

# 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

### **Our Goal**

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.

## **Welcome & Opening Remarks**

Corina Norrbom, MD

## **Featured Project Presentations**

- ➤ **Grace Wittenberg**, Addressing Barriers to Advance Care Planning Within the Hispanic Population at the Wausau Free Clinic
- Megan Schleusner, Stop the Bleed: Enhancing Emergency Preparedness in Central Wisconsin
- Paige Boruch & Erin Gruber, Period Poverty Within John Muir Middle School
- ➤ Liane Kee, Assessing the Health Needs of Northcentral Wisconsin's LGBTQ+ Population
- ➤ Alec Hafferman, Importance of Mental Health in Teenagers

# **Community Engagement Fund Awards & Closing Remarks**

Amy Prunuske, PhD



- > 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
- Fin 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



#### **Medical Student: James Adkins**

Project Title: Longitudinal Evaluation of the Healthy Habits Program

Community Mentor: Rochelle Alger, The Boys and Girls Club

MCW-CW Collaborator: Corina Norrbom, MD

**Purpose:** 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.

**Methods:** 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.

**Results:** 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.

**Conclusions:** 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



**Medical Student: Paige Boruch** 

Project Title: Period Poverty Within John Muir Middle School

**Community Mentor:** Patty Zemke, Wausau School District

MCW-CW Collaborator: Amy Prunuske, PhD

Purpose: Assess the extent of period poverty and its effects within John Muir

Middle School.

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

**Results**: 17% didn't have regular access to menstrual supplies. 70.4% have felt anxious or worried about not having enough menstrual supplies. 31.7% of students have missed class due to limited access to menstrual supplies

Free responses were allowed at the end of the survey. Responses included "why can't menstrual products be free because many can't afford it" and "it's really stressful when you're on your period and don't have supplies"

**Conclusions**: Limited access to menstrual supplies with possible mental health implications was evident. The pilot program received positive feedback from current students, staff, and visiting community members.

All data was presented to the Wausau School District (WSD). WSD showed a desire to offer complementary menstrual supplies in additional schools. Logistical and financial planning for expansion efforts will occur during the 2023-2024 school year.

Poster



**Medical Students: Grace Buechel** 

**Project Title:** Mental Health Comorbidities in Those Seeking Long-Term Addiction Treatment

**Abstract:** 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.

<u>Poster</u>



#### **Medical Student: Mack Christianson**

**Project Title:** Qualitative Analysis of Shopping Model for Food Pantry

**Community Mentor:** Donna Ambrose, The Neighbor's Place

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** 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.

**Purpose:** Evaluate food pantry patron perceptions and experience with transition from food box pick-up to the new shopping method and whether it influenced healthy eating habits.

**Methods:** A Qualtrics survey was developed. People who were waiting to gain access to the food pantry were approached and asked if they would take a survey. Questions were read to participants, and responses were entered into Qualtrics. A qualitative analysis of surveys was done.

**Results:** Patrons of the food pantry had trust issues and feared loss of access to food if they participated in the survey. Pantry staff is overall regarded highly. Some individuals struggled with the lottery model. Patrons had variable wait times to shop, from minimal to several hours, depending on when they were called through the lottery. Although people value choice of foods, many expressed that they would rather have a food box pick-up method if it would decrease their waiting time.

**Conclusions:** Although patrons appreciate choice of food items, they expressed fear of not having access to proteins with the new method. Additionally, some seem to value time efficiency to get their food over choice of food items. A larger pool of data would be beneficial and further data should be collected to continue to improve access and use and encourage healthy eating.

<u>Poster</u>



# **Medical Student: Reilly Coombs**

**Project Title:** Exploring Healthcare Barriers for the Unhoused: Insights from a Rural Midwestern Community

Community Mentors: Tracy Rieger and Eric Lemirand, Wausau Police Department; Ben Lee, United Way of Marathon County; Jeff Todd and Jeff Oswald, Wausau Free Clinic; Diane Sennholz, North Central Community Action Program; Ron Alexander, North Central Area Congregations Organized to Make an Impact; Mary Jorgenson, Wausau Salvation Army

MCW-CW Collaborators: Amy Prunuske, PhD and Corina Norrbom, MD

**Purpose:** People experiencing homelessness are more likely than the general population to have chronic conditions and often encounter significant barriers to health care access. Many of these barriers can be impacted 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:** This survey was adapted from a survey previously conducted to assess needs of Milwaukee's homeless population. Surveys were distributed during outreach around the city of Wausau, Wisconsin. Data was transcribed, reviewed, and descriptive statistics were calculated.

**Results:** A total of 45 surveys were completed. Most participants identified as white, non-Hispanic males (24, 53%) and were between the ages of 46-55 (14, 31%). Barriers to health care included lack of housing, cost, transportation, lack of a mailing address, inadequate hours, and disrespectful care. 84% (38) of participants stated they have a mental health diagnosis, yet only 31% (14) stated they see a mental health professional.

**Conclusions:** Individuals experiencing homelessness in a rural community, like urban settings, have broad and complex barriers to accessing health care. Given limited resources in a smaller community, innovative and holistic solutions should be considered when aiming to make care more equitable. To meet the mental health needs of this community, a psychiatry free-clinic led by Medical College of Wisconsin-Central Wisconsin medical students is planning to open in Fall 2024.

Poster



**Medical Student: Erin Gruber** 

Project Title: Period Poverty at John Muir Middle School

Community Mentor: Patty Zemke, Wausau School District

MCW-CW Collaborator: Amy Prunuske, PhD

**Purpose:** Evaluating the need for period supplies in the female bathrooms at John Muir middle school and installation of containers with free products as a pilot program.

**Methods:** A Qualtrics survey was administered to all female students at John Muir Middle School to assess the need of menstrual products.

**Results:** The age of onset of first menarche of female students at John Muir Middle School ranges from 9-13 years old, with 11 years being the majority. When asked if students have enough supplies when they are on their period, 17% replied "No."

When accounting for the effects of mental health, 70% of female students responded that they feel anxious or worried about not having period supplies when they get their period.

Class attendance was also reported as being affected by not having enough period supplies: 31% of students have missed class because they did not have enough supplies.

In the free response section of the survey, students wrote about the need and being thankful for the school providing free supplies in the bathrooms.

**Conclusions:** Students having limited access to menstrual supplies was evident within the middle school. In addition to limited access, results showed possible mental health and class attendance implications.

The Period Poverty Pilot Program was seen as a success by the current students, staff, and several visiting students and community members.

All data collected by the Medical College of Wisconsin – Central Wisconsin and findings by the Ambassadors of Diversity was presented to all Principals within the Wausau School District. Overall, the Principals showed a strong desire to implement a similar program in additional schools. Logistical and financial planning to expand this program will occur during the 2023-2024 school year.

All findings have been shared with the United Way of Wausau. This included one presentation to current United Way employees and another presentation to other individuals affiliated with the United Way and bettering the Wausau area. After presenting to the principals of the Wausau School District, each individual school is in charge of taking action of ordering the supplies and installing the container.

Project Video

**Return to Student Project List** 



#### **Medical Student: Alec Hafferman**

Project Title: Importance of Mental Health in Teenagers

Community Mentors: Cari Guden and Marisa Doll, Edgar School District

MCW-CW Collaborator: Corina Norrbom, MD

**Purpose:** 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 students. The project also utilized a survey to assess student's perspectives on relationship building and the workshop's impact on future relationships.

**Methods:** To complete this project successfully, collaboration with a faculty member, EHS superintendent, and EHS Mental Health group led to discussions regarding adolescent mental health and identify areas for growth. The workshop topic was finalized because of collaborative efforts with mentors and EHS staff. Evidence-based relationship building skills were discovered through research and a workshop design was centered on students incorporating and applying these skills in the future. One 45-minute workshop for every grade (freshman, sophomore, junior, senior) was completed. An anonymous Qualtrics survey was created and administered to all EHS students which included 4 questions using the Likert scale to assess the workshop's impact on the students and relationship building skills.

**Results:** 98% of EHS students reported they strongly agree or agree having positive relationships leads to a healthier life. 96% of EHS students strongly agree or agree they plan to apply concepts learned during this workshop about relationships in their daily life. 98% of EHS students strongly agree or agree they recognize how impactful relationships can be on their life.

**Conclusions:** Most EHS students reported the workshop was worth their time, believe positive relationships lead to a healthier life as well as impact their daily life. The majority of EHS students indicated they will apply the skills taught going forward. As a result of this successful project, another workshop will be presented at the Edgar High School's Mind Your Health Day.

**Poster** 



**Medical Student: Liane Kee** 

**Project Title:** Assessing the Health Needs of Northcentral Wisconsin's LGBTQ+ Population

**Community Mentors:** Jake Prunuske, MD, Kevin O'Connell, MD, and Chanteal Findling, DO, Aspirus Wausau Family Medicine Residency

MCW-CW Collaborator: Corina Norrbom, MD

**Purpose:** 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.

**Methods:** 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.

**Results:** 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 genderaffirming surgery (GAS) sought providers who explicitly advertised themselves as LGBTQ+ friendly.

**Conclusions:** Disparities in health outcomes and patient satisfaction among the LGBTQ+ community 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.

**Poster** 



# Medical Student: Carson Klug, PharmD

**Project Title:** Improve Your Balance – Working to Reduce Falls in Central Wisconsin

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

MCW-CW Collaborator: Amy Prunuske, PhD

**Purpose:** 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.

**Methods:** 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.

**Results:** 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."

**Conclusions:** 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 falls.

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#### Medical Student: Ellie Mallek

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

**Abstract:** 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.

<u>Poster</u>



#### Medical Student: Giridhar Murali

**Project Title:** Analyzing the Public Perceptions of NARCAN in Central

Wisconsin

Community Mentor: Dr. Michael Clark, Aspirus Health

MCW-CW Collaborator: Corina Norrbom, MD

**Purpose:** 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.

**Methods:** 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.

**Results:** 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 Central WI. From the surveys: Nearly 30% of participants personally knew someone who died from overdosing. After presenting, the average score (on a scale of 1-10) on recommending naloxone was a 7/10, 8/10 on where to find it, and 6/10 for interest on wanting to learn more. This was a direct increase from an average initial score of 5/10 on recommending naloxone, 4/10 on where to find it, and 5/10 for interest on wanting to learn more.

**Conclusions:** A significant number of people in Central WI have been directly impacted by opioid overdoses. People were generally willing to engage about the topic and be educated about opioid overdoses and use of naloxone. I plan to continue to engage with the public and administer surveys. Increasing knowledge and awareness about opioid overdoses and use of naloxone has the potential to save lives.

<u>Poster</u>



**Medical Student: Dylan Pierce** 

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

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

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** 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 the impact of health insurance costs on healthcare access, understand health insurance and healthcare access barriers, assess preferred health information channels, and identify trusted messengers in rural central Wisconsin counties. A combination of quantitative and qualitative methods were employed to analyze the data to glean a comprehensive understanding of health insurance and healthcare access barriers, preferred information channels, and trusted community members.

**Methods:** Surveys were conducted by community health workers (CHWs) from the Rural Resiliency Network (R2N) at rural community outreach events in Marathon, Portage, Wood, Waupaca and Clark Counties between November 2022 and January 2024. Surveys were done digitally, on paper, or conducted verbally and entered into Qualtrics by the CHW. A combination of quantitative and qualitative methods were employed to analyze the data to evaluate health insurance and healthcare access barriers, preferred information channels, and trusted community members.

**Results:** A total of 277 people completed the survey. Participant ages ranged between 16 and 65 years old and were from diverse racial and ethnic backgrounds. A comparison was made between respondents who were from towns with population > 15,000 and those from towns of <15,000. 49% of individuals from large towns and 42% of individual from smaller towns reported refraining from seeking healthcare due to cost concerns. 61% of Hispanic respondents reported lacking health insurance coverage. Among respondents aged 45 and older, 50.3% had not considered colon cancer screening. Among women aged 40 and older, 39.5% had not contemplated undergoing mammography. Nearly half (48.2%) of surveyed individuals had never undergone screening for diabetes.

Conclusions: There are health insurance and healthcare access challenges faced by individuals in rural communities that may be impacted by factors such as geographic location, ethnicity, and age. Addressing disparities requires multifaceted interventions to improve affordability, increase health insurance coverage, promote awareness of preventive screening measures, and enhance accessibility to healthcare services, particularly in underserved communities. By implementing targeted strategies to address these issues, policymakers, healthcare providers, and community stakeholders can work towards achieving more equitable and inclusive healthcare systems that prioritize preventive care and reduce barriers to access for all individuals.

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Project Video

Return to Student Project List



# **Medical Student: Megan Schleusner**

**Project Title:** Stop the Bleed: Enhancing Emergency Preparedness in Central

Wisconsin

**Community Mentor:** Chris Davis, MD, Froedtert-MCW

MCW-CW Collaborator: Amy Prunuske, PhD

**Abstract:** This project addresses the critical need to enhance emergency preparedness in Central Wisconsin, particularly in rural areas, by increasing the number of individuals trained in bleeding control techniques. Through a

collaborative effort involving multiple specialties, medical students, and community partners, our initiative employs a train-the-trainer model to disseminate essential skills widely. We aim to expand the availability of trained instructors and bleeding control kits within the Wausau community, targeting schools, workplaces, and community organizations. Our methods include a post-training survey for assessment, and integration of training into the curriculum for first-year medical students. Given the longer emergency medical service (EMS) response times and limited access to trauma centers in rural areas, Stop the Bleed training is vital for empowering community members to provide immediate assistance in life-threatening bleeding situations. By equipping individuals in rural communities with the necessary skills, our project seeks to mitigate the impact of traumatic injuries and improve outcomes, thereby fostering resilience and preparedness at the community level.

<u>Poster</u>



# Medical Student: Elijah Szymanski

**Project Title:** Assessing the Use of Emergency Rooms for Ambulatory Sensitive Conditions by Patients Without Insurance in Weston, WI

**Community Mentor:** 

**MCW-CW Collaborator:** 

**Purpose:** The purpose of this study was to research the number of uninsured people, without PCPs, who were admitted to the Marshfield Medical Center-Weston (MMC-Weston) emergency department (ED). From that group of

data, we wanted to see how many of those patients presented with acute or chronic ambulatory sensitive conditions. Patients being seen for these reasons are considered a failure of the health care system because they are not treating and preventing these manageable conditions. This is also deemed a misuse of valuable healthcare personnel and resources that poses a significant financial burden on the hospital systems.

**Methods:** The IT department at MMC-Weston pulled electronic health record (EMR) data from the ED to look at uninsured patients who presented with ambulatory sensitive conditions in the past year. From these data further demographics were also investigated.

**Results:** The average age of patient is 43. The zip code with the heaviest representation is a town less than 1000. The most common diagnose in this data set is uncontrolled diabetes.

**Conclusions:** It was identified that there is a population of patients who have used the ED for ambulatory sensitive conditions.

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**Medical Student: Thong Thor** 

Project Title: AHmong Us Mentorship Program

Community Mentor: Nkauj Ntsuab Khang

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** 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.

**Methods:** 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 school district educators. Selected students then engaged in facilitator-led sessions that included guest speakers, healthcare professionals, and career exploration opportunities. Pre- and post-participation surveys were conducted to obtain background information and to assess and evaluate the impact of the program. Volunteer opportunities were also provided to participants.

**Results:** There were 10 total participants, one of whom dropped out for undetermined reasons. The student participation breakdown was as follows: Seniors - 33%, Juniors - 23%, Sophomores - 33%, and Freshmen - 11%. The cohort consisted of students from three separate school districts. All the seniors who participated went on to a 4-year college. There was a 55% survey completion rate. All respondents indicated a positive experience. Overall, they found the mentorship program useful, though responses varied on whether they would recommend the program.

**Conclusions:** The AHmong Us Mentorship Program offers a proactive approach to addressing the underrepresentation of Hmong individuals in the healthcare field by providing early exposure and mentorship opportunities to high school students. The mentorship program resulted in a positive experience for the students. Students also indicated personal growth while acquiring knowledge and skills that impact their choices in pursuing healthcare careers, contributing to the community, and addressing existing health disparities.

Poster



#### **Medical Student: Andrew Turunen**

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

Community Mentors: Jeff Todd, MS, CMPE and Jeff Oswald, MD, Wausau

Free Clinic

MCW-CW Collaborator: Dr. Lisa Dodson

**Purpose:** The purpose of this study was to research the number of people who were admitted to the Aspirus Wausau emergency department (ED) without health insurance (uninsured patients). From that group of data, we wanted to see how many of those people presented with acute or chronic conditions that could have been prevented or taken care of in an ambulatory setting. Patients being seen for these reasons are considered a failure of the health care system by not treating and preventing these manageable conditions. This population of people also costs the healthcare system money if hospital bills are not being paid.

**Methods:** The IT department at the hospital pulled electronic health record (EMR) data from the emergency department to look at those who presented to the ED as "self-pay" which assumes they don't have health insurance. From those people, demographics such as age, gender, race, and zip code were analyzed to identify the population of people using the ED for ambulatory care sensitive conditions, identified by a set of known ICD-10 codes.

**Results:** From the data received, there were 36 individuals who met the inclusion criteria during the year 2022. The mean age was 45.28+/- 13.8 with 86% being white. 30 out of the 36 people were identified as unspecified sex, making this data point difficult to interpret. The most represented zip codes were 54401 (10 patients, 27.8%), 54403 (6 patients, 16.7%), and 54476 (4 patients, 11.1%).

**Conclusions:** It was concluded that the population we were identifying does exist. Exploring efforts to minimize these hospital encounters will not only save the hospital system's money but will more importantly benefits the patient's health and wellbeing. Next steps in this project would include informing the emergency departments and the community about local resources for this patient population, such as the Wausau Free Clinic.

Poster



### **Medical Student: Grace Wittenberg**

**Project Title:** Addressing Barriers to Advance Care Planning Within the Hispanic Population at the Wausau Free Clinic

**Community Mentors:** Jeffery Todd, MS, CMPE and Jeffery Oswald, MD, Wausau Free Clinic; Francisco Guerrero, University of Wisconsin System Administration; Leslie Thiele, Marshfield Clinic

MCW-CW Collaborator: Amy Prunuske, PhD

**Purpose:** Approximately one in three adults in the United States has completed an advance directive (AD) for end-of-life care. Individuals who identify as Hispanic are less than half as likely as non-Hispanic White participants to have an AD. The advance care planning (ACP) to guide future education at the Wausau Free Clinic (WFC), where the patient population is over 74% Hispanic.

**Methods:** A ten question needs assessment was created to indicate basic demographics, ACP, and learning styles. Surveys were administered in English or Spanish to willing participants 18 or older from February 2023 until May 2023 one half day per week after vitals were taken. Data was analyzed qualitatively for common themes and quantitatively for percentages and means.

**Results:** About three-fourths of the 46 respondents were Hispanic or Latino. Most respondents were middle aged (35-44). Over 80% of respondents had not heard of ACP, but 61% desired to learn about it. Although 70% said they have someone in the US to make healthcare decisions for them, only 17% have a legal document designating that specific individual. Only 1 in 10 participants said a physician has had a conversation with them about ACP. Respondents expressed preference for 1:1 learning, followed by small group and then large group learning. Healthcare access and lack of education were the biggest challenges to participating in ACP.

**Conclusions:** Most individuals who utilize WFC were unaware of ACP. This could be due, in part, to the lack of education provided by physicians. Because Wisconsin is not a "next of kin" state, family members are not authorized to make decisions for adult family members if they are unable to do so for themselves. This increases the importance of having an AD completed for all individuals 18 years and older. Integrating ACP conversations into routine vital signs is a possible next step to approaching the lack of completion.

**Poste**r



# **Medical Student: Lauren Woyak**

Project Title: Substance Misuse Harm Reduction in Portage County

Community Mentor: Jessica Geschke, Start Healing Now, The Clinton

Foundation

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** 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.

**Purpose:** To place Overdose Aid Kits (OAK boxes) throughout Portage County to provide free, destigmatized access to harm reduction resources such as naloxone, fentanyl testing strips, CPR barriers, prescription disposal kits and pamphlets for local and national addiction resources.

**Methods:** Businesses and local government officials were approached about placement of an OAK box on their premises. They were contacted via email, social media or face to face. Boxes were placed in locations where permission was received. OAK boxes were monitored three months after their placement to evaluate whether contents were accessed. Surveys were distributed to businesses and organizations who refused an OAK box to assess stigma around harm reduction resources in rural communities.

**Results:** 8 of 59 organizations that were approached welcomed placement of an OAK box. Three of the organizations who refused an OAK box stated it was because they already have the resource available. Surveys revealed many community members feel that placing harm reduction methods into the community may encourage people to misuse substances, may deter customers away from their business, and people who are addicted to opioids need a higher level of intervention to enter lifelong recovery. 4 of 20 naloxone doses were removed. 4 of 16 fentanyl test strips removed. 2 of 24 CPR barriers removed. 16 of 112 pamphlets removed. 3 of 6 prescription disposal kits removed.

**Conclusion:** OAK boxes are providing needed harm reduction resources in Portage County and business owners with a box are thankful they have not had to personally use the Narcan provided, but are glad to have it available for when the day comes. Wider distribution of OAK boxes could increase community access to harm reduction resources however, stigma surrounding addiction and harm reduction remains a barrier.

**Poster** 

**Project Video** 

Return to Student Project List



## **Medical Student: Theodore Yang**

**Project Title:** The Importance of Pathway Programs upon Helping Disadvantaged Students Matriculate into Medical Schools

Community Mentor: Nicole Thill, Advocates in Medicine Pathway

MCW-CW Collaborator: Amy Prunuske, PhD

**Abstract:** Access to medical education remains a significant challenge for disadvantaged students, perpetuating disparities in the healthcare workforce. Barriers to matriculating into medical school are particularly

pronounced for individuals from lower socioeconomic backgrounds, rural communities, and underrepresented ethnic groups in medicine. Recognizing the importance of diversity in improving patient care, this research focuses on the role of pathway programs as a solution to these issues. Despite underrepresented minorities constituting 29% of the U.S. population, only 13% enter medical school. Pathway programs offer outreach, mentorship, and structural support, aim to increase opportunities. This study aims to show the significance of pathway programs in fostering diversity within medical education and, ultimately within the field of medicine.

Surveys will be collected through Qualtrics from medical students at the Medical College of Central Wisconsin, aiming to determine the extent to which students from disadvantaged backgrounds utilize pathway programs, with the hypothesis that many individuals from these groups benefited from such programs. As the survey is refined and expanded across all campuses, crucial data will be collected with the goal to inform efforts in creating more opportunities and resources through pathway programs contributing to a more inclusive and diverse healthcare workforce.

**Methods:** 1200 students will be sent surveys (all students from 3 campuses at MCW.) We hope to have 500 surveys filled. We hope to gather data on underrepresented minority medical students and medical students from rural backgrounds. Did these students use pipeline programs and if it played a role in their acceptance into medical school? Did they attend the medical school in which they did their pipeline programs at? MCAT scores and barriers to being accepted to medical school. How diversified is our school?

**Results:** 35 surveys were completed. 20% 7/35 were underrepresented minorities in medicine, 11% 3/35 were from rural areas (classified as a 10 in rural-urban continuum codes) and 17% 6/35 come from a family where the highest paid parent made less than 41,775. 8% (3/35) utilized a pathway program with 1 being an underrepresented minority in medicine, and 1 being from a lower income family. All students indicated that the pathway programs played a role in their acceptance to medical school as well as help prepared them for medical school.

**Conclusions:** In conclusion all students who participated in pathway programs agreed that the program played a role in helping students matriculate and be prepared for medical school. The definition of pathway programs was not specified and defined and I hypothesize that there were probably more students who participated in some type of pathway program but was unaware. In the future the plan is to Develop a more narrow scope search to target students who participated in pathways programs.

# 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:

- Autumn Capper Lyme Disease Awareness and Prevention Teaching Model
- Carolyn Storch Understanding Menstrual Health: A Comprehensive Needs Assessment
- **Christopher Benny** Roots of Resillience: AnEvaluation of the Lac du Flambeau Family Circles AODA Traditional Parenting Program
- Kia Lor Factors Influencing Decision to Breastfeed in Hmong Women
- Luke Mueller Preventing Diabetic Associated Visual Impairments in Rural and Underserved Populations Through Community Public Health Screenings
- Marin Stowe Identifying Type 2 Diabetes Mellitus in Rural Communities
- Payton Jorgenson Quality Improvement of Medical Care among Underserved Populations in the Wausau Free Psychiatry Clinic

We would like to thank our many community partners, teachers and mentors, as well as the Physicians in the Community Advisory Board for their time and input!

Physicians in the Community Advisory Board:

- William Harris Wisconsin Judicare, Inc.
- Brian Gumness BA & Esther Greenheck Foundation
- Mariana Savela Hmong and Hispanic Communication Network
- Sue Smith Wood County Health Department
- Rubins Silva Hmong and Hispanic Communication Network
- Yauo Yang The Cross
- Casey Nye DC Everest School District
- **Dakota Kaiser** Bridge Community Health Clinic
- Robert Gouthro MCW-CW Psychiatry Residency
- Ernest Wayde Wayde Consulting

# Teaching Pins

MCW Teaching Pins recognize excellent teachers that advance medical students' learning and support the core missions of teaching and engagement in the community. The following outstanding medical student teachers have been recognized by the MCW Curriculum and Evaluation Committee for this past academic year.

- Jessica Scharfenberg Healthfirst
- Jim and Marty Harris From Laos to America Museum
- Dipesh Navsaria MD University of Wisconsin

If you would like to contribute to the Community Engagement Fund to assist future students with their community engagement projects, please contact:

Lisa Grill Dodson, MD

Sentry Dean and Founding Dean MCW-Central Wisconsin Idodson@mcw.edu 715.870.0919

**Karen Ropel** 

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# Thank you for your support!

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