

Disparities in Diabetes by Geography

A Healthy Metric 2023 Brief Report for Wisconsin



Healthy Metric
Advancing Health Equity in Wisconsin

Report Goal

Our goal is to examine differences in diabetes management between people with diabetes alone and those with diabetes and cardiovascular disease, considering whether they live in rural or urban areas.

About Healthy Metric

Healthy Metric is a partnership between UW-Madison, the Medical College of Wisconsin, Marshfield Clinic Research Institute, the Wisconsin Collaborative for Healthcare Quality, and the Wisconsin Health Information Organization that aims to eliminate health disparities in Wisconsin through collaboration, measurement, and interventions.

About the Measures

Optimal control in diabetes: The percent of adults with diabetes (age 18-75) who met all the following conditions: most recent A1c test result was less than 8%, most recent blood pressure measurement was less than 140/90 mmHg, most recent tobacco status was tobacco-free, prescribed daily aspirin or other antiplatelet for adults with heart disease, and used a statin within the one-year measurement period.

Tobacco-free in diabetes: The percent of adults with diabetes (age 18-75) whose most recent tobacco status was tobacco-free.

Measure Goal

Achieving the highest rates of optimal control and tobacco-free status for both patients with diabetes and cardiovascular conditions, as well as patients with diabetes alone.

Cardiovascular Conditions Included

Coronary artery disease, myocardial ischemia, congestive heart failure, and/or cardiomyopathy

Data



Data includes individuals who received health care services from a WCHQ member health system/clinic in 2022.

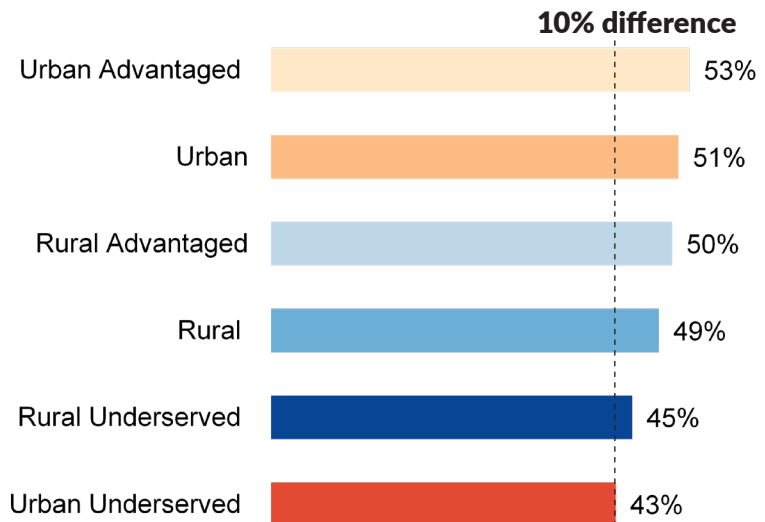
Contact

For more information about Healthy Metric, visit: www.healthymetric.org

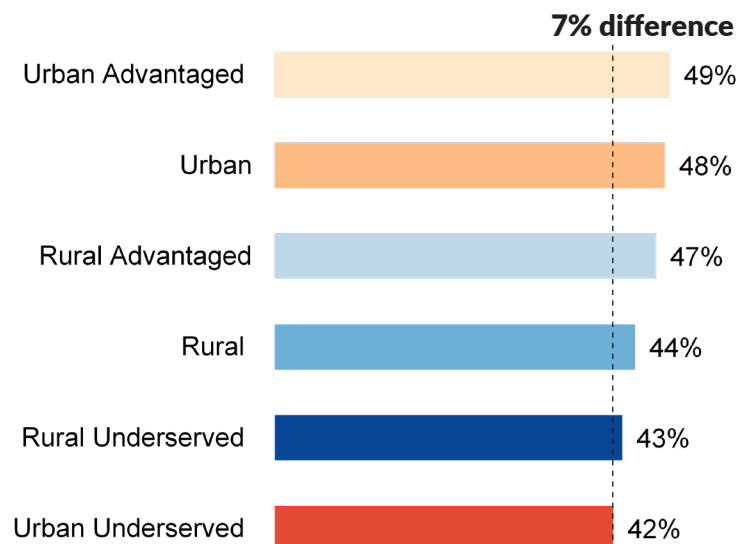
Key Findings

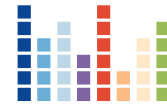
- Patients with diabetes and cardiovascular conditions had higher rates of optimal control in diabetes compared to patients with diabetes alone across all geographic areas.
- Patients with diabetes living in urban and rural underserved areas experienced disparities in diabetes optimal control compared to patients in urban advantaged areas, with greater disparities among those who also have cardiovascular conditions.

Optimal Control for Patients with Diabetes and Cardiovascular Conditions



Optimal Control for Patients with Diabetes Only





Key Findings

- Disparities in being tobacco-free contributed greatly to geographic disparities in optimal control in diabetes.
- Patients with diabetes (with or without cardiovascular conditions) had similar rates of being tobacco-free.
- Patients who live in underserved areas (with or without cardiovascular conditions) experienced substantial disparities in being tobacco-free compared to patients in urban advantaged areas.
- There are major opportunities to reduce tobacco use in rural and urban underserved areas for patients with diabetes, particularly for those who also have cardiovascular conditions.

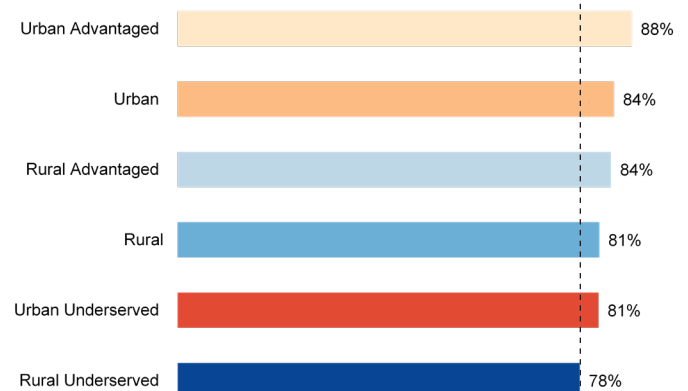
Tobacco-Free for Patients with Diabetes and Cardiovascular Conditions

9% difference



Tobacco-Free for Patients with Diabetes Only

10% difference



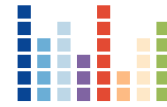
Impact of Geography on Optimal Control and Tobacco Use in Diabetes^{1,2}

Access to Healthcare: Urban areas often have better access to healthcare facilities, specialized clinics, and diabetes management resources, which may contribute to better diabetes control compared to areas with limited healthcare infrastructure. Patients may experience other barriers to accessing healthcare such as being uninsured or underinsured, lacking transportation to get to clinics, and difficulty leaving work to seek healthcare. Limited healthcare access (e.g., tobacco cessation programs) and awareness about tobacco risks contribute to higher tobacco use rates in underserved areas. Tobacco use can contribute to the development of cardiovascular disease and worsen diabetes outcomes with continued use.

Socioeconomic Factors: Advantaged areas with higher socioeconomic status may have better access to health-supporting resources such as nutritious food options, physical activity facilities, transportation, and diabetes self-management resources, leading to improved control compared to underserved areas. Individuals with lower socioeconomic status may reside in areas with higher tobacco availability or have greater exposure to smoking norms within their communities, making it more difficult to quit or resist tobacco use. Individuals of higher socioeconomic status may experience fewer challenges related to medication expenses and visit co-pays.

References

1. Hill-Briggs F, Adler NE, Berkowitz SA, et al. Social Determinants of Health and Diabetes: A Scientific Review [published online ahead of print, 2020 Nov 2]. *Diabetes Care*. 2020;44(1):258-279. doi:10.2337/dci20-0053
2. Garrett BE, Dube SR, Babb S, McAfee T. Addressing the Social Determinants of Health to Reduce Tobacco-Related Disparities. *Nicotine Tob Res*. 2015;17(8):892-897. doi:10.1093/ntr/ntu266



How can stakeholders use these data for action?

- **Healthcare Providers:** Healthcare providers, including physicians, nurses, and care teams, can utilize this information to assess the performance rates in different geographies. It can help them identify areas of improvement and develop targeted interventions to enhance patient care and outcomes such as quitting smoking and better diabetes testing and management.
- **Healthcare Administrators:** Administrators in healthcare organizations can use this information to evaluate the performance of different geographies within their healthcare system. It can guide resource allocation, strategic planning, and quality improvement efforts around tobacco cessation and diabetes care to ensure equitable and optimal care delivery.
- **Public Health Professionals:** Public health professionals, such as policymakers and researchers, can analyze the performance rates to gain insights into healthcare disparities across different geographies and chronic condition groups. This information can inform policy decisions, resource allocation, and interventions such as limiting access to tobacco and improving access to nutritious food and safe places to exercise to improve population health outcomes.
- **Quality Improvement Teams:** Quality improvement teams within healthcare organizations can leverage this data to identify areas with lower performance rates and implement targeted quality improvement initiatives to improve diabetes testing and treatment and smoking cessation. It can aid in setting performance goals, monitoring progress, and driving initiatives to enhance care quality and patient outcomes.
- **Patients and Advocacy Groups:** Patients and advocacy groups can use this information to raise awareness about disparities in diabetes care by geography, advocate for needed resources to improve diabetes management, and engage in initiatives aimed at enhancing healthcare outcomes.
- **Insurance Providers:** Insurance providers can use this information to develop programs that incentivize tobacco cessation for individuals with diabetes. This may include offering coverage for tobacco cessation medications, providing discounts on insurance premiums for non-smokers, or offering additional support services for tobacco cessation.

Resources for Taking Action to Reduce Disparities

- [Toolkit for Improving Chronic Conditions, Hypertension & Diabetes: Care & Outcomes](#)
- [Wisconsin Tobacco Quitline](#)
- [Quit Connect: A Protocol to Improve Tobacco Quit Line Referrals](#)
- [What Works for Health: Diabetes](#)
- [What Works for Health: Tobacco Use](#)

About the Funders

Advancing A Healthier Wisconsin Endowment (AHW): Driven by a vision for a healthier Wisconsin, the Advancing a Healthier Wisconsin Endowment reaches statewide, propelling the most promising work and ideas to build a healthier Wisconsin for generations to come.

Wisconsin Partnership Program (WPP): WPP represents a far-reaching commitment by the University of Wisconsin School of Medicine and Public Health to greatly improve the health of people in Wisconsin for years to come.

Healthy Metric is a partnership between:

