Effects of Accessing Altrusa House Hospitality Resources on Guest Experience and Perception of Outcomes

Author: Alex Coakley, MS3

Introduction

-Altrusa House is a healthcare hospitality service that provides affordable housing to patients accessing healthcare in the Green Bay area.
-Familial or patient proximity to their place of care has shown benefits on psychosocial, clinical satisfaction and healthcare utilization outcomes by patients or their families. Considering these improved outcomes, programs that assist patients/family proximity to care should be a clinical priority.[2,5]
-Previous research on national healthcare hospitality organizations has shown improved patient perception of care with usage of hospitality resources.[3]
-The goal of this study is to assess the impact of Altrusa House on the perceptions of guest healthcare experience and outcomes.

Methods

Residents of Altrusa House above the age of 18 are emailed a survey after their stay

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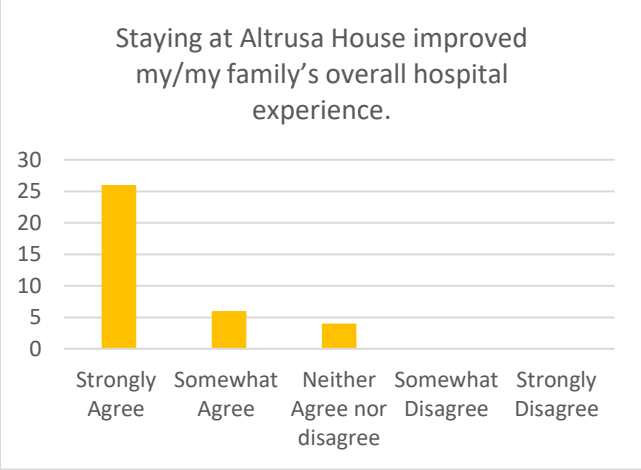
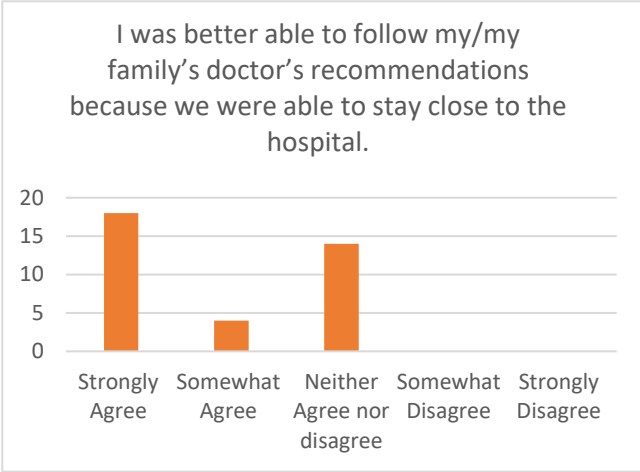
Surveys consisted of 11 questions asking for guest opinion of statements ranked 1-5 (5=Strongly agree, 1= Strongly Disagree)

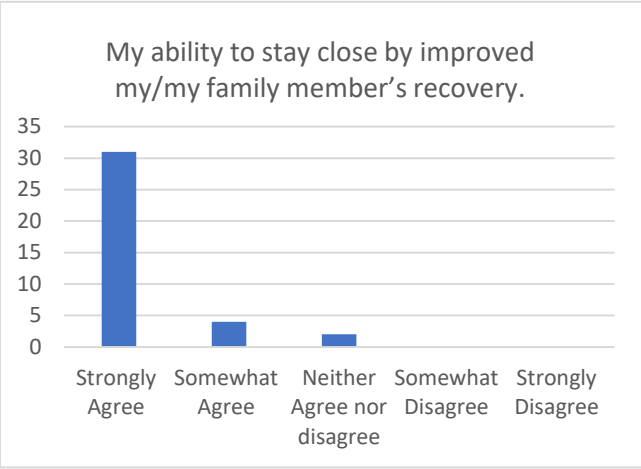
↓

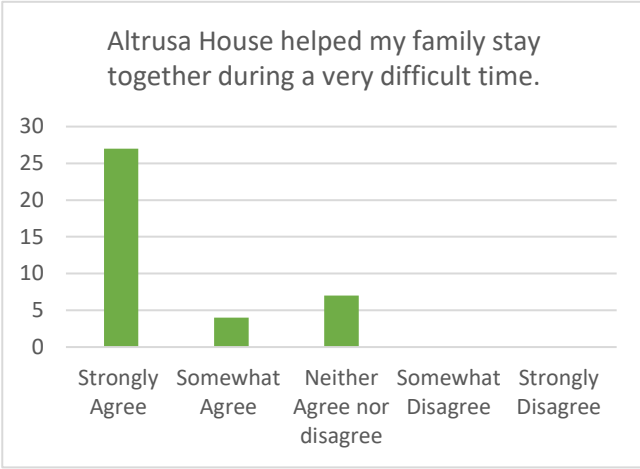
49 surveys fit the criterion and were used for analysis

Results









Discussion

-Of the eleven questions asked in the survey: eight questions had overwhelmingly positive responses while three had neutral responses.
-The mostly positive response demonstrates an overall positive perception of guest healthcare experience.
-Positive responses to following doctor's recommendation and improving patient's condition shows guests' belief that Altrusa House impacted their healthcare.
-33 of the 49 surveys collected came from out of state; demonstrating Altrusa House's importance for patients traveling long distances.
-Further studies could look at the link between hospital outcomes compared between an Altrusa House group and a non-Altrusa House group.
-A limitation of the study was its occurrence during the COVID-19 pandemic, limiting access to the Altrusa House.

References:

Acknowledgements:
- Annie Bongiorno and the staff at Altrusa House
- Dr. Ferguson

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Racial Disparities in Sacral Neuromodulation for Idiopathic Fecal Incontinence

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Medical College of Wisconsin[1], Departments of Colorectal Surgery[2], Gastroenterology[3], and Obstetrics & Gynecology[4]

Background

- Fecal incontinence (FI) affects up to 17% of the community and 50% of nursing home residents.[1]
- Treatments include fiber supplements, pelvic floor therapy (PFPT), and surgery, like Sacral Neuromodulation (SNM).
- SNM prevents involuntary urination and defecation through modification of communication between the spinal cord and end organs.[2]
- Patients who underwent SNM report up to 77% fewer incontinence episodes.[3]
- Previous work has shown that White women are significantly more likely to undergo SNM for urinary incontinence than Black women.[4]
- However, little has been done to understand racial disparities in SNM as treatment for FI.

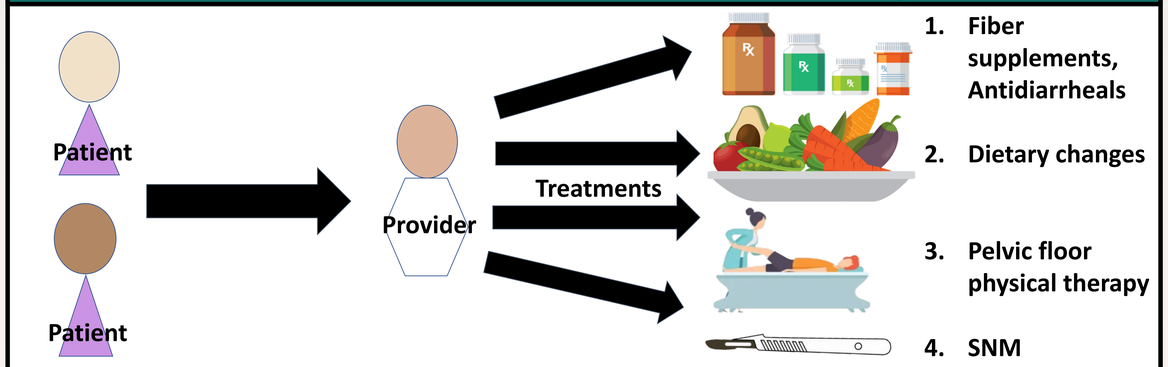
Hypothesis

We hypothesized that Black patients would be offered SNM less than White patients.

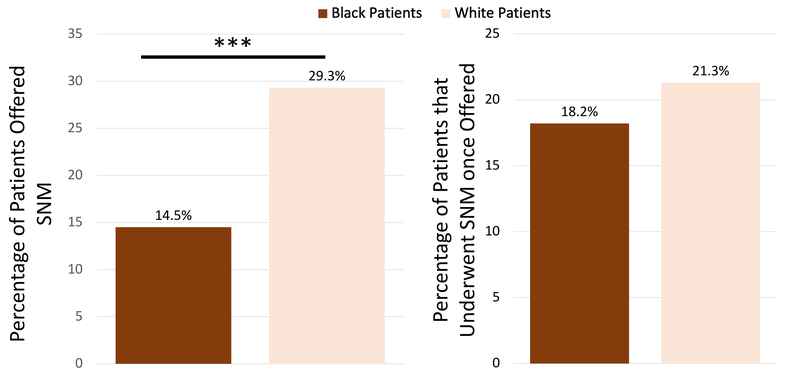
Methods

- This was a retrospective age-matched cohort study.
- Study subjects were female patients over the age of 18 who presented to Froedtert and affiliated clinics for idiopathic FI from 2010 to 2021.
- The two cohorts were patients who identified as non-Hispanic Black/African American ("Black") and non-Hispanic White/Caucasian ("White").
- The primary outcome was documentation of discussion of SNM as a potential therapy.
- A 2:1 age-matched cohort of White patients per Black patient was planned to detect a 10% absolute difference in our primary outcome with 80% power at an alpha of 0.05.
- Medical records were queried to collect clinical variables including surgical and non-surgical treatments offered, diagnostic tests ordered, and referring provider specialties.

Fecal Incontinence Treatment Options

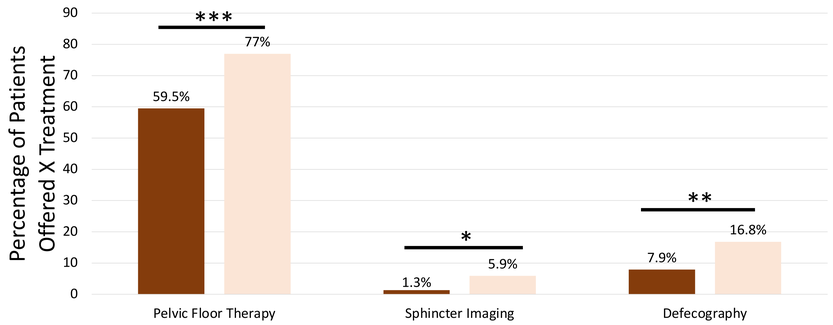


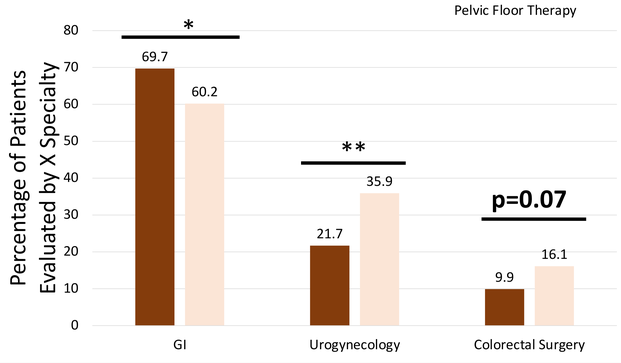
Results



Black patients were less likely to be offered SNM than White patients (14.5% vs 29.3%, p<0.001). However, of those offered the treatment, there was no difference in Black vs White patients that underwent SNM (18.2% vs 21.3%, p=0.74).

Black patients were also less likely to be referred for pelvic floor therapy (59.9% vs 77.0%, p<0.001), sphincter imaging (1.3% vs 5.9%, p=0.024), and defecography (7.9% vs 16.8%, p=0.01).





Black patients were more likely to see GI (69.7% vs 60.2%, p=0.046), while White patients were more likely to see Urogynecology (35.9% vs 21.7%, p=0.002) Colorectal Surgery (CORS) (16.1% vs 9.9%, p=0.07) although the latter did not reach statistical significance. Those seen by CORS or Urogynecology were more likely to discuss SNM (47.6% vs 8.2%, p<0.001).

* = p ≤ 0.05, ** = p ≤ 0.01, *** = p ≤ 0.001

Discussion

- Black patients were offered SNM less than White patients (14.5% vs 29.3%, p<0.001). This is consistent with other studies on SNM for urinary incontinence that show White women < 65 years old are more likely to undergo SNM for incontinence, despite SNM having similar efficacy in White and non-White patients.[4,5]
- Black patients were less likely to be referred for other therapies and evaluations including pelvic floor therapy, sphincter imaging, and defecography in our work. Similarly, there are racial disparities in follow-up care have been documented in specialties that treat FI, like OB/GYN, GI, and CORS.[6,7]
- **Strengths**: To our knowledge, this is first study examining the role of referral patterns in racial disparities for treatment of idiopathic FI. We used strict inclusion criteria and age-matched controls.
- **Weaknesses**: The primary outcome (documentation of SNM education) is limited by the medical record. We are also underpowered for some analyses. Lastly, we had strict inclusion criteria limiting generalizability.
- **Conclusions:** There are differences in SNM referrals to treat FI in Black vs White patients. This may be due to differences in discussions about this therapy, referral patterns, and specialty-specific counseling.

Future Work

Multidisciplinary work is needed to provide equitable education about SNM for this life-altering condition.

Acknowledgements

The project described was supported by the National Center for Advancing Translational Sciences, National Institutes of Health, Award Number **UL1TR001436**. The content is solely the responsibility of the author(s) and does not necessarily represent the official views of the NIH.

References

1. Nelson, Richard L. "Epidemiology of fecal incontinence." *Gastroenterology*, vol. 126, no. 1, 2004, pp. S3-S7. *ScienceDirect*, https://www.sciencedirect.com/science/article/pii/S0016508503015580.
2. Medtronic. "Sacral Neuromodulation." *Medtronic*, 2021, https://www.medtronic.com/us-en/healthcare-professionals/therapies-procedures/urology/sacral-neuromodulation.html. Accessed 11 December 2021.
3. Matzel, K. E. "Sacral nerve stimulation for faecal incontinence: its role in the treatment algorithm." *Colorectal Disease*, vol. 2, 2011, pp. 10-14. *PubMed*, https://pubmed.ncbi.nlm.nih.gov/21284796/.
4. Laudano, Melissa A., et al. "Disparities in the Use of Sacral Neuromodulation among Medicare Beneficiaries." *Journal of Urology*, vol. 194, no. 2, 2015, pp. 449-453. *AUA Journals*, https://www.auajournals.org/doi/full/10.1016/j.juro.2015.03.111.
5. Dobberfuhl, Amy D., et al. "Statewide Success of Staged Sacral Neuromodulation for the Treatment of Urinary Complaints in California (2005-2011)." *Female Pelvic Medicine and Reconstructive Surgery*, vol. 26, no. 7, 2020, pp. 437-442. *PubMed*, https://pubmed.ncbi.nlm.nih.gov/30059438/.
6. Collins, Yvonne, et al. "Gynecologic cancer disparities: A report from the Health Disparities Taskforce of the Society of Gynecologic Oncology." *Gynecologic Oncology*, vol. 133, no. 2, 2014, pp. 353-361. *PubMed*, https://pubmed.ncbi.nlm.nih.gov/24406291/.
7. Andersen, Shaneda W., et al. "Association of Race and Socioeconomic Status With Colorectal Cancer Screening, Colorectal Cancer Risk, and Mortality in Southern US Adults." *JAMA Network Open*, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6991213/.

Development of an Internal Medicine Resident Continuity Clinic at the Sixteenth Street Community Health Centers

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Department of Medicine, Division of General Internal Medicine, Section of Primary Care, Medical College of Wisconsin

BACKGROUND

- Internal Medicine (IM) residents and program directors desire outpatient rotations within community health centers (CHCs).
- Limited opportunities exist for residents to train in CHCs or CHCs serving Latinx populations or people living with HIV (PLWH).
- Program development in this area is important to:
  - Provide specialized training for IM residents in the care of vulnerable, non-English speaking populations and PLWH
  - Improve recruitment of URM residents into IM programs
  - Recruit and prepare IM physicians to work in CHCs

SETTINGS

- Sixteenth Street Community Health Centers (SSCHC):
  - A large federally qualified health center serving over 40,000 patients annually across multiple clinical sites in the Greater Milwaukee area
  - 85% of the population is Hispanic, 70% best served in a language other than English, 74% live below the federal poverty level, 58% on Medicaid insurance, 19% lack insurance
  - Part of a Ryan White program serving approximately 260 PLWH
- Medical College Internal Medicine Residency Program:
  - A well-established IM residency program with 120 active residents, including a robust ambulatory care track
- MCW and SSCHC have established clinical and educational collaborations.
- Developing an IM residency continuity clinic site expected to be mutually beneficial to both organizations.

OBJECTIVES

- Develop the organizational collaborative structure to host 6 IM residents for their continuity clinic at SSCHC starting 7/1/2022
- Develop operational structure for templates, empanelment, EHR access, MA support, and rooming structure for residents
- Plan robust methods to evaluate impact

DISCUSSION

- Program established with 6 resident starting 7/1/2022
- High interest and engagement from residents
- Organizational and operational structure defined and running well; continued process improvement planned
- Weekly morning didactics with interdisciplinary education focusing on unique care needs of vulnerable, non-English speaking, LGBTQ+ populations, and PLWH.
- Quality improvement project structure in development.
- Analytic method approved by IRB and preliminary outcomes expected in 2024.

Research Question	Analytic Plan

Impact on resident interest and comfort in providing primary care for underserved, non-English speaking, LGBTQ, and PLWH populations	• Annual assessment of SSCHC residents versus other residents in:
	  • Comfort/interest in targeted populations
	  • Cultural competency in care questionnaire

Impact on recruitment of URM residents to program	• Pre/post URM resident enrollment in program • Survey to residents of impact of SSCHC experience on rank order
Impact on SSCHC operations/finances	• Resident empanelment (Goal 100) • Attending productivity per half day of resident clinic vs. half day of private clinic

Medical Students Mentoring High School Students to Mitigate Adverse Childhood Experiences (ACE)

Drake Giese, BS[1]; Katherine Ernste, BA[1]; Olivia Newgaard, BS[1]; Sindu Donepudi BS[1]; Nicholas Weiler, BS[1] ,Jeff Fritz, PhD[1]; Shannon Young, Ed.D.[2]

[1]Medical College of Wisconsin - Central Wisconsin (MCW-CW), [2]Enrich, Excel, Achieve Learning Academy (EEA)

Purpose

- Adverse Childhood Experiences (ACE) are defined as experiencing or witnessing violence, abuse, neglect, and other adverse events through childhood.
- ACE scores are calculated based on the total number of these experiences.
- As a child's score increases, their school performance declines and are at an increased risk of poor future health outcomes.
- To mitigate effects of ACEs, intervention at an early age is hypothesized to be beneficial.
- One attempted intervention is a near-peer mentoring program for K-12 students with elevated ACEs at Enrich Excel Achieve Learning Academy (EEA) in Wausau, WI.

Introduction

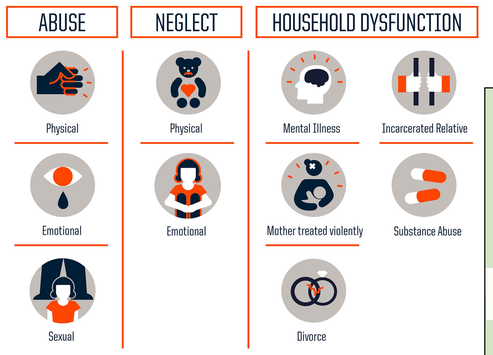


Figure 1A: Three Types of ACEs, Starecheski L, 2015

Figure 1D: Protective Factors that Promote Resilience to ACEs, adapted from the National Child Traumatic Stress Network[15]

Figure 1C: ACE Scores and School Performance [10]

Methods

- 14 medical students were matched with a student from EEA to mentor monthly for 1 year
- Meetings were set to be at least 30 minutes in person or virtually via google meet.
- Each monthly meeting medical student mentors were provided a Leader in Me activity guide to foster interactions between the students.
- Goal of establishing a positive relationship, with the intention to increase student engagement and mitigate future effects of high ACE scores.

Results

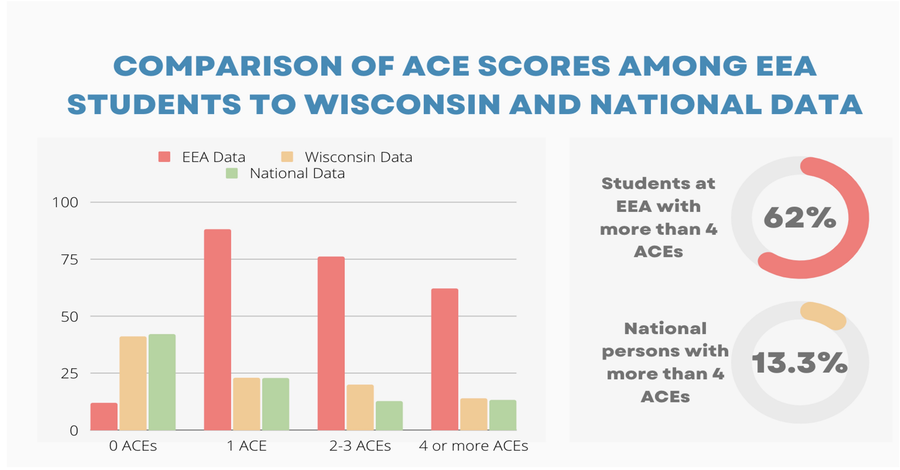


Figure 2A: Comparison of ACE Scores at EEA to Wisconsin and National Data [11]

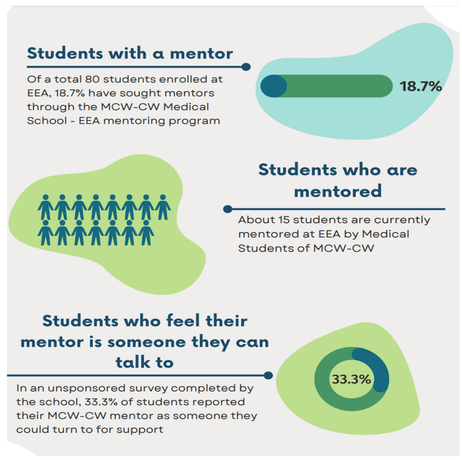


Figure 2B: Student data from EEA

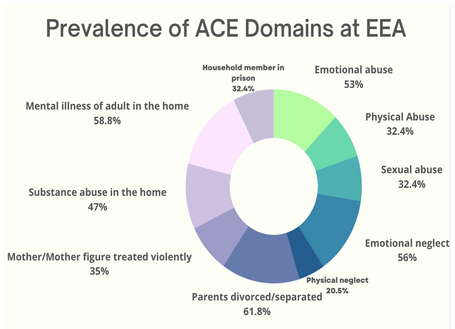


Figure 2C: Student data from EEA

Conclusions

- The mentoring initiative has been successful in fostering positive relationships in students with high ACE scores.
- This positive relationship provides the students with support. As the project continues, we hope to the mentoring program will improve school attendance, performance, and behavioral discipline among mentored students.
- With increased school engagement, we hope future complications of high ACE scores can be mitigated.
- The mentoring program will continue for the upcoming school year and focus on continually improving by asking for EEA and MCW student feedback

Limitations

- The mentoring program has shown efficacy, but data is strictly qualitative
  - Future studies can be strengthened by evaluating quantitative characteristics such as attendance, grades, and health pre- and post-mentoring.
- Data is only representative of children at EEA in the mentoring program
  - Future studies can be strengthened by assessing the same characteristics with:
    - students in EEA not being mentored
    - students that are not going to EEA but within the same school district
- Due to Covid-19, most meetings occur virtually, limiting the connection between mentors and mentees. Ideally, students would be meeting in person.

Sources

1. Adverse childhood experiences: perceptions, practices, and possibilities. WMJ. Accessed November 10, 2021. https://wmjonline.org/120no3/sherfinski/
2. Preventing adverse childhood experiences |violence prevention|injury center|cdc. Published April 6, 2021. Accessed January 6, 2022. https://www.cdc.gov/violenceprevention/aces/fastfact.html
3. Starecheski L. Take the ace quiz - and learn what it does and doesn't mean. NPR. https://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean. Published March 2, 2015. Accessed January 24, 2022.
4. Mullen G. What is an ace score? Exploring the Core. https://www.exploringthecore.com/post/what-is-an-ace-score. Published May 5, 2019. Accessed January 24, 2022.
5. TS, M, JES, et al. What aces/pces do you have? ACEs Too High. https://acestoohigh.com/got-your-ace-score/. Published May 26, 2021. Accessed January 24, 2022.
6. Petruccelli K, Davis J, Berman T. Adverse childhood experiences and associated health outcomes: A systematic review and meta-analysis. Child Abuse Negl. 2019 Nov;97:104127. doi: 10.1016/j.chiabu.2019.104127. Epub 2019 Aug 24. PMID: 31454589.
7. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. American Journal of Preventive Medicine. 1998;14(4):245-258. doi:10.1016/S0749-3797(98)00017-8
8. Boullier M, Blair M. Adverse childhood experiences. Paediatrics and Child Health. 2018;28(3):132-137. doi:10.1016/j.paed.2017.12.008
9. Preventing adverse childhood experiences |violence prevention|injury center|cdc. Published April 6, 2021. Accessed January 6, 2022. https://www.cdc.gov/violenceprevention/aces/fastfact.html
10. Crouch E, Radcliff E, Hung P, Bennett K. Challenges to school success and the role of adverse childhood experiences. Academic Pediatrics. 2019;19(8):899-907. doi:10.1016/j.acap.2019.08.006
11. Giano, Z., Wheeler, D. L., & Hubach, R. D. (2020, September 10). *The frequencies and disparities of adverse childhood experiences in the U.S. - BMC public health*. BioMed Central. Retrieved October 12, 2022, from https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09411-z

Special Thanks

A Special Thanks to Medical College of Wisconsin - Central Wisconsin campus and the Enrich, Excel, Achieve Learning Academy, as well as Olivia Newgaard, Dr. Jeff Fritz, and Dr. Shannon Young for their work on the EEA-MCW mentoring program.

Mindful Coloring with Children at Golden House

Genna Berman and Khadijah Enoh

MCW Green Bay

INTRODUCTION

- Adverse childhood experiences (ACEs) are unfavorable circumstances encountered in childhood, including abuse, violence, and household mental health and substance use issues[1]. Detrimental stress due to ACEs can affect brain development and how the body responds to stress[1].
- ACEs correlate with increased risk of asthma, depression, cancer, diabetes, smoking, heavy drinking, and decreased educational attainment[1].
- Mind-body methods attenuate negative symptoms while promoting self-regulation and positive health, social, and academic behaviors[2,3]. Mindful coloring[6] may be a method for at-risk children to benefit from these techniques.

PURPOSE

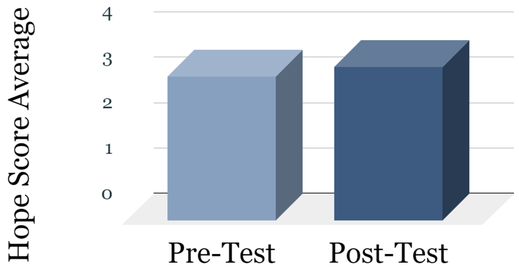
- To assess whether mindful coloring activities, intended to ground participants to the present moment while eliciting positive self-imagery, can act as a protective technique against the adverse outcomes associated with ACEs by improving hope, resilience, and mood in children who have experienced ACEs

METHODS

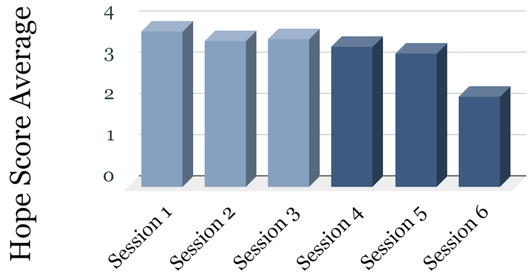
- Six children ages 7-13 at Golden House Domestic Abuse Shelter participated in weekly sessions as availability allowed.
- Participants colored what they visualized during a self-affirming meditation reading.
- Identical pre-test and post-test surveys were administered each session assessing resilience[4], hope[5], and mood.

RESULTS

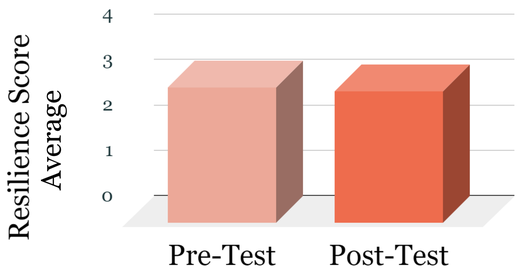
Hope Before and After



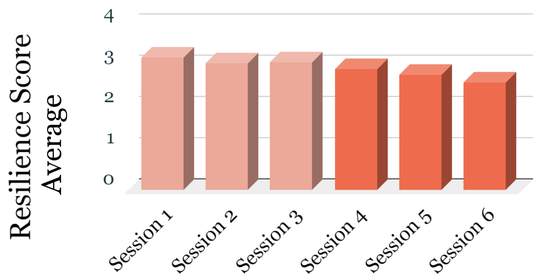
Hope Over Time



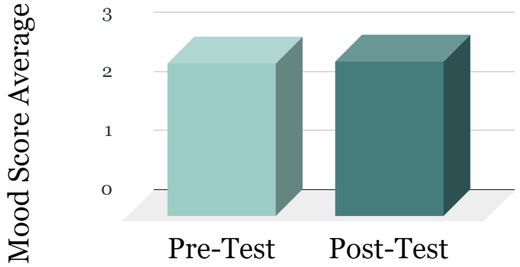
Resilience Before and After



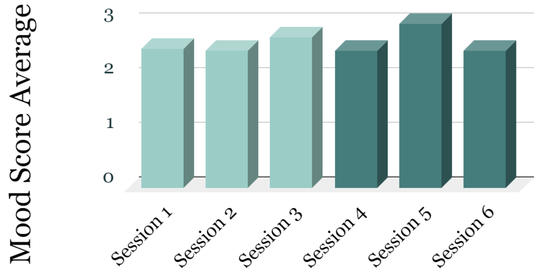
Resilience Over Time



Mood Before and After



Mood Over Time



Hope Scale[5]

None of the time	A little of the time	Some of the time	A lot of the time	Most of the time	All of the time
I think I am doing pretty well.					
I can think of many ways to get the things in life that are most important to me.					
I am doing just as well as other kids my age.					
When I have a problem, I can come up with lots of ways to solve it.					
I think the things I have done in the past will help me in the future.					
Even when others want to quit, I know that I can find ways to solve the problem.					

Resilience Scale[4]

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I tend to bounce back quickly after hard times.				
I have a hard time making it through stressful events.				
It does not take me long to recover from a stressful event.				
It is hard for me to snap back when something bad happens.				
I usually come through hard times with little trouble.				
I tend to take a long time to get over set-backs in my life.				

Mood Scale

CONCLUSIONS

- There were no statistically significant changes between overall pre-test and post-test scores for resilience, hope, or mood, nor over time for hope or mood.
- There was a statistically significant negative change in resilience scores over time between the first half of sessions and the second half. A larger sample size may reveal additional statistically significant results.
- The resilience results most likely show the effect of experiencing ACEs and living in a shelter for two months more so than the effect of the intervention, demonstrating the necessity of support for children experiencing ACEs.

REFERENCES

1. *Adverse Childhood Experiences (ACEs)*. (2021). https://www.cdc.gov/violenceprevention/aces/
2. Bethell, C., Gombojav, N., Solloway, M., & Wissow, L. (2016). Adverse Childhood Experiences, Resilience and Mindfulness Based Approaches: Common Denominator Issues for Children with Emotional, Mental, or Behavioral Problems. *Child and adolescent psychiatric clinics of North America*, 25(2). 139–156. https://doi.org/10.1016/j.chc.2015.12.001
3. Coffey, K.A., Hartman, M. & Fredrickson, B.L. Deconstructing Mindfulness and Constructing Mental Health: Understanding Mindfulness and its Mechanisms of Action. *Mindfulness* 1, 235–253 (2010). https://doi.org/10.1007/s12671-010-0033-2
4. Connor-Davidson Resilience Scale or the Brief Resilience Scale determined best by Windle G, Bennett KM, Noyes J. A methodological review of resilience measurement scales. *Health Qual Life Outcomes*. 2011;9:8. Published 2011 Feb 4. doi:10.1186/1477-7525-
5. C. R. Snyder, Betsy Hoza, William E. Pelham, Michael Rapoff, Leanne Ware, Michael Danovsky, Lori Highberger, Howard Ribinstein, Kandy J. Stahl, The Development and Validation of the Children's Hope Scale, *Journal of Pediatric Psychology*, Volume 22, Issue 3, June 1997, Pages 399–421. https://doi.org/10.1093/jpepsy/22.3.399
6. Mantzios M and Giannou K (2018) When Did Coloring Books Become Mindful? Exploring the Effectiveness of a Novel Method of Mindfulness-Guided Instructions for Coloring Books to Increase Mindfulness and Decrease Anxiety. *Front. Psychol.* 9:56. doi:10.3389/fpsyg.2018.00056

Thank you to our Community Partner, Golden House, and Dr. Rosculet, Dr. Christensen, Dr. Ferguson, and Dr. Lynch for their guidance and for making this project possible.

Assessment of Opioid Overdose Risk and Response Readiness Among Patients at a Clinic for Uninsured Patients

Benjamin Wrucke; Stephen Stevanovic; Naisarg Vanani; Ryan Klauck; Bryan Johnston, MD,
MCW-Milwaukee, Department of Family & Community Medicine

MEDICAL COLLEGE OF WISCONSIN
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Introduction

Background:

- The opioid epidemic is worsening [7], and opioid overdose represents the leading cause of non-natural death in Milwaukee County [9].
- Studies have shown that bystanders can effectively administer naloxone to reverse opioid overdose and that overdose education programs result in improved ability to recognize and respond to opioid overdose [2, 5-6,10].
- Uninsured patients are at increased risk of death due to opioid overdose [1], yet there is limited research investigating opioid overdose risk and response readiness among uninsured patients.

Objectives: 1) Assess the risk of opioid overdose among uninsured patients and their family members and close contacts and 2) assess whether these patients are prepared to respond to opioid overdose.

Methods

Data Collection: Patients of a student-run free clinic for uninsured patients completed an anonymous survey during in-person appointments. Data was collected for eight months from 2021-2022.

Study Population: 72 patients completed the survey. All were uninsured, English-speaking, and 18-years-old or older.

Statistical Methods: Logistic regression determined predictors of overdose response readiness. One-proportion Z-test compared study population rates of opioid use with overall statewide community rates reported by the Wisconsin Department of Health Services Opioid Dashboard [8].

Conclusions

- Uninsured patients at student-run free clinics, especially those with family members or close contacts who use opioids, likely represent a target population for opioid overdose education and naloxone distribution.
- When determining how to screen for naloxone distribution at clinics for uninsured patients, screening for family/contact use may offer a lower number of naloxone kits distributed in order to intervene during one witnessed opioid overdose, but other distribution models exist [3-4].

References

[1] Altekruse et al., (2020). *PLoS One*
[2] Clark et al., (2014). *Journal of Addiction Medicine*
[3] Fisher, Lina, (2022). Narcan Vending Machine Lands Outside Sunrise Navigation Center. *The Austin Chronicle*
[4] Fleming, O, (2022). San Diego Deploying Free Narcan Vending Machines to Help Combat Opioid Epidemic. *NBC 7 San Diego*
[5] Giglio et al., (2015). *Injury Epidemiology*
[6] Mueller et al., (2015). *Substance Abuse*
[7] Opioid Data Analysis and Resources | CDC, (2022).
[8] Opioid Data Summary Dashboard | Wisconsin DHS (2022)
[9] Peterson et al., (2019). *Journal of Forensic Sciences*
[10] Razaghizad et al., (2021). *American Journal of Public Health*

Acknowledgements

Thank you to The Saturday Clinic for the Uninsured for being our community partner!

Results

Variable	n	% of total responders
Use	10	13.89
Prescribed use	9	12.5
Misuse	1	1.39
Family/close contact use	7	9.72
Affected by use	15	20.83
Overdosed	0	0
Witnessed an overdose	4	5.56
Sum of witnessed overdoses	6	N/A
Used naloxone	0	0
Trained	8	11.11
Would like to be trained	13	18.06
Carry	2	2.78
Unsure where to get naloxone	44	61.11

One-proportion Z-test

Variable	X^2	df	P-value
Prescribed use	0.59	1	0.443
Misuse	1.76	1	0.184

Multivariate Logistic Regression

Variable	OR (95% CI)	P-value
Dependent variable = Trained		
Use	2.29 (0.19-19.44)	0.46
Family/close contact use	29.82 (2.31-778.21)	0.01 ***
Witnessed an overdose	0.23 (0.004-5.37)	0.40
Dependent variable = Would like to be trained		
Use	1.43 (0.14-14.42)	0.75
Family/close contact use	N/A	0.99
Witnessed an overdose	N/A	1
Dependent variable = Carry		
Use	2.75 (0.25-22.93)	0.35
Family/close contact use	0.94 (0.01-21.42)	0.97
Witnessed an overdose	5.12 (0.1-229.66)	0.38

Subgroup Analysis

Subgroup	Variable	n within subgroup	% of subgroup
Family/close contact use (n = 7)	Trained	3	42.86
	Would like to be trained	3	42.86
	Carry	1	14.29
	Unsure where to get naloxone	3	42.86
Witnessed an overdose (n = 4)	Trained	1	25
	Would like to be trained	2	50
	Carry	1	25
	Unsure where to get naloxone	3	75
Not trained (n = 62)	Would like to be trained	12	19.35
Don't carry (n = 64)	Unsure where to get naloxone	41	64.06
Family/close contact use + Not trained (n = 4)	Would like to be trained	3	75
Family/close contact use + Don't carry (n = 6)	Unsure where to get naloxone	3	50

- The past-year rate of medically prescribed opioid use in the study population (12.5%) did not differ from the rate statewide (15.8%; p=0.44).
- Family or close contact opioid use significantly predicted being trained to respond to opioid overdose (p=0.01, OR=29.8), but it did not predict carrying naloxone (p=0.97).
- Among responders with family or close contacts who use opioids, 75% of those who are not trained on how to respond to overdose would like to be, and 50% of those who do not carry naloxone do not know where to get it.

Be There Wisconsin Website

Lethal Means Storage Program
Live Today- Put It Away: Safe Gun Storage Program

Medical College of Wisconsin - Captain John D. Mason Veteran Peer Outreach Program

Bertrand Berger, PhD, Susan Smykal, Mark Flower

MCW Community Engagement Poster 2022

Introduction

Our state-wide program provides firearm owners suicide prevention education and the option to store of firearms outside the home (when in crisis) at firearm retailers. The program, hosted by the Southeastern Wisconsin Veteran Suicide Prevention Task Force, is Veteran focused but available publicly through www.BeThereWis.Com. Participating firearm retailers are easily accessed on an interactive map.

Goal or Intended Outcome

The **Live Today- Put It Away Program** is where the firearm retailer/gun shop/range provides voluntary, temporary, safe storage of a firearm for a Veteran or individual who is in a crisis. The goal is to provide people in crisis an option to have distance between themselves and their firearm, to decrease the impulse to use the firearm to kill themselves to prevent suicides.

Initiative Implementation

Wisconsin's program was started by Chuck Lovelace, owner of Essential Shooting Supplies, LLC. Mr. Lovelace began the program after a Veteran purchased a firearm at his establishment and used it to die by suicide. He developed the program in partnership with Safe Communities Madison-Dane County.

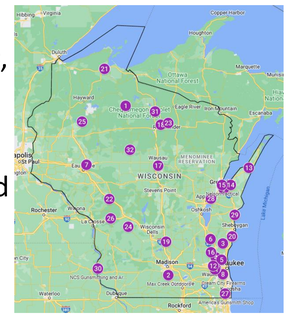
CAPTAIN JOHN D. MASON VETERAN PEER OUTREACH PROGRAM

Gun Shop retailers and range owners are provided free materials by the Captain John D. Mason Veteran Peer Outreach Program, a program at the Medical College of Wisconsin. These materials include:

- Question and Answer Sheet
- Tip Sheet for WI Retailers and Owners
- NSSF Posters
- Gun Safety 11th Commandment Guide
- Participation Agreement
- Certificate
- Example Contract for Gun Shops

Results/Achievements

The **Live Today-Put it Away** program began in 2021 and in a short period of time has developed education materials, a website page and a Google map.



The program started with 2 firearm retailers and now has 33 sites distributed throughout Wisconsin.

Message to Gun Shops: **We need your help!** Please sign up, so your establishment can be placed on the map so that individuals, mental health providers, family, and friends will see that you are part of a suicide prevention solution. Once you **sign the agreement** someone will contact you within 48 hours to place your establishment on the map.

7000

Page views of the Wisconsin Firearm Safe Storage Facilities Map

As a result of the program, firearm retailers have stored firearms for people in crisis. The program is currently working with 3 county sheriff departments interested in providing safe gun storage.

Future Development

Our goal is to have a firearm safe storage program in every County (72) and expand to law enforcement partners, as well as expand the program to interested partners in Indiana and Minnesota. We also plan to develop a dedicated website at LiveTodayPutitAway.org.

Conclusion

Live Today – Put it Away is a collaborative effort to reduce suicide in the SMVF population through reduced access to lethal means.

CONTACT INFO

Mark Flower, Veteran Peer Specialist
Phone: (414) 955-8910
Email: mflower@mcw.edu
Web Site: https://www.betherewis.com/

Acknowledgments

Thanks to Susan Smykal, Mark Flower and Dr. Bertrand Berger, for their work in expanding the program and Jean Papalia for her expert consultation in the development of the program.

COVID-19 Impact on Emergency Front Line Responders in Northeast Wisconsin

Josh Christensen and Riley Coon

INTRODUCTION

- COVID-19 took 2020 by storm resulting in over 20 million cases and nearly 1,000,000 deaths throughout the United States[1] (as of May 1, 2022).
- Due to the unpredictable and potentially traumatic work environment that these workers regularly put themselves in we have already seen exceedingly high levels of mental health conditions among emergency medical responders[2]. This is dangerous for this population as it has been shown that emergency first responders are less likely than the general population to seek help for mental health issues out of fear of stigmatization or demotion.
- A meta-analysis performed prior to the pandemic in 2018 demonstrated that 15% of first responders suffer from depression and anxiety and 27% suffer from general psychological distress[3].
- With the widespread and seemingly inescapable COVID-19 virus leaving an unforgettable mark on our society, as well as the unpredictability that comes with it, we set out to try and understand the effects on the stress level and mental health emergency medical personal in our community.

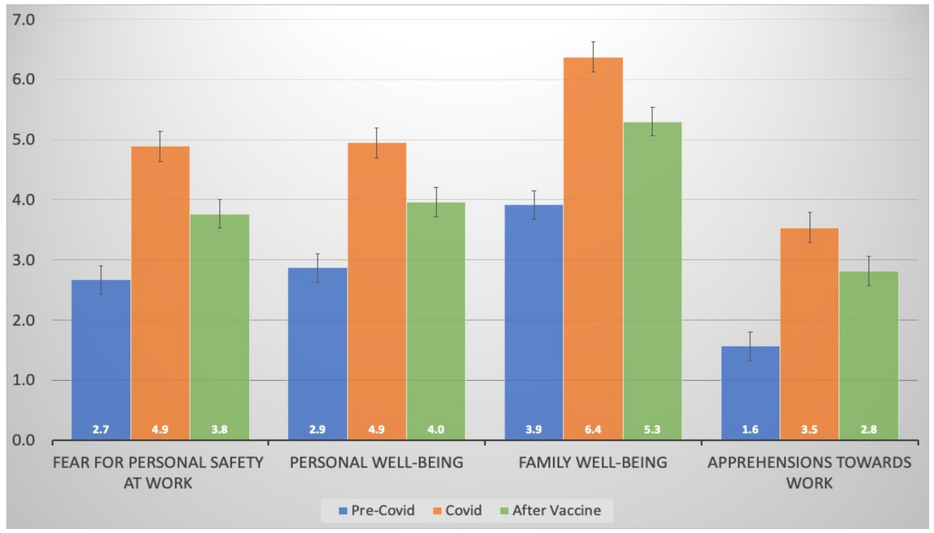
PURPOSE

- To identify any trends that may have formed in the workplace satisfaction and mental health of Northeastern Wisconsin's front-line emergency responders.
- Provide first responder departments with first-hand data from their employees/volunteers.
- Give first responders a chance to speak up about how the pandemic has impacted their mental health.
- This information may potentially aid in preparation for similar instances in the future.

METHODS

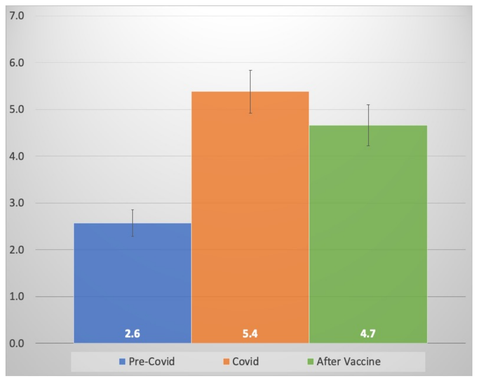
- Recruitment of front-line responders that work in emergency health departments in Northeastern Wisconsin was accomplished via email reach out to departments that listed an email or a ”contact us” link on the Wisconsin Department of Health Services websites roster of first responder departments.
- Agreeable departments were emailed a survey to distribute to their staff which included a variety of demographic as well as focused questions regarding their work life, home life, and mental health.
- The data was analyzed using ANOVA for statistical significance. Resulting data can be seen to the right.

RESULTS

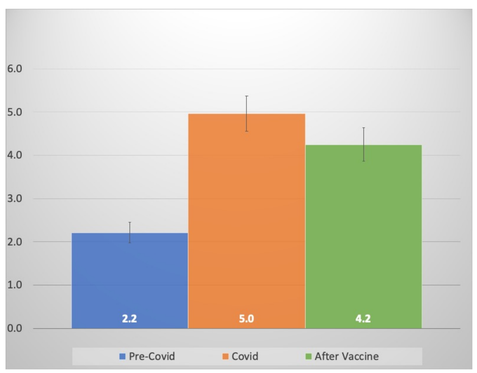


Wellbeing: Questions regarding well-being had a similar pattern of minimal concern in the pre-COVID-19 timeframe with a drastic increase during the pandemic. Unlike depression and anxiety levels, these variables did have a statistically significant decrease following the widespread availability of the vaccine. However, were still statistically significantly elevated above the level of the pre-COVID-19 timeframe. No statistically significant difference in well-being answers between genders or age groups.

PHQ-9: There was a significant increase in the level of depression among first responders from the pre-COVID-19 timeframe to the during COVID-19 timeframe.
This level of depression remained after the vaccine was widely available.
No statistically significant difference in PHQ-9, answers between genders or age groups.



GAD-7: There was a significant increase in the level of anxiety among first responders from the pre-COVID-19 timeframe to the during COVID-19 timeframe.
This level of anxiety remained after the vaccine was widely available.
No statistically significant difference in GAD-7, answers between genders or age groups.



CONCLUSIONS

The COVID-19 pandemic has had profound effects on emergency front line responders, especially during the height of the pandemic prior to widespread release of the vaccine. Currently, the worst of the pandemic seems to be behind us, however, many measures of wellbeing and mental health have failed to decline back to their pre-pandemic baseline. There may be many contributing factors to this increase and subsequent failure to normalize, including but not limited to the increased workplace hazard, politicization and/or increased demands on the job during the pandemic. Continued research is needed to narrow down the exact cause.
In the meantime, it is essential that we support our emergency first responders while we all continue to deal with the lasting effects of the COVID-19 pandemic.

REFERENCES

1. CDC. (2020, March 28). COVID Data Tracker. Centers for Disease Control and Prevention. https://covid.cdc.gov/covid-data-tracker
2. Anka A. Vujanovic, Antoine Lebeaut & Samuel Leonard (2021): This study evaluated the effect of a COVID 19 exposure in first responders with regards to their mental health. They found that COVID-19 Related Worry was incrementally associated with increased levels of anxiety and depression.
3. Petrie, K., Milligan-Saville, J., Gayed, A., Deady, M., Phelps, A., Dell, L., Forbes, D., Bryant, R. A., Calvo, R. A., Glozier, N., & Harvey, S. B. (2018). Prevalence of PTSD and common mental disorders amongst ambulance personnel: A systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, *53*(9), 897–909. https://doi.org/10.1007/s00127-018-1539-5

ReachOutWis.Org

Effect of Mass Communication on Veteran Suicide Prevention: Help Seeking & Firearm Safety Behaviors

Berger, Bertrand, Ph.D.; Kohlbeck, Sara, MPH, Buttery, Dan; Hargarten, Stephen, MD.

MCW COMMUNITY ENGAGEMENT POSTER SERIES 2022

This project is funded wholly by the Advancing a Healthier Wisconsin Endowment.

Introduction

In the State of Wisconsin, the suicide rate increased by 40% from 2000 to 2017 and has been higher than the national rate. The suicide rate among Wisconsin Veterans has also been increasing over the past 20 years. Veterans who die by suicide are more likely to use a firearm, to have physical health problems, and have experienced a recent death of a friend or family. A suicide prevention strategy is to promote, educate, and encourage people to seek help when in a crisis and to decrease their access to lethal means (e.g., to safely store firearms and ideally store them outside of the home during a crisis).

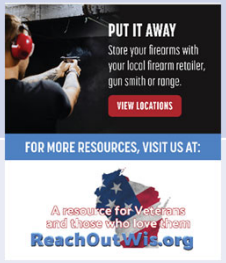
Methods

The study was developed through the collaboration between the MCWs' Psychiatry and Comprehensive Injury Center, UWM Marketing Department, War Memorial Center and the Milwaukee Veterans Health Administration.

The study was designed measure the effectiveness of 4 advertising campaigns over the course of a year using Veteran focused, statewide mass media public health messaging designed to increase help seeking behavior and decrease the incidence of firearm suicides.

Methods (cont.)

Veterans provided input to the research team through focus groups and were the "messengers" in the advertising. Message effectiveness was measured by tracking website traffic to the study's website (ReachOutWis.Org) and surveying a representative subject pool of Wisconsin residents at baseline (prior to advertising) and after each advertising campaign.



Conclusion

Digital, video and audio advertising drew people to the study's website. Survey data shows an association across time for increased help seeking behavior and intent to improve the safe storage of firearms.

Preliminary survey results indicate the advertising message was seen by 95% of surveyed Wisconsin Veterans and may have influenced these subjects to improve their safe storage of firearms and seek help if they are in crisis

Results/Achievements

Baseline Survey results

Firearm ownership

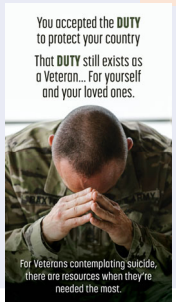
67% of Veterans own at least one firearm vs. 41% of non-Veterans.

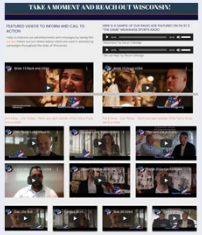
Firearm Safe Storage

33% of veterans own a keep a loaded and unlocked firearm vs.16% of non-Veterans

Advertising examples

Video, radio, & email >





Advertising over 1 year:

Primary media target demographic
Males age 55+ (Veterans when possible)

12.2 Million Impressions!

plus Secondary media :

17.4 Million Impressions!

Website traffic to ReachOutWis.Org

(Sept 1, 2021 to Oct 26, 2022)

Users: 24,310 New Users: 24,193
Session: 27,782 # of session per user: 1.14
Page Views: 41,966 Pages/Session: 1.51
Ave. Session: 1:00 min Bounce Rate: 73.44%

Survey results:

Questions	Baseline		Post -Advertising	
	Veterans	Non-veterans	Veterans	Non-Veterans
I visited websites related to safe storage of firearms and suicide prevention p<.001	49%	39%	96%	75%
Saw advertising about veterans and suicide prevention in the past four months P<.001	76%	55%	90%	74%
People should temporarily store firearms outside of the home there is a suicide crisis P <..005	Agree 71% Unsure 16% Disagree 13%	Agree 77% Unsure 13% Disagree 11%	Agree 83% Unsure 12% Disagree 5%	Agree 80% Unsure 13% Disagree 7%

Blood Pressure and Medication Outcomes for Uninsured Adults Given Automatic Blood Pressure Cuffs

Heather M. Hellweg, PharmD Candidate 2023, Hannah Ryou, PharmD Candidate 2023, Zachary M. Hovis PharmD, BCACP
Medical College of Wisconsin School of Pharmacy

Introduction

- Hypertension is a major risk factor for heart disease and stroke, which are leading causes of death in the United States.[1]
- The impacts of COVID-19 on chronic diseases, such as hypertension, are still being recognized. Annual blood pressure trends from April to December 2020 were significantly higher compared to 2019 ($p<0.001$) in the United States.[2]
- A 10-mmHg reduction in systolic blood pressure (SBP) is associated with a 31% reduction in stroke risk.[3]
- AHA/ACC 2017 guidelines for hypertension recommend using home monitoring for titrating medication in combination with telehealth counseling or clinical intervention to help achieve the target blood pressure <130/80 mmHg.[4]
- Despite this recommendation, little is known about the feasibility or practicality of utilizing home blood pressure monitoring to assist in managing hypertension for uninsured or underinsured adults as these individuals face significant, multifaceted barriers to chronic disease management.[5,6]
- In March of 2021, Wisconsin's Free and Charitable Clinics Collaboration awarded a grant to Bread of Healing, a network of safety net clinics in Milwaukee, WI, for a Self-Monitoring Blood Pressure (SMBP) program. The program consists of a loaned blood pressure monitor coupled with education on how to properly collect blood pressure.

Objective

- To determine the impact of home blood pressure monitoring for uninsured and underinsured adults with elevated blood pressure readings at a safety net clinic in Milwaukee, WI. The results will help inform Bread of Healing on the utility of continuing the SMBP program.

Study Population

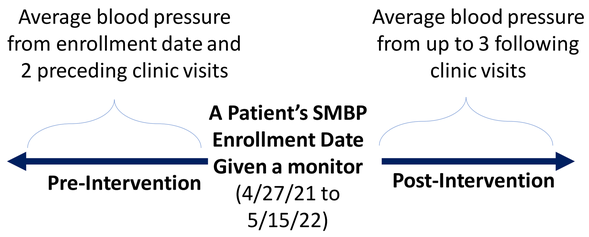
Table 1: Baseline Characteristics (n = 44)

Age (mean)	51 years (SD ± 10.5)
Gender (% male)	56.8%
Race / Ethnicity (%)	
Hispanic	40.9%
Black / African American	38.6%
Caucasian	6.8%
Asian	6.8%
Other / Not Specified	6.8%
English as Primary Language (%)	50%
Current Smoker (%)	40.9%
Health Conditions* (%)	
Heart Disease / MI / Stroke	20.5%
Hyperlipidemia	38.6%
Diabetes / Pre-Diabetes	56.8%
Chronic Kidney Disease	31.8%
BMI ≥ 30 kg/m^2	29.5%

* May be underreported based on manual review of paper charts. MI = myocardial infarction

Methods & Statistics

- Retrospective, pre-post analysis using paper charts of patients enrolled in the Self-Monitoring Blood Pressure (SMBP) program
- Intent to treat protocol used for post-intervention data and the median blood pressure was used instead of excluding a patient
- Standardized protocol for chart review process
- **Primary Outcome**: the difference between the mean blood pressure (systolic and diastolic) pre-intervention vs. post-intervention; utilized a paired t-test
- **Secondary Outcomes:** Incidence of adding a new medication, optimizing a medication dose, and characterizing which drug classes were prescribed during post-intervention period



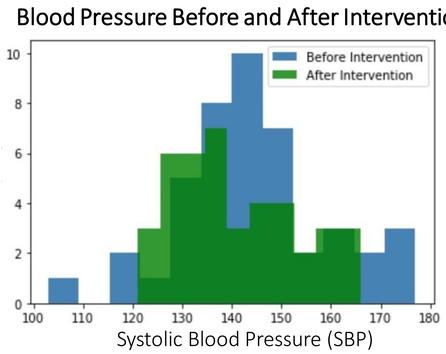


Figure 1: Histogram of mean SBP before and after receiving a blood pressure cuff.

Post Hoc Analysis

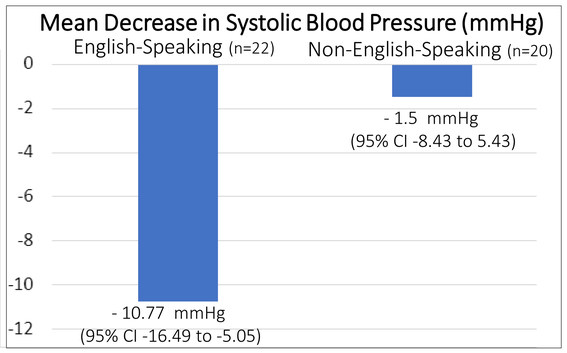


Figure 3: English-speaking SBP significantly decreased by 10.77 mmHg ($p=0.008$) compared to non-English-speaking which did not have a significant change. Two patients were excluded: (1) had no indicated language (2) no post-intervention blood pressure recorded. Bread of Healing has several consistent volunteers who speak Spanish (the primary non-English language) and utilizes an interpreter through an iPad as needed.

Patient Safety

- Two investigators reviewed charts and recorded de-identified patient information into a secure sheet.

Results

Primary Outcome

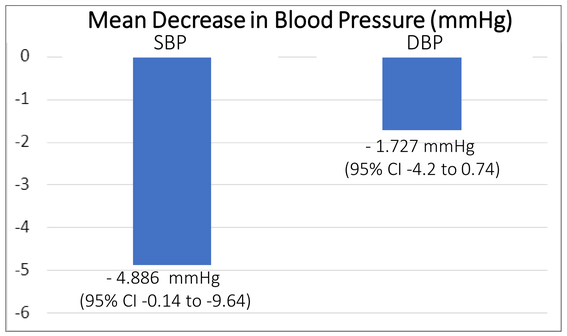


Figure 2: The average change in systolic blood pressure (SBP) showed a significant decrease of 4.89 mmHg ($p=0.04$) and diastolic blood pressure (DBP) decreased 1.73 mmHg which was not significant. The post-intervention period ranged from approximately 3 to 10 months after enrollment.

Secondary Outcomes

- 14 incidents (31.8%) of a medication addition
  - Thiazide diuretics (7 incidents)
  - Angiotensin II Receptor Blockers (4 incidents)
- 15 incidents (34.1%) of a medication dose optimization

Discussion

Findings and Observations

- Implementation of the SMBP program at Bread of Healing Clinic in Milwaukee demonstrated a statistically significant decrease in systolic blood pressure
- The study period overlapped with a COVID-19 policy to reduce contact with high-risk patients. This likely caused variation in ongoing hypertension education that patients received during the post-intervention period
- Non-pharmacological interventions were not captured due to inconsistencies in progress notes (made by pharmacy, nursing, or physician); however, some reported patients responding positively to diet and exercise recommendations. One patient quit smoking after realizing for themselves that it increased their blood pressure
- The small number of patients reduces external validity
- The paper charts posed a significant barrier for the accessibility of compiling information and despite using a standardized protocol for chart review some information could have been missed due to an inconsistent format of charting

Post-Hoc Discussion

- There is a significant difference in BP decrease between English-speaking and non-English-speaking patients
- Further investigation is necessary to assess how communication to non-English-speaking patients can be improved

Recommendation for Continuing the SMBP Program

- A barrier to continuing the SMBP program after grant funding ends the loss of resources (blood pressure cuffs, finances, etc.)
- If a stricter protocol is enforced to have the blood presser cuffs returned, reducing the cost to the clinic, it is recommended for the SMBP program to continue for patients with hypertension
- The SMBP program could be more effective by having more intentional follow-up with patients or assessing the patient's intent to utilize the blood pressure cuff

Further Research

- Comparison of patient's home and clinic BP
- Association between how often a patient records their home BP and their mean change in BP pre-post intervention

References

1. Prevalence of Hypertension and Controlled Hypertension — United States, 2007–2010. 2013. *Center for Disease Control and Prevention.* [online] Available at: <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a24.htm> [Accessed 5 June 2022].
2. Laffin LJ, Kaufman HW, Chen Z, et al. Rise in Blood Pressure Observed Among US Adults During the COVID-19 Pandemic. *Circulation.* 2022;145(3):235-237.
3. Lawes CM, Bennett DA, Feigin VL, Rodgers A. Blood pressure and stroke: an overview of published reviews. *Stroke.* 2004;35(3):776-785. doi:10.1161/01.STR.0000116869.64771.5A
4. Colantonio LD, Booth JN 3rd, Bress AP, et al. 2017 ACC/AHA Blood Pressure Treatment Guideline Recommendations and Cardiovascular Risk. J Am Coll Cardiol. 2018;72(11):1187-1197. doi:10.1016/j.jacc.2018.05.074
5. Tucker KL, Sheppard JP, Stevens R, et al. Self-monitoring of blood pressure in hypertension: A systematic review and individual patient data meta-analysis. *PLoS Med.* 2017;14(9):e1002389. Published 2017 Sep 19. doi:10.1371/journal.pmed.1002389
6. County Health Rankings & Roadmaps. 2022. *County Health Rankings & Roadmaps.* [online] Available at: <https://www.countyhealthrankings.org/app/wisconsin/2021/rankings/milwaukee/county/outcomes/overall/snapshot> [Accessed 2 March 2022].

Advocates in Medicine Pathways (AMP): A Pipeline Program to Address Provider Shortages of Central Wisconsin Rural & Hmong Populations

Chloe Lang, MPH; Sheng Khang; Nicole Thill, MPH; Amy Prunuske, PhD

Introduction

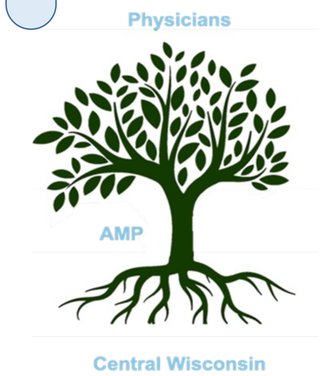
The MCW- Central Wisconsin campus and North Central WI Area Health Education Center (AHEC) aim to address the health care provider shortage in the area, by training community-focused physicians that will serve the health care needs of Central Wisconsin. Wausau is home to a predominant Hmong and rural population, both of whom are greatly underserved in medicine. Building a strong doctor-patient relationship is crucial to providing excellent health care. Having physicians that look like patients, understand the patient's culture, and adequately represent the people that make up the local community, helps facilitate a much stronger, trustworthy doctor-patient relationship that is needed to build a healthier community.

Background

Literature suggests that placing a medical school near target populations is not sufficient to help under-represented students successfully navigate the medical school admissions process[1]. MCW-Central Wisconsin wanted to develop a more targeted effort to make this regional campus more accessible to Hmong and rural students. This project protocol was reviewed by MCW IRB PRO00038142.

AMP Mission

The Advocates in Medicine Pathways or AMP, is a program aimed to support the professional development of undergraduate students interested in attending medical school at the Medical College of Wisconsin-Central Wisconsin to promote a diverse, future healthcare workforce built around resilience, relationships and system-based knowledge. AMP aims to increase the diversity and distribution of quality healthcare workforce in rural and underserved communities



Actions:

- Recruit underrepresented in medicine central Wisconsin students from Hmong and rural backgrounds
- Provide support, mentoring, and professional development
- Facilitate and retain a diverse healthcare workforce to fulfill ongoing primary care shortages in rural central Wisconsin

AMP Programmatic Components

AMP is a 6-month program that runs from January through July, comprised of five core programmatic components:

- Biweekly advising sessions with content experts centered around AAMC's 15 core competencies. Topics include:
  - Cultural Competence
  - Communication (Improv) Development
  - Medical School Application & MCAT
  - Written Competence
  - Ethics in Medicine
  - Rural Health
  - Physician & Medical Student Panel
- Weeklong clinical job shadowing with a physician in family medicine or psychiatry
- 1 credit "Wicked Problems" course offered through UW-Stevens Point at Wausau (tuition paid by scholarships through the UW Wausau Foundation)
- Participation in the Wisconsin AHEC Community Health Internship Program, a full time, paid 8-week experience
- Opportunity to participate in Hmong Culture Day, Future Physician's Day, AHEC Community Health Immersions, tour of MCW-CW and Wausau community, and social networking events with medical students and faculty

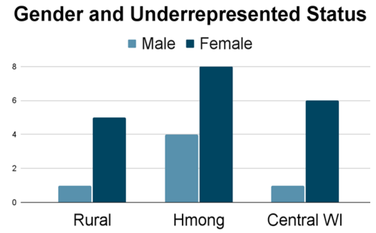
Benefits:

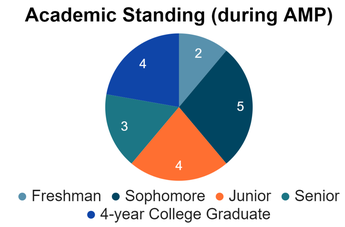
The program is built to help address the barriers that underrepresented students in medicine encounter when applying and transitioning to medical school. Programmatic elements aim to contribute to a successful medical school application and help address barriers that underrepresented students in medicine encounter when applying to medical school. Benefits of participation include:

- Networking, mentoring, and opportunities for strong letters of recommendation
- Assistance with crafting and refining personal statement
- MCAT test preparation and guidance
- Development of interviewing skills through mock interviews
- $1000 in financial support for each AMP student to be used towards preparing for medical school. Examples include: purchasing MCAT test prep, technology needs, travel assistance, conference or professional development expenses, etc.
- Opportunity for direct interview at MCW-CW following successful completion of AMP and meeting required benchmarks

Results/Conclusions

AMP was first offered in 2021. The program has successfully graduated two cohorts (18 students total).





Student Reflections

"I never really knew what to expect of medical school besides people's horror stories online. So, getting to talk with medical students and professionals giving solid advice is really valuable."

"Each session gradually helped me learn what I need to learn."

"All the premed students I know, already have family members who are doctors or have siblings who are on a premed track, so they already have set plans and goals of what they need to accomplish. I didn't know anybody who was like me and didn't really know what to do."

Future Directions

- Update "Wicked Problems" course to include more case-based discussion
- Continue to mentor and support AMP alumni as they prepare for and matriculate into medical school.
- Apply for funding to sustain the AMP program after 2024.

References

1. Johnson, GE, Wright, FC, and Foster, K. The impact of rural outreach programs on medical students' future rural intentions and working locations: a systematic review. BMC Med Educ. 2018; 18: 196.

Funding is currently provided by Advancing a Healthier Wisconsin (AHW# #5520567) from 2020-2024.

Utilization Rates of Dermatology Screening Certification Services in Nail Technicians Within the Wauwatosa Area

Jacqueline Tran, BS, Jenna T Le, BS, Nicole T Xia, BS, Melanie Clark, MD
Department of Dermatology, Medical College of Wisconsin, Milwaukee WI

BACKGROUND

- According to the WHO, 1 in 5 Americans will develop skin cancer in their lifetime.
- Skin cancer screening by a dermatologist is one of the best ways to detect skin cancers early, positively impacting cancer treatment options and patient prognosis.
- Cosmetologists and other beauty professionals have a positive impact on pro-health initiatives in their places of work.

AIM

- To determine whether nail technicians in the Wauwatosa and Milwaukee area are utilizing skin and nail cancer certification platforms.

METHODS

- Phone calls were conducted with the following interval: day 0, day 3, and day 7.
- Surveys were delivered via email, phone, text, or in-person.
- Survey questions pertained to awareness of certification resources and reasons for lack of use.

Inclusion Criteria
- Salons with a Wauwatosa zip-code
- Employed licensed nail technicians

Exclusion Criteria
- Shut down/no phone connected
- Did not employ nail technicians

RESULTS

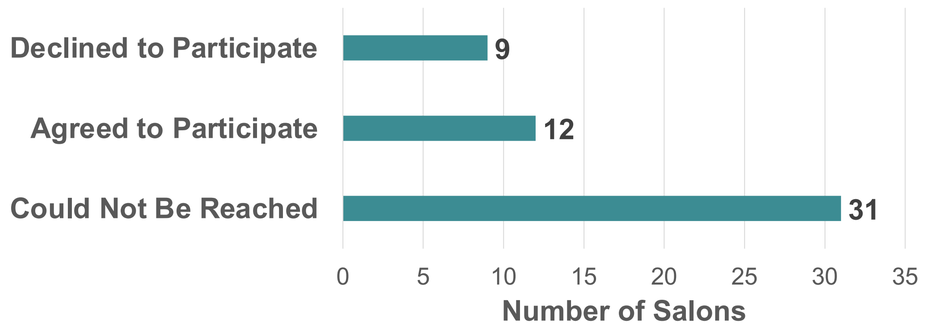


Figure 1. Salon Responses to Participation via Phone Recruitment (n=52)

- Over half of the salons could not be reached by phone.
- Further data analysis was postponed due to a low number of survey respondents.

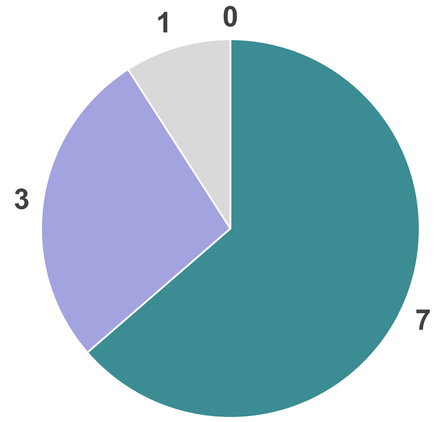


Figure 2. Number of Surveys Completed Via Email, Phone, Text, or In-Person (n=11)

CONCLUSION

- More surveys were completed in-person (64%) when compared to email (27%), phone call (9%), or text message (0%).
- We present the importance of in-person and face-to-face contact when partnering with the community to conduct research.

FUTURE DIRECTIONS

- Further efforts will include in-person flyer distribution with a QR code (Figure 3).
- Inclusion zip codes will be broadened to the Greater Milwaukee Area (Figure 4).
- Our goal is to increase the number of survey respondents to better determine utilization rates of skin and nail cancer screening platforms amongst nail technicians.

Figure 3. Flyer for In-Person Distribution with QR Code to the Survey

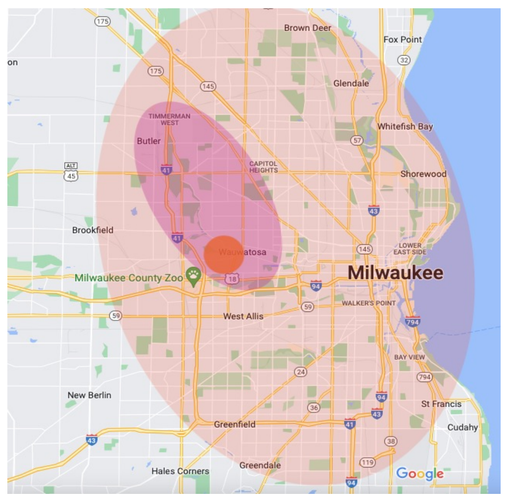
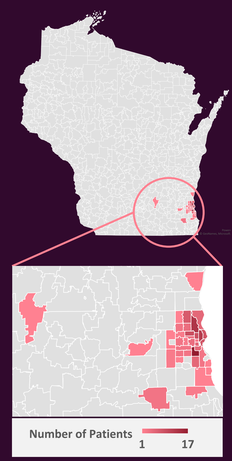


Figure 4. Expanded Study Inclusion Zip-Codes
Orange dot: MCW Campus
Purple oval: Initial Study Area
Salmon pink oval: Area of Expansion

Patients without health insurance and experiencing food insecurity are more likely to suffer from anxiety and depression – a cross-sectional study at a Milwaukee student-run free clinic



Suma K. Thareja, PhD, Spenser Marting, William Davies, *Santhosi Samudrala, Ramsey Rayes, Marie Balfour, Ana Mia Corujo-Ramirez, Frances Carter, Benjamin Liu, MD, Dylan Trinh, Thomas Ritter, MD, Jessica Miller, Rebecca Lundh, MD, and Staci A. Young, PhD*

Background

- Patients experiencing food insecurity commonly screen positive for a myriad of social determinants of health (SDOH) needs and chronic medical conditions influenced by diet[1-3]
- Food insecurity affected 10.5% of households in 2020[4]
- Few studies have investigated associations between food insecurity and other SDOH needs or chronic medical conditions within uninsured populations

Objective

- Screen patients seen between October 2021 and April 2022 at the Milwaukee student-run free clinic, Saturday Clinic for the Uninsured (SCU), for food insecurity using the USDA six-item short form[5] and evaluate associations of food security status with 1) nine separate SDOH needs and 2) eight chronic medical conditions.

Methods

SCU patients over 18 yo completed the SDOH screening questionnaire

Clinic volunteers provided patients with tailored resources to meet their SDOH needs

Research volunteers conducted chart review, collecting demographics and medical history

SDOH needs and chart review information were tracked in a HIPPA-safe REDCap database

Conducted data analysis (descriptive statistics, correlation, and odds ratios)

Disseminating findings and conceptualizing helpful interventions

Discussion

- Risk factors separate from food security status may explain associations with other chronic medical conditions, including uninsured status, socioeconomic status, eating behaviors, or healthy food inaccessibility
- Based on our findings, we recommend that clinicians working with patients who have anxiety and depression (as primary or comorbid diagnosis) should assess food security status and other SDOH needs

References

1. Banks AR, Bell BA, Ngendahimana D, Embaye M, Freedman DA, Chisom DJ. Identification of factors related to food insecurity and the implications for social determinants of health screenings. *BMC Public Health*. Jul 16 2021;21(1):1410. doi:10.1186/s12889-021-11465-6
2. Ghazaryan A, Carlson A, Rhone AY, Roy K. Association between the Nutritional Quality of Household At-Home Food Purchases and Chronic Diseases and Risk Factors in the United States, 2015. *Nutrients*. Sep 18 2021;13(9)doi:10.3390/nu13093260
3. Kim D. Financial hardship and social assistance as determinants of mental health and food and housing insecurity during the COVID-19 pandemic in the United States. *SSM Popul Health*. Dec 2021;16:100862. doi:10.1016/j.ssmph.2021.100862
4. United States Department of Agriculture Economic Research Service. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/
5. Hamilton WL Cook JT, Thompson WW, et al. *Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project*. 1995. 9/01/1997. https://fns-prod.azureedge.us/sites/default/files/SUMRPT.PDF

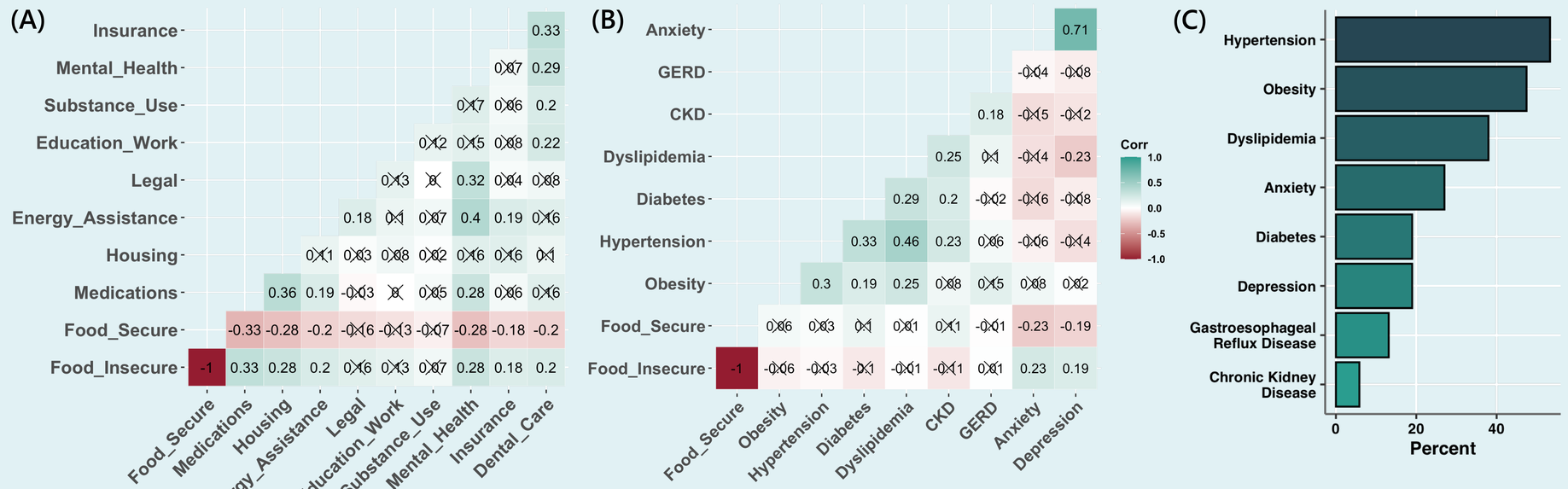
Acknowledgments

- We extend our gratitude to the patients and healthcare providers of SCU for their participation and feedback
- We are also grateful to many clinic volunteers who made this project possible, including Nicole Runkle, MD, Ashley Pohlman, MD, Erica Engstrand, Donglin Zhang, Madeline Zamzow, and Owen Bowie, Anna Lyons, Delaney Weiland, Shivani Kumar, Nathan Luzum, and Jennifer Terrell

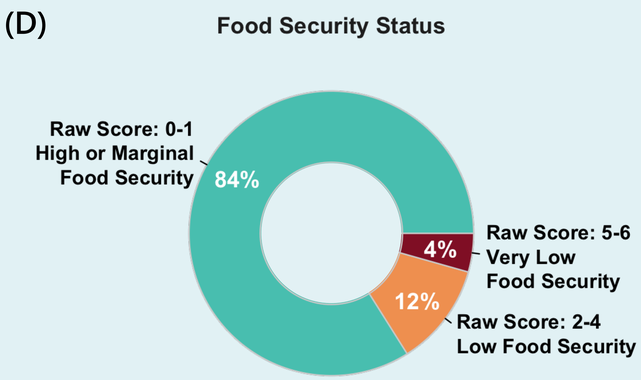
Ascension Columbia St. Mary's

MEDICAL COLLEGE OF WISCONSIN

Results



Figures: (A) Matrix of Kendall's tau (τ) correlation coefficients of SDOH variables assessed among participants that completed all parts of the needs assessment (n=135) with significant relationships ($p < 0.05$) remaining uncrossed; **(B)** Matrix of Kendall's tau(τ) correlation coefficients of food security status and patient medical history (n=137) with significant relationships remaining uncrossed ($p < 0.05$); **(C)** Percent distribution of patient medical history significant for common chronic diseases (n=137); **(D)** Percent distribution of food security status scores (n=137).



Conclusions

Patients without health insurance and experiencing food insecurity were more likely to:

1. Need resources on medication financing, housing, energy assistance, mental health, insurance, and dental care
2. Have anxiety and depression but not obesity, hypertension, diabetes, dyslipidemia, chronic kidney disease, or gastroesophageal reflux disease

Building a Community-Academic Partnership to Improve Screening for Intimate Partner Violence: Integrating Advocates in Healthcare Clinic Settings

Heidi Paquette, PhD[a], Erin Schubert, PhD[b], Colleen Galambos, PhD[c], Teresa Jerofke-Owen, PhD[a], Erica Arrington, MD[d], Greer Jordan, MD[d], Nilanjan Lodh, PhD[a], Gisela Chelimsky, MD[e], Linda Piacentine, PhD[a], Kimberly S. Gecsi, MD[d]

[a]Marquette University , [b]Sojourner Family Peace Center, [c]UW-Milwaukee, [d]Medical College of WI, [e]Virginia Commonwealth University

Background

Intimate partner violence (IPV) impacts over 12.5 million US Adults[3].

- Over 1/3 of women experience physical violence, rape or stalking by an intimate partner in their lifetime[3].
- Annual cost in WI is estimated at $657 million and Milwaukee estimated at $113 million billion[4].
- IPV is underreported[2] and leads to negative health outcomes[1].
- Identifying survivors of IPV early and connecting them with community resources can save lives.
- IPV service providers and community partners offer emergency shelter, safety planning, emotional support, and healing services.

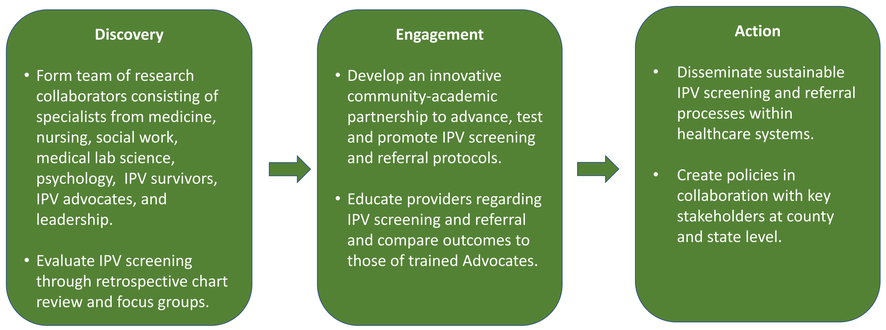
Discussions with community providers, leaders, and advocates suggest current IPV screening practices are limited and not standardized.

Aims

- Develop an innovative community-academic partnership to advance, test and promote effective IPV screening and referral protocols in a medical setting.
- Compare the effectiveness of screening done by IPV advocates vs trained medical providers in medical clinics serving women from vulnerable populations.

Method

- Mixed methodology for the three-phase project will help in understanding current practices and effects of interventions.



Results to Date

- Community stakeholders assisted to develop our research focus and methodological approach.
- Retrospective chart review and focus group data are being analyzed and results are pending.
- A community-academic partnership was formed, funded, and published an article together.

Conclusion

- The goal is to identify the best approach for sustainable IPV screening and referrals in a healthcare setting.
- Through community collaboration with IPV survivors, providers, and academic researchers, we will establish a model for addressing this complex public health challenge.

Acknowledgements

Project supported by:

- Grant funding from the Advancing a Healthier Wisconsin Endowment at the Medical College of Wisconsin
- Zilber Family Foundation
- IPV Survivors
- MCW– Department of Pediatrics

References

[1]Campbell, J. C., Baty, M. J., Laughon, K., & Woods, A. (2009). Health effects of partner violence: Aiming toward prevention. In D. J. Whitaker & J. R. Lutzker (Eds.), *Preventing partner violence: Research and evidence-based intervention strategies* (pp. 113–138). American Psychological Association.

[2]Gwinn, C. (2015). *Cheering for the Children: Creating Pathways to HOPE for Children Exposed to Trauma*. Wheatmark.

[3]Smith, S. G., Zhang, X., Basile, K. C., Merrick, M. T., Wang, J., Kresnow, M., & Chen, J. (2018). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2015 Data Brief*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

[4]Sojourner Family Peace Center. (2022). *The economic impact of Domestic Violence in Milwaukee & Wisconsin 2021*. Economic+Impact+of+DV+FINAL.+10.11.2022.pdf (squarespace.com).

COMPARING ACCEPTABILITY OF HOME- VERSUS CLINIC-BASED ANAL SWABBING AMONG MEN WHO HAVE SEX WITH MEN: THE PREVENT ANAL CANCER STUDY

Jenna Nitkowski, PhD (Presenter), Anna Giuliano, PhD, Tim Ridolfi, MD, Elizabeth Chiao, MD, MPH, Maria Fernandez, PhD, Vanessa Schick, PhD, Michael D. Swartz, PhD, Jennifer S. Smith, PhD, Alan G. Nyitray, PhD, and The Prevent Anal Cancer Study Team

Background

Anal cancer overview

- Rare, but rates are increasing
- Disproportionately affects MSM
  - HIV+ MSM 80x more likely to develop anal cancer vs. HIV- men
- No consensus screening guidelines
- **Need to know how people experience different options for screening**

Our goal

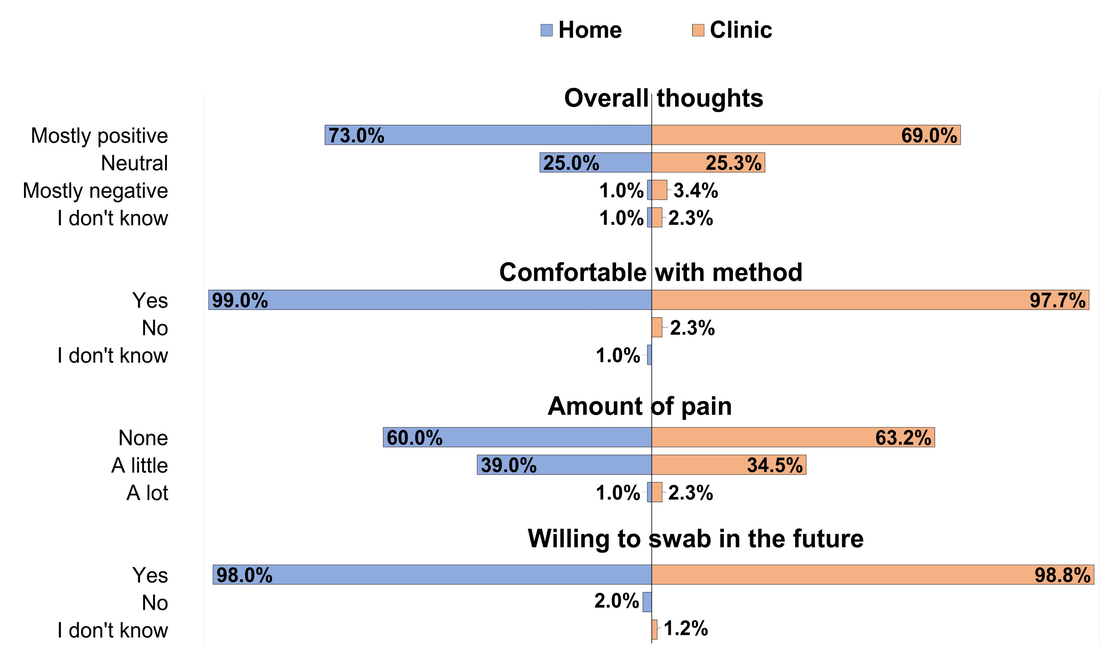
Compare acceptability of home versus clinic anal swabbing.

Methods

THE PREVENT ANAL CANCER (PAC) SELF-SWAB STUDY

- Recruited MSM & trans people ages 25+ in the **Milwaukee area** through **community clinics, events, local businesses, & social media ads**
- **Community advisory board (CAB) of local MSM** provided guidance on study design, recruitment, and interpretation of results
- **Participants randomized to home or clinic**
  - **Home** = received a mailed anal self-swab kit
  - **Clinic** = scheduled & attended one of five community partner clinics where a clinician collected an anal swab
- **We analyzed participant survey responses after their anal swab**
  - **Acceptability** = overall thoughts, comfort with method, pain, willingness to swab in the future

Results



- **Acceptability was high** for home & clinic
- **No significant differences** between home & clinic
- **Acceptability did not differ by age, HIV status, education, or race/ethnicity**

Conclusions

- **Anal swabbing acceptability was high for both home & clinic and did not differ by demographics.**
- **Nearly all participants reported they were willing to undergo an anal swab in the future.**

Thank you to The PAC Self-Swab Study participants, study team, CAB, providers, & community clinics!

Research reported in this poster was supported by the National Cancer Institute of the National Institutes of Health under Award Number R01CA215403 (NCT03489707). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. This work was also supported by the Medical College of Wisconsin and the Cancer Prevention Research Institute of Texas (RP170668). Thanks to COPAN Diagnostics Inc. for donation of FLOQSwabs® and transport vials and thanks to the Young Men's Affiliation Project for illustrations.

Continuing Community Engagement through Expanded Powered Mobility for Young Children with Special Needs: Go Baby Go! Milwaukee Improvements and Modifications

Molly Erickson, Elizabeth Conrath, Allison Friel, Lauren Tyson, Divya Shah
Zachary Krueger, Michael Collins, Benjamin McHenry, and Gerald F Harris

Go Baby Go! (GBG) is a nationwide community-based design and outreach program that provides **modified ride-on cars** to children 9 months to 5 years of age who experience **limited mobility.** **GBG! is an open-source program that was started at the University of Delaware by Dr. Galloway and provides cars to families at no cost.**

Dr. Galloway started the program because of a desire to provide children with limited mobility or cognitive delay an opportunity for independent mobility at a young age. Research has shown that independent mobility leads to an increase in a child's social-emotional, cognitive, and motor skills. In this project, toy ride-on cars are modified technically and therapeutically to fit the specialized needs of each child. Examples include a therapy switch in place of a gas pedal, joystick control instead of a steering wheel, head and body support, custom harnesses, and padding to ensure a stable posture.

260 Cars
Built to Date

Room for Improvement

The GBG! MKE team is constantly working on improving the GBG! MKE program and family experience. This effort started in 2019 with a family satisfaction survey completed by the GBG! MKE families. Based on the 2019 recent survey, several challenges were identified including the following:

- **60% of children experienced difficulties driving a self-steer car due to cognitive delays and/or physical limitations.**
- **27% of children were startled by the initial motion/start-up of the car.**
- **27% of families experienced difficulties transporting the car in their vehicle.**

Acknowledgment

The GBG! MKE team would like to extend a special thank you to James Friel from the Department of Recreational Sports at Marquette University who made the GBG! MKE Open Gym possible. We also sincerely thank OREC/MU,MCW and Children's Foundation for ongoing financial and technical support of the program.

We would also like to recognize our many generous donors because without their support we would not be able to provide this large number of cars at no cost to the families of Southeast WI.

Going Forward

Going into 2023 the GBG! MKE team will continue working on improving the GBG! MKE family's experiences include:

- **Continued research into Joystick Driven Vehicles.**
- **Sending the 3rd family satisfaction survey.**
- **Expanding the GBG! program to the Fox Valley Region.**
- **Offering the 4th family picnic.**
- **Continued improvements to the vehicles.**

2018

Picnic

In 2018 the GBG! MKE team had our first GBG! MKE family picnic.

Each GBG! MKE family was invited to attend, and the team sets up games, activities, a racetrack, and a podium where the children could drive their car and meet other kids with cars like theirs. It was also a great opportunity for families to meet. We have since hosted two others in the summer of 2019 & 2022.

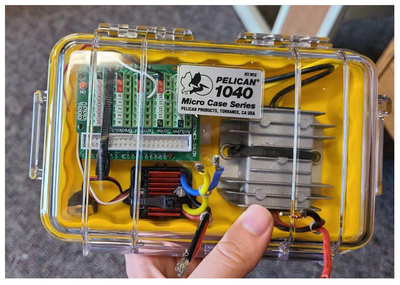
2019

Remote Car

In 2019 the GBG! MKE team started producing remote control cars. These cars are wired so that the child has to be pressing the adaptive switch and the parent has to be pressing the forward/backward button on the remote at the same time for the car to move. This keeps the child actively engaged with the motion while addressing the difficulties children were experiencing with the self-steer car.

2020

Acceleration Controller



In 2020 the GBG! MKE team started to offer an acceleration controller microprocessor system for self-steer vehicles. This system was designed to slowly ramp the speed of the car up from zero to full power. This ramp-up is much slower than the car's internal systems and was designed to address startle reactions resulting from initial car start-up.

2021

Open Gym

In 2021 the GBG! MKE team started offering open gym time to families. This gym time is offered three days a week and is an opportunity for GBG! MKE families to use their cars indoors during the winter months. This will be offered to families again in 2022.

Student Engagement

In 2021 the GBG! MKE team worked to increase student engagement. The team started to allow Marquette University engineering PT, and OT students the opportunity to watch GBG! fittings and learn about the clinical side of the program.

Additionally, the OREC/MU,MCW team started offering engineering students the opportunity to practice their hands-on skills by completing mechanical and electrical modifications of the car under the guidance of the GBG! MKE engineer.

2022

Joystick Driven Vehicle

In 2022 the GBG! MKE team hopes to start research on a joystick-driven vehicle. This vehicle will have a much smaller footprint and be much lighter than earlier cars to help families more easily transport the vehicle. The vehicle will be built, wired, and programmed to respond in a manner similar to an electric-powered wheelchair with research focusing on the joystick control.

Facebook Group

In 2022 the GBG! MKE team worked with a GBG! MKE mom to start a Facebook group where the families could post about their children, ask questions to other families with shared experiences, or provide feedback on the GBG! MKE program. In just a few months the group has almost 40 members.

Qualitative Assessment and Model Building: Uncovering the Medical School "Unspoken Curriculum" through a Community-Engaged Nutrition Education Program

Bethany Korom, Megan Cory, MD, Bryan Johnston, MD, Jacob Schreiner, MD, Marie Balfour, Jay Goldsher, Emily Villarreal, Myah Pazdera, Matthew Hernandez, David Nelson, PhD

Introduction

- Longitudinal volunteer experiences help students gain communication and interpersonal skills, practice teaching, and experience with the communities they serve[1,2]
- "Hidden Curriculum": Aspects of education not formally taught in curriculum[3,4]
- **"Unspoken curriculum"**: Student participation in community-centered experiences and reflection exercises to gain confidence in skills within the community
  - Goal = supporting high quality physicians
  - Develop knowledge and familiarity with community resources, local environments, cultural norms, personal vulnerability, and teaching skills
- The Food Doctors (TFD): medical student run volunteer experience to teach nutrition education to elementary students in Milwaukee
- **Study Aim:** capture reflections of how TFD experience impacts the connection to the community and patients

Methods

Medical student volunteer program to supplement nutrition education curriculum in Milwaukee elementary schools

2013: TFD Creation

April 2021: Pilot interview

Training on interview conduction, motivational interview techniques

Open-ended semi-structured interview questions focused on how TFD influenced personal and professional development

Spring 2021: Interviews

Fall 2022: Qualitative analysis

Grounded theory qualitative analysis on interview transcripts to identify common themes

Gauge participant reactions to the themes and how they relate to clinical life, discussing how it resonates with their personal experiences

Fall 2022: Debriefing sessions

Results

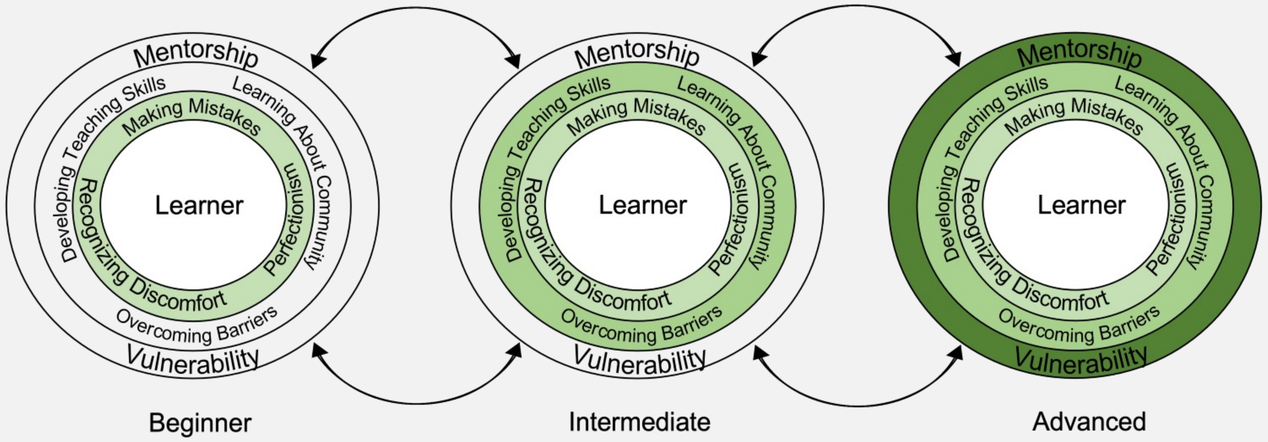


Figure 1 (above): Developmental Skills at Each Stage of the Unspoken Curriculum.
Analysis of the interviews yielded four major themes: navigating unfamiliar environments (including recognizing discomfort, making mistakes, and mentoring), navigating perfectionism, building capacity (including overcoming barriers, developing teaching skills, and learning about the community), and navigating vulnerability. These themes were noted to have varying relevance based on each student's time and developmental level within the TFD program. We developed a learner-centered model from these themes that summarize the skills at each stage of student development of their relationship with the community. Specific themes are more apparent in different stages of the learner's interaction with community. As learners move progressively to the right, their skills develop further until they reach the advanced stage.

"When I started Food Doctors, learning from the more experienced upperclassmen was so helpful. I was so nervous to present my first lesson, and they let me observe before I had to do it myself. I could tell there was a 'see one, do one, teach one' model that worked well in that dynamic, and their passion for the program made it easy to get excited. In medical school, we interact with many residents and fellows who also use the same teaching model. When they are excited and eager to teach, it feels easier to jump in, especially knowing that they won't let us fall when we make mistakes. As I became a senior member of Food Doctors, I now get to foster the same enthusiasm in our new members, which is also great practice for when I become a resident. Peer-peer and near-peer relationships are one of the pillars that hold up the medical education system, and when executed well can increase learning for all."
-Medical Student Reflection

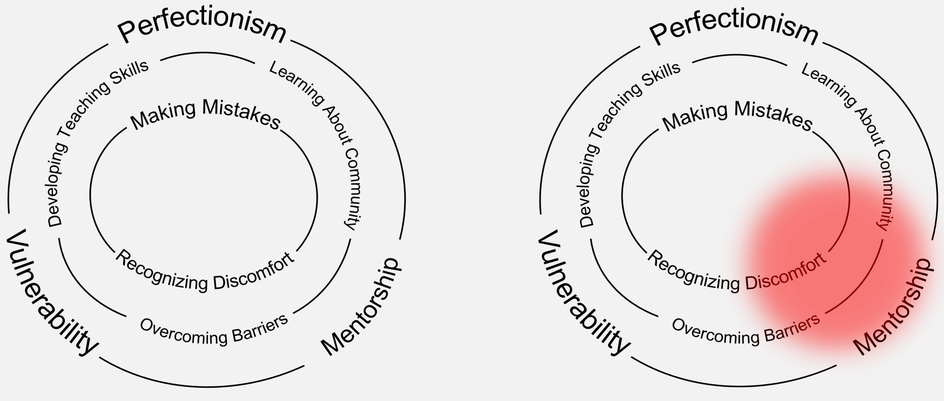


Figure 2 (above): Map of Skill Development in the Unspoken Curriculum.
Together, these themes represent the challenges and triumphs of students participating in longitudinal community engagement (CE) programs during medical school. Our proposed model can be utilized by medical students and other community engaged learners to plot their development and identify areas for growth. For example, the student reflection above can be plotted on the model based on their interaction with the following themes: mentorship, recognizing discomfort, overcoming barriers, and learning about the community. Each circle does not represent discreet events or linear movement, but instead relates skills at different levels of development together.

Discussion

- Learner-centered model emphasizes individual student journey
- Intentional reflection can guide professional development

Reflection:	**Skill development:**
Personal perfectionism	-Practice adaptability
Embracing vulnerability	-Recognize limits -Ask for help -Prepare for unanticipated outcomes
Community relationships	-Learn about the community -Practice skills in safe environment

- Student reflections from TFD demonstrate timeline of skill development
  - Begin with interpersonal skills (teaching skills, avoiding mistakes)
  - Later, begin to understand fundamental principles of CE (explore shortcomings and vulnerabilities)
- There is a need for intentional support of medical students starting their CE journey earlier in the process

Conclusion

- Our proposed model can help individual learners identify strengths and areas for improvement
  - Progression through the model is a continuous work in progress
- Medical curriculum promotion of longitudinal community engagement programs enhance development of vulnerability, mentorship, and teaching
  - Strengthens patient-doctor relationship
  - Connections between doctor and community

References

1. Stewart T, Wubbena ZC. A Systematic Review of Service-Learning in Medical Education: 1998–2012. *Teaching and Learning in Medicine*. 2015;27(2):115-122. doi:10.1080/10401334.2015.1011647
2. Haidar A, Erickson SG, Champagne-Langabeer T. Medical Students' Participation in Longitudinal Community Service During Preclerkship Years: A Qualitative Study on Experiences and Perceived Outcomes. *Journal of Medical Education and Curricular Development*. 2020;7:2382120520936661. doi:10.1177/2382120520936610
3. Yazdani S, Andarvazh MR, Afshar L. What is hidden in hidden curriculum? a qualitative study in medicine. *Journal of Medical Ethics and History of Medicine*. Published online May 26, 2020. doi:10.18502/jmehm.v13i4.2843
4. Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. Acad Med. 1998;73(4):403-407. doi:10.1097/00001888-199804000-00013

A Retrospective Review of Racial and Ethnic Disparities in Security Activations at Children's Wisconsin

Ali Syed, MS; Alex Bryant, MD, MPH; Lauren Titus, MD; Praful Aggarwal, MS; Lisa Zetley, MD, Sarah Bauer, MD; Chelsea Willie, MD; Jasmine Dowell, MD

BACKGROUND

- Patients experience racial and socioeconomic disparities during healthcare (HC) encounters.
- Implicit biases can result in care disparities across many care aspects, including hospital security team activation.
- Security activations during HC encounters carry complex psychosocial implications, especially for socioeconomically disadvantaged and minoritized populations.
- Visitation restriction during HC encounters is a major stressor for children and their families.

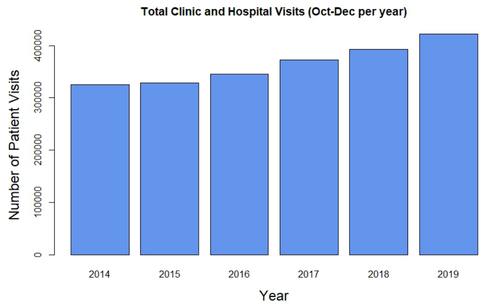
HYPOTHESIS

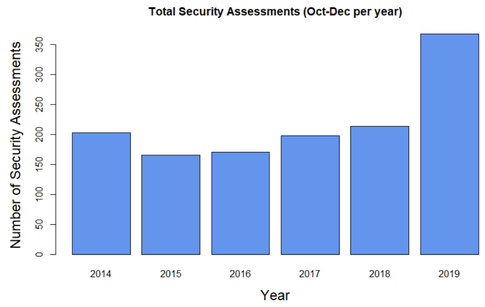
- Disparities in hospital experience can affect patient care. We will assess if there is a disproportionate activation of security assessments on patients of low socioeconomic status, Black race, or Hispanic ethnicity.

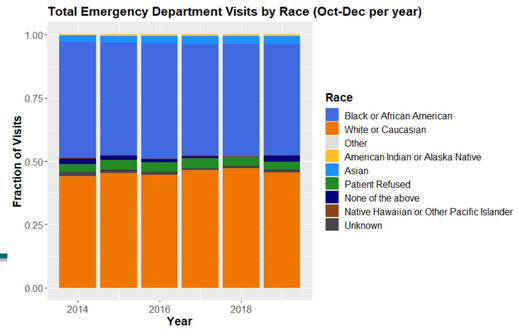
METHODS

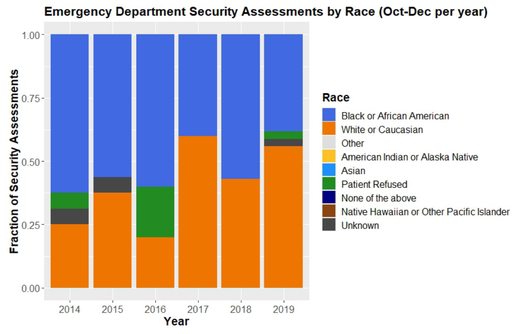
- Retrospective chart review of security activations occurring October-December from 2014-2019 (n=1314) at CW. A time period-based audit approach was chosen to minimize confounding of data by seasonal disease patterns.
- Security activations initiated per hospital protocol were excluded (e.g., trauma patients, self-harm)
- Extracted data: patient demographics, reason for security activation, and security assessment outcome.

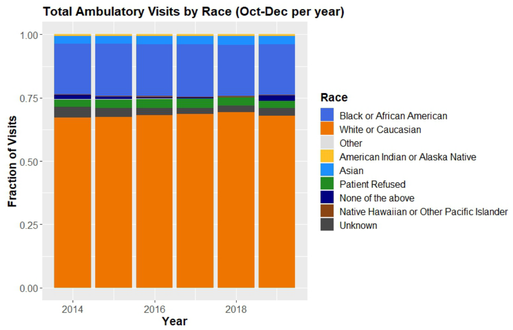
RESULTS

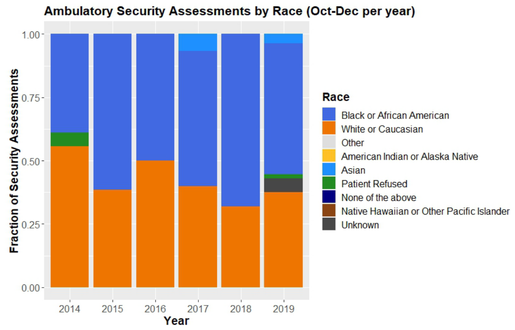


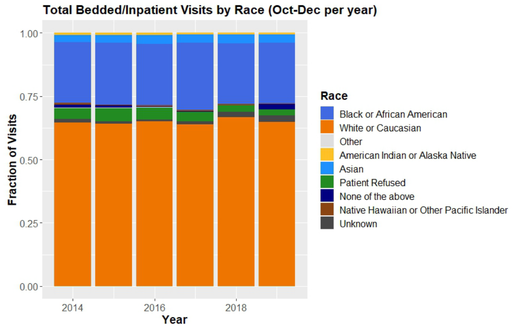


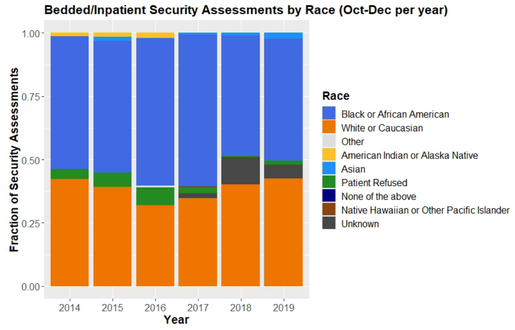












CONCLUSION

- Half of CW security activations were for Black patients, though they only comprise one-fifth of the CW patient population.
- Majority of security assessments for perceived aggression were activated for Black patients.
- Visitation was restricted for Black patients more often than White or Hispanic patients perceived to be aggressive, indicating disparate application of interventions after security assessment.
- Findings suggest hospital staff perception of safety threats may be influenced by implicit bias.
- Trauma-informed care requires consideration of the potential for negative impact of disparities in security activation and assessment outcomes on patient care and family experience for Black patients, and societal relationship between the HC system and the Black community.

FUTURE DIRECTIONS

- Complete multivariate analysis to identify drivers of security activation and assessment decisions to identify targets for quality improvement interventions.
- Disseminate findings to key stakeholders and hospital leadership at CW to improve awareness and develop an equitable security activation system.
- Develop a system for ongoing data collection and staff feedback on security activation patterns.

Our team has no financial relationships to disclose or Conflicts of Interest to resolve.

Community Outreach as a Core Component of Professional Development in Resident Education: A Descriptive Abstract

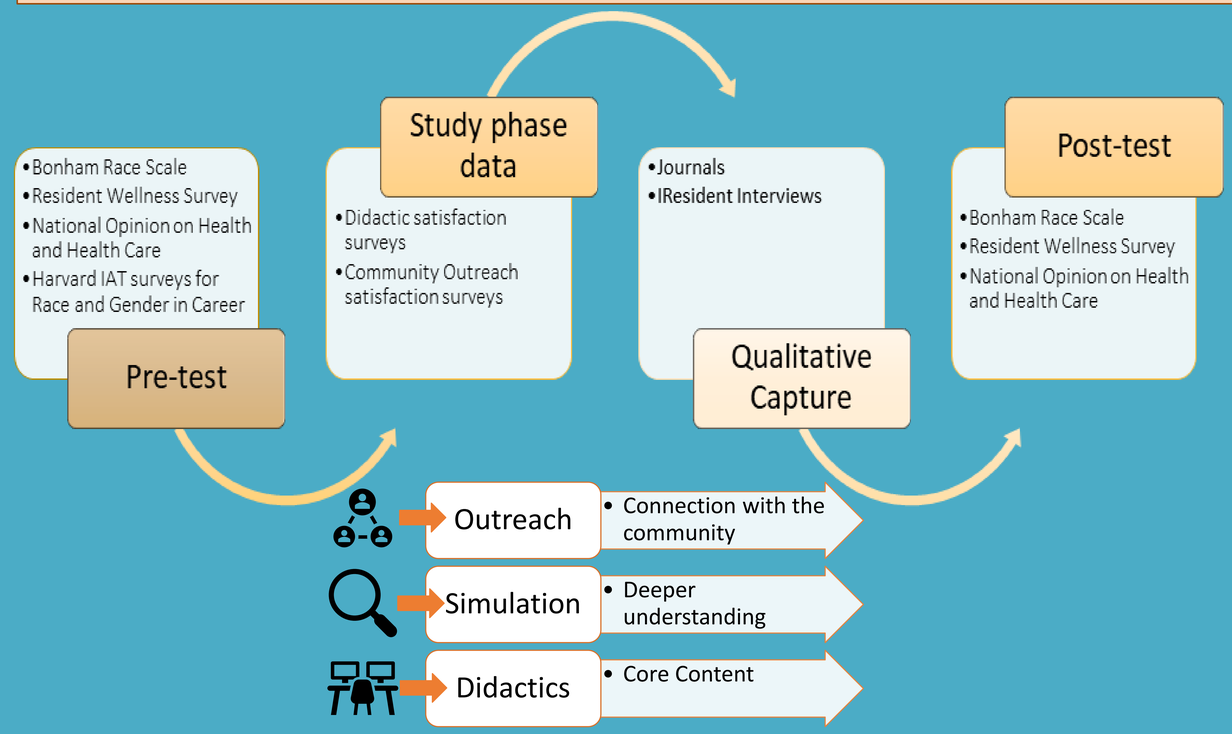
Jessica L. De Santis, Anne L. Castro, M. Tracy Zundel, David A. Nelson, Michael Malinowski, & Stacy L. Fairbanks

Background: Milwaukee has a profound history of segregation that impacts education, poverty, disproportionate prison populations, and lack of access to housing and healthcare. **Medical residents can learn to better serve our Milwaukee communities through education.** In 2021, we created the Professional Development Week (PDW) for the Post-Graduate Year 1 (PGY1) residents in the Department of Anesthesiology to help residents better understand Milwaukee and develop skills that are traditionally not emphasized in the clinical setting. In 2022, we received an AHW award to extend professional training in community engagement and professional development to PGY1 residents in Anesthesiology, Surgery, Neurology, OBGYN, and Radiation Oncology.

- Anesthesiology
- Surgery
- Neurology
- OBGYN
- Radiation Oncology

Research Question:
We propose that all PGY1 residents employed by The Medical College of Wisconsin and Associated Hospitals have a PDW, and this will directly impact the quality of care provided in SE Wisconsin by increasing trainee involvement in community service, addressing health disparities, and advocating for underserved patients.

Methods & Strategies: This year's PDW curriculum serves as our pilot for the envisioned project. We anticipate enrolling 175 trainees over 2022 and 2023. Residents enrolled will participate in a pretest/posttest study with surveys examining resident wellness, biases, and health disparity perceptions. Participants will engage in 2.5 days of curriculum including community outreach with Streetlife Communities Milwaukee and All Saints Community Garden. Participants will be interviewed by our research team and keep a journal to be collected for thematic analysis.



Conclusion: We propose the following specific aims will be met:

1) Educate medical residents in Milwaukee's health disparities
2) Partner with organizations in SE Wisconsin to create a mutually beneficial relationship to improve the overall health of Wisconsin
3) Engage medical residents in cultural competencies such that they ultimately choose to practice in Wisconsin, thus decreasing health disparities and improving the health of the population

Assessing and Improving Prominent Social Determinants of Health among Patients at a Student-Run, Milwaukee Free Clinic

Adrianna Doucas, Jessica Miller, Xiaowei Dong MS, Spencer Huang PhD, Rebecca Lundh MD, Staci Young PhD

Department of Family and Community Medicine, MCW-Milwaukee

Background

- WHO research affiliates determined that social determinants of health (SDoH) drive disease risk and susceptibility[1]
- Health insurance coverage is integral to healthcare access and overall health
- Uninsured patient populations in the United States are understudied[2,3]
- Research about how free clinics address social needs is limited[4]
- The social needs of the uninsured population must be better understood to provide holistic care
- In Milwaukee, WI the Saturday Clinic for the Uninsured (SCU) is a free clinic
- At SCU, an Education Resource Committee (ERC) assesses patient's SDoH and provides community resources

Aims

- Assess the demographics of the SCU patient population
- Assess the most prominent SDoH needs of SCU's patient population
- Assess community resource allocation for the five most prominent SDoH needs
- Assess the reasons why patients refused resources

Methods

1- Data collection via REDCap surveys (October 2021 – ongoing)

2- Export REDCap data (.csv, Excel)

3- Clean and analyze data using R Studio. (Inclusion criteria: patients over 18 years old with at least one completed SDoH survey)

4- Generate figures and conclusions

Results

Figure 1a

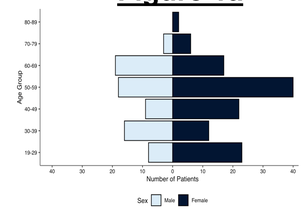


Figure 1a patient reported age and sex

Figure 1b

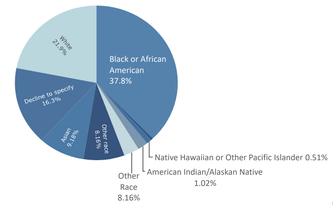


Figure 1b patient reported race

Figure 1c

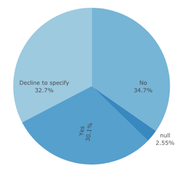


Figure 1c patient reported ethnicity

Figure 2

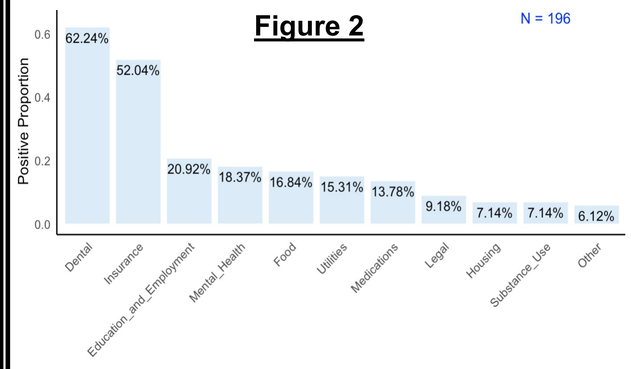


Figure 2 frequency of positive patient screening responses to 11 SDoH

Figure 3

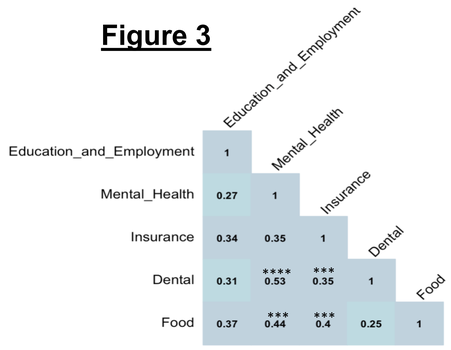


Figure 3 tetrachoric correlation heatmap displaying correlations between top five social needs. Significance determined by tetrachoric correlation:

*** = P ≤ 0.001
**** = P ≤ 0.0001

Figure 4a

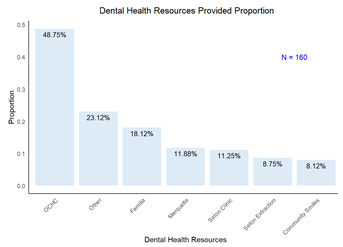


Figure 4b

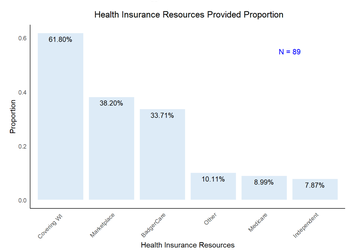


Figure 4c

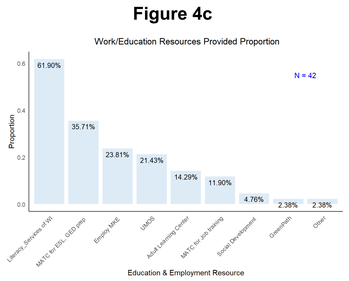


Figure 4d

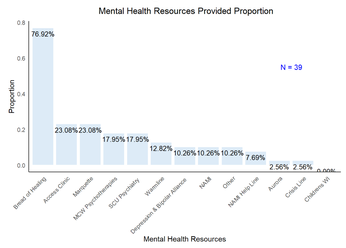
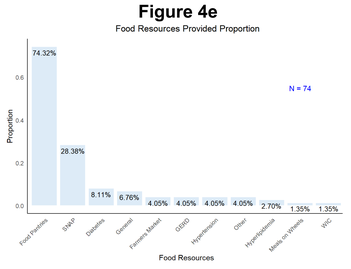


Figure 4e



Figures 4a-e bar graphs displaying resource allocation for the top five social needs

Figure 5a

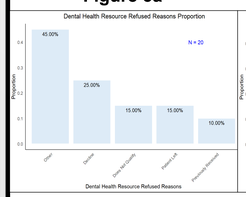


Figure 5b

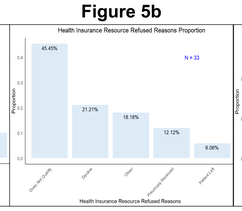


Figure 5c

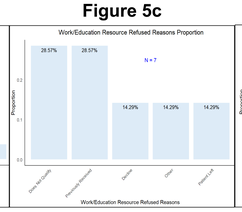


Figure 5d

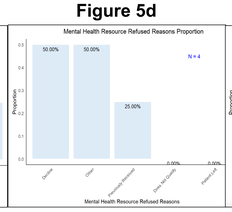
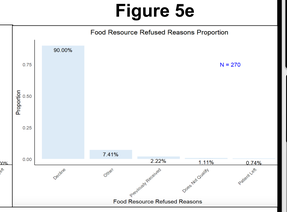


Figure 5e



Figures 5a-e bar graphs displaying patient reasons for refusing resources after screening positive for a top five social need

Discussion

The most prominent SDoH of SCU's patients are dental care, insurance, mental health, education/work opportunities, and food insecurity

These results will inform:

- improved care of this population
- a novel workflow to be adopted by free clinics

Certain SDoH correlate in screening

- Mental health and dental needs correlating suggest a shared barrier of financial insecurity
- Mental health and food insecurity, insurance and food insecurity, and insurance and dental care correlating suggest the interplay of financial stability and insurance, and the psychological impact of basic needs such as food security

Resource Allocation

- Understanding frequent resource allocation educates further investigation into resource success

Resource Refusal Reasons

- Most patients declined mental health and food resources
- Most patients did not qualify for insurance or work/education opportunities implies access barriers
- Most patients refusing dental resources for "other reasons" inspires future investigation to understand patient thinking

Limitations

- Limited number of patients, variation in survey results due to different ERC members conducting the survey

Future Work

This study inspires future work to investigate:

- patient-reported usefulness of the community resources provided for identified social needs
- longitudinal study of patient resource utilization and reported success/"helpfulness"

Acknowledgements

Special thanks to the Education and Resource Committee members that assisted with survey data collection. Funding was provided by The Medical College of Wisconsin Department of Family and Community Medicine.

References

1. Crear-Perry J, Correa-de-Araujo R, Lewis Johnson T, et al. "Social and Structural Determinants of Health Inequities in Maternal Health." *Journal of Womens Health (Larchmt)*. 2021 Feb, https://pubmed.ncbi.nlm.nih.gov/33181043/.
2. Institute of Medicine (US) Committee on Health Insurance Status and Its Consequences. "America's Uninsured Crisis: Consequences for Health and Health Care." *National Center for Biotechnology Information*, U.S. National Library of Medicine, 2009, https://pubmed.ncbi.nlm.nih.gov/25009923/.
3. Rahman S, Mirza AS, Wathington D, et al. "Chronic Disease and Socioeconomic Factors among Uninsured Patients: A Retrospective Study." *Chronic Illness*, U.S. National Library of Medicine, 19 Feb. 2019, https://pubmed.ncbi.nlm.nih.gov/30782011/.
4. Palakshappa D, Scheerer M, Semelka CT, et al. "Screening for Social Determinants of Health in Free and Charitable Clinics in North Carolina." *Journal of Health Care for the Poor and Underserved*, U.S. National Library of Medicine, https://pubmed.ncbi.nlm.nih.gov/32037338/.

VeteranPeerOutreach.org
Website

Captain John D. Mason Veteran Peer Outreach Program: A veteran-engaged program to connect veterans in Wisconsin to VA health care services and community resources to decrease veteran suicide.

Susan Smykal; Mark Flower; Bertrand Berger, PhD

MCW COMMUNITY ENGAGEMENT POSTER SERIES 2022

Introduction

- Approximately 70% of veterans who die by suicide are not utilizing VA health care.
- MCW and VA Milwaukee are collaborating to address the veteran suicide crisis.

The Captain John D. Mason Veteran Peer Outreach Program's was established in 2018. The program engages Veteran peer specialists to provide outreach in the community in order to:

1. engage veterans and their families in VA health care and community resources,
2. provide knowledge, resources and hope, to help prevent veteran suicide.

Objective

- Engage the community through outreach events
- Build partnerships with veteran organizations and community partners
- Increase media exposure for the program

The Captain Mason Program, through collaboration with MCW, Milwaukee VA, veteran organizations, and the community, will work to decrease suicide in southeastern Wisconsin and state-wide.

Method

- Joined SE WI Veteran Suicide Prevention Taskforce meeting with multiple veteran organizations regularly
- Joined veteran coalitions in Oshkosh, Green Bay, as well as Veterans Health Council
- Partnered with WDVA providing presentations for the Governor's Challenge
- Increased Social Media presence
- Implemented Live Today – Put it Away! Wisconsin's voluntary, temporary, safe storage of firearms program for individuals in a crisis
- Through outreach we have become a resource to other groups (.e.g., Public Health, Police)

Conclusion

The Captain Mason Program has pivoted and expanded, despite various obstacles, such as the COVID pandemic. The program has thrived as connections to veterans increased by 84% (from 120 to 222) since March 2020. Innovative ideas, veteran community partnerships and media exposure have propelled the program forward. This program is beneficial to locating veterans in the community and assisting them in connecting to VA healthcare or community resources to help prevent veteran suicide.

Results/Achievements

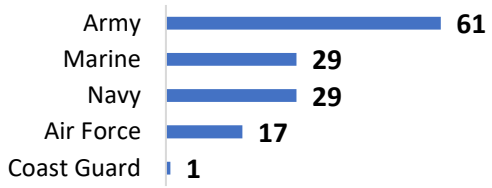
 # Engaged in Program

222	33
# Veterans	# Families

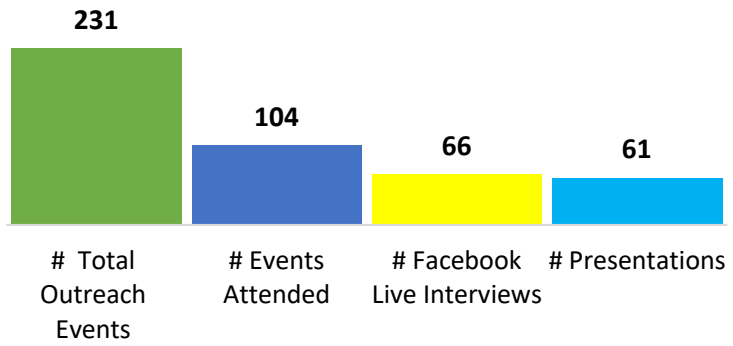
1279 # Followers

Live Today – Put it Away!
Slogan Established June 2021

Military Branch Served



# of Community Events



Community Contacts	
# Community Discussions Attended	234
# Business / Organization Contacts	729
# Community Touches from All Events	24,287

Special Mentions

- Active Member Southeastern Wisconsin Veteran Suicide Prevention Taskforce
- Active Member Governor's Challenge – Area 3 Lethal Means

Using Community Engagement to Inform Health Disparity Reports for Healthy Metric

Idayat Akinola, MBBS, MPH[1]; Lauren Bednarz, MPH[2]; Korina Hendricks, MPH[2]; Maureen Smith, MD, MPH, PhD[2]; Joan Neuner, MD, MPH[1]; Jennifer Weiss, MD, MS[2]; Robert T. Greenlee, PhD, MPH[3]; Kathryn E. Flynn, PhD[1]

[1]Medical College of Wisconsin, [2]University of Wisconsin School of Medicine and Public Health, [3]Marshfield Clinic Research Institute

Healthy Metric
Advancing Health Equity in Wisconsin

Background

- Wisconsin has widespread disparities in health outcomes and care.
- Healthy Metric is a partnership between MCW, UW-Madison, Marshfield Clinic Research Institute, the Wisconsin Collaborative for Healthcare Quality (WCHQ), and the Wisconsin Health Information Organization (WHIO).
- Healthy Metric connects health systems, payers, and communities with academic institutions to build sustainable systems that measure, monitor, and reduce disparities through best practices and evidence-based innovations.

Objective

- To use a participatory design process with community partners to gain feedback on disparity reports and identify future topics of interest.

Methods

- Seven interactive sessions were conducted with 26 attendees.
- Participants represented rural and urban areas from all regions of Wisconsin.
- Participants provided feedback on the previous disparity reports and what they would like to see in future reports.
- Session feedback was grouped and analyzed by category, theme, and feasibility.

Participating Organizations

Health Dept	Health System	Payer	Community Orgs	Policymaker
• Bayfield County • City of Cudahy • City of Greenfield • City of Racine • Kenosha County • Oneida County • Walworth County	• Aspirus • Marshfield Clinic • Sixteenth Street • Stockbridge Munsee Clinic • Wisconsin Association of Free & Charitable Clinics • Wisconsin Hospital Association	• Group Health Cooperative of Eau Claire • Quartz • WPS	• Invisible Reality Ministries • MetaStar • Rock County Cancer Coalition • United Way of Wisconsin • Wisconsin Institute for Healthy Aging	• Chippewa County Health & Human Services Board • Wisconsin Cancer Collaborative • WPHA Public Affairs Committee

Key Themes

- Inclusion of additional data sources
- Information to take data to action
- Identification of priority measures for inclusion
- Identification of priority populations for inclusion
- Clear presentation of data
- Importance of benchmarking/goal setting
- Inclusion of social determinants of health and root causes for framing
- Need for local data

Recommendations

- Present data at the lowest level of geography possible.
- Include benchmarks/goals for measures.
- Present data on social determinants of health to provide additional context when presenting geographical data.
- Develop a project website where disparity reports, data dashboard, materials for taking action, and best practices can be accessed by stakeholder.

Results

- We learned what metrics and populations to consider for future reports – including mental health, multiple chronic conditions, and rural health
- We received feedback on data visualizations and content and simplified our data presentation for our brief reports
- We incorporated a “taking action” section into each report, including resources for taking action and questions to consider for taking action.

Conclusions

- Stakeholder engagement was critical to identifying topics for future reports, incorporating action into the reports and tools, raising the need for a project website as a central resource for community members, and developing a user-friendly format.
- We have launched the Healthy Metric website and 5 brief disparity reports. We will continue to engage stakeholders throughout the project.

This project is funded by the Advancing a Healthier Wisconsin Endowment and Wisconsin Partnership Program.

Harps of Comfort: Virtual Music Sessions in the ICU for Patients in Isolation

Hannah Ulatowski, M2, BFA; Jennifer Cichon Mackinnon, MD, MM, FACP; Jennifer Hollis, CM-Th, MDiv
Department of Medicine, Medical College of Wisconsin

Background

- Patients afflicted with severe COVID-19 infection in the ICU are often on ECMO(Extracorporeal Membrane Oxygenation) and in isolation. Many patients died alone in this setting.
- Patients with COVID suffer from difficult symptom burden including anxiety, dyspnea, and loneliness that requires multi-modal management with both pharmacologic and non-pharmacologic efforts.
- Music, specifically music thanatology have been found to help with symptom palliation that utilizes the recognition that music has the capacity to comfort body, mind, and spirit. Harp music is the instrument of choice for the field of music thanatology.
- Froedtert Hospital currently has an in-person Music Thanatologist who could not go into COVID isolation rooms with her harp.
- In March of 2020, Dr. Mackinnon recognized the need for this service within the COVID-19 patient population. She reached out to a well-known music-thanatologist through Twitter saying, “I am a harpist and doctor. I want to see how we can bring music into the ICUs” and this started the collaboration with therapeutic musicians from around the country.

Hypothesis

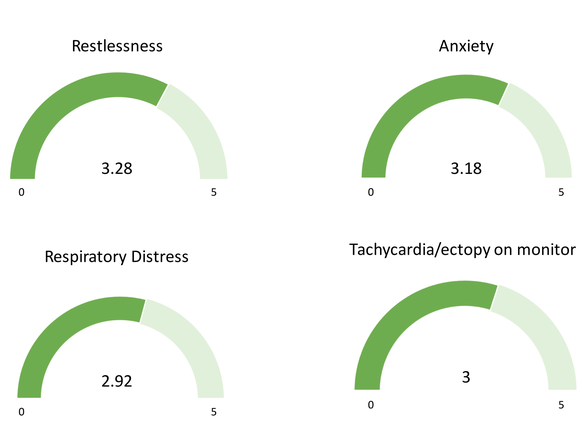
- The virtual harp music sessions improve physiological stress for patients in ways noticeable to nursing staff overseeing these sessions and the musicians performing. Musicians also have reported overall satisfaction with the tele-music sessions.

Methods

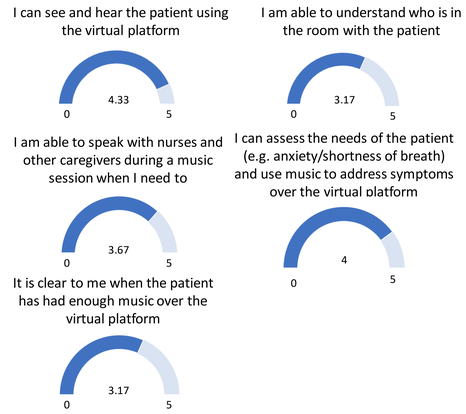
- An online survey of 8 questions was distributed to nursing staff in the CVICU at Froedtert Hospital who have used Harps of Comfort for at least one patient.
- A separate survey was also distributed to musicians preforming these virtual sessions
- Questions using a Likert scale were used to determine changes in restlessness, anxiety, respiratory distress, and tachycardia noticed by the nurses or musicians.
- Open questions were also asked to note any unique observations as well as areas for improvement for this new service.

Results

20 nurses and 6 musicians responded to the surveys.



Nursing feedback: average improvement on a scale of 0 - 5

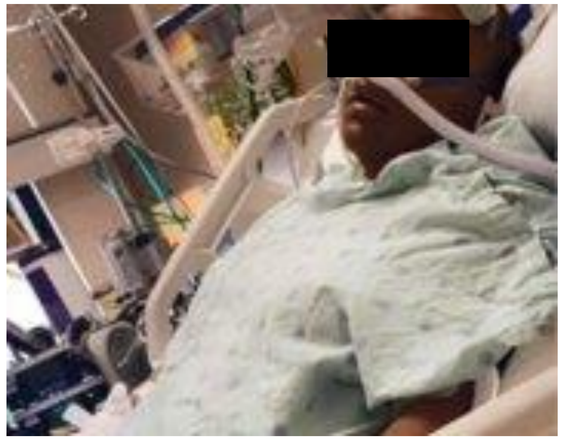


Musician feedback: average agreement with the above statements on a scale from 0 - 5

A nurse wrote, "I think this has been a very useful tool for our COVID patients. The music helps in many ways, including helping them feel less 'alone' during a very frightening experience."

One musician shared, "[The family was] so thankful to have the opportunity to be connected remotely with loved one. This was so important during Covid. In one situation, I was done playing the harp for the patient and was able to keep the Zoom link going for family socializing. I came back to my computer a 1/2 hour later and ended the meeting when family was done talking."

Virtual Music Sessions



Harpist, Elizabeth Markell, CM-Th playing from her home in Oregon (left). Patient in ICU with music at bedside via iPAD (right). Photos used with permission.

Discussion

Many nurses found Harps of Comfort to be beneficial to their patients. Some saw improvements in physiological signs of stress such as respiratory distress and heart rate. One difficulty in noticing improvements, however, is that many patients in the CVICU are sedated and on numerous medications. One nurse who indicated that they did not notice many physical improvements in their patients due to the sedation wrote that they felt the music sessions were still calming and positive for their patients, especially because of the isolation. Musicians were happy to be connecting with patients in isolation but noted that the online platform introduced new challenges. Nurses and musicians also wrote that they heard from patients’ families that they were grateful for Harps of Comfort for allowing them to connect with their loved ones. Based on our survey results, staff and patient engagement improved with music.

Future Work

In the future, it would be beneficial to study changes in vital sign parameters to have results from biological markers of stress which has been seen with music. Also evaluating if music can help with prevention of ICU-related delirium would be helpful. There has also been little research done on the difference between in-person and virtual music therapy.

Acknowledgements

This project was funded by the MCW and Froedtert Hospital as part of the SAMS/MSSP program. Musicians are funded through a grant from the Froedtert Hospital Foundation.

References

Bonakdarpour, B., McFadden, A., Zlotkowski, S., Huang, D., Shaker, M., Shibata, B., Haben, W., Brashear, C., Sandoval, A., Breitenbach, C., Rodriguez, C., Viamille, J., Porter, M., Galic, K., Schaeve, M., Thatcher, D., & Takarabe, C. (2021). Neurology Telemusic program at the time of the covid-19 pandemic: Turning hospital time into aesthetic time during crisis. *Frontiers in Neurology*, *12*. https://doi.org/10.3389/fneur.2021.749782

Bradt, J., & Dileo, C. (2014). Music interventions for mechanically ventilated patients. *The Cochrane database of systematic reviews*, *2014*(12), CD006902. https://doi.org/10.1002/14651858.CD006902.pub3

Freeman, L., Caserta, M., Lund, D., Rossa, S., Dowdy, A., & Partenheimer, A. (2006). Music thanatology: prescriptive harp music as palliative care for the dying patient. *The American journal of hospice & palliative care*, *23*(2), 100–104. https://doi.org/10.1177/104990910602300206

Pattison, N., Droney, J., & Gruber, P. (2020). Burnout: Caring for critically ill and end-of-life patients with cancer. *Nursing in critical care*, *25*(2), 93–101. https://doi.org/10.1111/nicc.12460

Roberts, P. (2005). *Relief of Suffering at the End of Life*. The Institute of Music and Medicine.

Television Interviews to Increase Health Literacy in Underserved Populations: Assessing Health Segments Broadcasted on Hmong TV

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Background

The Hmong population in the US is recognized as medically underserved with numerous health disparities compared to other Asian populations and the general population.[1,2,3]

Nyob Zoo Milwaukee TV (NZ) is a Hmong-language television program that:

- Broadcasts monthly in southeastern Wisconsin, national audiences through social media.
- Engages with the community nonprofits to enrich education and health literacy.[4]

Partnership with the Asian Pacific American Medical Student Association (APAMSA) at the Medical College of Wisconsin fulfills goals to:

- Identify health topics of interest and record segments within NZ's normal broadcast.[5]
- Address health concerns within the Hmong community.
- Provide relevant health information in an easily-digestible format to a broad audience.

Project Aims

To evaluate the increased reach of broadcasted health segments when shared via social media.

Methods

NZ and APAMSA records were surveyed to quantify the reach of shows and embedded health segments broadcasted through TV and social media. The difference in the number of views recorded for the same segment from TV broadcast versus social media was calculated.

Results

Figure 1. Estimated TV and Social Media Views for Broadcasted Segments

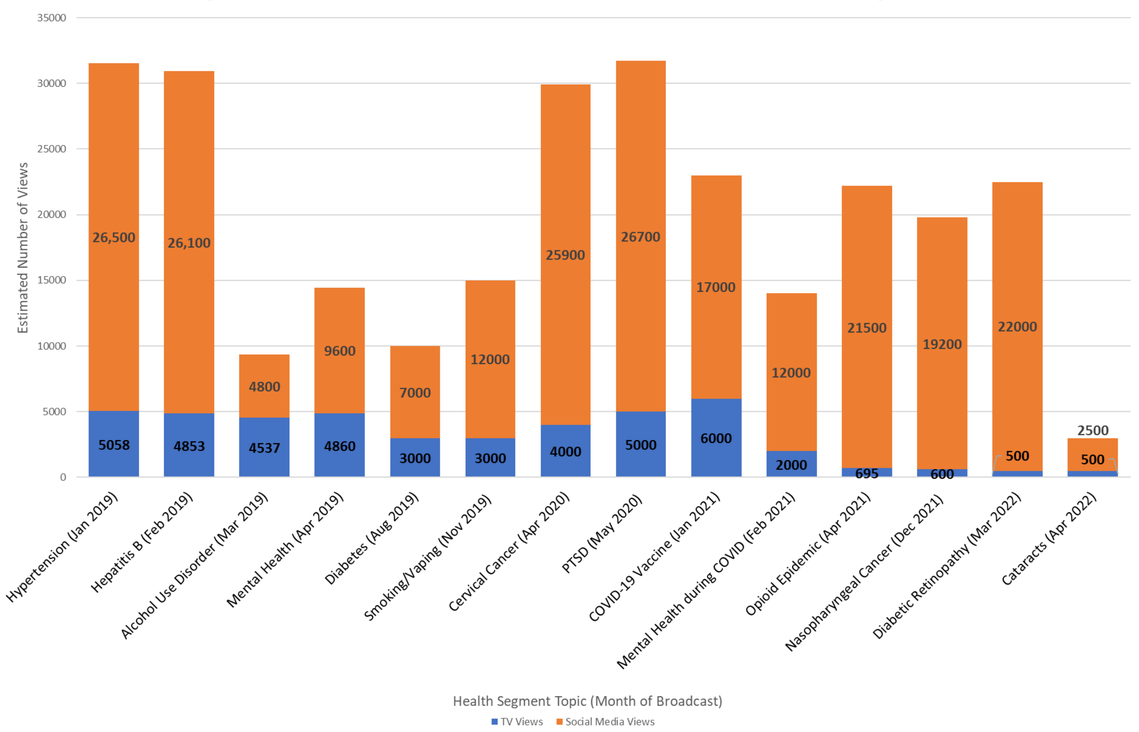
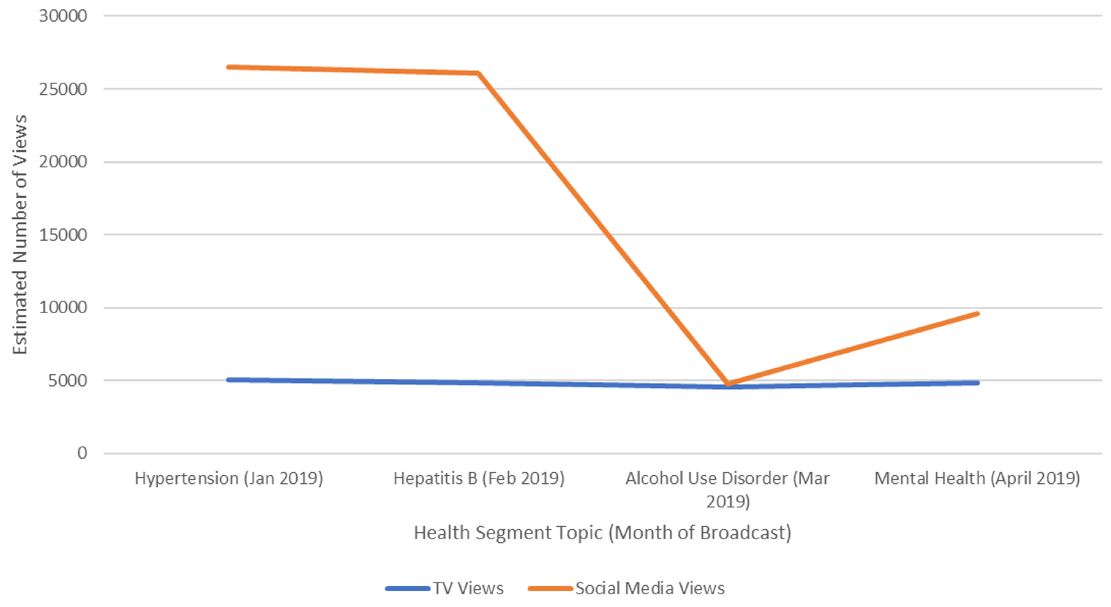


Figure 2. Estimated Viewership Trend from January – April 2019



Discussion

Social media can drastically increase the reach of TV-broadcasted health segments.

Viewership trends were inconsistent between monthly NZ broadcasts.

Full analysis of health segments is limited by inability to stratify viewership data demographics and gauge audience response to health information based on currently available data.

Future Work

- Conduct further analysis of viewership trends with complete viewership data.
- Evaluate how APAMSA and NZ can influence factors to increase the reach of broadcasted health segments in the community.

Acknowledgements

Thank you to Dawn and Thay Yang at Nyob Zoo Media for their continued partnership with MCW-APAMSA. Thank you also to Dr. Malika Siker for providing guidance and expertise for this project.

References

1. Lor M. Systematic Review: Health Promotion and Disease Prevention Among Hmong Adults in the USA. *J Racial Ethn Health Disparities*. 2018;5(3):638-661. doi:10.1007/s40615-017-0410-9
2. Khuu BP, Lee HY, Zhou AQ. Health Literacy and Associated Factors Among Hmong American Immigrants: Addressing the Health Disparities. *J Community Health*. 2018;43(1):11-18. doi:10.1007/s10900-017-0381-0
3. Lee HY, Vang S. Barriers to Cancer Screening in Hmong Americans: The Influence of Health Care Accessibility, Culture, and Cancer Literacy. *J Community Health*. 2010;35(3):302-314. doi:10.1007/s10900-010-9228-7
4. About NZ Hmong Media. Nyob Zoo Milwaukee TV. Accessed October 25, 2022. https://www.nzhmongmedia.com/about
5. Medical College of Wisconsin. MCW Students Use Television to Address Health Disparities. Published June 18, 2019. Accessed October 25, 2022. https://www.mcw.edu/mcwknowledge/mcw-stories/mcw-students-use-television-to-address-health-disparities

D.R.IV.E. Together: An Investigation of Structural Discrimination and Health Outcomes at the Individual, Neighborhood, and Community Level

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Medical College of Wisconsin[1], Marquette University[2], University of Wisconsin-Milwaukee[3], Social Development Commission[4]

Introduction

Structural Racism and Discrimination

- Structural Racism/Discrimination (SRD): societal structures and policies that systematically limit opportunities and resources for traditionally marginalized groups
- SRD and individual level racism are linked to poor mental and physical health outcomes.[1,2]
- SRD perpetuates inequity across domains including housing, education, criminal justice, economic, health care systems, and resource deprivation.[3,4,5]
- Milwaukee County is the most racially diverse and segregated metropolitan area in the United States and the first to officially recognize SRD as a public health issue. In Milwaukee, racial/ethnic minority individuals are over-represented in communities that are under-resourced and whose environments are implicated in heightened stress levels and health disparities.[6]
- Research needs to assess the intersection of neighborhood and individual experience of SRD to provide a more comprehensive understanding of health disparities.[7]

Figure 1: National Institute on Minority Health and Health Disparities Research Framework

		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence (Over the Lifecourse)	Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		Individual Health	Family/ Organizational Health	Community Health	Population Health

National Institute on Minority Health and Health Disparities. 2018
*Health Disparity Populations: Race/Ethnicity, Low SES, Rural, Sexual and Gender Minority
Other Fundamental Characteristics: Sex and Gender, Disability, Geographic Region

Objectives

Aim 1: Use geospatial analysis to examine the impact of structural racism/discrimination (SRD) on physical and mental health at multiple geographic scales

Aim 2: Establish the relationship between individual experiences and behavioral factors within the context of neighborhood indicators of structural racism/discrimination (geospatial analyses) among Black American adults

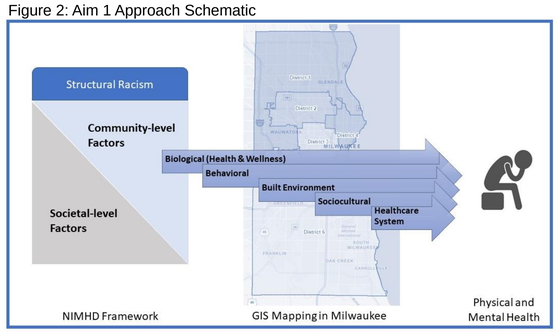
Working Hypotheses

Aim 1 Working Hypothesis:
- **1a:** Health-related community wellness will co-vary geospatially with neighborhood indicators of SRD.
- **1b:** SRD factors will have geographic heterogeneous influence on health measures

Aim 2 Working Hypothesis:
- **2a:** Cumulative structural and interpersonal discrimination will predict negative physical and mental health outcomes and maladaptive behaviors (e.g., alcohol use)

Methods

Figure 2: Aim 1 Approach Schematic



Aim 1:
- **Statistical Approach:**
- Geospatial analytic approaches: proximity analyses and distance measurements, analyses of clusters, patterns and trends, hot spot calculations, spatial accessibility, Moran's I calculations.
- Statistical map visualization
- The spatial modeling tool Multiscale Geographically Weighted Regression (MGWR) is used to explain the spatial variability at multiple scales.
- **Data Sources:** ACS Community Survey (Census), Center for Disease Control, National Center for Environmental Health (EPA), PolicyMap.com (database repository), IPUMS National Historical Geographic Information Systems, Milwaukee County Medical Examiner's Office, Milwaukee Property Database (MPROP), Milwaukee Public School, Office of Emergency Management, WI Department of Health Services

Aim 2:
- **Goal Participant Count:** N = 200
- **Inclusion Criteria:** 18+ years of age or older, involved in the SDC programs, living in Milwaukee County, identified as Black/African American.
- **Self-Reported Assessments**: (1) structural racism/discrimination (geocoded variables informed by results of Aim 1), (2) individual experiences of racism, (3) socio-environmental risk and resilience/mobility factors (self-reported and geocoded variables), (4) symptoms of psychological distress and physical health, (5) additional outcome and moderator variables

Preliminary Results

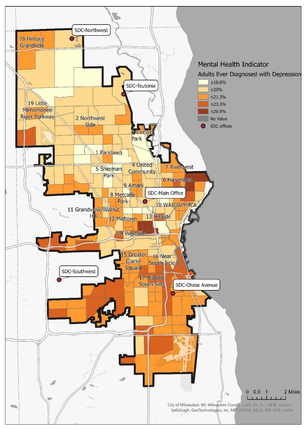


Figure 3: Geospatial Visualization of Adults Ever Diagnosed with Depression

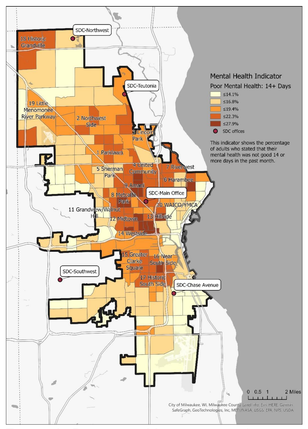


Figure 4: Geospatial Visualization of Adults Reporting 14+ Days of Poor Mental Health in the Past Month

Preliminary Results (cont'd)

Figure 3:
Percentage of adults ever diagnosed with Depression is geographically correlated with location in Milwaukee County.
Figure 4:
Percentage of adults who reported poor mental health for 14 or more days in the past month is geographically correlated with location in Milwaukee County.

All Indicators Assessed in Aim 1:

Physical/Built Environment	Behavioral	Health Care System
Air and water quality by address	Overdose	Health accessibility indices
Toxic chemical release inventory	Suicide attempts	Index of Medical Underservice
Lead contamination	Binge drinking	Essential worker jobs
Vacant lots	Smoking	Access to health centers
Redlining grades	Lack of physical activity	Access to mental health providers
Owner occupied housing	Drug-related death	Percent population without health insurance
Rental	Type of crime	Health literacy
Housing foreclosure	Incarceration	Medicaid expenditures
Designated food deserts	Offense-type sentencing	Clinics count
Access to green space	Use of force incidents	Distance to hospitals
Food swamps	Gun violence	
Distance to liquor stores		
Neighborhood stability		
Expressway impact		

Biological (Health & Wellness)		Sociocultural Environment	
Mental Health	Physical Health	Structural Racism	Calculated Indicators
Depression	Diabetes	Households Receiving SNAP	Racial Segregation Indices
PTSD	High blood pressure	Social Determinants of Health (SDOH)	Diversity Index (H-H index)
Suicide	High cholesterol	Poverty	Child Opportunity Index
Stress	Chronic kidney disease	Employment rate	Social Vulnerability Index (SVI)
Sleep problems	Chronic pulmonary disease	Household income	Digital Divide Indices
Stressful life events	Stroke	Educational attainment	Gentrification Index
EMS response details	Asthma	Households with cash public assistance income	
Adults with 7+ days of poor Mental Health	Heart disease	Incarceration rate	
Cognitive difficulty	Arthritis	Crime rate by type	
	Immunization	Concentrated persistent poverty	
	Lead testing	Low income and low access tracts	
	Disability	Voter turnout	
	Adults with 7+ days of poor Physical Health	Neighborhood stability	
		HOLC Grades	

Discussion

Expected Outcomes:
- Identify SRD factors that influence health and wellness and the effectiveness of community and individual resources.
- We anticipate these relationships will vary across scales, among cities and neighborhoods, and over time.

Impact:
- Develop a comprehensive framework for future research regarding SRD that incorporates the multilevel approach
- Present findings to the SDC to inform direct services, policy and advocacy work currently being done at the SDC
- Create a dashboard accessible to the community through the SDC that will display the factor relationships outlined in Aim 1.

Citations

1. Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., Gupta, A., Kelaher, M. and Gee, G. (2015). Racism as a determinant of health: a systematic review and meta-analysis. PloS one, 10(9), e0138511.
2. Williams, D. R. (2018). Stress and the mental health of populations of color: Advancing our understanding of race-related stressors. Journal of health and social behavior, 59(4), 466-485.
3. Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. The Lancet, 389(10077), 1453-1463.
4. Gee, G. C, & Ford, C. L. (2011). Structural racism and health inequities: Old issues, new directions. Du Bois review: social science research on race, 8(1), 115-132. doi:10.1017/S1742058X11000130.
5. Williams, D. R., Lawrence, J. A., & Davis, B. A. (2019). Racism and health: evidence and needed research. Annual review of public health, 40, 105-125.
6. Firebaugh, G. & Acciai, F. (2016). For blacks in America, the gap in neighborhood poverty has declined faster than segregation. Proc. Natl. Acad. Sci. 113, 13372–13377.
7. Alvidrez, J., Castille, D., Laude-Sharp, M., Rosario, A., & Tabor, D. (2019). The National Institute on Minority Health and Health Disparities Research Framework. *The American Journal of Public Health, 109*, S16-S20.

Partnering with an Urban Public Recreation System to Implement Total Wellness, a Cancer Prevention Intervention

Devon Riegel, Jamila Kwarteng, Laura Pinsoneault, Ana Manriquez Prado, Sandra Contreras, Sophia Aboagye, Erica Wasserman, Derek Donlevy, Alexis Visotcky, Patricia Sheean, Margaret Tovar, Kathleen Jensik, Regina Vidaver, and Melinda Stolley

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Introduction

- Cancer is a leading cause of death in Wisconsin, with higher mortality rates in Black/African American (BI/AA) and Hispanic/Latino (H/L) populations.
- Focus groups and community members expressed interest in programming to increase cancer awareness and support healthy behaviors.
- In partnership with Milwaukee Recreation (MKE Rec), Total Wellness (TW) was created to provide programming to Milwaukee communities.
- Accessible and affordable programing is especially relevant in Milwaukee, where BI/AA and H/L communities are disproportionately affected by segregation (Fig 1).
- We present a program description and preliminary results for implementation of TW in BI/AA and H/L communities in Milwaukee.

Methods

- TW program content was informed by the American Cancer Society Guidelines and community feedback through surveys and discussion sessions.
- TW class format (Fig 2) – All weeks integrate information on lifestyle change and cancer prevention and screening:
  - 16-week program, two 8-week sessions (TW 1.0, 2.0) each offered once per season.
  - Meets 2x weekly: Class 1 is a 30-min cancer and lifestyle education session + 60-min exercise class; Class 2 is a 60-min exercise class.
  - Exercise classes incorporate cardio, strength-training, and stretching.
  - Led by fitness instructors trained in cancer prevention and lifestyle change.
- Implementation in MKE Rec programming:
  - TW is listed as a wellness class in the MKE Rec program guide and advertised on MKE Rec's website and social media.
  - Emails were distributed to zip codes of predominantly BI/AA and H/L neighborhoods.
  - TW graphics for t-shirts and ads were created in collaboration with MKE Rec (Fig 2).
- Program evaluation:
  - Class participants are invited to complete evaluation to assess program impact. Evaluation completion not required to enroll in the class.
  - Evaluating at a systems level (i.e., # of registrants, # of instructors trained) and individual level (i.e., cancer knowledge, health behaviors, fitness).

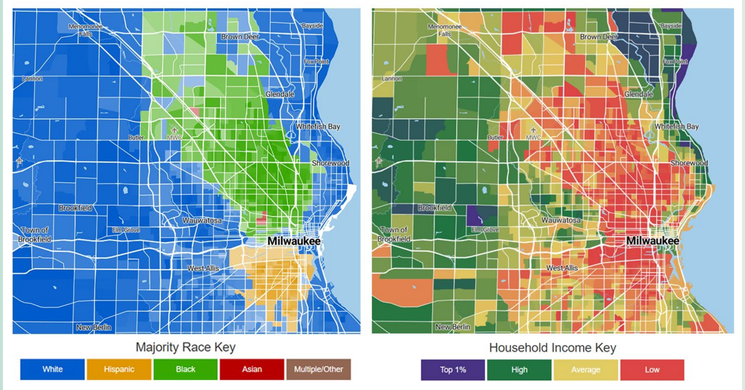

Fig 1: Maps generated from bestneighborhood.org underscoring racial segregation and economic disparity in Milwaukee, WI.

Table 1. Participant characteristics

Variables	Total N=28(col%)
Age	
N	28
Mean ± SD	50.04 ± 13.53
Race	
Back or African American	20 (71.4)
White	5 (17.9)
Asian	1 (3.6)
Two or More Races	2 (7.1)
Ethnicity	
Non-Hispanic or Latino	23 (92.0)
Hispanic or Latino	2 (8.0)
Missing	3
Comorbidities	
High Blood Pressure	17 (60.7)
High Cholesterol	9 (32.1)
Obesity	18 (66.7)

Total Wellness 1.0 (8 wks)	**Total Wellness 2.0** (8 wks)
1. Introduction to Total Wellness	9. Eating Healthy Every Day
2. Plant-Based Eating	10. Replacing Red Meats *(w/ cooking demo)*
3. Body Composition	11. Cues to Action
4. Stress	12. Mindful Eating
5. Tracking	13. Move More, Sit Less
6. Eating Healthy on a Budget *(w/ cooking demo)*	14. Family First
7. Learning Ways to Move All Day	15. Maintaining Changes
8. Self-Evaluation and Goal Setting	16. Celebration!

Fig 2:
(Left) Graphic used for TW t-shirts, credit Nicolette Lara at MKE Rec.
(Right) Table depicting TW weekly curriculum topics.

Results

Systems Level Evaluation:

- 4 instructors were trained (2 bilingual English/Spanish, 2 English only).
- 2 facilities offered programming:
  - Marshall High School, serving the BI/AA community offered Winter, Spring, Summer 2022.
    - 51 total registrations over 3 seasons (Winter, Spring, Summer 2022).
      - 39 TW 1.0 (limit 15 per class - offered all three seasons)
      - 12 TW 2.0 (limit 15 per class - must have attended TW 1.0; offered Spring, Summer 2022)
      - Winter and Spring TW 1.0 cohorts enrolled at 100% capacity.
  - South Division High School, serving the H/L community offered TW 1.0 Spanish-language Spring and Summer 2022
    - Neither session met enrollment requirement (≥ 5 registrations), highlighting need for community awareness of new resource.
  - New cohorts for Fall 2022 are enrolling at Marshall and South Division (English-language).

Individual Level Evaluation:

- 28 enrollees consented to participate in the evaluation.
  - Baseline demographics data is summarized in Table 1. Most participants are employed full-time (64.3%) with varied education, marital status, and incomes.
  - 32.1% of participants are current or former tobacco users.
  - 64.3% of participants scored ≤ 23 on the Godin Leisure Score indicating insufficiently to moderately active.

Conclusion and Next Steps

- Total Wellness demonstrated **preliminary success** in reaching the MKE BI/AA community.
- **Program awareness** is the greatest barrier to success.
  - Lower enrollment in Summer possibly due to seasonal changes in motivation, weather, and participant availability.
  - MKE is not recognized as a resource in the H/L Spanish speaking community. Prior to TW it offered no Spanish language classes.
- **Future work:**
  - TW awareness campaign, particularly in H/L communities.
  - Analysis of pre- vs post-intervention evaluation data to assess program impact.
  - Long-term follow-up (3 months) with participants to assess maintenance of acquired skills and knowledge from classes.

We would like to thank the staff of MKE Rec, WI DHS, and the participants for making Total Wellness possible. We also thank the DHHS Office of Minority Health (Project #6 CPIMP201215-01-01).

Ophthalmology in the Milwaukee Community: Implementing a Middle School Educational Program for All

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SIGNIFICANCE

- Latinos make up 18.7% of the U.S. population, but only 5% of the physician workforce and 6.2% of medical school matriculants[1].
- Underrepresented in Medicine (URM) teens express interest in careers in the STEM fields at the same rate as Caucasian teens.
- Critical timepoint: Student's perceived enjoyment in the sciences, across all races, decreases between the fourth and eighth grades[2].

EYES ON THE FUTURE

- The Eyes On the Future (EOTF) program was developed in 2014 with seed funding obtained from a video competition by the Association of American Medical Colleges (AAMC) Diversity Policy and Programs' ProjectMED, in an effort to develop initiatives to diversify the future of medicine.

METHODS

- 25 eighth-grade students were selected from Bruce Guadalupe Middle School.
- Selection was made by science teacher based on subject interest.

TABLE 1. Demographics of Middle School Students

Variables	Pre-Program Count (N = 24)	Post-Program Count (N = 22)
Sex		
Boys	13 (54%)	12 (55%)
Girls	11 (46%)	10 (45%)
Race/Ethnicity*		
Hispanic or Latino/a	24 (100%)	22 (100%)
White	3 (13%)	3 (14%)
I plan to attend _____ after high school.		
Four-year college	20 (83%)	16 (73%)
Two-year college	1 (4%)	1 (5%)
Technical school, apprenticeship, or trade school	0 (0%)	0 (0%)
Get a full-time job	0 (0%)	1 (5%)
Not sure	3 (13%)	4 (18%)

The values are given as the number of students, with the percentage in parenthesis.
*Some students identified with more than one race/ethnicity category.

Fig. 1: Demographic characteristics of students who completed the survey.

- Goal: Design and implement survey to assess student's attitudes about science and future career goals using a 5-point Likert scale.
- Analysis: used the mean of all non-missing items. Higher scores indicated more positive attitudes.

CURRENT PROGRAM

Event 1	Event 2	Event 3	Event 4	Event 5
Eye anatomy and eye health session Creation of eye model	Dissection of cow eye and eye anatomy	Visit to MCW STAR (Standardized Teaching Assessment Resource) Center	Field trip to the local Discovery World Science and Technology Museum	STEM careers, MCW pipeline programs, and steps needed to apply to medical school

RESULTS

A

STEM Career Questions*	Pre-Program Average (N = 24)	Post-Program Average (N = 22)	Pre-Program Average (N = 13)	Post-Program Average (N = 12)	Pre-Program Average (N = 11)	Post-Program Average (N = 10)
I want to have a job in science and medicine in the future.	4.17	4.18	4.15	4.25	4.18	4.10
I am smart enough to pursue a job in science and medicine.	4.00	3.86	4.15	4.00	3.82	3.70
A job in science and medicine is cool.	4.33	4.36	4.38	4.42	4.27	4.30
Anyone can have a job in science and medicine.	4.29	4.27	4.15	4.25	4.45	4.30
Going to college is very important to me.	4.75	4.59	4.85	4.67	4.64	4.50
Going to college is very important to my family.	4.83	4.68	4.77	4.83	4.91	4.50
I feel like I will have adequate resources and support to apply to college in the future.	4.29	4.36	4.38	4.33	4.18	4.40

*Likert scale response options: Strongly Disagree (1 point), Disagree (2 points), Neither Agree nor Disagree (3 points), Agree (4 points), Strongly Agree (5 points).

Science Interest Questions*	Total		Boys		Girls	
	Pre-Program Average (N = 24)	Post-Program Average (N = 22)	Pre-Program Average (N = 13)	Post-Program Average (N = 12)	Pre-Program Average (N = 11)	Post-Program Average (N = 10)
Science is interesting.	4.29	4.23	4.54	4.42	4.00	4.00
I like hearing science presentations.	4.08	3.73	4.38	3.67	3.73	3.80
I like talking about science with others.	3.63	3.73	3.85	3.75	3.36	3.70
I like asking questions.	3.46	3.62	3.46	3.64	3.45	3.60
I want to take more classes in science.	4.17	3.95	4.38	4.00	3.91	3.90
I understand science.	3.79	3.86	4.15	4.00	3.36	3.70
I feel I will get a good grade in science.	4.04	4.09	4.23	4.17	3.82	4.00
Science is useful to the world.	4.79	4.82	4.77	4.92	4.82	4.70
Science will affect me throughout my life.	4.38	4.41	4.38	4.42	4.36	4.40

B



Fig. 2: Results for the questions related to interests in the sciences and STEM careers. A) Response options were on a Likert scale that included: Strongly Disagree (1 point), Disagree (2 points), Neither Agree nor Disagree (3 points), Agree (4 points), Strongly Agree (5 points). A higher score indicates a more positive attitude. **B)** Photos of three events within the EOTF program.

- For many of the question items, students had a more positive attitude upon completion of the program, although the trends outlined above did not achieve statistical significance.
- Limitations: We were unable to compare the individual-level attitude changes because of the anonymous data collection method utilized. Sample size and student selection were additional limitations.

CONCLUSION

- This low-cost, high-reward early educational outreach program can be implemented to create community partnerships to inspire the youth to pursue a career in STEM.

REFERENCES

1. AAMC. Diversity in Medicine: Facts and Figures 2019 [Internet]. AAMC. Association of American Medical Colleges; 2019 [cited 2022Aug5]. Available from: https://www.aamc.org
2. Riegle-Crumb C, Moore C, Ramos-Wada A. Who wants to have a career in science or math? Exploring adolescents' future aspirations by gender and race/ethnicity. Science Education. 2011 May;95(3):458-76.

Acknowledgements: We'd like to acknowledge the medical student, graduate student, and LMSA volunteers at the Medical College of Wisconsin and the principal, teacher, and staff members at Bruce-Guadalupe Middle School who generously shared their time and contributed to the success of the program.

No author has any financial relationships to disclose or Conflicts of Interest to resolve.

The Role of Trauma Clinic in Decreasing Community Violence and Recidivism

Monet Woolfolk, MCW and Colleen Trevino, RN, NP, PhD
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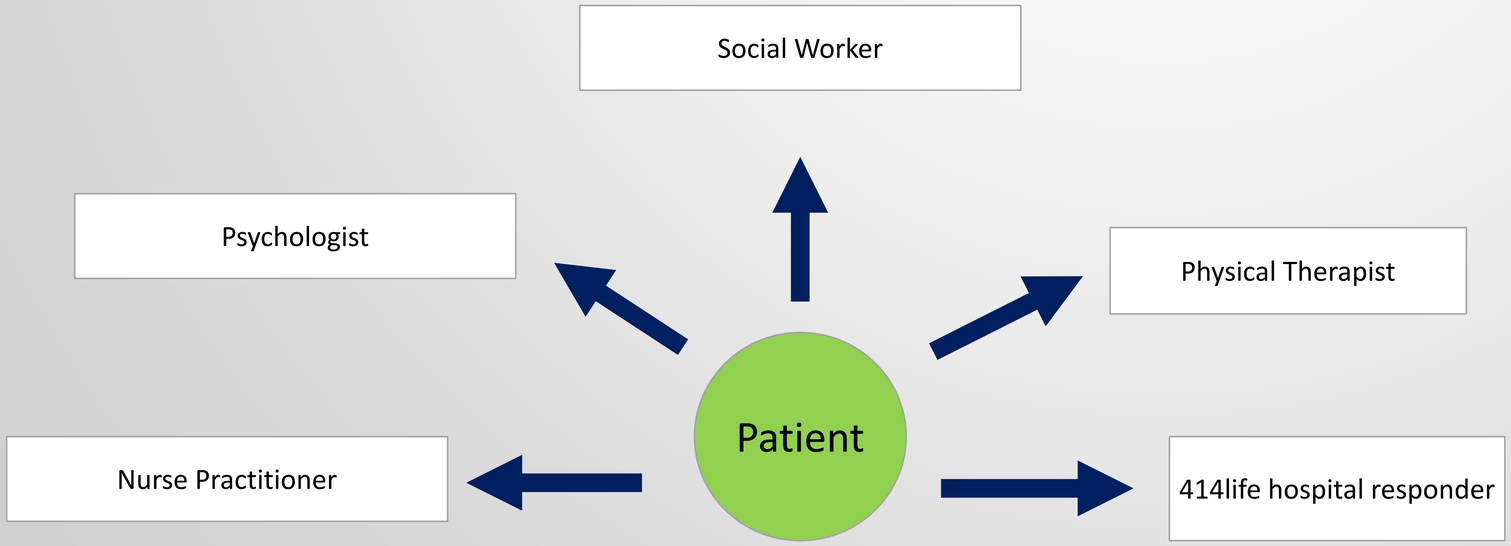
Introduction

- Non-fatal gun injuries are a common cause of morbidity in city centers, without the publicity and interference that fatal gun injuries often garner.

- Once someone has been shot with a gun, their risk of being shot again in the following 10 years is16%, with the number as high as 26% for high risk subgroups such as young African American males.
- In Milwaukee specifically, non-fatal gun injuries have increased 14% from 2020 to 2021.
- So far in 2022 homicides are up 100% compared to this time in 2021.
- To address the growing violence in Milwaukee, **414life** was created by community leaders. 414life is a community-based violence prevention program' that works on addressing the many complex factors that contribute to growing violence in Milwaukee.

Methods

- In order to combat both the morbidity created by gun violence, as well as mortality, the Trauma Quality of Life (TQoL) clinic was developed.
- TQoL is a multidisciplinary clinic aimed at improving the quality of life of gunshot victims, as well as decreasing recidivism.
- The structure of TQoL involves routine follow up appointment for the patients. At the initial trauma follow up appointment the patients see a nurse practitioner, a psychologist, a physical therapist, a social worker and a 414life hospital responder.
- The TQoL clinic works alongside 414life, a community-based violence prevention program to connect with these patients and their communities and support them in not only their physical health but their mental health, housing, and work.
- Based on patient needs, additional follow up appointments can be scheduled with any of the 5 providers that the patients see.



Discussion

- In the 22 months since the clinic has begun it has served 282 patients.
  - 83.7% have been male
  - 77.7% have been black or African-American
  - 35.9% of patients were referred for outpatient physical therapy after being seen by the TQoL physical therapist
  - 31% of patients were scheduled for additional meetings with the psychologist after their initial clinic visit.
- Further analysis still needs to be done on the post clinic follow up surveys to determine the tangible results of the clinic but the goal is to improve physical well being as well as symptoms of PTSD, and their effect on the patient's interpersonal relationships.
- this will hopefully result in long term decreases in violence amongst this patient.

Future Work

To further evaluate the needs of this patient population, more data needs to continue to be collected on long term well-being of these patients post TQoL clinic. Additionally, it would be helpful to do more data collection on the specific needs that these patients and their families present with.

Acknowledgements

Special thanks to the Department of Trauma Surgery, Colleen Trevino NP, PhD and Terri deRoon Cassini PhD

References

"Milwaukee Police Department." *Crime Maps & Statistics*, 7 Nov. 2021, https://city.milwaukee.gov/police/Information-Services/Crime-Maps-and-Statistics.
Miston, Bill. "Milwaukee Homicides up 100% from Record-Breaking 2021." *FOX6 News Milwaukee | Wisconsin & Local Milwaukee News WITI*, FOX6 News Milwaukee | Wisconsin & Local Milwaukee News WITI, 30 Mar. 2022, https://www.fox6now.com/news/milwaukee-homicides-up-100-from-record-breaking-2021.

Collaborative Work Groups to Reduce Wisconsin's Breast and Lung Cancer Disparities

Staci Young,[1] David Frazer,[2] Tim Meister,[1] Tobi Cawthra,[1] Laura Pinsoneault,[3] Melinda Stolley[1]

[1]Medical College of Wisconsin, [2] Center for Urban Population Health, [3] Evaluation Plus

Community & Cancer Science Network

MEDICAL COLLEGE OF WISCONSIN

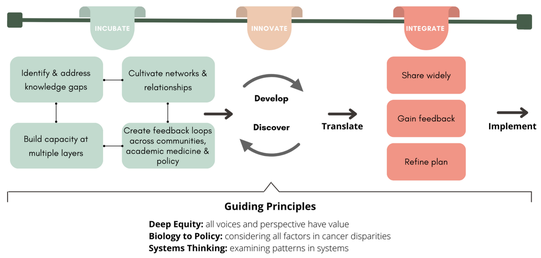
CUPH Center for Urban Population Health
Data-driven. Evidence-based. Community-engaged.

BACKGROUND

Complex problems require a deep understanding of the issue and a collaborative approach to find sustainable solutions. Cancer disparities are complex and must be understood from a broad set of perspectives across the academic spectrum *and* non-academic sources (community members, community-based organizations, and policymakers).

The **Community and Cancer Science Network** (CCSN) is a transdisciplinary network focused on addressing statewide cancer disparities. The CCSN grounds its approach in the principles of **deep equity**, **systems-change**, and the **integration of biology to policy**. It brings together diverse perspectives through a three-phase model.

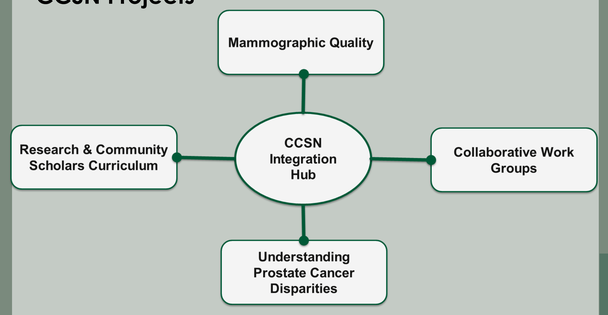
CCSN Initiative Framework



Now in its third year, CCSN encompasses four projects guided and supported through the transdisciplinary framework by a leadership structure, known as the Integration Hub. The projects are:

1) **Research & Community Scholars** - a curriculum for biomedical researchers and community members to address mistrust and misunderstandings of disparities;
2) **Mammographic Quality** - development of a shared measurement system to improve mammographic quality;
3) **Collaborative Work Groups** - design and implementation of community-based action plans to address breast and lung cancer disparities;
4) **Understanding Prostate Cancer Disparities** - formation of a workgroup to explore the potential causes and solutions for prostate cancer disparities in the state.

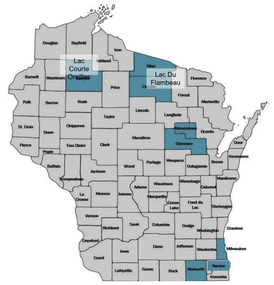
CCSN Projects



This initiative is funded by:
MCW MEDICAL SCHOOL
ADVANCING A HEALTHIER WISCONSIN ENDOWMENT

Aim 1: Build infrastructure to support the development and implementation of transdisciplinary Collaborative Work Groups

Work Group Locations



Locations determined by project team using quantitative and qualitative data to highlight areas of greatest need

Partner with trusted community champion partner organizations:

Three community organizations hire facilitators and evaluators and host work groups.

Great Lakes Inter-Tribal Council, Inc.
Lac du Flambeau, Wisconsin

WISCONSIN WOMEN'S HEALTH FOUNDATION

eliminating racism empowering women
ywca Southeast Wisconsin

Develop work groups consisting of both community and faculty members

- Create up to seven work groups consisting of 10-14 people
- Promote the opportunity widely among community and academic channels
- Identify candidates with personal and/or professional experience who demonstrate commitment to the process and openness to collaboration
- Ensure that each work group has representation of bot community members and survivors along with academ expertise along the cancer continuum.

Cancer Continuum

Aim 2: Co-learn, design and assess feasibility of solutions to address the targeted issues

PROCESS OVERVIEW

01 OBSERVE & UNDERSTAND
Purpose: Co-learn with stakeholders
- Statewide (or local) data on cancer burden
- Cancer risk factors
- Cancer disparities
- Social determinants of health

Activity: Define the local scope of the problem

02 DISCOVER & DIGEST
Purpose: Integrate diverse perspectives along biology to policy continuum
- Use secondary data from Step 1 and expertise in workgroup to create a richer understanding of cancer disparities
- Outreach to gain any missing information

Activity: Conduct root cause analysis

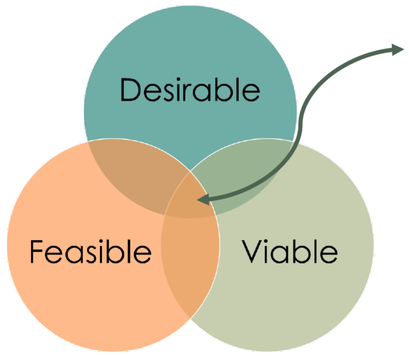
03 DESIGN
Purpose: Synthesize all analysis to-date
- Define the themes from Steps 1 and 2
- Prioritize key topic for focus
- Create exhaustive list of potential solutions
- Prioritize the solutions that are "desirable, viable, feasible" (test with stakeholders)

Activity: Design solution, budget & implementation

Cancers of Focus
- Breast cancer
- Lung cancer

Topics of Focus
- Environmental Factors – social and physical;
- Healthcare access and quality;
- Stress;
- Tobacco (focus on African American community and Indigenous populations)

Human Centered Design Key Criteria



Desirable (Human)
- How many stakeholder groups are requesting this solution?
- Which stakeholder groups does this affect?
- What is our proof?

Viable (Organization)
- Is there an organization that has the capacity to implement this solution?
- If no capacity, is there an organization that the solution would at least fit within their mission?
- Does this organization have a desire to partner in the implementation of this solution?

Feasible (Resource$)
- Does this solution build on the strengths of the stakeholders?
- Do the stakeholders/organization(s) have the resources to implement the solution?
- If not, what would be required to make it resource feasible.

Finding the Right Solution

Aim 3: Evaluation

Employ Developmental Evaluation framework to assess process and outcomes of the transdisciplinary work groups and action plans

Aim 1 Outcomes:
mutual respect, appropriate pace, open and frequent communication, shared vision, shared stake

Aim 2 Outcomes:
knowledge and understanding, continuous learning, solution generation and selection, action plan and budget development, Phase II proposal submitted

Aim 4 Outcomes:
increased screening, diagnosis, treatment, and/or risk reduction; policy change; system change; social environmental change; physical environment change; financial environment change

Aim 4: Partner with stakeholders to disseminate processes and results through diverse traditional and non-traditional channels

Traditional: disseminate processes and outcomes in aggregate to peer-reviewed journals, conferences, newsletters, and networks of stakeholders involved in the effort

Non-traditional: collaborate with Co-PIs, community partners, work group members, and other stakeholders to identify opportunities to share information broadly and to a lay audience. This may include presentations, written reports, connections/outreach to similar groups/efforts, and networking.

NEXT STEPS

- Secure funding for Phase Two (project implementation) - Phase I funding will close in 2023 and each work group will need to demonstrate how the solutions identified will have a positive impact on the health of the selected community.
- Learn, grow, make mistakes and learn from them – there are many opportunities, successes, challenges, and missteps ahead. The developmental evaluation framework will aim to understand and harness this learning.
- Develop authentic community-academic partnerships – this is often easier said than done and the greatest variable is often TIME. Building relationships premised on trust and mutual respect is imperative to successfully moving the work forward and all stakeholders must commit to the process.

“It’s About Being Healthy”- Teaching Community Engagement through a Health Promotions Program Lens

Meghan Malloy[1], Bethany Korom[1], Caroline Remmers[1], Zecilia Alamillo-Roman[2], Shary Perez[2], Kelly Dione[3], David Nelson, PhD, MS[1]

[1] Medical College of Wisconsin [2]United Community Center, Milwaukee, WI [3]Marquette University

Introduction

- There is a need for **culturally-appropriate health promotions programs t**o address barriers and promote healthy behaviors in under-resourced populations, and doing so requires training of community-engaged health professionals.
- ***Community engagement:*** collaboration between academic partners and community members to meet the specific needs of the community and foster bi-directional learning
- Because **socioecological factors strongly influence community health,** *community engagement* efforts allow for unique perspectives and experiences to guide the creation of a culturally appropriate and community-facing health promotion program.
- This effort builds upon our team's previous research to teach medical learners about community engagement using a model of a successful community partnership

Objectives

- **Aim 1:** To engage with the community partner to identify themes that align with the principles of community engagement from previous health promotion program efforts.
- **Aim 2:** To create a teaching module to introduce community engagement to medical students early in their medical training
- **Aim 3:** To enhance community engagement vs service knowledge for medical students involved in specific health-promotion organizations
- **Aim 4:** To interpret community partner and family response alignment with the results from the teaching module focus groups
- **Aim 5:** To integrate community partner feedback with results from the teaching sessions to strengthen the teaching module for further dissemination and ensure its accuracy

Acknowledgements

We would like to acknowledge and thank our partners at The United Community Center & Marquette University for their contributions to the FIT Families program and the related projects.

Results

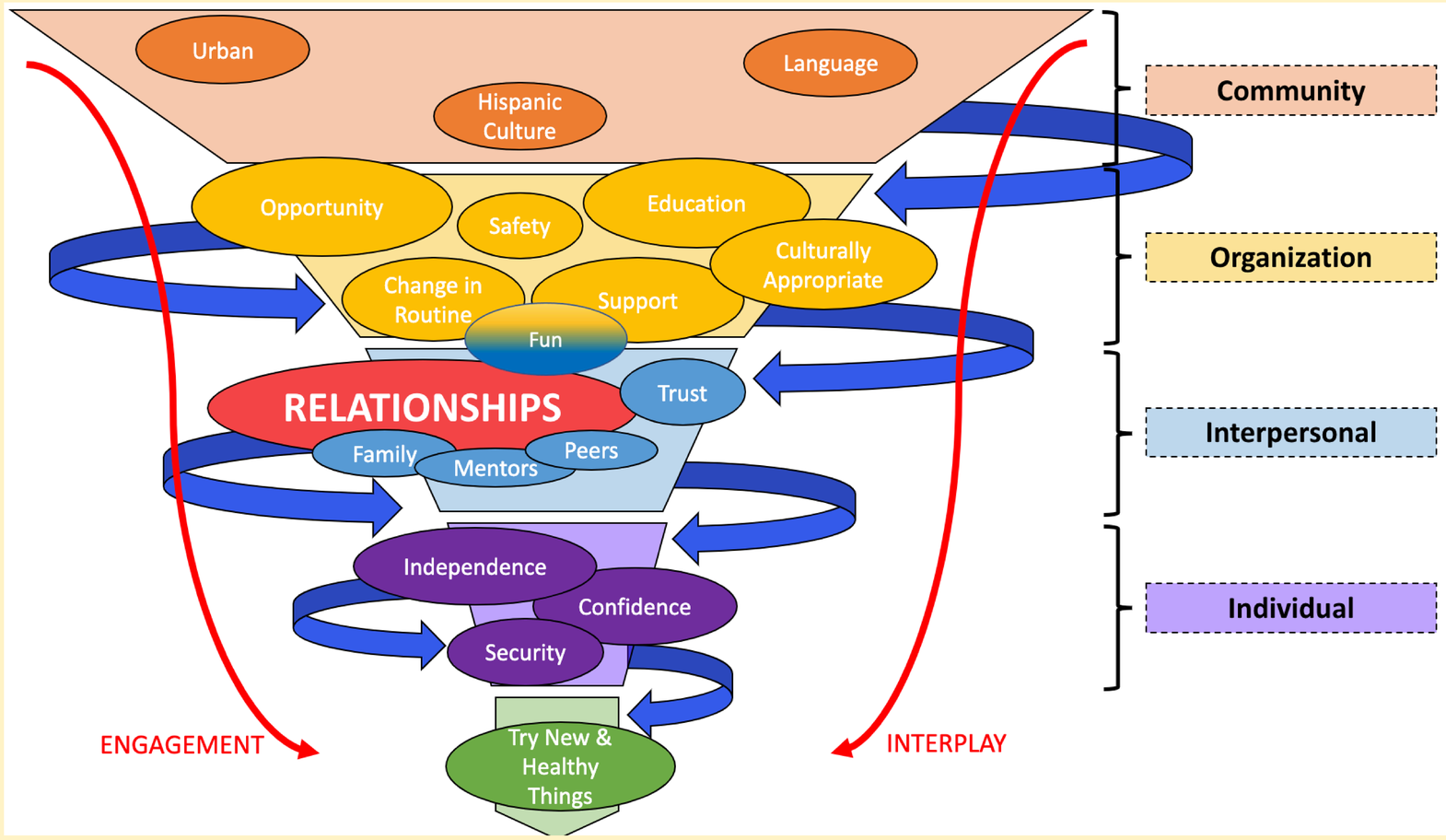


Figure 1 (left):

- The creation of this novel model is based on themes that emerged from family interviews that allowed for program success.
- Our model integrates the levels of the SEM with aspects of the FIT 4 YES program that were necessary to empower participants to engage with healthy behaviors in a **community-facing, family-oriented program**
- Each of the factors included are linked in such a way to create a funnel effect down to the individual level allowing for change within the larger community, highlighting the ***dynamic and fluid nature of the SEM***

Project Timeline

2022- 2023: Expansion of project with input from partners

2018-2020: FIT 4 YES at the UCC

Nutrition and physical education program for students in Milwaukee

Zoom interviews with parents and children who participated in program

2020: Interviews with FIT 4 YES families

2021 Spring: Interview analysis

Qualitative analysis of interviews to determine themes of the program that made it successful

Multiple iterations of models were created to demonstrate movement and synergy

2021 Fall: Creation of novel SEM

Spring 2022: Partner check-in and further development

Meetings with UCC for model feedback and development of next project

Invite families to talk about lasting experiences with FIT4YES 2 years after completion

Fall: Focus groups with community families

Winter: Create teaching module with community feedback

With community feedback, will create a teaching module for medical students on

Two sessions, one for the general student body & one for students previously involved in health promotion

Spring: Present to medical students

Summer 2023: Project analysis and presentations to community

Bring results back to community partners for future volunteer trainings

Review of Homeless and Vulnerably Housed Patient Referrals from Milwaukee Hospitals and Safety Net Clinics to the Housing is Health Program

Parsia Vazirnia, B.S; Michael C. Decker, MD; Greg Stadter, MPH

MCW MEDICAL SCHOOL

MILWAUKEE HEALTH CARE PARTNERSHIP

Background

- In 2019, the Milwaukee Health Care Partnership (MHCP) launched the Housing is Health (HIH) Program for homeless and vulnerably housed patients receiving care at hospitals in Milwaukee County
- The goal of the HIH, in partnership with the Milwaukee County Housing Division and IMPACT Coordinated Entry (CE), is to navigate patients to housing resources to improve health outcomes and reduce ED visits, inpatient stays, and readmissions.
- In early 2022, HIH expanded to the seven largest safety-net primary care clinics (SNCs) in Milwaukee and added CE as the program's housing referral intake partner

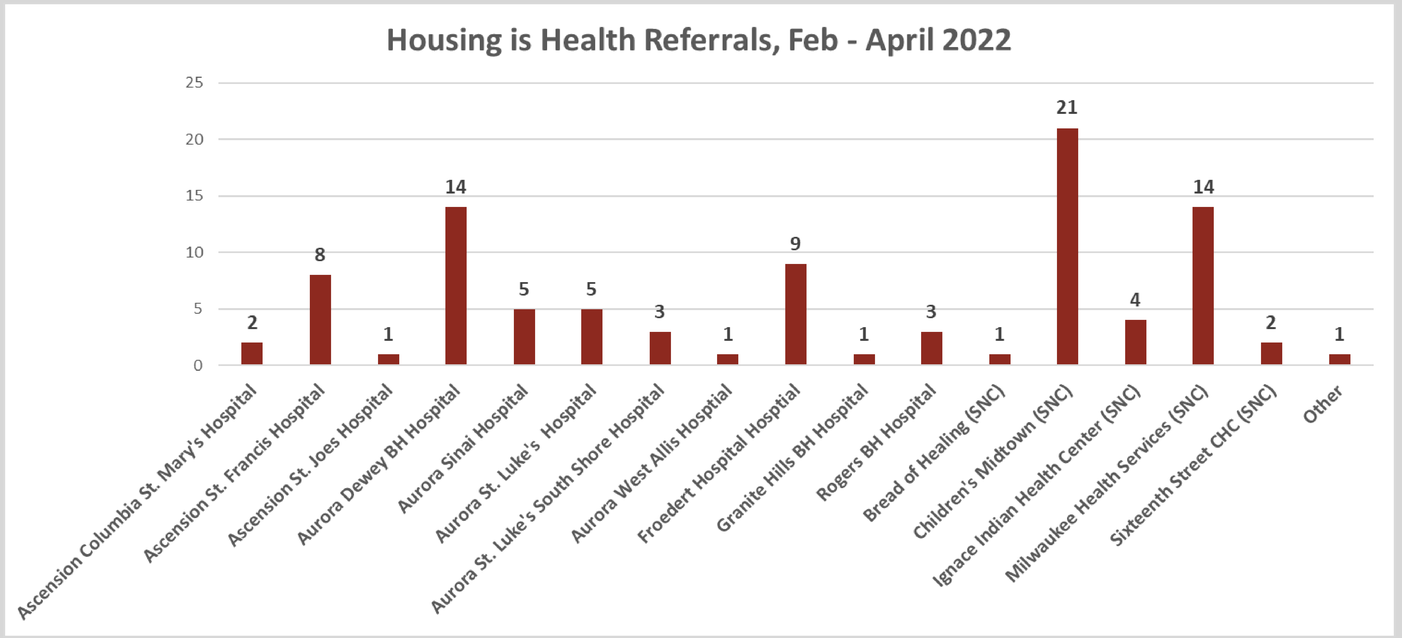
Objective

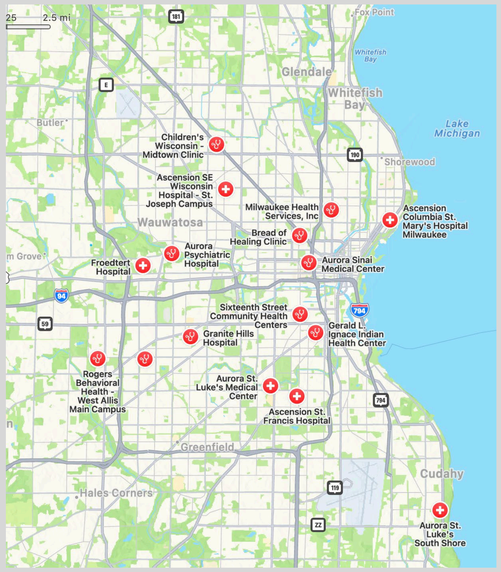
- This study categorized health care referrals sent by hospitals and safety-net clinics to the CE team and compared referral patterns across participating organizations.

Methods

- Referrals to the CE team were reviewed from February to April 2022. Data included were the date of the referrals, where referral was from, and narrative summaries documenting patient's housing needs
- Each referral was categorized into 7 categories: Homeless Services, Doubled-Up (experiencing housing instability but temporarily staying with family or friends), Housing Quality, Affordable Housing, Eviction Prevention, Violence, and Unknown.

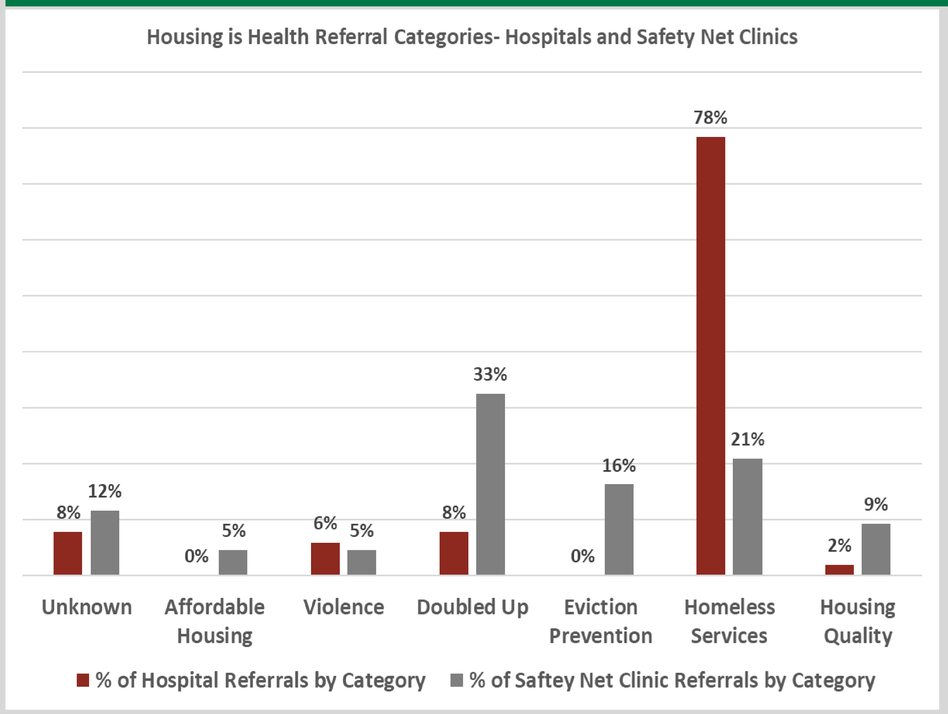
Housing is Health Program Overview

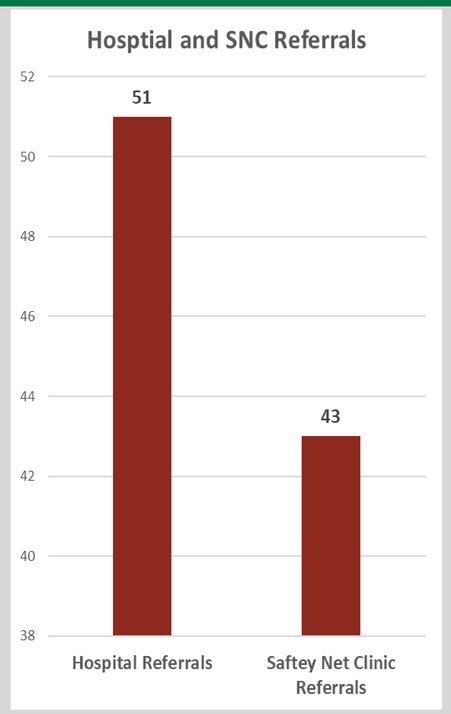




Map of Milwaukee Hospitals and SNCs participating in the Housing is Health Program

Results





- Homeless Services was the category with the most referrals from hospitals, followed by Doubled Up, and Violence.
- Doubled-Up was the category with the most referrals from primary care clinics, followed by Homeless Services, Eviction Prevention, Housing Quality, Affordable Housing, and Violence.

Conclusion

- Homelessness is more likely to be detected in hospital settings while housing insecurity is more likely to be surfaced in primary care settings.
- CE is applying this categorization system for ongoing HIH data collection
- This review suggests enhanced focus on frontline staff training on identifying homelessness in hospitals and housing instability in the safety net clinic setting.

Duration of Stay and its Effect on COVID-19 Vaccination Acceptability within the Undocumented Latinx Population in two Major California Cities

Leopoldo Bello-Luna[1], Jesus R. Torres[2], MD; MPH; MS

1. MCW, 2. UCLA, Emergency Medicine

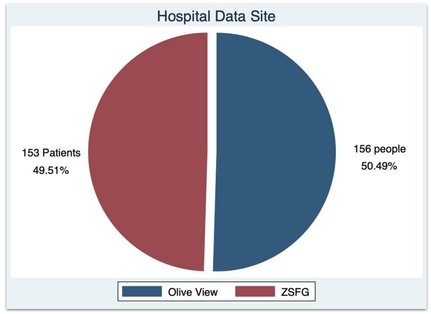
1. Introduction

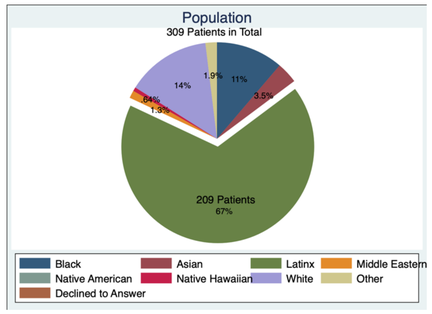
- The COVID-19 pandemic exposed inequalities as evident by varying COVID-19 infection and vaccine acceptability rates in minority populations.
- Immigration factors may play a role in vaccination acceptability
- We sought to explain the effects of duration of stay (length of time since immigration) in the US on COVID-19 vaccination uptake among the undocumented Latinx patient population.

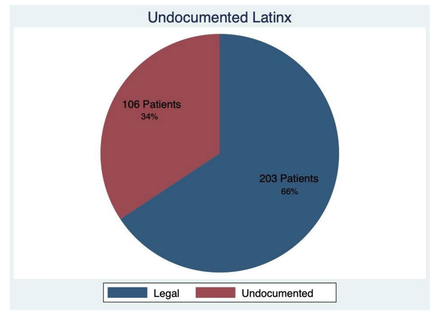
2. Methods

- The 35-question survey took place from September 2021 to March 2022 at Olive view in Los Angeles and ZSFG Emergency Departments in San Francisco. Both hospitals serve large portions of Latinx immigrant population populations
- Trained research assistants verbally consented participants in both English and Spanish after receiving their medical screening exam.
- Primary data analysis, using statistical software STATA, yielded COVID-19 infection and vaccine hesitancy rates divided according to documentation status.
- This analysis describes the effects of duration of stay, represented as those living in the US for 10 or less years and those over ten years of undocumented Latinx patients on vaccination hesitancy.

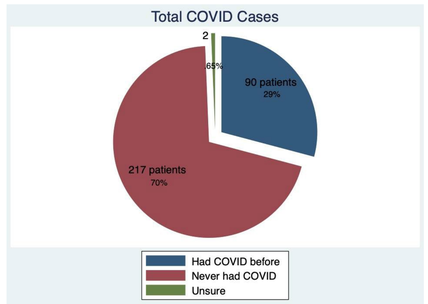
4. Results

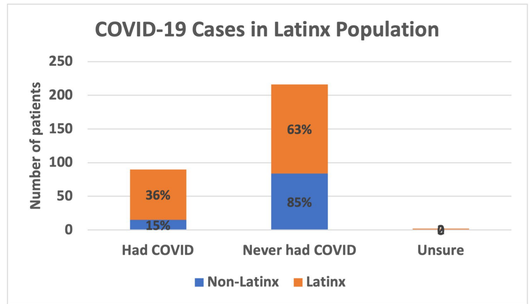


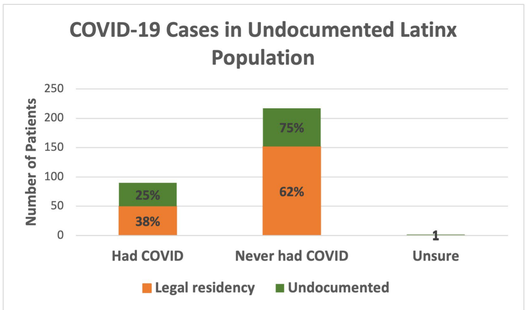




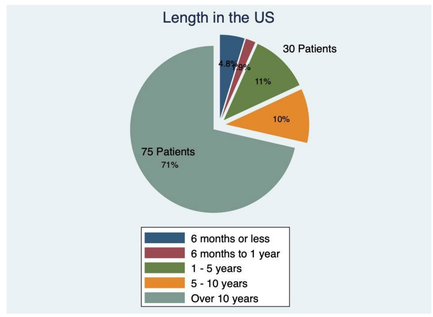
- 309 patients enrolled, 52% were male, 68% identified as Latinx, 14% White, and 11% Black. Among the Latinx participants, 56% reported Spanish as their primary language and 34% self-identified as having an undocumented status.

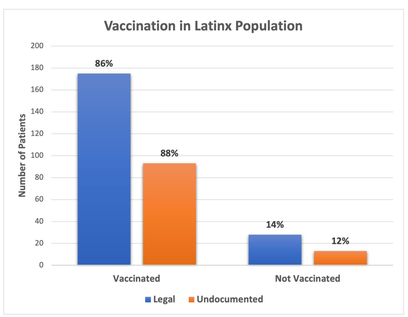


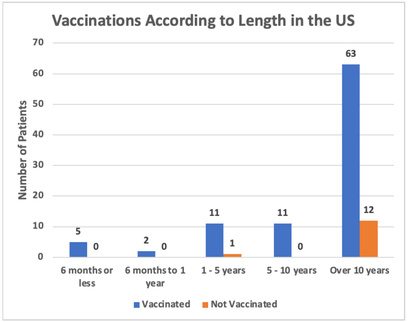




- Of the entire Latinx cohort, 36% experienced COVID-19 compared to 18% of non-Latinx. Within the undocumented Latinx, 38% reported a COVID-19 infection in the past.







- The undocumented Latinx group with greater than 10-years duration of stay had a vaccination rate of 84%, and 72% reported having health insurance; whereas, when compared to those with less than 10-year duration, a 97% vaccination and a 47% health insurance rate were reported.

5. Conclusion

- Our analysis demonstrates a lower vaccination rate among the undocumented Latinx who have resided in the US for over a decade. California is the leading state in undocumented healthcare, but our data demonstrates that we still have work to do. These results are instrumental in forming an education component to educate our patient population and physicians that everyone, regardless of legal status, has the right to get vaccines.

Development of an EcoTherapy Prescription: Community partnerships for advancing nature immersion in an urban setting

David A. Songco, Psy.D., Medical College of Wisconsin, Department of Family & Community Medicine; R. Justin Hougham, Ph.D. University of Wisconsin-Madison; Leah Flanagan, B.S., Medical College of Wisconsin; Rachel Ginn, Case Western University

Introduction

As people live more urbanized lifestyles especially within densely populated areas, there is potential to lose daily contact with nature, diminishing access to the wide range of associated health benefits of interacting with nature[1].

"Low socioeconomic and ethnic minority people have access to fewer acres of parks, fewer acres of parks per person, and to parks with lower quality, maintenance, and safety than more privileged people." - Rigolon, 2016[2]

The urban impoverished population face many systemic barriers and many lack adequate access (*Figure 1*) to transportation and resources to make the journey to preserves or nature areas[3]. Green space that is available is limited (pocket parks), often deemed "unsafe" based upon crime statistics near the park (*Figure 2*), and lacks substantial acreage compared to preserves or nature areas.

This project seeks to address inequities regarding access and accessibility to nature through the development of an *EcoTherapy Prescription* that provides access to an immersive nature experience.

Figures

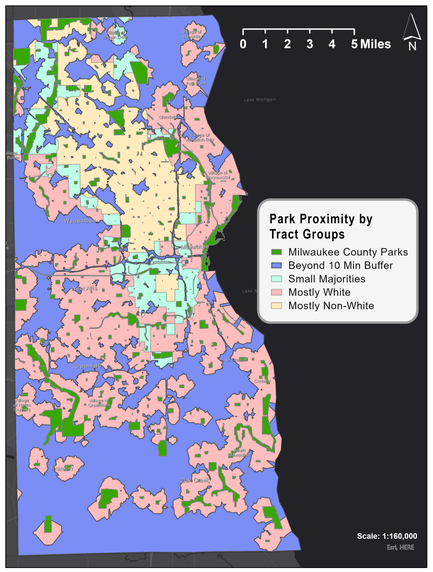


Figure 1 - Park Proximity by Tract Groups - Milwaukee County[5]
- ~50% of non-white group live in "dead zones"
- Mostly white census tracts had largest typical park size, non-white group had smaller than average size parks

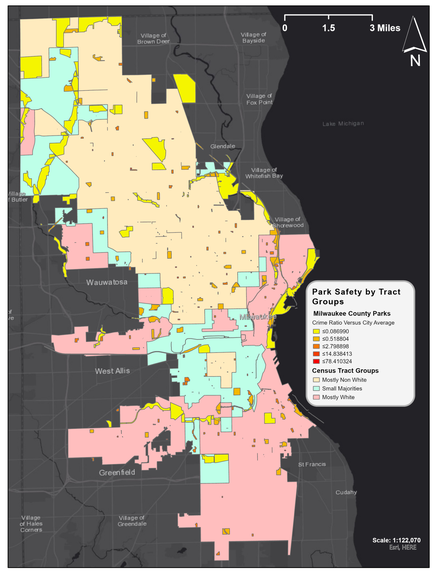


Figure 2 - Park Safety by Tract Groups
- 200m buffer zone evaluated for applicable crimes
- Mostly non-white group 55 parks with above average crime
- Mostly white group 49 parks with above average crime

Discussion

Implications for Community Advocacy

By receiving surveyed feedback on our EcoTherapy Prescription, we will be better equipped to balance perceived versus expressed needs of community members regarding the benefits of nature immersion. This will inform a framework for cross- collaboration in community engagement aimed at advancing our community's health and wellness. Additional advocacy efforts may also include increased public parks and green space within urban settings as well as community/safety concerns

Equity & Inclusion Limitations

During this initial pilot, we recognize that the Prescription is developed for a literate, English speaking population. Future iterations to include multiple language translations.

Diversity, Equity, Inclusion & Community Collaboration

The data and results from this initial pilot could contribute to broader DEI efforts at Wehr Nature Center as well as the entire field of Environmental Education. This pilot can also serve as a framework for cross collaboration and community engagement between healthcare institutions, environmental organizations, and community non-profits to advance healthy communities.

Methods

Development and design of EcoTherapy self-guided curriculum
- Review of the literature within EcoPsychology, nature therapy, Sami Lok, Forest Therapy Experiences
- Expert consultation with EcoPsychology faculty from Naropa University
- Four (4) module curriculum to be utilized during different visits emphasizing Stimulation, Acceptance, Purification, Insight, Recharging, and Change[4]

Coordination with community partners
- Collaboration with naturalists at Wehr Nature Center for initial pilot
- Grant funding requested through the Charles E. Kubly Foundation (pending)
- Coordination with ride share company (Lyft) to develop event code for transportation to Wehr Nature Center - utilizes geofencing technology for requests to and from Wehr Nature Center

Piloting EcoTherapy Prescription in Family Medicine
- Family Medicine Physicians at the MCW/CSM Family Health Center will provide an EcoTherapy Prescription to patients; Target n=100
- Prescription will contain directions to Wehr Nature Center, accessibility options, transportation event code to address transportation barriers, and link to evaluation

Evaluation Survey and Data Analysis
- Participants will be encouraged to complete an evaluation survey assessing satisfaction and experiences with the curriculum, the nature preserve, and accessibility

References

1. Wood, L., Hooper, P., Foster, S., & Bull, F. (2017). Public green spaces and positive mental health-investigating the relationship between access, quantity and types of parks and mental wellbeing. Health & place, 48, 63-71.
2. Rigolon, A., & Németh, J. (2021). What Shapes Uneven Access to Urban Amenities? Thick Injustice and the Legacy of Racial Discrimination in Denver's Parks. Journal of Planning Education and Research, 41(3), 312-325. https://doi.org/10.1177/0739456X18789251
3. McCay, L., Bremer, I., Endale, T., Jannati, M., & Yi, J. (2019). Urban design and mental health. Urban mental health, 32.
4. Oh KH, Shin WS, Khil TG, Kim DJ. (2020). Six-Step Model of Nature-Based Therapy Process. International Journal of Environmental Research and Public Health. 17(3):685. https://doi.org/10.3390/ijerph17030685
5. DeGuilme, E. (2020). Evaluating Park Inequities in Milwaukee County Using GIS. ArcGIS Storymaps. https://storymaps.arcgis.com/stories/8efdd90d38fe44f8908ae659da2167e0

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The role of peer support in the survivorship experience of African American prostate cancer survivors

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Background and Purpose

Associations between social connections and health outcomes are well documented in the general population. However, information on this relationship in African American prostate cancer survivors (AAPCS) is limited.

This study uses qualitative interviews to explore how social connections may impact the health and health behaviors of AAPCS enrolled in Men Moving Forward (MMF), a randomized lifestyle intervention trial for men who have completed treatment or on active surveillance.

The 16-week MMF program designed for and by AAPCS brings men together for 2x-weekly group sessions to support adherence to the American Cancer Society (ACS) nutrition and physical activity guidelines.

MMF participants were invited to complete interviews at the end of the program. These interviews sought to:
1) explore how different aspects of the social network may impact health or health behaviors, and
2) identify opportunities to leverage social connections to improve the survivorship of AAPCS.

In this preliminary analysis, we focus specifically on the role of peer support and the impact of sharing one's prostate cancer experience.

Methods

Interviews took place at the conclusion of the 16-week program. Men who participated in at least one MMF session were randomly selected and invited to participate.

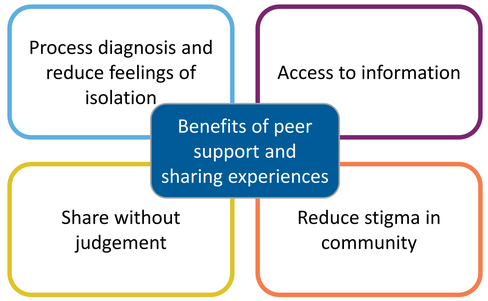
The semi-structured interview guide explores social networks, health and health behaviors, stress, cancer survivorship, and the MMF program. The interview guide was developed and revised in consult with the MMF community advisory board.

Interviews were scheduled at participants' convenience and held virtually or at a study site location (based on participant choosing). Interviews were audio recorded, transcribed verbatim, and coded by two coders using MAXQDA software.

Analyses used a grounded theory approach. Initial coding was done using an open coding approach, followed by axial coding to thematically organize codes. Results presented here reflect preliminary themes.

Results

Subthemes identified related to peer support and sharing related to prostate cancer experience.



Sample quotes from interview participants.

Process diagnosis and reduce feelings of isolation	"You know, when you have it, you feel alone. They don't understand what I went through. Well, these guys went through it too, so they can understand where you've been, what you've been through, so that makes a world of difference, you can feel comfortable and not intimidated, 'cause we all went through the same thing, just different times."
Access to information	"When you're with people that actually went through it, they can guide you on more of the things in and out. The thing that stopped me from getting radiation, aside from the organs melting, was there was one of the guys was a truck driver and after he had his radiation, he couldn't sit for extended amounts of time. There were a bunch of guys that had different other stuff done that were like, not able to hold their urine and needing bags. And it – and so it – it – I tried to uh [laughs] stay away from all those kind of things. And I really didn't – I can't say that I absolutely knew what treatment to take, but I just decided get it out of me, as much as you can."
Share without judgement	"You're able to — to relate with relate with others who have gone through the same experience and get that recommendation from them. We shared whatever experiences we're having without judgement because everybody has gone through the same experiences. So, you don't feel you are being judged or made fun of that. And these are all men, too. So, we shared freely with each other"
Reduce stigma in community	"Well, I tell you this, they [MMF] did meet my expectations to agree where they taught me to accept. And at the same time, to not accept, but to learn from. What is it I have had? And then the same time, tell other people, other Black men, not be afraid. That when you go to the doctor, knowing and asking questions about procedures."

Acknowledgements

We would like to thank our community advisory board for their support in developing the interview process and guide. We also thank the men who have enrolled in Men Moving Forward, especially those who participated in the interviews for their time and interest.

Funding for this study was provided by NCI R01CA229546. We also thank NCI for granting a diversity supplement to further support this work.

Participant Demographics

		Mean, [range] or percent (N = 14)
Age		68.6, [57 - 78]
Combined family income		
	< $39,999	21.40%
	$40,000 - $59,999	21.40%
	$60,000 - $79,999	21.40%
	> $80,000	28.60%
	Prefer not to answer	7.14%
Marital status		
	Married/Living with partner	71.40%
	Divorced	28.60%
Education		
	High school graduate or equivilent	28.60%
	Associates degree, some college or 2-year certificate	35.71%
	College graduate or higher	35.71%
Employment		
	Employed, full or part time	21.40%
	Retired	64.30%
	Other	14.30%
Comorbidities (count)		2.3, [0 - 6]
Treatment (percent yes)		
	Surgery	57.40%
	Radiation	57.40%
	Hormones	28.57%

Key Findings

Preliminary findings suggest the importance of peer support and sharing of stories at various stages of survivorship. Within this theme, four sub-themes were identified:

1. Connecting with other survivors helped with processing, acceptance, and isolation following diagnosis.
2. Feedback, advice, and information sharing felt more credible and valued when coming from someone who understood what they had been through.
3. Shared experience helped men feel understood and able to share without fear of judgement.
4. Telling their story to others offered a way to confront stigma around prostate cancer and offer support to men in their communities. This sharing also offered comfort to the survivors.

Peer support and shared experiences offer an opportunity to provide support and education to AAPCS.

Currently, peer support resources for men with prostate cancer are limited, and even fewer offer culturally tailored support or programming.

Enhancing efforts to create and activate social connections between survivors may offer an additional opportunity to improve survivorship outcomes in AAPCS.

Precision Epidemiology: Using Next-generation Geospatial Analyses to Guide Community Level Responses in Diverse Segregated Metropolitan Regions

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[1]Medical College of Wisconsin

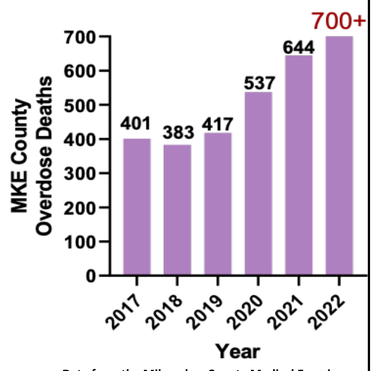
[2]University of Wisconsin Milwaukee

[3]Project WisHope

[4]City of Milwaukee Health Department

Introduction

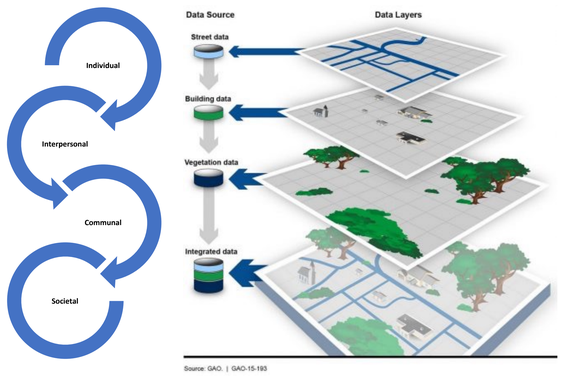
- Opioid overdoses deaths **(OOD)** have **doubled in Milwaukee county** over the course of the past decade
- Previous intervention strategies have utilized county wide initiatives which **do not consider the diversity/ heterogeneity of communities**
- Obstacles occurring while addressing the crisis are lack of evidence-based decision making, absence of community-informed decision making, poor communication across disciplines and community partners.
- There is a need for **localized approaches** to address the diversity and heterogeneity of communities.



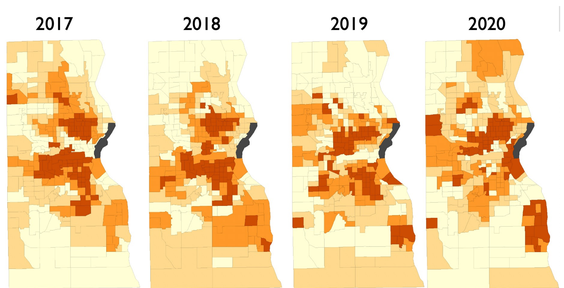
Data from the Milwaukee County Medical Examiner

Methodology

Geospatial data science is a powerful approach that permits inference of complex interactions among variables based on their temporal-spatial relationships



GIS enables us to distill the public health crisis down to the specific community and neighborhood **'hot spots'** for overdose deaths.

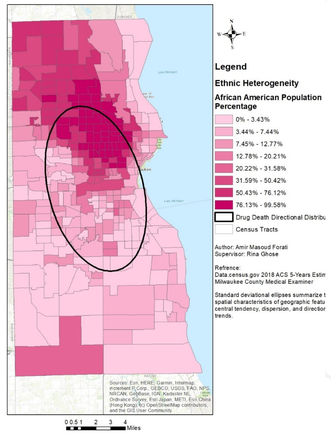


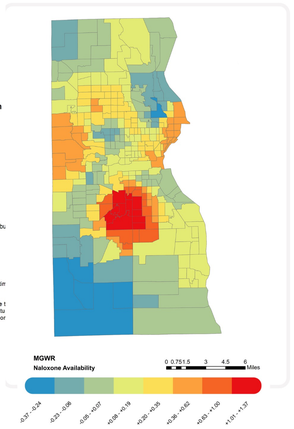
Georeferenced overdose data can be disaggregated based on demographic and socioeconomic factors (age, gender, race, etc.)

Geographic information systems (GIS) based mapping of disparities in opioid overdose deaths in Milwaukee

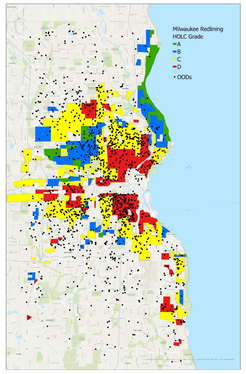
The Impact of Narcan Availability on OODs Varies Across Communities Defined by Racial Composition

Ethnic Heterogeneity: African American Population





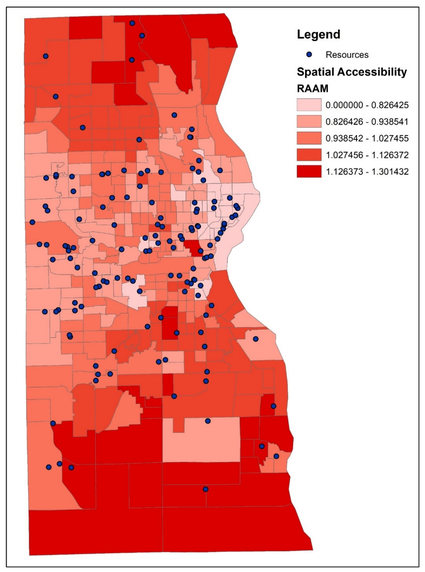
Historic Redlining and OODs

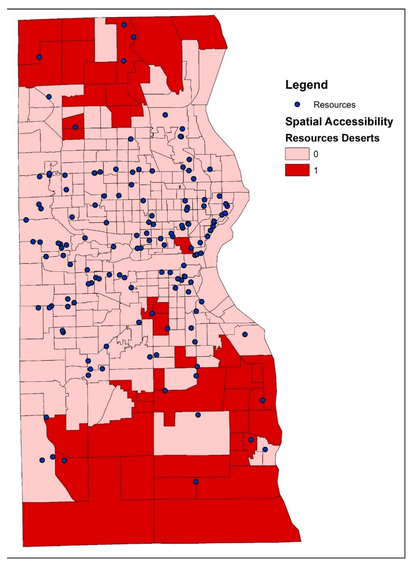


Grade	nonfatal overdose rate per 1000 persons	fatal overdose rate per 1000 persons
A	15.5957	1.448781
B	23.63363	2.151772
C	37.74099	3.825454
D	39.02893	3.895353
Overall	35.3771	3.52659

The maps demonstrate persistency in overdose hotspots which further illustrate the inability of "one-size-fits-all" approaches towards addressing the crisis. Geographically marginalized communities are disproportionately impacted by the overdose highlighting a need for public health interventions with an equity-based approach

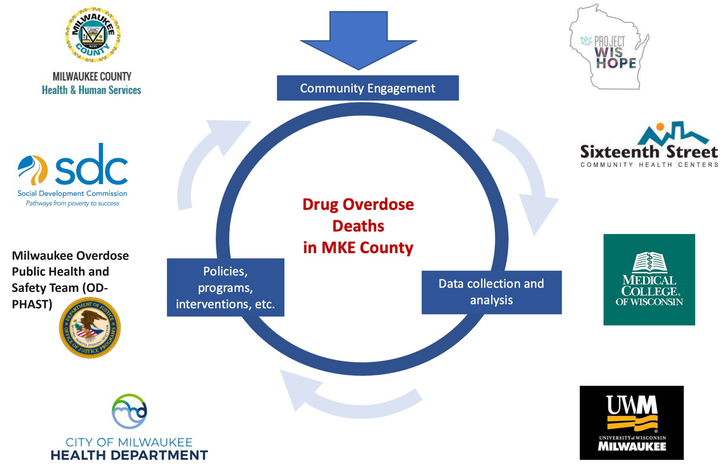
Spatial Accessibility Resource Deserts





The RAAM (*Rational Agent Access Model) is a framework for calculating the accessibility of public resources using spatial measures (distance and travel time). ***Higher RAAM = lower accessibility***. These analyses were conducted using a resource map developed by project WisHope. Ref: Saxon, J., & Snow, D. (2020). A rational agent model for the spatial accessibility of primary health care. Annals of the American Association of geographers, 110(1), 205-222.

Geospatial Analysis Driving Community Engagement



- Guided by our community partners (WisHope and the Milwaukee County DHHS BHS) we will identify, compile, and prioritize relevant geo-referenced datasets and create a comprehensive resource map for Milwaukee County that will permit identification of factors that influence overdose risk and recovery outcomes.
- We anticipate that in addition to advancing the current project, these maps and datasets will be available to support a wider range of initiatives in Milwaukee. Using our advanced MGWR analysis we expect to identify a range of factors that influence opioid overdose risk at the county, city, and neighborhood scales.
- Through data-informed community engagement, we will obtain qualitative data that will provide important context to enable us to interpret and understand community characteristics that confer risk for or are protective against opioid overdose as well as factors that determine the effectiveness of community resources, policies, and practices targeting the opioid crisis.

Conclusion and Future Directions

- Using our MGWR approach, we have already found that the influence of NARCAN® availability on overdose deaths varies across diverse Milwaukee communities (Forati et al., 2021).
- We anticipate that the relationships between factors that confer for or are protective against overdoses will vary with scale and across the diverse cities and neighborhoods in Milwaukee.
- This information is critical as it will allow us to move past "one-size-fits-all" approaches that are problematic in diverse and segregated metropolitan areas such as Milwaukee and to embrace data/outcome-informed strategies that are guided by community engagement.

Acknowledgements

This work was supported by a grant from the Foundation on Opioid Response efforts, FORE Grant Team, SPROUT Milwaukee, and multiple Milwaukee community leaders, stakeholders, and members

First year results of a cancer disparities curriculum to address mistrust and misunderstanding between basic science researchers and community members

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[1]Medical College of Wisconsin, [2] Evaluation Plus,, [3] House of Grace Kingdom Ministry

Background

Medical mistrust contributes to limited participation in biomedical studies. At the same time, researchers may misunderstand the context of communities experiencing the highest disparities. As a result, the conditions limit the development of new and relevant biomedical research questions and hampers understanding of biological, clinical, and social factors holding disparities in place.

To reduce misunderstanding and mistrust between researchers and community members, a team led by a senior basic science researcher at the Medical College of Wisconsin (MCW) and a retired community college faculty member launched a pilot 9-month bi-weekly Cancer Disparities Curriculum for Research and Community Scholars in Fall 2021.

Designed for early career biomedical scientists ("research scholars") and Milwaukee community members ("community scholars"), the curriculum included topics such as root causes of cancer disparities, communicating with different audiences, bias, racism, and bridging diverse perspectives presented by experts from the community and MCW.

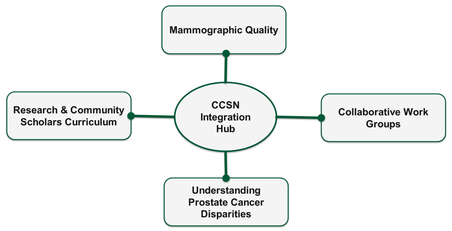
Sample Curriculum

Date		Topic	Facilitator	Objectives
Wed., Sept. 29, 2021	3	Root causes of cancer disparities in Wisconsin	Dr. Staci A. Young (MCW)	Understand core factors that cause cancer disparities. Review the history of disparities research.
Wed., Oct. 13, 2021	4	Implicit bias and institutional racism	Jamaal Smith (City of Milwaukee)	Learn about the causes and consequences of implicit bias. Understand how institutional racism affects communities of color.
Wed., Jan. 12, 2022	9	Cancer diagnosis	Dr. Joan Neuner (MCW) Gale Johnson (DHS-WWWP)	Understand how cancer is diagnosed. Learn how early and accurate diagnoses enhance survival. Explore how racism impacts early and accurate diagnoses.
Wed., Jan. 26, 2022	10	Cancer treatment	Dr. Jim Thomas (MCW)	Learn about the different methods that are used to treat cancer. Understand the factors that limit successful treatment.

The curriculum also pairs a research and a community scholar together to develop a project to address cancer disparities incorporating both perspectives. At the end of the 9-months, scholars are invited to participate in an alumni network to reinforce their learning and continue collaboration.

Sample projects
Tailor information on cancer screenings & distribute to non-traditional outlets.
Create a shared understanding of early cancer-detection barriers through interviews with cancer survivors and co-survivors, Federally Qualified Health Centers.

This curriculum is a project of the Community and Cancer Science Network (CCSN) which promotes transdisciplinary collaboration with equitable engagement of non-academic audiences as full partners and emphasizing co-learning and co-developing of solutions.



Findings

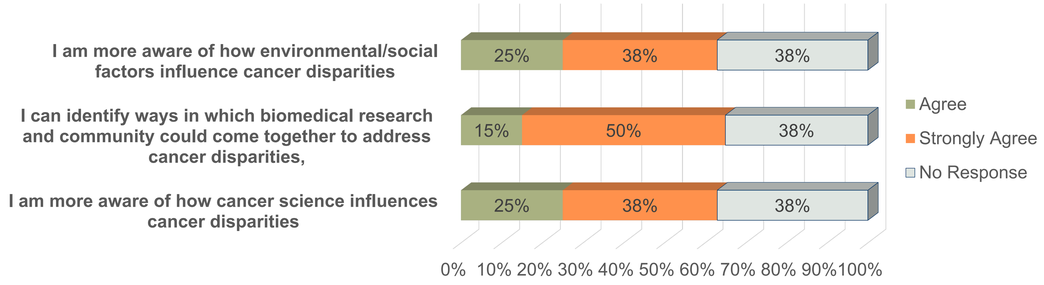
Developmental evaluation was used to assess delivery of the curriculum for the pilot cohort. This approach allowed our project team to modify components in near real-time based on what we were observing and learning from scholars and curriculum facilitators. We also used the data collected to understand redesign opportunities for the second pilot cohort (beginning Sept. 2022). The team used quantitative and qualitative learning methods including attendance data, scholar surveys, facilitator surveys, and observations and after-action reviews of each session. The evaluation of the first cohort (concluded May 2022) suggests that the curriculum and approach supports an increased understanding of the scientific, environmental, and social factors that influence cancer disparities for both research and community scholars. While we heard throughout the curriculum that scholars were beginning to think differently about their work, the evaluation suggested that our organic approach to relationship building did not provide the desired guidance and support. The scholars indicated that the curriculum could be redesigned in a way that creates more intentional opportunities to connect learning to action.

Quantitative Results

Sample Scholar Ratings of Content: *Did session enhance your understanding of factors related to cancer disparities*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Oct. 27 - Understanding the lived experience of all people	0%	14%	14%	14%	57%
Dec. 1 - Biomedical research and the molecular events that cause cancer	0%	0%	0%	29%	71%
Dec. 15 - Social determinants that impact the molecular causes of cancer	14%	0%	0%	14%	71%

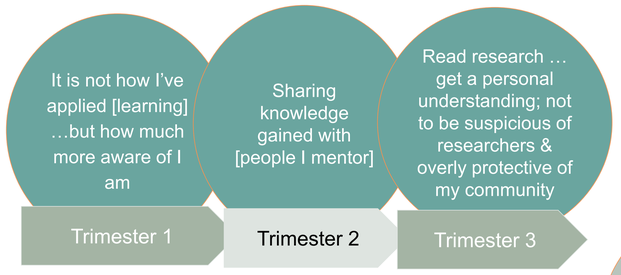
Scholar Survey: End of Cohort 1 Curriculum, N=8



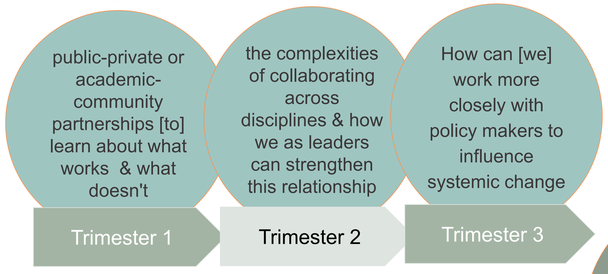
Qualitative Results

Scholars were asked a series of open-ended questions about what they were learning & their reactions to this information

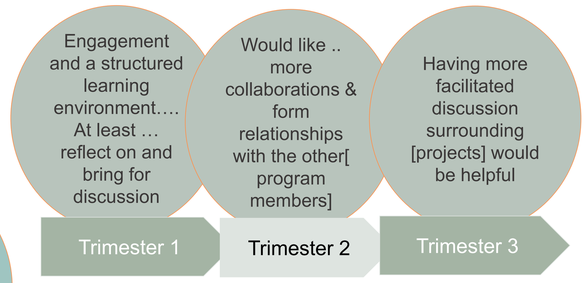
What learnings from the course they have applied.



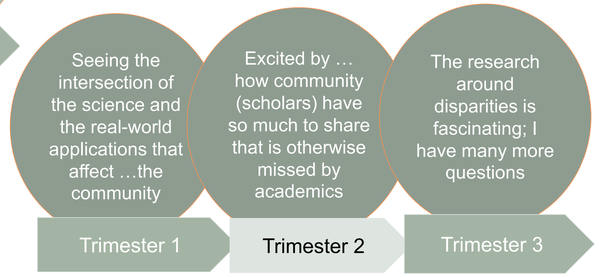
What they would like to learn more about.



What they would change about curriculum.



What excited them about what they were learning.



Next Steps

The data collected throughout the first cohort was used to make minor adjustments in the curriculum. However, for our second cohort (beginning September 2022), the leaders are using comprehensive findings and a human-centered design toolkit to make several essential changes:

Create more opportunities for Scholars' interactions

- Use meeting times for activities or small group discussion
- Coach session facilitators to employ adult learning principles including a variety of learning domains and incorporating varied learning styles

Expand Systems Change Discussions

- Recruit facilitators with experience in changing diverse systems
- Demonstrate links between biology to policy systems influencing cancer disparities using a root cause analysis

Enhance understanding of projects

- Provide greater guidance to scholars on project focus (i.e., beyond community-based interventions)
- Provide guidance on implementing projects through an alumni network

The team will continue to evaluate the impact of the curriculum throughout cohort 2 and beyond, to make improvements and to demonstrate which elements are the most effective in creating strong collaborative partnerships between early-career basic scientists and community members.

This initiative is funded by:

MCW MEDICAL SCHOOL | ADVANCING A HEALTHIER WISCONSIN ENDOWMENT

Lessons Learned about Conducting Community-Engaged Research during the COVID-19 Pandemic

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[1] Institute for Health and Equity, [2] Department of Family and Community Medicine, Medical College of Wisconsin, Milwaukee WI

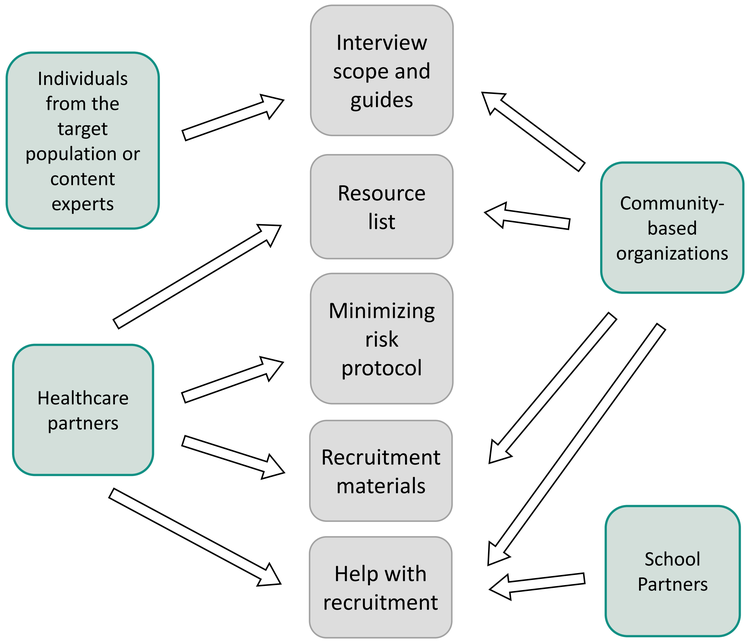
Lora Daskalska
Doctoral Candidate at the Medical College of Wisconsin

Background

- Community-engaged research is an inclusive approach for population-based studies that address social determinants of health.
- The COVID-19 pandemic posed challenges to building collaborative community-academic research partnerships.
- A qualitative, community-engaged study was designed to better understand access to mental health care for Black and Latinx teens in Milwaukee by interviewing teens, parents, and providers.

The objective of this presentation is to describe the lessons learned from conducting this research during the COVID-19 pandemic.

Methods



We approached community stakeholders (green boxes) to provide input on the study design and for help with recruitment (grey boxes). The only activity conducted before the start of the pandemic was gathering information on the interview scope.

	Start of Relationship	
CEn Metrics	**Before the Pandemic**	**During the Pandemic**
Community Partners	3 CBOs	4 HCPs, 3 CBOs, and 1 SP
Average length of relationship before collaboration	1 year	1 month
Meetings attended	26 total 10 in-person 16 virtual	30 total 2 in-person 28 virtual

Relationship building involved attending meetings, presenting the study to individuals and groups, and volunteering. CBO = Community-based organization, HCP = Healthcare partner, SP = School partner

Results

Lessons Learned on Community Engagement: Barriers and Facilitators to Building Community-Academic Partnerships during the COVID-19 Pandemic

Barriers

- Making new connections is most difficult at the **beginning of a pandemic**
- **Remote** relationship building relies on emails/calls at a time when individuals may feel burnt out from these modes of communication
- **Turnover** at partner organizations impedes the continuity of relationship building and project progress
- **IRB rules and timelines** hinder addition of new partners for help with recruitment

Facilitators

- **Many organizations** are working to improve youth mental health in Milwaukee
- Introductions through a **mutual connection** promote trust
- Having a **longer-term, established** relationship fosters buy-in and trust
- Having a **mutually beneficial** relationship between the community and academic partners fosters buy-in
- **Checking in** with partners helping with recruitment provides reminders that the project is ongoing

Project Goals	**Results**
Connect with community stakeholders to help design a meaningful project and receive help reaching participants	• Three partnerships before the pandemic and eight during the pandemic (seven were during active recruitment) • Relationship building was easier before the pandemic, when there were fewer community partners and more opportunities to meet, especially in-person • Initial introductions were in-person before the pandemic and virtual during the pandemic • During pandemic project was further along and new partnerships were sought for help with recruitment. There was less time for relationship building prior to the start of those collaborations.
Interview up to 45 teens, parents, and providers	• Recruitment goal was reduced to up to 15 key informant interviews • To date, 5 providers, 3 parents, and 1 teen have been interviewed

Conclusions

- Three organizations partnered with the academic team before the pandemic and eight during.
- There was less time for relationship building during the pandemic compared to before. This may have resulted in less project buy-in and slower recruitment.
- The COVID-19 pandemic shifted communication modes and eliminated some relationship building opportunities. The project team adapted to more virtual communication and reduced the participant goal to work toward meeting project goals.

Future Work

- Data collection and analysis continues for the study on access to mental health care for teens.
- Results will be disseminated with community partners and implications for practice and policy will be identified.
- Future research will implement these lessons learned and create more feasible goals at the project onset.

References

Ahmed, Syed M, Cheryl Maurana, David Nelson, Tim Meister, Sharon Neu Young, and Paula Lucey. 2016. "Opening the Black Box: Conceptualizing Community Engagement From 109 Community-Academic Partnership Programs." *Progress in Community Health Partnerships : Research, Education, and Action* 10 (1): 51–61. https://doi.org/10.1353/cpr.2016.0019.

Teti, Michelle, Latrice Pichon, and Tyler W Myroniuk. 2021. "Community-Engaged Qualitative Scholarship During a Pandemic: Problems, Perils and Lessons Learned." *International Journal of Qualitative Methods* 20: 16094069211025456. https://doi.org/10.1177/16094069211025455.

Acknowledgements

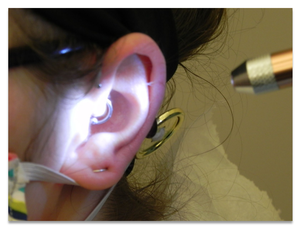
Thank you to each participant and community stakeholder that contributed to this project. Incentives for this project were funded by the MCW Women in Science Student Award.

MEDICAL ASSISTANT ACCELERATED PATHWAY TO EMPLOYMENT

Katherine Karshna, Yvette Willis, Elizabeth Eiland, Chytania Brown, MS, Cheyenne Greenhouse, M2, Carletta Rhodes, MBA, and Linda Meurer, MD, MPH

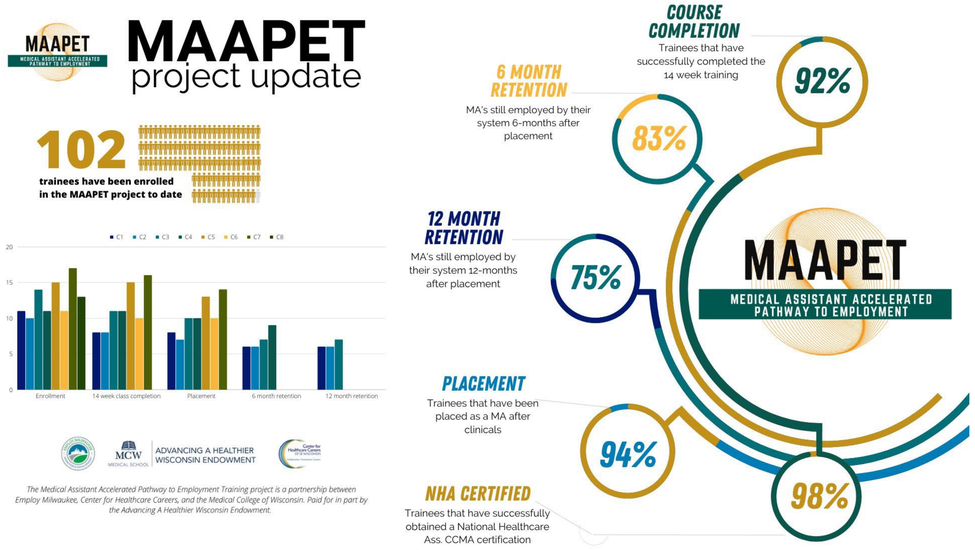
Introduction

- A shortage of Medical Assistants (MA) is a critical workforce need in our community.
- Traditional 12–24-mo programs are expensive and unable to keep up with health systems' demand.
- A collaboration among major regional health system employers, the Center for Healthcare Careers and Employ Milwaukee, **MAAPET aims to build a talent pool of MAs in SE Wisconsin by implementing a 14-week, accelerated, tuition-free training program with immediate employment targeting individuals from diverse, low income and underrepresented groups.**

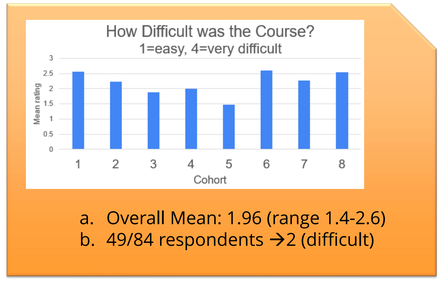


Methods

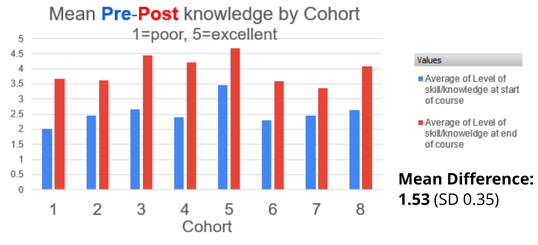
- A target of 130 trainees in 10 cohorts will complete 10 weeks of classroom training and 4 weeks of on-the-job clinical experience.
- MAAPET provides salary, community supports, trained preceptors, mentors and instructors.
- The evaluation includes **process measures** (e.g., achievement of milestones, number/ characteristics of trainees), and **product measures** (reactions, learning outcomes, completion, employment and retention six- and 12-months post-program completion).



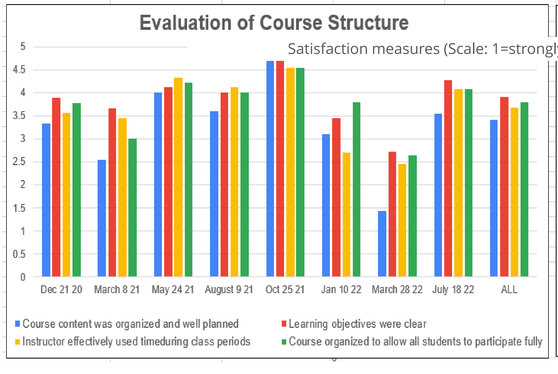
MAAPET Student Experience Survey: Cohorts 1-8

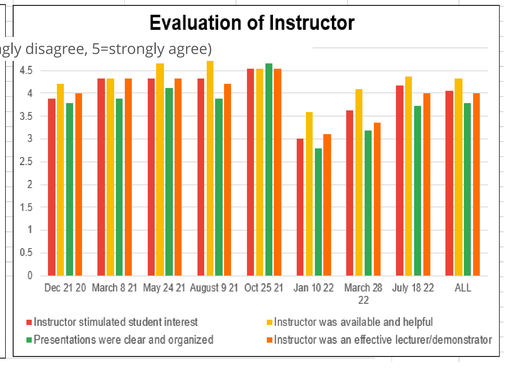


a. Overall Mean: 1.96 (range 1.4-2.6)
b. 49/84 respondents →2 (difficult)



Mean Difference: 1.53 (SD 0.35)



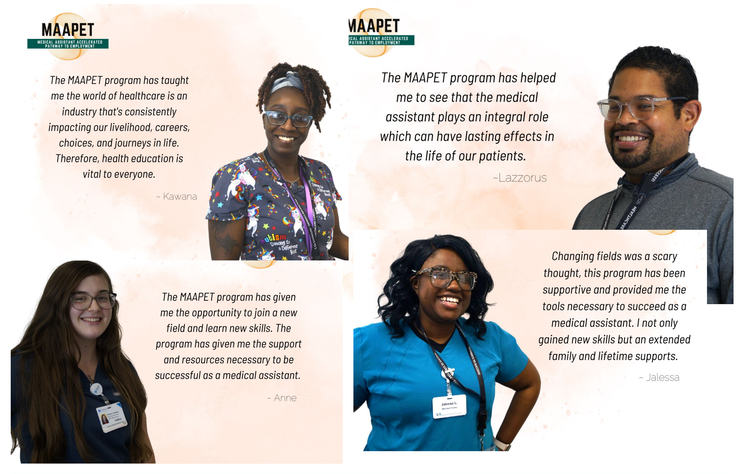


Results

To date, **102 trainees have enrolled,** 75% of whom are 'underserved' (Black (43%), Hispanic (17%), Hmong (3%), receiving public assistance (29%) &/or disabled (3%).

- 15 still in training
- 79/87 (91%) successfully completed 14-week course;
- 74 (73% of total) placed as MAs in a partner clinic
- Of those placed early (n=35), 29 (83%) remained in their positions after 6 months; 18/24 (75%) remain at 12 months.
- To date, 43 graduates have taken the national MA certification test and **42 (98%) have passed!**

- **Unanticipated barriers** were overcome by a skilled and resourceful instructor, including a frequent move to on-line instruction due to COVID-19; and the need to provide support and resources to trainees facing social challenges at home.



Discussion

- MAAPET is accelerating the production of a diverse MA workforce and contributing to healthcare delivery and equity at the frontline of clinical services.
- Disruptions in in-person training caused by COVID-19 restrictions affected student satisfaction, but not student success.
- Future efforts are underway to sustain the program after AHW funding, and to expand training into area high schools.

The Medical Assistant Accelerated Pathway to Employment Training project is a partnership between Employ Milwaukee, Center for Healthcare Careers, and the Medical College of Wisconsin. Paid for in part by the Advancing A Healthier Wisconsin Endowment.