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CARDI•OH
Ohio Cardiovascular and Diabetes Health Collaborative

Social Determinants of Health: An Overview

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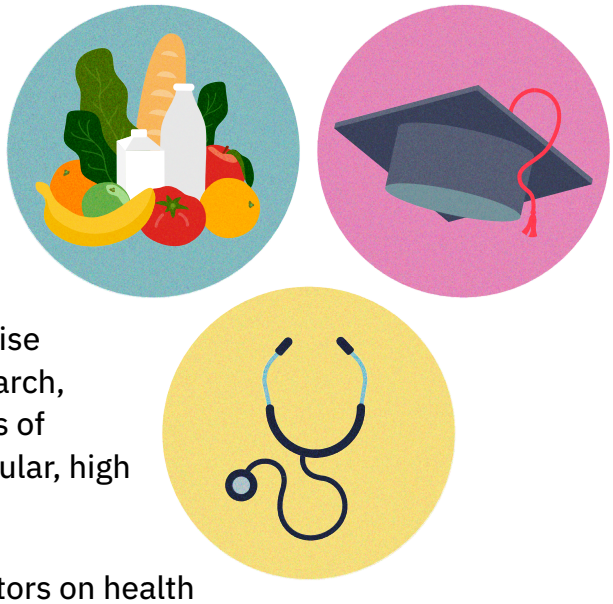


In recent years the need to address social determinants of health (SDOH) has been clearly recognized by health care payers, patients, health professionals and provider organizations.[1]

In this executive summary overview, we provide a concise summary of the current and future implications of research, best practices and ongoing work on social determinants of health as related to cardiovascular health and, in particular, high blood pressure in Ohio.

The powerful influence of social and environmental factors on health outcomes has long been acknowledged by health care practitioners and epidemiologists since the times of Hippocrates, Galen and Snow.[1] Interest in investigating and addressing SDOH continues to grow within health care organizations, and for Medicaid providers in particular. Healthy People 2030 has provided a brief definition for *social determinants of health*: "conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[2]

Multiple clinical, biomedical, research and professional organizations have elaborated on this definition and embraced social determinants in multiple domains to a varied degree of breadth and specificity. For example, Healthy People 2030 further organizes social determinants into five areas: Economic Stability, Education Access and Quality, Health Care Access and Quality, Neighborhood and Built Environment, and Social and Community Context.[2]

*Social Determinants of Health Working Group

Social Determinants Screening Tools

In recent years, multiple professional and scientific associations and some provider organizations have sought to create, promote and distribute brief social determinants screening tools for use in clinical settings. These include the National Academy of Medicine,[3] the American Association of Family Physicians,[4] Kaiser Permanente,[5] and several others. These tools share a common set of "core" social determinants concepts. While each organization's list might vary slightly, a core set of concepts should minimally include: housing, food, transportation, income, education, interpersonal violence, and social support.

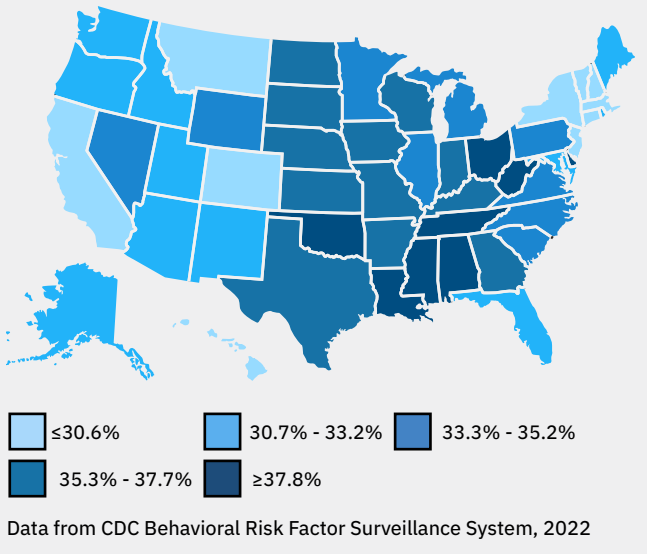
Social Determinants and Cardiovascular Health in Ohio

Ohio consists of 88 counties that are a combination of urban, rural and suburban areas. The five main urban areas are located in Cuyahoga (Cleveland), Franklin (Columbus), Hamilton (Cincinnati), Lucas (Toledo), and Summit (Akron/Canton) counties. The other 83 counties are smaller metropolitan areas, with the majority consisting of a mix of suburban, rural and rural/Appalachian areas. The Ohio Department of Health's Online State Health Assessment shows the demographics of Ohio together with health outcomes such as prevalence of chronic disease, length of life, quality of life, and health behaviors.[6] The dashboard shows that cardiovascular disease, hypertension, obesity, diabetes and related risk factors (such as tobacco use, sedentary lifestyle and poor nutrition) are salient concerns for Ohio. According to the dashboard, obesity, heart disease, and hypertension are highly-prevalent conditions in Ohio. More than 12% of Ohioans have diabetes and more than 35% have hypertension.[6] All three of these conditions were more common among middle-aged Ohioans than younger Ohioans, indicating that chronic disease will be a significant challenge for Ohio's growing aging population in the coming years.) By age 55-64, nearly one-fifth of Ohioans reported having diabetes.

According to the America's Health Rankings annual report, in 2023, Ohio ranked 44th in the nation for obesity, 42nd for cardiovascular disease, and 38th for both hypertension and premature death[7] (See Figures 1 and Figure 2).

Figure 1. Obesity by State

Adults with BMI ≥ 30 based on reported height and weight

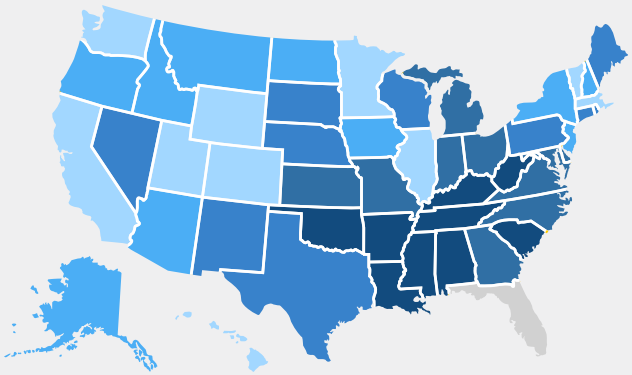


Data from CDC Behavioral Risk Factor Surveillance System, 2022

Adapted from *America's Health Rankings*[7]

Figure 2. High Blood Pressure by State

Adults reporting a diagnosis of high blood pressure



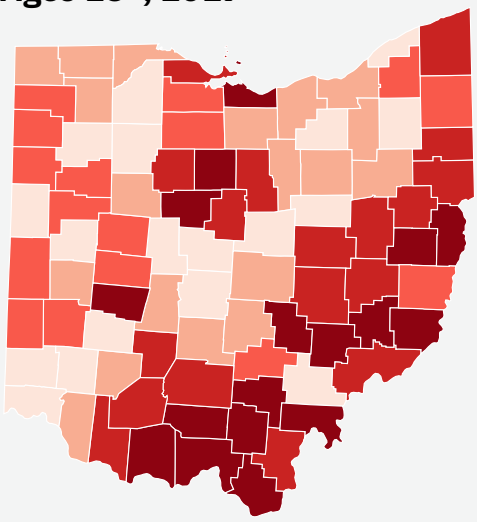
Data from CDC, Behavioral Risk Factor Surveillance System, 2021

Adapted from *America's Health Rankings*[7]

Maps of Ohio by county indicate that urban counties and counties located along the south and southwest borders of the Ohio River experience the highest rates of avoidable cardiovascular death.[8] Counties at the bottom of the rankings for health outcomes are primarily urban and rural, with the largest cluster considered rural/Appalachian. Maps of social and economic factors, such as the poverty rate, similarly indicate that high poverty counties tend to be the same counties with higher levels of avoidable cardiovascular death. Data on health at the county level are completed every few years and are available for all counties or clusters of counties in Ohio. They show a high burden of hypertension and diabetes (See Figures 3 and Figure 4.)[8]

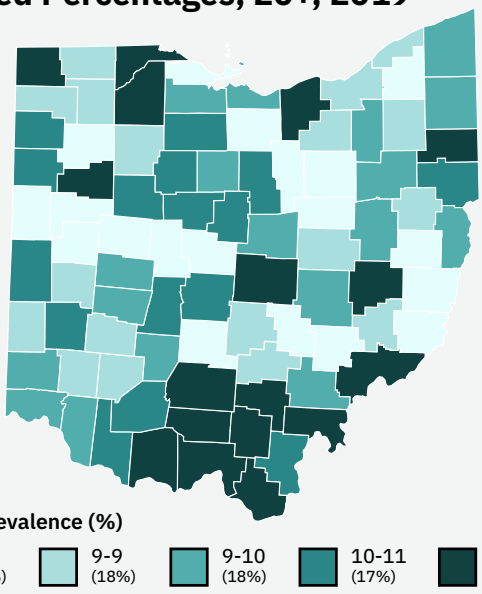
Health factors in the county health rankings represent the focus areas that drive how long and how well we live, including health behaviors (tobacco use, diet and exercise, alcohol and drug use, sexual activity), clinical care (access to care, quality of care), social and economic factors (education, employment, income, family and social support, community safety), and the physical environment (air and water quality, housing). Counties clustered along the southern border of Ohio and in urban counties have the lowest rankings.[8]

Figure 3. High Blood Pressure in Ohio Among Adults Ages 18+, 2019



Adapted from *Interactive Atlas of Heart Disease and Stroke*[8]

Figure 4. Diagnosed Diabetes in Ohio, Age-Adjusted Percentages, 20+, 2019



Adapted from *Interactive Atlas of Heart Disease and Stroke*[8]

Addressing Social Determinants of Health

Efforts to address SDOH will need to extend far beyond the walls of health care clinics, hospitals and emergency rooms. The long term and sustainable pathway to improved health is one that involves creating healthier communities through a combination of public policy, institutional change, and fundamental reworking of the ways in which people relate to one another and to their environments, as well as healthcare facilities. The COVID-19 pandemic intensified and highlighted social needs in vulnerable communities. While some populations continue to be disproportionately affected by COVID-19 and long term health consequences of COVID-19, innovations in telehealth and in social programs have been wide ranging. For example, the Affordable Connectivity Program has dramatically expanded access to digital health tools for many Ohioans (See Additional Resources).

Insurers, providers and policy makers have also expanded their focus on identifying high value pathways to improved health that can be initiated quickly at the level of individual patients and within current processes of care. In order to respond to these SDOH, Cardi-OH also seeks to highlight emerging strategies with potential for ameliorating social needs among Medicaid patients in Ohio. Screen and refer models to address SDOH continue to be implemented and evaluated by several organizations (e.g., Pathways Community Hubs [See Additional Resources], Ohio Comprehensive Primary Care initiative, Accountable Health Communities initiatives, and United Way 211) and are underway at practices across the state. New evidence and best practices continue to emerge. Projects across the state are seeking to implement innovations like Food Pharmacy onsite at health clinics to address food insecurity, health centric ride-sharing apps to address transportation challenges, novel health clinic and novel cash assistance programs. In addition, the 2018 Ohio Community Health Worker Statewide assessment provided a clear and feasible pathway toward improving the health and social conditions that shape outcomes for Ohio communities, "[Community Health Workers] are well-suited to act as a bridge between community members and the health system to help ensure access to care at the right time and adherence to treatment plans."[9] Adoption of CHW approaches across the state has continued (See Additional Resources). By bringing together efforts to address patients' social needs with appropriate clinical best practices, these initiatives hold the promise for markedly advancing healthcare delivery and improving the cardiovascular health of the Medicaid population.

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Additional Cardi-OH Resources

Community Health Workers

- **Integrating Community Health Workers as a Part of the Health Care Team**
  cardi-oh.org/resources/integrating-community-health-workers-as-a-part-of-the-health-care-team
- **Capsule 46 - Utilizing Community Health Workers to Advance Health Equity**
  cardi-oh.org/resources/capsule-46--utilizing-community-health-workers-to-advance-health-equity
- **Podcast 46 - Community Health Workers: Connecting Clinical Practices to Patient Neighborhoods**
  cardi-oh.org/resources/podcast-46--community-health-workers-connecting-clinical-practices-to-patient-neighborhoods
- **Webinar - Success Stories from the Field: Involving Community Health Workers in Team-based Cardiometabolic Care**
  cardi-oh.org/resources/success-stories-from-the-field-involving-community-health-workers-in-team-based-cardiometabolic-care

Digital Divide

- **Overcoming the Digital Divide**
  cardi-oh.org/resources/overcoming-the-digital-divide
- **Capsule 26 - Closing the Digital Divide on Affordable Internet Access**
  cardi-oh.org/resources/capsule-26--closing-the-digital-divide-on-affordable-internet-access
- **Podcast 24 - Bridging the Digital Divide in Health Care**
  cardi-oh.org/resources/podcast-24--bridging-the-digital-divide-in-health-care

Pathways Community HUBs

- **Ohio Pathways Community HUBs: Understanding the Benefits for Patients with Diabetes**
  cardi-oh.org/resources/ohio-pathways-community-hubs-understanding-the-benefits-for-patients-with-diabetes
- **Capsule 19 - Connecting Patients With Diabetes to Pathways Community HUBs to Address Social Needs**
  cardi-oh.org/resources/capsule-19--connecting-patients-with-diabetes-to-pathways-community-hubs-to-address-social-needs

Screening Tools

- **Social Needs Screening Tools**
  cardi-oh.org/resources/social-needs-screening-tools

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