

*Physicians in the Community
Scholarly Concentration*

Student Project Showcase 2024

*Physicians in the Community
Student Project Showcase*

*MCW-Central Wisconsin
Wednesday, July 31, 2024
4:00 pm – 6:00 pm*

All students who train at the Medical College of Wisconsin-Central Wisconsin regional campus will become community-engaged physicians. This means that they will reflect on the impact that the social determinants of health have on their patients' lives and advocate for the overall health of the communities where they choose to practice.

Over the two-year Physicians in the Community course, students forge relationships with community members across many professional disciplines and explore local health priorities. In partnership with community mentors, the students identify community needs, collaborate to design and implement a community-engaged scholarly project, and develop presentations to share their results. Many of the students are building upon projects started by previous medical students, and projects will continue to evolve to meet the needs of our Central Wisconsin community.

We would like to thank our many community teachers and community mentors, as well as the Physicians in the Community Advisory Board for their input into the training of our future doctors, many of whom will return to live and work in Central Wisconsin communities.

Corina Norrbom, MD

, Addressing Barriers to Advance Care Planning Within the Hispanic Population at the Wausau Free Clinic

, Stop the Bleed: Enhancing Emergency Preparedness in Central Wisconsin

, Period Poverty Within John Muir Middle School
, Assessing the Health Needs of Northcentral Wisconsin's LGBTQ+ Population
, Importance of Mental Health in Teenagers

Amy Prunuske, PhD

Student Projects

James Adkins, Longitudinal Evaluation of the Healthy Habits Program

Paige Boruch, Period Poverty Within John Muir Middle School

Grace Buechel, Mental Health Comorbidities in Those Seeking Long-Term Addiction Treatment

Mack Christianson, Qualitative Analysis of Shopping Model for Food Pantry

Reilly Coombs, Exploring Healthcare Barriers for the Unhoused: Insights from a Rural Midwestern Community

Erin Gruber, Period Poverty Within John Muir Middle School

Alec Hafferman, Importance of Mental Health in Teenagers

Liane Kee, Assessing the Health Needs of Northcentral Wisconsin's LGBTQ+ Population

Carson Klug, Improve Your Balance – Working to Reduce Falls in Central Wisconsin

Ellie Mallek, Implementation of the Peer Shopping Program for New Women, Infants, and Children (WIC) Participants

Giridhar Murali, Analyzing the Public Perceptions of NARCAN in Central Wisconsin

Dylan Pierce, Understanding Healthcare Barriers in Central Wisconsin: A Community-Based Analysis

Megan Schleusner, Stop the Bleed: Enhancing Emergency Preparedness in Central Wisconsin

Elijah Szymanski, Assessing the Use of Emergency Rooms for Ambulatory Sensitive Conditions by Patients Without Insurance in Weston, WI

Thong Thor, AHmong Us Mentorship Program

Andrew Turunen, Assessing the Use of Emergency Rooms for Ambulatory Sensitive Conditions by Patients Without Insurance in Wausau, WI

Grace Wittenberg, Addressing Barriers to Advance Care Planning Within the Hispanic Population at the Wausau Free Clinic

Lauren Woyak, Substance Misuse Harm Reduction in Portage County

Theodore Yang, The Importance of Pathway Programs upon Helping Disadvantaged Students Matriculate into Medical School

Longitudinal Evaluation of the Healthy Habits Program

Rochelle Alger, The Boys and Girls Club

Corina Norrbom, MD

To determine the effectiveness and possible longer-term impacts of the Healthy Habits Program, a six-week nutrition and fitness program, on Boys and Girls Club members.

The Healthy Habits program was taught to both teen and elementary aged members of the Boys and Girls Club of Wausau Wisconsin. Participation was voluntary. Attendees varied from week to week. A survey was completed during the final session. Subsequently, a free response survey was offered monthly for 6 months to evaluate for development and retention of healthy habits.

Multiple surveys completed by both cohorts reported similar themes, in response to the question about challenges they faced there were multiple responses linking taste as a big challenge, whether that be healthy food tasting bad or junk food tasting good. This theme was further seen in the question asking if or when they stopped any habits as common responses were centered around them either never starting or stopping due to difficulties with taste of food. Furthermore, multiple responses reported that if they could make healthier food taste better, they would be more likely to stick to the program.

A major challenge to healthy habits that adolescents and teens at the Boys and Girls Club face is that they rely on others such as parents and schools to provide them with opportunities to eat healthy foods. Club members would have preferred a more interactive program. Longitudinal follow-up of the club members was difficult because the program was voluntary and Club attendance varies.

[Poster](#)

[Project Video](#)

[Return to Student Project List](#)

Period Poverty Within John Muir Middle School

Patty Zemke, Wausau School District

Amy Prunuske, PhD

Assess the extent of period poverty and its effects within John Muir Middle School.

A Qualtrics survey was sent to students who identify as female.

Mental Health Comorbidities in Those Seeking Long-Term Addiction Treatment

Those suffering from substance use disorder frequently struggle with various mental health comorbidities in addition to substance use. The effects of both substance use and mental illness can be detrimental to any individual's progress towards their goals. In identifying mental health comorbidities in those seeking long-term substance use treatment, root maladaptive behaviors and beliefs can be addressed, and recovery education can be guided. The first residents of the Gospel TLC underwent an intake assessment that utilized the DSM-5-TR, a cross-cutting symptom measure to assess mental health domains that are significant across psychiatric diagnoses. The DSM-5-TR was scored, and domains indicative of "threshold to guide further inquiry" were explored using Level 2 cross-cutting symptom measures. These specific questionnaires alluded to likely mental health comorbidities among the Gospel TLC residents. 7 adult male participants completed the initial intake DSM-5-TR and additional symptom measures. Upon final scoring, likely mental health comorbidities were identified, with the most frequent being manic/hypomanic conditions, unspecified personality traits, and unspecified anxiety disorders. Results indicate a high likelihood of mental health comorbidities among the residents of the Gospel TLC seeking long-term addiction treatment. Though full psychiatric evaluation is recommended to confirm, previous diagnoses align with the analyzed results. Consequently, understanding of likely mental health comorbidities will help shape the Gospel TLC curriculum and prompt individual discussions to best fulfill the goal of a successful recovery.

Qualitative Analysis of Shopping Model for Food Pantry

Donna Ambrose, The Neighbor's Place

Corina Norrbom, MD

The Neighbors' Place food pantry moved to a new site in Wausau after COVID. This allowed staff to try a new method of having patrons obtain food. Patrons select grocery items as if they were shopping while being assisted by volunteers. They access the shopping area via a lottery system. The previous model was through food box pick-up. It was hypothesized that a shopping-based model would improve access and choice for individuals, increase autonomy and access to healthy produce, and decrease stigma and stress.

Importance of Mental Health in Teenagers

Cari Guden and Marisa Doll, Edgar School District

Corina Norrbom, MD

The purpose of this project was to prepare and organize a workshop regarding mental health during the 2023-2024 school year for Edgar High School (EHS) students. The workshop focused on positive relationship building which was a point of emphasis from EHS administration and studentTc -4hc2/addTd4nu0 Td (C)3 (s

Assessing the Health Needs of Northcentral Wisconsin's LGBTQ+ Population

Jake Prunuske, MD, Kevin O'Connell, MD, and
Chanteal Findling, DO, Aspirus Wausau Family Medicine Residency
Corina Norrbom, MD

To determine the nature and extent of health care services sought by LGBTQ+ (particularly transgender) individuals within the Northcentral Wisconsin area and address barriers to healthcare within and beyond the health care facility.

Conducting semi-structured individual interviews (n = 8) with patients of Aspirus Wausau Family Medicine Residency who identified with the LGBTQ+ community, consisting of questions relating to their healthcare experiences and quality of care as it relates to LGBTQ+ specific health needs.

Participants cited provider empathy and ease of interaction as key contributors to positive healthcare experiences, with provider discomfort contributing to negative healthcare experiences. These attributes were determined by reading provider body language, identifying signs of allyship in the healthcare environment, and recognizing consistent use of chosen name and pronouns. Patients seeking LGBTQ+ specific treatments such as hormone replacement therapy (HRT) or referral for gender-affirming surgery (GAS) sought from providers was reported to be 42% (n=4) among the LGBTQ+ community. This may be related to the degree of provider education relating to LGBTQ+ healthcare. More investigation is required to determine the number of LGBTQ+ patients within the Northcentral Wisconsin area; however, these interviews suggest that open expression of allyship and knowledge by healthcare providers influence patient trust in disclosing their gender or sexual identity to their providers.

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Improve Your Balance – Working to Reduce Falls in Central
Wisconsin

Erin Wells and Jennifer Clark, Aging & Disability
Resource Center of Central Wisconsin; Amanda Tabin, Aspirus Wausau
Hospital

Amy Prunuske, PhD

In 2022 alone, Marathon County reported 2,293 visits to the emergency department due to unintentional fall-related injuries. This may or may not seem like a high number, but Wisconsin leads the country in highest rate of deaths from older adult falls. My project aims to assess what resources would be most utilized by persons at risk of falling. By hosting the Improve Your Balance – Prevent Falls Resource Fair, my community mentors and I educated members of the community about the important role that falls play in consumption of various community services. Our goal was to use this resource fair as a way to make sure future fall prevention programming aligned with the needs of our Central Wisconsin community. In addition, a goal of our project was to bring community members, services, and leaders together to help reduce the number of falls in our community.

During the Improve Your Balance – Prevent Falls Resource Fair, we encouraged attendees to fill out surveys. Each survey consisted of three parts. The first part helped us understand the demographics of our population. The second part allowed each attendee to self-assess his or her own fall related risk factors. The last part of the survey was used to gain an understanding of goals and action plans that attendees would set to help reduce their chance of falling in the future.

Our survey results showed that around 70% of attendees were worried about falling, with close to 70% of people being surveyed endorsing unsteadiness when walking. When discussing results from the third section of the survey, the number one goal set by attendees was to “Exercise regularly. Focus on exercises that help with balance and strength.”

When developing future resources for fall prevention, a focus should be placed on exercise programming. As future physicians, we can utilize this project to ask our patients about their exercise regimens, balance, and provide them with resources to prevent

Implementation of the Peer Shopping Program for New Women, Infants, and Children (WIC) Participants

The current usage of the Supplemental Nutrition Program through Women, Infants, and Children (WIC) is lower than expected which is partly due to the difficulty in accessing products that qualify under WIC and utilizing the WIC benefits card. The Peer Shopping Program was created to aid new Marathon County participants in receiving their benefits by having someone trained at WIC go to the grocery store and show new participants the necessary skills needed to use their WIC card. Through this program we predicted participants would feel more confident in buying food through WIC. Surveys were sent to current WIC participants to receive feedback on the program. New WIC participants were then offered the program and surveys were filled out before and after the shopping trip to assess confidence levels in using WIC. First, we assessed the need for the program and found that 61% believed having someone assist would benefit them and 74% believed it would benefit new participants. We collected preliminary data from participants who have gone through the program and 100% indicate they would recommend it to others. A peer support program is a worthwhile investment to ensure new mothers and their children are getting the necessary nutrition.

[Poster](#)

[Project Video](#)

[Return to Student Project List](#)

Analyzing the Public Perceptions of NARCAN in Central
Wisconsin

Dr. Michael Clark, Aspirus Health

Corina Norrbom, MD

The purpose of this study was to analyze how the public feels about naloxone, develop an understanding of the nature and prevalence of the opioid epidemic in Central WI, and to teach people about opiate overdose and use of naloxone. The overarching goal is to help curb deaths caused by drug overdoses. By being aware of the role of naloxone and how to use it, anyone can play a part in helping to save a life.

This study utilized pre and post surveys to measure participant gain in knowledge of the opioid epidemic and how naloxone can be used. Participants initially filled out a survey to measure prior knowledge and interest. They were then given a 10-minute presentation by the investigator regarding the opioid overdose epidemic, a demonstration of how to use naloxone, and where it can be obtained in the community. Participants then filled out a post-presentation survey to see how much information they gleaned.

There were 58 participants in the study who filled out the surveys, with another 29 participants declining to fill out the survey but still gaining the vital information in the education sessions. A special effort was made to sample and educate minorities in the community, especially the Indian community in

Understanding Healthcare Barriers in Central Wisconsin: A
Community-Based Analysis

Andy Johnson, Julie Bunczak, Vanessa Silva, Jeff
Haessly, Nicholas Giordano, and Nathaniel Zurawski, R2N, WIPPS

Corina Norrbom, MD

In 2019, rural areas in the U.S. faced significant health
disparities compared to urban counterparts. Limited data exists on state and
county levels, prompting the need for community-focused investigations. This project aimed to assess
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AHmong Us Mentorship Program

Nkauj Ntsuab Khang

Corina Norrbom, MD

The AHmong Us Mentorship Program aims to address the underrepresentation of Hmong individuals in the healthcare field by promoting early awareness and exposure to various health professions among high school students. The program seeks to empower students to make informed career decisions and contribute to the diversification of the healthcare workforce.

Led by H2N and in partnership with the Hmong American Center in Wausau, the mentorship program recruited high school students in grades 9 through 12 who had an interest in a healthcare career. Students were selected by schinte (u)4.68(s)-3 (n)-(t)3()5.54 (g)3 ((d)-0.62-0.7 r(e)3.9 (s()5.54,-

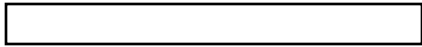
Assessing the Use of Emergency Rooms for Ambulatory
Sensitive Conditions by Patients Without Insurance in Wausau, WI

Substance Misuse Harm Reduction in Portage County

Jessica Geschke, Start Healing Now, The Clinton
Foundation

Corina Norrbom, MD

With the rise in opioid related deaths, harm reduction initiatives have taken off throughout Wisconsin. However, efforts are often aimed towards the larger cities with greater populations, leaving rural communities behind. In Portage County, there is a lack of addiction and harm reduction resources even though opioid-related deaths continue to rise at unprecedented rates. While FDA approval of selling naloxone over the counter has increased its access, there is still a financial barrier as well as stigma around purchasing naloxone from the pharmacy.



Community Engagement Awards

The Community Engagement Award was established to help the students invest in the community and has been generously supported by Dr. David and Mary Ann Lillich, Incredible Bank, and the Dan Storey Foundation.

This fund will help support the following projects in the upcoming year:

- Lyme Disease Awareness and Prevention Teaching Model
- Understanding Menstrual Health: A Comprehensive Needs Assessment
 - Roots of Resilience: An Evaluation of the Lac du Flambeau Family Circles AODA Traditional Parenting Program
- Factors Influencing Decision to Breastfeed in Hmong Women
- Preventing Diabetic Associated Visual Impairments in Rural and

