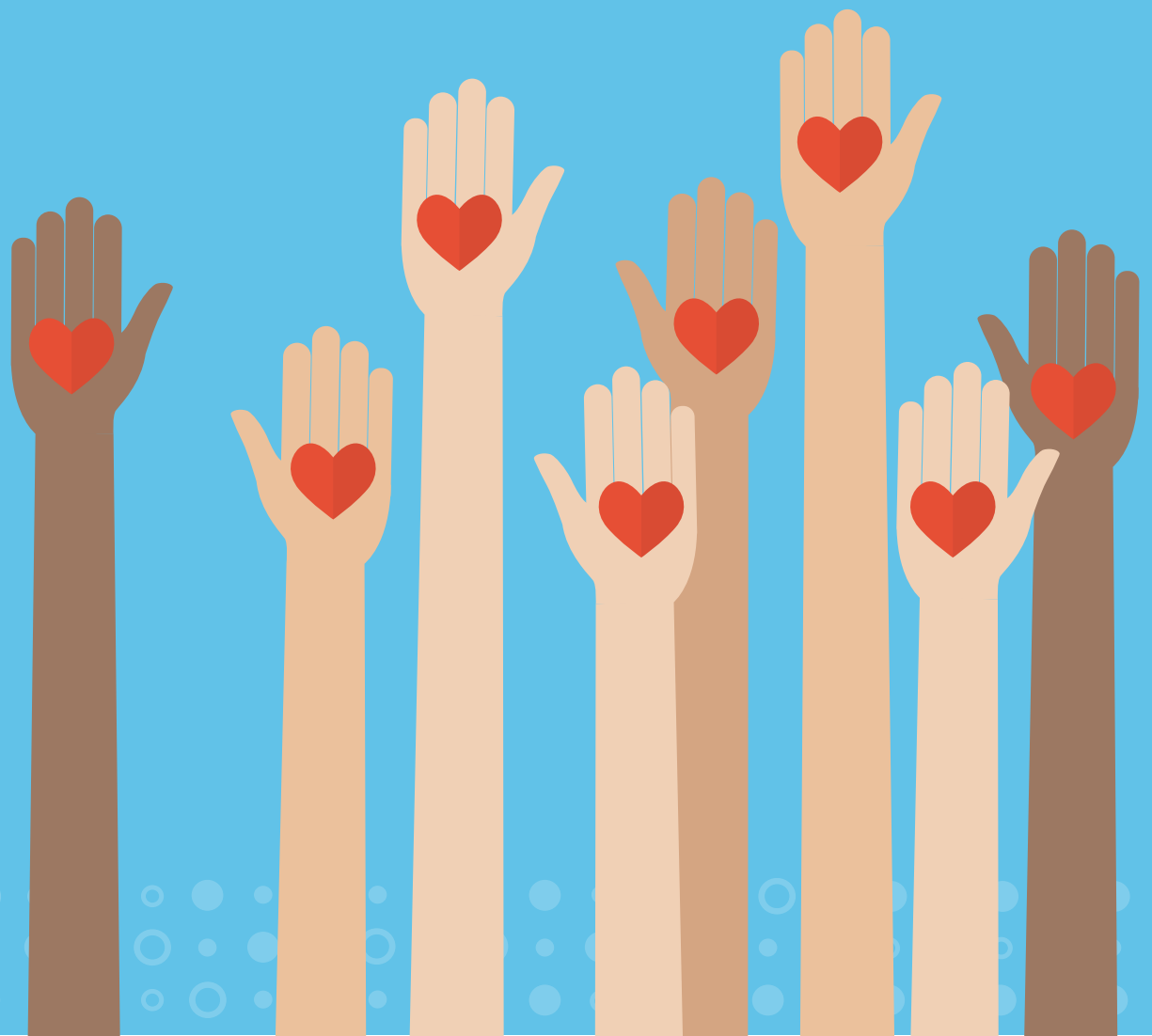


# Social determinants of health (SDoH) affect everyone



## Contents

---

What if your spending isn't getting results?	3
What shapes health outcomes: A new view	3
How do social determinants of health affect health outcomes?	3
Many groups experience multiple SDoH risk factors	4
Disparities follow vulnerable populations into the medical system	4
Why health inequities harm us all	5
The evidence shows health equity efforts pay off	6
What can health plans and self-insured employers do?	7
Conclusion: Traditional wellness programs don't help with SDoH risk factors	7
About MOBE	7
Sources	8



## What if your spending isn't getting results?

Health plans and employers spend billions of dollars to create healthy populations of people with a strong sense of well-being. But what if all that cost and effort accomplishes less than you think? What if the strongest drivers of health outcomes are beyond the reach of today's health care system? Surprisingly, the latest research backs up that conclusion.

## What shapes health outcomes: A new view.

Today, our vision of what it takes to attain our best health looks much different than it once did.

In the past, access to health care and the quality of care provided were seen as the key drivers of health. But now we know that's only part of the equation.

### In fact, researchers estimate that health care drives only 20% of the outcome.

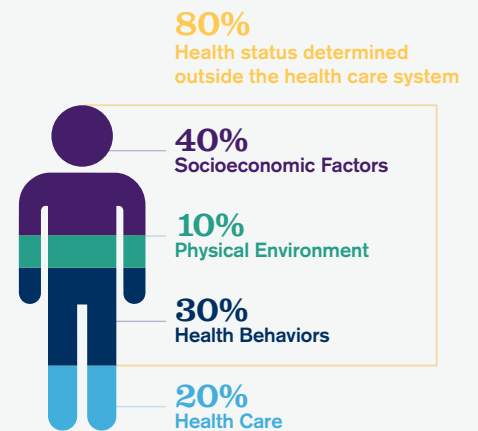
A full 80% of health outcomes is driven by other factors:

- 40% by socioeconomic factors
- 10% by physical environment
- 30% by health behavior patterns

And behaviors themselves are heavily influenced by social circumstances.<sup>1</sup>

## How do social determinants of health affect health outcomes?

The socioeconomic and environmental factors that influence health outcomes are known as "social determinants of health" (SDoH). These are the conditions in which people live, learn, work, and play. All of these have a profound impact on health. Some generally lead to positive outcomes and others to negative ones.



## Consider these three scenarios that illustrate different SDoHs:

1

A single dad in an inner-city neighborhood holds down two jobs to support his two young sons. But there is no supermarket nearby stocked with fresh fruit and vegetables. And he has no time to improve his cooking. So, his family meals are made up of fast food and packaged snacks. In time, both he and his older son are diagnosed with prediabetes.

2

A college-educated white woman fills a prescription but feels uneasy after reading the instructions on the bottle. She's a confident professional who attended school with many pre-med students, so she's not shy about telling her doctor she believes a mistake was made. She's right, and she saves herself from a dangerous drug interaction.

3

An older woman on a fixed income has no car, and the bus route near her house has been cut. A neighbor is planning to drive her to get a COVID vaccination but cancels because of a family emergency. The woman never gets her vaccination.

As these stories show, social circumstances have broad, long-term consequences on health. Many SDoH health risks are widespread.

About 3.6 million people in the U.S. skip medical care every year because of transportation issues, for example.<sup>2</sup>

And whole families suffer, not just individuals. When a family experiences social risks and adversity across generations, that can actually create changes in the genome that are passed down to the children.<sup>3</sup>

### **Many groups experience multiple SDoH risk factors.**

In a world with health equity, every person would have the opportunity to attain their best health. No one's health would be limited by factors such as racial or gender discrimination or by the high levels of pollution in their neighborhood.

In the real world, having multiple SDoH risk factors leads to many health disparities—preventable differences in disease burdens—for specific demographic groups.

For example, workers with low incomes, regardless of race or ethnicity, are at higher risk for earlier onset of chronic diseases and earlier mortality than workers with high incomes.

An adult with a family income below the federal poverty level (FPL—\$27,750 for a family of four) is 4.5 times more likely to suffer clinical depression than someone with family earnings of four times the FPL (\$111,000 for a family of four).<sup>4</sup>

For people who identify as Black, the risk of developing diabetes is 77% higher than for people who are white. For those who identify as Hispanic/Latino, the risk is 66% higher than for whites. Asian and Pacific Islander Americans have double the risk of developing diabetes as the overall population.<sup>5</sup>

## Disparities follow vulnerable populations into the medical system.

Health care systems aren't always designed to support people who speak languages other than English. People who can't speak English well have longer hospital stays, more readmissions, and more admissions for conditions that are usually treated in outpatient facilities. They're also more likely to have inappropriate and expensive tests.<sup>6</sup>

And not speaking English is just one example of what can lead to disparities in the medical system. The lack of inclusivity in studies has left doctors with limited understanding of the health of female and intersex people.<sup>7</sup> And many clinical trials haven't represented diverse racial/ethnic populations, leaving gaps in understanding safety and efficacy of treatments.<sup>8</sup>

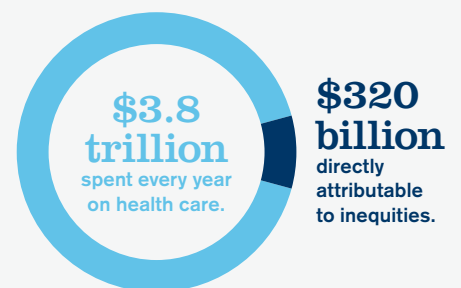
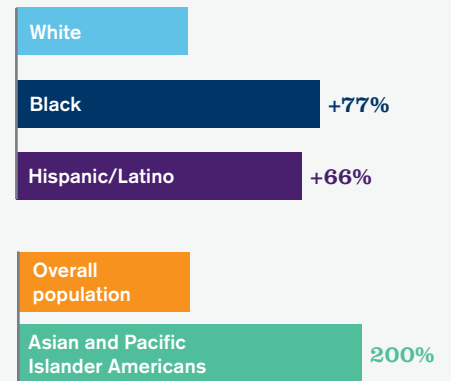
## Why health inequities harm us all.

Health disparities drive up medical costs at every level: for individuals, health plans, employers, and the nation.

The U.S spends more than \$3.8 trillion a year on health care. And 8.4% of that total—or \$320 billion a year—can be attributed directly to health inequities.

More than 30% of the medical costs faced by people who identify as Black, Hispanic, or Asian American are due to a lack of access to preventive-health resources. That can be something as basic as no nearby access to a pharmacy or a grocery store that sells fresh or affordable fruit and vegetables.

Risk of developing diabetes.



The U.S. expenditure on health care and how much is directly attributed to health inequities.

If these health disparities are not addressed, they could add \$1 trillion to U.S. health spending by 2040.<sup>9</sup> And employers and health plans fund much of that. Employer plans cover more individuals than any other payer: 54.5% of the population. (In second place, Medicare covers another 18.4%.)<sup>10</sup>

But unnecessarily high medical costs aren't the only problems related to health equity. U.S. businesses absorb an estimated \$42 billion a year from disparity-driven illnesses and conditions like early-onset type 2 diabetes or hypertension that drive workers to be absent or to quit their jobs.<sup>11</sup>

**\$42 billion/year**

Estimated amount absorbed by businesses due to health-related employee absences/departures.

## The evidence shows that health equity efforts pay off.

Improving health equity in our nation means facing these stark, innumerable disparities. And it means finding ways to help people who face barriers to optimal health due to social and environmental factors.

Up to now, most efforts to tackle this problem have come from businesses and nonprofits working with public payers like Medicare and Medicaid. And these efforts have proven their value, by reducing avoidable health emergencies and the high-cost medical interventions they lead to.

### Here are two examples from real-life case studies:

1

A county-based safety-net organization in Minnesota called Hennepin Health serves a population where 70% belong to historically underrepresented racial and ethnic groups.

Hennepin Health used questionnaires to determine the SDoH risk factors for its Medicaid population. Then they helped coordinate services like placement in affordable housing, substance abuse counseling, and vision care for high-risk patients.

In 18 months, Hennepin saw a 9.1% drop in emergency room visits, and a 3.3% rise in preventive-care visits. The effort netted financial savings and increased the percentage of patients getting optimal levels of care for asthma, diabetes, and heart disease.<sup>12</sup>

2

Pennsylvania's Reading Hospital screened its Medicare and Medicaid populations for SDoH risk factors, including unreliable transportation, housing instability, and no reliable, nutritious food source.

Staff then helped individuals access local resources to meet those needs.

In the first year, the hospital saved \$1 million. The savings came from a 15% decrease in emergency room visits for issues that could be handled in outpatient settings or avoided with better preventive care.<sup>13</sup>

## What can health plans and self-insured employers do?

Many health plans and employers understand why it's urgent to address health inequity. Many are looking for ways to mitigate SDoH risk factors that increase the risk of poor medical outcomes.

### The question is: How?

The market is flooded with solutions designed to improve personal health. But few seriously address SDoH risk factors. And while many vendors claim to address these factors, buyers may not be sure how to evaluate these claims.



## Conclusion: Traditional wellness programs don't help with SDoH risk factors.

Health plans and self-insured employers invest HEAVILY in wellness solutions, hoping to help those they cover keep minor health ills from becoming big problems. And since wellness programs focus on helping people build good health habits, they seem like ideal partners.

But research now clarifies that, for many, incorporating needed healthy habits into daily life isn't possible without addressing SDoH risk factors. Some people may not have access to safe, clean green spaces for outdoor activities. Some may need medication instructions translated into the language they speak at home. And some may live in a food desert.

Most health and wellness programs aren't set up to deal with these risks.

## About MOBE.

MOBE is a health outcomes company. We improve health by providing a high-touch, one-to-one coaching program focused on lifestyle, emotional well-being, and comprehensive medication management. Using advanced analytics, we identify populations where we can make a real difference in both individual health status and expense reduction for our clients.

We embrace everything that has shaped a person, from cultural background to physical, mental, and social circumstances and everything in between. MOBE is committed to diversity, equity, and inclusion, and we seek partnership with others who share our values. Connect with us for more information about how we'll make a difference in the health outcomes of your people.

## Sources

- <sup>1</sup> "Going Beyond Clinical Walls: Solving Complex Problems," Robert Wood Johnson Foundation, Institute for Clinical Systems Improvement, October 2014, accessed November 28, 2022, [https://www.icsi.org/wp-content/uploads/2019/08/1.SolvingComplexProblems\\_BeyondClinicalWalls.pdf](https://www.icsi.org/wp-content/uploads/2019/08/1.SolvingComplexProblems_BeyondClinicalWalls.pdf).
- <sup>2</sup> "Social Determinants of Health Series: Transportation and the Role of Hospitals," American Hospital Association, November 2017, accessed November 28, 2022, <https://www.aha.org/aharet-guides/2017-11-15-social-determinants-health-series-transportation-and-role-hospitals>.
- <sup>3</sup> Hunter Howie, Chuda M. Rijal and Kerry J. Ressler, "A Review of Epigenetic Contributions to Post-Traumatic Stress Disorder," *Dialogues in Clinical Neuroscience* 21, no 4 (December 2019): 417-428, <https://doi.org/10.31887/DCNS.2019.21.4/kressler>.
- <sup>4</sup> Debra J. Brody et al., "Prevalence of Depression for Adults Aged 20 and Over: United States, 2013-2016," National Center for Health Statistics Data Brief No. 303, Centers for Disease Control and Prevention, February 2018, accessed November 28, 2022, <https://www.cdc.gov/nchs/products/databriefs/db303.htm>.
- <sup>5</sup> Kenneth E. Thorpe et al., "The United States Can Reduce Socioeconomic Disparities by Focusing on Chronic Diseases," *Health Affairs*, August 17, 2017, accessed November 28, 2022, <https://www.healthaffairs.org/doi/10.1377/forefront.20170817.061561/full/>.
- <sup>6</sup> R. Wyatt et al., "Achieving Health Equity: A Guide for Health Care Organizations," IHI White Paper, Institute for Healthcare Improvement, 2016, accessed November 28, 2022, <https://www.ihl.org/resources/Pages/IHIWhitePapers/Achieving-Health-Equity.aspx>.
- <sup>7</sup> Zawn Villines, "What to Know About Gender Bias in Healthcare," *MedicalNewsToday*, October 25, 2021, accessed November 28, 2022, <https://www.medicalnewstoday.com/articles/gender-bias-in-healthcare>.
- <sup>8</sup> Darrell M. Gray II et al., "Diversity in Clinical Trials: An Opportunity and Imperative for Community Engagement," *Lancet Gastroenterology & Hepatology* 6, no 8 (August 2021): 605-607, [https://doi.org/10.1016/S2468-1253\(21\)00228-4](https://doi.org/10.1016/S2468-1253(21)00228-4).
- <sup>9</sup> Andy Davis and Yale Yoon, "At \$320B a Year, We Can't Ignore the Cost of Health Inequities," *Deloitte Health Forward Blog*, July 19, 2022, accessed November 28, 2022, <https://www2.deloitte.com/us/en/blog/health-care-blog/2022/at-threetwenty-billion-dollar-a-year-we-cant-ignore-the-cost-of-health-inequities.html>.
- <sup>10</sup> Katherine Keisler-Starkey and Lisa N. Bunch, "Health Insurance Coverage in the United States: 2020," United States Census Bureau Report No. P60-274, September 14, 2021, <https://www.census.gov/library/publications/2021/demo/p60-274.html>.
- <sup>11</sup> Nambi Ndugga and Samatha Artiga, "Disparities in Health and Health Care: 5 Key Questions and Answers," Kaiser Family Foundation, May 11, 2021, accessed November 28, 2022, <https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/>.
- <sup>12</sup> Shana F. Sandberg et al., "Hennepin Health: A Safety-Net Accountable Care Organization for the Expanded Medicaid Population," *Health Affairs* 33, no 11 (November 2014), <https://doi.org/10.1377/hlthaff.2014.0648>.
- <sup>13</sup> "Making the Business Case for Addressing Health-Related Social Needs," Centers for Medicare & Medicaid Services, June 2022, accessed November 28, 2022, <https://innovation.cms.gov/media/document/ahc-reading-hosp-spotlight>.