

Healthy Metric

Advancing Health Equity in Wisconsin

2023

Disparities in Mental Health Care and Outcomes

A Healthy Metric Report for Wisconsin

FUNDING PROVIDED BY:



ADVANCING A HEALTHIER
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SCHOOL OF MEDICINE AND PUBLIC HEALTH

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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

Healthy Metric is a partnership between the University of Wisconsin–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.

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Executive Summary

Healthy Metric developed this report to inform and accelerate programs to address and eliminate health disparities. Eliminating disparities in mental health care and outcomes will require health care organizations, health plans, health departments, policymakers, community organizations, researchers, employers, and others to work together.

The report focuses on achievement of depression screening (which is universally recommended), people visiting a health care provider for mild to moderate and severe mental health diagnoses, and the use of telehealth to treat mental health disorders. We selected these measures because they represent the continuum of outpatient mental health care. This report uses electronic health record data from the Wisconsin Collaborative for Healthcare Quality (WCHQ) and administrative health care claims data from the Wisconsin Health Information Organization (WHIO).

By publicly reporting differences in mental health care and outcomes in Wisconsin, the Healthy Metric program is drawing attention to these disparities to promote accountability and inform improvement efforts by all health care stakeholders. This report will help stakeholders identify opportunities to develop approaches within their communities to address these disparities and create a healthier Wisconsin for all.

KEY FINDINGS

- The number of Wisconsinites who sought treatment for mild to moderate depression and/or anxiety increased by over 63,000 people from 2019 to 2021.
- The percentage of visits in 2019 to 2021 was highest for people who lived in urban advantaged and urban areas and lowest for people who lived in rural underserved and urban underserved areas.
- Not all patients receiving primary care services were screened for depression. This suggests that the actual rate of depression may be higher than indicated in this report, particularly among urban underserved and rural populations
- There was a 40% increase in telehealth visits from 2019 to 2021, which was primarily driven by increases in urban advantaged areas. This indicates that telehealth is not closing gaps like we might have expected, particularly among rural populations.

Additional findings are outlined throughout this report.

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Introduction

Wisconsin residents experience some of the worst disparities in health and care quality in the nation,¹ with both rural and urban underserved and racial and ethnic minority populations experiencing significant disparities in health outcomes for chronic conditions such as diabetes, hypertension, and depression.²⁻⁴ The COVID-19 pandemic negatively impacted many people's mental health and introduced new barriers for people with preexisting mental illness in Wisconsin and nationally. Reducing disparities in mental health is a priority for the state of Wisconsin, with Governor Evers declaring 2023 "the year of mental health," including plans and funding to expand access to mental and behavioral health, particularly for Wisconsin's underserved populations.⁵

The *2019 Wisconsin Health Disparities Report* identified disparities in depression screening, with a lower percentage of all non-white races and ethnicities receiving a recommended screening compared to the white population, and a lower percentage of people with Medicaid insurance being screened than all other insurance types.⁶ In the *2020 Wisconsin Health Disparities Report: Rural and Urban Populations*, the depression screening rate was lower for urban advantaged and urban underserved populations than in other geographic areas.⁷

About this Report

This report presents recent Wisconsin data on disparities in mental health screening, outpatient visits, and telehealth visits by race and ethnicity, insurance type, age, and rural and urban geography.

This report also includes implications and opportunities for change, as well as resources for taking action to reduce disparities in mental health outcomes and care. While the potential opportunities and resources listed in this report are not exhaustive, they are intended to offer direction for stakeholders across the state.

Healthy Metric is confident that by identifying and publicly reporting these disparities, this report will draw attention to and promote public accountability, improvement, and action by multiple stakeholders. Information and tools to address disparities in mental health are included in the Taking Action section of the report.

Definition of Disparities in Mental Health Care and Outcomes

We use "disparities in mental health care and outcomes" to define a difference between selected groups of people in screening, diagnosis, treatment, and outcomes for mental health. Health and health care disparities often refer to differences that are not explained by variations in health needs, patient preferences, or treatment recommendations and are closely linked with social, economic, and/or environmental disadvantages.⁸

Race and Ethnicity

Nationally, disparities in health outcomes and health care exist for people of color⁹ (even when controlling for insurance status and income) and are often related to the social determinants of health, structural racism,¹⁰ or other factors.⁷ This report utilizes race and ethnicity categories as defined by the CDC,¹¹ and includes American Indian or Alaska Native, Asian/Pacific Islander, Black, Hispanic/Latino, and White.

Insurance Types

Disparities by health insurance coverage may exist due to differences in the populations that are insured, or due to variation in coverage, cost sharing (e.g., co-pay and deductible amounts), or the cost of medical services. This report categorizes insurance into three types: Commercial, Medicare Advantage, and Medicaid. In disparities evaluation, Medicaid is often used as a proxy for lower income people and Medicare, a proxy for people who are living on a fixed income which is often lower than during their working years.

Geography

Geographic disparities can be due to a number of factors such as difference in income levels, racial and ethnic composition, and the distribution of health care service providers. This report uses a grouping of Wisconsin ZIP codes developed by researchers and staff at UW-Madison that reflects different levels of health-related characteristics.^{7,12} The six geographic groups are: rural underserved, rural, rural advantaged, urban underserved, urban, and urban advantaged. To view maps of the rural and urban ZIP code groups in Wisconsin, see the Appendix.

Age

Disparities in age may exist due to varying levels of access to appropriate, affordable, high-quality care, accumulated effects of exposure to external risks, and the biological changes that occur with advancing age.

Data

The Wisconsin Collaborative for Healthcare Quality (WCHQ) member organizations submitted standardized clinical data for 2021, which was aggregated to provide a statewide snapshot that identified disparities across mental health measures. Differences in statewide performance are presented separately for populations defined by race and ethnicity, and geography (rural and urban ZIP code group of patients' residence). For all WCHQ measures, higher performance is considered better.

The Wisconsin Health Information Organization (WHIO) receives medical and pharmacy claims and insurance eligibility records from 15 Wisconsin health plans, a large self-funded employer coalition, a pharmacy benefits management organization, and the Wisconsin Medicaid program. Among other data elements, these records contain diagnoses and procedure codes, and indicators of service location and type which were used to create the measure results in this report. Disparities in statewide performance are presented separately for populations defined by age, insurance type, and geography.

Mental Health Screening in Wisconsin

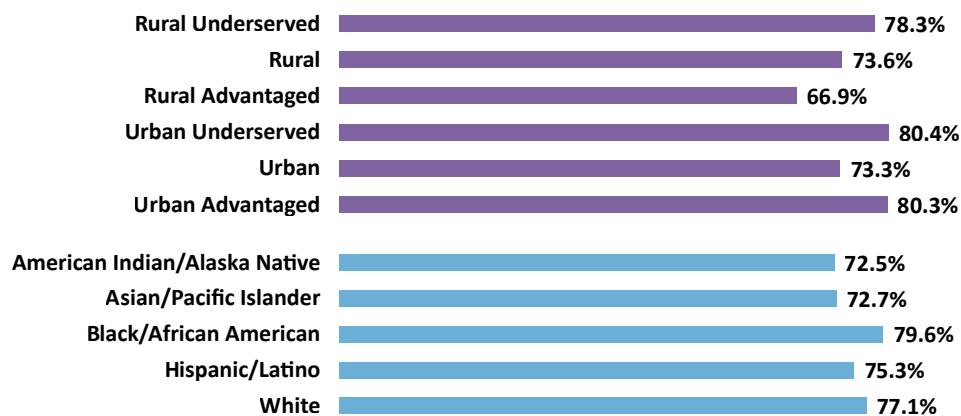
Background

This section presents recent WCHQ clinical data on depression and PHQ-9 screening by rural and urban groups and race and ethnicity. The US Preventive Services Task Force (USPSTF) recommends depression screening in the general adult population to detect and diagnose depression and initiate care.¹³ Increasing rates of depression screening is a Healthy People 2030 goal.¹⁴ The PHQ-9 is the nine-item depression scale of the

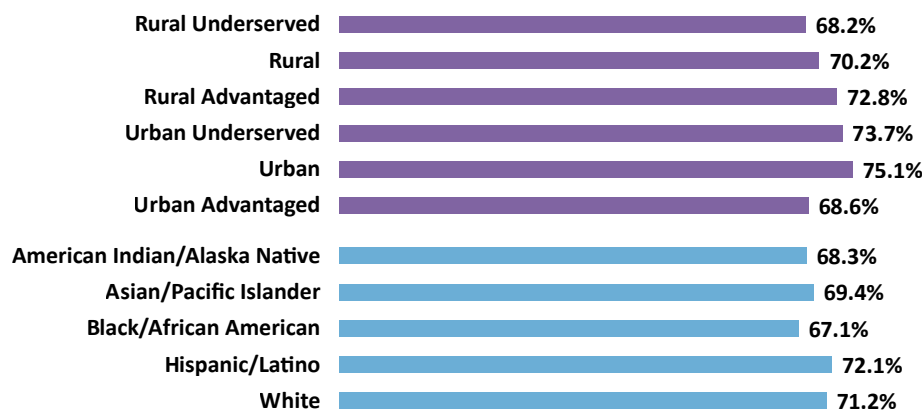
patient health questionnaire. The PHQ-9 can function as a screening tool, an aid in diagnosis, and as a symptom-tracking tool that can help track a patient’s overall depression severity, track the improvement of specific symptoms with treatment, and identify specific symptoms that are not responding.¹⁵ The Depression Screening and PHQ-9 Utilization measure descriptions are available in the [Methodology](#) section of this report.

Depression Screening in Adults and Adolescents Geography, race, and ethnicity, 2021

Depression Screening in Adults by Geography and Race and Ethnicity



Depression Screening in Adolescents by Geography and Race and Ethnicity



KEY FINDINGS

Geography

- Wisconsin adults (>18) in the rural advantaged group were screened less compared to other geographies.
- Wisconsin adults (>18) who live in urban underserved and urban advantaged areas had the highest rates of screening for clinical depression.
- Wisconsin adolescents (12-17 years old) living in rural underserved and urban advantaged areas had lower depression screening rates compared to adolescents living in urban areas.

Race and Ethnicity

- Black/African American adults (>18) had the highest rate of screening for clinical depression.
- American Indian/Alaska Native and Asian/Pacific Islander adults (>18) had the lowest depression screening rates.
- Hispanic/Latino adolescents (12-17 years old) had the highest rate of depression screening.
- Black/African American adolescents (12-17 years old) had the lowest rate of depression screening.

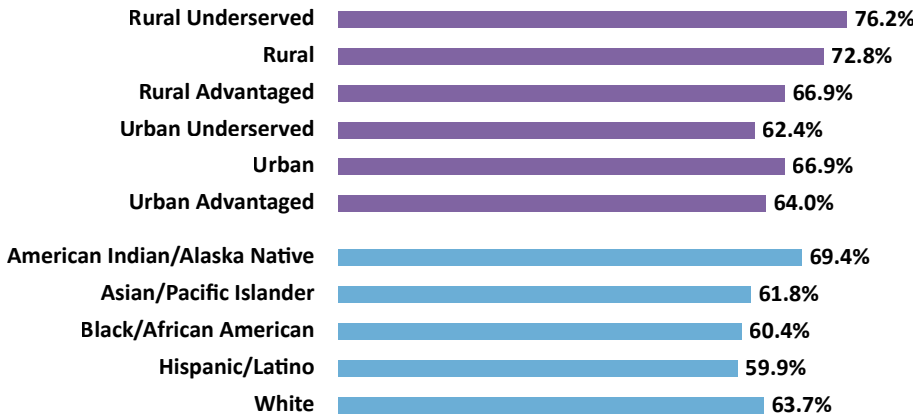
Age

- Fewer Wisconsin adolescents (12-17 years old) were screened for depression compared to adults.

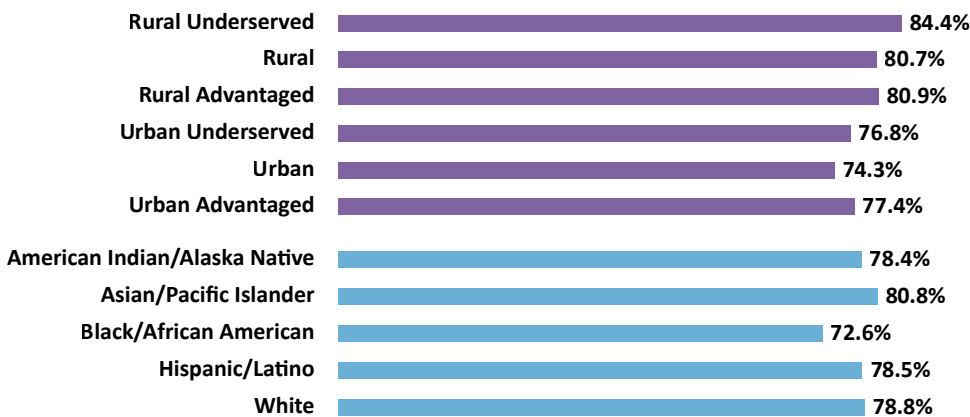
PHQ-9 Screening in Adults and Adolescents

Geography, race, and ethnicity, 2021

PHQ-9 Screening in Adults by Geography and Race and Ethnicity



PHQ-9 Screening in Adolescents by Geography and Race and Ethnicity



KEY FINDINGS

Geography

- Wisconsin adults (>18) who live in urban advantaged and urban underserved areas had substantially lower PHQ-9 screening compared to other geographies.
- Wisconsin adolescents (12-17 years old) living in urban areas had lower PHQ-9 screening compared to other geographies.

Race and Ethnicity

- Substantially fewer Hispanic/Latino adults (>18) had PHQ-9 screening compared to the highest performing group (American Indian and Alaska Native).
- Black/African American adolescents (12-17 years old) had lower rates of PHQ-9 utilization compared to other race/ethnicity groups.

Age

- Substantially fewer Wisconsin adults (>18) had PHQ-9 screening across all rural and urban geographies when compared to their adolescent counterparts (12-17 years old).
- Substantially fewer adults (>18) had PHQ-9 screening across all race and ethnicities when compared to their adolescent counterparts (12-17 years old).

Mental Health Diagnoses in Wisconsin

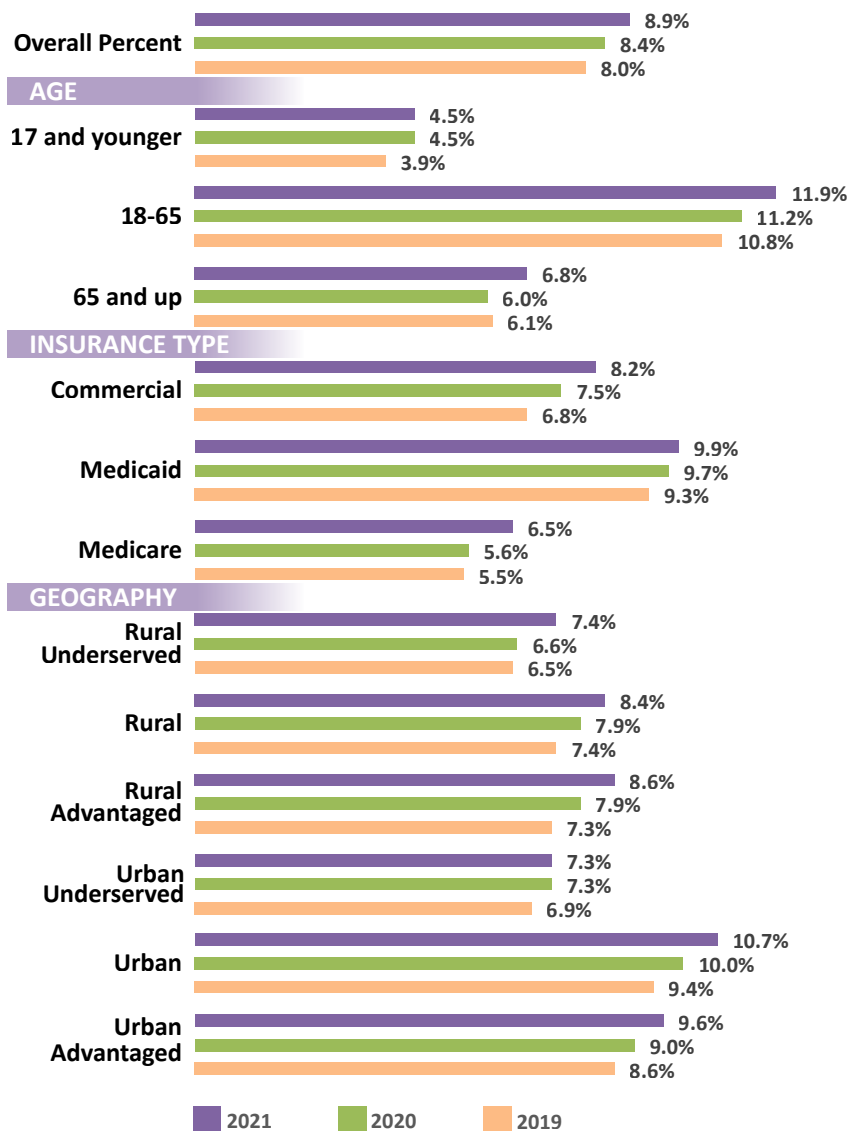
Background

This section presents information on two severity levels of mental health diagnoses using the WHIO data including mild-moderate depression and/or anxiety diagnoses and schizophrenia, schizo-affective, bipolar, or severe depression disorders diagnoses. Each set of diagnoses is stratified by age, insurance type, and geography for service dates from 2019 through 2021. Patients were identified by the presence of the relative diagnosis codes

on a health care visit available within the WHIO data. Early diagnosis and treatment of mental health conditions can lead to better management of symptoms and an improved quality of life. The Mild-Moderate Depression and/or Anxiety and Diagnosis of Schizophrenia, Schizo-Affective, Bipolar or Severe Depression disorders measure descriptions are available in the [Methodology](#) section of this report.

Percentage of Visits for Mild-Moderate Depression and/or Anxiety Over Time

Overall, age group, insurance type, and geography variables, 2019-2021



KEY FINDINGS

Overall

- In 2021, the number of Wisconsinites with visits for mild-moderate depression and/or anxiety increased by more than 63,000 compared to 2019 – an increase of 36% in just two years.
- From 2019 to 2021, the percentage of Wisconsinites who had one or more visits for mild-moderate depression and/or anxiety increased from 8.0% to 8.9%.

Age

- Wisconsin adults (18-65 years old) were the most likely to have a visit for mild-moderate depression and/or anxiety compared to other age groups.

Insurance Type

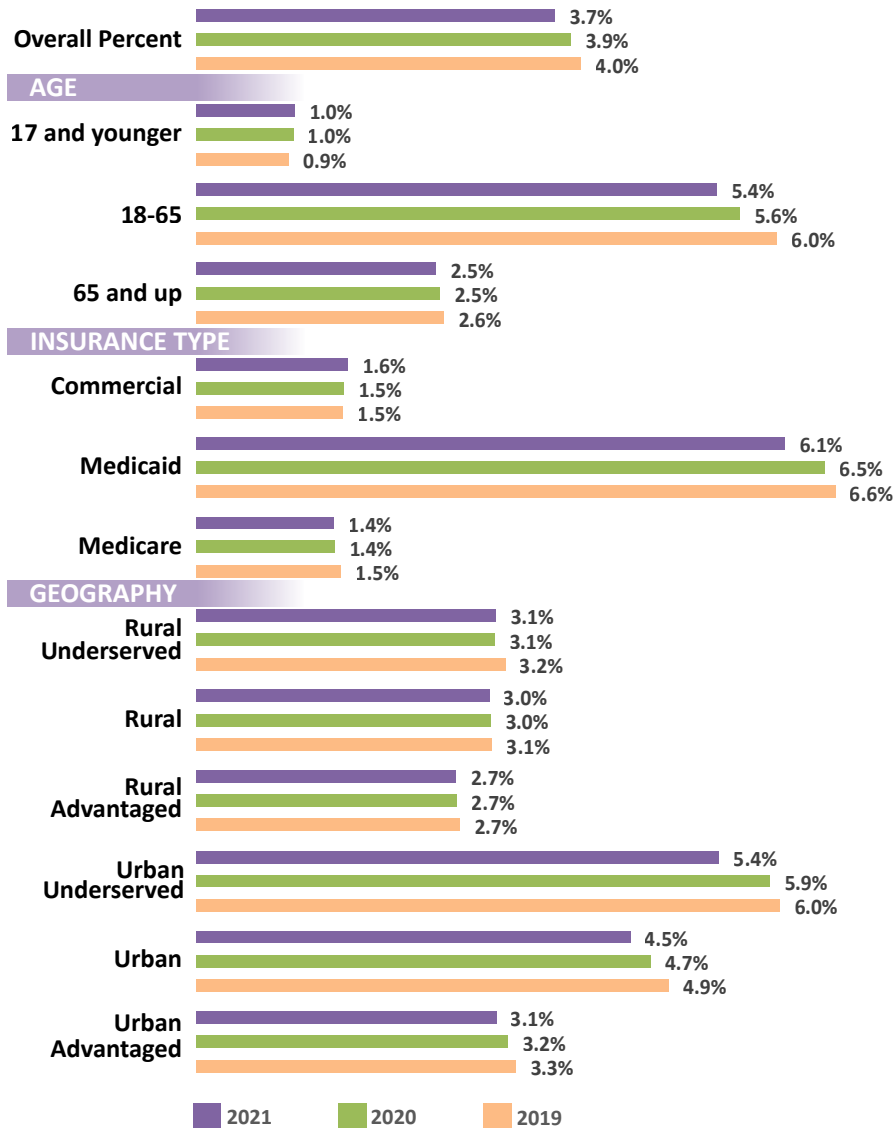
- Visits for mild-moderate depression and/or anxiety increased the most from 2019 to 2021 among people with commercial insurance.
- Visits for mild-moderate depression and/or anxiety were highest for people with Medicaid insurance.

Geography

- The highest rates of visits for mild-moderate depression and/or anxiety were for people who lived in urban and urban advantaged areas.
- The share of Wisconsinites with visits for mild-moderate depression and/or anxiety was lowest in urban underserved and rural underserved areas.
- Visits for mild-moderate depression and/or anxiety increased substantially from 2019 to 2021 in Wisconsin across all geographic areas.

Percentage of Visits for Schizophrenia, Schizo-Affective Disorder, Bipolar, or Severe Depression Disorders over Time

Overall, age group, insurance type, and geography variables, 2019-2021



KEY FINDINGS

Overall

- Visits for bipolar, schizophrenia, schizo-affective and/or severe depression disorder had minimal change from 2019 to 2021.

Age

- Wisconsin adults (18-65 years old) were the most likely to have a visit for bipolar, schizophrenia, schizo-affective and/or severe depression disorder compared to other age groups.

Insurance Type

- Substantially more Wisconsinites with Medicaid had a visit for bipolar, schizophrenia, schizo-affective and/or severe depression disorder compared to those with commercial or Medicare insurance.

Geography

- The rate of visits for bipolar, schizophrenia, schizo-affective and/or severe depression disorders was highest for Wisconsinites who lived in urban underserved areas.

Telehealth Visits for Mental Health

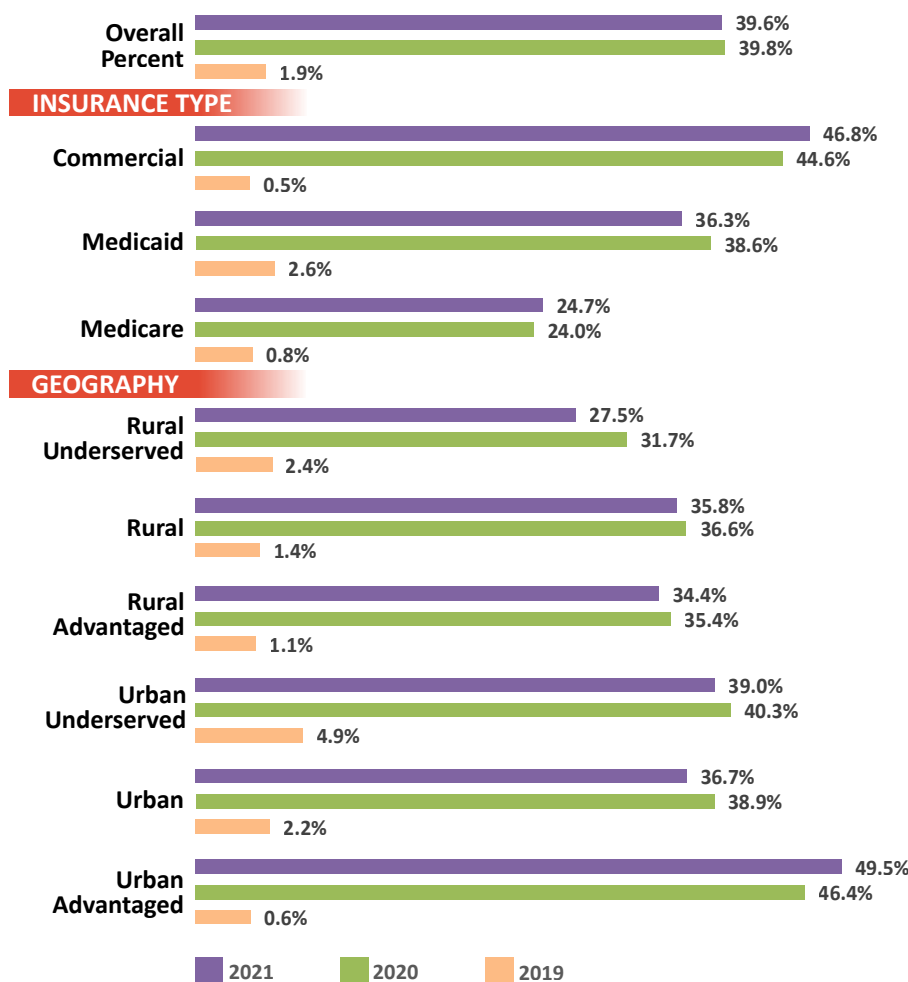
Background

This section presents information on telehealth visits stratified by insurance type and geography from 2019 through 2021. Use of remote care delivery using a telehealth system increased dramatically for certain outpatient services during the COVID-19 pandemic. In a previous report by the Wisconsin Health Information Organization, they found that even when in-person

outpatient and urgent care visits were re-established in Wisconsin, telehealth visits continued and that telehealth services were used to deliver services to people with mental health diagnoses.¹⁶ The Telehealth measure description is available in the [Methodology](#) section of this report.

Percentage of Telehealth Visits for Mild-Moderate Depression and/or Anxiety over Time

Overall, age group, insurance type, and geography variables, 2019-2021



KEY FINDINGS

Overall

- Nearly 40% of visits for mild-moderate depression and/or anxiety in 2020-2021 were conducted through telehealth. This compares to a nearly nonexistent use of telehealth visits in 2019.

Insurance Type

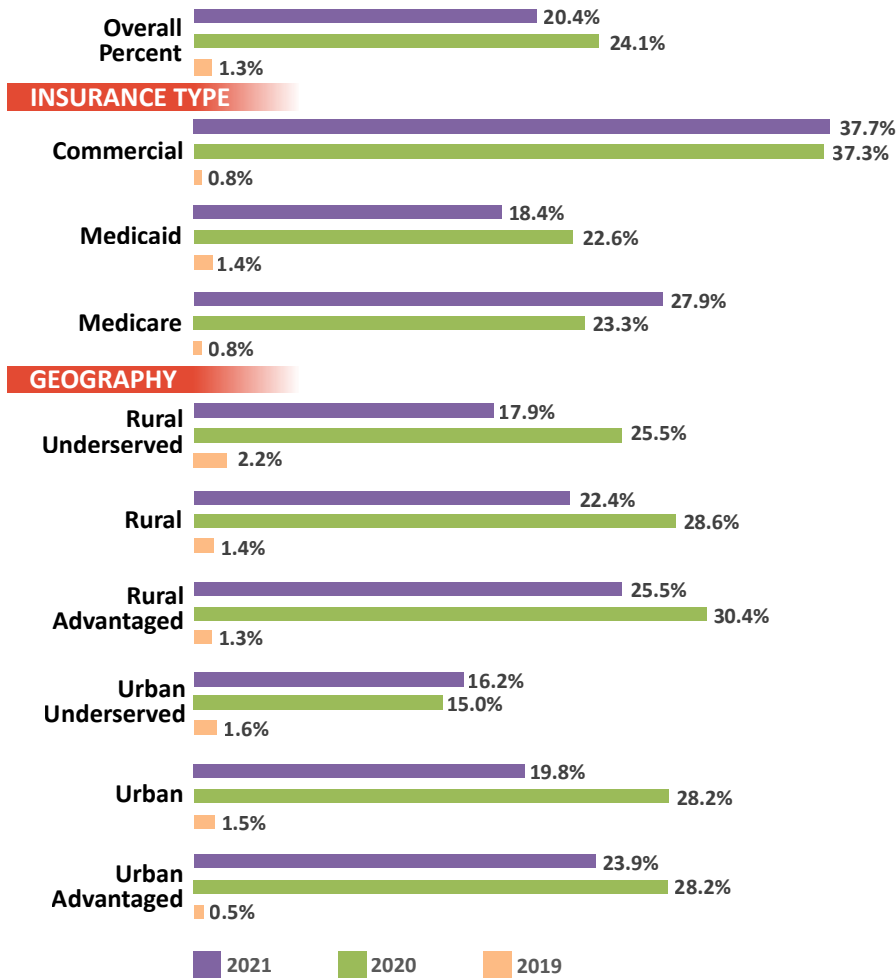
- In 2021, Wisconsinites with commercial insurance utilized telehealth more than those with Medicaid or Medicare insurance for mild-moderate depression and/or anxiety.

Geography

- In 2021, the percentage of telehealth visits for mild-moderate depression and/or anxiety was substantially higher for Wisconsinites who lived in urban advantaged areas compared to all geographies.

Percentage of Telehealth Visits for Schizophrenia, Schizo-Affective, Bipolar, or Severe Depression Disorders over Time

Overall, age group, insurance type, and geography variables, 2019-2021



KEY FINDINGS

Overall

- In 2021, 20% of visits for bipolar, schizophrenia, schizo-affective and/or severe depression disorders were conducted through telehealth. This compares to a nearly nonexistent rate of telehealth visits in 2019.

Insurance Type

- In 2021, Wisconsinites with commercial or Medicare insurance utilized telehealth substantially more than those with Medicaid for bipolar, schizophrenia, schizo-affective and/or severe depression disorders.

Geography

- From 2020 to 2021, telehealth visits for bipolar, schizophrenia, schizo-affective and/or severe depression disorders decreased in all geographies except for a slight increase in telehealth visits by those who live in urban underserved areas.

Implications and Opportunities

The goal of the *Disparities in Mental Health: A Healthy Metric 2023 Report for Wisconsin* is to provide baseline information on disparities in mental health outcomes and care within Wisconsin. This report can contribute to the identification of opportunities for health systems, health departments, policymakers, non-profits, researchers, and employers to develop collaborative approaches within their communities to create a healthier Wisconsin for all.

We identified disparities in mental health screening, outpatient visits, and telehealth utilization by race and ethnicity, rural and urban geography, insurance type, and age. We conclude the report by highlighting some factors that may be contributing to the current state, as well as potential solutions for reducing the disparities gaps in these areas.

Mental Health Screening

Increasing rates of mental health screening in primary care can lead to better rates of diagnosis and treatment and improve quality of life. Some barriers to screening include stigma, lack of resources for treatment referrals, and time limitations during outpatient visits.¹⁷ Focused efforts to increase depression screening for all patients may include integrating behavioral health into primary care visits to improve mental health screening and treatment, which may also reduce stigma.¹⁸

Mental Health Diagnoses

The COVID-19 pandemic uniquely impacted the number of people experiencing anxiety, depression, and other mental health challenges with low-income and racial and ethnic minority communities being especially impacted.¹⁹ Focused efforts to support populations experiencing mental health challenges may include implementing community-based mental health care programs; increasing the number of psychiatrists, psychologists, therapists, and other mental health professionals, particularly in underserved areas; increasing reimbursement rates for mental health services; and expanding reimbursement for models that integrate mental health services with other services such as the collaborative care model.^{20,21}

Telehealth Utilization

We are still learning which health care services are better when delivered in-person versus through telehealth. However, the significant, sustained increase in the use of telehealth services for mental health care visits indicates that telehealth is an acceptable service modality for at least some portion of mental health visits. Additional research should be completed to better define the subpopulations of people with mental health disorders who are able to successfully use telehealth services. Increasing patients' access to affordable and reliable internet coverage, access to computers and smartphones, and increasing digital literacy can address some of the identified barriers to telehealth utilization. Focused efforts to increase telehealth utilization include improving and expanding the broadband infrastructure - a current priority of Governor Evers' office²² - ensuring that reimbursement for telehealth services and technology is consistent with in-person services and identifying high-risk patients with low digital literacy and employing community health workers to help them with using a computer or smartphone.²³

Mental Health Workforce

Wisconsin is experiencing a crisis in access to mental health care due in part to insufficient investment in personnel and infrastructure, more individuals seeking treatment,²⁴ and stress caused by the COVID-19 pandemic.

Mental health workforce shortages can increase disparities in certain geographic locations, which are exacerbated by a lack of culturally responsive practitioners. Lack of mental health care services can lead to increases in substance use, homelessness, interactions with the criminal justice system, emergency room visits, hospitalizations, and suicide.²⁵

There are efforts in place to address these workforce shortages, including grants for early childcare and education and clinical supervision, the creation of additional psychiatry residency programs, efforts to increase cultural and linguistic diversity among new practitioners, and using telehealth to improve access, especially in underserved areas.

Taking Action

Data from Healthy Metric is an important tool to understand health outcomes and care. However, it is just one component in identifying and addressing health disparities. Some resources for taking action to address mental health disparities are below.

Resources for Reducing Disparities

- Agency for Healthcare Research and Quality
 - National Healthcare Quality and Disparities Reports (NHQDR)
<https://datatools.ahrq.gov/nhqdr>
- National Institute on Minority Health and Health Disparities – Understanding Health Disparities Series
<https://www.nimhd.nih.gov/resources/understanding-health-disparities/>
- National Institute on Minority Health and Health Disparities – PhenX Social Determinants of Health Assessments Collection
<https://www.nimhd.nih.gov/resources/phenx/>

Mental Health Resources

National Resources

- Centers for Disease Control & Prevention (CDC) Mental Health page
<https://www.cdc.gov/mentalhealth/>
- CDC How Right Now Resource Page
<https://www.cdc.gov/howrightnow/index.html>
- Lee Thompson Young Foundation – Resources
<https://www.ltyfoundation.org/resources>
- National Alliance for Mental Illness (NAMI) Mental Health Education Classes
<https://www.nami.org/Support-Education/Mental-Health-Education>
- National Institute of Mental Health
<https://www.nimh.nih.gov/>
- National Network to Eliminate Disparities in Behavioral Health (NNED)
<https://nned.net/>
- Substance Abuse and Mental Health Services Administration (SAMHSA) Public Messages
<https://www.samhsa.gov/public-messages>

- Practitioner Training
<https://www.samhsa.gov/practitioner-training>
- What Works for Health: Mental Health
https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies?keywords=mental+health&sort_by=search_api_relevance

Local Resources

- Mental Health America of Wisconsin
<https://www.mhawisconsin.org/>
- UW-Madison Division of Extension – Supporting You(th) Campaign Materials
<https://extension.wisc.edu/supporting-youth/>
- Wisconsin Department of Health Services: Mental Health Statistics
<https://dhs.wisconsin.gov/stats/mental-health.htm>

Questions to Consider for Taking Action

To reduce health disparities, it is important to consider the different policy, system, and environmental factors that influence mental health. Below are a few questions to consider.

- How do socioeconomic factors affect mental health?
- How do socioeconomic factors affect access to mental health care?
- How can the stigma about mental health conditions impact disparities in diagnosis and treatment?
- To what extent is mental health care, including access to telehealth, paid for by different types of health insurance?
- How could past experiences contribute to some communities' lack of trust in mental health care providers?
- How could we reduce unnecessary interactions with the criminal justice system for people experiencing mental health crises?
- How might we encourage the recruitment, training, and retention of a diverse mental health workforce?
- How can mental health care be more informed by the trauma that people have experienced?

Methodology

WCHQ

Data

WCHQ members submitted standardized and recent (2021) clinical data, which was aggregated to provide a statewide snapshot that identified disparities across depression screening measures. Differences in statewide performance are presented separately for populations defined by race and ethnicity and rural and urban residence. For all WCHQ measures, higher performance is considered better.

Data Quality and Validation

Data from WCHQ member organizations underwent a rigorous validation process. This consisted of a series of quality checks, including comparing denominators and performance rates with their publicly reported WCHQ measure results and ensuring that all data mappings were complete. Some member-level data was excluded from analysis due to incompleteness or quality issues.

WCHQ Data Limitations

There are several limitations to the findings of this report. First, some of the population sizes are small. This means that small fluctuations in health outcomes or care could have an inflated impact on the measure results. Second, this report only includes data from health care organizations that are members of WCHQ. Therefore, a subset of individuals throughout the state who are treated in other health systems or who have not recently visited a health system are not included. This particularly impacts patient population groups who receive care through Federally Qualified Health Centers (FQHCs), Indian Health Service clinics and clinics in northwestern Wisconsin. Third, the denominators for geography are lower than the denominators for race/ethnicity due to a larger instance of incomplete data among WCHQ member health systems for the ZIP code variable. Lastly, due to the varied methods of data submission, statistical significance testing was not able to be performed on the data in this report.

WCHQ Measure Descriptions

Depression Screening

The percentage of patients aged 12 years and older screened for clinical depression at any time during

the measurement period using an age-appropriate standardized depression screening tool.

PHQ-9 Utilization

The Patient Health Questionnaire-9 (PHQ-9) is one of the most commonly used depression screening tools and demonstrates clinical utility and diagnostic accuracy. The PHQ-9 consists of nine items based on the nine DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, fifth edition) criteria for major depressive disorder.¹⁵ This measure assesses the percentage of adolescent patients (12 through 17 years of age) and adult patients (18 years of age or older) with Major Depression or Dysthymia who have completed a PHQ-9 tool during the applicable 12-month measurement period in which there was a qualifying primary care visit.

WHIO

Data

The WHIO data is provided by 15 Wisconsin health insurance companies (commercial and Medicare Advantage), a large employer self-funded purchasing coalition, a pharmacy benefits manager company, and the Wisconsin Medicaid program. These organizations submit detailed medical and pharmacy data to the WHIO, along with eligibility records that identify demographic and insurance coverage characteristics of insured people. The WHIO used the claims data to identify people who received services with an indicator diagnosis and used the eligibility data to identify demographic and location-based characteristics of these people.

Data Quality and Validation

Data received by WHIO undergoes multiple data quality checks at each stage of processing. Files are initially reviewed from each WHIO data contributor, with quality checks added in subsequent stages as the data is integrated into a single all payor, person-centric, de-identified database. Results for this report were further examined against available state and national benchmarks, studies, and other results.

WHIO Data Limitations

The WHIO's data is limited to people in Wisconsin who have insurance coverage, and that are covered by

organizations that voluntarily contribute their data to the WHIO. The WHIO data used in this report does not include data for the uninsured population, some portion of self-funded insurance plans, people who are employed by the federal government, or people insured by the Medicare Fee-for-Service health plan option except for supplemental plans in Wisconsin. The WHIO data system currently includes 4.9 million Wisconsinites, about 75% of the population.

WHIO Measure Descriptions

Mild-Moderate Depression and/or Anxiety – Patients were identified as having any of the following diagnoses

- **F320** – Major depressive disorder, single episode, mild
- **F321** – Major depressive disorder, single episode, moderate
- **F330** – Major depressive disorder, recurrent, mild
- **F331** – Major depressive disorder, recurrent, moderate
- **F441** – Dissociative fugue

Diagnosis of Schizophrenia, Schizo-Affective, Bipolar or Severe Depression disorders – Patients were identified as having any of the following diagnoses:

- **F20x** – Any diagnosis in the schizophrenia diagnosis grouping
- **F25x** – Any diagnosis in the schizoaffective disorder diagnosis grouping
- **F31x** – Any diagnosis in the bipolar disorder diagnosis grouping
- **F322** – Major depressive disorder, single episode, severe without psychotic features
- **F323** – Major depressive disorder, single episode, severe with psychotic features
- **F332** – Major depressive disorder, recurrent severe without psychotic features
- **F333** – Major depressive disorder, recurrent, severe with psychotic symptoms

Telehealth

The percentage of visits for mild-moderate depression and/or anxiety or schizophrenia, schizo-affective, bipolar, or severe depression disorders that were conducted via telehealth.

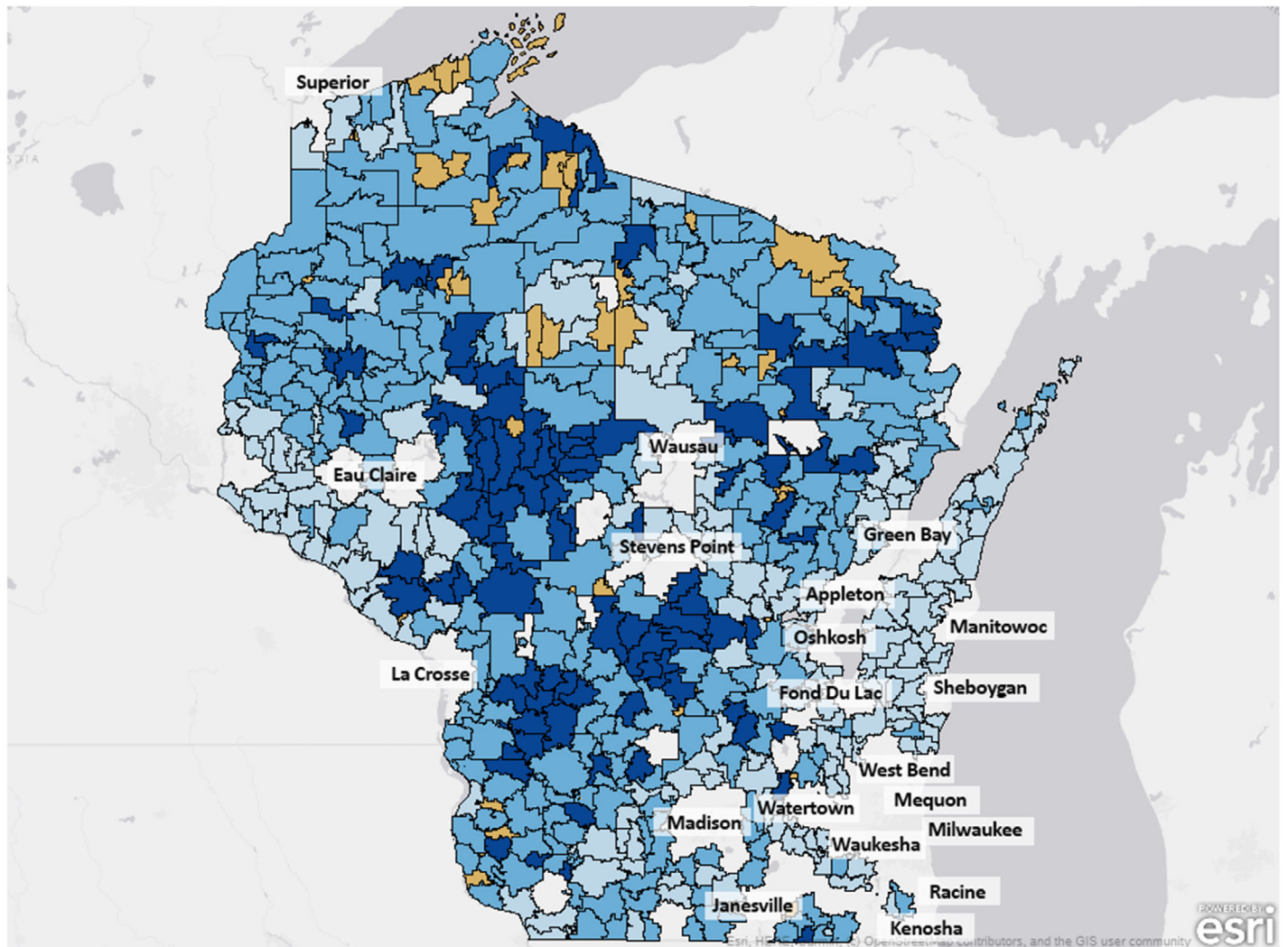
Appendix

Rural Health-Related Characteristics by ZIP Code

Rural areas in Wisconsin contain about one-third of the population of the state but make up more than 96% of the land area.²⁶ The map below displays rural ZIP codes in the state according to health-related characteristics. ZIP codes labeled as "N/A" are either non-residential (e.g., only P.O. Box or commercial organization addresses) or have populations with less than 500 people.

- 95 ZIP codes categorized as Rural Underserved
- 233 ZIP codes as Rural
- 172 ZIP codes as Rural Advantaged

ZIP Codes by Rural Groupings



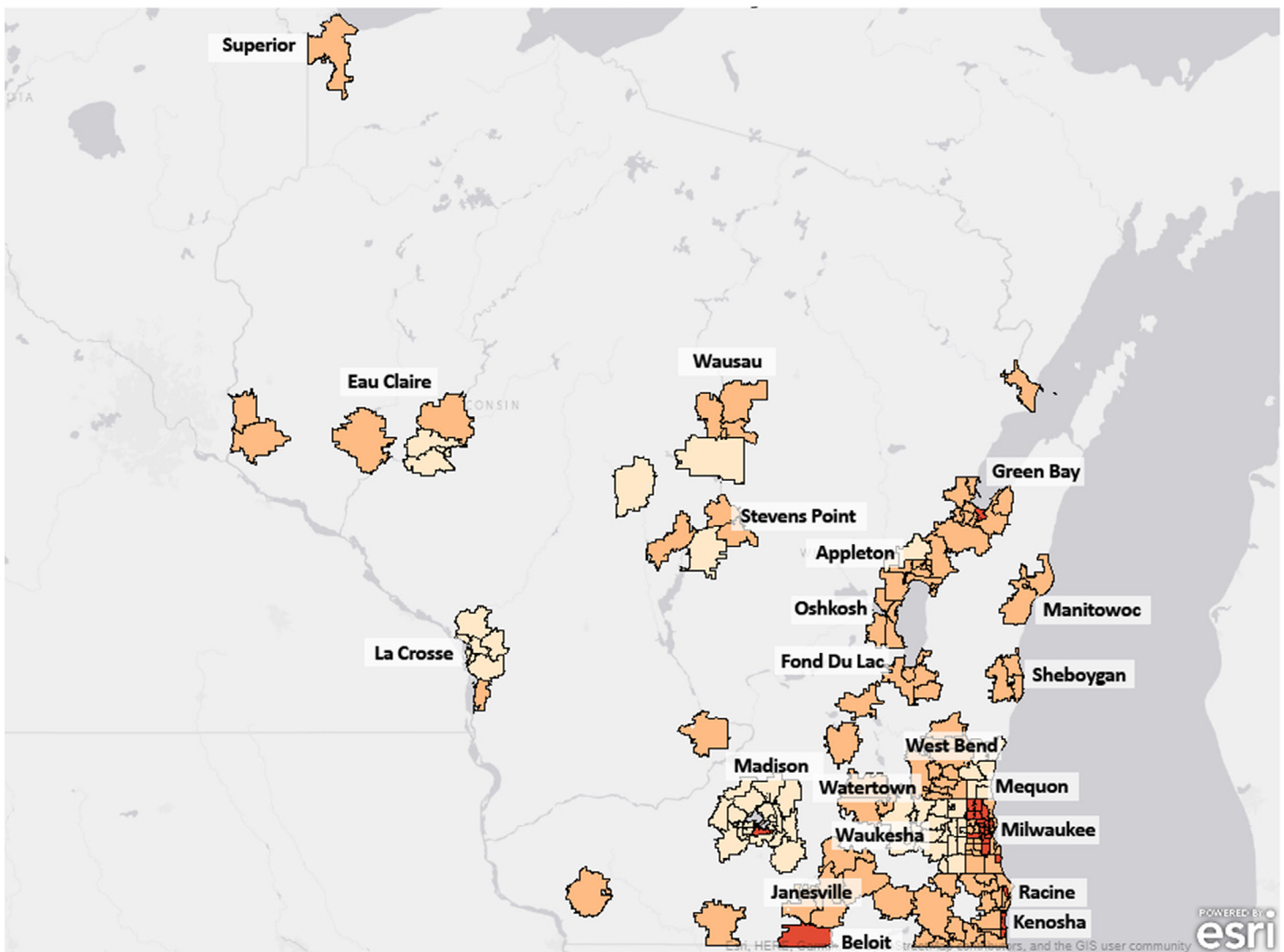
Rural Groupings: N/A Rural Advantaged Rural Rural Underserved

Urban Health-Related Characteristics by ZIP Code

Urban areas in Wisconsin contain about two-thirds of the state’s population, with more than one-third of the state’s total population residing in Milwaukee, Dane, Waukesha, and Brown counties.²⁶ The map below displays urban ZIP codes in the state differentiated by health-related characteristics. ZIP codes labeled as “N/A” are either non-residential (e.g., only P.O. Box or commercial organization addresses) or have populations with less than 500 people.

- 23 ZIP codes were categorized as Urban Underserved
- 104 ZIP codes as Urban
- 65 ZIP codes as Urban Advantaged

ZIP Codes by Urban Groupings



Data Tables

Depression Screening in Adults and Adolescents

Disparity Indicator	Depression Screening in Adults	Depression Screening in Adolescents
Rural Underserved	78.30% (n=32,563)	68.20% (n=3,197)
Rural	73.60% (n=114,039)	70.20% (n=11,162)
Rural Advantaged	66.90% (n=72,103)	72.80% (n=7,377)
Urban Underserved	80.40% (n=39,999)	73.70% (n=3,268)
Urban	73.30% (n=206,087)	75.10% (n=22,315)
Urban Advantaged	80.30% (n=146,775)	68.60% (n=14,686)
American Indian/Alaska Native	72.50% (n=2,963)	68.30% (n=398)
Asian/Pacific Islander	72.70% (n=23,708)	69.40% (n=2,868)
Black/African American	79.60% (n=47,957)	67.10% (n=4,066)
Hispanic/Latino	75.30% (n=41,647)	72.10% (n=7,843)
White	77.10% (n=972,656)	71.20% (n=73,480)

PHQ-9 Screening in Adults and Adolescents

Disparity Indicator	PHQ-9 Screening in Adults	PHQ-9 Screening in Adolescents
Rural Underserved	76.20% (n=8,500)	84.40% (n=480)
Rural	72.80% (n=30,050)	80.70% (n=1,826)
Rural Advantaged	66.90% (n=18,191)	80.90% (n=1,118)
Urban Underserved	62.40% (n=10,614)	76.80% (n=633)
Urban	66.90% (n=60,846)	74.30% (n=4,045)
Urban Advantaged	64.00% (n=33,577)	77.40% (n=2,329)
American Indian/Alaska Native	69.40% (n=1,366)	78.40% (n=102)
Asian/Pacific Islander	61.80% (n=2,845)	80.80% (n=265)
Black/African American	60.40% (n=10,827)	72.60% (n=745)
Hispanic/Latino	59.90% (n=10,293)	78.50% (n=1,306)
White	63.70% (n=260,363)	78.80% (n=12,433)

Percentage of Visits for Mild-Moderate Depression and/or Anxiety Over Time

Indicator	2021	2020	2019
Overall	8.9% (n=239,284)	8.4% (n=191,726)	8.0% (n= 175,893)
AGE			
17 and younger	4.5% (n=30,073)	4.5% (n= 25,326)	3.9% (n= 23,983)
18-65	11.9% (n=174,749)	11.2% (n= 140,402)	10.8% (n= 129,103)
65 and up	6.8% (n= 24,684)	6.0% (n= 19,944)	6.1% (n= 20,197)
INSURANCE TYPE			
Commercial	8.2% (n= 98,153)	7.5% (n= 76,611)	6.8% (n= 65,696)
Medicaid	9.9% (n= 127,967)	9.7% (n= 105,229)	9.3% (n= 99,896)
Medicare	6.5% (n= 15,540)	5.6% (n= 12,084)	5.5% (n= 12,113)
GEOGRAPHY			
Rural Underserved	7.4% (n= 8,147)	6.6% (n= 6,526)	6.5% (n= 6,364)
Rural	8.4% (n= 34,725)	7.9% (n= 28,553)	7.4% (n= 27,350)
Rural Advantaged	8.6% (n= 22,308)	7.9% (n= 17,677)	7.3% (n= 16,299)
Urban Underserved	7.3% (n= 25,882)	7.3% (n= 21,490)	6.9% (n= 20,835)
Urban	10.7% (n= 79,479)	10.0% (n= 62,340)	9.4% (n= 55,324)
Urban Advantaged	9.6% (n= 52,782)	9.0% (n= 43,157)	8.6% (n= 40,872)

Percentage of Visits for Schizophrenia, Schizo-Affective Disorder, Bipolar, or Severe Depression Disorders over Time

Indicator	2021	2020	2019
Overall	3.70% (n= 99,295)	3.90% (n= 88,033)	4.00% (n= 87,810)
AGE			
17 and younger	1.00% (n= 6,791)	1.00% (n= 5,623)	0.90% (n= 5,836)
18-65	5.40% (n= 79,025)	5.60% (n= 70,621)	6.00% (n= 71,818)
65 and up	2.50% (n= 8,975)	2.50% (n= 8,315)	2.60% (n= 8,448)
INSURANCE TYPE			
Commercial	1.60% (n= 18,632)	1.50% (n= 15,493)	1.50% (n= 14,536)
Medicaid	1.40% (n= 78,256)	1.40% (n= 70,506)	1.50% (n= 70,943)
Medicare	6.10% (n= 3,412)	6.50% (n= 3,078)	6.60% (n= 3,261)
GEOGRAPHY			
Rural Underserved	3.10% (n= 3,424)	3.10% (n= 3,023)	3.20% (n= 3,124)
Rural	3.00% (n= 12,467)	3.00% (n= 11,036)	3.10% (n= 11,344)
Rural Advantaged	2.70% (n= 6,975)	2.70% (n= 6,018)	2.70% (n= 6,047)
Urban Underserved	5.40% (n= 19,033)	5.90% (n= 17,439)	6.00% (n= 18,145)
Urban	4.50% (n= 33,310)	4.70% (n= 29,138)	4.90% (n= 28,791)
Urban Advantaged	3.10% (n= 17,033)	3.20% (n= 15,374)	3.30% (n= 15,732)

Percentage of Telehealth Visits for Mild-Moderate Depression and/or Anxiety over Time

Indicator	2021	2020	2019
Overall	39.60% (n= 538,292)	39.80% (n= 291,489)	1.90% (n= 19,544)
INSURANCE TYPE			
Commercial	46.80% (n= 225,554)	44.60% (n= 108,365)	0.50% (n= 1,774)
Medicaid	36.30% (n= 298,733)	38.60% (n= 173,764)	2.60% (n= 17,433)
Medicare	24.70% (n= 13,357)	24.00% (n= 9,470)	0.80% (n= 339)
GEOGRAPHY			
Rural Underserved	27.50% (n= 11,860)	31.70% (n= 7,594)	2.40% (n= 870)
Rural	35.80% (n= 66,887)	36.60% (n= 38,132)	1.40% (n= 2,067)
Rural Advantaged	34.40% (n= 38,573)	35.40% (n= 21,712)	1.10% (n= 908)
Urban Underserved	39.00% (n= 65,225)	40.30% (n= 38,448)	4.90% (n= 6,398)
Urban	36.70% (n= 160,554)	38.90% (n= 93,680)	2.20% (n= 7,008)
Urban Advantaged	49.50% (n= 167,418)	46.40% (n= 76,005)	0.60% (n= 1,625)

Percentage of Telehealth Visits for Schizophrenia, Schizo-Affective, Bipolar, or Severe Depression Disorders over Time

Indicator	2021	2020	2019
Overall	20.40% (n= 242,091)	24.10% (n= 161,677)	1.30% (n= 18,495)
INSURANCE TYPE			
Commercial	37.70% (n= 42,195)	37.30% (n= 25,358)	0.80% (n= 773)
Medicaid	18.40% (n= 192,762)	22.60% (n= 131,166)	1.40% (n= 17,519)
Medicare	27.90% (n= 6,947)	23.30% (n= 5,270)	0.80% (n= 204)
GEOGRAPHY			
Rural Underserved	17.90%	25.50%	2.20%
Rural	22.40%	28.60%	1.40%
Rural Advantaged	25.50%	30.40%	1.30%
Urban Underserved	16.20%	15.00%	1.60%
Urban	19.80%	28.20%	1.50%
Urban Advantaged	23.90%	28.20%	0.50%

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