et al. 2023). Biennial surveys of MCOs in 2018, 2020, and 2022 reveal a strong commitment to and progress toward addressing the nonmedical needs of members, including food, housing, utilities, and transportation (Vanhoose et al. 2023).

UPSTREAM STRATEGIES

- ***Investing in community health.*** Fourteen of the 16 MCOs in Texas are investing in their communities to address nonmedical drivers such as education, employment, and housing (Vanhoose et al. 2023). Examples of community programs include funding community members to pursue community health worker training and certification to broaden their skills for future employment opportunities; expanding access to affordable housing; supporting grassroots community-based organizations focused on economic mobility and workforce development in their communities; and making social investments in nonmedical drivers such as food security, housing, transportation, and education.
- ***Multisector collaborative initiatives.*** Many health plans actively participate in transformative systems change efforts, including community-wide collective impact initiatives. Commercial payers are increasingly sponsoring and providing grant awards or gifts focused on addressing the nonmedical drivers of health and health equity in communities. While some are one-time awards, others are longer-term investments, such as supporting training in population health, advancement of value-based payment models, and multiyear support for community-based organizations serving individuals and families experiencing food insecurity, social isolation, and behavioral health challenges.[36]

Health Philanthropy

The role of health philanthropy in promoting health equity has evolved extensively. With growing research documenting the profound role that nonmedical drivers play in shaping health and health disparities, health funders are increasingly focused on upstream strategies for health alongside their ongoing downstream work to improve health care (Mitchell 2016). Many are moving away from a charity mindset to promoting transformative change across communities.[37] Others are collaborating to pool their resources in shared place-based grantmaking. This is true of health funders in Texas, where the shift gained momentum at the height of the dual pandemic of COVID-19 and racism. This section highlights some ways philanthropic funders across Texas invest in midstream and upstream strategies for health. An inventory of specific health philanthropy programs is provided in appendix table A.4.

MIDSTREAM STRATEGIES

- ***Coordinated system of health and social services.*** Many health funders are providing critical support to develop and enhance local and regional care coordination and infrastructure for seamless health care and social services. For example, in Greater Austin, three funders—the Michael & Susan Dell Foundation, Episcopal Health Foundation, and St. David's Foundation—have joined forces to support the creation of a model community—a person-centered and equity-focused framework that brings together various agencies, community clinics, and education institutions to offer more holistic delivery of social services.[38]
- ***Contributions to the evidence and practice base.*** Health funders are also supporting research, evaluation, and learning to help address social needs. For example, Episcopal Health Foundation in 2018 launched a survey to understand the commitment of Texas health plans in addressing social needs and the nonmedical drivers of health. In 2019, the foundation launched the Texas MCO Social Determinants of Health Learning Collaborative (now in its fourth year) to share resources to support Medicaid MCOs and other stakeholders in improving members' health while advancing health equity and health care transformation.[39]

UPSTREAM STRATEGIES

- ***Community improvement demonstrations and investments.*** Several health funders have launched strategic frameworks that explicitly commit to achieving health equity. In doing so, funders have established requirements to address the nonmedical drivers of health, collaborate with multisector partners, and meaningfully engage communities. For example, in 2018, the Hogg Foundation for Mental Health awarded $4.5 million to six communities to "transform the environments where people live, learn, work, play, and pray, bringing a population health

approach to support resilience, mental health, and well-being."[40] In 2020, Episcopal Health Foundation launched the Texas Accountable Communities for Health Initiative, an $8 million multiyear investment to support the development of financially sustainable multisector community health collaboratives in six urban, suburban, and rural communities. Similarly, in 2021, Methodist Healthcare Ministries launched the Communities of Solutions initiative in South Texas, "a framework that supports communities in cultivating behaviors, processes, and systems that, over time, result in a culture of health and sustainable improvements in health, well-being, and equity."[41]

- ***Learning collaboratives for community capacity building.*** As philanthropy is investing in large systems change efforts, it is also supporting learning collaboratives and technical assistance to build capacity among partners. For example, in late 2022, Methodist Healthcare Ministries launched Prosperemos Juntos/Thriving Together to support coalitions in Bexar County and South Texas to engage in community transformation in a way that advances equitable processes and outcomes, addresses the underlying nonmedical drivers of health, and develops and implements strategies to address the root drivers of intergenerational poverty and exclusion.[42] The program is designed explicitly to build capacity and accelerate coalitions toward equity.
- ***Community engagement in grant decisionmaking.*** Some health funders are piloting initiatives to empower and engage community members in grantmaking. For example, in 2021, St. David's Foundation supported a new shared gifting program for rural communities, recognizing that rural communities are dramatically underrepresented in philanthropic investments across the state. Shared gifting is participatory grantmaking that allows community residents, rather than funders or local decisionmakers, to decide funding priorities. This process is a strategy "to democratize giving, empower residents to tackle their community's needs, and transform the power dynamics that typically exist in the current system of philanthropy."[43]

Local Health Departments

According to the American Public Health Association, the fundamental purpose and role of public health is to promote and protect the health of people and communities where they live, learn, work, and play.[44] Local health departments advance this mission by preventing the start and spread of diseases and outbreaks; promoting healthy communities; and protecting community health and vitality through partnerships, advocacy, and policy. By their historical roots and the nature of their work, local health departments have focused on health farther upstream than most other health system players.

Recent calls by public health leaders for implementing a Public Health 3.0 approach have further galvanized local health departments as the "chief health strategist" in collaborating with health care and multisector partners, engaging communities, and catalyzing action to improve the conditions for health in communities (DeSalvo et al. 2017). Following is a summary of midstream and upstream strategies led by local health departments, with an inventory of specific programs provided in appendix table A.5.

MIDSTREAM STRATEGY

- ***Coordinated health care and social services.*** Local health departments are increasingly coordinating whole-person care, bridging the health and social needs of community members. For example, in 2021, Harris County Public Health launched ACCESS Harris County, an integrated care coordination program. ACCESS (Accessing Coordinated Care and Empowering Self Sufficiency) seeks to improve outcomes for low-income and underserved members of the community through a holistic approach, addressing co-occurring challenges with physical and mental health, financial hardship, housing needs, substance abuse, and other inequities.[45]

UPSTREAM STRATEGIES

- ***Community health assessment.*** The Public Health Accreditation Board requires health departments to complete a community health assessment and community health improvement plan every five years. Many health departments collaborate with hospitals and other partners on regional assessment and implementation to leverage limited resources and increase shared impact. For example, the Williamson County and Cities Health District led a collaborative effort with their hospital and health care partners in 2016, establishing Health Equity Zones—or census tract areas in the county with higher-than-average health risks and burdens—to direct targeted efforts for community health improvement.[46]
- ***Multisector collaborative initiatives.*** Local health departments are either leading or partnering in transformative, multisector collaborative initiatives. For example, in 2015–17, Harris County Public Health served as the lead backbone organization, collaborating with the Houston Food Bank and MD Anderson Cancer Center on the BUILD Health Challenge to improve health through a sustainable food system in North Pasadena (BUILD Health Challenge 2018).
- ***Federal and state-funded initiatives.*** Local health departments receive federal and state grants to address the nonmedical drivers of health and health equity. Federal funding dedicated to closing health gaps accelerated during the COVID-19 pandemic. For example, the Texas Department of State Health Services (DSHS) received over $45 million from the CDC to engage communities disproportionately affected by COVID-19 and build sustainable relationships

with local health departments.[47] Of this funding, $19.5 million was available for 54 local health departments to develop partnerships and engage targeted communities facing the greatest health disparities.

State Health Agencies

Texas Health and Human Services leads the state's programs and initiatives to promote health through two agencies—the Texas Health and Human Services Commission (HHSC) and DSHS. Texas HHSC administers programs such as Texas Medicaid and Children's Health Insurance Program, Supplemental Nutrition Assistance Program benefits, and the Women, Infants, and Children nutrition program, among many others addressing health, food, safety, and disaster services. Texas DSHS serves as the state public health agency, focusing on the core functions and essential services of public health.

Texas's state health agencies have long addressed health disparities, with a history of efforts dating back to 1993. In 2010, the state established the Center for the Elimination of Disproportionality and Disparities in HHSC. The center was built on seminal work that started in 2005, revealing racial disparities in Child Protective Services. These findings prompted the state to develop dedicated programs to address institutional racism and advance health equity that ultimately demonstrated progress in closing racial gaps in services.[48] The center built on this success and, in 2011, was designated as the state's Office of Minority Health, dedicated to studying and solving racial disparities—including addressing systemic bias and racism—across various Texas state agencies with a focus on juvenile justice, child welfare, mental health, education, and health.[49]

However, despite heightened attention to persistent disparities, including the black maternal mortality crisis in Texas, the Office of Minority Health was defunded by the 85th Legislature, shutting its doors in 2018. Since then, the Texas legislature has not funded the creation of a new office dedicated to tracking and addressing health disparities in the state. State agencies are working through a patchwork of other mechanisms to address health disparities and the nonmedical drivers of health, as summarized below. An inventory of programs is provided in appendix table A.6.

MIDSTREAM STRATEGY

- ***State nonmedical drivers of health action plan.*** Texas HHSC has recently made strides to incentivize organizations to address the health-related social needs of Medicaid beneficiaries across Texas. Early in 2023, Texas HHSC released the Non-Medical Drivers of Health Action Plan, outlining steps and goals for Texas Medicaid and Children's Health Insurance Program to

coordinate activities that address nonmedical drivers through the health care providers and MCOs providing Medicaid services to low-income individuals (Texas HHSC 2023). The Health Action Plan focuses on three drivers—food insecurity, housing, and transportation at a midstream level. The plan intends to help state health agencies build data infrastructure, coordinate services, develop policies to incentivize MCOs, and foster collaboration across partners and community-based organizations, moving the state toward cost savings, reducing preventable utilization of medical services, and improving health outcomes, particularly among those facing the greatest challenges.

UPSTREAM STRATEGIES

- ***Health disparities improvement initiative.*** Within Texas DSHS, the Center for Public Health Policy and Practice focuses explicitly on efforts to address health disparities through more upstream and community-centered initiatives. The center played a critical role in the absence of a statewide health disparities center and at the height of the pandemic when COVID-19 disparities were especially pronounced. Notably, Texas DSHS received $45.2 million in funding from the CDC during the pandemic to "authentically engage targeted communities disproportionately impacted by COVID-19 and build sustaining relationships in those targeted communities, leading to improved health among vulnerable populations."[50] As part of this funding, the center dedicated support for the Health Disparities Improvement Initiative to design and test community interventions that address the root drivers of COVID-19 disparities (e.g., food insecurity, housing, chronic disease).[51] Other funding was dedicated to establishing infrastructure for tracking, reporting, and leading initiatives on addressing health disparities.
- ***Multisector collaborative initiatives.*** Texas health agencies have also served as partners in cross-sector health initiatives. For example, in 2016, HHSC launched the state-community-academic partnership Healthy Families Initiative to understand multilevel contextual factors influencing pregnancy outcomes. The initiative also developed programs to reduce health disparities in low-access regions, such as Hidalgo County on the southern border of Texas and Smith County in rural East Texas (Patel et al. 2021).

Academic Health Institutions

Academic health institutions, including schools of public health, medicine, and nursing, train the next generation of health professionals and lead on innovation, research, and evidence that expands the understanding of health, its drivers, and interventions. In doing so, academia is building curricula and

experiential learning related to the drivers of health, testing new innovations and models, conducting research and evaluation to measure the impact and return on investment of potential solutions, serving as backbones and neutral facilitators for cross-sector collaboratives, and advocating for policy and systemic change. Below, we summarize academia's role in midstream and upstream efforts for health equity. An inventory of programs is provided in appendix table A.7.

MIDSTREAM STRATEGIES

- ***Screening and addressing social needs.*** Academic institutions are playing several roles in advancing social screening and referral programs. Some serve as bridge or backbone entities coordinating social screening and referral programs. For example, the University of Texas School of Public Health was the bridge entity for the five-year AHC initiative in Houston funded by the Centers for Medicare & Medicaid Services.[52] Some are also measuring the impact of social needs screening and referral programs, helping to build an evidence base on their reach, effectiveness, and return on investment.
- ***Medical and health professional training to address social needs.*** The University of Texas Rio Grande Valley was the first to develop the Community Engaged Lifestyle Medicine curriculum in residency programs for physicians earning a General Preventative Medicine/Public Health degree. The model curriculum emphasizes community engagement, intersectoral partnerships, and cultural responsiveness (Krishnaswami, Sardana, and Daxini 2019). Physicians who graduate from these programs are better equipped to address the social needs of their patients. Dell Medical School also strives to address nonmedical drivers. Its Department of Population Health is an example of how academic institutions can engage the community, as the strategic plan for the department was heavily informed by focus groups with the community (Tierney 2018). The school also hosts a two-year clerkship for medical students, during which each student works in a community clinic and engages with community organizations.[53] The University of Texas Medical Branch also launched a novel initiative, Hospital to Home, a medical student–led clinical experience connecting hospitalized patients at high risk for unmet social and medical needs with the appropriate community resources.[54] Hospital to Home seeks to improve patient health outcomes and reduce future hospitalization.

UPSTREAM STRATEGIES

- ***Leading multisector collaborative initiatives.*** Academic partners lead several cross-sector collaborative initiatives to address upstream drivers of health. For example, UT Health School of Public Health serves as the backbone organization for the Health Equity Collective—a large

collective impact initiative in Greater Houston to advance health equity through systemic and policy solutions that address nonmedical needs and drivers of health (John et al. 2021). Guided by an equity-centered framework, the collective operates at all levels—downstream, midstream, and upstream—establishing initiatives such as a community information exchange to screen and connect patients in a closed-loop referral, advancing system and policy change to strengthen the regional community health workforce, and other actions.

- ***Community-based participatory research*** is considered a "transformative research paradigm that bridges the gap between science and practice through community engagement and social action to increase health equity" (Wallerstein and Duran 2010, S40). Academic institutions are key players in advancing community-based participatory research in ways that build trust and authentic engagement with communities to identify needs, develop and implement effective interventions, redress power imbalances, and drive systemic change. For example, in Hearne, REACH (the Researching Equity and Community Health project) uses a human-centered approach to investigate the structures contributing to substance abuse and identify effective community interventions in rural areas. The program "will help build leadership, outreach, and skills within the community."[55]
- ***Community Health Workers:*** As health system players increasingly address the nonmedical drivers of health at individual and community levels, the role and importance of community health workers, *promotores*, and other professionals with similar roles has also grown. Community health workers, often from the communities they serve, play critical roles as connectors and change agents in promoting health and equity for patients and communities. Academic institutions serve as training grounds for community health workers, and some are taking explicit steps to strengthen and sustain this critical workforce.

Nonprofit Health Organizations

Nonprofit health organizations are essential partners in promoting health. These organizations range in size, scope, and reach from small grassroots community-based organizations to larger research, advocacy, and service-oriented entities. Depending on their mission, size, and scope, the role of nonprofits in midstream and upstream community-centered initiatives varies but is essential. Below is a summary of nonprofit health organizations, with an inventory in appendix table A.8.

MIDSTREAM STRATEGIES

- ***Serving as backbone or bridge for coordinated care.*** In some communities, nonprofit organizations serve as the backbone or bridge organization for health and social service coordination. For example, the Health Collaborative in San Antonio is implementing the Pathways Community HUB Institute model, which helps communities build a sustainable, outcome-based, community-centered care coordination network with community health workers to screen for and complete 21 pathways (e.g., education, food security, housing, transportation, medical adherence). Similarly, Parkland Center for Clinical Innovation served as the bridge organization for the Dallas AHC initiative, coordinating social needs screening and referral across clinical, social service, and community partners.
- ***Building an evidence and practice base.*** Many nonprofits are serving as catalysts to accelerate progress on health-related social needs screening by conducting objective impact evaluations, facilitating learning collaboratives or communities of practice, and convening multisector partners to share and exchange knowledge, experiences, and best practices.

UPSTREAM STRATEGIES

- ***Convener for community health improvement.*** Nonprofit organizations help facilitate dialogue, collaboration, and consensus to drive transformative change across communities. Some lead and facilitate local and regional community health needs assessment and improvement. Others convene statewide partners in learning collaboratives to advance equity-centered knowledge and best practices. For example, Texas Health Institute has served as a statewide convener for the Texas Primary Care Consortium for over a decade, creating a forum for the exchange of lessons and best practices for addressing systemic inequities in primary care.[56]
- ***Champion for policy and systems change.*** Some nonprofits are vocal and trusted champions, advocates, and leaders for policy change. Meadows Mental Health Policy Institute, a nonpartisan think tank, has been critical to addressing mental health disparities in Texas. The Maternal Health Equity Collaborative of grassroots nonprofits has helped advance the maternal health equity agenda in Texas, centering the voices and needs of directly affected birthing persons.

Health Leaders across Texas Have Ideas on How to Move Forward

The release of *Unequal Treatment* 20 years ago was groundbreaking in providing scientific evidence for the long-standing racial and ethnic health disparities in the US. The report alerted health leaders across the country and in Texas to the root structural drivers of inequities, galvanizing action to close gaps in health. Yet, two decades later, the disparities remain firmly entrenched.

> *In a lot of places in Texas, [you] can't even say the word equity, you can't say racism, you can't talk about our history. And so that is a major barrier when there's a lack of acknowledgement.*
> *—Texas health leader*

Our review of data and initiatives over the last 20 years indicates a stark reality of the Texas health landscape today: On the one hand, racial and ethnic disparities in health and the nonmedical drivers of health are deep, pervasive, and persistent. On the other hand, players across the health ecosystem are shifting upstream to improve health and achieve health equity. While this shift is promising, its impact is yet to be seen in health outcomes. Interviews with health leaders and experts across the state provide insight into the ongoing challenges that impede health system efforts toward health equity and what more it will take to progress and have an impact.

This section summarizes the interviewees' considerations and recommendations for realizing the vision of better and equitable health in Texas. Interview participants represented a range of sectors, geographies, communities, and perspectives, including health care, health payers, public health, academia, nonprofits, rural health, maternal health, mental health, and community health. Leaders shared challenges facing the state and offered their insights and considerations for moving forward:

- Frame health equity in ways that are inclusive, data-driven, and solutions-oriented.
- Apply a multilevel systems change approach to advancing health equity.
- Authentically engage communities as partners in advancing health equity.
- Value and invest in achieving better and equitable health.

Frame Health Equity in Ways That Are Inclusive, Data-Driven, and Solutions-Oriented

Nearly all health leaders discussed the challenges surrounding the term health equity and the need to reframe how we talk about it to garner broader understanding and support for action. They reflected that the term has become politically "charged" and "triggering" for several elected officials, citing it as a "conversation ender," the cause for "[the] door to be slammed on your face," and for policies and actions being "voted against."

Interviewees reflected on several reasons for this pushback. Some explained that health equity and social determinants of health are often equated with concepts of socialism. Others explained that the term has become jargon, often used without grounding in data, evidence, and framing to explain what it means and why it matters. Also discussed was the lack of shared language for and understanding of health equity across government officials, health administrators, health practitioners, and community leaders: "The folks that hold power are not always speaking the same language as the folks that are doing the work. And when we can't agree on basic definitions of problems and/or shared sets of facts about what's happening and why, that makes it really hard to advance the goals that we have. And for people that do hold power to trust that they are better off sharing, or ceding some of that power to others."

You have to figure out how to talk about this in a non-threatening way that brings it down to a real personal level…not getting too theoretical, not getting too partisan, where it's really just about people and making community stronger and healthier.
—Texas health leader

Following are recommendations we identified from our conversations with health leaders on framing health equity in inclusive ways, grounded in data, evidence, and solutions-:

- **Move away from words and jargon** to using data, maps, visuals, and storytelling to demonstrate who is affected by health inequities, how they are affected, and why. Several health leaders discussed the importance of granular data at both patient and community levels. Data documenting health outcomes and disparities by geography, income, race, ethnicity, language, and other demographic factors could be leveraged along with storytelling to identify

people and communities with the greatest need. As one leader explained, “Data does not lie…these are the demographics of the populations that are disproportionately impacted…here are the outcomes for populations that are disproportionately impacted.”

- **Make a business case for achieving better and equitable health.** Health leaders spoke about creating a shared value proposition across sectors and for the business community, exploring and communicating “what’s in it for them” to value health equity. Many also emphasized the importance of communicating the cost savings of better and equitable health and, conversely, the cost of inaction to businesses, health care, and society at large.
- **Use a solutions-oriented approach**. Health leaders discussed the importance of moving beyond talking about disparities and deficits in communities to framing the conversation around solutions that identify and address root causes. The interviewees recommended pairing data on disparities with concrete solutions grounded in evidence-based practices demonstrated to improve conditions for health and create opportunities for everyone to thrive.
- **Ground health equity in shared beliefs and values**. Health leaders also emphasized the importance of making explicit that equity is a core American value. As one leader shared, “when you’re able to weave in things that are supposed to be well understood common values of our society, when you’re able to talk about these things in the context of shared beliefs and shared understandings, then you’re able to get more work done.”
- **Be inclusive**. Health leaders encouraged an “inclusive” framing that recognizes the work of equity as lifting all people and communities, with targeted efforts to address the needs of those most marginalized. Several interviewees emphasized approaching equity through an intersectional lens, recognizing that disparities can exist for any group of individuals and communities, with some enduring long-standing impacts caused by factors such as intergenerational poverty and structural racism and others facing marginalization based on recent policies.

While there was agreement on the need to find new, inclusive, and compelling ways to talk about health equity “to get things done,” some health leaders questioned whether it was the right thing to do. In doing so, they cautioned that reframing health equity should not undo progress or minimize the work required at the most upstream level to dismantle the causes of the causes, including systems of power and structural racism that continue to shape people’s lives and health opportunities.

Apply a Multilevel Systems Change Approach to Advancing Health Equity

Health leaders agreed that addressing the nonmedical drivers of health presents a pathway to advance health equity in Texas. Leaders emphasized a multilevel "systems change" approach that compels health system players to move farther upstream while operating at midstream and downstream levels, work across sectors, and engage directly affected communities in collaborative solutions.

The COVID-19 pandemic was a clarion call to build more holistic and integrated systems of health (not just health care) in Texas. As one interviewee explained, "COVID didn't create the problems, but it definitely demonstrated that we need holistic, integrated approaches because people that were disproportionately impacted, Black and Brown folks, needed housing, needed food assistance, needed economic assistance, working in the lowest paying jobs…" The following are recommendations discussed by health leaders for applying a multilevel systems change approach:

- **Leverage the momentum of midstream progress to move farther upstream.** Health leaders acknowledged the promise and momentum of recent initiatives led by health system players to address individual social needs (e.g., social needs screening and clinical-community linkages for food, legal, housing, and other services). While midstream initiatives are essential, many cautioned that they alone are insufficient to improve community health and equity. Thus, interviewees encouraged the health system to push farther upstream. Health system players can ask, which upstream actions would have the greatest impact on the health of the communities we serve? Which health, nonhealth, and community partners are needed to drive collective action? Interviewed leaders identified the current housing crisis as a critical upstream priority, encompassing chronic homelessness, housing instability, and displacement caused by rising housing costs, gentrification, and other factors. Addressing food insecurity was also discussed as a priority, including ongoing health–food system partnerships, policy change, and investments in communities to improve access to affordable, healthful foods.

You can't solve food insecurity with a box of food. Nor can you expect that people who have food insecurity only have food insecurity, and they don't also have issues or challenges with transportation, housing, and all the stuff that goes with it. It really kind of needs a comprehensive approach to the whole person, and not a singular issue.
—Texas health leader

- **Address the interconnections of nonmedical drivers of health.** Health leaders emphasized the need for holistic approaches that acknowledge the complex interrelations across various nonmedical drivers of health. At a midstream level, social needs screening and referral programs—especially those anchored in interoperable data systems between health and community organizations—were recognized as offering promise for addressing interconnected individual needs. At an upstream level, multisector collaborative initiatives and coalitions were discussed as important strategies. Some leaders also discussed neighborhood or community hubs that co-locate resources for residents, including affordable quality housing, education, healthful foods, health care, and others.

> *In a nutshell, systems have to change. Dismantling inequities means power has to be shared. And power being shared means resources have to be redirected, redistributed to invest in addressing them.*
> *—Texas health leader*

- **Address the root causes of inequities in the nonmedical drivers of health.** Several health leaders emphasized that a systems approach should address the nonmedical drivers of health *and* the root causes that have created uneven access to these drivers. A systems approach might include raising awareness and understanding among institutional leaders and practitioners of the legacy of structural racism, including policies like redlining, that to this day profoundly shapes neighborhood conditions such as poverty concentration and access to quality housing, education, healthful foods, and health care. Others discussed the importance of addressing systemic and implicit bias within institutions that may impede equity efforts. As one health leader recommended, "Start with things like undoing racism, groundwater analysis, training…and after that, do an intense analysis of the systems that you're in, that you're leading, and making decisions [for]." In reflecting on the Office of Minority Health that once existed in Texas and was later dismantled by the state legislature, one health leader shared, "Our state agencies were able to reduce the disparity in African American child removals for CPS in Texas…They did it through undoing racism workshops. They did it through mental model shifts…like getting people to think about systems, systems of oppression, how systems work." Others discussed the importance of sharing power and redistributing resources in ways that center communities most directly affected by inequities (discussed in greater detail in the next section).
- **Expand health insurance coverage for low-income individuals.** Every health leader interviewed for this report discussed the importance of expanding Medicaid coverage for low-

income people, echoing public sentiment. A recent poll found that nearly 7 in 10 Texans (69 percent) support expanding Medicaid, yet the state has not done so (Episcopal Health Foundation 2021). Texas has ranked rock bottom on health insurance coverage for the last two decades, with Hispanic and Black individuals having the lowest rates of coverage and the greatest barriers to accessing timely and quality care. An abundance of research has documented the positive effects of ACA Medicaid expansion, including increasing coverage, improving health care access and utilization, improving health care affordability, and improving self-reported health. At least 20 studies have also confirmed the positive effects of Medicaid expansion on state budgets and economies (Guth, Garfield, and Rudowitz 2020). A systemic approach to achieving better health for everyone in Texas would address both the 80 percent of nonmedical drivers of health and the 20 percent of medical drivers of health, including health insurance coverage (Hood et al. 2016).

Authentically Engage Communities as Partners in Advancing Health Equity

Health leaders acknowledged the importance of engaging communities in upstream efforts to achieve better and equitable health. However, they noted challenges in doing so meaningfully and authentically. For example, some health leaders felt that community engagement by health system players can be tokenizing, a check in the box, or "window dressing," serving the interest and purpose of the health system yet not fully benefiting the community.

> *Frankly, underrepresented communities that are impacted by disparities and inequities, they've told us over and over again…"we don't need a circle, we don't need a square, we need an oval," yet [the system] continues to provide squares and circles.*
>
> *—Texas health leader*

One health leader acknowledged that while health systems will engage communities for input, the solutions they implement often do not reflect what the community asked for, similar to the analogy of a square peg in a round hole. Building on this idea, some health leaders felt that health system players need to better recognize, engage, and empower community members who have the expertise of lived experience. Interviewees said that even when communities are consulted, their "voice is still small." One health leader questioned, "so how do you make that voice louder?" While several health leaders acknowledged they were not community engagement experts, they offered considerations based on their perspectives and experiences:

- **Acknowledge and listen to community expertise.** Many health leaders discussed the importance of "listening" and bringing community members' "voices to the table" to understand their needs, strengths, resources, and aspirations for improving their health and well-being. One health leader emphasized, "I think it comes down to listening to who you're trying to serve first and having that be your guidepost." Another leader emphasized the importance of listening because "the solutions are in the community."

How do we not just survey and get input from people, but really get to know people in their spaces, and enhance their capacity to help build solutions for their spaces?
—Texas health leader

Community engagement [can be] an agent of capacity building and investment in the neighborhood because community engagement shouldn't just be this transactional thing, but an opportunity for you to build leaders, for you to create sustainability and human capacity, and new skills in the community.
—Texas health leader

- **Recognize community engagement is not a one-time activity** but a long-term, ongoing process of building relationships and trust. One health leader said that community engagement requires "a paradigm shift." As this individual explained, "You have to dismantle old ways of thinking and move forward, which is not easy. It takes time."
- **Move from transactional to transformative partnerships** that engage community members as experts and partners in long-term solutions. As one leader acknowledged, to build community leadership capacity, health system players must invest in training and support. For example, when communities are engaged in programs, research, and evaluation, health system leaders "can empower community to be able to use that data" by offering data workshops and creating a platform so the community can access the data. Building on experience doing this, the health leader went on to share, "we taught [the community] how to use [data], we taught them how to advocate for it. And they have been able to use that data to advocate for themselves at city council, and they've had some wins there." Beyond building skills and capacity, empowering

communities to lead collaborative health solutions also means sharing power. While not discussed extensively, a few leaders reflected on the importance of addressing power dynamics in relationships between health system players and the community, working to build inclusive spaces for voices, opinions, and expertise to be heard equitably.

- **Remember, there is no one-size-fits-all approach**. Some health leaders emphasized that there is no one-size-fits-all approach to engaging communities. Depending on the community, issues of focus, and scope and nature of work, the level of engagement and the strategies will vary. However, there was an acknowledgment of core principles that apply to any level of engagement—recognizing the value and expertise of community, being honest and authentic in engagement, and building lasting bidirectional relationships on mutual trust and respect.
- **Value community expertise.** Some health leaders discussed the importance of valuing and investing in community engagement; paying community members for their time, expertise, and participation; and making participation accessible.

You pay them! The same way we're all getting paid …We treat them like this is a legitimate job, like a consultant. We have to stop treating communities as if somehow they have this moral obligation to help us do our jobs better… they need to be paid, that is how you engage communities. That's the number one solution. If you start paying them, they will show up because, guess what, you've demonstrated the value of commitment for their time.
—Texas health leader

Value and Invest in Achieving Better and Equitable Health

Health leaders identified the importance of valuing and investing in health equity and aligning financial incentives across the health ecosystem. However, they discussed challenges in doing so, identifying barriers such as limited sustainable funding, misalignment between health system payment and equity priorities, and the need to build a case for long-term investment in equity work. Several health leaders offered input on how to sustainably support and finance health equity initiatives:

> *Having a clear vision about what equity really means…not just in the social or philosophical context, but operationally, what does it mean? In the payment system, what does it really mean? How do we operationalize this as an extension of the care delivery?*
>
> *—Texas health leader*

- **Reestablish a state office of health equity.** Several health leaders discussed the need for a permanent, sustainable version of the state Office of Minority Health that existed before 2018. The office was critical in tracking and supporting programs to address state health disparities and dismantle systemic bias within and across agencies. The prior office demonstrated success in prioritizing equity, improving structures, and closing gaps. Reestablishing the office could encourage more permanent funding, investment, and support of health equity initiatives (especially midstream and upstream) in local communities and across Texas.
- **Leverage philanthropic funding, community benefits, and other support to invest in longer-term, systemic solutions.** Many health leaders acknowledged the need to address the chronic underfunding of community health and equity initiatives. Some recommended that philanthropy, hospital community benefits, health plan foundations, and others invest or pool resources for longer-term systemic support. Examples include multisector collaborative initiatives focused on upstream community conditions (e.g., housing, food justice), evidence-based clinical-community linkages, coordinated care systems, and community-based organizations that can lead or partner on systems change initiatives.

We need to do a much better job as a health care industry to work together and work together with other community partners and other sectors. Quite frankly, our providers need to not be so siloed either. A lot of it is just a resource issue, and so that puts us in a competitive position sometimes. I don't think it has to be like that. We really are all in this together. So, I think we just need to become a lot more coordinated and collaborative and keep working together to tackle this.
—Texas health leader

- **Build on federal and state momentum to incentivize health care players to address nonmedical drivers of health**. Health leaders identified recent federal and state movement toward value-based care. At a state level, they were particularly encouraged by the Non-Medical Drivers of Health Action Plan. They also acknowledged state policy wins to address the nonmedical drivers of maternal health—particularly systematic screening of nonmedical needs of pregnant women and their babies, Medicaid reimbursement for community health workers and doulas addressing those needs, and the extension of postpartum Medicaid and Children's Health Insurance Program coverage from two to 12 months. They also recognized national actions, such as the Centers for Medicare & Medicaid Services' requirement for reporting social drivers of health for inpatient care. Such government actions serve as leverage, incentivizing health care providers and health plans to address and pay for the nonmedical drivers of health.
- **Generate an evidence base for what works to compel financial investment.** Some health leaders recognized the need for more evaluations to identify what works, in what contexts, and how to drive long-term systemic change. Without more research into upstream solutions to health equity, the leaders said, "there may not be adequate evidence to put money behind it."

Conclusion

Twenty years ago, *Unequal Treatment* provided groundbreaking scientific evidence for the long-standing racial and ethnic health disparities in the US. The report galvanized a movement to close gaps in health nationally and in Texas. Yet, two decades later, the disparities remain firmly entrenched. Our report glimpses into the state of racial and ethnic health disparities in Texas and the health system's role in promoting better health and health equity through midstream and upstream community-centered

initiatives. While still too early to see the impact, Texas health leaders are cautiously optimistic that by addressing the root structural and nonmedical drivers of health through evidence-based strategies and the authentic engagement of communities in solutions, the state can come closer to realizing the vision of health equity.

Notes

[1] "Life Expectancy at Birth by State, 2020," Centers for Disease Control and Prevention, 2022, https://www.cdc.gov/nchs/pressroom/sosmap/life_expectancy/life_expectancy.htm.

[2] S. Klineberg, "The Texas Demographic Revolution: Why Education Matters More Today Than Ever Before," *San Antonio Report*, September 19, 2016, https://sanantonioreport.org/the-texas-demographic-revolution-why-education-matters-more-today-than-ever-before/.

[3] "Texas Enters 2021 as the World's 9th Largest Economy by GDP," Texas Economic Development Corporation, news release, January 27, 2021, https://businessintexas.com/news/texas-enters-2021-as-worlds-9th-largest-economy-by-gdp/.

[4] "Total Hospitals," Kaiser Family Foundation, 2021, https://www.kff.org/other/state-indicator/total-hospitals/; "Total Health Care Employment," Kaiser Family Foundation, 2021, https://www.kff.org/other/state-indicator/total-health-care-employment/.

[5] L. Minton, L. Vela, and B. Wright, "Counting the Cost of Texas Health Care," *Fiscal Notes*, Texas Comptroller of Public Accounts, March 2017, https://comptroller.texas.gov/economy/fiscal-notes/2017/march/health-care.php.

[6] America's Health Rankings, "Health Disparities: Infant Mortality, Texas," 2021, https://www.americashealthrankings.org/explore/disparity/measure/im/state/TX.

[7] "Infant Mortality," America's Health Rankings, data from CDC National Vital Statistics System Linked Birth-Death Records, 2003–06 and 2019–20, https://www.americashealthrankings.org/.

[8] "Maternal Mortality Ratio (Modeled Estimate, per 100,000 Live Births)—OECD Members," World Bank, 2023, https://data.worldbank.org/indicator/SH.STA.MMRT?locations=OE&most_recent_value_desc=true.

[9] "Maternal Deaths and Mortality Rates: Each State, the District of Columbia, United States, 2018–2021," Centers for Disease Control and Prevention, 2023.

[10] "Health Status: Health, United States 2020-2021," Centers for Disease Control and Prevention, 2023, https://www.cdc.gov/nchs/hus/topics/health-status.htm.

[11] N. Ahmad and J. Mark, "Home Is Where Our Health Is," Robert Wood Johnson Foundation blog, July 22, 2019, https://www.rwjf.org/en/insights/blog/2019/07/home-is-where-our-health-is.html.

[12] "Severe Housing Problems in Texas," America's Health Rankings, accessed February 28, 2024, https://www.americashealthrankings.org/explore/measures/severe_housing_problems/TX.

[13] "Severe Housing Problems," America's Health Rankings.

[14] "Homeownership in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/homeownership/TX.

[15] "Poverty in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/household_poverty/TX.

[16] "Children in Poverty in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/ChildPoverty/TX.

[17] "Children in Poverty in Texas," America's Health Rankings.

[18] "High School Graduation in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/Graduation_A/TX.

[19] "Less Than High School Education in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/education_LT_HS/TX.

[20] Economic Research Service, "Definitions of Food Security," US Department of Agriculture, 2022, https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/.

[21] "What Are the Connections between Food Insecurity and Health?" Feeding America, accessed February 28, 2024, https://www.feedingamerica.org/hunger-in-america/food-insecurity.

[22] "Food Insecurity in Texas," America's Health Rankings, 2022, https://www.americashealthrankings.org/explore/measures/food_insecurity_household/TX.

[23] "Adults Age 18 and Older Who Went without Care Because of Cost in Past Year (%)," The Commonwealth Fund, accessed February 28, 2024, https://www.commonwealthfund.org/datacenter/adults-who-went-without-care-because-cost.

[24] "Uninsured Adults Ages 19–64 (%), by Race/Ethnicity," The Commonwealth Fund, accessed February 28, 2024, https://www.commonwealthfund.org/datacenter/uninsured-adults?state=Texas.

[25] Center for Public History and Houston Medical Forum, "*To Bear Fruit for Our Race: The Negro Health Problem (1900–1926, Section 5),"* University of Houston, https://uh.edu/class/ctr-public-history/tobearfruit/story_1900-1926_section05.html.

[26] "The 2022 Greater Brazos Valley Health Assessment," Center for Community Health Development, presentation, 2022.

[27] "CHRISTUS Health's Anchor Mission for Community Health," CHRISTUS Health, https://www.christushealth.org/connect/community/anchor-mission; "Memorial Hermann Joins the Healthcare Anchor Network; Increases Investment in Community to Address Housing, Employment, and Other Social Determinants of Health," press release, October 26, 2021, https://www.memorialhermann.org/about-us/newsroom/press-releases/healthcare-anchor-network-increases-investment-community.

[28] Healthcare Anchor Network, https://healthcareanchor.network/; Texas Accountable Communities for Health Initiative (TACHI), https://www.txachi.org/.

[29] Texas Accountable Communities for Health Initiative (TACHI), https://www.txachi.org/; "Parkland Teams with Hospital Community Cooperative to Tackle Health Inequities in Dallas County," *Parkland News Flash*, January 28, 2019, https://www.parklandhealth.org/news-and-updates/parkland-teams-with-hospital-community-cooperative-1472; S. Marashi, "Texas Health Resources Joins National Health Equity Collaborative, Launches Initiatives to Address Social Determinants of Health in Erath County," *State of Reform* (blog), January 7, 2022, https://stateofreform.com/news/2022/01/texas-health-resources-health-equity-social-determinants/.

[30] "Legacy Community Health Launches New Social Determinants of Health Initiative," press release, Legacy Community Health, June 14, 2018, https://www.legacycommunityhealth.org/newsroom/press-releases/legacy-community-health-launches-new-social-determinants-of-health-initiative/.

[31] "TACHC Partners with Unite US," press release, Texas Association of Community Health Centers, August 23, 2022, https://www.prnewswire.com/news-releases/texas-association-of-community-health-centers-tachc-partners-with-unite-us-301610551.html.

[32] "Austin Medical-Legal Partnership," People's Community Clinic, https://www.austinpcc.org/our-programs/other/austin-medical-legal-partnership/; A. Simmons, "A Health Center That Prescribes Food as Medicine," NACHC blog, National Association of Community Health Centers. https://www.nachc.org/a-health-center-that-prescribes-food-as-medicine/.

[33] "Community Centered Health Homes,". Episcopal Health Foundation, https://www.episcopalhealth.org/grantmaking/community-centered-health-homes/.

[34] K. Krisberg and D. Leffler, "A Free Medical Clinic Opened in Rural East Texas: Thousands Poured In for Help," *Texas Tribune*, September 21, 2022, https://www.texastribune.org/2022/09/21/east-texas-free-medical-clinic-medicai/.

[35] "Accountable Health Communities Model," Centers for Medicare & Medicaid Services, 2023, https://innovation.cms.gov/innovation-models/ahcm.

[36] "Humana and University of Houston Set New Standard for Clinical Training Models," Humana, 2019, https://healthequity.humana.com/stories/humana-and-university-of-houston-set-new-standard-for-clinical-training-models/; "Supporting Partners to Address Social Determinants in Texas," UnitedHealthcare newsletter, August 2, 2021, https://www.uhccommunityandstate.com/content/state-profiles/united-for-good-texas-/supporting-partners-to-address-social-determinants-in-texas.

[37] C. James, "Philanthropy's Increased Focus on Health Equity Post–COVID-19," *Health Affairs Forefront* (blog), February 4, 2021, https://www.healthaffairs.org/content/forefront/philanthropy-s-increased-focus-health-equity-post-covid-19.

[38] J. Taha, "United Way Launches Model Community Initiative for Greater Austin Area," United Way for Greater Austin blog, February 2, 2022, https://www.unitedwayaustin.org/model-community-initiative-launches-for-greater-austin-area/.

[39] "Spotlight Series: The Texas Managed Care Organization Social Determinant of Health Learning Collaborative," NORC, January 2021.

[40] I. Evans, "Hogg Foundation Awards $4.5 Million to Address Well-Being in Rural Texas Communities," *Hogg Blog*, Hogg Foundation for Mental Health, July 11, 2018, https://hogg.utexas.edu/texas-rural-communities.

[41] "Pursuing Health Equity through Communities of Solutions," Methodist Healthcare Ministries blog, January 15, 2021, https://news.mhm.org/pursuing-health-equity-through-communities-of-solutions/.

[42] "Prosperemos Juntos/Thriving Together Learning Collaborative," Methodist Healthcare Ministries, 2023, https://www.mhm.org/thriving-communities/.

[43] W. P. Moore and A. Asante, "Rural Residents as Grantmakers: Experimenting with Shared Gifting," *Insights* (blog), St. David's Foundation, February 3, 2022, https://learning.stdavidsfoundation.org/insight/rural-residents-as-grantmakers-experimenting-with-shared-gifting/.

[44] "What Is Public Health?," American Public Health Association, 2022, https://www.apha.org/what-is-public-health.

[45] "ACCESS Harris County," Harris County Public Health, 2021, https://publichealth.harriscountytx.gov/Divisions-Offices/Divisions/ACCESS-Harris-County.

[46] "Williamson County Health Equity Zones," Healthy Williamson County, 2019, https://www.healthywilliamsoncounty.org/tiles/index/display?id=189505412342358036.

[47] "CDC Funding for COVID-19 Health Disparities," presentation, Texas Department of State Health Services, 2021, https://www.dshs.texas.gov/sites/default/files/phfpcommittee/docs/DSHS--COVID-19-Health-Disparities-Funded-Activities.pptx.

[48] "Refunding the Center for Elimination of Disproportionality and Disparities," Texas Black Caucus Foundation, February 2021, https://www.txlbcfoundation.org/cedd.

[49] "Refunding the Center for Elimination of Disproportionality and Disparities," Texas Black Caucus Foundation.

[50] "COVID-19 Health Equity Funding," presentation, Texas Health and Human Services, 2021, https://www.dshs.texas.gov/sites/default/files/phfpcommittee/docs/Health-Equity-Funding-PHFPC.pptx.

[51] "COVID-19 Health Disparities Activities," Texas Health and Human Services, 2021, https://www.dshs.texas.gov/sites/default/files/phfpcommittee/docs/COVID-19-Health-Disparities-Funding--10-12-2021.docx.

[52] UT Health, "UT Health School of Public Health Awarded $2.6 Million to Address Social Needs of Medicare and Medicaid Beneficiaries in Harris County," *Texas Medical Center News*, June 21, 2017, https://www.tmc.edu/news/2017/06/uthealth-school-public-health-awarded-2-6-million-address-social-needs-medicare-medicaid-beneficiaries-harris-county/.

[53] "Department of Population Health," Dell Medical School, accessed February 28, 2024, https://dellmed.utexas.edu/units/department-of-population-health.

[54] "2021 President's Cabinet Awards," UTMB, 2021, https://development.utmb.edu/cabinet-2021.

[55] "Researching Equity and Community Health (REACH) Project," Interdisciplinary Research Leaders, September 2021, https://irleaders.org/team/researching-equity-and-community-health-reach-project/.

[56] "Making Primary Care Primary," Texas Primary Care Consortium, 2023, https://www.txprimarycareconsortium.org/.

References

America's Health Rankings. 2002. *2002 Annual Report*. Minnetonka, MN: United Health Foundation.

———. 2021. *Health Disparities Report*. Minnetonka, MN: United Health Foundation.

———. 2022. *2022 Annual Report*. Minnetonka, MN: United Health Foundation.

Austin/Travis County Community Health Plan. 2022. *2022 Community Health Assessment: Austin/Travis County, Texas*. Austin, TX: City of Austin.

Braveman, P., E. Arkin, T. Orleans, D. Proctor, and A. Plough. 2017. "What Is Health Equity? And What Difference Does a Definition Make?" Princeton, NJ: Robert Wood Johnson Foundation.

BUILD Health Challenge. 2018. *Harris County BUILD Health Partnership Case Study: Restructuring the Local Food System to Make it Healthy, Sustainable, and Community-Supported*. Pasadena, TX: Harris County BUILD Health Partnership.

Carlton, E. L., and S. R. Singh. 2018. "Joint Community Health Needs Assessments as a Path for Coordinating Community-Wide Health Improvement Efforts between Hospitals and Local Health Departments." *American Journal of Public Health* 108 (5): 676–82.

CDC (Centers for Disease Control and Prevention). 2022. "US State Life Tables, 2020." *National Vital Statistics Reports* 71 (2): August 23.

Center on Society and Health. 2014. "Why Education Matters to Health: Exploring the Causes." Issue Brief 2. Richmond, VA: Virginia Commonwealth University.

Cole, M. B., K. H. Nguyen, E. Byhoff, and G. F. Murray. 2022. "Screening for Social Risk at Federally Qualified Health Centers: A National Study." *American Journal of Preventive Medicine* 62 (5): 670–78.

Crear-Perry, J., R. Correa-de-Araujo, T. L. Johnson, M. R. McLemore, E. Neilson, and M. Wallace. 2021. "Social and Structural Determinants of Health Inequities in Maternal Health." *Journal of Women's Health* 30 (2): 230–35.

DeSalvo, K. B., N. Bloser, K. Reynolds, J. He, and P. Muntner. 2006. "Mortality Prediction with a Single General Self-Rated Health Question." *Journal of General Internal Medicine* 21: 267–75.

DeSalvo, K. B., Y. C. Wang, A. Harris, J. Auerbach, D. Koo, and P. O'Carroll. 2017. "Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century." *Preventing Chronic Diseases* 14: 170017.

Guth, Madeline, Rachel Garfield, and Robin Rudowitz. 2020. T*he Effects of Medicaid Expansion under the ACA: Studies from January 2014 to January 2020*. Menlo Park, CA: Kaiser Family Foundation.

Harvard T. H. Chan School of Public Health. 2023. "Hospital Engagement in the Social Determinants of Health in Texas: Insights from a National Survey of US Hospitals." Houston, TX: Episcopal Health Foundation.

Health Collaborative. 2019. *2019 Bexar County and Atascosa County Community Health Needs Assessment Report*. San Antonio, TX: Health Collaborative.

Hood, C. M., K. P. Gennuso, G. R. Swain, and B. B. Catlin. 2016. "County Health Rankings: Relationships between Determinant Factors and Health Outcomes." *American Journal of Preventive Medicine* 50 (2): 129–35.

IoM (Institute of Medicine). 2003. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, DC: National Academies Press.

John, J. C., T. Kaleemullah, H. McPherson, K. Mahata, R. B. Morrow, D. Bujnowski, A. Johnston, et al. 2021. "Building and Advancing Coalition Capacity to Promote Health Equity: Insights from the Health Equity Collective's Approach to Addressing the Social Determinants of Health." *Health Equity* 5 (1): 872–78.

Kassebaum, N. J., A. Bertozzi-Villa, M. S. Coggeshall, K. A Shackelford, C. Steiner, K. R. Heuton, D. Gonzalez-Medina, et al. 2014. "Global, Regional, and National Levels and Causes of Maternal Mortality during 1990–2013: A Systematic Analysis for the Global Burden of Disease Study 2013." *Lancet* 384 (9947): 980–1004.

Krishnaswami, J., J. Sardana, and A. Daxini. 2019. "Community-Engaged Lifestyle Medicine as a Framework for Health Equity: Principles for Lifestyle Medicine in Low-Resource Settings." *American Journal of Lifestyle Medicine* 13 (5): 443–50.

LaVeist, T. A., D. Gaskin, and P. Richard. 2011. "Estimating the Economic Burden of Racial Health Inequalities in the United States." *International Journal of Social Determinants of Health and Health Services* 41 (2): 231–38.

LaVeist, T. A., E. J. Pérez-Stable, P. Richard, A. Anderson, L. A. Isaac, R. Santiago, C. Okoh, et al. 2023. "The Economic Burden of Racial, Ethnic, and Educational Health Inequities in the US." *JAMA* 329 (19): 1682–692.

Mainardi, A. S., D. Harris, A. Rosenthal, C. A. Redlich, B. Hu, and A. M. Fenick. 2023. "Reducing Asthma Exacerbations in Vulnerable Children through a Medical-Legal Partnership." *Journal of Asthma* 60 (2): 262–69.

Mayberry, R. M., D. A. Nicewander, H. Qin, and D. J. Ballard. 2006. "Improving Quality and Reducing Inequities: A Challenge in Achieving Best Care." *Baylor University Medical Center Proceedings* 19 (2): 103–18.

Mikkelsen, L., and E. Baumgartner. 2019. "The Community-Centered Health Home Model: Bridging Health Care and Community Health." Presentation given at the Communities Joined in Action National Conference, Seattle, WA, April 24.

Mitchell, B., and J. Franco. 2019. "HOLC 'Redlining' Maps: The Persistent Structure of Segregation and Economic Inequality." Washington, DC: NCRC.

Mitchell, F. 2016. "Innovations in Health Equity and Health Philanthropy." *Stanford Social Innovation Review*, Spring.

Naeem, J., E. Salazar-Contreras, V. Sundaram, L. Wainwright, K. Kosel, and S. Miff. 2022. "The Dallas Accountable Health Community: Its Impact on Health-Related Social Needs, Care, and Costs." *NEJM Catalyst* 3 (9).

Patel, D. A., M. Salahuddin, M. Valerio, N. Elerian, K. J. Matthews, P. McGaha, R. Nelson, and D. L. Lakey. 2021. "A Participatory, State-Community-Academic Model to Improve Pregnancy Outcomes in Texas: The Healthy Families Initiative." *Health Education and Behavior* 48 (5): 690–99.

Poulos, N., D. Mandell, D. Lakey, and E. Nehme. 2022. "Food Bank–Healthcare Partnerships in Texas: Cultivating Sustainable Partnerships with Population Health Impact." Austin: University of Texas Health Science Center at Tyler and University of Texas Systems Administration, Office of Population Health.

Rolf, S., L. Garnham, J. Godwin, I. Anderson, P. Seaman, and C. Donaldson. 2020. "Housing as a Social Determinant of Health and Wellbeing: Developing an Empirically Informed Realist Theoretical Framework." *BMC Public Health* 20: 1138.

Sharma, S. V., N. Tice, R. Mak, J. Klotz, and E. M. Marks. 2023. "Food is Medicine: A Primer on Health System Initiatives in Texas." Houston, TX: Center for Health and Biosciences Issue Brief. Baker Institute for Public Policy, Rice University.

Sim, S.-C., E. Marks, J. Sutton, Eran Ben-Porath. 2021. "Texas Residents' Views on State Health Policy Priorities." Houston: Episcopal Health Foundation.

Swope, C. B., and D. Hernandez. 2020. "Housing as a Determinant of Health Equity: A Conceptual Model." *PubMed Central*, April 10.

Texas Black Caucus Foundation. 2021. "Refunding the Center for Elimination of Disproportionality and Disparities." Austin: Texas Black Caucus Foundation.

Texas DSHS (Department of State Health Services). 2021. *2021 Healthy Texas Mothers and Babies Data Book*. Austin: Texas DSHS.

———. 2022. *Texas Maternal Mortality and Morbidity Review Committee and Department of State Health Services Joint Biennial Report 2022.* Austin: Texas DSHS.

———. 2023. *Addendum* - *Texas Maternal Mortality and Morbidity Review Committee and Department of State Health Services Joint Biennial Report 2022.* Austin: Texas DSHS.

Texas HHSC (Health and Human Services Commission). 2023. "Non-Medical Drivers of Health Action Plan." Austin: Texas Health and Human Services Commission.

Tierney, W. M. 2018. "Use of Stakeholder Focus Groups to Define the Mission and Scope of a New Department of Population Health." *Journal of General Internal Medicine* 33 (7): 1069–1076.

United Health Foundation. 2022. *2022 Annual Report*. Minneapolis: United Health Foundation.

UT Southwestern. 2019. *Life Expectancy at Birth in Communities across Texas: 2005–2014—Data Summary and Technical Report.* Dallas: University of Texas Southwestern Medical Center.

Valerio, V. C., J. Downey, S. K. Sgaier, W. M. Callaghan, B. Hammer, and P. Smittenaar. 2023. "Black-White Disparities in Maternal Vulnerability and Adverse Pregnancy Outcomes: An Ecological Population Study in the United States, 2014–2018." *The Lancet: Regional Health—Americas* 20: 100456.

Vanhoose, L., S. Mills, S. Sim, K. Gahremani, and J. Lynch. 2023. "Non-Medical Drivers of Health (NMDOH) Strategies: Findings from a 2022 Survey of Managed Care Organizations (MCOs) in Texas." Houston, TX: Episcopal Health Foundation.

Wallerstein, N., and B. Duran. 2010. "Community-Based Participatory Research Contributions to Intervention Research: The Intersection of Science and Practice to Improve Health Equity." *American Journal of Public Health* 110 (Suppl 1): S40–S46.

Weinstein, J. N., A. Geller, Y. Negussie, and A. Baciu, eds. 2017. "The Root Causes of Health Inequity." *Communities in Action: Pathways to Health Equity*. Washington, DC: National Academies Press.

WHO (World Health Organization). 2010. *Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and Their Measurement Strategies*. Washington, DC: WHO.

Williams, D. R., and C. Collins. 2001. "Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health." *Public Health Reports* 116 (5): 404–16.

About the Authors

Nadia J. Siddiqui is an independent consultant on community health and health equity based in Houston, Texas. Before consulting, she served as chief health equity officer at Texas Health Institute (THI) and provided leadership, strategy, and direction on national, state, local, and community research and programs addressing health disparities and advancing health equity. Siddiqui spent over a decade at THI, co-leading and collaborating on initiatives such as the inaugural America's Health Rankings *Health Disparities Report*, biennial America's Health Rankings *Health of Those Who Have Served Reports*, RWJF-funded initiatives including *Aligning Systems for Health Equity in Texas* and the national *Health Opportunity and Equity (HOPE)* initiative. Previously, her research focused on informing policy change for racial equity in health reform initiatives and public health and disaster preparedness. Siddiqui has a master of public health in health policy and management from the University of Arkansas for Medical Sciences College of Public Health and a bachelor of arts in economics, with honors, from the University of Texas at Austin.

Sarah Morriss is a research assistant in the Health Policy Center at the Urban Institute. She analyzes data and assists with questionnaire development for Urban's Well-Being and Basic Needs Survey. She also contributes to policy briefs and papers on topics related to health equity, health care access, and disability. Morriss has a bachelor's degree in economics and public policy from the University of Chicago.

Kimá Joy Taylor is the founder of Anka Consulting, a health care consulting firm, and a nonresident fellow at the Urban Institute. Taylor collaborates with Urban Institute researchers on several topics, including analyses of racial disparities in screening and treatment practices for parents with substance use disorder, management of neonatal abstinence syndrome at hospitals in California, and prevention and early detection of mental and behavioral health problems among adolescents and young adults.

She most recently served as the director of the Open Society Foundations' National Drug Addiction Treatment and Harm Reduction Program. She oversaw grantmaking that supported the expansion of access to a nonpunitive continuum of integrated, evidence-informed, and culturally effective substance use disorder services. Before joining the Open Society Foundations, Taylor served as deputy commissioner for the Baltimore City Health Department, a health and social policy legislative assistant for Senator Paul S. Sarbanes, and a pediatrician at a federally qualified health center in Washington, DC. Taylor is a graduate of Brown University, Brown University School of Medicine, and the Georgetown

University residency program in pediatrics. In 2002, Taylor was awarded a Commonwealth Foundation fellowship in minority health policy at Harvard University.

Brian Smedley is among the inaugural class of equity scholars at the Urban Institute, where he conducts research and policy analysis to address structural and institutional forms of racism that affect the health and well-being of people of color. Previously, Smedley was chief of psychology in the public interest at the American Psychological Association, where he led the organization's efforts to apply the science and practice of psychology to the fundamental problems of human welfare and social justice. Among his other prior positions are cofounder and executive director of the National Collaborative for Health Equity, codirector of the Robert Wood Johnson Foundation Culture of Health Leaders program, and vice president and director of the Health Policy Institute of the Joint Center for Political and Economic Studies. He also was a senior program officer at the Institute of Medicine (IOM), where he served as study director for the IOM report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, among other reports on diversity in the health professions and minority health policy. Smedley has been honored by the American Public Health Association, the Congressional Black Caucus, the Rainbow PUSH Coalition, and the American Psychological Association.

Smedley is the treasurer and a member of the board for the Poverty and Race Research Action Council, the chair of the advisory committee to the Maryland Office of Minority Health and Health Disparities, and a member of and consultant to the Institute for Healing Justice and Equity at Saint Louis University.

Statement of Independence

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org