

Physician in the Community Scholarly Pathway

Our goal is that all the students who train on the Medical College of Wisconsin-Central Wisconsin regional campus will be community-engaged and determine how social and environmental 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 Physician in the Community course, students have forged relationships with community members across many professional disciplines and have explored local health priorities.

Students have collaborated to design appropriate methods, and developed effective presentations. The students in our inaugural class were the pioneers of these

Debra Hill Decker, MD

Cara Norborn

Dr. J. P.

Project Abstracts

Medical Student: Britt K. DeRuyter

1. Aspirus Wausau Spinal Cord Injury Clinic:
A Multidisciplinary Approach to Patient Care

Community Mentor:



Medical Student: Forrest Ericksen

4. Good News Project – Health Equipment Lending Program

Community Mentors: Toni Schmitt and Dr. Charles MacCarthy, Good News Project

6JG)QQF 0GYU 2TQLGEV KU C NQECN PQRPTQ,V QTICPK\C\ MacCarthy and his wife Peggy. The Good News Project conducts community service both locally and abroad. With the help of Toni Schmitt, I have been working with the Health Equipment Lending Program or HELP closet which began in 2005 to serve the local community. The HELP closet provides equipment such as wheelchairs, walkers, and countless other medical devices to the community for those in need of this equipment. This program is funded entirely by donations and donated equipment. The importance of this service within our community is what got me excited to participate. In 2017 alone, the HELP closet provided more than 3,000 items to individuals within our community. The exponential growth of the HELP closet in recent years has demonstrated its need. My project has been fostering collaboration between the HELP closet and local organizations to raise awareness and provide this equipment to the appropriate people. I have been doing this through physical therapy and senior care centers within our community which frequently encounter RCVKGPVU VJCV YQWNF DGPG,V HTQO VJG *'.2 ENQUGV oU project is to foster relationships between the HELP closet and these organizations. This would provide equipment to those in need and increase the amount of donations of used equipment to support the continued growth of the HELP closet.

Medical Student: Alexandra Frawley

Medical Student: Seth Heithaus

8. Survey of Marathon County Substance Abuse Providers

Community Mentor: Melissa Moore, Marathon County AOD Partnership

Purpose: 5 W D U V C P E G C D W U G J C U D G G P K F G P V K , G F C U C R W D
County community. Several local groups are working to address the problem. There is a need to compile information on the available substance abuse services in Marathon County in order to identify existing resources and needs.

Methods: Area substance abuse treatment providers were surveyed to create a directory of available resources. Providers were also asked to participate in an interview. The survey results were compiled into the beginnings of a directory with information intended to direct people to the most appropriate treatment services available.

Results: Q H K F G P V K , G F C I G P E K G U T G V W T P G F C U W T X G [C
The interviewees discussed topics such as the opioid epidemic, what leads people to seek treatment, and predictors of treatment success.

Conclusions: Interviewees noted that mental health diagnoses and trauma co-occur with substance abuse at high rates. They cited replacement activities and peer support as important to recovery success. Barriers include lack of inpatient treatment, sober living and employment opportunities. Oversight requirements and high no-show rates, as well as a shortage of research on the effects of substance abuse on children, create challenges in providing needed services.

Medical Student: Brenden Heroa6ng (en-US)tkp

Medical Students: Ryan Huynh & Kyle Olson

10. Relationship Between Diabetes, Physical Activity, and Rice-Portion-Size in the Wausau Hmong Community

Community Mentor: Dr. Kevin Thao, Aspirus Wausau Family Medicine

Purpose: Socioeconomic and lifestyle factors may affect the health of the Central Wisconsin Hmong population. For example, 1 in 5 Hmong individuals locally live under the poverty line, and 68% of those over 65 do not speak English. These aspects may have unforeseen negative health outcomes.

Objective: With an increasing Hmong population, we wanted to learn how lifestyle differences, URGEK, ECNN[FKG V CPF

Medical Student: Toro Pérez, Patricia

11. Evaluation of the Interpretation Services Provided at Aspirus Wausau Clinics

Community Mentor: Shaune Harter, Aspirus Wausau Hospital and Clinics

9 JGP CEEGUUKPI JGCNVJECTG C UKIPK,ECPV RGTEGPVCIG
language discordance with their physician and other healthcare personnel. This language barrier disrupts communication and can impact effectiveness of care, leading to worse patient outcomes and decreased patient satisfaction. Access to quality interpretation services can bridge the language barrier, and lead to stronger doctor/patient relationships and improved patient outcomes. This project looked at the interpretation services in the Aspirus Wausau clinics to determine how easy it is to request those services, and to gauge healthcare worker satisfaction. The research was conducted through an anonymous Qualtrics survey that was distributed by email to all employees at the Aspirus Wausau ENKPKEU 6JG TGUWNVU UJQY VJCV YJKNG JGCNVJECTG Y
interpretation services, distribution and service quality could be improved. The second part



Medical Student: Bryan Miles

13. Hybrid Ablation for the Treatment of Nonparoxysmal Atrial Fibrillation with Postoperative Monitoring Utilizing Implantable Loop Recorders

Community Mentors: Dr. John Johnkoski, Dr. Kevin Rist, Dr. Andrew Mykytsey; Aspirus Wausau Hospital

Purpose: # VTKCN ,DTKNNCVKQP #(KU C EQOOQP CTTJ[VJOKC nonparoxysmal AF (NPAF) represent a major challenge. Catheter ablation (CABL) and minimally invasive surgical techniques have achieved only modest success in treating NPAF. This led to a staged approach. With regards to rhythm monitoring, the gold standard JCU DGGP ' -)U QT *QNVGT OQPKVQTU 6JGUG CUUWOG VJC OQPKVQTKPI RGTKQFU VTCPUNCVGU VQ NCEM QH CVTKCN monitored. Internal loop recorders (ILR) erase this assumption.

Medical Student: Matthew Novitch

15. Improving Mental and Physical Outcomes for those with Glioblastoma Multiforme in Central Wisconsin

Community Mentor: Dr. Andrew Beaumont, Aspirus Wausau Hospital

Glioblastoma (GBM) is both the most common and most lethal primary CNS malignancy in adults, accounting for 45.6% of all malignant CNS tumors, with a 5-year survival rate of only 5.0%, despite the utilization of multimodal therapy including resection, chemotherapy, CPF TCFKCVKQP 6TGCVQGPV QH)\$/ KU FKH,EWNV FWG VQ medical management with chemotherapy and radiation, and as such improvements YGTG OCFG KP VJG ,GNF QH DKQOGFKECN GPIKPGGTKPI # CU VWOQT VTGCVKPI ,GNFU 66(U TGR TGUGPV CP GPKVTG RTGNKOKPCT[UVWFKGU UWIIGUVKPI EQORCTCDNG CPF C\ chemotherapeutic agents in the treatment of recurrent glioblastoma. A recent randomized clinical trial comparing NovoTTF-100A to physician's best choice chemotherapy in RCVKGPVU YKVJ TGEWTTGPV INKQDNCUVQOC TGXGCNGF VJ EJGOQVJGTCRQWVKE CIGPVU YKVJ C OQTG HCXQTCNDG UK of life. Adherence to NovoTTF-100A therapy is the greatest threat to its use, as patients are required to wear the cap often throughout the day and are required to be close to power sources due to short battery life. In order to evaluate how to improve patient compliance, a cohort of patients going through NovoTTF-100A therapy were systematically questioned on their use of the technology and viable suggestions for improvement. While the results included the expected battery power and aesthetic complaints, an overwhelming result was that the physician presentation of the product made the biggest difference in patient compliance and usage of NovoTTF. Going forward, educated and motivated physician TGETWKVOGPV EQWNF RNC[C FG,PKPI RCTV KP IGP GTCVKR undergoing NovoTTF therapy for GBM.

Medical Student: Courtney Schwebach

16. The impact of mentorship on students with Adverse Childhood Experiences (ACEs) and their future success

Community Mentors: Dr. Shannon Young, Enrich Excel Achieve Learning Academy
Dr. Jeff Fritz, MCW-Central Wisconsin

Purpose: Adverse childhood experiences (ACEs) have been shown to have cumulative and negative long-term health effects. A possible prevention method is providing mentorship to students. Thus, we assessed ACEs, mentorship experiences, and life satisfaction of former students.

Methods: Eighteen former students of Enrich Excel Achieve (EEA) Learning Academy in Wausau, WI completed a 37-question Qualtrics online survey. The survey incorporated sections on ACEs, resiliency, demographic information, mentorship experience, life satisfaction and social support. The data was then analyzed using Excel and normalized to the total number of participants.

Results: Former students of EEA Learning Academy experienced an average 2.9 ACEs while participants of Kaiser's ACEs study experienced 1.7 ACEs. The majority of former students who did have a mentor, while at school, reported a positive experience. While all former students earn an annual income below the average in Wisconsin, they reported high life satisfaction, considered themselves successful, and felt happy.

Conclusion: Former EEA Learning Academy students have experienced more ACEs than the average person, which could indicate that EEA may attract students with more ACEs due to its non-traditional learning setting. In addition, the ACEs the students did experience may indicate the issues that are more prominent in Wausau. However, the students reported overall high levels of life satisfaction. Some possible reasons for their higher life satisfaction could be the mentorship they received, an inherent resiliency or something else.

Medical Student: Stephanie Strohbeen

17. Enhancing Wausau's Walkability with StriveOn App

Community Mentors: Blake Opal-Wahoske and Emma Busig, Wausau River District

Purpose: The Wausau community is striving for excellence in health and wellness for its citizens. To achieve this goal, a local team is developing guided walking tours utilizing the StriveOn App. The goal of this project was to elicit feedback from the employees in Wausau's downtown area to ensure that the walking tour app will be utilized to increase work day activity.

Methods: Downtown employees were asked to participate in a survey for input into the new app. If they were willing to participate, they were provided an informational letter and completed a 14-question survey on an electronic device using Qualtrics Survey Software.



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Medical Student: Neal Smith

20. Barriers to Oral Healthcare for Head Start Guardians in Marathon County

Community Mentor: Kris Lemke, Marathon County Child Development Agency Head Start

Purpose: 6Q Q V J F G E C [K O R C E V U C E J K N F o U R G T H Q T O C P E G K P and adequate nutrition. This burden disproportionately affects children in low income rural households.

Methods: Partnering with Marathon County Child Development Agency, we assessed beliefs and attitudes about child dental health; assess the knowledge of services and fees of local dental providers; and identify barriers to receiving appropriate dental care for parents and guardians of Head Start participants. We developed a protocol that included meeting with parents or guardians during scheduled parent-case manager meetings. The meetings consisted of a brief presentation; a pre and post-test to assess guardian's attitudes and beliefs; and a series of open ended questions for participants to identify their perceived barriers to accessing oral health care.

Results: Five parents participated in the study. Barriers that were brought up in the discussion portion were; children's behavior at the dentist; unanticipated costs of the visits; and the burden of making appointments.

Conclusion: The study results would indicate that parents already value dental health and have the skills necessary to assist their child with dental care. Parents are less likely to know where and how much a dental visit will cost.

Medical Student: Chris Zeman

21. The Joseph Project Wausau – A Medical Student Initiated Intervention to Support Well-being through Employment

Community Mentors: Chaplain Ray Slatton, Greater Wausau Christian Services

Purpose: Healthy People 2020 highlights the importance of improving the social and physical environment to address health inequities. The Joseph Project Wausau (JPW) was designed to improve social health determinants by increasing job opportunities necessary for economic stability by removing barriers to acquiring jobs for individuals from low socio-economic backgrounds.

Methods: Participants attended a 4-day job skills workshop focused on strategies to acquire and maintain employment hosted by MCW Students, Greater Wausau Christian 5 GTXKEGU CPF VJG QH,EG QH 7 5 5GPCVQT 4QP ,QJPUQP interview with a local manufacturer and were provided 30 days of free transportation.

Results: 6JGTG JCXG DGGP ,XG ,29 YQTMUJQRU YKVJ C VQVCN training, and transportation of a JPW graduate is approximately \$300. Comparatively, based on estimates from the University of Wisconsin Extension Center for Community and Economic Development, a manufacturer paying \$14/hour spends approximately \$4,200 to recruit and train an employee.

Conclusions: More time will be necessary to track long-term outcomes of JPW students, but the initiative has shown that a cost-effective, community-driven solution to improve social health determinants is possible.

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