# Exploring Health Care Barriers for the Unhoused: Insights from a Rural Midwestern Community

Reilly A. Coombs, MS; Payton Jorgenson, BS; Corina Norrbom, MD; Amy Prunuske, PhD

# **ABSTRACT**

**Introduction:** People experiencing homelessness are more likely than the general population to have chronic health conditions and often encounter significant barriers to health care access. Many of these barriers can be affected by community-based factors, such as availability of reliable transportation, past experiences with health care systems, and community attitudes toward the unhoused population. This project aims to assess the needs and barriers to health care identified by people experiencing homelessness in a rural Midwestern city.

**Methods:** The survey used was adapted from a survey previously conducted to assess the needs of the homeless population in Milwaukee, Wisconsin. Surveys were distributed during outreach around the city of Wausau, Wisconsin. Data were transcribed and reviewed, and descriptive statistics were calculated.

**Results:** A total of 45 surveys were completed. Most participants identified as White, non-Hispanic males (n=24, 53%) and were 46 to 55 years old (n=14, 31%). Barriers to health care included lack of housing, cost, transportation, lack of a mailing address, inadequate hours, and disrespectful care. Eighty-six percent of participants (n=38) reported having a mental health diagnosis, yet only 26% (n=12) stated that they see a mental health professional.

**Conclusions:** Individuals experiencing homelessness in a rural community have broad and complex barriers to accessing health care. Given limited resources in smaller communities, innovative and holistic solutions should be considered when aiming to make care more equitable.

# INTRODUCTION

The experience of homelessness is complex and multifaceted, often stemming from a combination of factors, such as unaffordable housing, unemployment, mental health challenges, the loss of a family member, eviction, or substance use. These diverse challenges highlight the need for a comprehensive array of services to address the unique circumstances of each individual facing homelessness.

**Author Affiliations:** Medical College of Wisconsin-Central Wisconsin, Wausau, Wisconsin (Coombs, Jorgenson, Norrbom, Prunuske).

Corresponding Author: Reilly A. Coombs, MS, 1900 Westwood Dr, Suite 3100, Wausau, WI 54401; email rcoombs@mcw.edu; ORCID ID 0009-0005-3709-2169

In 2023, homelessness in the United States continued to rise, totaling over 653100 individuals on a single night; and 18% of individuals were noted to be people experiencing homelessness in rural areas.1 Each January, the US Department of Housing and Urban Development (HUD) completes its annual Point-in-Time Count of all those experiencing homelessness on a given night. In January of 2023, there were an estimated 4775 individuals experiencing homelessness in the state of Wisconsin.2 Sixty-four percent of unhoused individuals in this Point-in-Time Count were located outside of Milwaukee, Racine, and Dane counties.2 Milwaukee, Racine, and Dane counties are significant urban centers in Wisconsin, carrying a higher population density and also boasting diverse populations in terms of ethnicity, culture, and socioeconomic backgrounds versus other Wisconsin counties.

Furthermore, 64% of unhoused individuals experiencing homelessness in Wisconsin reside in smaller communities. Literature on rural homelessness is sparse; however, we know that when compared to urban areas, rural areas have more significant health disparities, less community resources, more suicide and drug-related deaths, and less access to mental health care.<sup>3-7</sup>

Moreover, individuals experiencing homelessness often face the challenging dilemma of prioritizing essential needs, such as securing food and shelter, over accessing health care services.<sup>8</sup> Unfortunately, this predicament leads to underutilization of health care resources, ultimately culminating in late-stage disease presentations and, consequently, poorer prognoses when these individuals do seek medical attention.<sup>9</sup> Recent studies examining health insurance coverage within unhoused populations reveal

VOLUME 124 • NO 1 17

that despite improvements in resources over the last decade, a substantial portion of individuals experiencing homelessness (42%-72%) are insured.<sup>10,11</sup> Still, persistent barriers hinder their access to essential medical care, highlighting a pressing issue that necessitates attention and intervention.<sup>12</sup>

Mental health is a significant concern for many Americans today. The National Institute of Mental Health reports that as of 2021, 22.8% of the population has received a mental health diagnosis.<sup>13</sup> In contrast, HUD reports a higher prevalence among individuals experiencing homelessness, with 31.4% having a serious mental illness and 24% reporting substance abuse.<sup>14</sup> This is particularly worrisome in unhoused populations in rural communities, where mental health resources are scarce. The reasons for these disparities are well documented and the result of a lack of trained mental health providers in rural communities, underutilization of services, and limited care coordination in medical care.<sup>15-17</sup> Addressing these systemic issues is crucial for ensuring equitable mental health support for all individuals, irrespective of their housing status or geographical location.

The overarching goal of this study is to shed light on the health needs and barriers to care faced by unhoused populations in central Wisconsin. By identifying these challenges, we hope to pave the way for the development and implementation of effective solutions to enhance access to health care services and ultimately improve health outcomes within this vulnerable population. The information provided in this study can be utilized by various stakeholders, including policymakers, health care providers, social service agencies, and community organizations to address the identified needs and barriers to care among this population. Overall, we hope the insights from this survey serve as a catalyst for positive change both within and beyond our community by providing valuable information about the health needs and concerns of our unhoused population and offer actionable recommendations for improving access to care and addressing health disparities.

# **METHODS**

A survey tool was developed to assess the health needs and barriers to care of individuals in central Wisconsin by adapting a previous Medical College of Wisconsin questionnaire.8 This survey was created in collaboration with those who work closely in the space, including case managers, local organization leaders who focus on serving our unhoused population, and the Marathon County Health Department. All members had the capacity to suggest additional questions or veto questions. These individuals were asked to review the survey on a voluntary basis given their experience in the field. The final survey was reviewed by the Medical College of Wisconsin Institutional Review Board and ultimately focused on assessing health status, health resource utilization, and barriers to care. It received approval by the Medical College of Wisconsin Institutional Review Board on March 15, 2023.

Participants were eligible to participate in the survey if they

met the criteria of being a "person or family in Marathon County lacking stable or regular residence," were 18 years or older, and were able to comprehend English.

A medical student interviewed participants through community outreach during the nightly intake process at local shelters in Wausau, Wisconsin. Given the length of the survey and the desire to establish rapport with study participants, it was determined that it may be best to administer the survey in an interview format. Participants were asked if they wanted to participate in the study, were read the informational letter, and asked if they met the study inclusion criteria. Participation was voluntary, and participants did not receive incentives.

The interviews were carried out predominantly at local organizations (eg, shelters) in a private area by a medical student. The student used a mobile Qualtrics survey (either on a phone or laptop) to record participant responses. The interviews were not recorded; rather the student conducting the interviews scribed participant responses. Topics included participants' backgrounds and demographics, reasons for homelessness, barriers to care, health resource utilization, mental health care and diagnoses, substance use, and access to harm reduction. The survey included close-ended and open-ended questions to assess needs and barriers to health care in this population. Close-ended questions ranged from simple yes or no responses to some utilizing a Likert scale to assess opinions. Descriptive statistics were calculated from these responses. The data from open-ended questions were compiled in Excel and thematically encoded by a 2-person medical student team.

# **RESULTS**

A total of 45 surveys were completed. The response rate was 82%. Questions from the survey and results are shown in Table 1. Participant demographics included the following: 31 identified as White (69%); 4 Asian (9%), 4 Black/African American (9%), 3 American Indian/Alaskan Native (7%), and 3 "other" (7%). Only 5 participants (11%) identified as Hispanic. Three participants (7%) were veterans. The most common age group was 46 to 55 (n = 14, 31%), and 33 (73%) participants identified as male. Twenty-four participants (53%) rated their health as "poor" or "fair," including 7 female participants (58%) and 5 minority participants (36%).

Respondents were asked to indicate how often they utilized the health services listed in Table 2 in the last 12 months. Nineteen (43%) had used the emergency department, and 12 (27%) had an overnight hospital stay. Only 8 participants (18%) had seen a dentist in the last year, and 20 (44%) saw a mental health provider in the last year. Twenty participants (45%) said they have a primary care provider, yet 38 (84%) have active health insurance.

Participants were asked to rate potential barriers to health care on a scale from 1 to 5 (1 = not a barrier to care and 5 = a significant barrier to care). Significant barriers included lack of housing, cost of care, lack of transportation, and not having a mailing address (Table 3). Sixty percent (n = 27) of participants did not have an income.

**18** WMJ • 2025

Variable	n (%)	Variable	n (%)	
Race (n = 45)		Do you have access to harm reduction (clean needles, Narcan, etc)? (n=45)		
White	31 (69)	Yes	24 (53)	
Asian	4 (9)	No	21 (47)	
African American/Black	4 (9)	In the past year, have you had unprotected se	x? (n = 45)	
Alaskan Native/American Indian	3 (7)	Yes	14 (31)	
Other	3 (7)	No	31 (69)	
Ethnicity (n=45)	3 (7)	(For females) In the past year, have you been pregnant or worried about becor		
Hispanic	5 (11)	ing pregnant? (n=12)		
Non-Hispanic	40 (89)	Yes	3 (25)	
Age (n=45)	40 (03)	No	9 (75)	
18–25	3 (7)	(For females) Are you currently using birth con	trol? (n = 11)	
26–35	5 (7) 5 (11)	Yes	2 (18)	
36–45	13 (29)	No	9 (82)	
46–55		Do you have any chronic illnesses you are prescribed medications for (diabete		
	14 (31)	high blood pressure, heart disease, asthma, e	tc)? (n = 44)	
56–65	9 (20)	Yes	21 (48)	
66+ 6 (n. 45)	1 (2)	No	23 (52)	
Sex (n = 45)	00 (70)	Do you have a mental health diagnosis? (n = 44)		
Male	33 (73)	Yes	38 (86)	
Female	12 (27)	No	6 (14)	
Overall, how do you feel your health is? (n = 45)	0 (40)	Within the past 12 months, did you worry your food would run out before you		
Poor	8 (18)	got money to buy more? (n = 45)	•	
Fair	16 (36)	Never	9 (20)	
Good	16 (36)	Rarely	3 (7)	
Very Good	3 (7)	Sometimes	16 (36)	
Excellent	2 (4)	Fairly often	7 (16)	
Do you have a primary care physician or clinic you regularly visit? (n=44)		Frequently	10 (22)	
Yes	20 (44)	How often does anyone, including family, thre	•	
No	24 (55)	Never	16 (36)	
Do you have a dentist you regularly visit? (n=45)		Rarely	9 (20)	
Yes	5 (11)	Sometimes	6 (13)	
No	40 (89)	Fairly often	4 (9)	
Do you currently have a mental health counseling service	e, including substance	Frequently	9 (20)	
use counseling? (n=45)		Where do you usually sleep? (n =45)	- ()	
Yes	12 (27)	Shelter	31 (69)	
No	33 (73)	Outside	9 (20)	
Do you have health insurance? (n=45)		Car	1 (2)	
Yes	38 (84)	Couch or friends	3 (7)	
No	7 (16)	Own place	0	
Who is your insurance provider? (n=38)		Hotel	1 (2)	
BadgerCare or Medicaid	31 (67)	Hotel	1 (2)	
Private	2 (4)			
Medicare	5 (11)			

Thirty-eight participants (84%) had health insurance, with state insurance being the most common (n = 31, 67%). Thirty-seven participants (82%) reported substance use. The most used substances reported were tobacco/nicotine products (n = 34, 92%), alcohol (n = 17, 46%), cannabis (n = 17, 46%), methamphetamine (n = 8, 22%), hallucinogens (n = 4, 11%), and cocaine (n = 4, 11%). Eleven female participants (92%) and 10 minority participants (71%) stated that they use substances. Twenty-one (47%) participants indicated that they do not have access to harm reduction methods (eg, clean needles, fentanyl testing strips, naloxone). Thirty-eight participants (86%) stated that they have a mental health diagnosis, yet only 12 (27%) indicated they currently see a mental health professional. Nine female participants (75%) stated

they have a mental health diagnosis, but only 4 (33%) currently see a mental health professional. Twelve (86%) minority participants said that they have a mental health diagnosis, but only 2 (14%) currently see a mental health professional.

Participants were asked what they believed was causing their homelessness. Responses are listed in Box 1. Responses to why they were not using mental health or substance use counseling are listed in Box 2.

### **DISCUSSION**

The findings from this survey reveal a notable disparity in the utilization of health resources among unhoused individuals within the Wausau community. Noteworthy aspects include the utilization of

19

Health Resource	Utilized Service n (%)		
Emergency department	19 (42)		
Mental health provider	20 (44)		
Dental	8 (18)		
Urgent care	15 (33)		
Primary care provider	18 (40)		
Free clinic	3 (7)		
Overnight hospital stay	12 (27)		

Barrier	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)
Inadequate hours	14 (33)	3 (7)	14 (33)	8 (19)	4 (9)
Money	4 (9)	1 (2)	5 (12)	8 (19)	25 (58)
Transportation	3 (7)	2 (5)	11 (26)	4 (9)	23 (53)
Substance Use	23 (53)	3 (7)	7 (16)	5 (12)	5 (12)
Safety	23 (53)	3 (7)	8 (19)	3 (7)	6 (14)
Language barrier	36 (84)	1 (2)	4 (9)	0 (0)	2 (5)
Ability to read or write	37 (86)	2 (5)	1 (2)	0 (0)	3 (7)
Housing	1 (2)	2 (5)	4 (9)	8 (19)	28 (65)
Childcare	41 (95)	1 (2)	1 (2)	0 (0)	0 (0)
No mailing address	7 (16)	2 (5)	14 (33)	7 (16)	13 (30)
Disrespectful care	21 (49)	2 (5)	5 (12)	4 (9)	11 (26)

5 = significant barrier.

the emergency department (ED) (42%), dental care (18%), and overnight hospital stays (27%) in the last 12 months. In comparison to the general adult US population, unhoused individuals in Wausau, Wisconsin, exhibit heightened utilization of the ED (recent data found that 21.3% of US adults in 2018 had 1 or more ED visits in the past year vs 42% in this cohort), more overnight hospital stays (5.2% of individuals aged 1 to 64 had an overnight hospital stay in 2018 vs 27% in this cohort), and lower utilization of dental care (in 2020, the general adult population utilization of dental care was 62.7% vs 18% utilization in this cohort). <sup>18-21</sup> Furthermore, this population not only demonstrates elevated rates of ED utilization but also experiences higher frequency of hospital admission and overnight hospital stays. Importantly, our unhoused population faces significant health risks related to dentition. <sup>22</sup>

A significant number of respondents (86%) acknowledged being diagnosed with a mental health disorder; however, a substantial number stated they were not accessing mental health care. Most commonly, individuals reported not accessing care due to wanting to independently address their concerns, substance use, and a lack of trust in clinicians. Furthermore, 82% of respondents reported substance use. The accessibility of mental health care is a widespread challenge across the United States, with rural communities facing even greater limitations. <sup>15</sup> Specifically, rural individuals are less likely to see a mental health professional and

**Box 1.** Participant Responses When Asked What They Believe Caused Their Homelessness

"My wife and I lost my apartment because I lost my job in December. We fell behind in rent; the landlord used to work with us but is now not willing to work with us."

"Addiction."

"Not able to have an adequate credit score for rentals and not having enough money for double deposits."

"A lot of different things. Physically I've had a lot of surgeries, lots of health problems, lots of medical bills, divorced, and I have a mental disability."

"Developed blood clots and got behind on rent from being in hospital and not able to work."

"Started using drugs 8 years ago and going through psychosis."

"I had a job, but I got hit by a car in and had to stay in hotels to heal."

"Me and myself and I. I hate life."

"I have epilepsy and just got out of the hospital. I was staying with my brother, and I am a recovering addict. It was a bad situation for me to be around all the drinking and everything."

"Suffer from alcoholism badly."

"Background checks; landlords don't give second chances."

"Got kicked out because of religious reasons."

"Parents died, kids left, and was left alone. No one to take care of and freaked out."

"Myself."

**Box 2.** Participant Responses When Asked Why They Were not Using Mental Health or Substance Use Counseling

"Missed appointments and now can't go back."

"Lost job and started doing drugs. Didn't need it."

"Big trust issues."

"Been through treatment as a kid. Now I'm old enough to decide if I want to go."  $% \begin{center} \end{center} \begin{center} \begin{center$ 

"Tried it and didn't work."

"Don't like being on medications."

"I'm old and have been going through this for a long time. I want to stop drinking though."

"I don't like doctors. It's hard to find good decent doctors and people I can

"Sometimes you just have to cope with it yourself and give yourself time from people."

"Don't feel comfortable speaking with them. Don't know if I can trust them."

"No reason for not, just haven't."

"Don't feel like I need one."

see clinicians with less specialization.<sup>15</sup> The shortage of health care professionals poses a significant challenge for all patients.<sup>16,17</sup> This challenge is further intensified by the constrained resources available to people experiencing homelessness, encompassing difficulties with transportation and the financial burden associated with seeking care.

The unhoused individuals in this community reside in a small town in central Wisconsin. Wausau is home to 39968people. People experiencing homelessness in Wausau have articulated facing mul-

**20** WMJ • 2025

tiple obstacles to accessing health care. Predominantly, individuals cite the cost of care, lack of transportation, and lack of housing as significant barriers. Similarly, unhoused individuals in an urban Wisconsin city also faced difficulty accessing care for these reasons.8 However, it is important to note that homelessness in smaller rural towns in the United States differs significantly from homelessness in urban cities. In comparison to their urban counterparts, rural areas often have fewer shelters, lack of or limited public transportation, lack of privacy, fewer job opportunities, and rising rent. Furthermore, these factors contribute to the comprised health outcomes of rural unhoused populations, even when individuals do seek medical attention at clinics. Finding solutions for these systemic barriers in rural settings is essential for fostering equitable health care access. Some solutions may be to include individuals with lived experience in policy decision-making, antistigma education, improved transportation, increasing access to mental health resources, and improving coordinated care in these communities.<sup>23,24</sup>

Limitations of this study include the exclusion of participants below the age of 18 and those unable to read or complete the survey in English. Given the nature of the interview format and limited interviewers, the survey could be conducted only in English. Another constraint was the predominant inclusion of participants from shelters in the Wausau area, thus not providing a comprehensive representation of the entire population. Notably, a significant portion of the unhoused community in Wausau abstains from utilizing shelters, opting instead to sleep outdoors or "couch surf" (often "couch surfers" are not accounted for in surveys and are an example of hidden homelessness). Additionally, it is important to acknowledge that the willingness to utilize services may be more pronounced among the shelter-utilizing population, potentially creating a bias compared to their unhoused counterparts who do not frequent shelters.

# **CONCLUSIONS**

Individuals experiencing homelessness in central Wisconsin have numerous complex health needs and face considerable barriers to care. These findings underscore the intricate interplay between homelessness, substance use, and mental health. A significant portion of the population reports chronic illnesses, mental health diagnoses, and substance use without adequate access to care. These multifaceted challenges necessitate comprehensive, compassionate care, emphasizing holistic and inclusive health care solutions and providing direction for future interventions. Strategies to improve access to health care may include improving public transportation, improving access to mental health care, antistigma education, and including individuals with lived experience in policymaking.

Funding/Support: None declared.

Financial Disclosures: None declared.

### **REFERENCES**

- **1.** 2023 AHAR: part 1: point-in-time estimates of homelessness in the U.S. December 2023. Accessed January 15, 2024. https://www.huduser.gov/portal/datasets/ahar/2023-ahar-part-1-pit-estimates-of-homelessness-in-the-us.html
- **2.** SOH: State and CoC dashboards. National Alliance to End Homelessness. 2024. Accessed January 15, 2024. https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-dashboards/
- **3.** Case A, Deaton A. Mortality and morbidity in the 21st century. *Brookings Pap Econ Act.* 2017;2017:397-476. doi:10.1353/eca.2017.0005
- **4.** Arredondo K, Touchett HN, Khan S, Vincenti M, Watts BV. Current programs and incentives to overcome rural physician shortages in the United States: a narrative review. *J Gen Intern Med.* 2023;38(Suppl 3):916-922. doi:10.1007/s11606-023-08122-6
- **5.** Rural counties face psychiatrist shortage. Wisconsin Policy Forum. October 2018. Accessed January 15, 2024. https://wispolicyforum.org/research/rural-counties-face-psychiatrist-shortage/
- **6.** Weil AR. Rural health. *Health Aff (Millwood)*. 2019;38(12):1963. doi:10.1377/hlthaff.2019.01536
- **7.** Nielsen M, D'Agostino D, Gregory P. Addressing rural health challenges head on. *Mo Med*. 2017;114(5):363-366.
- **8.** Matzke J, Johnston B, Schneider T, Nelson D. A health needs assessment among Milwaukee's homeless. *WMJ*. 2022;121(2):149-152.
- **9.** Sachs-Ericsson N, Wise E, Debrody CP, Paniucki HB. Health problems and service utilization in the homeless. *J Health Care Poor Underserved*. 1999;10(4):443-452. doi:10.1353/hpu.2010.0717
- **10.** Baggett TP, O'Connell JJ, Singer DE, Rigotti NA. The unmet health care needs of homeless adults: a national study. *Am J Public Health*. 2010;100(7):1326-1333. doi:10.2105/AJPH.2009.180109
- **11.** Ferris-Day P, Hoare K, Wilson RL, Minton C, Donaldson A. An integrated review of the barriers and facilitators for accessing and engaging with mental health in a rural setting. *Int J Ment Health Nurs*. 2021;30(6):1525-1538. doi:10.1111/inm.12929
- **12.** Kushel MB, Vittinghoff E, Haas JS. Factors associated with the health care utilization of homeless persons. *JAMA*. 2001;285(2):200-206. doi:10.1001/jama.285.2.200
- **13.** Mental illness. National Institute of Mental Health. Accessed January 21, 2024. https://www.nimh.nih.gov/health/statistics/mental-illness
- **14.** 2023 CoC Homeless Populations and Subpopulations Reports. US Department of Housing and Urban Development. Accessed January 21, 2024. https://www.hudexchange.info/programs/coc/coc-homeless-populations-and-subpopulations-reports/
- **15.** Morales DA, Barksdale CL, Beckel-Mitchener AC. A call to action to address rural mental health disparities. *J Clin Transl Sci.* 2020;4(5):463-467. doi:10.1017/cts.2020.42
- **16.** Kepley HO, Streeter RA. Closing behavioral health workforce gaps: a HRSA program expanding direct mental health service access in underserved areas. *Am J Prev Med.* 2018;54(6 Suppl 3):S190-S191. doi:10.1016/j.amepre.2018.03.006
- **17.** Andrilla CHA, Patterson DG, Garberson LA, Coulthard C, Larson EH. Geographic variation in the supply of selected behavioral health providers. *Am J Prev Med.* 2018;54(6 Suppl 3):S199-S207. doi:10.1016/j.amepre.2018.01.004
- **18.** Summary health statistics: National Health Interview Survey, 2018. National Center of Heath Statistics. Accessed January 23, 2024. https://ftp.cdc.gov/pub/Health\_Statistics/NCHS/NHIS/SHS/2018\_SHS\_Table\_P-10.pdf
- **19.** Cairns C, Kang K. National Hospital Ambulatory Medical Care Survey: 2020 Emergency Department Summary Tables. National Center for Health Statistics; 2022. Accessed January 15, 2024. https://stacks.cdc.gov/view/cdc/121911
- **20.** Cha AE, Cohen RA. Dental care utilization among adults aged 18-64: United States, 2019 and 2020. NCHS Data Brief. 2022;(435):1-8. doi:10.15620/cdc:115597
- **21.** Health, United States Hospitalization. National Center for Health Statistics. Published June 26, 2023. Accessed May 13, 2024. https://www.cdc.gov/nchs/hus/topics/hospitalization.htm
- **22.** Oral Health in America: A Report of the Surgeon General. US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000. Accessed January 23, 2024. https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf
- **23.** Buck-McFadyen E. Competing perspectives on rural homelessness: findings from a qualitative study in Ontario, Canada. Health Soc Care Community. 2022;30(5):e2003-e2011. doi:10.1111/hsc.13633
- **24.** Tsai J, O'Toole T, Kearney LK. Homelessness as a public mental health and social problem: new knowledge and solutions. *Psychol Serv.* 2017;14(2):113-117. doi:10.1037/ser0000164

VOLUME 124 • NO 1 21



*WMJ* (ISSN 2379-3961) is published through a collaboration between The Medical College of Wisconsin and The University of Wisconsin School of Medicine and Public Health. The mission of *WMJ* is to provide an opportunity to publish original research, case reports, review articles, and essays about current medical and public health issues.

 $\ \, \odot$  2025 Board of Regents of the University of Wisconsin System and The Medical College of Wisconsin, Inc.

Visit www.wmjonline.org to learn more.