

# Physicians in the Community Scholarly Pathway

Student Project Showcase 2023



Physicians in the Community Student Project Showcase

MCW-Central Wisconsin Thursday, July 27, 2023 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**

- ➤ Haley Daigle, Addressing How to Care for and Treat Patients with Intellectual Disabilities
- ➤ Jaclyn Schneider, Art for Dessert: The Effect of Art Kits on Depression Scores in Wausau's Elderly Population
- ➤ Jessica Weiss, LENA Start: Using Validated Screening Tools to Compare Early Childhood Development Interventions Implemented In-Person Versus Online
- Christopher Hagen, Cranium Crew: Raising Concussion Awareness in Central Wisconsin

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

Amy Prunuske, PhD



- Jennifer Backus, Programming for Caregivers Who Have a Loved One with Down Syndrome
- Cassandra Balson, Effectiveness of Training on Suicide Prevention and Peer-Support
- Lauren Beranek and McKenzie Borkovec, Ongoing Analysis of Pap Smear Guidelines in High-Risk Popualtions
- > Jonathan Bressler, Health Committee Guide for Wausau Area Refugee Co-Sponsorship Teams
- > Haley Daigle, Addressing How to Care for and Treat Patients with Intellectual Disabilities
- ➤ **Katherine Ernste**, A Medical Needs Assessment of the Uninsured and Underinsured Population of the Wausau Free Clinic
- Charles Flaskrud, Hmong & Hispanic Communication Network, A Community Health Worker Organization Advancing Health Equity in Rural Wisconsin
- ▶ Drake Giese, Medical Students Mentoring Adolescent Students to Mitigate Adverse Childhood Experiences (ACE)
- > Christopher Hagen, Cranium Crew: Raising Concussion Awareness in Central Wisconsin
- **Rachel Harrik**, Health Career Youth Programming for Underrepresented Groups in Medicine: Central Wisconsin's Efforts to Increase Hmong Representation
- **Kaitlyn Krien**, Cycling Without Age An Opportunity to Engage the Community
- > Mike Mathieu, My Choice
- ➤ **Jaclyn Schneider**, Art for Dessert: The Effect of Art Kits on Depression Scores in Wausau's Elderly Population
- **Celine Scholin**, DC Everest Mental Health Initiative and Wellness Day
- **Dana Warwick**, Identifying Areas of Improvement in Healthcare for Individuals with Intellectual Disabilities
- Nicholas Weiler, MCW-CW in the Hmong Gardens
- ➤ **Jessica Weiss**, LENA Start: Using Validated Screening Tools to Compare Early Childhood Development Interventions Implemented In-Person Versus Online
- Jennifer Woodworth, Assessing Medical Students' Attitudes and Beliefs Toward Obese Patients
- ➤ **Justin York**, Assessing Medical Student Perception and Awareness of Mental Health and Suicide on the CW Campus



#### Medical Student: Jennifer Backus, RD

**Project Title:** Nutrition Programming for Caregivers Who Have a Loved

One with Down Syndrome

Community Mentor: Erica Erdman, GiGi's Playhouse Wausau

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** Nutrition recommendations for individuals with Down syndrome are comparable to those of the general population. However, the wide array of health conditions associated with Down syndrome may add nutrition challenges in the homes of these families. These potential challenges faced by families of GiGi's Playhouse in Wausau, WI were assessed. Results guided the development and delivery of nutrition programming for caregivers.

**Methods:** A 26 question needs assessment was completed by caregivers via Survey Monkey. Data collected and guidance from Erica Erdman, Wausau Founder and Playhouse Manager, guided development of a nutrition education program for GiGi's Wausau. Nutrition program delivery included 5 weeks of in-person, 1.5-hour nutrition education courses. Instructional handouts and food samples were supplied to participants during each session. Additionally, participants were sent home with cooking supplies for recipes learned. Each session was followed by an email including the class presentation and recipes. Completion of a survey was requested of participants post-programming.

**Results:** 2-9 caregivers received nutrition education at each session. Participants credited their ability to see, smell and taste new foods with friends, as well as recipes and ingredients sent home, for their ability to implement concepts learned at home. 100% of participants who completed the post-programming survey (n=3) were able to list at least 1 applicable recipe/idea for their family, had tried at least 1 new meal/snack at home, and would recommend programming to other GiGi's parents.

**Conclusions:** Nutrition programming for caregivers of GiGi's Playhouse Wausau provided nutrition education to families who have a loved one with Down syndrome. All families in attendance successfully implemented positive nutrition habits into their homes. Future projects will promote programming at Special Olympics events, aiming to educate a larger number of families.

<u>Poster</u>



Medical Student: Cassandra Balson

Project Title: Effectiveness of Training on Suicide Prevention and Peer-Support

Community Mentor: Barbara Moser, MD, Compassion MKE

David Cipriano, MS, PhD, Seeking Peer Outreach

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** This project aimed to examine the effectiveness of the current SPO\* training for Tier 2's. The research will be used to fine-tune the training, so it is effective and proven to work. With an overarching goal to improve the SPO\* program and achieve the mission to change stigma surrounding mental health in healthcare, decrease isolation, and encourage discussion about mental health.

**Methods:** Prior to training, volunteers were sent a survey to assess their knowledge on peer support as well as their confidence in intervening with individuals in distress. Following the training module, participants were sent the same survey and data from the two were compared.

**Results**: The pre-survey indicated 50% of participants disagreed it was a good idea to use validation techniques when talking with someone about suicidal ideation. However, in the post-survey 100% of people agreed it was a good idea. Participants were asked to what degree do they agree with the statement "If I am concerned that a peer is suicidal, I feel comfortable about how to handle the situation." On the pre-survey 70% disagreed or were unsure, 20% agreed and only 10% strongly agreed. After the training, the post-survey results showed 69% of people agreed and 31% strongly agreed, no one disagreed.

**Conclusions**: The pre-surveys showed medical students at MCW were not equipped to handle a crisis situation, and even more relevant, were not confident to do so. After Tier 2 training, it was shown individuals were equipped with a deeper knowledge of crisis intervention handling and suicide prevention.

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## Medical Students: Lauren Beranek and McKenzie Borkovec

**Project Title:** Ongoing Analysis of Pap Smear Guidelines in High-Risk Populations

Community Mentors: Jessica Scharfenber,

**Healthfirst Network** 

MCW-CW Collaborator: Amy Prunuske, PhD



Abstract: According to the study prompting the 2018 USPSTF guidelines, cervical cancer predominantly affects under-screened individuals with a cervix in the United States who are without insurance or no regular physician. This prompted a retrospective chart review of patients aged ≥18 seen at Healthfirst community clinic in Marathon County, WI that showed this patient population had rates of low condom use, history of HPV prior to colposcopy, and positive pap smear that led to a colposcopy less than 5 years following a negative result. These findings suggest the need to collect additional subpopulative data and expand upon previous information. By collecting more details, the purpose of this study is to determine what variables result in increased risk of abnormal pap smear and subsequent abnormal colposcopy and if additional intervention is needed in this population. Information of statewide HPV immunization status was used to support the project.

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**Medical Student: Jonathan Bressler** 

**Project Title:** Health Committee Guide for Wausau Area Refugee Co-

**Sponsorship Teams** 

Community Mentor: Adam Van Noord

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** At the end of 2021, a new refugee resettlement site, the Wausau Multicultural Community Center (MCC), was opened in Wausau, WI, with the goal of resettling up to 75 individual refugees in 2022. Following rapid U.S. military withdrawal from Afghanistan in 2021, the MCC began resettling Afghan refugees in Wausau. The 75-person goal was quickly met and surpassed.

Refugee families are placed with "Co-Sponsorship Teams" who support them during the first 9 months of their arrival, including the intense first 90 days of resettlement. These local volunteer groups assist refugee families with all elements of resettlement, including: Housing Setup, Transportation, Health, Education, Cultural Adjustment, and Jobs and Finance.

In the rapid placement of so many families, local resources for the area needed to be developed quickly. Through collaboration with local stakeholders, and by learning from early Co-Sponsorship Team experience, we produced a Health Committee Guide that is now included as part of the orientation resources for all Wausau area Co-Sponsorship Teams.

**Methods:** To produce this guide, I researched national and statewide resources, discussed local needs with the Wausau MCC, and worked with local stakeholders, including Bridge Community Health Clinic. Feedback was solicited from these stakeholders during the editorial process. To best understand the needs of co-sponsorship teams, I joined a local Co-Sponsorship Team and served as co-team leader and health committee lead.

**Results:** The Health Committee Guide is now provided to all Wausau Co-Sponsorship teams as part of their orientation to co-sponsorship. The guide will continue to be updated and edited as needed and as refugee health resources in Wausau expand.

**Conclusions:** The Health Committee Guide has been shared with all co-sponsorship teams and will be shared with future teams. The Wausau Multicultural Community Center will edit and update this guide as appropriate in the future.

Accessing and navigating healthcare as a refugee is difficult and confusing. Transportation for healthcare appointments and urgent health concerns is often insufficient in a community of Wausau's size, and its difficulty is overlooked. Working with refugees and immigrants gives one a greater understanding of broad issues in policy and infrastructure and is professionally satisfying. In my career as a physician, I look forward to working with immigrant populations. Participation with the refugee resettlement effort in Wausau has provided an important perspective that will impact how I provide care, support public health, and engage with community.

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#### **Medical Student: Haley Daigle**

**Project Title:** Addressing How to Care for and Treat Patients with Intellectual Disabilities

**Community Mentor:** Michael Clark, MD and Melissa Schoenbrodt, Special Olympics of Wisconsin

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** Individuals with intellectual disabilities (ID) are medically vulnerable and more likely to live with complex and poorly managed chronic health conditions. This study aimed to determine whether an educational session focused on engagement, communication, and the healthcare needs of this population would improve medical students perceived preparedness to care for patients with ID.

**Methods:** 39 medical students attended an educational session (60 min lecture, 30 min panel discussion, and 90 min standardized patient encounter). Participants completed a survey that asked participants to self-assess their ability to communicate with, comfortably engage, provide care for, and understand the needs of patients with ID before vs. after. 13 students applied their learned skills at MedFest, where Special Olympics athletes receive free sports physicals. After, participants completed a similar survey that assessed students' perspectives, ability to engage and provide care, and the effectiveness of the educational session. Descriptive statistics were calculated.

**Results:** 100% response rate. Results demonstrate that the educational session increased medical students' perceived confidence (61% vs 93%), comfortability (80% vs 92%), communication skills (59% vs 97%), understanding (61% vs 90%), and perspective (59% vs 100%). 100% of MedFest volunteers said the education session provided them with more confidence and valuable clinical techniques. 100% of participants believe MedFest enhanced their comfort regarding caring for this patient population.

**Conclusions:** Medical school education, combined with real-life experience, improves medical students' perceived ability to provide confident, compassionate, and high-quality care to patients with ID. The educational session will be held biennially at the Medical College of Wisconsin - Central Wisconsin campus, while MedFest will occur annually in Wausau. Work is being done to expand the session to other medical schools.

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#### **Medical Student: Katherine Ernste**

**Project Title:** A Medical Needs Assessment of the Uninsured and Underinsured Population of the Wausau Free Clinic

Community Mentor: Jeff Oswald, MD; Jeff Todd, MS, CMPE

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** : Identify factors preventing the Wausau Free Clinic population from receiving healthcare through existing health systems and the top health problems patients present for to help guide the clinic in what services to offer to best serve our patients.

**Methods:** From spring 2021 through fall 2022, a 20 question online Qualtrics survey was administered to 36 patients who received care at the Wausau Free Clinic during clinic hours. Survey was available in both Spanish and English. Survey data along with clinic-provided demographic information on 207 total patients who attended clinic in this same timeframe was analyzed. This data was used to provide insight on services needed, patients being served, and gaps in care.

**Results:** Of the 207 patients who attended clinic from spring 2021 through fall 2022, 61.1% of patients identified as Hispanic or Latino and 49.8% of the patient population listed Spanish as their preferred language. 39.9% of patients were between ages of 20-39 and 36.9% were between the ages of 40-59. 54.3% presented for acute care visits and 45.7% for chronic care visits. The most common diagnoses were skin rash/lesion, followed by mental health, back/muscle pain, diabetes and hypertension. Top factors preventing patients from receiving care elsewhere included lack of insurance, perceived financial burden, and lack of transportation.

**Conclusions:** The majority of patients who presented to the Wausau Free Clinic were Latinx, many of whom primarily speak Spanish, highlighting the need for Spanish-speaking providers and/or regular interpreting services. There were similar amounts of acute and chronic issues addressed at the clinic. The clinic along with partnering community organizations with similar objectives work to mitigate financial and other barriers to close gaps in healthcare access for Wausau Free Clinic patients.

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#### **Medical Student: Charles Flaskrud**

**Project Title:** Hmong & Hispanic Communication Network, A Community Health Worker Organization Advancing Health Equity in Rural Wisconsin

Community Mentors: Mariana Savela, Toufue Xiong, Tony Gonzalez,

Francisco Guerrero, and Norma Castro, H2N

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** The goal of this project was to assess a Community Health Worker organization's ability to address barriers to health equity in Hispanic and Hmong populations through health maintenance services, case management, and community-based health education.

**Methods:** Quantitative and qualitative data was collected from CHWs (Community Health Workers) and community members through the use of Qualtrics surveys.

**Results:** The CHWs approach to advancing health equity in underserved populations is a more effective strategy compared to the traditional means. Community members are more likely to seek out healthcare opportunities and educational resources. CHWs that are members of underserved communities themselves feel an incredible sense of fulfillment serving their community through the model of healthcare.

**Conclusions:** As the paternalistic approach to medicine fades, new strategies are emerging to reach populations that were previously left behind. The Community Health Worker model is an underutilized, powerful tool for advancing health equity across many settings and cultures. In the future, more research will be done to assess the efficacy of this model compared to other methods.

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#### **Medical Student: Drake Giese**

**Project Title:** Medical Students Mentoring Adolescent Students to Mitigate Adverse Childhood Experiences (ACE)

Community Mentor: Shannon Young, PhD, Enrich, Excel, Achieve

Learning Academy

MCW-CW Collaborator: Corina Norrbom, MD and Jeffrey Fritz, PhD

**Background:** Adverse Childhood Experiences (ACE) are defined as experiencing or witnessing violence, abuse, or neglect as a child. ACE scores are calculated based on the total number of these experiences. As a child's score increases, their school performance declines and risk increases for poor future health outcomes. To mitigate ACEs effects, intervention at an early age is critical. One such method is a nearpeer mentoring program for K-12 students with elevated ACEs at Enrich Excel Achieve Learning Academy (EEA) in Wausau, WI. The goal of the mentoring program is to establish a positive relationship, with the intention that the mentoring program will increase student engagement and mitigate future effects of high ACE scores.

**Methods:** A medical student-led initiative was developed to mentor fourteen EEA students with significant ACE scores. Mentoring sessions were in person for all mentors and mentees for a minimum of 30 minutes in duration for the entirety of the academic school year. Mentees were surveyed at the beginning and end of the school year to monitor progress in the program. Questions focused on their support system and how comfortable they feel asking for help.

**Results:** Surveys showed significantly high ACEs among EEA students, with evidence of successful creation of positive longitudinal relationships with implementation of the mentoring program. 62% of students at EEA have 4 or more ACEs in their life, compared to 16% in the state of Wisconsin. With the implementation of the near-peer mentoring, 93.3% of students reported they had someone to reach out to for support, an increase of over 20% from previous years data.

**Conclusions:** The mentoring initiative has been successful in fostering positive relationships in students with high ACE scores. This positive relationship allows the students to feel they have support which could otherwise be absent. As the project continues, we hope the mentoring program will improve school attendance, performance, and behavioral discipline among mentored students. With increased school engagement, we hope that future complications of high ACE scores can be mitigated.

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#### **Medical Student: Christopher Hagen**

**Project Title:** Cranium Crew: Raising Concussion Awareness in Central

Wisconsin

Community Mentor: Michael Clark, MD, Granite Peak Ski Patrol

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** Lack of concussion knowledge/awareness is an identified issue within the Central Wisconsin area. To help meet this knowledge gap, Cranium Crew, a concussion education program, was created. This study seeks to assess the effectiveness of Cranium Crew's education at conveying key information about concussion mechanism and symptoms while addressing common misconceptions.

**Methods:** Multiple education sessions were held covering concussion mechanisms, risks, symptoms, and case examples. Case examples were then discussed to develop talking points for addressing potential concussions. Afterword's, a Qualtrics survey containing 11 questions was provided to participants collecting information about demographics, current activities, previous concussion education, and pre/post-concussion knowledge/comfort discussing concussions with others. The collected data was then analyzed using a paired t-test in excel.

**Results:** A total of 18 surveys were collected from 4 separate presentations. T-test analysis from pre/post surveys indicated significant increases in knowledge of concussion causes (+2.78), symptoms (+2.71), and when to seek medical attention (+3.17) when ranked on a 1–10 point scale. Additionally, increases were also seen in confidence in talking to others about concussions (+1.35), willingness to reach out to others (+1.00), and personally seeking medical attention (+0.88) on a 1-5 point scale.

**Conclusions:** The initial data analysis of Cranium Crew's effectiveness strongly indicates an increase in concussion knowledge and comfort when approaching others about symptoms. Ultimately this is a positive indication that proper education and discussion Can increase awareness of concussions in the Central Wisconsin area. Ideally more data will be collected with a broader range of demographics to further assess the education program's effectiveness.

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#### **Medical Student: Rachel Harrik**

**Project Title:** Health Career Youth Programming for Underrepresented Groups in Medicine: Central Wisconsin's Efforts to Increase Hmong Representation

Community Mentor: Sheng Khang, North Central AHEC

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** This research endeavored to analyze the level of success of AHmong Us', a high school program, goals of increasing the interest in and access to health careers for Hmong students. The success of this program is hoped to increase representation of Hmong people in the healthcare field and subsequently increase socioeconomic, education, and health statuses of Hmong people in Central Wisconsin. Data was collected via free-answer surveys of 9 students who completed the program. Analysis of the surveys was completed with word similarity and frequency. The analysis showed that AHmong Us was successful in increasing access to health careers for the Hmong students who completed the program. Further research will show whether or not those students pursue a career in the healthcare field.

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**Medical Student: Kaitlyn Krien** 

Project Title: Cycling Without Age - An Opportunity to Engage the

Community

Community Mentor: Halle Veenstra, Cycling Without Age

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** Cycling Without Age Pilots provide older adults and adults with differing abilities the opportunity and excitement of being outdoors on a trishaw. Passengers will experience a new adventure, enjoy nature up close, share stories, engage with the community, and make new intergenerational friendships while riding in the greater Wausau area. By increasing accessibility to nature and engagement with the community, Wausau along with Cycling Without Age can help combat feelings of loneliness and isolation that may be experienced by older adults and individuals with disabilities. Cycling Without Age allows individuals of all abilities a chance to safely cycle and appreciate nature.

**Methods:** Island Place residents were asked to participate in a survey for comparing their UCLA loneliness scale prior to and after the Cycling Without Age season. If they were willing to participate (n=6), they were provided an informational letter and completed the UCLA loneliness questionnaire. Questions also provided room for quotes on the Cycling Without Age program. All results have been de-identified and this project was registered with the MCW IRB.

**Results:** Five out of the six Island Place residents showed improved UCLA loneliness scores after the Cycling Without Age experience. All subjects had improved scores for engagement with nature and the outdoors. All subjects had improved scores for feeling of belonging within the Wausau Community as well as increased engagement with the environment.

**Conclusions:** There is a positive correlation between Cycling Without Age and participants engagement with the environment and the Wausau Community. Future directions for project include surveying other sites such as Opportunity Inc., Riverview Terrace, North Central Health Care, Mount View Care Center, Birchwood Highland Apartments, Renaissance and Rennes. Additional plans embrace building on social infrastructure and promote activities to engage all members of our community.

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**Medical Student: Mike Mathieu** 

Project Title: My Choice

Community Mentor: Patricia Zemke, MS Ed, John Muir Middle School

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** Studies have been published about how lack of parental support during childhood is associated with increased adult depression and chronic problems. Additionally, there is a large body of literature about the relationship of adverse childhood experiences and poor health outcomes, mental illness, and substance abuse. Many children are faced with challenging social and economic situations at home. A strong adult relationship in a child's life can be crucial in developing resilience. The "My Choice" program was developed to identify students who needed extra social, emotional, and academic support at school with the goal of creating a safe space for students to feel listened to and valued not only in the school setting but also in the community. My project aimed to evaluate the impact of the My Choice program on developing relationships with caring adults at school and in the community, as well as behaviors at school.

**Methods:** Eight students were selected by school personnel and agreed to participate. Students met with the facilitating teacher and their peers for 1 hour per day, three days per week, for approximately ten months. My plan was to do a pre and post survey.

**Results:** The surveys were not able to be given as planned.

**Conclusions:** Since data was not able to be collected, it is hoped that another student will collect and analyze pre and post surveys with the next My Choice class.

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#### **Medical Student: Jaclyn Schneider**

**Project Title:** Art for Dessert: The Effect of Art Kits on Depression Scores in Wausau's Elderly Population

**Community Mentor:** Rachel Hausmann-Schall and Katie Anderson, Leigh Yawkey Woodson Art Museum, Doris Spooner, Wausau Area Mobile Meals

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** In 2018, Marathon County Pulse reported the prevalence of depression in Medicare-age residents of Marathon County was 17.9%. Modeled after a similar program initiated by The Metropolitan Museum of Art in New York City, "Art for Dessert" aims to improve depression scores for the homebound by including a bimonthly, immersive art kit with their Wausau Area Mobile Meals meal delivery. These art kits are intended to encourage and foster creativity and help older adults find joy in their day-to-day lives.

**Methods:** Thirty-eight clients of Wausau Area Mobile Meals, who indicated interest in the program via survey, received 1 art kit every other month with their meal delivery. Art kits delivered in August 2022, February 2023, and June 2023 were accompanied by a PHQ-9 survey, which participants were asked to fill out and return to their delivery driver. PHQ-9 scores were compiled and compared to baseline scores, collected in August 2022.

**Results:** At the start of the study, baseline PHQ-9 scores indicated 12 participants with minimal depression, 8 participants with mild depression, 5 participants with moderate depression, and 1 participant with moderate-severe depression.

**Conclusions:** Fifty percent of study participants had some level of baseline depression at the start of the study. Participants did interact with their art kits and reported enjoying the creative outlet. On a small scale, this program is feasible and can be successfully rolled out in a community like Wausau. Future plans include expanding the target population to include more than the homebound, like those physically or intellectually disabled and those living in group homes or nursing homes.

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#### **Medical Student: Celine Scholin**

**Project Title:** DC Everest Mental Health Initiative and Wellness Day **Community Mentor:** Brooke Davis, DC Everest Area School District

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

**Background:** The goals of this project were to provide resources and education about mental health to DC Everest High School students and advocate for suicide prevention. In addition, this project was meant to encourage conversations about mental health between students and their peers and set the stage for future conversation about mental health at DC Everest and in the Wausau community.

**Methods:** Methods for this project included an anonymous, voluntary, electronic survey administered to students immediately following the Mental Wellness Day. The survey included questions about students' grade levels and homeroom teachers. The survey also assessed student opinions about the Mental Wellness Day sessions and resources provided during the event. Finally, the survey collected student ideas for future mental health discussions.

**Results:** Of 1,321 enrolled students, 565 survey responses were recorded. The results of the survey showed 56.16% of respondents classify their mental health as "coping," "struggling," or "unwell." 81.78% of respondents felt they obtained useful resources through the event and 77.14% of respondents felt their knowledge about mental health topics improved through participation in the event.

**Conclusions:** In conclusion, the majority of student respondents report having mental health struggles. Despite the survey's limitations, the Mental Wellness Day was successful in delivering mental health resources and education to DC Everest High School students. Additionally, students provided ideas for future mental health discussions. Ideally, small group sessions will be held throughout the school year so students can regularly discuss mental health topics they find important.

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#### **Medical Student: Dana Warwick**

**Project Title:** Identifying Areas of Improvement in Healthcare for Individuals with Intellectual Disabilities

Community Mentor: Melissa Schoenbrodt and Michael Clark, MD, Special

Olympics Wisconsin

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** Currently, no specific training requirements exist for medical schools on treating people with intellectual disabilities, leaving it up to each individual medical school. The goal of this project was to survey patients and clinicians to see if they felt that implementing education into medical schools about caring for patients with intellectual disabilities (ID) would be helpful and to identify areas of improvement in healthcare for individuals with ID.

**Methods:** Surveys were conducted in-person and online through email and newsletters to clinicians and parents/guardians of Special Olympics Wisconsin (SOWI) athletes. The surveys were used to assess barriers to care perceived by both parties, level of comfort in giving care, satisfaction in receiving care, and desired topics to be included into a medical school education session for caring for people with ID.

**Results:** 59 SOWI athlete surveys and 43 clinician surveys were filled out. The barrier to care identified most often by parents/guardians of SOWI athletes was provider scarcity. 49% of clinicians felt that they were not able to give the same quality of care to their patients with ID and reported complex social situations most frequently as an obstacle to quality care. All clinicians felt that a formal education in the medical school curriculum would or might be beneficial. None felt that an education session would not be beneficial.

**Conclusions:** Implementing education in medical school on how to care for individuals with ID is seen as a valuable endeavor by both healthcare clinicians and patients. Some focus areas identified for beneficial medical education included how to address communication barriers, common physical exam differences, variation in screening timelines, and local resources for patients. Future studies will evaluate the effectiveness of education presentations and hands-on activities on medical students' understanding and comfort level with caring for patients with ID.

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**Medical Student: Nicholas Weiler** 

Project Title: MCW-CW in the Hmong Gardens

**Community Mentor:** Martha Harris and Jim Harris, Hmong Gardens

MCW-CW Collaborator: Corina Norrbom, MD

**Background:** The purpose of this project was to increase the cultural awareness of the Hmong culture within the MCW-CW student population over a gardening season.

**Methods:** This was to be accomplished by getting the students to be involved in growing a garden that contained traditional American foods as well as traditional Hmong foods. The students were surveyed before their first time at the garden and at the end of the gardening season. These were surveys of the students' self-beliefs of their own cultural awareness of the Hmong culture and necessity of cultural awareness in medicine.

**Results:** Based on the students' responses, before and after participating in the garden, there was an increase in self-reported cultural awareness of the Hmong culture from an average of 4.33 to 6.11 on a 10-point scale (0=unaware, 10= very aware). This difference was not found to be statistically significant. Student beliefs of the importance of cultural awareness in medicine remained unchanged but significantly high 8.13 pre-project to 8.89 post-project.

**Conclusions:** Based on the results of the results from this survey we cannot concluded that cultural awareness of the Hmong culture was increased in students participating in this project. This was mostly limited by availably to participate in the gardens. In the future this project could be continued by working closely with the other Hmong gardeners to get a better understanding of the meaning of the gardens.

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#### **Medical Student: Jessica Weiss**

**Project Title:** LENA Start: Using Validated Screening Tools to Compare Early Childhood Development Interventions Implemented In-Person Versus Online

Community Mentor: Sam Steiner, MA-CCC/SLP, IMH-E, LENA Start

**Marathon County** 

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

**Background:** The early language environment is critical for a child's language and cognitive development which is related to later social, personal, and academic achievements. Language Environment Analysis (LENA®) utilizes validated automatic speech detection which provides quantitative measurements of a child's natural home language environment, enabling the analysis of auditory interactions between caregivers and children. This study analyzed data collected since 2019 to determine if this evidence-based program is as effective when implemented in-person versus online.

**Methods:** Ten sessions of parental education taught parents to increase interactions with their children (0-3 years) to improve brain development and enhance early language acquisition. The validated recorder collected quantitative feedback, presented in weekly reports, and revealed trends in data including: Adult Word Count (AWC) and Conversational Turns (CT). During the program, surveys provided parent demographics and revealed child developmental gains.

**Results:** This study demonstrated the efficacy of LENA Start as both an in-person and online class. Both class modalities were effective for increasing total AWC, and children of parents who participated in LENA Start classes gained over two months of developmental skills per month.

**Conclusions:** LENA Start should continue to be offered as both in-person and virtual classes in the Wausau area to aid in early childhood language and cognitive development.

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**Medical Student: Jennifer Woodworth** 

**Project Title:** Assessing Medical Students' Attitudes and Beliefs Toward Obese Patients

Community Mentor: Medical College of Wisconsin – CW, MKE, and GB

campuses

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** In medicine, there has been recent focus on obesity and BMI as modifiable risk factors for poor health outcomes. Evidence does show that a BMI over 30.0 is correlated to chronic health issues such as diabetes, heart disease, and chronic renal failure. However, BMI is one piece of a patient's profile and is not an exclusive determinant of quality of life. Negative inclinations about weight and body-shape still exist among healthcare providers, which can lead to overweight patients delaying care to avoid confrontation with these attitudes and beliefs. The first step in addressing this problem is understanding more about the prevalence of weight stigma among future providers and physicians. Surveying medical students helps us understand where the implicit bias about weight in medicine begins, and if it would be able to be addressed in medical school curriculums.

**Methods:** Using the NEW Attitudes Scale established by Dr. Edward Ip at Wake Forest School of Medicine, students will be asked to answer questions anonymously to gauge the bias, or lack of bias, they may have against overweight and obese patients.

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#### **Medical Student: Justin York**

**Project Title:** Assessing Medical Student Perception and Awareness of Mental Health and Suicide on the CW Campus

**Community Mentor:** Jeff Fritz, PhD, Medical College of Wisconsin – Central Wisconsin

MCW-CW Collaborator: Amy Prunuske, PhD

**Background:** Across the nation, there are continued statistics of poor mental health and suicide in healthcare. Seeking Peer Outreach\* (SPO\*) was developed to target stigma and isolation around mental health in professional education through a three-tiered, peer-support system. This research aims to study the effectiveness and efficacy of the Tier 1 interventions, which includes all members on the CW campus, over the first two years of the program.

**Methods:** Approximately 6 months after SPO\* was introduced, a voluntary, anonymous survey was sent out via email to all individuals on campus to assess awareness of SPO\*'s mission, willingness to reach out to peers for support, comfort level with talking about mental health, and mental well-being. This survey was conducted through Qualtrics and consisted of 10 questions.

**Results:** With a 27.3% response rate, 96% of respondents were aware of the mission and vision of SPO\*. 92% knew who the trained Tier 2 individuals were as well as felt comfortable talking about mental health and suicide with their peers. On a 0-100 scale indicating mental well-being, the mean was 69.0 with a standard deviation of 15.53.

**Conclusions:** Tier 1 interventions have helped reduce stigma surrounding mental health and suicide in professional education. With a mean mental well-being score of 69.0, more work is needed to institute such a drastic change. Continued discussions and events surrounding mental health are crucial components to reducing this stigma and as SPO\* continues to grow across the institution, hopefully the comfortability only continues to grow.

**Poster** 

### 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:

- Lauren Woyak Substance Misuse Harm Reduction in Portage County
- Thong Thor AHmong Us
- Megan Schleusner Stop the bleed
- Reilly Coombs Health Needs Assessment of Wausau, WI
- Dylan Pierce Assessing Rural Healthcare Coverage and Health-Related Information in Central Wisconsin
- Ellie Mallek WIC Peer Shopping program
- Theodore Yang Advocates in Medicine Pathway
- Grace Wittenberg Expanding Advanced Care Planning across All Ages at Wausau Free 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
- Katie Rosenberg Mayor, City of Wausau
- Kathy Foley Former Director of Leigh Yawkey Woodson Art Museum
- Laura Scrudiere Marathon County Health Department

## **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.

- Mariana Savela Hmong and Hispanic Communication Network
- Donna Ambrose Neighbor's Place
- Sheng Khang North Central Area Health and Education Center

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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Lisa Grill Dodson, MD Sentry Dean & Founding Dean

Terri Walkush Course Coordinator Education Program Analyst, Sr.

