

## INTRODUCTION

Incorporating horseback riding into various forms of therapy has gained popularity across the country and strives to aid people with special needs. The physical benefits have been demonstrated with studies reporting improvement in dynamic balance and gait in patients recovering from strokes and those with multiple sclerosis (Han et al. 2012), (Muñoz-Lasa et al. 2011). Objective information is needed regarding the emotional benefits of these programs.

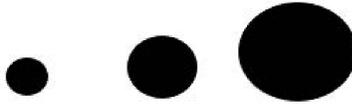
Exceptional Equestrians (EE) is a facility in De Pere, Wisconsin where professionals provide equine-assisted therapy to children with cognitive and physical disabilities. EE agreed to partner in hopes of gaining insight into the emotional benefits of these programs.

## PURPOSE

Objectively measure the impact of equine-assisted therapy on stress reduction and mood states in children with disabilities while promoting inclusion of those with special needs in the field of research.

## METHODS

How many of the following emotions did you experience on three separate occasions. Their guardians completed the identical survey for their perception of the participant's mood state. The surveys were condensed versions of the Profile of Mood States (POMS) Questionnaire and included visual aids to accommodate the participants (Figure 1). Selection criteria included intellectual ability to express emotions and age between 7-18 years.



	No	Somewhat	Yes	Very much
I feel calm	1	2	3	4
I am tense	1	2	3	4
I feel upset	1	2	3	4
I am relaxed	1	2	3	4
I feel content	1	2	3	4
I am worried	1	2	3	4

Figure 1. Condensed POMS survey used in the study

## RESULTS

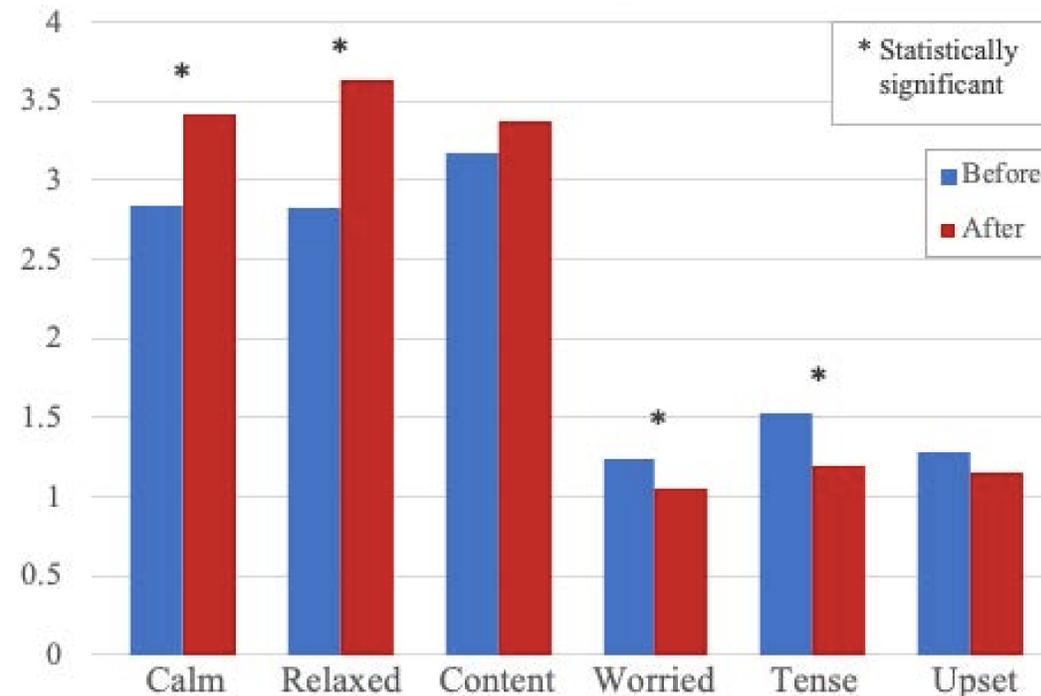


Figure 2. Participant self-reported impact of equine-assisted therapy on mood states. The participant's average response for pre- and post- therapy were analyzed with a one-tailed, paired t-test. n=15. t critical: 1.76. p=0.05.

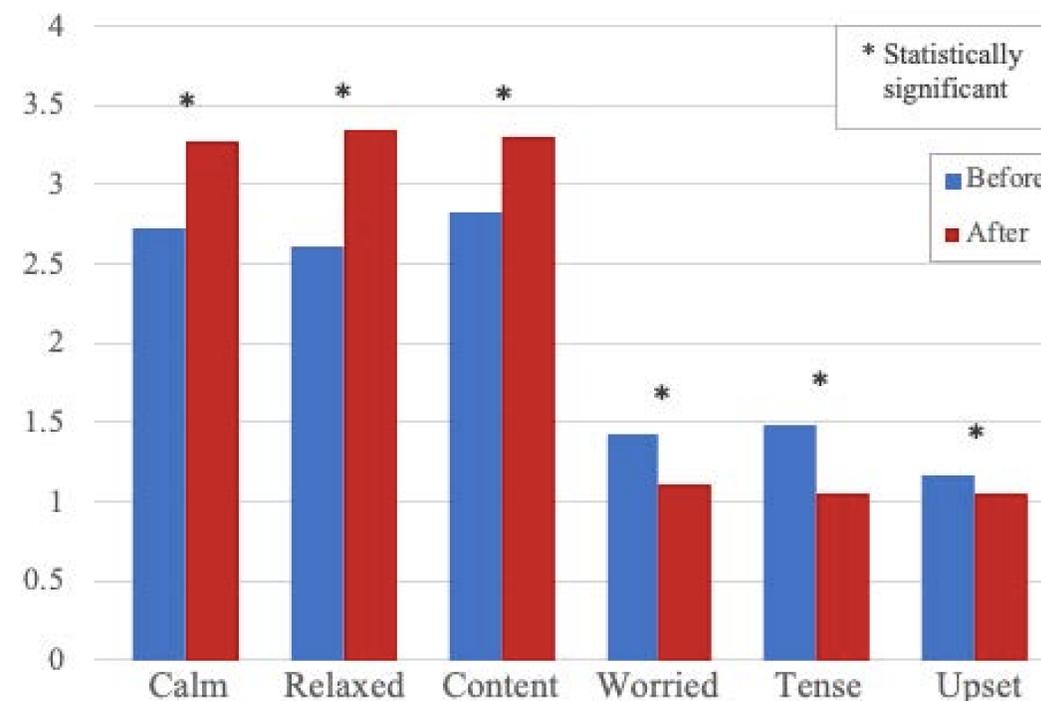


Figure 3. Guardian's report on impact of equine-assisted therapy on mood state of participant. The guardian's average response for pre- and post- therapy were analyzed with a one-tailed, paired t-test. n=15. t critical: 1.76. p=0.05.

## CONCLUSIONS

There was a statistically significant difference between all pre- and post- equine-assisted therapy mood states except participant-reported "content" and "upset." All the guardian-reported mood states were statistically significant, demonstrating visible improvement in the participant's mood and stress level. Limitations to this study include small sample size (n=15) and the variable cognitive ability of the participants to understand the wording of the standardized survey.

Participant-reported calmness and relaxation improved by 14.7% and 20.3%, respectively (Table 1). Similarly, guardian-reported perception of participant's relaxation and calmness improved by 13.6% and 18.3%, respectively (Table 2).

Table 1. Participant self-reported average percent change of mood states. t critical one-tailed: 1.76. p= 0.05

	Average change (%)	t stat	p-value
Calm	14.7%	3.24	0.00296
Relaxed	20.3%	3.73	0.00112
Content	5.28%	1.52	0.0748
Worried	-5.00%	1.790	0.0476
Tense	-8.33%	2.65	0.00959
Upset	-3.06%	1.75	0.0511

Table 2. Guardian-reported average percent change of mood states of participants. t critical one-tailed: 1.76. p= 0.05

	Average change (%)	t stat	p-value
Calm	13.6%	2.98	0.00500
Relaxed	18.3%	4.40	0.000300
Content	11.9%	3.90	0.000808
Worried	-7.78%	2.61	0.0104
Tense	-10.8%	3.19	0.00328
Upset	-3.06%	1.85	0.0426

## REFERENCES

- Han JY, Kim JM, Kim SK, et al. Therapeutic effects of mechanical horseback riding on gait and balance ability in stroke patients. *Ann Rehabil Med.* 2012;36(6):762-769. doi:10.5535/arm.2012.36.6.762
- Muñoz-Lasa S, Ferriero G, Valero R, Gomez-Muñoz F, Rabini A, Varela E. Effect of therapeutic horseback riding on balance and gait of people with multiple sclerosis. *G Ital Med Lav Ergon.* 2011;33(4):462-467.



# Physician Perspective on Drug Addiction

Zoe Weller and Alexa Bonneville

## INTRODUCTION

Drug addiction is a devastating problem worldwide, as there is no simple solution. Data from the CDC's National Center for Health Statistics indicate that there were an estimated 100,306 drug overdose deaths in the United States last year, an increase of 28.5% from the previous year. Physicians play a crucial role in the treatment of those battling an active addiction as the alcohol and substance abuse screening questions can be crucial in detecting the early stages of an addiction or an active addiction.

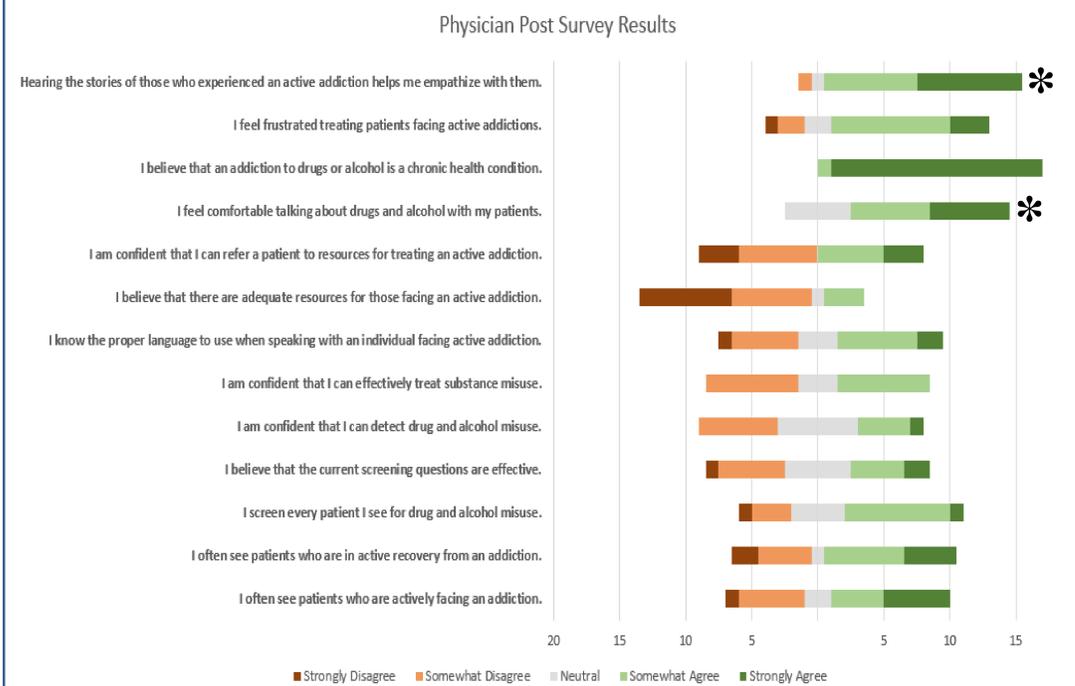
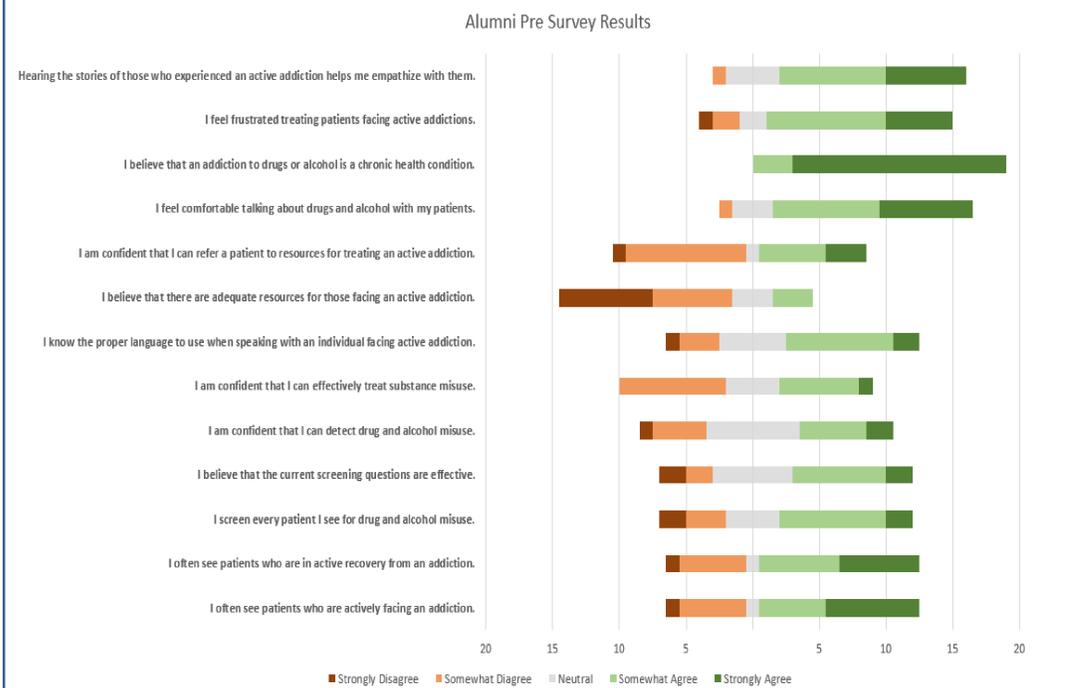
## PURPOSE

As future physicians, the goal of our study is to identify and address gaps in medical management of substance use to better serve our future patients.

## METHODS

Primary Care and Emergency Medicine physicians received an awareness video made with the Jackie Nitschke Center along with a pre and post video survey. Materials were sent via email. Qualtrics was used to create surveys and collect data. Partners at Bellin Health provided the lists of subjects. Additionally, alumni of the Jackie Nitschke Center were surveyed to identify discrepancies in care and potential action areas.

## RESULTS



\* indicates statistically significant change from pre to post survey

## CONCLUSIONS

- All participants surveyed believe that addiction to drugs or alcohol is a chronic health condition.
- Nearly all of the alumni surveyed reported that addiction had some impact on their physical and mental health, which is where the role of the physician is especially important.
- Sharing the stories of those who have faced drug and alcohol addiction is effective in increasing physician empathy which is the first step towards improving health care for those facing and in recovery from drug and alcohol addiction ( $p = 0.0071, \alpha = 0.05$ ).
- Our study found that physicians felt less comfortable talking about drugs and alcohol with patients after viewing the awareness video ( $p = 0.0073, \alpha = 0.05$ ). Hearing directly from those in recovery could have made physician participants realize they may need some development of this skill. This could demonstrate an area of improvement for physician education and the possibility for a partnership with local resources such as Jackie Nitschke Center in the future.

## REFERENCES

Ahmad F. Provisional drug overdose death counts. Natl Cent Health Stat. Published online 2022. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

Thank you to our community partners, Jackie Nitschke Center and Bellin Health (especially Dr. Brad Wozney with Primary Care and Amy Vang with Emergency Medicine), as well as our PI, Dr. David Ferguson, for helping with this project.



# Housing Instability and Related Stressors of People Living With HIV/AIDS in Indiana

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<sup>2</sup>Health Plus Indiana, South Bend, IN

## Background

Safe, stable housing is a basic need; it is difficult to care for one's mental and physical health without it. Housing stability is more than protection from the elements; it's having a choice when one moves, the ability to pay for utilities, food, and other necessities without spending most of one's paycheck. Individuals with unstable housing experience more stress and worse health outcomes.

### Housing Instability/Homelessness in People Living With HIV/AIDS (PLWHA) Is Associated With:



## HIV Facts

- In 2021, an estimated 1.2 million people had HIV.
- Men accounted for the majority of (25,900, 81%) of estimated HIV infections in 2021.
- Gay, bisexual, and other men who reported male-to-male sexual contact accounted for the highest percentage of estimated HIV infections in 2021 (32,100, 66%).
- Racial and ethnic minorities continue to be more adversely affected accounting for the majority of new HIV cases in 2021 (22,300, 69%).
- Stable housing is associated with viral suppression and lower rates of HIV transmission.
- When a person living with HIV is on effective treatment, it lowers the level of HIV in the blood (viral load). When the viral load is undetectable, it is not able to be transmitted to another individual.

**Undetectable=Untransmittable**

## Methods

A survey was designed by research staff and given to all cits of Health Plus Indiana. Responses were analyzed.

## Objective

This study aimed to understand the housing stability of our clients (cits) and assess their stress related to housing.

## Results

- 19 individuals were included in this study
- Median age of 50.5 years (range, 26-65 years old)
- 9 (47%) identified as White, 8 (42%) identified as Black/African American, 1 (5%) identified as Multiracial, 1 (5%) identified as Hispanic
- 2 (10%) cits said they currently do not have a steady place to live
- 5 (26%) cits said they currently have a place to live but were worried about losing it in the future
- 8 (42%) cits stated they are worried that in the next two months they may not have a place to live
- 3 (16%) cits said there was violence or conflict in the place they stayed the night prior to filling out the survey
- 4 (21%) cits said their health or safety was at risk at the place they were staying and 2 of them said they did not have any other place to go
- 4 (21%) cits said that in the last 12 months a utility company threatened to turn off services
- Most cits were stressed to some degree in the last year about not having money for utilities, rent, or food

## Conclusion + Impact

Safe, stable housing is inextricably linked to a person's mental and physical health. Without stability, cits experience stress due to the uncertainty of their future housing, ability to pay utilities, rent, and purchase food.

### Interventions to Improve the Health of Unhoused/ Marginally-Housed PLWHA and Decrease Viral Loads



## Acknowledgements

A sincere thank you to Valerie Reist, Leeah Hopper, and all staff of Health Plus Indiana for their continued advocacy, leadership, and alliance to the PLWHA in Indiana and beyond.

## References

1. Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2017–2021. HIV Surveillance Supplemental Report, 2023; 28 (No.3). <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2023. Accessed [October 31, 2023].
2. Gillies P, Tolley K, Wolstenholme J. Is AIDS a disease of poverty? *AIDS Care*. 1996 Jun;8(3):351-63. doi: 10.1080/09540129650125768. PMID: 8827126.
3. Milloy, M.J., Marshall, B.D.L., Montaner, J. *et al.* Housing Status and the Health of People Living with HIV/AIDS. *Curr HIV/AIDS Rep* 9, 364–374 (2012). <https://doi.org/10.1007/s11904-012-0137-5>
4. Royal SW, Kidder DP, Patrabansh S, Wolitski RJ, Holtgrave DR, Aidala A, Pals S, Stall R. Factors associated with adherence to highly active antiretroviral therapy in homeless or unstably housed adults living with HIV. *AIDS Care*. 2009 Apr;21(4):448-55. doi: 10.1080/09540120802270250. PMID: 19401865.
5. Wells N. U=U, PrEP and the unrealised promise of ending HIV-related stigma. *Sex Health*. 2023 Jul;20(3):271-272. doi: 10.1071/SH23045. PMID: 37344211.
6. Wiewel, E.W., Singh, T.P., Zhong, Y. *et al.* Housing Subsidies and Housing Stability are Associated with Better HIV Medical Outcomes Among Persons Who Experienced Homelessness and Live with HIV and Mental Illness or Substance Use Disorder. *AIDS Behav* 24, 3252–3263 (2020). <https://doi.org/10.1007/s10461-020-02810-8>

# Students Understanding Principles of Research Education through Medicine, Engineering, and Science (SUPREMES)

Duřanka Djorić, PhD,<sup>1,2</sup> Denise Perea, BSc. Ed.,<sup>1</sup> and Jim Hokanson, PhD<sup>1</sup>

<sup>1</sup>Joint Department of Biomedical Engineering, Medical College of Wisconsin and Marquette, Milwaukee, WI, <sup>2</sup>Department of Microbiology and Immunology, Medical College of Wisconsin, Milwaukee, WI

## YEAR ONE

### MODULE 1: Student Training (Fall Academic Semester)

- ❖ Attend 2.5 h workshops per week at the Medical College of Wisconsin
- ❖ Advance understanding of biomedical research through: reading and presenting scientific articles, writing, asking hypothesis-driven questions, learning and applying laboratory techniques/methodologies

## PROGRAM EXECUTION

### MODULE 2: Laboratory research (Spring Academic Semester)

- ❖ Apply knowledge and skills from Module 1 during participation in hands-on scientific research in a funded research laboratory at MCW, MU, CRI, Versiti, VA
- ❖ Spend a minimum of 100 h in a laboratory setting

## YEAR TWO

Returning SUPREMES students  
continue year-long research

Laboratory Practical

Symposium

# SUPREMES

STUDENTS UNDERSTANDING PRINCIPLES OF RESEARCH EDUCATION THROUGH MEDICINE, ENGINEERING, AND SCIENCE

**PROGRAM OBJECTIVE:** Improve understanding and appreciation of scientific research through hands-on training of the next generation of scientists.

### Background:

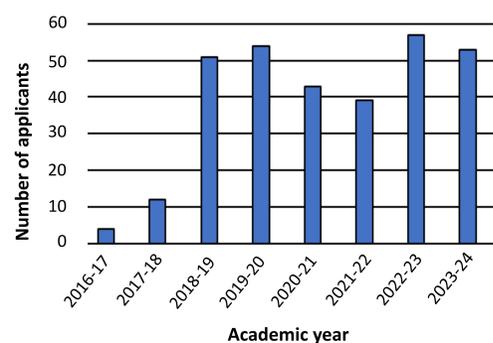
- Established in 2016 with a goal to immerse students in laboratory research activities
- Students improve critical thinking and problem-solving skills while developing scientific literacy
- Students contribute to research in laboratories located in various departments across MCW as well as Marquette, Versiti, Children's, and the VA.

### WEBSITE:

<http://mcw.marquette.edu/biomedical-engineering/supremes.php>

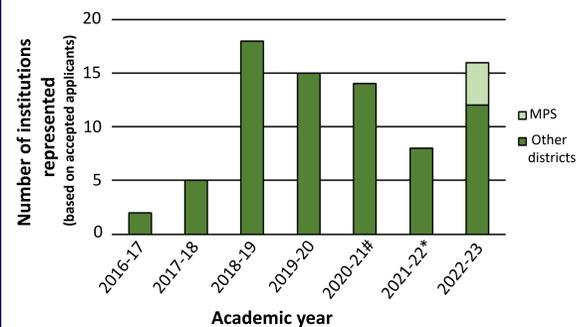


## Program Data

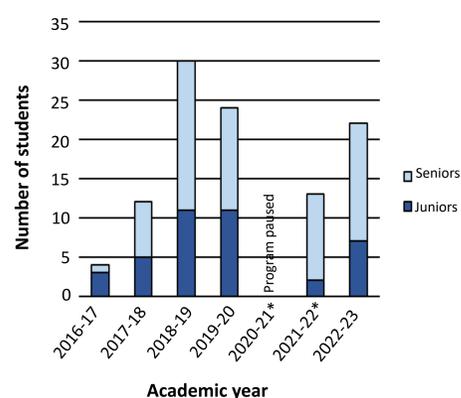


**Fig 1. Number of applications over time.** Number of applications (both incomplete and complete) was assessed over the last eight years of the program. Most incomplete applications stop at the stage of providing a personal statement and are typically not numerous. Academic years, 2020-21 and 2021-2022 experienced Covid-19 restrictions and uncertainties.

## Program Data

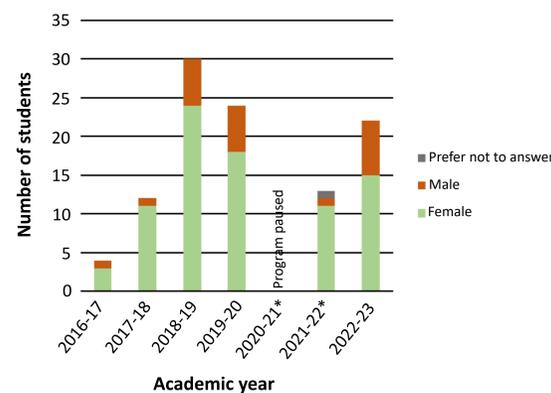


**Fig 2. Number of high schools represented.** Number of local high schools represented was determined based on accepted students for each academic year. (#) SUPREMES program was placed on pause for the 2020-2021 academic year; students were not admitted into the program and the number of represented institutions is drawn from the complete applicant pool. (\*) The 2021-22 academic year experienced Covid-19 restrictions and only 13 students could be admitted into the program. MPS, Milwaukee Public Schools.



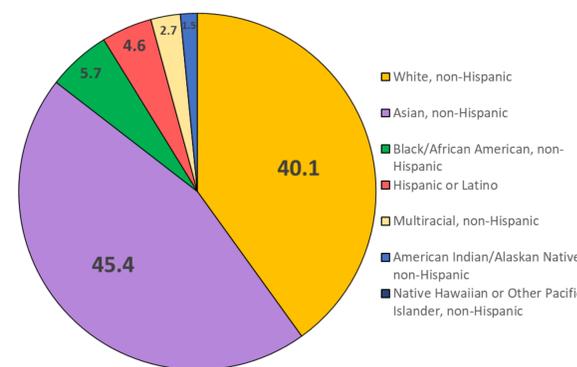
**Fig 3. Distribution of juniors and seniors in the SUPREMES program.** The distribution of accepted juniors and seniors was assessed across 7 academic years. (\*) The 2020-2021 academic year experienced Covid-19 related shut-down and students were not admitted into the program. (\*) The 2021-22 academic year experienced Covid-19 restrictions and only 13 students could be admitted into the program.

## Program Data Continued



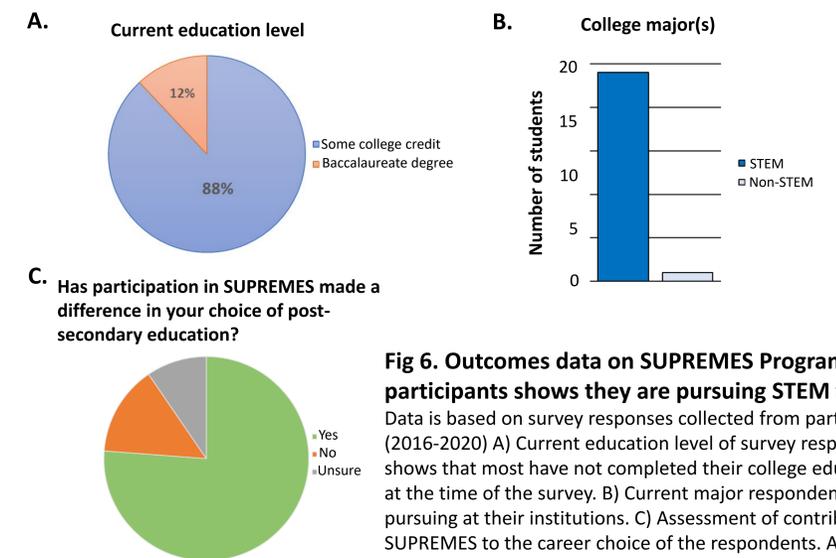
**Fig 4. Gender identity distribution of students participating in the SUPREMES program.** The distribution of accepted students was assessed across 7 academic years. (\*) The 2020-2021 academic year experienced Covid-19 related shut-down and students were not admitted into the program. (\*) The 2021-22 academic year experienced Covid-19 restrictions and only 13 students could be admitted into the program.

Diversity Index = 37.7 %



**Fig 5. Diversity of students applying for the SUPREMES program.** A.) Diversity Index was determined using applicant data (both complete and incomplete applications) from 8 years of the program. The higher the diversity index, the more diverse the population (*i.e.*, for this data set, there is a 37.7% chance that two individuals, chosen at random, would come from a different race). B.) Diversity index was calculated for each academic year applications to the program were accepted.

## Program Outcomes



**Fig 6. Outcomes data on SUPREMES Program participants shows they are pursuing STEM fields.** Data is based on survey responses collected from participants (2016-2020) A) Current education level of survey respondents shows that most have not completed their college education at the time of the survey. B) Current major respondents are pursuing at their institutions. C) Assessment of contribution of SUPREMES to the career choice of the respondents. Average survey response rate is ~40%.

## Future Directions and Goals

- ❖ Actively recruit students from diverse high schools
- ❖ Improve advertising materials and communication with area high schools
- ❖ Provide application support (*i.e.*, assistance with application, personal statement)
- ❖ Engage with local high schools through seminars and luncheons to further encourage STEM careers

## Program Benefits

- Benefit to student:**
- ❖ Active participant on a scientific research team
  - ❖ Increased scientific literacy through advanced training in research, manuscript writing, and presentation of findings
  - ❖ Networking opportunity (recommendation letters for college)
  - ❖ Exposure to additional career opportunities
- Benefit to preceptor:**
- ❖ Highly motivated and trained research team member
  - ❖ No cost
  - ❖ Potential for scientific publications
  - ❖ Outreach opportunity to cultivate our future researchers

## Acknowledgements

Current support for SUPREMES has been provided by the Joint Department of Biomedical Engineering MCW and Marquette and Children's Research Institute at the Medical College of Wisconsin. Study data were collected and managed using REDCap electronic data capture tools hosted at the Medical College of Wisconsin and REDCap project supported by Clinical and Translational Science Institute grant support (2UL1TR001436).

# Inclusive Play: Toys For All – Impact and Outcomes of Adaptive Toy Use in Therapy

Andrew Donahoe, Molly Erickson, Vladimir Bjelic, and Gerald F. Harris

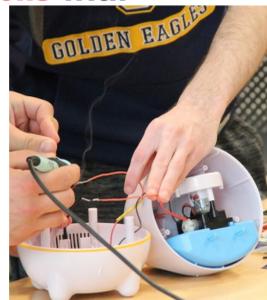


## Program Overview

The **Inclusive Play: Toys For All** is a collaboration between Penfield Children's Center (**Penfield**) and the Orthopaedic & Rehabilitation Engineering Center at Marquette University (**OREC (MU, MCW)**) that produces free **switch-adapted toys to the greater Milwaukee area**. Off-the-shelf toys are modified to use therapy switches to replace the activation methods of some toy features. The toys are then used in therapy for children with developmental impairments so they can **play and communicate independently** while growing stronger cognitive connections with their environment.

Each toy's wiring creates a **distinctive behavior** which will affect how the toy functions relating to input:

- Single press
- Sustained press
- Combination of both



## Adaptive Toys in Therapy

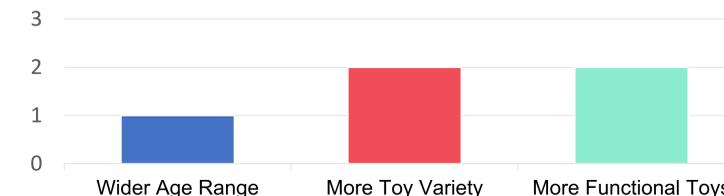
Speech, Physical, and Occupation therapy offer **tailored interactions with children** based on individual abilities, demanding a broad range of unique toys. The availability of a variety of toys increases the likelihood of **productive therapy sessions** that account for a child's interest and ability level.



- Toy success is measured by **engagement and interaction**.
- Toys are used as **motivation and a vehicle for therapy**.

## Next Steps

What Should Future Toys Address?



The professionals interviewed expressed a need for more diversity in **future adapted toys**. They explained it is important that there are toys to choose from that **fit a range of situations**, so there are always options that will work for each child. Emphasis on toy variety for different interests and abilities was mentioned over **15** times in the 5 interviews.

Additionally, the professionals mentioned catering to the interests of older children and developing toys with **“real life” functionality**, such as the drink dispenser and fan.

The professionals specifically listed the following categories as areas they would like to see expanded:

- Remote control toys
- Electric toothbrushes
- Kitchen equipment
- Outdoor toys



**All 5 professionals recommended adaptive toys as effective tools for therapy.**

## Method

To assess the program's outcomes, limitations, and impacts, interviews were conducted with **5 professionals** who have worked with inclusive play toys. They were asked questions about their experiences, session goals, toy effectiveness, and how they use **different toy behaviors**.

Their backgrounds include:

- 2 Physical Therapists
- 1 Speech Language Pathologist
- 1 Special Education Teacher
- 1 Occupational Therapist

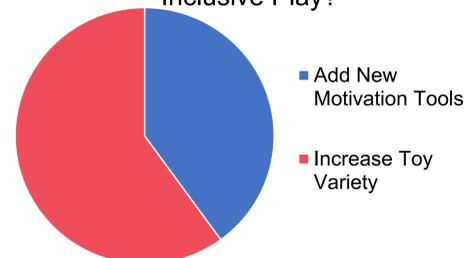
Experience using adapted toys as a therapy tool ranged from **30+ years to 6 months**, with their first experience being the Inclusive Play toys. In total, those interviewed see a range of **18-25 patients a week** and use the toys **1-4 times a week for each patient**.

The professions were asked questions in these 4 categories:

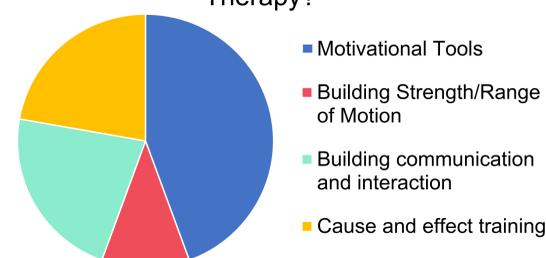
- Background (work & toy experience)
- Therapy goals (what is achieved by using toys)
- How toys are used (functionality & goals)
- Reflection (limitation & future toy suggestions)

## Results

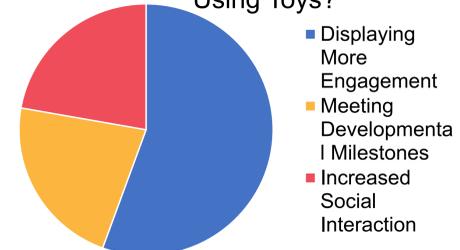
What Were Your Main Goals with Inclusive Play?



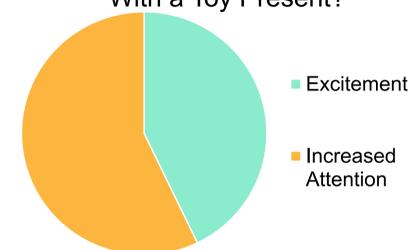
How are Adaptive Toys Used in Therapy?



What Expectations Do You Have When Using Toys?



How Does a Child's Attitude Change With a Toy Present?



Common responses when asked:

1. Which toy was most popular: **4/5 answered it varies with every child.**
2. How they used the different toy behaviors during therapy: **3/5 answered the bubble machine and fan give valuable sensory feedback especially for children with blindness.**
3. What they would want to see in the future: **3/5 answered functional toys like the drink dispenser allow for more interaction within family.**

## Acknowledgments

**Inclusive Play: Toys For All** would like to thank all the professionals featured in the interviews. We would also like to thank the donors for their generous contributions to this program, especially Kohl's Building Blocks for their extra support in providing free adaptive toys to children who need them.

# Mental Health Outreach in Urban Faith-based Communities: Are They Working?

Tobi Yusuf, BS, Matthew Jandrisevits, PhD

Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, Milwaukee WI

## Background

The consequences of mental illnesses may be longer lasting in racial/ethnic minority groups (1) who mainly reside in urban areas. These communities face barriers to receiving mental healthcare (2) and often turn to their faith-based communities for support. It is unclear if mental health outreach efforts in these communities address religious people's unique perceptions and needs and/or fail to improve mental health access for them.

## Hypothesis

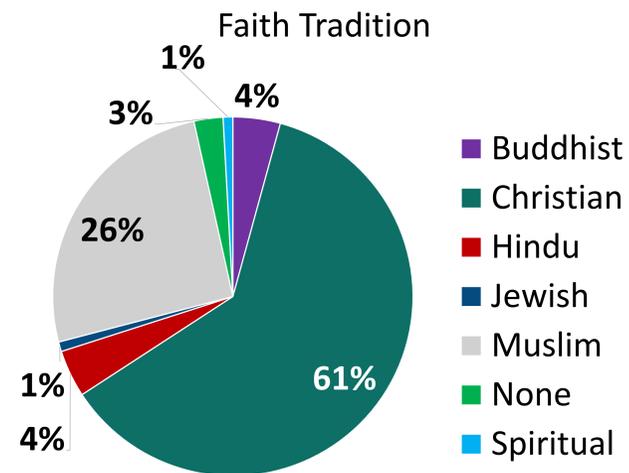
If mental health outreach programs address urban faith-based communities' perceptions of mental illness and their mental health needs, then members of urban congregations will be more receptive to these programs and find them helpful in improving mental health at their congregation.

## Methods

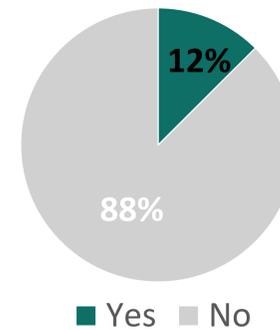
Surveys were distributed to several religious congregations in Milwaukee which asked questions about congregant's demographics, personal and perceived congregational beliefs about mental illness, willingness to seek mental health care, barriers to mental health care, exposure to mental health outreach programs, and thoughts on how helpful outreach programs were or would be at their congregation.



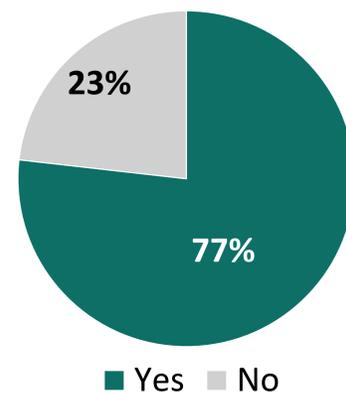
## Results (n = 115)



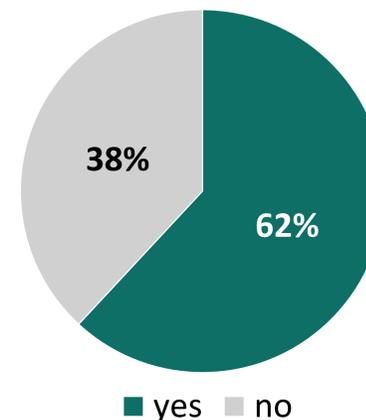
Mental Illness comes from lack of prayer and/or doing sinful acts



Mental illness is a disease comparable to a physical illness, and people should seek care



Is there a mental health outreach program at your congregation?



Most participants would seek mental health care if they needed it (97%).

However, the top 3 barriers to seeking mental health care are:

1. High cost of mental health care
2. Lack of culturally competent providers
3. Lack of spiritual/religious based providers

Strategies that are most helpful:

1. Offer presentations on coping skills, anxiety, depression, suicide, traumatic events, and substance use.
2. Assist family members who are helping family and friends living with a mental illness.
3. Offer classes to reduce stress through meditation or prayer.

## Discussion

Most participants view mental illness as being comparable to physical illness and not the result of religious/spiritual failings. Not all participants were aware of mental health outreach programs held at their congregation. Lastly, it is advisable that congregations provide and promote these mental health promotion strategies to help address barriers that may prevent their members from seeking mental health care.

## Future Work

We plan to share this research to urban congregations in Milwaukee and reach out to more faith-based communities with a revised online survey to get a more representative participant sample. We also plan to evaluate how helpful an established mental health care promotion strategy is for improving mental health at a congregation.

## Acknowledgements

This research was funded by the SAMS/MSSRP fellowship at the Kern Institute. We would also like to thank the following congregations for allowing us to distribute our survey: Milwaukee Ken Center, Krishna Temple, St. Marks Episcopal Church, All People's Gathering, Evolve Church, and the Islamic Center of Milwaukee.

## References

1. American Psychiatric Association. (n.d.). *Mental health disparities: Diverse populations - psychiatry.org*. Mental Health Disparities: Diverse Populations - Psychiatry.org. Retrieved March 2, 2023, from <https://www.psychiatry.org/File%20Library/Psychiatrists/Cultural-Competency/Mental-Health-Disparities/Mental-Health-Facts-for-Diverse-Populations.pdf>
2. National Healthcare Quality and Disparities Report chartbook on person- and family-centered care. Rockville, MD: Agency for Healthcare Research and Quality; October 2016. AHRQ Pub. No. 16(17)-0015-9-EF.

# Assessing Youth Adult Equity

Kristin Kappelman and Clintel Hasan  
Milwaukee Succeeds

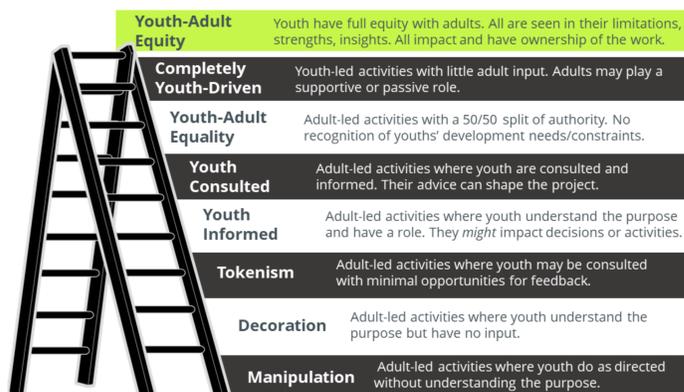


## What is the Youth Adult Equity Ladder Assessment?

Milwaukee Succeeds is committed to elevating youth voice and empowering youth who are directly impacted by issues in our education system to be active decision-makers when it comes to identifying solutions. As we work with partners, we discovered the need to assess where organizations are when it comes to youth-adult equity.

### YOUTH ADULT EQUITY LADDER

Adapted from BRIDGES from Adam Fletcher (2011) and Roger Hart (1994)



@youthforwardmke  
@youthforward\_mke  
@milwaukee succeeds



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Much like climbing a ladder, this conceptual framework represents a series of ascending rungs, each signifying a distinct level of youth engagement, influence, and partnership. At its core, this assessment tool seeks to empower organizations, schools, and community programs to introspectively evaluate the extent to which they genuinely include and respect the voices of young individuals. It provides a vital feedback mechanism, allowing these entities to measure their progress and identify areas where they excel and, equally importantly, where improvements are needed. In doing so, Milwaukee Succeeds aims to foster a future where youth are not mere spectators in their own lives but active, empowered participants in shaping their present and future.

## What are the goals?

The "Youth-Adult Equity Ladder Assessment" aims to help organizations:

1. Evaluate their current status on the Youth-Adult Equity Ladder, gauging youth engagement and influence.
2. Identify strengths, weaknesses, and areas for growth in youth-adult partnerships.
3. Advance equity initiatives by fostering a culture of continuous improvement and youth empowerment within organizations.

## How was the assessment developed?

Using Ray Hart's original research around Youth Adult Equity, the High School Success Data Workgroup developed a brief assessment to help organizations measure where they were on the ladder. We suggested that participants complete the assessment as a group/team, instead of individually, and give enough time for discussion. While we weren't ready to assess organizations as to their exact rung, participants received a score (out of 40 points) that helped them judge their progress, along with reflection questions to guide discussion.



## How many organizations participated?

With a goal of 10, 19 organizations completed the assessment. Results indicated that while organizations reported some evidence of youth and adults having ownership of outcomes and being recognized for participation in activities, additional work is needed to ensure that youth and adults have roles in creating change and safe, supportive environments are established for both groups.

## What are next steps?

- Using the feedback we received from our partners, we've modified the assessment to be more clear and concise.
- We're developing a handbook to help organizations as to how they can improve youth adult equity.
- "Badging" participating organizations on our website!

## How do I get involved?



Complete the assessment!



Visit our website!

# Analysis of effective Mentorship through Medical College of Wisconsin mentoring program with adolescents who have significant Adverse Childhood Experiences (ACEs)

Drake Giese, BS; Katherine Ernste, BA; Sindu Donepudi BS; Olivia Newgaard B.S; Jeffrey Amundson, PhD; Jeff Fritz, PhD; Shannon Young, Ed.D.

Medical College of Wisconsin - Central Wisconsin (MCW-CW), 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.
- As a child's ACE score increases, school performance declines and long term health outcomes worsen
- To mitigate effects of ACEs, a near-peer mentoring program for K-12 students with elevated ACEs at Enrich Excel Achieve Learning Academy (EEA) in Wausau, WI.
- The goal of the mentoring program is to create a positive relationship
- Through the COVID pandemic, mentoring styles at EEA have varied from in-person, virtual, and hybrid
- To foster more meaningful relationships,, mentor styles were compared based on if mentees felt they had a someone who they could talk to

## Introduction

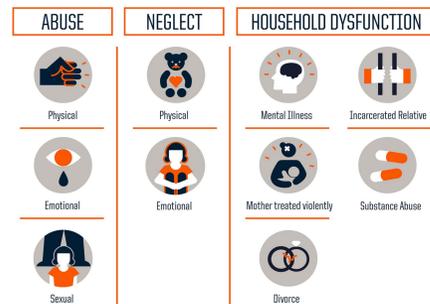


Figure 1A: Three Types of ACEs, Starecheski L, 2015



Figure 1B: Protective Factors that Promote Resilience to ACEs, adapted from the National Child Traumatic Stress Network

### COMPARISON OF ACE SCORES AMONG EEA STUDENTS TO WISCONSIN AND NATIONAL DATA

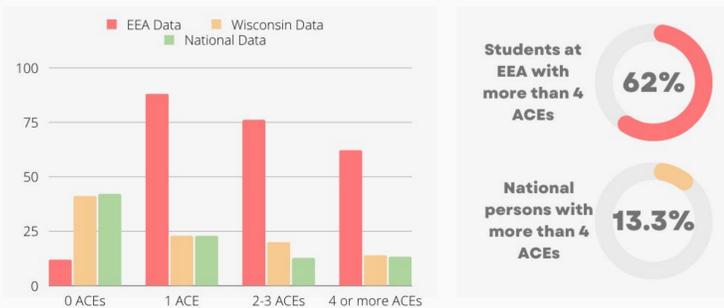


Figure 1C: Data for students with ACEs at EEA vs. Wisconsin and National data

## Methods

- Medical students were matched with a student from EEA to mentor monthly for 1 year. Meetings were at least 30 minutes.
- '21-'22 school year meetings were optional, in-person or online due to the COVID pandemic. Meetings were coordinated between the mentor and mentee via email.
- '22-'23 school year meeting were mandatory in person, and were scheduled at the same time for all mentor/mentee relationships
- For all meetings, mentors were provided a Leader in Me activity guide to foster interactions between the students.
- Goal of establishing a positive relationship
- Mentees surveyed at beginning and end of school year focusing on their support system and comfort seeking help

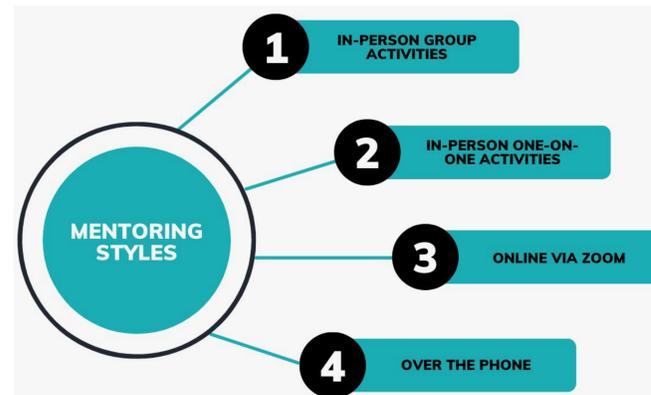


Figure 2: The types of mentoring styles that were implemented in the EEA/MCW Mentoring program

## Results

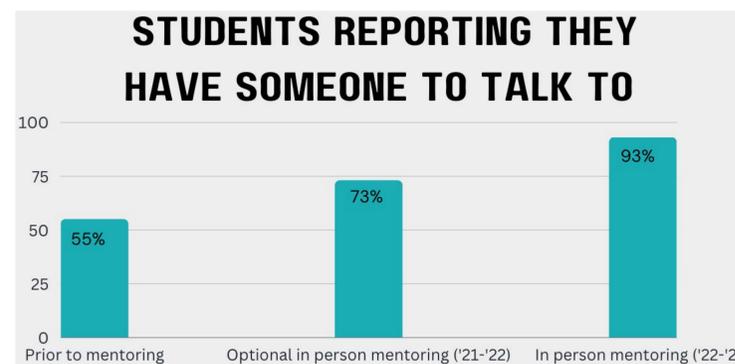


Figure 3: The survey results to the question "Do you feel you have someone to talk to?" prior to mentoring vs for the '21-'22 year vs. the '22-'23 year

## Conclusions

- The mentoring initiative has been successful in fostering positive relationships in students with high ACE scores.
- Increase of 20% of mentees who received in-person scheduled mentoring felt they had someone to talk to compared to optional in-person mentoring
- In-person mentoring more effectively develops relationships
- 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 continuing in-person meetings, and striving to create a more impactful mentoring program

## 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 participating in mentor programs

## Sources

1. Adverse childhood experiences: perceptions, practices, and possibilities. WMJ. Accessed November 10, 2021. <https://wmonline.org/120no3/sherfinski/>
2. Preventing adverse childhood experiences | violence prevention/injury center/fcdc. 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/peps do you have? ACEs Too High. <https://acestoohigh.com/get-your-ace-score/>. Published May 26, 2021. Accessed January 24, 2022.
6. Petruccioli 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)0017-8
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/fcdc. 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 Dr. Jeff Fritz, Dr. Shannon Young for their work on the EEA-MCW mentoring program.

# Phase 1 Evaluation of the Community Component of 414LIFE – Milwaukee's Community Gun Violence Prevention and Intervention Program



Amber Brandolino, MS, Kaylin M. B. Campbell, MA, & Leilani Lopez-Blasini, MS, Carissa W Tomas, PhD, Stephen Hopkins, Cornelius Hall, Jessica Butler, Lynn Lewis, & Constance Kostelac, PhD  
*Comprehensive Injury Center & 414LIFE, Medical College of Wisconsin, Milwaukee, WI*

## Background

**414LIFE** is Milwaukee's **community-** and hospital-based, violence intervention program adapted from **Cure Violence** and **HVIP**



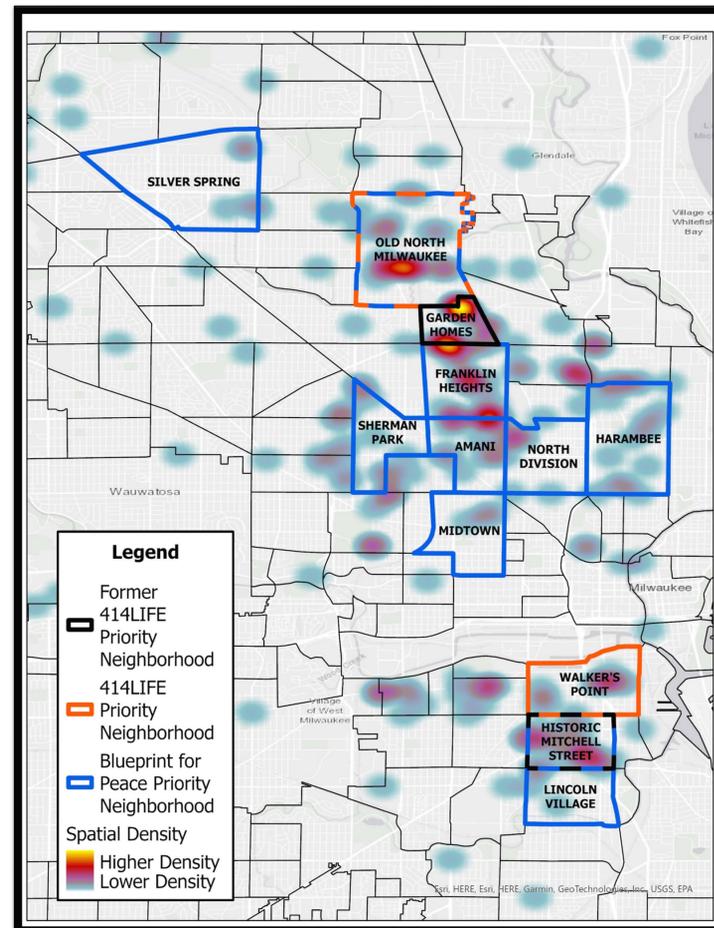
### Priority neighborhoods:

- Garden Homes (Jan 2022 end)
- Historic Mitchell Street (March 2022 end)
- Old North Milwaukee & Walker's Point (current)

## Methods

Program inputs, activities, & mediation data collected since **program start in October 2018 through December 2022** from:

- Cure Violence Global database
- Focus groups, interviews
- Program records



### FULL REPORT



4. Continually analyze data to ensure proper implementation and identify changes in violence.

AND 5. Provide training and technical assistance to [team members].

- a) **Full support from dedicated data & evaluation team.** Monthly reports on case load, success stories, mediations, community activities, city incidents. Annual full-program evaluation process.

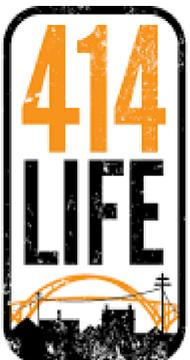
## Results

1. **Detect potentially violent events and interrupt them to prevent violence through trained credible messengers.**
  - a) **257 total mediations** in which most were completely or conditionally resolved (70.4%)
  - b) Staffing ranged from 11-13 roles since program start
2. **Provide ongoing behavior change and support to the highest-risk individuals through trained credible messengers.**
  - a) Most participants were **Black males aged 26.3 years** (average)
3. **Change community norms that allow, encourage, and exacerbate violence in chronically violent neighborhoods to healthy norms that reject the use of violence.**
  - a) **110 community activities**, of which **66.4%** were in priority neighborhoods (*e.g., public education, providing resources, building community partnerships*)

## Conclusion



414LIFE was well implemented as a Cure Violence adaptation.



# Determining Factors that Facilitate vs. Hinder Access and Participation in Treatment for Patients with a Substance use Disorder and Areas for Community Engagement Influence

Alexa Weber, BS and David Nelson, PhD  
Department of Family and Community Medicine

knowledge changing life

## Background

- Medications for substance use disorder (MSUD) uses medications like suboxone, buprenorphine, and methadone to reduce withdrawal and craving symptoms or to block the effects of a substance<sup>1</sup>
- Many patients with a substance use disorder (SUD) face other comorbidities such as untreated mental health diagnoses, trauma, poverty, or housing insecurity<sup>2</sup>
- These challenges create barriers to seeking treatment, like lack of transportation, fear of stigmatization, or time constraints<sup>1-3</sup>
- Implementing MSUD services into a primary care setting, such as a Family Medicine Clinic, attempts to minimize the number of appointments a patient makes and the number of providers they see, potentially resulting in greater engagement in treatment<sup>2,3</sup>

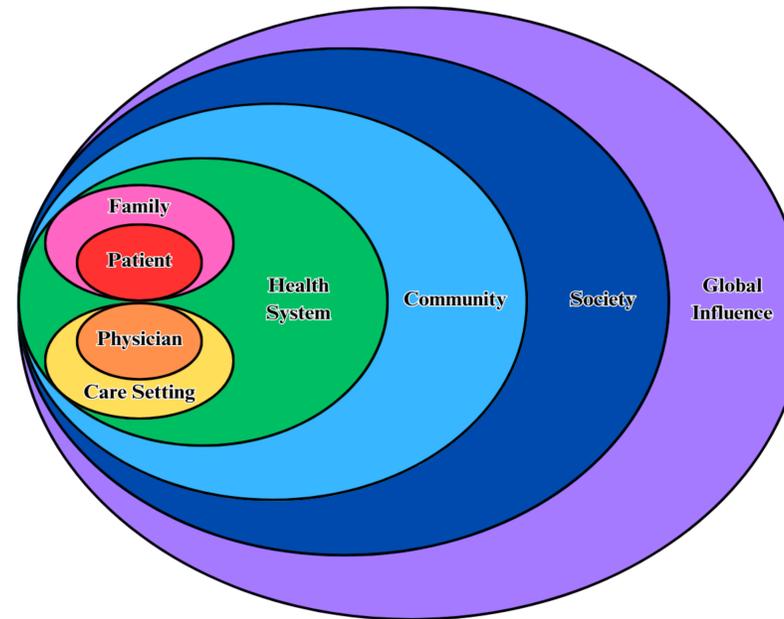
## Specific Aims

1. Determine **barriers and facilitators** to SUD treatment at the following levels of population: patient, family, physician, care setting, health system, community, society, and globe<sup>2-4</sup>
2. Identify how physicians can use **community engagement** to maximize facilitators and minimize barriers<sup>5</sup>
3. Express how to measure **treatment plan or program success**<sup>1,2</sup>

## Methods

- Conducted one-time primary interviews with healthcare workers in addiction medicine (11), social workers who support individuals with an SUD (3), community organizations that serve individuals with an SUD (1), and people in recovery for their SUD (6)
- Transcribed primary interviews to a notepad for patient comfortability and ease of conversation then transferred to computer
- Interpreted results from secondary audio-recorded patient interviews (30)
- Coded responses

## Results



### Barriers (n=51)

- Lack of transportation (28)
- Lack of housing (27)
- Low prevalence of treatment providers (25)
- Surrounded by drug use in social circles (24)
- Past healthcare trauma (24)
- Poverty/lack of employment (24)
- History of trauma/violence/other life stressors (21)
- Poor insurance coverage (20)
- Lack of insurance (18)
- Punitive/abstinence-based physician (17)
- Co-occurring mental health concerns (17)
- Lack of family/social support (15)
- Neurobiology of addiction (15)
- Societal stigma surrounding SUD (15)
- Clinic in inaccessible location (14)
- Stigma in care setting (14)
- Daily dosing of methadone clinic (14)
- Fear of treatment (13)
- Use of incarceration for drug offenses (13)
- Inflexible scheduling (12)
- COVID (12)

### Success (n=15)

- Patient retention (7)
- Patient achieving their goals for treatment (7)
- Increased functionality in patient's life (6)
- Established patient-provider trust (5)
- Patient still alive (5)
- Less harmful drug use (4)

### Facilitators (n=51)

- Intrinsic motivation to quit (28)
- Non-punitive/harm reduction-focused physician (25)
- Longitudinal relationship with provider (23)
- Use of medications for treatment (20)
- Social supports on-site (17)
- Positive patient-provider relationship (16)
- Treatment in a primary care clinic (16)
- Peer support specialists (16)
- Family support for treatment (15)
- Word-of-mouth referral (15)
- Change in environment/social circle (15)
- Welcoming clinic environment (14)
- Flexible scheduling (13)
- Community Engagement (n=21)
  - Educate other providers (12)
  - Partner with community organizations (12)
  - Improve medical school SUD education (10)
  - Educate care team and front desk staff (10)
  - Establish better continuity of care (10)
  - Educate community members (10)
  - Provide resources (8)
  - Advertise SUD treatment to all patients (8)
  - Bring MSUD to the community (8)
  - Advocate for harm reduction-focused policy (8)
  - Advertise treatment services (7)
  - Educate family members (6)
  - Assess all patients for SUD risk (6)
  - Educate patients (6)

## Discussion

- The most barriers to access and engagement in treatment were found at the community level, but so were the most facilitators
- For the barriers listed at the physician level, most professionals noted the lack of physicians providing MSUD, while most patients described a negative experience with a physician
- Among the listed facilitators to SUD treatment, many described the impact a positive patient-physician relationship can have on treatment outcomes
- The most common response to how to use community engagement involved educating those around us to reduce stigma and shift blame away from the patient
- There was no one overwhelming metric for the success of a program, though most described the goals of a patient-centered treatment plan

## Recommendations

- Future studies should differentiate barriers vs. facilitators between professionals and patients to identify if there is a discrepancy
- All patients in this study were being seen for MSUD in primary care clinics, future studies would benefit from interviewing patients receiving treatment within inpatient settings or methadone clinics as well

## Acknowledgements

Thank you to MCW's Department of Family and Community Medicine for funding this project. Thank you to Dr. Nelson for all his incredible support and guidance along the way. Thank you to each of the wonderful professionals who took the time to chat with me as well as connect me to other individuals and resources. Thank you to every patient interviewed who was generous enough to open up and share their story with me.

## References

- <sup>1</sup> Cernasev, Alina et al. "A systematic literature review of patient perspectives of barriers and facilitators to access, adherence, stigma, and persistence to treatment for substance use disorder." *Exploratory research in clinical and social pharmacy* vol. 2 100029. 4 Jun. 2021, doi:10.1016/j.resop.2021.100029
- <sup>2</sup> Farhoudian, Ali et al. "Barriers and Facilitators to Substance Use Disorder Treatment: An Overview of Systematic Reviews." *Substance abuse : research and treatment* vol. 16 11782218221118462. 29 Aug. 2022, doi:10.1177/11782218221118462
- <sup>3</sup> Mackey, Katherine et al. "Barriers and Facilitators to the Use of Medications for Opioid Use Disorder: a Rapid Review." *Journal of general internal medicine* vol. 35, Suppl 3 (2020): 954-963. doi:10.1007/s11606-020-06257-4
- <sup>4</sup> Meurer, Linda N et al. "The urban and community health pathway: preparing socially responsive physicians through community-engaged learning." *American journal of preventive medicine* vol. 41, 4 Suppl 3 (2011): S228-36. doi:10.1016/j.amepre.2011.06.005
- <sup>5</sup> Substance Abuse and Mental Health Services Administration (SAMHSA). *Community Engagement: An Essential Component of an Effective and Equitable Substance Use Prevention System*. SAMHSA Publication No. PEP22-06-01-005. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2022.

# “It Takes a Village”: Reflections from participants after a Hispanic community-based health promotion program

Bethany Korom, Meghan Malloy, Caroline Remmers, Elizabeth Welsch & David Nelson  
Medical College of Wisconsin, Milwaukee, WI, USA

## Introduction

- Physical activity among Hispanic and other minority adolescents in the U.S. lag White, non-Hispanic adolescents<sup>1</sup>
- Culturally informed, community-based health programs have a beneficial impact on physical activity levels<sup>2</sup>
- There is a need for longer term follow up to determine the impact on family and individual habits over time<sup>3,4</sup>
- UCC:** United Community Center. A long-standing organization supporting Hispanic youth and families on Milwaukee’s south side for over 50 years, with a vision to empower the Hispanic community to achieve their fullest potential
- FIT4YES:** Families Inspired Together 4 Youth Empowered to Succeed. Community-based health promotion program introducing new activities, nutrition education sessions, and family-centered retreats for Hispanic students considered overweight and their families

### Study aim:

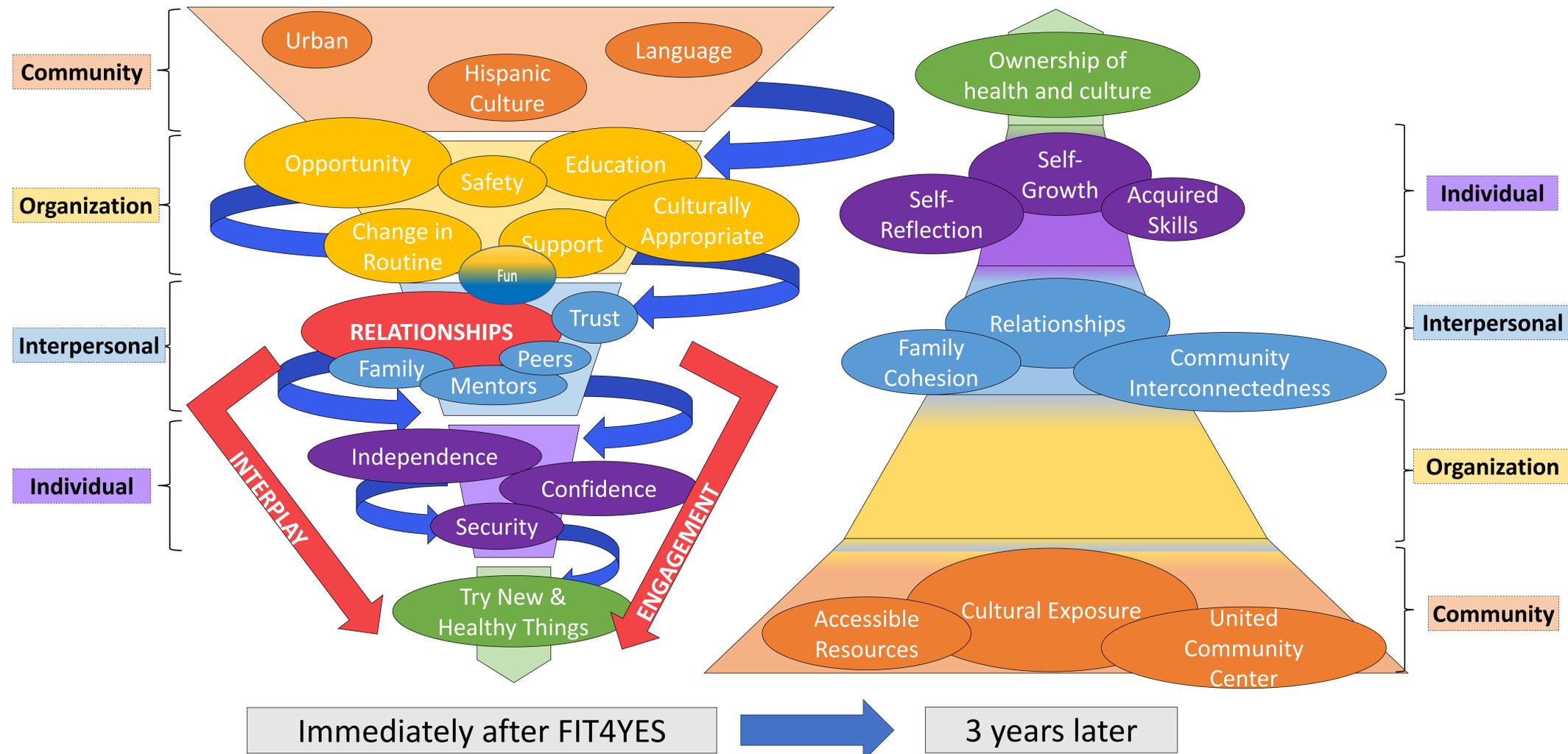
To conduct participant check-ins to explore aspects of FIT4YES that continue to influence family health habits and child development

## Methods

- Community-based focus groups were held in Milwaukee, Wisconsin at the UCC with Hispanic parent participants of the FIT4YES program three years after program conclusion: N=16
- Semi-structured guide of open-ended questions to facilitate discussions
  - How has the program influenced your family?
  - How has it influenced your health and wellness?
  - Tell me what you remember from the program.

- Grounded theory qualitative approach was used to code the transcripts and identify overarching themes
- Team members considered how the previous model (**Figure 1**) needed to be modified to reflect the newly identified themes, leading to the creation of an updated iteration of the model (**Figure 2**)
- Frequent meetings were held with the UCC to present the model and findings for feedback and open discussion leading to updated models

## Findings



**Figure 1: “It’s about being healthy:” Community-Based Health Promotion Model. Version 1.** The creation of this novel model was based on themes that emerged from family interviews that allowed for the success of the FIT4YES program. Our model integrates the levels of the social-ecological model (SEM) with aspects of the FIT4YES program that were necessary to empower participants to engage with healthy behaviors within each level. Each of the factors included are linked to create a funnel effect down to the individual level allowing for behavior change to try new and healthy things.

**Figure 2: “It takes a village:” Community-Based Health Promotion Model. Version 2.** This model integrates the levels of the SEM with three overarching themes and associated sub-themes that emerged from the analysis of the focus group interviews when discussing the lasting impact of the FIT4YES program on family behaviors three years after program conclusion. Each theme is built on top of each other to build towards the highest level: Ownership of health and culture. The absence of themes within the organization level demonstrates the lack of formal programming during this time. Each level’s colors blend to demonstrate the flexibility and integration of each level with the next.

## Conclusions

We propose **three recommendations** for the development of *community-based* health promotion programs:

**1.** Multiple components are needed for the success of a program that must be *dynamic* to meet the community’s needs in a culturally appropriate way.

**2.** The lasting strength of a program is dependent on the strength of the *individual components* that will differ based on the individual organization and the community in which it is based.

**3.** An *anchor institution* is vital for a longstanding effect, allowing consistency and trust within the community.

## References

- Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity. Data, Trend and Maps [online]. [accessed Mar 31, 2023]. URL: <https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>
- Mier N, Ory MG, Medina AA. Anatomy of culturally sensitive interventions promoting nutrition and exercise in hispanics: a critical examination of existing literature. Health Promot Pract. 2010 Jul;11(4):541-54. doi: 10.1177/1524839908328991. Epub 2009 Feb 4. PMID: 19193933; PMCID: PMC3780354
- Gatto NM, Martinez LC, Spruijt-Metz D, Davis JN. LA sprouts randomized controlled nutrition, cooking and gardening programme reduces obesity and metabolic risk in Hispanic/Latino youth. Pediatr Obes. 2017 Feb;12(1):28-37. doi: 10.1111/ijpo.12102. Epub 2016 Feb 22. PMID: 26909882; PMCID: PMC5362120
- Mead E, Brown T, Rees K, et. al.: Diet, physical activity and behavioural interventions for the treatment of overweight or obese children from the age of 6 to 11 years. Cochrane Database Syst Rev 2017

## Introduction

- Our goal was to provide a **hands-on activity to introduce students to the field of microbiology** in an engaging way
- The Milwaukee Public Schools (MPS) STEM Fair is an excellent platform to reach **diverse K-12 students from over 50 schools** in the Milwaukee community.
- The American Society of Microbiology (ASM) awarded the Community Science Grant for use towards an exhibition at the MPS STEM Fair

## Methods

- 1) Attain funding from ASM**
- 2) Design interactive activity for MPS Students**
  - A binocular compound lab microscope and set of slides prepared with an array of intriguing specimens including bacteria, fungi, human tissue, and insects were purchased.
  - Use of the microscope was demonstrated for students, and then students were allowed to select specimens of interest and operate the microscope themselves
- 3) Survey participants to determine impact of the activity**
  - Demographic information was also collected to determine the reach of our impact.
  - To gauge the impact of this activity, students and their parents/teachers were surveyed on their interest in the microscope activity and microbiology.
  - Assessed interest future activities in the classroom

## Results

**>85%** of participants agreed the activity was **engaging and easy to follow**

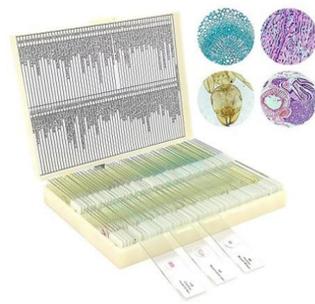


Figure 1. Example of slides viewed by students during the interactive microscope activity.

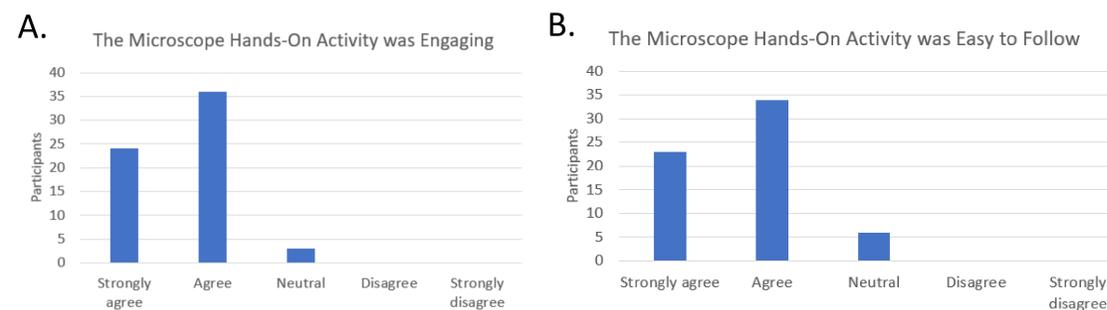


Figure 2. Survey responses of participants regarding (A) engagement and (B) ease of activity.

**>75%** of participants belong to **minority, under-represented populations**

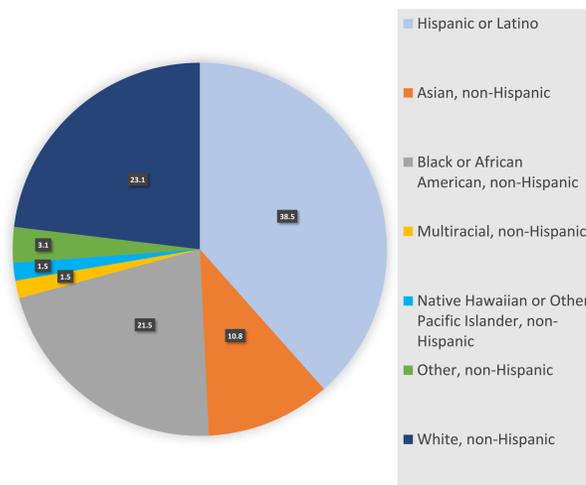


Figure 3. Race and ethnicity of activity participants.



Figure 4. Photos taken during microscope activity.

**4/5** of teachers expressed interest in **coordination of future activities in the classroom**

## Conclusions & Future Directions

- This activity successfully reached a diverse population of Milwaukee area students.
- The majority of participants agreed the activity was engaging and easy to follow.
- This activity put the Medical College of Wisconsin (MCW) on the map for MPS students, specifically sparking an interest in microbiology.
- Using connections gained through this activity, future collaborations can be arranged to continue engagement with MPS students.
- Engaging with students through the MPS STEM Fair may be an effective way to grow interest in MCW programs for middle and high school students.



To learn more about summer programs offered at MCW visit:  
<https://www.mcw.edu/education/pathway-programs>



## Acknowledgments



The Community Science Grant from the American Society of Microbiology, #P00699, was awarded to DDJ. These funds were directly applied to costs of the activity.

We would like to thank the Department of Biomedical Engineering for hosting the exhibitor table at the Milwaukee Public School STEM Fair and sharing this space for our activity.



We would like to thank the Milwaukee Public School District for hosting the MPS STEM Fair and allowing us to showcase this activity.



Community & Cancer Science Network

# A transdisciplinary team approach to understanding cancer disparities in the transgender/nonbinary population



Tobi Cawthra,<sup>1</sup> michael munson,<sup>2</sup> Chandler Cortina,<sup>1</sup> Laura Pinsoneault,<sup>3</sup> Andrew Petroll,<sup>1</sup> Melinda Stolley<sup>1</sup>

<sup>1</sup>Medical College of Wisconsin, <sup>2</sup>Forge, <sup>3</sup>Evaluation Plus

## BACKGROUND

Little data is available about the impact of cancer in the transgender and nonbinary population. However, several known contributors to cancer health disparities- including low SES and discrimination- disproportionately impact transgender and nonbinary (TNB) individuals.

To effectively address, we must engage those with diverse expertise including knowledge of biology, behavior, and the socio-cultural and physical environments.

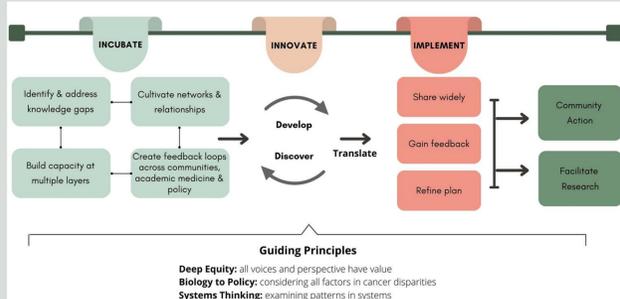
We propose a transdisciplinary (TD) work group with diverse cultural, social and scientific contexts that engages in a collaborative process that

- facilitates openness, respect and trust,
- bridges any gaps in understanding between community and academic partners,
- grows capacity to collaborate, and
- builds knowledge to create a social action and research agenda, including patient-centered and comparative effectiveness research to reduce TNB cancer disparities.

With the Froedtert & MCW Inclusion Health Clinic, a primary and specialty care clinic focused on the LGBTQ+ community, we are adapting our approach from previous work of the **Community and Cancer Science Network (CCSN)**. CCSN, is a transdisciplinary network focused on addressing statewide cancer disparities through authentic and sustainable collaborations between academia and community in Wisconsin.

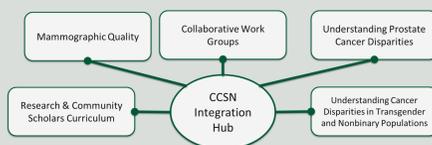
CCSN is grounded in three principles: deep equity, systems thinking, and the integration of biology to policy perspectives.

## CCSN INITIATIVE FRAMEWORK



Now in its fourth year, CCSN encompasses five projects guided and supported through the transdisciplinary framework by a leadership structure, known as the Integration Hub.

## CCSN Projects



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 implement community-based action plans to address breast and lung cancer disparities;
- 4) **Understanding Prostate Cancer Disparities** - workgroup explores the potential causes and solutions for prostate cancer disparities in the state.
- 5) **Understanding Cancer Disparities in the Transgender/Nonbinary Population**

**Aim 1:** Create a TD team with diverse expertise in basic/laboratory, clinical, and population health research and the TNB community members, community-based organizations, and health clinics serving TNB populations.

## TD team with diverse expertise

### Stakeholder map

CCSN STAKEHOLDER NETWORK ANALYSIS  
Mapping of Perspectives for TD Team: Understanding cancer disparities in the transgender & non-binary population

Given: Southeastern Wisconsin, adult

	Community (4) - trans-community voices/centrality of role is in trans community	Provider in Community (3) - centrality of role is in services, clinical care, programming, advocacy/access	Academic/Medicine/ Researchers (4) - centrality of role is in basic, clinical, translational research
Must Have - our team must have these voices	<ul style="list-style-type: none"> <li>• Cancer survivor from trans community/non-binary population and/or caregiver/survivor ("I" or "we" went through this)</li> <li>• Grassroots/Mutual Aid or community-driven support</li> </ul>	<ul style="list-style-type: none"> <li>• NP, MD, DO (gender-affirming care)</li> <li>• Primary Care</li> <li>• One NP</li> <li>• One OB/GYN in gender-affirming care</li> <li>• Oncology</li> <li>• Mental Health provider</li> </ul>	<ul style="list-style-type: none"> <li>• Dual Clinical/Research Role</li> <li>• Primary Care</li> <li>• Oncology</li> <li>• Basic Science</li> <li>• Inclusion Clinic, Endocrinology or Gender-affirming Space</li> <li>• Population/ health services researcher</li> </ul>
Should Have - our team should have these voices, or we will intentionally seek their input	<ul style="list-style-type: none"> <li>• Interfaith</li> <li>• Community-serving organization with focus on trans/non-binary community</li> <li>• Multiple body/health issues</li> <li>• Member of transgender/non-binary population</li> </ul>	<ul style="list-style-type: none"> <li>• Surgeon from MCW/Proedtert</li> <li>• Pharmacist</li> <li>• Health policy/health care policy</li> <li>• Healthcare navigator</li> <li>• Social work (could fill other roles)</li> </ul>	
Could Have - If we can seek this input or voice, we will	<ul style="list-style-type: none"> <li>• Diverse and resilient (specific: Milwaukee community-based non-profit)</li> <li>• Milwaukee LGBT Community Center (specific: Milwaukee community-based non-profit)</li> <li>• Legal/human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Marketing and Communications</li> <li>• Hospital Administration</li> <li>• Billing</li> <li>• Legal/healthcare</li> <li>• Providers outside of SE WI rural issue</li> </ul>	<ul style="list-style-type: none"> <li>• Researchers outside of SE Wisconsin who might be doing similar work</li> <li>• MCW graduate school leadership</li> <li>• MCW medical school leadership</li> <li>• MCW pharmacy school leadership</li> </ul>

TD team: members of the team do not include Leadership team members

**Hosted webinar;** link on community partner website, outreach in newsletter and social media

**Identify researchers** with an interest/work on topic



- ✓ Geographic diversity
- ✓ Age diversity
- ✓ Gender diversity
- ⚡ Racial/Ethnic diversity

### Team leaders:

1 non-profit leader & clinician researcher

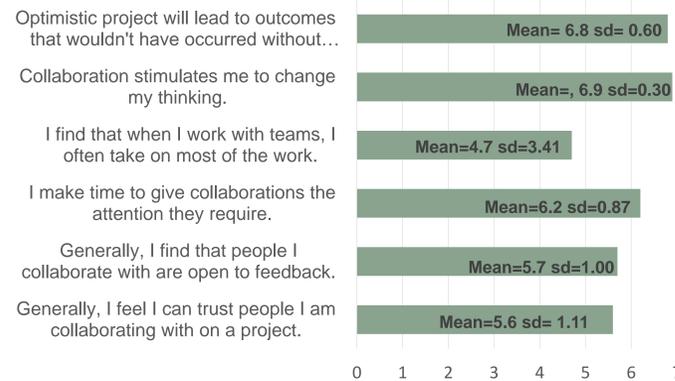
### Team members

4 community members  
4 health care providers  
(1 community provider; 3 from Inclusion Health Clinic)  
3 researchers

## Collaboration Readiness Survey

A 12-Item scale that examines an individual's perceptions and beliefs about collaboration.<sup>1</sup> Adapted from the Transdisciplinary Tobacco Use Research Centers (TTURC) Initiative Researcher Survey.

Sample Collaboration Readiness Items (n=10, range = 1=7)



## FUTURE DIRECTION

- Test tools. Standardize, and create toolbox for future work
- Following development of final plan, determine partners for future collaborations, secure funding, and implement solutions.

### Sources:

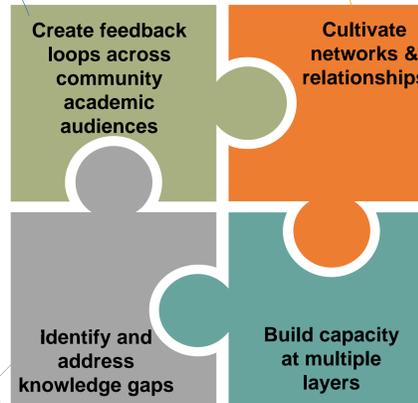
1. Mâsse LC, Moser RP, Stokols D, Taylor BK, Marcus SE, Morgan GD, Hall KL, Croyle RT, Trochim WM. Measuring collaboration and transdisciplinary integration in team science. Am J Prev Med. 2008 Aug;35(2 Suppl):S151-60. doi: 10.1016/j.amepre.2008.05.020. PMID: 18619395.

**Aim 2:** Facilitate engagement across disciplines to co-learn and generate a conceptual model of cancer disparities among TNB populations and co-create a PCOR/CER agenda

## INCUBATE

Host discussion sessions with community and academic audiences; share information with team

Build team cohesion through ice breakers/informal conversations during team meetings



Conduct root cause analysis of cancer disparities with team

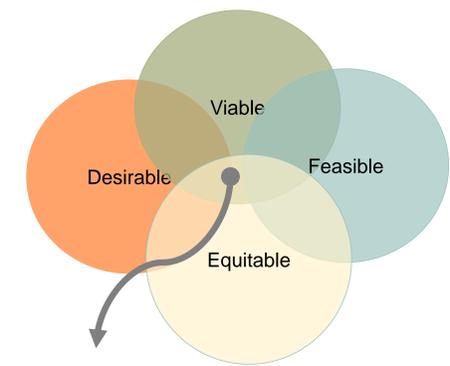
Developing equitable collaboration skills; Sharing resources

## INNOVATE

### Determining a Solution/Strategy

Team uses data produced during Incubate phase to brainstorm solutions.

Potential solutions are assessed through a strategy screen.



Does this "solution" reduce disparities?  
Can this "solution" be implemented in alignment with our values?  
Can we measure outcomes?  
What are the opportunities for innovation and scaling  
Do we have the capacity at all necessary levels to implement this "solution"?  
Do we have a clear understanding of what is required to implement?

## IMPLEMENTING OUR PRINCIPLES:

### Deep Equity

#### Deep Equity:

All voices and perspectives have value

- Sharing leadership
- Frequent introductions including pronouns
- Opportunities for different ways of sharing – verbal, written, anonymous
- Material provided in advance
- Notes and recordings shared after meeting
- Collectively decide group norms

### Integrating Biology to Policy

#### Integration of biology to policy:

Consider all factors

- Engage perspectives not on the team
- Facilitate discussions and connections between team members
- Create and revisit root causes of cancer disparities analysis
- Involve all in the discussion
- Ask questions

### Systems Thinking

#### Systems thinking:

Examining patterns

- Asking why
- Consider and explore connections
- Surface and test assumptions

**Aim 3:** Disseminate the team's social action and research plan in community town halls and in clinical and academic settings.



**Draft Plan:** TD team will incorporate potential social and research solutions in a draft plan



**Town Halls/Grand Rounds:** The plan will be shared and feedback sought; feedback incorporated in final plan.



**Refine Plan:** Final plan will include action items for the team to advance work including securing funding.

This program is funded through a Patient-Centered Outcomes Research Institute (PCORI) Eugene Washington PCORI Engagement Award (EA #25591).

### Disclaimer:

The views, statements, or opinions presented in this poster are solely the responsibility of the author(s) and do not necessarily represent the views of the Patient-Centered Outcomes Research Institute® (PCORI®), its Board of Governors or Methodology Committee

# Food For Thought... Relationship Between Marathon County's 2022 Food Insecurity and Mental Health Indices

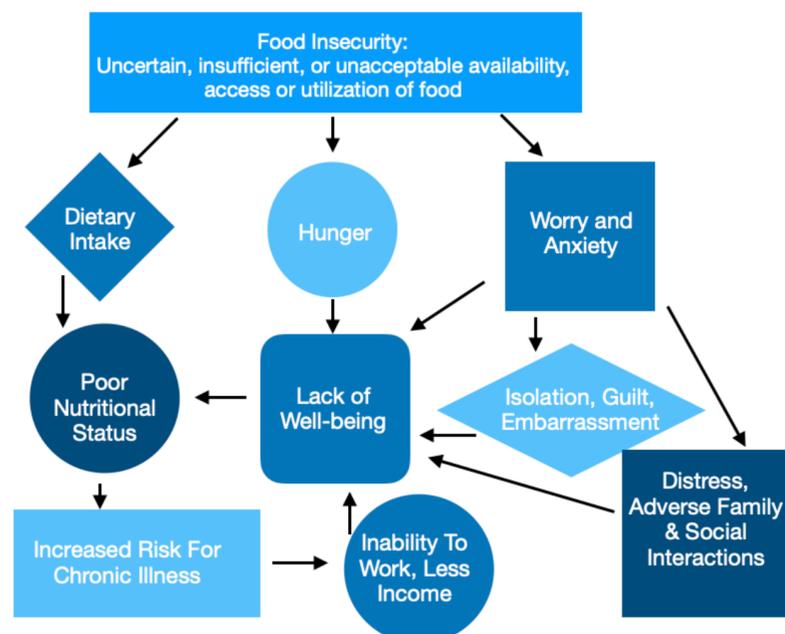
Reilly A. Coombs, MS<sup>1</sup>, Alexandra E. Reischman, MD<sup>2</sup>

<sup>1</sup>Medical College of Wisconsin-Central Wisconsin, Wausau, WI

<sup>2</sup>Medical College of Wisconsin-Central Wisconsin Psychiatry Program, Wausau, WI

## Introduction

Rural communities have fewer food outlets that sell quality, affordable and nutritious foods. These food deserts can leave individuals and families to face food insecurity. Food insecurity has been linked to poor mental health and is suggested to be a risk factor for depression, anxiety, and stress. Individuals in rural communities also face multiple barriers to receiving mental health care and are less likely to access these services.



- Some areas of rural Central Wisconsin lack both resources:
- Five of 72 Wisconsin counties have a “significant shortage” of psychiatrists and 20 have no practicing psychiatrists at all
- During 2015-2019, 19.5% of children, 11.2% of working-age adults, and 3.2% of seniors in Wisconsin lived in food insecure households

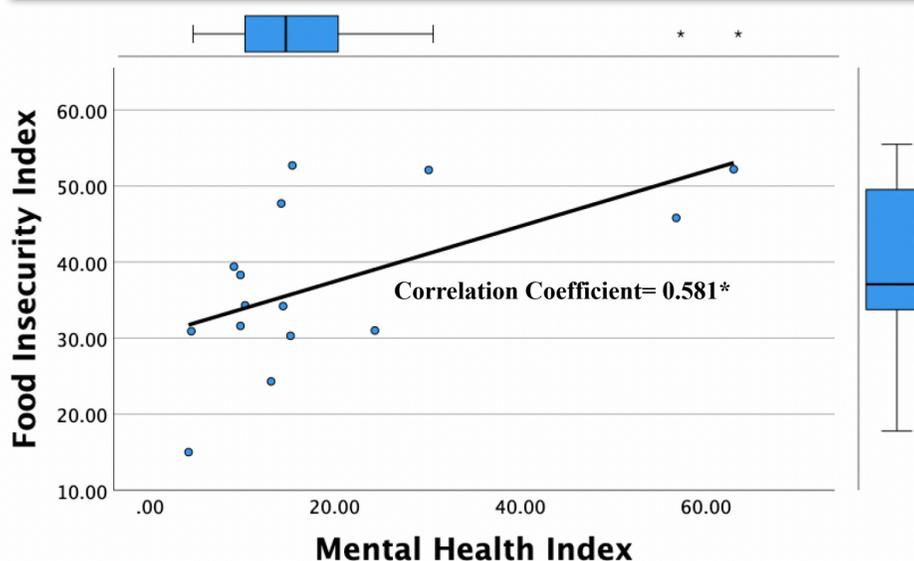
## Objective

The aim of this study was to evaluate Marathon County’s 2022 Food Insecurity and Mental Health Indices and determine their relationship.

## Methods

A cross-sectional analysis was performed on fifteen zip codes in Marathon County using mental health index and food insecurity data from the Marathon County Pulse database. A Spearman’s correlation coefficient (to determine if there was a relationship between the two variables) was used to analyze the correlation between the county’s food insecurity index and mental health index using SPSS software version 29.

## Results



- 3 (20%) zip codes had a food insecurity index value greater than the country's average index value.
- 5 (33%) zip codes had a food insecurity index relative rank of 5 (greatest need) when compared locally.
- 2 (13%) zip codes had a mental health index greater than the country's average index value.
- 2 (13%) zip codes had a mental health index relative rank of 5 (greatest need) when compared locally.
- We found a moderate, positive correlation between the food insecurity and the mental health indices, Correlation Coefficient= 0.581.

## Conclusion + Impact

- There are areas of Marathon County experiencing food hardships and poor mental health. **This study suggests that there is a moderate, positive correlation between food insecurity and mental health in Marathon County.**
- This research will inform community partners and county stakeholders about county wide disparities. With goals to engage the community to determine solutions.
- Further research can be done to better understand the specific disparities and barriers these community's face in accessing mental health care and food.

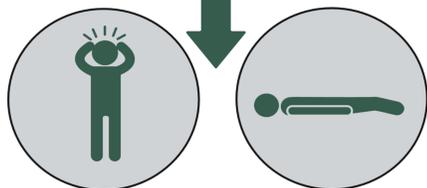
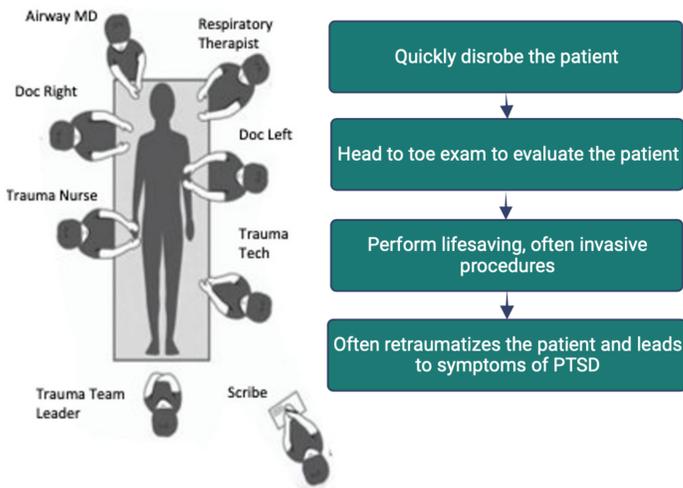


## References

1. Cain KS, Meyer SC, Cummer E, et al. Association of food insecurity with mental health outcomes in parents and children. *Academic Pediatrics*. 2022;22(7):1105-1114. doi:10.1016/j.acap.2022.04.010
2. Ferris-Day P, Hoare K, Wilson RL, Minton C, Donaldson A. An integrated review of the barriers and facilitators for accessing and engaging with mental health in a rural setting. *International Journal of Mental Health Nursing*. 2021;30(6):1525-1538. doi:10.1111/inm.12929
3. Loftus EI, Lachaud J, Hwang SW, Mejia-Lancheros C. Food insecurity and mental health outcomes among homeless adults: A scoping review. *Public Health Nutrition*. 2020;24(7):1766-1777. doi:10.1017/s1368980020001998
4. Pourmotabbed A, Moradi S, Babaei A, et al. Food insecurity and mental health: A systematic review and meta-analysis. *Public Health Nutrition*. 2020;23(10):1778-1790. doi:10.1017/s136898001900435x
5. Rural counties face psychiatrist shortage. Wisconsin Policy Forum. Accessed October 26, 2023. <https://wispolicyforum.org/research/rural-counties-face-psychiatrist-shortage/>.
6. Wisconsin Food Security Project Background. Food Security Project Home. (n.d.). <https://foodsecurity.wisc.edu/background#:~:text=Children%20in%20Wisconsin%20are%20at,lived%20in%20food%20insecure%20households.>

## Background

### Trauma Resuscitation



Strange sensations and emotions  
Loss of control and awareness



Confusion

Perceived Life Threat

Post-Traumatic Stress Disorder (PTSD) affects approximately **25%** of trauma patients



## Methods



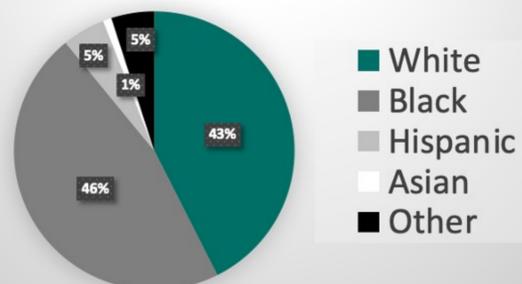
- Survey of 193 trauma patients at Froedtert Hospital
- Surveyed on their experiences from time of injury through admission
- Assessed on level of fear for their life and if they were experiencing symptoms of PTSD

## Results

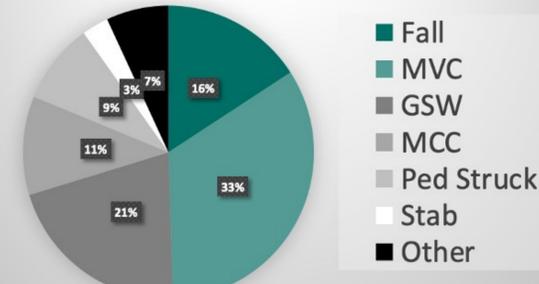
	Number of Patients	% of Patients
Total	193	100
Men	117	61

Average Age: 39

### Race



### Mechanism of Injury

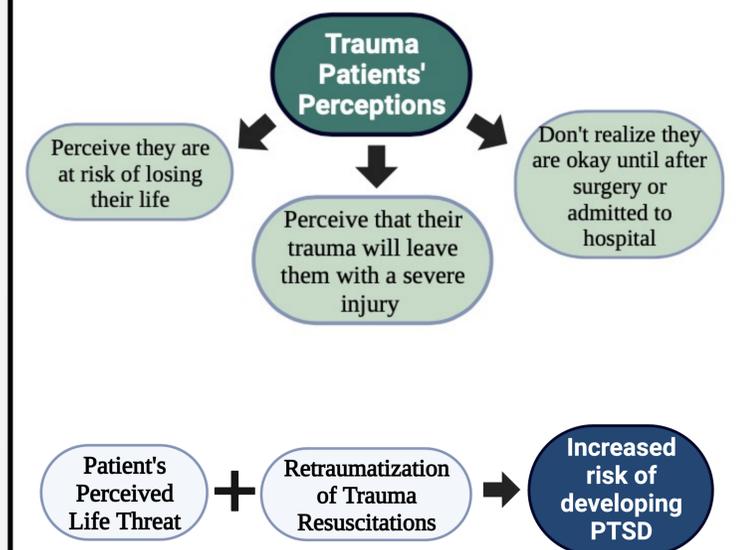


	Number of patients	% of patients
Patients who were frightened they were going to lose their life	128	66
Patients who were believed they were going to be severely injured	169	88
Patients who perceived their injury as severe	71	37
Patients who perceived their injury as very severe	76	40
Patients who endorsed at least one symptom of PTSD	160	83

## Results

Time:	Number of Patients (%)
At scene before any first responders	23 (11.5%)
When EMS arrived/in ambulance	32 (16%)
In the emergency room	45 (22.5%)
After surgery/in inpatient room	75 (37.5%)
Still didn't know they were going survive	6 (3%)

## Discussion



## Future Work

- Implementation of an **Assurance of Safety (AOS)** to provide improved trauma informed care to the community
- Survey and measure patient outcomes **after** implementation
- Analyze provider burnout and the impact of AOS on **burnout**

# A Patient Forward Approach to Enhancing Cancer Survivorship: Development of a Physical Activity Program Intervention to Manage Fatigue in Chronic Myeloid Leukemia (CML) Patients.

Jessica Liu B.S., Kelly Cohesey MOT, OTR/L, Ehab Atallah, MD, Kathryn Flynn, PhD, Whitney A. Morelli, PhD

Department of Physical Medicine and Rehabilitation, Medical College of Wisconsin

## Background

- Fatigue is a frequently reported sequelae of Tyrosine Kinase Inhibitor (TKI) therapy in CML patients<sup>1,2,3</sup>.
- According to the American College of Sports Medicine, cancer survivors should aim for a minimum of 150 minutes of moderate intensity aerobic activity each week<sup>4</sup>
- Despite data illustrating successful fatigue mediation through physical activity (PA), only 8% of cancer survivors meet physical activity guidelines<sup>5,6,7</sup>
- **Therefore, our objective is to better understand the specific needs and preferences of CML patients and their barriers to PA for the creation of a personalized and tailored physical activity program intervention to manage fatigue**

## Methods

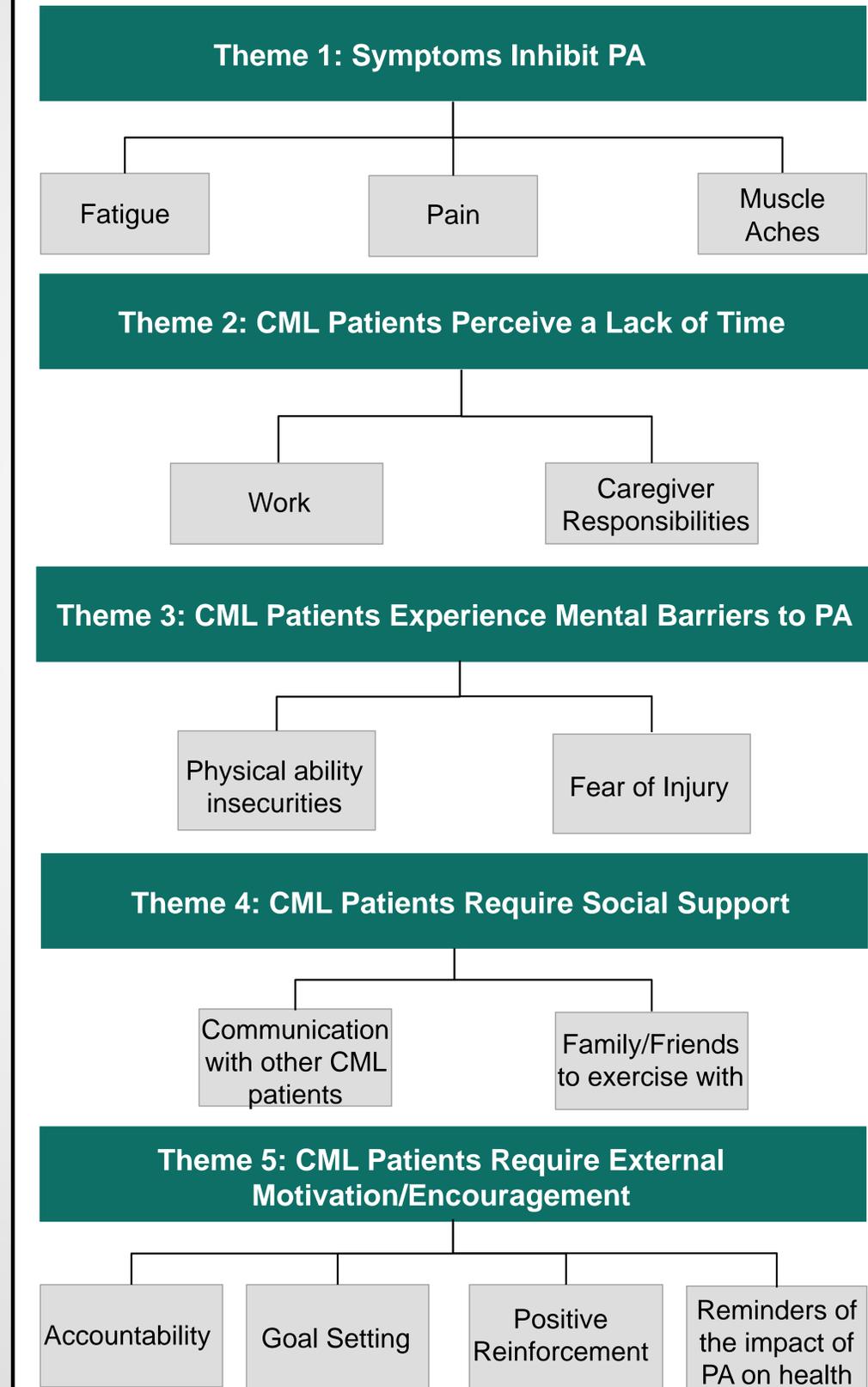
- Patients were recruited through CML advocacy websites, FH-MCW CRDW, and Facebook.
- Eligible participants completed surveys that evaluated their barriers to PA and preferences for a PA program through multiple choice and open-ended questions.
- Participants wore an ActiGraph activity monitor to measure baseline physical activity and answered fatigue symptom prompts using an ecological momentary assessment (EMA) smartphone app over a 7-day period.
- Descriptive statistics are reported to indicate patients' program preferences, physical activity levels, and fatigue.
- Open ended survey questions were evaluated using a thematic content analysis approach.

## Impactful Quote

"Starting my TKI was an intense experience for me. I had so many side effects that made me feel out of touch with my body. Exercising again has felt really empowering and helped me bridge the mind-body connection. It's helped me feel like my body is my own again, and that I have the skills to cope with being chronically ill."



## Results



## Results

- On average, participants (N=32) were 52 ± 14 years old, 50% female, and 92.1% white.
- PROMIS Fatigue questionnaire reports an average t-score of 58±9.7
- 7-day activity monitoring reveals that participants spend 67.5% of their time sedentary, 29.7% in light intensity PA, 2.7% in moderate intensity PA, and no time in vigorous PA.
- The most highly desired features participants want in a PA program include utilization of a wearable activity tracker such as Fitbit or Apple Watch, feedback on their activity level, educational materials on the benefits of exercises and how to perform exercises, activity reminders, goal competitions set either by a computer or by themselves, and the ability to share data with their care provider.

## Conclusions

- CML patients taking TKI's face barriers to performing physical activity.
- The needs and preferences survey illustrates the demand for a personalized approach in successful promotion of physical activity for this population.
- Further, our objective measures of physical activity and fatigue symptoms reveals highly sedentary behavior, to a level that is drastically lower than even other cancer survivor groups<sup>6</sup>.
- Intervention in this population is imperative to reducing fatigue and enhancing quality of life.

## Future Work

- Results from this project will be used to develop an empirically designed and tailored physical activity program for patients with CML taking TKI's to reduce fatigue, enhance survivorship, and increase quality of life.
- Future work will assess the efficacy of the resulting program and explore potential biological mechanisms of fatigue.



# Perceptions of Breastfeeding in The Workplace



Heather Heyrman, M3. Emma Ellis, M3  
Medical College of Wisconsin – Green Bay

## Introduction

The benefits of breastfeeding, for both mom and baby, are endless. For baby, breastfeeding is the best source of nutrients, increases immunity, and helps protect against short and long-term illness. For mom, breastfeeding can increase the bond with the baby as well as decrease the risk of ovarian and breast cancer, type II diabetes, and high blood pressure.

Currently, the Fair Labor Standards Act through the U.S. Department of Labor requires “employers to provide reasonable break time for an employee to express breast milk...Employees are entitled to a place to pump at work, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public.”

Yet 60% of women stop breastfeeding sooner than they have planned. One of the leading causes for women to stop breastfeeding earlier is because of inadequate workplace policies and lack of support from their employers.

## Purpose

The purpose of this study is to investigate perceptions of breastfeeding/pumping in a workplace with an established workplace policy to support breastfeeding mothers.

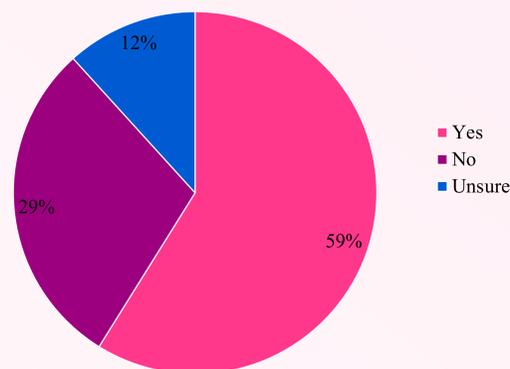
## Methodology

A poster was distributed to each staff member at one of the Encompass Early Education and Care centers. The poster contained information regarding our study and a link and QR code to a Qualtrics survey. The first page of the survey asked a variety of demographic questions. The second page asked questions specific to the participants’ personal perceptions to breastfeeding/pumping in their workplace. These questions focused on if employees have time, a private space, and location to store breastmilk.

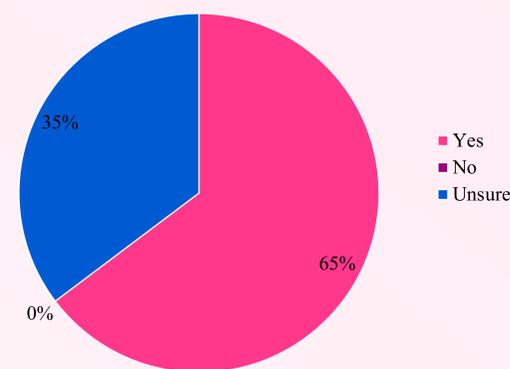
## Results

- We originally reached out to eight area school districts to be apart of the study. Most of these school administrations failed to respond to our invitation to participate. Four school district initially agreed to participate, but ultimately decided participation was not in the best interest of their institution. Only one of these districts had additional workplace policies, beyond the federal law, to support breastfeeding employees in their handbooks we could access. This policy was added a few weeks after we had initially reached out to the district.
- A total of 18 of the 24 employees at Encompass participated in our study.
- All 18 participants were female.
- There were no actively breastfeeding/pumping employees at the time of the survey distribution.

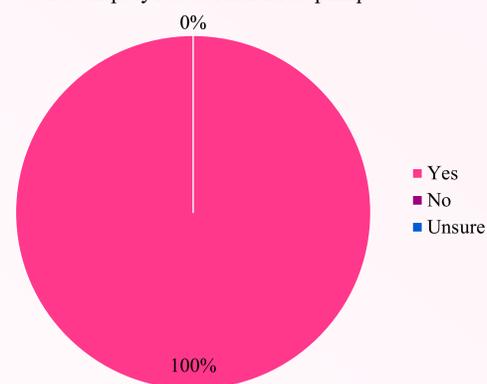
I know of employees that have breastfed/pumped in my workplace



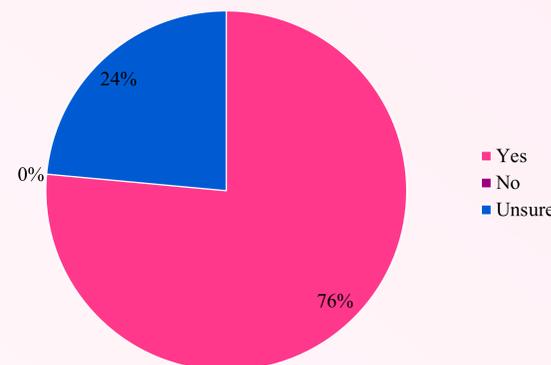
Do you feel employees have time to breastfeed/pump during the workday at your workplace?



Do you feel your workplace has a private space for employees to breastfeed/pump?



Are there locations available at your workplace to store breastmilk?



Where do employees breastfeed/pump?

- Breastfeeding area
- Private area blocked off by sliding screens
- Private area with comfortable seating that is behind a privacy screen

Where do employees store their breastmilk in your workplace?

- Staff breakroom fridge
- Refrigerator in the infant room

## Conclusion

Overall, the perceptions of breastfeeding/pumping at Encompass Early Education and Care center are very positive. Even though only 59% of employees reported that they knew an employee that had breastfed/pumped at their workplace and there were no actively breastfeeding/pumping employees, all the employees knew of a designated location for breastfeeding/pumping. The overwhelming majority knew of a place to store breastmilk and felt like employees had time during the workday to breastfeed/pump.

An established company policy for breastfeeding/pumping can lead to positive perceptions regarding breastfeeding for all employees, not just those who previously or actively are breastfeeding/pumping, and can help create positive workplace environments for those breastfeeding.

## Future Direction

Gather data from a workplace that does not have an additional workplace policy to support breastfeeding women above the federal law to be able to compare data obtained in this study.

## Acknowledgements

- The Brown County Breastfeeding Coalition and Sara Lornson RN, BSN of the DePere Health Department.
- Angela Nackers, Ashley Gumieny, and all the employees at Encompass Early Education and Care.

## Resources

Identifying Barriers and Supports to Breastfeeding in the Workplace Experienced by Mothers in the New Hampshire Special Supplemental Nutrition Program for Women, Infants, and Children Utilizing the Total Worker Health Framework  
Lauer EA, Armenti K, Henning M, Sirosis L. Identifying Barriers and Supports to Breastfeeding in the Workplace Experienced by Mothers in the New Hampshire Special Supplemental Nutrition Program for Women, Infants, and Children Utilizing the Total Worker Health Framework. *Int J Environ Res Public Health*. 2019;16(4):529. Published 2019 Feb 13. doi:10.3390/ijerph16040529

The Breastfeeding and Employment Study (BES) Toolkit by Beth H. Olson, PhD, available at <http://www.hipxchange.org/BreastfeedingAndEmployment>, is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

Brown CR, Dodds L, Legge A, Bryanton J, Semenic S. Factors influencing the reasons why mothers stop breastfeeding. *Can J Public Health*. 2014 May 9;105(3):e179-85. doi: 10.17269/cjph.105.4244. PMID: 25165836; PMCID: PMC6972160.

"Breastfeeding Report Card." *Centers for Disease Control and Prevention*. 31 Aug. 2022. [www.cdc.gov/breastfeeding/data/reportcard.htm](http://www.cdc.gov/breastfeeding/data/reportcard.htm).

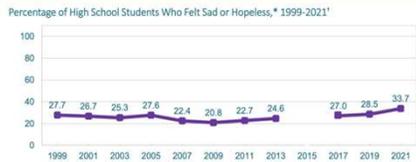
# Suicide and COVID-19: Analyzing Suicidal Behaviors in Youth after COVID-19 Related Deaths in the Community

Karolina Kalata, M1, Sara Kohlbeck, PhD, MPH, Michelle Pickett, MD  
 Medical College of Wisconsin, School of Medicine

## Background

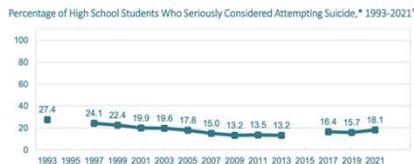
According to the Wisconsin Data and the Wisconsin Suicide Prevention Plan released in 2020, suicide among Wisconsinites increased 40% from 2000 to 2017 where teens and young adults were more likely to have thoughts of suicide than any other age group. This increase in Wisconsin suicides does not consider the recent COVID-19 pandemic and the mental health effects on this population. According to the same data, one in six public high school students in Wisconsin reported suicidal thoughts in 2017, and this group has high incidence of hospitalization for self-harm. Therefore, suicidal behaviors including attempts and ideations need to be considered in this study.

### Depression by Year



\*Using the 12 months before the survey.  
 \*Increased 1999-2001, decreased 2001-2003, increased 2003-2005, decreased 2005-2007, increased 2007-2009, decreased 2009-2011, increased 2011-2013, decreased 2013-2017, increased 2017-2019, increased 2019-2021. Significant linear trends of percent across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).  
 †None available for 2020. This graph contains weighted results.

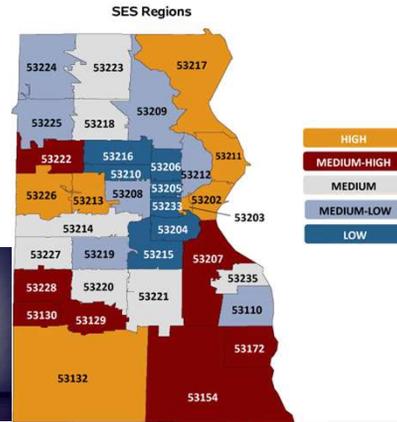
### Suicide Consideration by Year



\*Using the 12 months before the survey.  
 \*Increased 1993-2001, decreased 2001-2003, decreased 2003-2005, decreased 2005-2007, decreased 2007-2009, decreased 2009-2011, decreased 2011-2013, decreased 2013-2015, increased 2015-2017, decreased 2017-2019, increased 2019-2021. Significant linear trends of percent across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).  
 †None available for 1995-2003. This graph contains weighted results.

## Hypothesis

The hypothesis is that, because of the social disruption and neighborhood-level stressors of the COVID-19 pandemic, zip codes in Milwaukee County that experienced disproportionately high rates of COVID-19 deaths will also demonstrate higher rates of suicidal behaviors among youth ages 11 to 24.



## Methods

Data on suicides and COVID-19 related deaths with the associated zip codes will be obtained from the public Milwaukee County Medical Examiner. Data on suicidal attempts, suicidal behaviors and suicidal ideations will be collected from the trauma registry and medical records at Froedtert Hospital and Wisconsin Children's Hospital. The project will demonstrate a conceptual model to account for the impact of death on the individual and community level and how the impact of racial segregation and social health disparities in society can influence outcomes. Linear regression analysis will be conducted to quantify the relationships between the variables and examine an association.

## Expected Outcomes

We expect the project to demonstrate the impact COVID-19 related deaths on youth suicidal behaviors. If certain zip codes in the Milwaukee County are identified to have been significantly impacted by COVID-19 related deaths and exhibit increases in youth suicidal behaviors, we can further investigate the demographics of the zip code regions evaluating for race, ethnicity, and socio-economic factors. Analyzing data on suicidal behaviors among youth ages 11-24 among zip codes in Milwaukee can ultimately be categorized by pre-high school, during high school and post-high school age sets to further investigate the education systems and resources in place during this time. Data collection and extraction is currently in progress.

## Importance

The additional need to assess COVID-19 responses in our communities and what areas in Milwaukee were disproportionately affected will contribute to the ongoing research of the effects of Milwaukee's history of segregation and zip code areas demonstrating the need for additional resources.

## Future Implications

Categorizing suicidal behaviors by zip codes may reveal pandemic. Further analysis of the lack of resources and effective education in these areas. Abstracts, poster presentations and publications may result from this work which can contribute to the ongoing research around the mental health effects of the COVID-19 impact of COVID-19 on certain areas in the Milwaukee County can contribute to the city's ongoing issue of concentrated poverty and health disparities.

## Acknowledgements

I would like to acknowledge mentorship and support from Dr. Sara Kohlbeck, PhD, MPH. I also want to thank the Office of Community Engagement and the Dr. Michael J. Dunn Fellowship for funding this experience.

## References

"Prevent Suicide Wisconsin. Suicide in Wisconsin: Impact and Response. September, 2020.  
 Data Shows Wisconsin Students Face Significant Mental Health and Emotional Challenges." *Wisconsin Department of Public Instruction*, 6 Dec. 2022, <https://dpi.wi.gov/news/releases/2022/youth-risk-behavior-survey-wisconsin-mental-health>.  
 Milwaukee, Health Compass. "Health Compass Milwaukee." *Health Compass Milwaukee :: Milwaukee Health Report*, <https://www.healthcompassmilwaukee.org/files/index/display?id=146057311458936237>.

## The Problem

- Children are victims of violence in our community
- After trauma, stress and emotions can be hard to cope with
- Community partners requested information and hands-on tools to support mental health

## Project Partners

### Project Ujima:

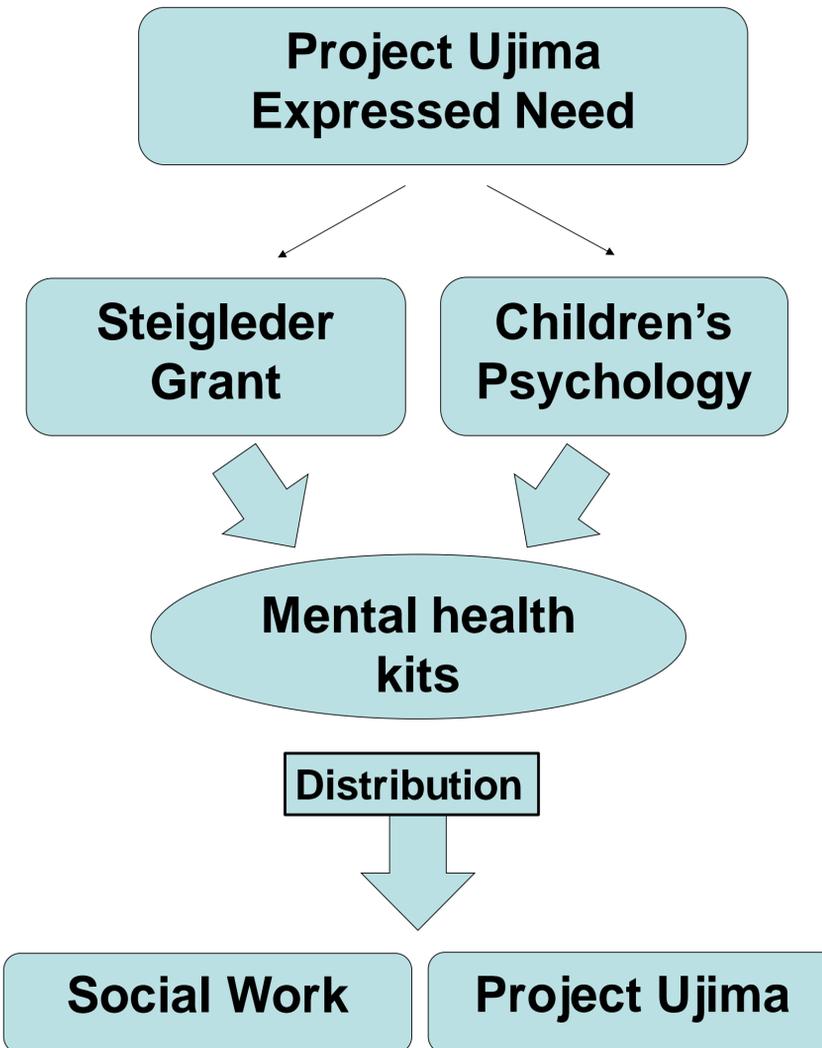
- Community organization, help victims of violence throughout our community
- Services to children and adults
- Provide comfort, advocacy, and support programs during and after hospitalization

### Psychology, Children's Wisconsin:

- Experts in pediatric mental and behavioral health
- Have experience working with families who have experienced violence

### Social Work, Children's Wisconsin:

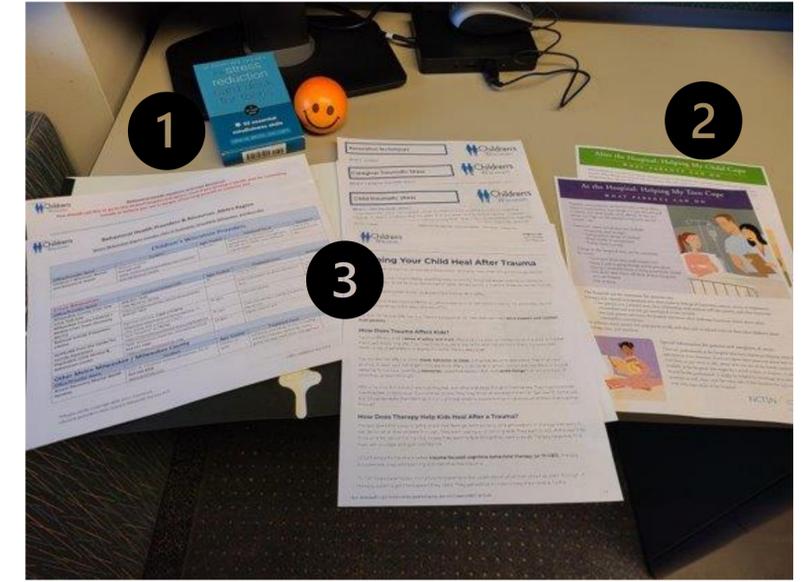
- Assist patients and families with navigating resources



## Reception

- 400 kits were created
- Distribution began August 2023
- 57 kits distributed to date
- Community champions for distribution
- Paired emotional management tools

## Kit Contents



1. Coping strategies card deck with fidget spinner or stress ball
2. Handouts about stress responses and coping strategies for families and children
3. Handouts about mental health crisis resources in the Milwaukee area
4. Added Intimate Partner Violence resources

## Acknowledgements

The authors wish to thank Project Ujima staff, CW social workers, trauma service and Dr. Mike Levas for their collaboration on this project.

Generous funding provided by the Steigleder Grant for Community and Global Health in Pediatric Critical Care Medicine.

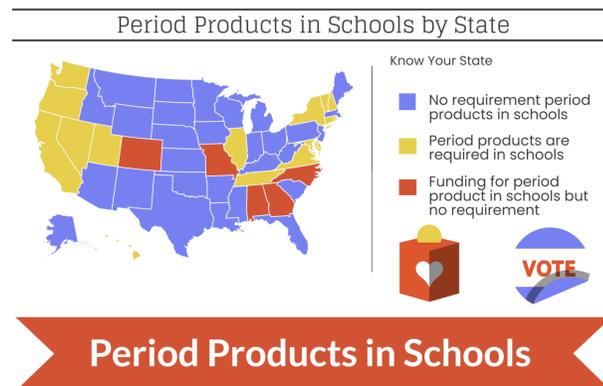
## Background

### Period Poverty Definition

A general term used to describe the menstrual health needs a woman lacks, such as access to clean hygiene products and safe and private facilities to use the products<sup>1</sup>.

### Fight against Period Poverty in Other States

16 states across the US have mandated free access to menstrual products in schools and other public places<sup>2</sup>.



### Fight against Period Poverty at John Muir

2021 - 2022 School Year

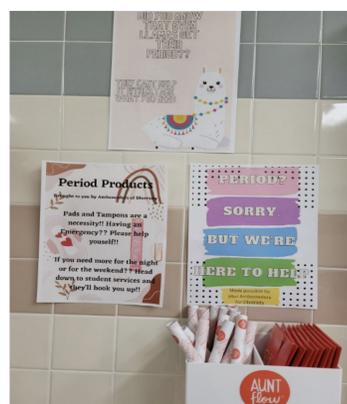
Ambassadors of Diversity assessed the quality of pre-existing menstrual product dispensers. Findings included non-functional dispensers and expired products. There were only 2 functional dispensers in the entire school that had non-expired products.



Ambassadors of Diversity presented their findings to John Muir administration.

2022 - 2023 School Year

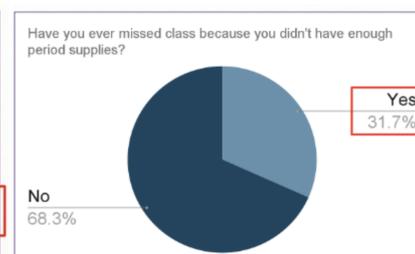
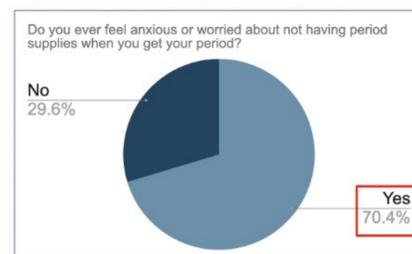
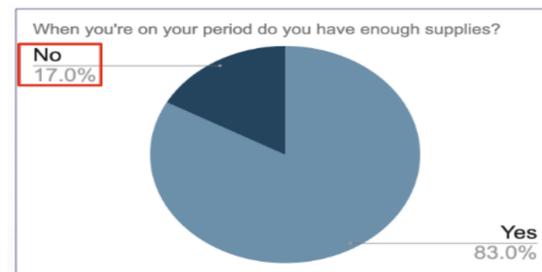
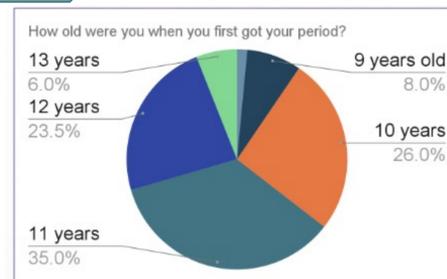
Ambassadors of Diversity implemented a pilot program where free menstrual supplies were offered in all female and gender-neutral restrooms. The company Aunt Flow was used.



## Methods

A Qualtrics survey was sent to middle school students who identified as female. The survey aimed to assess the extent of period poverty at the school and its impact on mental health and class attendance.

## Results



### Quotes from Current John Muir Students

"I get lazy and I usually forget stuff sometimes, and I have to ask people for quarters in the school bathroom when I forget"

"I think It would be a great idea to make sure we have period products in the bathrooms in case of emergencies"

"I know this has happened to other people and I want to make the situation better"

"Why can't menstrual products be free because many people get their period but they can't afford it because of food and bills for their house"

"Girls need extra supplies in the bathroom, it is really stressful when your on your period and don't have supplies, having supplies in the bathroom would be really helpful"

## Conclusions

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

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

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

All findings have been shared with the United Way of Wausau. This included one presentation to current United Way employees and another presentation to other individuals affiliated with the United Way and bettering the Wausau area.



## Future Directions

Continue conversations with Wausau School District throughout the 2023 – 2024 school year about implementing free period products in additional schools.

Recruit additional Medical College of Wisconsin- Central Wisconsin students to continue our work addressing Period Poverty in the Central Wisconsin area. Once new students have been recruited, advise students on how to attempt to expand the program to additional school districts.

Continue conversations with United Way about addressing Period Poverty within the Wausau and surrounding areas.

## Resources

Cardoso, L., Scolese, A., Hamidaddin, A., & Gupta, J. (2021). Period poverty and mental health implications among college-aged women in the United States. *BMC Women's Health*, 21(1), 1-7. DOI: 10.1186/s12905-020-01149-5

Period products in schools - alliance for period supplies. Alliance for Period Supplies - It's that time. (2023, February 3).

Retrieved March 3, 2023, from <https://allianceforperiodsupplies.org>

# Immersing into the Community: How Community Engagement Can Support an Understanding of the Social Determinants of Health

Kristine Burke, MPH, MSW; Sarah O'Connor, MS; Rebecca Bernstein, MD, MS; David Nelson, PhD, MS; Leslie Ruffalo, PhD, MS; Bryan Johnston, MD; Staci Young, PhD  
Medical College of Wisconsin

## Introduction

The Office of Community Engagement (OCE) supported the Community Engaged Scholars Immersion Program, an opportunity for researchers, clinicians, and community-based professionals interested in holistically understanding the Social Determinants of Health (SDOH). Individuals involved in their community through any form of civic participation provide direct benefits to the community [1].

SDOH continue to be a hurdle for health in the United States [2]. However, formal civic participation opportunities that focus on SDOH are limited. The Community Engaged Scholars Immersion Program was designed to fill this gap.

## Methods

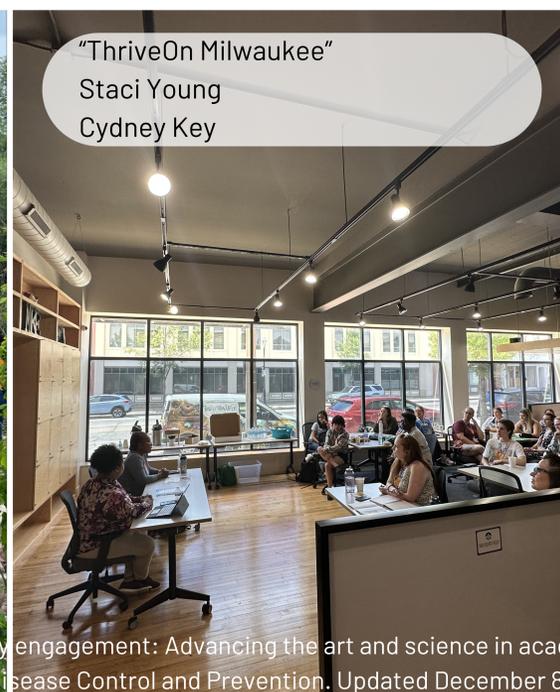
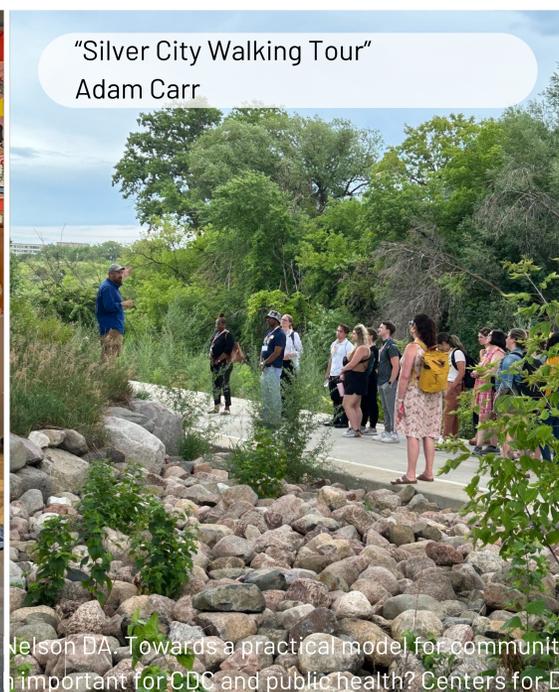
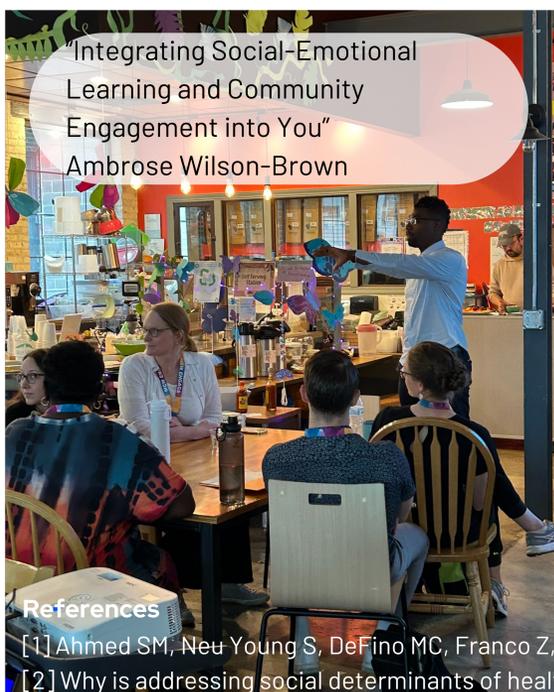
- OCE hosted a 3.5 day immersive experience for participants interested in community engagement
- Instructors were community partners with real-world experience and MCW faculty
- Participants completed daily surveys and at the end of the week participated in a focus group to discuss how the program impacted their learning and competency in understanding and researching SDOH.

## Results

- 16 participants in 2022 and 23 participants in 2023
- 100% of the survey respondents (n=21) found the program worthwhile
- Participants stated that learning about SDOH was enhanced by hearing real stories and practice methods from actual community partners
- All participants stated they learned something during the immersion program that could be used in practice

## Conclusion

This study supports that an immersive educational experience influences a practitioner's ability to understand and explore SDOH effectively.



### References

- [1] Ahmed SM, Neu Young S, DeFino MC, Franco Z, Nelson DA. Towards a practical model for community engagement: Advancing the art and science in academic health centers. *J Clin Transl Sci.* 2017;1(5):310-315. doi:10.1017/cts.2017.304
- [2] Why is addressing social determinants of health important for CDC and public health? Centers for Disease Control and Prevention. Updated December 8, 2022. Accessed October 25, 2023. <https://www.cdc.gov/about/sdoh/addressing-sdoh.html>

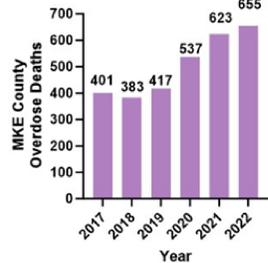
# Understanding Variation in Drug Overdose Mortality Across Diverse Communities in Milwaukee County

Poster #67

John Mantsch<sup>1</sup>, Rina Ghose<sup>2</sup>, Peter Brunzelle<sup>3</sup>, Constance Kostelac<sup>1</sup>, Cassandra Laibly<sup>1</sup>, Courtney Geiger<sup>4</sup>, Madeline Campbell<sup>2</sup>, Fahimeh Mohebbi<sup>2</sup>, Amir Forati<sup>2</sup>

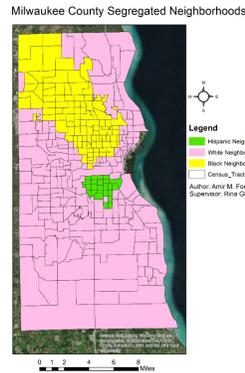
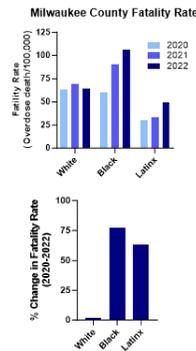
<sup>1</sup>Medical College of Wisconsin, <sup>2</sup>University of Wisconsin-Milwaukee, <sup>3</sup>Project WisHope, <sup>4</sup>City of Milwaukee Health Department

## Introduction

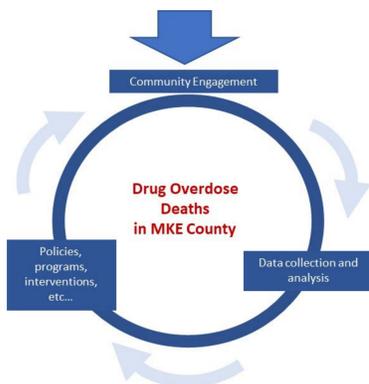


2022 incidence rate of 70 per 100,000 –over twice than that of the Wisconsin and among the highest in the U.S.

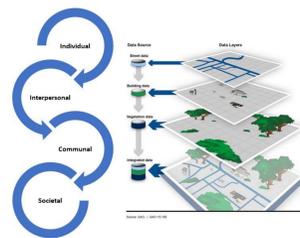
**MKE County currently has the 8<sup>th</sup> highest overdose fatality rate in the U.S.**



## Methods



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

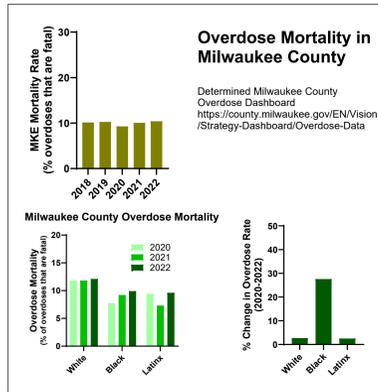


GIS: geospatial information systems

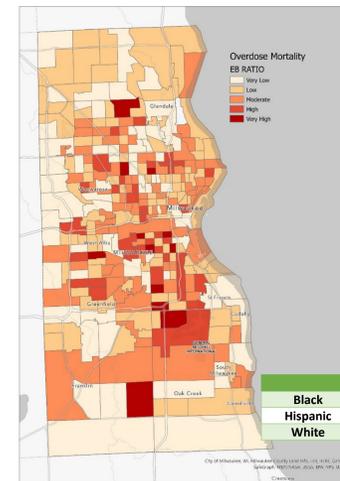
- We first examined overdose mortality (rate of overdoses that are fatal) using data available via the Milwaukee Overdose Dashboard
- Using incident reports and mortality data from the Milwaukee Medical Examiner and Office of Emergency Management from 2018-2021 we defined overdose mortality ratios across Milwaukee at the census tract level (after cleaning/preprocessing the data: 1,985 fatal and 17,476 nonfatal overdoses)
- To identify neighborhoods displaying higher mortality than predicted, we use a machine learning-based approach (Integrated Nested Laplace Approximation) to define standardized mortality ratios (SMRs) for each tract.
- Using socioeconomic and demographic data obtained from the U.S. Census Bureau's website (census.gov) we examined differences across communities defined according to high or low SMRs.
- Geospatial and spatiotemporal Time-Space Cube analysis was implemented to examine trends in overdose numbers in Milwaukee communities. Hotspot/coldspot communities were defined and socioeconomic/demographic differences were identified.
- A multiscale modeling approach (multiscale geographically weighted regression; MGWR) was used to provide a comprehensive and robust analysis of opioid overdose death determinants, explain how geospatial patterns vary across scales across Milwaukee County in 2019, and examine the differential influence of factors locally, regionally, and globally.
- We subsequently examined how associations varied with the racial/ethnic composition of communities by dividing Milwaukee County into White-majority, Black-majority, and Hispanic-majority regions according to census data and conducting separate, independent modeling processes.
- Community context was obtained through virtual (Zoom) engagement (two 90-min calls) of peer network members from Project WisHope, SE Wisconsin's largest peer support organization.

## Results

1. There are racial disparities in overdose mortality in Milwaukee County



2. Overdose mortality rates vary greatly across census tracts in Milwaukee County (2018-2021)



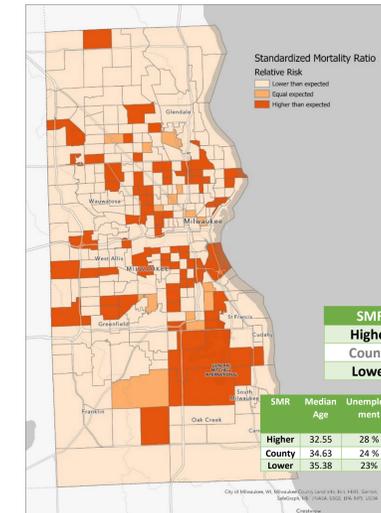
Mortality Category	Average Mortality
Very low	4.61 %
Low	8.40 %
Moderate	14.97 %
High	20.63 %
Very High	26.48 %

Spatial Empirical Bayesian Shrinkage SEBS and Jenks Natural Breaks Classification were used to calculate Excess Risk Factors (ERFs) for overdose mortality and create a map of overdose mortality in Milwaukee County based on 5 classes of SEBS ratios

	2018	2019	2020	2021
Black	12.68 %	13.00 %	9.99 %	12.16 %
Hispanic	14.39 %	21.03 %	13.72 %	15.46 %
White	11.37 %	11.39 %	11.25 %	11.79 %

Mortality Rates in Racial Majority Census Tracts

3. Standardized Mortality Ratios (SMRs) for Milwaukee County Census Tracts



INLA Bernardinelli modeling was used to calculate relative risks (SMRs) and expected overdoses across Milwaukee accounting for the complex spatial and temporal patterns. An SMR of 1.0 indicates that the observed mortality is the same as expected, while an SMR >1.0 suggests a higher risk, and an SMR <1.0 indicates a lower risk than predicted.

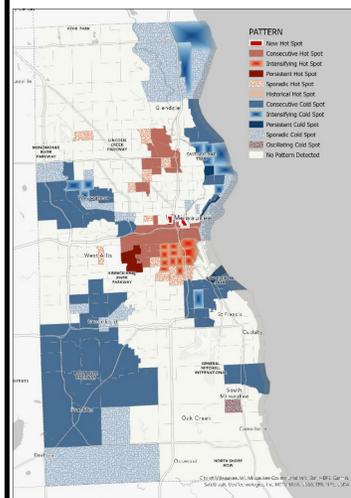
Demographics of Communities With Higher or Lower Than Expected Overdose Mortality Risk

SMR	White	Black	Hispanic
Higher	44 %	34 %	17 %
County	53 %	30 %	13 %
Lower	56 %	29 %	11 %

	SMR	Median Age	Unemployment	Below poverty level	Educational Attainment	Per Capita Income	Mental Health	Physical Health	Incarceration Rate
Higher	32.55	28	28 %	13%	\$21662	24%	26%	4.4%	
County	34.63	24	22%	19%	\$26885	22%	25%	4.0%	
Lower	35.38	23%	20 %	21%	\$28754	21%	24%	3.9%	

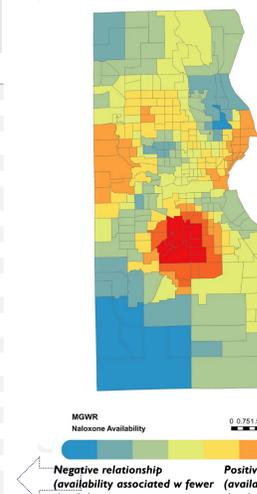
4. Identification of overdose hotspot communities in Milwaukee County



To identify and delineate distinct spatiotemporal patterns of overdoses, Time-Space Cube analysis was implemented. Demographics of hotspot/coldspot communities are provided below

	Consecutive Hot Spot	Sporadic Hot Spot	Intensifying Hot Spot	New Hot Spot	Consecutive Cold Spot	Milwaukee County
White	29.87%	37.54%	38.31%	61.18%	86.81%	55.67%
Black	52.72%	41.77%	9.95%	28.14%	3.53%	30.64%
Asian	3.59%	2.71%	1.75%	4.39%	3.80%	4.09%
American Indian and Alaska Native	0.43%	0.64%	1.28%	0.56%	0.64%	0.56%
Hispanic or Latino (of any race)	23.47%	35.11%	71.48%	6.68%	8.62%	14.63%
born outside the U.S.	3.46%	3.52%	13.42%	1.57%	1.14%	2.34%
Households with an Internet Subscription	68.33%	69.93%	65.68%	76.45%	87.50%	79.70%
Single-parent Households	52.97%	48.01%	46.59%	66.40%	22.27%	40.75%
Homeownership	24.61%	28.72%	23.38%	6.45%	58.57%	42.72%
Median Household Income	\$35,812	\$35,219	\$30,824	\$39,001	\$74,446	\$52,486
Per Capita Income	\$19,736	\$16,873	\$14,233	\$18,121	\$40,543	\$28,823
Families Living Below Poverty Level	29.22%	30.24%	36.02%	40.75%	4.83%	16.93%
Poor Physical Health: 14+ Days	17.37%	17.15%	18.63%	10.80%	10.40%	13.61%
Self-Reported General Health Assessment: Poor or Fair	29.35%	29.53%	34.74%	17.00%	13.29%	20.82%
Adults without Health Insurance	23.09%	25.89%	36.62%	16.40%	9.75%	16.22%
Adults Ever Diagnosed with Depression	20.09%	20.38%	21.21%	22.25%	20.17%	20.19%
Poor Mental Health: 14+ Days	19.48%	18.90%	20.37%	21.05%	12.60%	16.10%
Renter-occupied housing units	68.16%	65.09%	74.28%	93.66%	38.72%	53.13%
Median age (years)	30.47%	30.29%	28.77%	24.55%	39.84%	34.63%
Percent of Households Divorced	10.57%	10.52%	8.05%	6.55%	10.69%	10.77%
Full-time Employment	36.06%	40.15%	40.51%	18.46%	60.51%	48.91%
Educational Attainment: Retires Spending 30% or More of Household Income on Rent	9.01%	6.23%	4.68%	13.75%	31.44%	19.26%
	60.63%	63.46%	58.86%	60.40%	41.43%	51.55%

5. Naloxone availability is associated with reduced overdose deaths in White but not Black or Hispanic MKE communities



Examining Opioid Overdose Deaths across Communities Defined by Racial Composition in Milwaukee: a Multiscale Geographically Weighted Regression Approach

Variable	Race/Ethnicity
Age	Hispanic: White, Black
Crime rate	Hispanic: White, Black
Inequality of Household Income	Hispanic: White
Opioid availability	White: Black
Households with young kids	White: Black
Disability rate	White: Black
Neighborhood stability	Hispanic: Black
Access to healthcare	Hispanic: Black
Population density	Hispanic
Alcohol availability	Hispanic
Naloxone availability	White
Medically underserved areas	White
Incarceration rate	White
College enrollment	Black
Public health	Black

MGWR Naloxone Availability. Legend: Negative relationship (availability associated w fewer deaths), Positive relationship (availability associated w fewer deaths).

6. Relevant context provided through engagement of peer community members

- Message that fentanyl is in stimulant drug supply (cocaine) and counterfeit prescription opioids is not reaching some community members. Particularly challenging in older Black male community members who are less likely to be polydrug users.
- Stigma remains a significant barrier – common experience of lack of empathy in the medical community
- Need for better integration of members of the Black and Brown community and people with lived experiences (peers) into community resources
- Distrust of health care system, law enforcement, and many community resources.
- Mental health challenges are increasing in some populations: "only time I don't want to die is when I'm high"
- Access to may resources is limited – everything from lack of insurance coverage to transportation.
- Remaining connected following and overdose is critical – there is a very short time window of opportunity and many community members do not have active cell phones or other means of staying connected.

## Next Steps

- Dissemination to community leaders, members, and organizations. Targeted education around harm reduction.
- Development of a sustainable framework for data-guided, community-informed decision making at a neighborhood scale
- Strengthen partnerships with community organizations (e.g., the Social Development Commission) to provide support to Black and Brown Communities in Milwaukee.
- Establish a robust map of resources in SE Wisconsin.

- Focus on mental health
- Need for surveillance testing of drug supply
- Work with practitioners and emergency responders to address stigma in the health care system.
- Work with partners to increase inclusion of Black and Brown community members and people with lived experience in the health care system.
- Expansion of work beyond Milwaukee County.

## Support:

Foundation for Opioid Response Efforts



# Community Engagement Summer Series for Students: A Program Description and Evaluation

Kristine Burke, MPH, MSW<sup>1</sup>; Bryan Johnston, MD<sup>1</sup>; Heidi Keeler, PhD, RN<sup>2</sup>; Leslie Ruffalo, PhD, MS<sup>1</sup>; Sarah O'Connor, MS<sup>1</sup>; Staci Young, PhD<sup>1</sup>

<sup>1</sup>Medical College of Wisconsin

<sup>2</sup>University of Nebraska Medical Center

## Background

To provide an opportunity for medical students to learn about community engagement (CE) and community engaged research (CEnR), the MCW Office of Community Engagement (OCE), in collaboration with the Medical Student Summer Research Program (MSSRP) and the University of Nebraska Medical Center (UNMC), offered a virtual Medical Student Community Engagement Summer Series.

Understanding CE and CEnR is important to address social determinants of health (SDOH) and resulting health disparities [1]. Physicians are more likely to meet the challenges of societal issues and be more effective practitioners when they understand CE [2]. Thus, it is critical that medical education is infused with CE to understand SDOH and address health disparities.

## Methods

A virtual summer series was developed and led by MCW's OCE in collaboration with UNMC.

- Students completed a brief application indicating their interest prior to the start of the series
- Sessions were co-led by an MCW/UNMC faculty member and community partner and focused on principles of CE
- 3 sessions were offered in 2021, an additional 4th session "moving towards residency and career" was added in 2022 and 2023 based on feedback
- Participants were asked to provide feedback via online survey after each session

"I think when we have our medical or research 'hats' on, we come in with a solutions-based approach and forget that what we see as an outsider is likely different from what is actually happening in the community, and our perceived goals for the community may not line up with what they actually hope to achieve."

"I found it helpful to learn more about the medical students projects, how they involved community engagement/partnerships, and how this will impact their residency application process and what elements they will look for in residency."

## Results

- Since 2021, **68** students from MCW and UNMC participated in the series
- Survey response rates varied, with an average of **44%** of attendees responding to the survey
- At least **90%** of respondents **strongly or somewhat agreed** that each session was worthwhile
- **Small group discussions** and **learning from community partners** were noted as highlights of the sessions

### Sessions

Equitable Power and Responsibility

Capacity Building and Effective Dissemination

Strong Community - Academic Partnership

Moving Towards Residency and Career [in 2022, 2023]

## Conclusion

It is important to develop medical students competent in understanding CE principles to expand their ability to impact community health. This program offers a model to do so.

"I thought it was very worthwhile and informative and encouraging. Maybe in the future we could create a channel or platform that connects students with mentors in community engagement!"

## References

<sup>1</sup> Ahmed SM, Palermo AG. Community engagement in research: frameworks for education and peer review. Am J Public Health. 2010;100(8):1380-7.

<sup>2</sup> Goldstein, Bearman. Community engagement in US and Canadian medical schools. Advances in Medical Education and Practice. 2011:43.



# Days of Learning with Back to The Kitchen Series: Bridged Health, Medicine, and Community Engagement to Impact Health Disparities

Yvonne D. Greer, DrPH, RD, CD, Y-EAT Right, Nutritional Consultant for Healthy Living; Kelsey Heindel, MCW-Milwaukee; Kairee Larson, MCW-Milwaukee; David Nelson, PhD, MS, MCW-Milwaukee

## BACKGROUND

The Milwaukee County Organizations Promoting Prevention (MCOPP), a local health promotion coalition, was invited to partner with the Wisconsin Department of Health Services Chronic Disease Prevention Program (CDPP) on a five-year Centers for Disease Control and Prevention 1815 Diabetes and Heart Disease Prevention and Management Grant focused on education and outreach to underrepresented groups.

## OBJECTIVES

- 1) To create virtual spaces for culturally relevant health communication, skill-building, and resource sharing with both the community and clinicians.
- 2) To highlight the many cultural assets within the community that are making positive impacts on health disparities.

## METHODS

Used social media to create health communication programming through:

- **Days of Learning Podcast Series** with guest interviews focused on health, wellness, medicine, community engagement, and how these influence chronic disease risks in our communities,
- **Back to the Kitchen (BTTK) Series** which featured healthy food demonstrations by community partner, Y-EAT Right, posed nutrition reflection questions to viewers, and featured discussions with community health and wellness champions from Milwaukee's diverse communities.

**1,365**  
Podcast  
All-Time  
Plays

**100+**  
Partners  
Involved  
(New &  
Established)

**50+**  
Community  
Organizations  
Involved

Podcast guests and listeners noted that “the podcast was a good use of their time and improved their thinking and behaviors.”



Participants of the Back to the Kitchen Series stated that they “were motivated to change their eating habits, cook more at home, and ensure they have a variety of nutrient-dense foods based on health needs.”



## OVERALL RESULTS

- Increased access to self-measured blood pressure programs and resources in community settings, with a tie to community health worker support.
- Provided nutrition education and healthy food preparation skill-building to patients at risk for prediabetes and hypertension from underserved communities of color, specifically the North and South sides of Milwaukee priority populations.
- Established new community-clinical linkage to promote and refer patients with type 2 diabetes to Diabetes Self-Management Education and Support services or the Healthy Living with Diabetes Program.

**2,652**

Average Views for BTTK Sessions  
(Facebook & YouTube)

### BTTK Evaluation Survey revealed the series motivated participants:

- To make changes in their eating habits (100%)
- Feel better informed about their health and well-being (90%)
- Eat more fruits/vegetables (90%) and whole grains (70%)
- Share session recordings with others (77%)
- Seek more health information (70%)

## CONCLUSION

This project was successful at creating safe, trusting spaces for continued community conversations, knowledge exchanges, and skill-building which fostered bi-directional learning, culturally relevant health communication, and resource sharing.





Community & Cancer Science Network

# Collaborative Work Groups – Authentic Community Collaboration to Reduce Wisconsin’s Breast and Lung Cancer Disparities

Staci Young,<sup>1</sup> David Frazer,<sup>2</sup> Tim Meister,<sup>1</sup> Tobi Cawthra,<sup>1</sup> Laura Pineseault,<sup>3</sup> Felicia Fairfield,<sup>4</sup> Claire Piehowski,<sup>4</sup> Jada Proctor,<sup>5</sup> Kailey Taebel,<sup>5</sup> Melinda Stolley<sup>1</sup>

<sup>1</sup>Medical College of Wisconsin, <sup>2</sup>Center for Urban Population Health, <sup>3</sup>Evaluation Plus, <sup>4</sup>Wisconsin Women’s Health Foundation, <sup>5</sup>YWCA Southeast Wisconsin



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

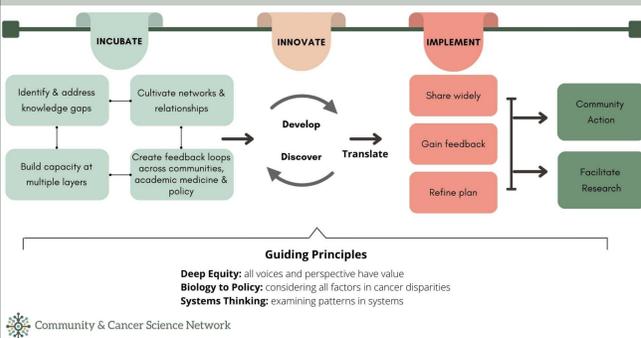
eliminating racism  
empowering women  
**ywca**  
Southeast Wisconsin

## 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 (i.e., 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

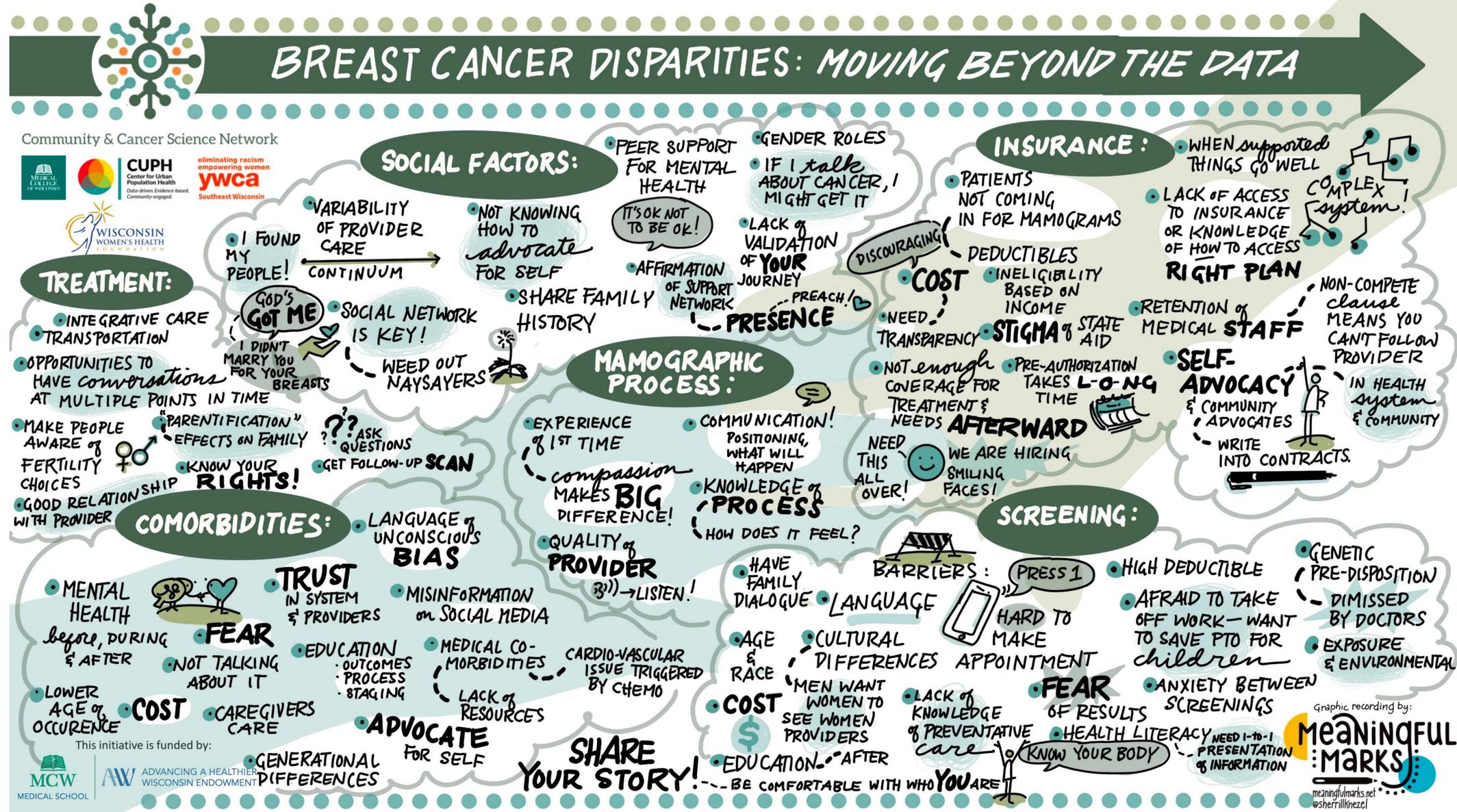


## COLLABORATIVE WORK GROUPS

Collaborative Work Groups (CWG) is a CCSN program that brings researchers and community partners in collaboration to address breast and lung cancer disparities statewide using a transdisciplinary approach to understand cancer disparities and create solutions grounded in CCSN’s three guiding principles.

CWGs have been actively engaged since the Spring of 2022 in several Wisconsin communities working to uncover the complex factors that drive breast and lung cancer disparities at the local level.

Guided by a human-centered design process, the groups are defining the local scope of the problem, integrating diverse perspectives into root cause analyses, and designing solutions that will target the disparities.



## BREAST CANCER WORLD CAFÉ

As part of data gathering to inform community level priorities, three CWGs collaborated to host a World Café event, a methodology for facilitating a large group dialogue, focused on breast cancer disparities.

- The CWGs invited **community members, breast cancer survivors and co-survivors, health care providers, allied health professionals, and breast cancer advocacy organizations** from three different counties to attend.
- Approximately 80 attendees gathered at small tables centered around various topics associated with breast cancer disparities including mammography access and process, social factors, co-morbidities, screening, insurance, and treatment.
- At each table, attendees discussed the topic and recorded their thoughts on a large notepad, and after 20 minutes switched to a different topic table and added on to previous contributions. Following the three rounds, a representative of each table reported the findings to the entire group.
- A graphic recorder captured the discussion, table notes were preserved, and attendees provided feedback on the meeting. Open coding validated the graphic recorder. Results of the World Café provided CWGs with data on community priorities.



## CONCLUSIONS and NEXT STEPS

- A World Café event is an effective methodology for collecting robust data on solutions for multi-county efforts involving diverse, transdisciplinary voices.
- The event demonstrated two key values of the CCSN: reliance on transdisciplinary relationships to nurture collaboration and the prioritization of building capacity with the community to lead local efforts to improve health outcomes.
- CWGs can contribute to eliminating cancer disparities in communities through a human centered design process that integrates diverse sectors with knowledge of biology, behavior, and the socio-cultural and physical environments, and creates an equitable voice for all participants to contribute to designing viable solutions.
- CWGs will leverage the lived experience, knowledge, and insight generated from the World Café event to inform the development of project strategies to implement in the affected communities to reduce breast and lung cancer disparities.

### Introduction

#### Impact of Continuity of Care:

- Continuity of care has been shown to improve long-term health outcomes.
- Uninsured patients are typically unable to receive long-term care and rely on **free clinics to address gaps in their healthcare.**

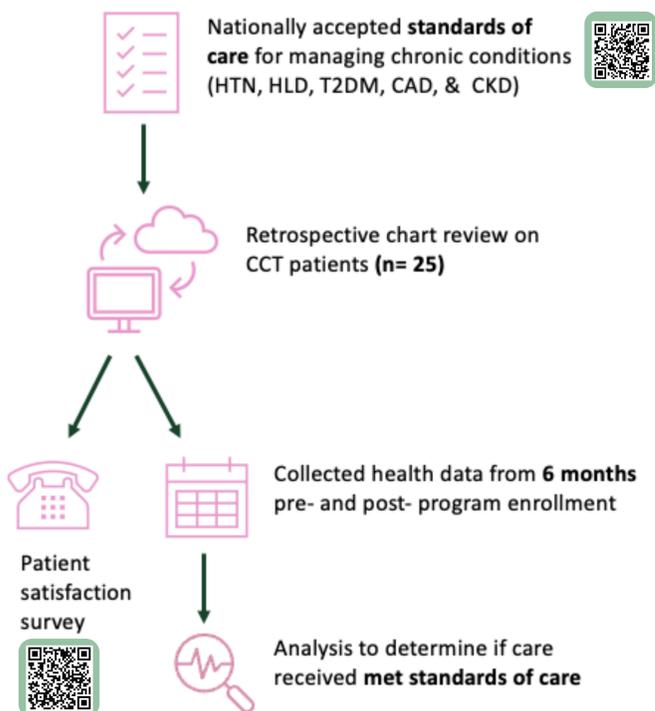
#### Free Clinics and their Patient Population:

- Many free clinics are dependent on a revolving door of volunteers – with a **high-turnover rate** – thus impacting the care this patient population receives.
- The **Saturday Clinic for the Uninsured (SCU)** is a student-led free clinic in Milwaukee serving an **underserved patient population.**

#### Relevance:

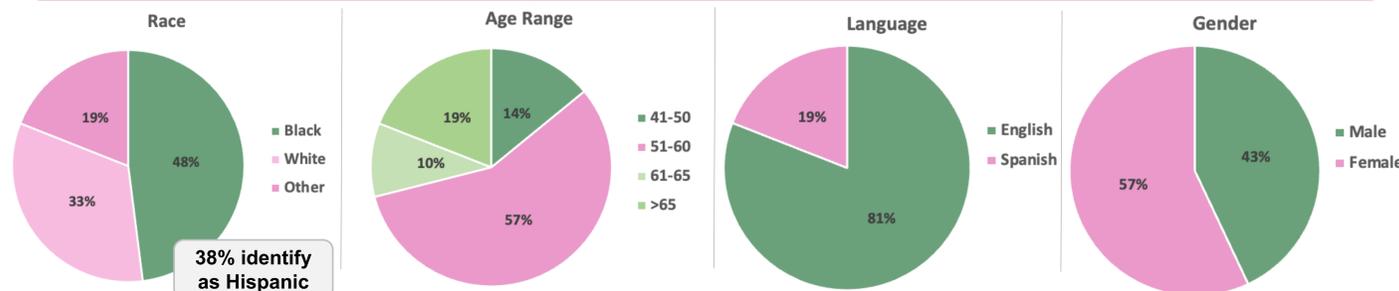
- In order to address this disparity, SCU implemented a **Clinical Continuity Track (CCT)** program for patients diagnosed with multiple chronic conditions. This program **assigns patients to student doctors** with the aim of providing **individualized, patient-centered care.**

### Methods



### Results

#### Demographic Data (n=21)



#### Patient Satisfaction Survey (n=21)

The following questions were answered using a 5-point Likert scale:

1- Strongly Disagree; 2 - Disagree; 3 - Neither Agree/Disagree; 4 - Agree; 5 - Strongly Agree

Survey Statement	Percentage Strongly Agree	Average Likert Score
1. Since being enrolled in the CCT program, I feel that my <b>healthcare needs are better understood</b> by the healthcare team at SCU.	71.4%	4.67 (0.58)
2. Since being enrolled in the CCT program, I feel <b>more comfortable discussing the details of my health</b> and wellness to the healthcare team.	81.0%	4.76 (0.54)
3. Since being enrolled in the CCT program, I feel that the details of my health and well-being are <b>being better addressed.</b>	61.9%	4.57 (0.60)
4. Since being enrolled in the CCT program, I feel more <b>confident in managing my chronic condition(s).</b>	61.9%	4.57 (0.60)
5. Since being enrolled in the CCT program, I am <b>better able to access care</b> , lab and imaging tests, medication, or treatment for my health needs.	71.4%	4.52 (0.58)

**85.7% of respondents** noted that being enrolled in the CCT program:

- Maintained or improved their **medication adherence**
- Helped them make **positive lifestyle changes.**
- Improved the **overall quality** of their healthcare

**Clinical continuity increases patient confidence and satisfaction and is linked with chronic condition healthcare parameters being met.**

#### Health Data Analysis (n = 25)

When comparing patient experiences in the 6 months **prior** to and 6 months **following** CCT enrollment:

#### Chronic Condition Management

Completion of chronic condition (HTN, HLD, T2DM) specific management parameters overall appear to have been **improved or maintained**, with the following exceptions:

- For T2DM:** 54% of patients did not receive a yearly ophthalmology exam
- For HTN:** 65% of patients did not get their HbA1c checked within parameters

#### Clinic Utilization

- 48% increase in clinic visits
- 67% decrease in phone encounters

#### Health Screening Parameters

- Only 11% of female patients due for a **screening mammogram** received a referral.
- Only 25% of male patients who due for a **Prostate Specific Antigen (PSA)** test received a referral.
- Only 47% of patients due for a **Fecal Immunochemical Test (FIT)** received one.
- All patients need to be tested at least once in their lifetime for **HIV, Hepatitis C, and other STDs.** Only 22% of CCT patients had this completed.

### Discussion

- There currently is **no literature** examining differences in the quality of continuity vs non-continuity-based care **in the setting of student-run free clinics.**
- Free clinics are imperative to providing care to underserved populations. However, limitations on resources, funding, and volunteers leads to most patients visiting these clinics to be seen by a **different medical care team at each appointment.**
- The CCT program at SCU **increases patient confidence** in managing their chronic conditions and in the healthcare they receive.
- Completion of healthcare parameters for chronic conditions has either been **maintained or improved upon CCT enrollment.**
- CCT enrollment is associated with an **increase in clinic appointments**, and a **decrease in clinic phone calls.**
- General screening parameters are not met within CCT enrollment, demonstrating an **area for improvement.**

### Future Directions

- This data will be shared with the **CCT Director at SCU** so that we can collaborate on ways to **improve the program** to better serve patients.
- Analysis from the strengths and weaknesses of this program will be used to **inform on future training of student volunteers.**
- We plan to develop **standardized clinic protocols** (labs, imaging, medication, etc.) for managing chronic disease of patients in the CCT program.
- These standards can also be expanded to treating **all SCU patients with chronic conditions.**

### References





# Wellness Wonderland



Sabrina Ali MD, Jeffrey Galloway DO, Tyler Kolstad DO  
Ascension All Saints Family Medicine Residency Program; Milwaukee, WI



## Background

- Untreated mental health conditions have serious implications, including suicide, homicide, and worsening of chronic diseases. This is especially true in underserved populations, such as in Milwaukee. This inspired All Saints Family Medicine Residency to host a mental health fair called "Wellness Wonderland" on August 19th, 2023. The fair targeted the local community which predominantly consists of persons of color with significant barriers to mental health care.

## Methods

- Multiple local businesses and organizations supported this event which allowed it to be free to participants. Numerous stations were setup including mental health resources, art therapy, meditation, yoga, nutrition, breathing exercises, positive affirmations, and fire safety. Participants collected raffle tickets at each station and traded them in for backpacks, school supplies, food, to play carnival games, and to enter a gift card raffle. Pre and post surveys were provided to participants regarding their understanding of mental health, strategies to cope, and connection to physical health.

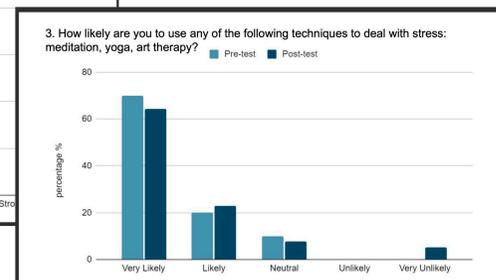
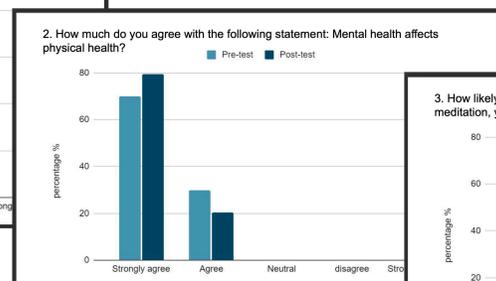
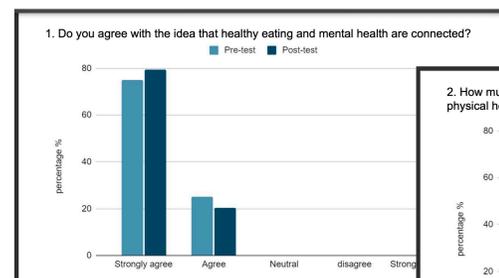


## Discussion

- Participants were engaged, inquisitive, candid about their mental health struggles, and eager to learn coping strategies. Based off the number of community members who participated, as well as the testimonials provided, we consider this event to have reached its goals.

## Results

- Question 1: After participating in various mental health stations, 79% strongly agreed vs 75% prior to participating.
- Question 2: After participating in various mental health stations, 79% strongly agreed vs 70% prior to participating.
- Question 3: After participating in various mental health stations, 64% were very likely vs 70% prior to participating.



## Objective

- The goal of this fair was to de-stigmatize mental health struggles, stimulate healthy discussions, provide mental health resources, teach adults/children how to deal with stress/emotions via an array of techniques, and to have fun. An additional goal was to have at least 100 members of the community participate.



## Acknowledgements



## Who is the family caregiver? Experiences of patients, family caregivers, and healthcare professionals in identifying and integrating the family caregiver during the inpatient hospital discharge process

- Leslie Ruffalo, PhD, MS, Associate Professor, Medical College of Wisconsin
- Kathleen Gale, PhD, Emerging Scholar, University of Wisconsin Milwaukee
- Melinda S. Kavanaugh, PhD, LCSW, Professor, University of Wisconsin Milwaukee

### INTRO

- We investigated the family caregiver component of the discharge process, leading to insights that better support the patients, family caregivers, and members of the clinical care team.

### METHODS

- Semi-structured interviews,  $N = 85$  including 52 older adults, 21 family caregivers, 12 hospital personnel (CNA, RN, PT, OT, administrators, physicians)

### RESULTS

- Family caregivers and older adult patients report confusion, inconsistency, and a lack of preparation for post-discharge activities after a hospital stay, leading to hospital readmissions.
- Hospital personnel report inconsistent communication, a lack of consistent processes, and acknowledge concerns about the lack of preparation and training for patients and their families.

### DISCUSSION

- The disconnect continues at home, leading to hospital readmissions and caregiver burnout.

### FINANCIAL DISCLOSURE

- The researchers acknowledge support from the Advancing a Healthier Wisconsin Endowment of the Medical College of Wisconsin

Family caregivers and older adult patients report confusion, inconsistency, and a lack of preparation for post-discharge activities after a hospital stay, leading to hospital readmissions.



*"...you don't think you're prepared. You don't know what's going to happen. As they age how bad is it going to get?"*

*Family Caregiver*

### Findings

The **current system** of healthcare, public sector, and community must determine how to adapt and change to support older adults and their family caregivers post-discharge.

**Each organization** within the system must determine their role in the post discharge process including the type of services and resources that support older adults and family caregivers.

**Family caregivers and older adults** must influence the discharge process by advocating for their needs:

*"I ended up having to advocate for myself during the hospital stay ... even with pharmacists. I am on a lot of medications because I'm a transplant patient. I told the pharmacist what my regime was. And he completely changed it. I could never figure out what they were doing and why and when. And then it was a problem ... because I had to figure out how I could get back on schedule at home."*

*Patient*



**APHA 2023**  
ANNUAL MEETING & EXPO  
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**CREATING THE HEALTHIEST NATION**  
OVERCOMING SOCIAL & ETHICAL CHALLENGES

# System of Wellness Instruction for Teachers and Teens (SWIFTT): Coalition between Milwaukee Public Schools (MPS), Marquette, UW-Whitewater, and MCW to support K-12 health and physical education teachers

Abbey Stoltenburg, MA, BS<sup>1</sup>; Leslie Ruffalo, PhD, MS<sup>2</sup>; Christopher Simenz, PhD, MS<sup>2</sup>; Carlos Rodriguez<sup>3</sup>; Bruce Dryer<sup>3</sup>; Pamela Hansen<sup>3</sup>; Brian Culp, Ed.D<sup>4</sup>; Courtney Barry, PsyD, MS<sup>2</sup>; Stephanie Morris<sup>4</sup>; Steve Wolff<sup>3</sup>; Chad Michelson<sup>3</sup>; Rodger Masarik<sup>3</sup>; Jordan Janusiak<sup>2</sup>; David Nelson, PhD, MS<sup>2</sup>

<sup>1</sup>Medical College of Wisconsin, <sup>2</sup>Department of Family & Community Medicine, <sup>3</sup>Milwaukee Public Schools, <sup>4</sup>Kennesaw State University, <sup>5</sup>SHAPE America



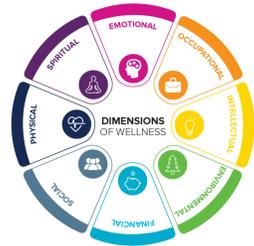
## Background

### Teacher Wellness<sup>1-3</sup>

- Teacher wellness ↔ student wellness
- Improves student academic performance & wellbeing

### Teacher burnout<sup>4,5</sup>

- School stressors → teachers leaving profession
- Teacher wellbeing programs improve distress/burnout, mood, wellbeing, student-teacher relationships and compassion
- Wellness resource: **System of Wellness Instruction for Teachers & Teens (SWIFTT)**



**Figure 1: Dimensions of Wellness.** Eight dimensions of wellness exist. Neglecting dimensions can lead to worsened quality of life, health, and wellbeing.<sup>6</sup>

**Significance:** Online Professional Development (PD) interventions may improve wellness for Health, Physical Education, and Wellness (HPEW) teachers

## Purpose of SWIFTT

To provide Professional Development (PD) opportunities to HPEW teachers on best practices **related to mental health, trauma-informed practice, and wellness in Wisconsin**

## Methods

### Creation of SWIFTT:

- Working team: Milwaukee Public Schools representatives and HPEW teachers (former and current), MCW Public Health researchers, Shape America, teacher training programs
- Online PD resources: designed based on research-backed methods and collaborator input
- Weekly meetings with all SWIFTT partners

### To evaluate SWIFTT:

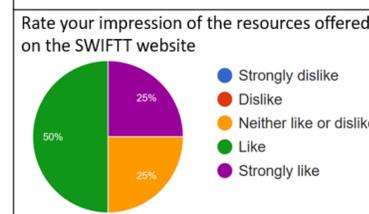
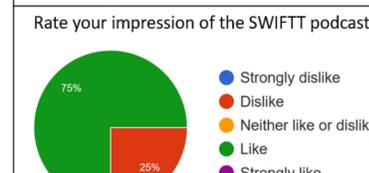
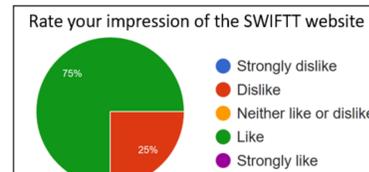
- N=4 teacher reviewers
- Google survey & Interview after ~4 hrs of SWIFTT evaluation
- analysis of survey and interview responses



**Figure 2: SWIFTT website.** SWIFTT website and other resources viewed by Beta testers when evaluating the SWIFTT.

## Results

### HPEW teacher impressions of SWIFTT:



Teaching Background			N=4																																																				
Subject(s) currently teach	Physical Education	50% (2)	<table border="1"> <thead> <tr> <th colspan="3">Demographics Data</th> <th colspan="3">N=4</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Age</td> <td>35-44</td> <td>50% (2)</td> </tr> <tr> <td>45-54</td> <td>25% (1)</td> </tr> <tr> <td>55-64</td> <td>25% (1)</td> </tr> <tr> <td rowspan="2">Gender</td> <td>Female</td> <td>50% (2)</td> </tr> <tr> <td>Male</td> <td>50% (2)</td> </tr> <tr> <td rowspan="2">Employed</td> <td>Full-time</td> <td>100% (4)</td> </tr> <tr> <td>Part-time</td> <td>0%</td> </tr> <tr> <td rowspan="2">Race/Ethnicity</td> <td>White</td> <td>100% (4)</td> </tr> <tr> <td>Other</td> <td>0%</td> </tr> <tr> <th colspan="3">Teaching Impact</th> <th colspan="3">N=4</th> </tr> <tr> <td rowspan="3">Level of students teach</td> <td>Elementary School</td> <td>25% (1)</td> </tr> <tr> <td>Elementary School, Middle School</td> <td>25% (1)</td> </tr> <tr> <td>High School</td> <td>50% (2)</td> </tr> <tr> <td rowspan="4">Years Teaching</td> <td>1</td> <td>25% (1)</td> </tr> <tr> <td>12</td> <td>25% (1)</td> </tr> <tr> <td>27</td> <td>25% (1)</td> </tr> <tr> <td>33</td> <td>25% (1)</td> </tr> </tbody> </table>			Demographics Data			N=4			Age	35-44	50% (2)	45-54	25% (1)	55-64	25% (1)	Gender	Female	50% (2)	Male	50% (2)	Employed	Full-time	100% (4)	Part-time	0%	Race/Ethnicity	White	100% (4)	Other	0%	Teaching Impact			N=4			Level of students teach	Elementary School	25% (1)	Elementary School, Middle School	25% (1)	High School	50% (2)	Years Teaching	1	25% (1)	12	25% (1)	27	25% (1)	33	25% (1)
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Highest level of education obtained	Bachelor's Degree with some professional schooling classes or certificate	25% (1)																																																					
	Master's Degree	75% (3)																																																					

**Table 1. SWIFTT Beta Tester Background data.** Survey results on demographic data, teaching background, and teaching impact for all HPEW teachers who evaluated SWIFTT resources (N=4).

**Figure 3. Overall impressions of SWIFTT.** From surveys, we learned most Beta testers enjoyed the SWIFTT website, podcasts, and resources. (N=4).

**All Participants were unaware of SWIFTT before reviewing it!**

### HPEW teacher perspectives on wellness:

#### Burnout Factors:

1. Overwhelmed with School Issues
2. Learning resources
3. Lack of support
4. Parents
5. School admin

“When I’m at school, I can’t decompress at all”

#### Reflections on wellness:

“Something that if I had took the time, I should take care of myself ... don’t get me wrong. I’m not like a hot mess or anything. I’m just reflecting on it.”

#### Impacts of wellness:

“It’s a struggle. And I tell my kids this all the time, I’m having a hard time today, I got a little less toleration in me. So I think it works hand in hand. Without a doubt, the better we’re feeling, the better we are, the more ... I have to just take a breath and just work through things as opposed to react, reacting to things, that I have an ability to have more. Alright, we’re gonna get through this, ... I think our wellness ... has a direct relationship correlation ... with how good of and how effective we are as teachers hands down.”

“Oh, if I feel crappy, I’m a crappy teacher. Definitely. Even mentally and physically, and ... I feel bad, and I admit it all out. Like, watch everybody I’m crabby today. ... but wellness wise, yes. If you don’t feel good ... you’re not teaching good.”

“If I’m feeling like really rundown and just really tired. I know, I can be more short with people. That’s I think that’s understandable. ...you know, there’s times that like, if I had like a really bad day, or if it’s towards the end of the week, ... like my body is naturally more tired. And when I’m more tired, ..., I try to still have my patience, but I feel like sometimes I can be more short ... with my tone.”



### Wellness

100% “well” on survey of self-reported wellness

#### Times to support teachers:

“...during the school year, like my mental and emotional state, like I’m just more exhausted, and that’s where I struggle the most is during the school year as the school year goes on.”

#### Ideas to support wellness in schools:

School-organized support, Teacher Zen Den, Violence Free Zone, checking in on others, supportive administrators

#### Current strategies to promote wellness:

“Having a support system,” “Walks,” “Mindfulness,” “Meditation,” “Massage,” “Pedicure,” “Therapy,” “Yoga,” “Gym,” “Sports,” “Travel,” or “watch a show”

**Figure 4. Teacher wellness.** From surveys and interviews, we learned more about HPEW teacher views on wellness. (N=4).

## Conclusions

Gaining HPEW teacher perspectives on the SWIFTT model may **increase SWIFTT resource use in HPEW teachers to mitigate teacher burnout and improve SWIFTT as a PD resource.** Collaborating with community partners effective in addressing teacher burnout.

### Key Takeaways:

**Overall: HPEW teachers satisfied with SWIFTT model**

#### Podcasts



Great way to get info, Short and convenient for teachers

#### Website



Stood out from other MPS websites

#### Resources



Plan to use resources for PD (EE portfolio), self-care, and future classroom applications

**Improve:** Learning Objectives or links to additional resources, increase perspectives by including teachers with range of experiences (early, mid, late career)

**Improve:** Navigation of resources, Organization of resources/layout, awareness among HPEW teachers

**Improve:** Additional wellbeing supports for students and teachers, Burnout specific resources, more relevant to MPS, use teacher views on wellness to improve resources

**Figure 5. SWIFTT Evaluation.** From surveys and interviews we learned that overall teachers were satisfied with SWIFTT. Podcasts were talked about the most followed by the website and then resources offered by SWIFTT. Beta testers discussed strengths of podcasts, website, and resources as well as areas of improvement.

### Possible Future Directions:

- Increase number & diversity of HPEW teachers
- Examine wellness of HPEW teachers throughout the year and correlate with SWIFTT usage
- Create district specific resources and measure impact on burnout/ wellbeing
- Involve more MPS teachers in resource creation (videos) & incorporating ideas into SWIFTT (website design, resources, and podcasts)
- Student specific resources
- Expand community partnership

**Acknowledgements:** Office of Community Engagement for helping support this project. Carlos Rodriguez for helping recruit participants. SWIFTT group for providing feedback about evaluation strategies.

## References

## Updated SWIFTT Website



# Challenges and Assets to Rural Wisconsin Obstetric Care

Madeline Edgerly, BA, Leslie Ruffalo, PhD, MS  
Department of Family & Community Medicine, MCW

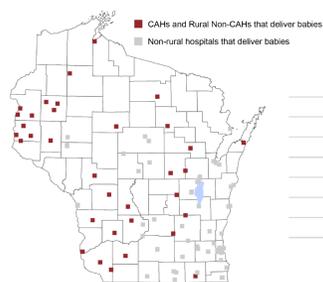
## Background

- **Women living in rural communities experience worse health outcomes compared to their urban counterparts.** Within obstetric care, rural expectant mothers endure higher rates of pregnancy complications and hospitalizations during pregnancy compared to expectant mothers in more urban areas. Over half of the US nonmetropolitan counties had infant mortality rates higher than the national average.
- **The gap between the demand for obstetric care and the supply of obstetricians continues to grow.** In the past two decades, nearly half of US counties lacked an OB-GYN. Many rural communities have relied on family medicine physicians for obstetric care, but recently the number of family medicine physicians practicing high-volume, full-spectrum obstetric care has declined by 50% and continues to decline.
- Many rural hospitals have been closing their labor and delivery units, creating a crisis for pregnant mothers. **Over the past ten years in Wisconsin alone, eleven rural hospitals have closed their labor and delivery units, and these closures will likely persist.**

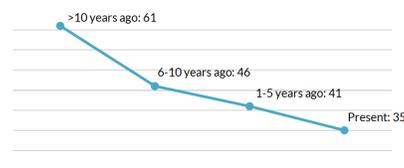
## Hypothesis

- This project seeks to understand the barriers and facilitators to labor and delivery in smaller Wisconsin communities and identify quality improvement strategies that will support not only the rural obstetric workforce, but more importantly the patients they are serving.

## Background Data

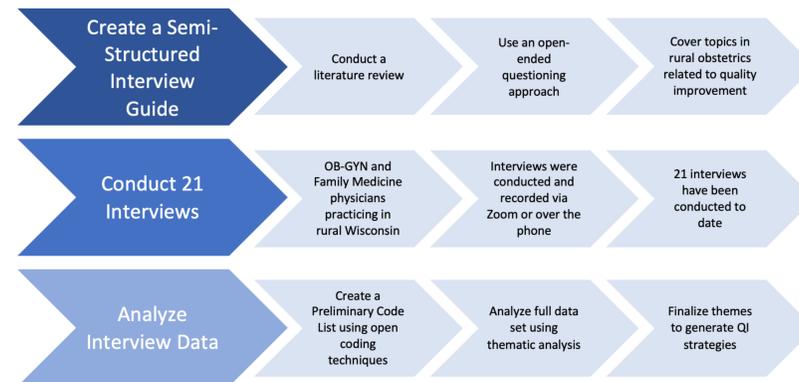


**Figure 1:** Wisconsin Hospitals with Labor and Delivery Units (2019)



**Figure 2:** Number of Rural Wisconsin Hospitals Providing Obstetric Deliveries (2019)

## Methods



**Figure 3:** Participants' Practice Location

## Results

Preliminary Coding Scheme	
Patient Safety Programs and Training	Rural Obstetric Care Challenges and Limitations
Health Systems	Obstetrics Training
Rural Medicine Lifestyle	C Sections
Rural Demographics	Transferring Patients
Physician Specialties in Rural Obstetrics	Transfer Criteria
Labor and Delivery Unit Closures	Physician Involvement in Hospital Changes
Staffing	Obstetrics Importance and Strength
Important Quality Measures	Evolution of Interest in Obstetrics
Materials and Resources	

### 1. Patient Safety Programs and Training

- Emergency Drills and Clinical Scenarios
- Good Communication
- Thinking Ahead and Through Potential Complications
- Protocols
- Partnerships with Larger Facilities

"And so if my hospital wanted to work with another hospital and have some of their doctors come and work at our hospital with higher volume now and then, and vice versa, and having more of an opportunity to share our skills, I think that would be one way where we could solve that problem. But it takes coordination, it takes money, it takes a hospital system to invest and put that money forth. And in rural areas, there's not a lot of money."

### 3. Rural Obstetric Care Challenges and Limitations

- Staff Recruitment and Retention
- Difficulty Recruiting OB-GYNs to Rural Areas
- Post-partum Hemorrhage

### 4. Transferring Patients

- Planned deliveries and secondary providers in more high resource hospital
- Do not always have ability or time to transfer
- Stabilize until safe to transport
- Laborious transfer process

### 2. Staffing

- Network of Support Among Colleagues
- Nursing Staff
- Agency/Travel Nursing
- Staff Shortages

"When I started, there were probably a group of about twelve core L&D nurses who had been there 10-20 years. And since I've been there, in 4 years, I feel like we have three left. And so not only is it challenges with staffing, but it's staff retention. Having a skilled labor and delivery nurse as a rural doc is so important to me... I rely on the nurses a lot."

"It's one thing to recruit people. It's another thing to retain them and to cultivate a culture that people want to stay a part of."

## Results, cont.

- Our interviews consisted of ten OB-GYN physicians and eleven family medicine physicians. Of the 21 interviews, nine physicians have been practicing obstetrics in a rural area specifically for under 5 years; six have been practicing rural obstetrics for 5-10 years; two have been practicing rural obstetrics for 11-20 years; and four have been practicing rural obstetrics for over 20 years.
- Six physicians completed some type of rural OB training while fifteen did not. Eleven physicians have practiced only in a rural area since residency.
- Future considerations in rural obstetric care will involve continuing **hands-on education** for labor and delivery teams, stronger **support from and potential agreements with larger hospitals**, and **recruitment and retention of a strong obstetric team committed to the community**.
- Focus on implementing programs and training to **supplement lower annual deliveries** in community hospitals, recruiting rural labor and delivery workforce, and **creating a network of support among colleagues and health systems** is imperative to sustain and build Wisconsin's rural obstetric care.

## Discussion

- We hope to use the themes discovered to identify recent and future quality improvement and patient safety initiatives to support obstetric care in Wisconsin's smaller communities and beyond.

## Acknowledgements

Thank you to Dr. Ruffalo for her mentorship and to the Wisconsin Academy of Family Physicians, Wisconsin Medical Society, and Wisconsin Association of Perinatal Care for their help with physician recruitment.

## References



# Expanding Access To Mental Health Resources for Young Adults Living In Poverty In Milwaukee Through Listening And Learning From Our Community

Bonner, J<sup>1</sup>., Lerret, S<sup>1,2</sup>., Ong, L<sup>1</sup>., Serna, A<sup>3</sup>., Totoraitis, M<sup>4</sup>., Skrajewski, D<sup>5</sup>., Jackson, K<sup>6</sup>., Thorstenson, E<sup>1</sup>., Davies, H<sup>6</sup>.

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## Background

- Addressing the mental health of young adults living in poverty requires:
  - Research, needs assessment, support, telehealth services, and funding at a local and state level
- This mission demands and benefits from a multi-disciplinary approach to maximize effectiveness and create sustainable change.

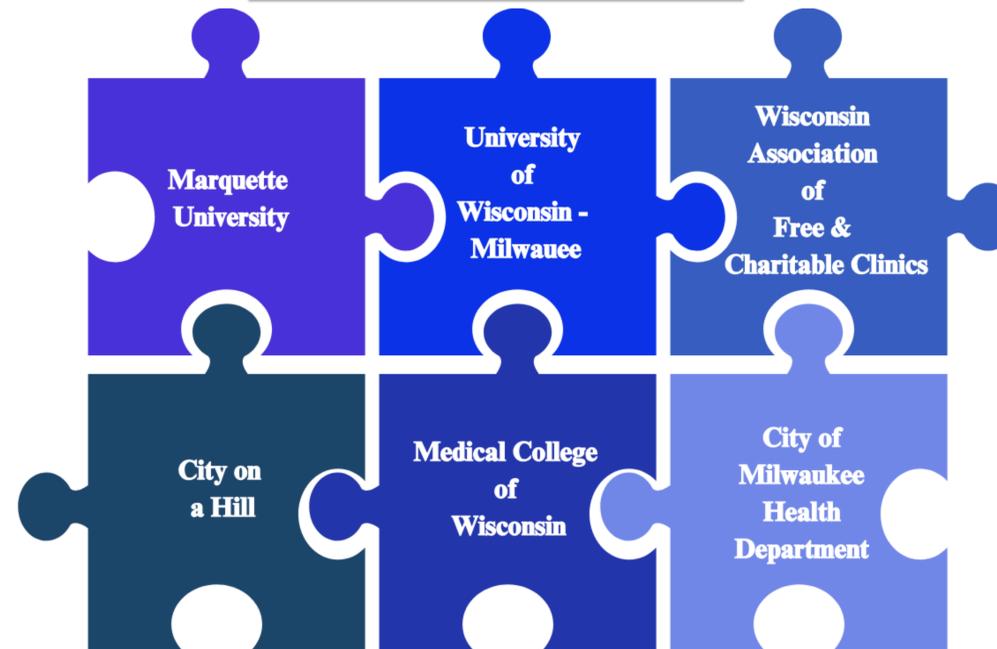
## Objective

- Address mental health access for the socially vulnerable population of young adults in Milwaukee through the development of community infrastructure via the implementation of institutional research.

## Methods

- Strategically leverage institutional, organizational, population, and personal strengths to build a sustainable partnership
  - Using Community Based Participatory Action Research model
- This is a collaborative process that equitably involves all stakeholders recognizing the unique strengths of each member.
  - Local universities
  - Community organizations
  - Young professionals (i.e. Americorps)

## Results



- Consortium Alignment Experience
  - Co-led by community and academic team members
  - Facilitated development of three interdisciplinary teams including young adults:



CREATING A CONSORTIUM



MENTAL HEALTH



COMMUNITY ENGAGEMENT

- Key focus group findings:
  - Lack of community awareness and education about telehealth and mental health coping skills
  - Lack of in-school resources acts as a barrier for young adult access to mental health providers

## Conclusion

- The collaboration between local universities and community organizations provides an opportunity to address poverty in Milwaukee by empowering the community and creating solutions to advance health equity.

## Next Steps

- Community clinics have direct access to academic partners who support informing telemental health services through:
  - Program evaluation
  - Analysis
  - Potential interventions
- This consortium continues to engage the community to better understand telemental health satisfaction of young adults
- Increase accessibility of telemental health services
- Ongoing integration of Americorps members into academic institutions and community partners allows local young adults to take leadership roles working with and for their peers
- Recruit additional community partners to join the consortium to increase community impact and sustainability



# Assessing the Impact of Housing Insecurity and Threat of Eviction on Health

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## Background

- Living under the threat of eviction is associated with **mental health stress**, including **depression and anxiety**, especially in **single mothers of color**<sup>1,2,3</sup>
- Increased self-assessed **unmet physical health needs**<sup>4,5</sup>
- More poorly controlled **diabetes, high blood pressure, respiratory conditions**, and difficulty controlling **Hep C and HIV**<sup>1,6,7,8</sup>
- Profound effects on **children** – **behavioral issues, lower weight-for-age z-scores, poorer overall health**<sup>1,9</sup>
- People in secure housing have **lower ED visits, more primary care visits, reduced medical expenditures**<sup>10</sup>

## Purpose

- To ascertain what the **perceived impact housing security has on health and how primary care physicians can help those at risk for eviction.**
- To determine a **primary care physician's role** in assessing how housing insecurities may be impacting a **patient's ability to manage a their health**
- To determine if there is a role for a **primary care physician to help provide resources for housing**

## Methods

Do you rent or own your current home?

Rent  Own  Other  Would prefer not to answer

If you **rent**, your current home please answer the following questions:

I spend more than 30% of monthly income on rent.

Yes  No  (Don't know)  Would prefer not to answer

I have moved 2 or more times in the last 12 months.

Yes  No  (Don't know)  Would prefer not to answer

I have been evicted in the past 12 months.

Yes  No  (Don't know)  Would prefer not to answer

I have been behind on my rent in the past 12 months.

Yes  No  (Don't know)  Would prefer not to answer

I live in a single person household.

Yes  No  (Don't know)  Would prefer not to answer

### Interview Guide

- Tell me about where you live. How does your housing impact you and your family?

- What would be the best case scenario for you and your family in terms of housing?

How do you feel your primary care physician could help with obtaining housing resources?

## Results

### Suboptimal Living Conditions Impacting Health

"Pipe broke underground... because I have breathing problems can't live with three inches of water... there's still mold because it's still drying. I don't know what's underneath that damn carpet"



### Landlord Concerns

"It causes a lot more stress, that's for sure... You know, because you're starting to get upset because you want to avoid them like the plague... we are afraid, because the door's by the kitchen and every time you walk to the kitchen, something [may be] slid underneath the door"



### Unstable Relationships with Neighbors and People in the Environment

"Three out of the four roommates were either drunk, drug addicts or alcoholics... he came to me and accused me of stealing drugs, accused me of stealing from him. You have to watch your back"

### Role of Physicians or Lack Thereof

"I don't think she can help at all... Cuz she's just a medical doctor. Maybe Yeah, she has some resources out there. In my head, I think they're just there help you feel better?"



SCAN ME

## Results cont.

### Settling for Suboptimal Housing for Resource Accessibility

"I've had heart surgery. I have lupus, I have lung problems. I have stomach problems and my daughter cannot drive. She can't walk anywhere without somebody being with her... I have to do what's best for my daughter and as bad as things are here, it is accessible for us for the hospital"

### Psychological Stress of Uncertain and Unstable Living Conditions

"You worry... rent is my priority. Rent is first before anything... if your car breaks down well then you have to find a different mode of transportation. But rent is always first... you know, you can live without cable you know. It is stressful worrying. About, you know, are you going to have enough to pay the rent, or, you know, it does get stressful. And stress is a big part of how your health is"

### Importance of "home"

"Like the skies opened up, like I could breathe for the first time. It was safe... I've been able to blossom and grow because I am in a safe place"

### Importance of Social Support

"Being safe is a huge deal. I get along with everybody which is nice. Right next door I've got somebody I can borrow a cup of something from if I want and they can do it with me and it's everything ... There's enough to be vulnerable about in our world right now and to have to be vulnerable about where you live shouldn't ever be - not in this country"

## Recommendations

- Create pamphlets with information about housing resources in the community
- Increase patient awareness of healthcare spaces as potential resources for housing assistance (eg make posters and pamphlets visible in healthcare spaces to increase patient awareness )
- Increase exposure to importance of housing security on health outcomes in medical school and residency curriculums
- Implement a social work consult and more in depth review of health complications for those who screen positive for housing insecurity

## Conclusion

- There is a clear positive impact of safe, stable, and affordable housing on **psychological health (eg anxiety, depression, and suicidality)**
- There is a clear positive impact on **physical health (eg respiratory conditions and physical safety)**
- Most patients **do not view their physician as a potential resource for obtaining housing resources**

## References

1. Swope C, Hernandez D. "Housing as a determinant of health equity: A conceptual model." *Social Science & Medicine*. 2019. doi: [10.1016/j.socscimed.2019.112571](https://doi.org/10.1016/j.socscimed.2019.112571).
2. Vasquez-Vera, Hugo et al. "The Threat of Home Eviction and its Effect on Health Through the Equity Lens: A Systematic Review." *Social Science & Medicine Vol 175*. 2017. <https://doi.org/10.1016/j.socscimed.2017.01.010>
3. Suglia, Shakira et al. "Housing Quality, Housing Instability, and Maternal Mental Health." *Journal of Urban Health*. 2011. doi: [10.1007/s11524-011-9587-0](https://doi.org/10.1007/s11524-011-9587-0).
4. Jaworsky, Denise et al. "Residential Stability Reduces Unmet Health Care Needs and Emergency Department Utilization among a Cohort of Homeless and Vulnerably Housed Persons in Canada." *Journal of Urban Health*. 2016. doi: [10.1007/s11524-016-0065-6](https://doi.org/10.1007/s11524-016-0065-6)
5. Burgard, Sarah A. et al. "Housing instability and health: Findings from the Michigan recession and recovery study." *Social Science & Medicine Vol 75 issue 12*. 2012. <https://doi.org/10.1016/j.socscimed.2012.08.020>
6. Axon, Neal et al. "Differential Impact of Homelessness on Glycemic Control in Veterans with Type 2 Diabetes Mellitus." *Journal of General Internal Medicine*. 2016. doi: [10.1007/s11606-016-3786-z](https://doi.org/10.1007/s11606-016-3786-z)
7. Clemenzi-Allen, Angelo et al. "Degree of Housing Instability Shows Independent "Dose-Response" With Virologic Suppression Rates Among People Living With Human Immunodeficiency Virus." *Open Forum Infectious Diseases*. 2018. doi: [10.1093/ofid/ofy035](https://doi.org/10.1093/ofid/ofy035).
8. Morris, Meghan D et al. "Housing Stability and Hepatitis C Infection for Young Adults Who Inject Drugs: Examining the Relationship of Consistent and Intermittent Housing Status on HCV Infection Risk." *Journal of Urban Health*. 2020. <https://doi.org/10.1007/s11524-020-00445-7>.
9. Cutts, Diana et al. "US Housing Insecurity and the Health of Very Young Children." *American Journal of Public Health*. 2011. doi: [10.2105/AJPH.2011.300139](https://doi.org/10.2105/AJPH.2011.300139)
10. Wright, Bill et al. "Health in Housing: Exploring the Intersection between Housing and Health Care." *Center for Outcomes Research and Education*. 2016. <https://www.enterprisecommunity.org/download?fid=5703&nid=4247>
11. Frazee TK, Brewster AL, Lewis VA, Beidler LB, Murray GF, Colla CH. Prevalence of Screening for Food Insecurity, Housing Instability, Utility Needs, Transportation Needs, and Interpersonal Violence by US Physician Practices and Hospitals. *JAMA Netw Open*. 2019;2(9):e1911514. doi:10.1001/jamanetworkopen.2019.11514
12. Chhabra M, Sorrentino AE, Cusack M, Dichter ME, Montgomery AE, True G. Screening for Housing Instability: Providers' Reflections on Addressing a Social Determinant of Health. *J Gen Intern Med*. 2019 Jul;34(7):1213-1219. doi: 10.1007/s11606-019-04895-x. Epub 2019 Apr 16. PMID: 30993632; PMCID: PMC6614210.

## Limitations

- Small sample size (n=6)
- Recruited patients from three Family Practice locations in Wisconsin

## Leveraging Community-based Resource Centers to Support Healthy Food Access.

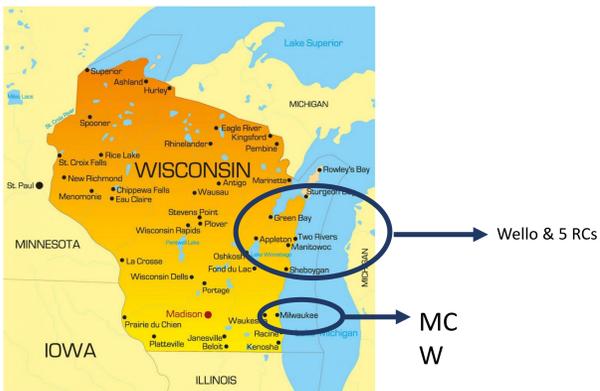
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### Introduction

- High consumption of fruits and vegetables is associated with better health outcomes.
- Many stakeholders are working to understand the systemic barriers to healthy food access.
- Yet, diet-related health problems disproportionality affect low-income communities of color.
- Goal: Leverage the power of trusted community networks to impact healthy food access for the people they serve.

### Partners

- Five local resource centers.
  - We All Rise
  - Casa ALBA Melanie
  - COMSA
  - Vivent Health
  - Crusaders of Justicia
- Wello
- Medical College of Wisconsin



### Methods

- Produce bags (fruits, vegetables, eggs, and cheese) distributed to Resource Centers.
- Resource Center staff have flexibility to distribute bags in the ways that they think will best serve the community.
- Resource Center staff also provided “Double Your Bucks” currency for community members to shop at local farmers markets
- Mobile markets in the summer and fall.



## Cultivating Community

# Cultivating Community is a well-being centered food hub.

- **Cultivating Community** gets food to the community in ways that support physical, mental, social and environmental well-being and address inequities.
- **Cultivating Community** models how communities can prioritize local food at multiple, coordinated levels of the local and regional food system.



## Results

Season One

<p><b>We All Rise: African American Resource Center</b></p> <ul style="list-style-type: none"> <li>• 4133 pounds of produce</li> <li>• DYB: \$3,000 (distributed)/ \$1,155 (redeemed)</li> </ul>
<p><b>Casa ALBA Melanie (Hispanic/Latinx community)</b></p> <ul style="list-style-type: none"> <li>• 2782 pounds of produce</li> <li>• DYB: \$3,000 distributed/\$2,107 (redeemed)</li> </ul>
<p><b>Crusaders of Justicia (Hispanic and low-income)</b></p> <ul style="list-style-type: none"> <li>• 2780 pounds of produce</li> <li>• DYB: \$3,000 distributed/\$963 (redeemed)</li> </ul>

## Implications

### More than Food:

- **Multi-solving to build community power**
- Rely on community partners to identify needs: “We believe...”
- Merge evidence-based interventions with implementation science
- Community Participatory Action Research Training



## Future Directions

- Identify funding for Cultivating Community expansion.
- 80% of produce purchased next season will be from socially disadvantaged and historically underserved farmers.
- Take a closer look at healthy food incentives.
- Explore applications of this approach to other community challenges.



## Acknowledgements

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# Strengthening Transdisciplinary Teams through Developmental Evaluation: Learnings from a Multi-year, multi-project initiative



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<sup>1</sup>Medical College of Wisconsin, <sup>2</sup>Evaluation Plus., <sup>3</sup>American Cancer Society

## Background

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

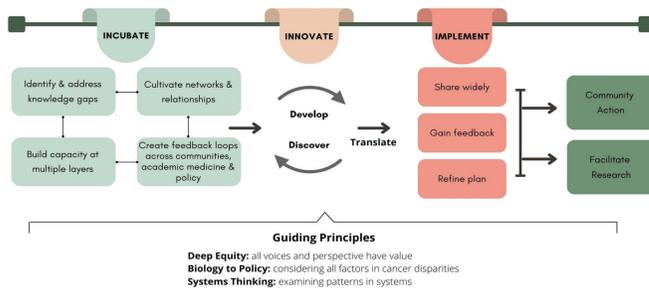
The **Community and Cancer Science Network (CCSN)** is a transdisciplinary network focused on addressing statewide cancer disparities through authentic and sustainable collaborations between academia and community in Wisconsin.

Our approach leverages academic and community expertise and is grounded in the principles of **deep equity**, **systems-change**, and the **integration of biology to policy**.

We bring diverse perspectives together through a three-phase model:

- 1) Incubate** - co-learn among team members to build trust and knowledge, integrate diverse perspectives and create a shared vocabulary;
- 2) Innovate** - use learnings to develop, prototype and pilot potential solutions;
- 3) Implement** - execute scalable and sustainable solutions.

## CCSN Theory of Change Framework

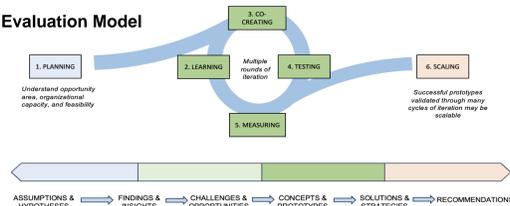


CCSN uses **developmental evaluation (DE)** to blend research and community perspectives and promote equitable partnerships. This evaluation approach:

- enables **timely data-based decision-making**,
- supports **innovation** ( e.g., new projects, org. changes, policy reforms, system change.)
- guides **adaptation to emergent and dynamic realities in complex environments, and**
- promotes **cross-sector learning**

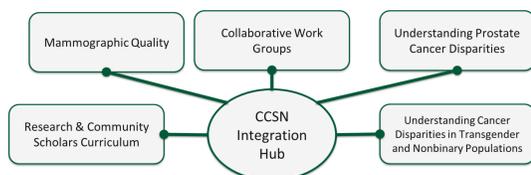
DE embeds an evaluation partner at the leadership table, to facilitate intentional data gathering and interpreting, surfacing issues, and assumptions, and testing the theory of change.

## Developmental Evaluation Model



CCSN:

- 5 transdisciplinary team projects guided by a core structure (Integration Hub).
- developed and led by community and academic co-leaders,
- supported by a facilitator and evaluator.
- integrates learning in real-time



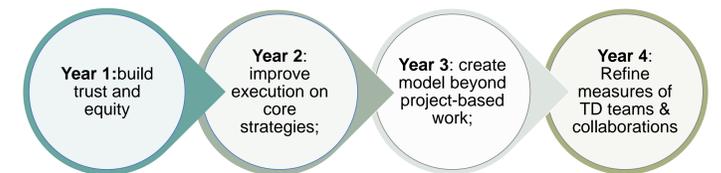
## METHODS: CCSN DEVELOPMENTAL EVALUATION - Outcome Dimensions, Measures, Results, Action

Now in its fourth year, CCSN used DE to guide development of its Theory of Change and shape the approach to accomplish its primary outcomes: 1) high functioning network of community and academic partners, 2) strong transdisciplinary collaborations, and 3) equitable, sustainable solutions. We adapted multiple tools from diverse disciplines to assess progress and refine approach.

## Annual Learning Agenda & DE Tools

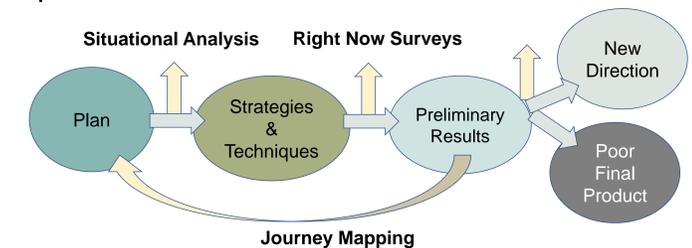
DE uses cycles of learning to advance work. These cycles are known as **Learning Agendas**.<sup>3</sup> Learning agendas are supported by other tools and activities.

CCSN sets an annual Learning Agenda and adjusts throughout the year to accommodate new knowledge, changes in the environment, and overall progress. CCSN's Learning Agendas contributed to strengthening teams and the overall network, a sharpening of direction, and growth in the network.



Tool	Purpose	How we used
<b>Journey Mapping</b>	Visual depiction of process that person goes through; elucidates facilitators & barriers	We used this tool in the early days of network to understand sticking points and how to help teams work through challenges. The data contributed to development of framework
<b>Situational Analysis</b>	A process that considers the internal and external factors contributing to how a team or organization is functioning at a given point in time	We used this tool to begin to plan for future, understanding external opportunities and pressures
<b>Reflective Practice</b>	This involves critical examination about an action thought or experience and leads people to consider the underlying factors including assumptions	These tools were helpful in preparing for critical moments and conversations including changes in leadership and how we could create a more supportive environment for teams.
<b>Right Now Surveys</b>	Surveys that provide near-immediate feedback with 3 simple questions: 1) Right now the greatest opportunity for success are...; 2) Right now, I am most concerned with...; 3) Right now, I most need help with...	This tool offered on-going interactions with network members and provided data to adjust approaches or make other improvements.
<b>One-on-One Interviews</b>	Discussions between the developmental evaluator and individual to provide more in-depth data and allow for greater understanding	This tool provided us with data to improve trust building and improve strategy execution

## Sample DE Process

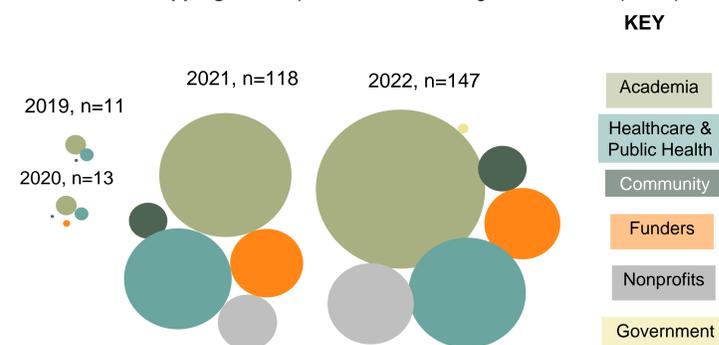


Developmental Evaluation tools can be used at any point in the process. Tools are used to meet the needs of the group. By engaging a developmental evaluator in the leadership, they can help determine which tools can be used and/or adapted to meet the current opportunity or challenges.

## CCSN Growth, Measures and Results

DE provided CCSN with data to make strategic choices about the network and understand and address barriers to participation. By responding and adapting, we have witnessed significant growth and evidence of strong partnerships. DE processes have also helped CCSN determine appropriate measures to determine the strength of transdisciplinary teams, collaboration and adherence to principles.

## CCSN Network Mapping: Visual process of describing the reach and participation in CCSN



## Network Survey Transdisciplinary Collaboration Practice Tenants<sup>1,2</sup>

We adapted several tools to assess transdisciplinary orientation and collaboration among Network members including the *Harvard Business Review's* (HBR) Learning Organization Assessment and the Wilder Collaboration Factors Inventory. Also, we developed measures to assess fidelity to our principles (i.e., deep equity). Surveys are conducted annually, and network members must be engaged for at least 6 months before completing assessment. Sample scores from HBR are listed below.

HBR Learning Organization Assessment TD Collaboration Practice Tenants Scores	CCSN Score (n=48)	Median Score	Third quartile range	Top quartile range
<b>Supportive Learning Environment</b>				
Psychological Safety	90	76	77-86	87-100
Appreciation of differences	90	64	65-79	80-100
Openness to new ideas	95	90	91-95	96-100
<b>Concrete Learning Practices</b>				
Experimentation	86	71	72-82	83-100
Information Collection	91	80	81-89	90-100
Analysis	80	71	72-86	87-100
Information Transfer	89	71	72-84	85-100
<b>Leadership That Reinforces Learning</b>				
Leadership Composite	94	76	77-82	83-100

## Conclusion:

- Transdisciplinary Collaboration involving community and academic partners offer great promise for innovative approaches to cancer disparities.
- Developmental Evaluation positively impacted CCSN's ability to engage community and academic partners in authentic transdisciplinary collaborations over a four-year, and multi-project effort.
- CCSN sees high value in embedding evaluation into the development of cancer disparities research and social action agendas

Sources:

1. Gavin, D.A., Edmondson, A.C., Gino, F. Is yours a learning organization? *Harvard Business Review*. 2008 Mar.  
 2. Wells, R., Yates, L., Morgan, I. et al. Using the Wilder Collaboration Factors Inventory to Strengthen Collaborations for Improving Maternal and Child Health. *Matern Child Health J* 25, 377-384 (2021). <https://doi.org/10.1007/s10995-020-03091-2>

# Utilizing an Environmental Justice Framework in Developing Partnerships to Prevent and Mitigate Water Lead Poisoning Among Milwaukee's Most Vulnerable Populations

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## INTRODUCTION

- Environmental justice is defined as “the fair treatment and meaningful involvement of all people, regardless of race ... or income with respect to ... regulations and policies that affect the environment and/or public health.”
- In 2023, Community Water Services initiated a water lead testing feasibility project in the city's most economically challenged neighborhoods.
- Project implementation clarified the need to use broad perspectives to address the problem.

## OBJECTIVE

- Describe lessons learned in developing and sustaining community-led partnerships to address the problem of lead exposure and poisoning in Milwaukee household water.

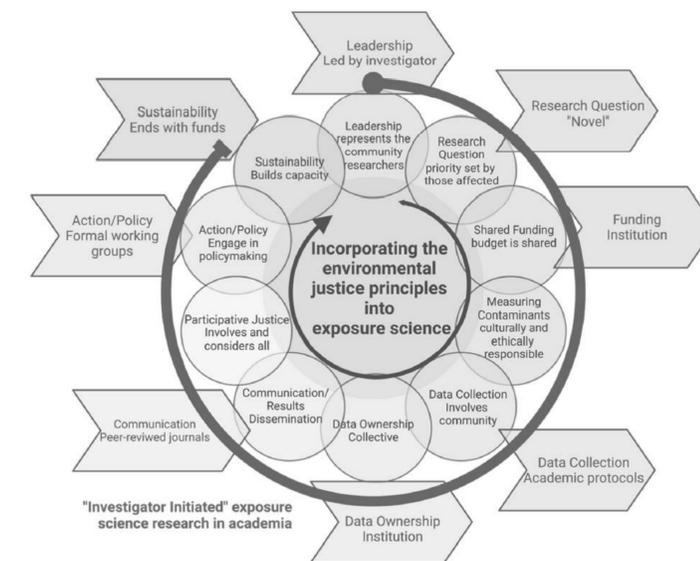
## METHODS

- Adopted an environmental justice framework.
- Informed our collaborative approach
- Partnerships to prevent and abate lead exposure in affected neighborhoods.
- Partnerships: Community Water Services, Medical College of Wisconsin, and lead prevention stakeholders in Wisconsin

# An environmental justice framework for addressing pervasive issues of lead exposure offers effective strategic direction in mitigating the problems of lead poisoning in Milwaukee.



## Environmental Justice Framework



## RESULTS

- Key lessons learned include the need to:
- 1) identify unique sites and approaches for participant recruitment
  - 2) be adaptable in implementing methods of water sample collection and testing
  - 3) obtain validation of test results
  - 4) develop effective results dissemination methods and parental education on lead poisoning dangers, prevention, and treatment options
  - 5) involve other advocacy groups and healthcare providers
  - 6) provide leadership in advocating for public policy solutions.

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# Harps of Comfort: Virtual Music Sessions for Critically Ill Patients

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Froedtert Hospital

## Problem Statement

- Patients afflicted with severe COVID-19 infection suffer from difficult symptom burden including anxiety, dyspnea, and loneliness that requires multi-modal management with both pharmacologic and non-pharmacologic efforts.
- Music-thanatology is a specialty of symptom palliation that utilizes the recognition that music has the capacity to comfort body, mind, and spirit. However, Froedtert’s in-person music-thanatologist could not go into COVID isolation rooms with her harp.
- In March of 2020, Jennifer Mackinnon, MD, recognized the need for this service within the COVID-19 patient population. She reached out to a fellow music-thanatologist saying, “I am a harpist and doctor. I want to see how we can bring music into the ICUs.”

## Process Improvement Goal

- To develop a novel pathway to offer virtual music sessions to help with symptom palliation in COVID-19 patients. Once established, the process was expanded for use in other critically ill patients.

## Improvement Strategies/Methods

- A group of highly trained palliative harpists began to meet virtually weekly to discuss the possibility of bringing free virtual music sessions to ICU COVID-19 patients in the spring of 2020.
- In September 2020, a plan for offering harpists on-call Monday through Friday, 1200-1700, to play music sessions for patients with COVID-19 on ECMO in one ICU was implemented. In fall of 2021, the program was expanded to include additional ICUs and other types of critically ill patient populations.
- A secure virtual platform for both musicians and clinicians to use was identified, and a process for obtaining and documenting permission by nursing staff for music sessions was developed.
- A daily communication process was identified: The lead on-call harpist contacted each ICU clinical nurse specialist (CNS) or charge RN to identify which patients were agreeable, stable enough, and available at a scheduled time for a music session. The lead harpist then selected which harpist would play for each patient if there was more than one session for the day.
- The CNS or charge RN communicated the harpist’s information to the bedside RN, ensured they had the knowledge of how to set up the session, and had a charged electronic tablet to utilize.



## Our Mission

Harps of comfort provides live, remote harp and vocal music, using an iPad, for patients who are experiencing difficult symptoms



Learn more at [www.harpsofcomfort.com](http://www.harpsofcomfort.com)

## Music Sessions

- Live music sessions are available weekdays between 12-5pm and are no cost to patients
- Patients (or their decision makers) must give permission for live music sessions
- Recorded music sessions on the Harps of Comfort website can be used at any time by patients or their family members on their personal electronic devices



## Results

- Since project implementation in the CVICU on September 21, 2020 through July 30, 2023 there were 399 virtual music sessions played.
- Quantitative data of bedside RN and Harpist perception of patient benefit was obtained through an optional anonymous survey. Average Improvements Seen in Restlessness, Anxiety, Respiratory Distress, and Tachycardia/ectopy on monitor based on nurse observation (n = 35 RNs, n = 6 Harpists):



- Qualitative impact of the intervention on patient care was captured through feedback from patients, family members, frontline staff, and the harpists themselves:
  - Wife of a patient stated she felt Harps of Comfort visits lowered her husband’s blood pressure. She made sure each day they played that she was also in the room; she found the music comforting as well.
  - A patient had been very restless, anxious and short of breath for much of the shift; he agreed to try Harps of Comfort playing for him and the bedside RN reported the patient fell asleep within five minutes!

## Conclusions

- Live music sessions delivered via an electronic device can address the issue of reaching critically ill, sometimes isolated patients with a non-pharmacologic symptom management modality that has the potential to improve their experience of anxiety, dyspnea, and loneliness, as well as to bring comfort to their family members.
- Expert music-thanatologists who are remote to the physical location of a patient can be brought to the bedside through the creative use of a secure, virtual platform and development of a consistent, reliable communication process with frontline staff.

### Acknowledgements:

- Thank you to the staff of the CVICU & MICUs for your tireless dedication to excellence in patient care, the Harps of Comfort members and, especially, Jennifer Hollis and Jennifer Mackinnon, MD, for your vision in creating the group and partnering to develop this process.

# HIGH-RESOLUTION ANOSCOPY ATTENDANCE AND ACCEPTABILITY IN THE PREVENT ANAL CANCER SELF-SWAB STUDY (NCT03489707)

knowledge changing life

Jenna Nitkowski, PhD (Presenter); Timothy J. Ridolfi, MD; Sarah J. Lundeen, RN; Anna R. Giuliano, PhD; Elizabeth Chiao, MD, MPH; Maria E. Fernandez, PhD; Vanessa Schick, PhD; Michael D. Swartz, PhD; Jennifer S. Smith, PhD; Bridgett Brzezinski, MA; and Alan G. Nyitray, PhD

## Background

### Anal cancer

- Rare, but rates are increasing
- Disproportionately affects men who have sex with men (MSM)
  - HIV+ MSM 80x more likely to develop anal cancer vs. HIV- men

### No consensus screening guideline

- Need to know how people experience different screening options
- **Human papillomavirus (HPV) anal swabbing** is one method to screen for high-risk HPV types associated with anal cancer
- **High-resolution anoscopy (HRA)** is an in-clinic procedure that examines the anal canal

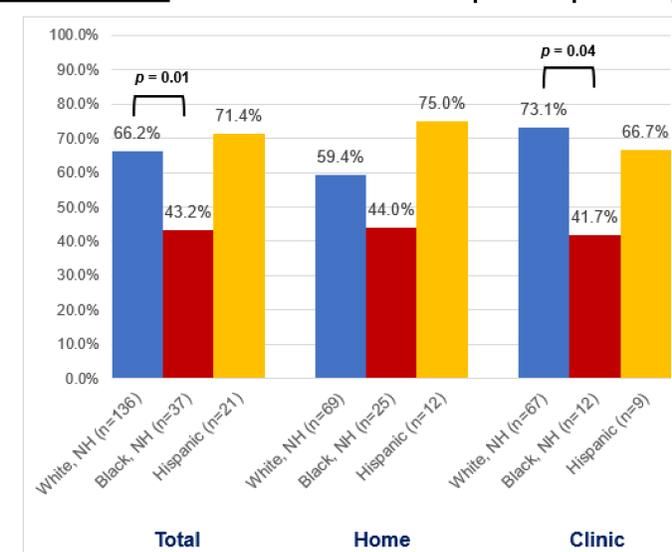
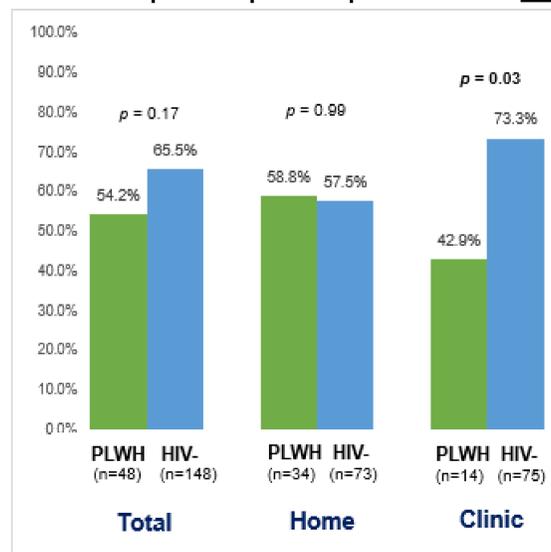
**Our goal:** Investigate whether anal HPV swabbing at home versus in a clinic impacts HRA uptake.

## Results

Overall, 62.8% of participants who engaged in home or clinic screening **attended HRA**

### Significant differences in HRA uptake by HIV status and race in the clinic arm

- Persons living with HIV (PLWH) had lower HRA attendance vs. HIV- participants
- Black non-Hispanic participants had lower HRA attendance vs. White non-Hispanic participants



## Methods

### The Prevent Anal Cancer Self-Swab Study (NCT03489707)

- 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
  - **All participants were asked to attend in-clinic HRA one year later.**
- We analyzed HRA attendance and acceptability among those who engaged in home or clinic baseline screening (n=196)

## Conclusions

- ❖ Attendance at HRA differed significantly by race and HIV status in the clinic arm but not the home arm.
- ❖ Given that PLWH and Black MSM are disproportionately affected by anal cancer, interventions are needed to support their clinic attendance.

Thank you to the participants, study team, CAB, providers, & community clinics!



## Background

- Diagnosing ASD is traditionally two-stage process:
  - 1) Screening by primary care providers (PCP) at 18 and 24 months using Modified Checklist for Autism in Toddlers (M-CHAT).<sup>1</sup>
  - 2) Diagnostic assessment of ASD at specialty clinic (long waiting lists).
- Results in a bottleneck of **delayed identification and access to supports and intervention**.
- Efforts to train PCPs in streamlined ASD diagnosis within Primary Care are growing but these programs are not currently widely implemented.<sup>2-6</sup>

## Methods

- Implementation study of STAT™ training followed by participation in a **year-long ASD learning community** which involved monthly meetings to discuss ASD knowledge and case conceptualizations.
- English speaking PCPs / FNs trained and assessed pre, post and 6 and 12 months: knowledge of screening / diagnosis of ASD, current practice and intention to diagnose ASD, attitudes on appropriateness of ASD diagnosis in PC, and comfort level with ASD. Data analysis used SPSS Descriptives.



## Conclusion

- Results for group one reveal comfort and intention to discuss, screen and diagnose ASD with families in primary care.
- The 6- and 12-month data, the FN data, and the group data will be analyzed to further evaluate the implementation of the WI-STAT.



## Purpose

- To implement and evaluate the Tennessee STAT™ (Screening Tool for Autism in Toddlers & Young Children 24-36 months old)<sup>7</sup> as part of a developmental assessment in a Wisconsin USA training cohort (WI-STAT) for PCPs and family navigators (FN).



## Results

- Ongoing study with two of three groups of participants trained so far.
- Most participants in group one ( 9 PCPS, 7 FNs) were white females with a mean 8.4 years of experience in their roles.
  - family medicine physicians
  - clinical psychologists
  - family nurse practitioners
  - family medicine doctor residents
  - psychotherapists
- After the WI-STAT training, first group of providers trained reported:
  - Comfort identifying the risk of ASD and discussing ASD with families.
  - Likely to independently screen for ASD and have discussions with families about ASD.
  - Felt most comfortable connecting families to speech therapy
- The second group, which is still ongoing, includes 4 primary care providers and 7 family navigators.

## Acknowledgements

- Funding from the Advancing Healthier Wisconsin Endowment.

## References

- Hyman, S.L., et al., (2020). Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. *Pediatrics*, **145**(1): e20193447.
- Ahlers, K., et al. (2019). A Pilot Project Using Pediatricians as Initial Diagnosticians in Multidisciplinary Autism Evaluations for Young Children, *J Dev Behav Pediatr* **40**(1): 1-11.
- Hine, J. F., et al. (2018). Embedding Autism Spectrum Disorder Diagnosis Within the Medical Home: Decreasing Wait Times Through Streamlined Assessment. *J Autism Dev Disord* **48**(8): 2846-2853.
- Hine, J. F., et al. (2020). Increasing Access to Autism Spectrum Disorder Diagnostic Consultation in Rural and Underserved Communities: Streamlined Evaluation Within Primary Care *J Dev Behav Pediatr* **41**(1): 16-22.
- Mazurek, M. O., Curran, A., Burnette, C., & Sohl, K. ECHO Autism STAT: Accelerating Early Access to Autism Diagnosis (2019). *J Autism Dev Disord*, **49**(1):127-137.
- Johnson, N. L., et al. (2023). A Scoping Review of Diagnosis of Autism Spectrum Disorder in Primary Care. *J Pediatr Health Care*. **37**(5):519-527.
- Stone, W. L., Coonrod, E. E., Turner, L. M., & Pozdol, S. L. (2004). Psychometric properties of the STAT for early autism screening. *Journal of Autism and Developmental Disorders*, **34**(6), 691-701.

# An Exploration of Maternal Health from the Perspective of Black Women

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## Background

Maternal mortality is defined as the number of annual deaths related to or aggravated by pregnancy or management of pregnancy and childbirth. These deaths are often caused by maternal morbidities, conditions that arise during pregnancy and others by mismanagement of preexisting conditions.<sup>2</sup> The United States has the highest rate of maternal mortality of all developed countries.

Black women are 3-4 times more likely to die during or after childbirth.<sup>2</sup> Research has shown that more than half of maternal deaths are preventable. Disparities that exist between Black women's access to quality, equitable care and that of their White counterparts make Black maternal mortality rates disproportionately high.<sup>1,2</sup>

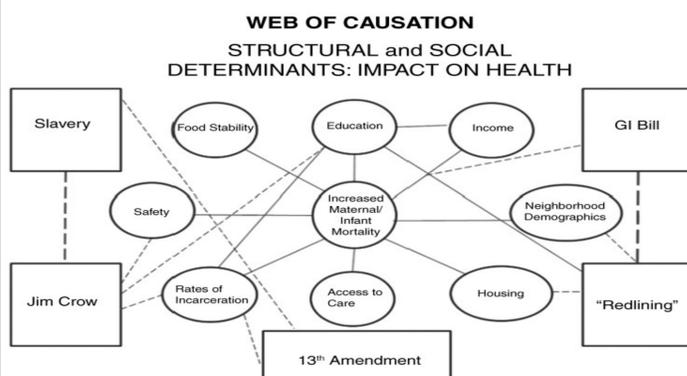
Medical racism and implicit bias heavily influence the quality of care Black women receive. Perceptions about Black women, whether conscious or subconscious, influence the decisions healthcare professionals make when caring for them.<sup>3</sup>

## Hypothesis

We hypothesized that we would identify opportunities to improve quality of care during the perinatal phase through the exploration of perspectives among Black women that suffered an unfavorable birthing experience.

## Background Data

This figure was developed by ROOTT (Restoring our Own Through Transformation) and shows factors that contribute to maternal mortality disparities.<sup>1</sup>



## Methods

**Recruit**

- Social media recruitment posts
- Interview questions developed
- Community based-organization recruitment; recruitment at Meta House in progress

**Interview**

- One-time 30-minute interview via zoom or phone
- All interviews were recorded using Zoom's recording feature
- Interviews were transcribed using Otter.AI; Transcripts were then reviewed and edited alongside interview audio for correctness.

**Analyze**

- Transcripts were analyzed to identify common themes and solutions
- A codebook organizing themes and solutions was created

**Criteria for Participation**

- Self-identification as a Black or African-American woman/birthing person
- Gave birth in a United States hospital
- Had an adverse birthing experience or outcome\*

\*We left this interpretation, specifically "adverse experience", open to the participants.

## Results

### Preliminary Codebook

Mood	Unmet Needs
Support System	Barriers
Information	Patient and Provider Characteristics
Quality of Care	Procedures
Communication	Patient Care
Provider-Patient Relationship	Personal Changes
Insurance	Perspective on Future Birth
Reaction to Healthcare Advice	Perspective on Change Needed

### 1. Quality of Care

- Dismissive
- Unnecessary questioning
- Unprofessional behavior
- Condescending comments
- Healthcare team unprepared
- Excessive injury

#### Quote from Participant

"I again asked for an epidural. And the nurse looked at me and said, at the exact same time that I asked a woman screamed, and she was like, 'that's what it sounds like when you're about to have a baby. You're not about to have this baby'...My mother-in-law had to go into the hallway and like yell, 'she's having the baby'. My son was, I was pushing him out. It became like this lights, camera, action, something that I'd never imagined for myself, because they were totally unprepared for me to have that baby."

### 2. Unmet Needs

- Mental health resources
- Follow up regarding traumatic experience
- Lack of postpartum support from care team
- Lack of support groups
- No reassurance from birthing team

#### Quote from Participant

"It was so scary, because it's like, I wasn't prepared for it. I didn't know what was happening. I thought I was gonna lose my baby, I thought I was gonna lose my life."

#### Cont. Quote regarding After Care

"And then they checked to make sure my incision was like, healing well. They asked me like the normal, like, postpartum depression questions, but they didn't really ask me about, like, my experience or like, what I went through or how I was doing as it pertains to that experience because it was really scary. And after that, that was, that was like it. Like, I wish they could be, I don't know, just talk to me more, or at least have more like follow ups, especially having a C section."

### 3. Information

- Lack of patient education
- Medical team unprepared for delivery
- No after care instructions
- Pre-existing conditions and complications were not properly explained

#### Quote from Participant

"Nobody warned me about what was to happen after like, not just a C section, but an emergency C section of like, how scary that was to go through that and you know, the fact that someone told me like, 'oh, no, don't worry, it's fine, it's fine'.\* Like that was like no, it wasn't fine."

\*Participant is referring to expressing concern that her baby's heart rate was dropping.

### 4. Patient and Provider Characteristics

- Young
- Unmarried
- Partner absent at time of labor
- Racial congruence vs incongruence
- Gave birth in unfamiliar hospital in affluent area
- Judgement & microaggressions
- Hospital characteristics (teaching hospital)

#### Quote from Participant

"They made it clear like you are a young mother. I was unmarried at the time. My husband, he's my husband now, but he wasn't with me when I delivered. But it was like all of these extra things at play in terms of how much care I deserved."

## Discussion

- Our preliminary findings show that the most common causes of unfavorable outcomes, according to participants were lack of quality care, unmet needs, lack of information, and patient and provider characteristics.
- Two of our participants became Doulas because of their experiences. Doulas provide more mother-centered care as opposed to baby-centered care. They provide emotional and physical support that most women/birthing people do not receive from a standard hospital birthing team.
- Simple solutions, such as listening to patients and involving them in their care can make drastic differences in birthing experiences and outcomes.

## Future Work

This is an ongoing study, and we are looking to recruit 6-16 more participants. We will continue to analyze interview data and present our findings to communities and medical audiences. We hope this information will lead to small changes and eventually systemic changes that will lower the maternal mortality rate of Black women/birthing people in the U.S. We hope that applicable solutions will be applied to all women/birthing people as well.

## Acknowledgements

I would like to thank Dr. Ruffalo for her support and mentorship and the Office of Community Engagement for funding.

## References

1. Crear-Perry J, Correa-de-Araujo R, Lewis Johnson T, McLemore MR, Neilson E, Wallace M. Social and Structural Determinants of Health Inequities in Maternal Health. *J Womens Health (Larchmt)*. 2021 Feb;30(2):230-235. doi: 10.1089/jwh.2020.8882. Epub 2020 Nov 12. PMID: 33181043; PMCID: PMC8020519.
2. Ozimek JA, Kilpatrick SJ. Maternal Mortality in the Twenty-First Century. *Obstet Gynecol Clin North Am*. 2018 Jun;45(2):175-186. doi: 10.1016/j.ogc.2018.01.004. PMID: 29747724.
3. Saluja B, Bryant Z. How Implicit Bias Contributes to Racial Disparities in Maternal Morbidity and Mortality in the United States. *J Womens Health (Larchmt)*. 2021 Feb;30(2):270-273. doi: 10.1089/jwh.2020.8874. Epub 2020 Nov 25. PMID: 33237843.

# Social Factors Associated with Utilization of COVID-19

## Relief Funding at an Urban Health Center

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Department of Family & Community Medicine, Medical College of Wisconsin, Milwaukee WI

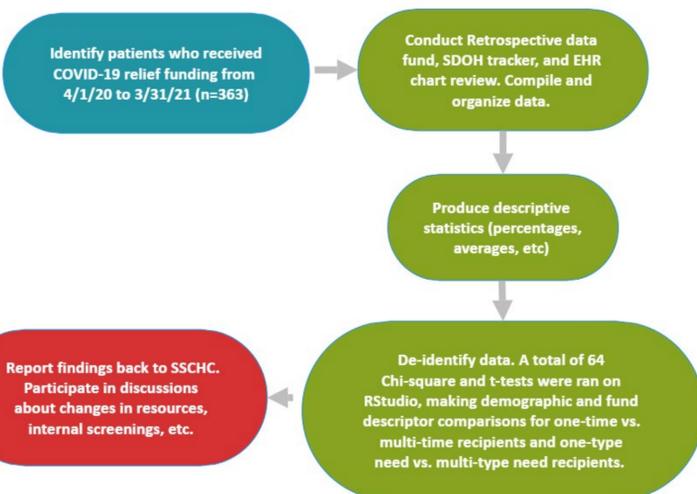
### INTRODUCTION

- Communities of color were disproportionately affected by the COVID-19 pandemic [1,2].
- Sixteenth Street Community Health Centers (SSCHC) provides care to over 37,000 Hispanic patients in Milwaukee's south side [3].
- The Patient Relief Fund (PRF) was established in April of 2020 by SSCHC to aid patients with emergency financial needs during the pandemic.
- Ryan White HIV/AIDS Program (RWHAP) Emergency Financial Assistance & Milwaukee Rent Assistance Program (MRAP) funds were also disbursed by SSCHC.
- Poverty, food security, and housing stability are social determinants of health (SDOH) [4].
- It is beneficial to explore the demographics and determinants that made patients rely on these funds.

### HYPOTHESIS

- Individuals accessing relief funds multiple times over the study period will have a higher overall burden of social determinants compared to those who only utilized the funds once.
- Individuals with multiple types of financial needs will have overall higher burden of social determinants compared to those with one type of need.
- There will be an overall low rate for SDOH screenings completed prior to fund need.

### METHODS



### RESULTS

Table 1. Patient demographics.

Category	PRF	MRAP	RWHAP
Total number of patients	242	49	93
Age, years (avg)	45.0	43.4	45.9
Age, years SD	13.0	9.0	12.58
Male	67 (27.7%)	8 (16.3%)	67 (72%)
Female	175 (72.3%)	41 (83.7%)	25 (26.9%)
Federal Poverty Level % (avg)	62.90	48.93	81.68
Federal Poverty Level % SD	63.60	45.73	113.80
Spanish primary language	206 (85.1%)	42 (85.7%)	68 (73.1%)
English primary language	28 (11.6%)	6 (12.2%)	22 (23.7%)
Hispanic	220 (90.9%)	47 (95.9%)	78 (83.9%)
Non-Hispanic	17 (7%)	1 (2%)	13 (14%)
Commercial Insurance	27 (11.2%)	6 (12.2%)	14 (15.1%)
Medicaid	74 (30.6%)	19 (38.8%)	19 (20.4%)
Medicare	8 (3.3%)	0 (0%)	9 (9.7%)
No Insurance	133 (55%)	24 (49%)	51 (54.9%)
Previously screened for SDOH	59 (24.4%)	6 (12.2%)	18 (19.4%)

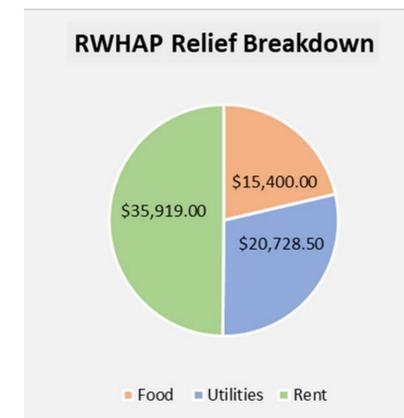
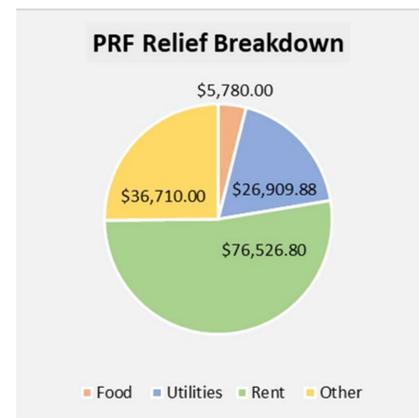


Table 2. Single vs. multi-time Aid Recipients

ALL FUNDS AGGREGATED	One time user	2+ time user	P-value
Federal Poverty Level % avg	71.62%	54.12%	0.06431
Age avg (years)	43.99	47.44	0.01367
Total Aid Received avg	\$698.11	\$1,369.35	<0.001
SDOH screening	19% screened	24% screened	<0.001

PRF	One time user	2+ time user	P-value
Federal Poverty Level % avg	62.61%	58.72%	0.7359
Age avg (years)	44.16	47.15	0.0993
Total Aid Received avg	\$454.20	\$1,592.29	<0.001
Household Size	3.107	3.276	0.5667

RWHAP	One time user	2+ time user	P-value
Federal Poverty Level % avg	102.16%	50.68%	0.01786
Age avg (years)	44.96	47.73	0.2964
Total Aid Received avg	\$631.77	\$948.92	0.0826

Table 3. Single-need vs. Multi-type need Recipients

ALL FUNDS AGGREGATED	One need type	Multi-type need	P-value
Federal Poverty Level % avg	59.93%	76.14%	0.06319
Age avg (years)	43.69	46.43	0.0368
Total Aid Received avg	\$589.96	\$1,272.26	<0.001
Language	Spanish 76%	Spanish 90%	0.0267
Insurance Type	Medicaid 36.8% None 51.4%	Medicaid 21.2% None 65.6%	0.01592

PRF	One need type	Multi-type need	P-value
Federal Poverty Level % avg	56.38%	67.24%	0.178
Age avg (years)	43.98	45.91	0.247
Total Aid Received avg	\$326.19	\$1,187.09	<0.001
Language	Spanish 78.6%	Spanish 92.9%	0.01527
Insurance Type	Medicaid 39.7% None 53.2%	Medicaid 21.2% None 69.9%	0.01147

RWHAP	One need type	Multi-type need	P-value
Federal Poverty Level % avg	67.87%	101.66%	0.1919
Age avg (years)	44.75	47.97	0.2143
Total Aid Received avg	\$255.30	\$1,485.47	<0.001

### DISCUSSION

- The majority of those who received aid were female, Spanish-speaking, Hispanic, and uninsured (Table 1.).
- There was a low percentage of SDOH screening completed in the past for these patients (21.6%)
- One-time users were less likely to have been screened for SDOH compared to multi-time users (Table 2.).
- For RWHAP aid recipients, multi-time users had a lower FPL% compared to one-time users.
- Multi-type need recipients were older, more likely to be uninsured, and more likely to be Spanish-speaking compared to one-type of need recipients (table 3.)

### CONCLUSION

- The relief funding was a necessary and important collective effort to address SDOH.
- The SSCHC and similar FQHCs who work with Hispanic populations would benefit from continuously screening for SDOH in uninsured patients as well as focusing on middle-aged females.
- Intersectionality between these factors leaves these particular community members more vulnerable and susceptible to changes in income security.

### ACKNOWLEDGEMENTS

- Sixteenth Street Community Health Centers (SSCHC) for the partnership.
- Brittany Skonecki (previous Social Services Manager), Jose Salazar (HIV Director), & Anna Klonowski (current Social Services Manager), SSCHC.
- Student Summer Fellowship funded by the Wisconsin Medical Society Foundation (WMSF).

### REFERENCES

- [1] "COVID-19: Racial and Ethnic Disparities." Wisconsin Department of Health Services, [www.dhs.wisconsin.gov/covid-19/disparities.htm](http://www.dhs.wisconsin.gov/covid-19/disparities.htm). Accessed 29 Jan. 2021.
- [2] Rubin Miller, Lily. "COVID-19 Racial Disparities in Testing, Infection, Hospitalization, and Death: Analysis of Epic Patient Data." KFF, Kaiser Family Foundation, 16 Sept. 2020, [www.kff.org/coronavirus-covid-19/issue-brief/covid-19-racial-disparities-testing-infection-hospitalization-death-analysis-epic-patient-data](http://www.kff.org/coronavirus-covid-19/issue-brief/covid-19-racial-disparities-testing-infection-hospitalization-death-analysis-epic-patient-data).
- [3] Sixteenth Street Community Health Centers. "2019/2020 Annual Report: At the Heart of Our Healthy Community." *Sixteenth Street Community Health Centers*, [sschc.org/wp-content/uploads/2020/10/SSCHC-AnnReport-2019-20\\_FNL.pdf](http://sschc.org/wp-content/uploads/2020/10/SSCHC-AnnReport-2019-20_FNL.pdf). Accessed 30 Jan. 2021.
- [4] "Poverty | Healthy People 2020." Health.Gov, [www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/poverty](http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/poverty). Accessed 30 Apr. 2021.

## Introduction

- **Lead poisoning** has significant **cognitive and developmental impacts on children**
- Despite its well-known effects, lead poisoning continues to affect children across the U.S.
- Lead poisoning **disproportionality affects children of lower socio-economic status (SES)** in Wisconsin
  - More likely to live in rental properties built prior to **1978**
  - Less access to healthy nutrition
  - Increased lead pipe exposure
- Children under 6 years of age in the City of Milwaukee have elevated blood lead levels at **rates as high as 20%** in some districts (QR Code)
- **Care4Kids** is a Medicaid benefit package for foster children in SE Wisconsin
- Foster children are at increased risk of lead poisoning due to greater likelihood of living in poverty

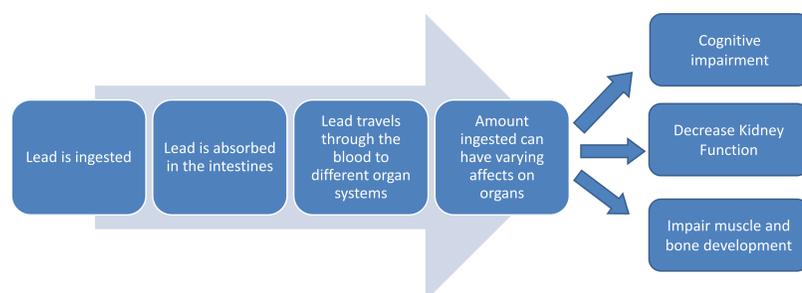


Figure 1: Simplified process of lead poisoning

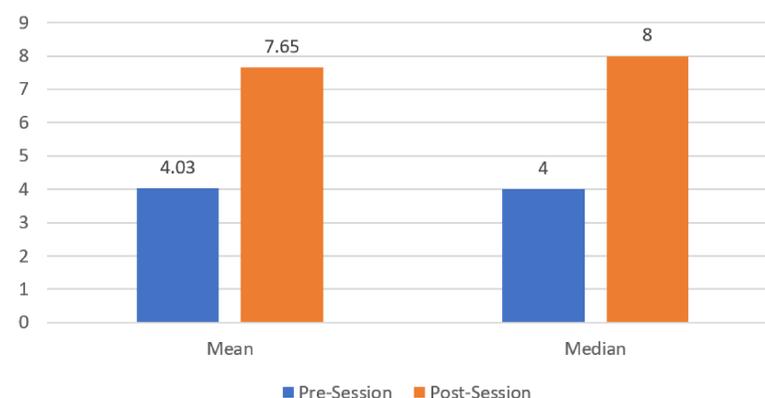
## Aim and Hypothesis

- The **aim of this project** is to increase knowledge and confidence amongst Care4Kids health care coordinators surrounding lead poisoning
- Our **hypothesis** is that a single lunch and learn session will have increases in lead poisoning knowledge and confidence between pre- and post-session surveys

## Methods

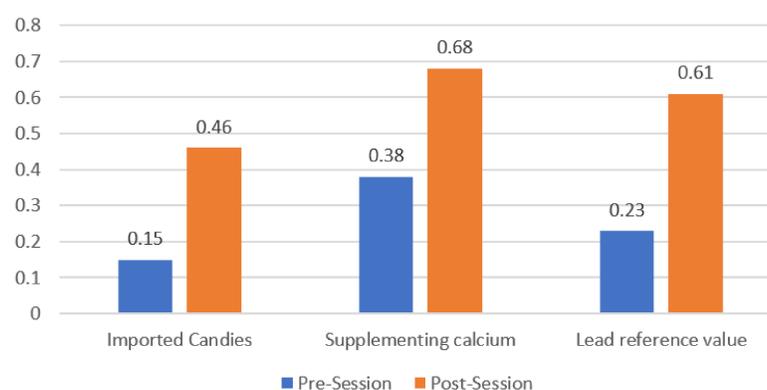
- Care4Kids health care coordinators notified of lead education session via email
  - Topic chosen due to multiple cases of children affected by lead poisoning in program over past 6 years
- Lead poisoning presentation was developed by the medical student, reviewed by physician
- Pre- and post-survey was created with an online software
- Questions focused around following topics
  - Lead poisoning sources
  - Health department guidelines
  - Treatments, interventions, recommendations
- Presentation delivered virtually over lunch hour
- Pre- and post-surveys were analyzed using the Mann Whitney U Test

Confidence Levels of Care Coordinators



Graph 1: Pre- and Post-Session confidence level averages, scale of 0-10

Percent Correct Answers



Graph 2: Percent correct answers between pre- and post-session statistically significant questions

## Results

- 40 participants completed the pre-survey, 28 completed the post survey
- Of the **10** objective questions on the survey, **4 had significant (p<.05) results** (Graphs 1 & 2)
  1. Confidence in managing lead poisoning cases; p<.001
  2. Supplementing calcium in diet; p=.0147
  3. Imported candies as lead source; p=.001
  4. Current lead reference value; p=.037
- Post-Lunch and Learn Results:
  - 20 said knowledge gained on sources
  - 23 said knowledge gained on prevention
  - 20 learned about lead and its affects on child development
  - 9 learned about accessing lead poisoning records on WIR

## Conclusions

- Significant increases in confidence of managing lead poisoning cases
- Knowledge gained in subject areas of sources of lead in the home, impact on child's neurocognitive development, and prevention strategies
- Potential reason for less knowledge gains due to background familiarity with lead poisoning
- **Future studies**
  - Complete a similar lesson with **care coordinators** of other institutions or child welfare case managers
  - Re-assess lead poisoning knowledge retention in 1 year with same population
- **Limitations** to the study include
  - Dropout rate
  - Limited generalization

## Introduction

- Family Medicine (FM) residency prepares physicians to serve communities by identifying concerns and collaborating with community experts to address needs
- Meta House, our community partner, is a residential and outpatient mental health and substance use disorder treatment facility for women
- Clinical staff at Meta House delivered high quality mental health and substance use disorder programming to patients, but they had limited capacity to provide general health education
- Ascension Columbia St. Mary's (CSM), Ascension All Saints (AS), and the North Side (NS) FM residencies collaborated to provide health education groups to patients at the Meta House and studied the impact of leading those groups on FM resident training

## Project Aims

- Provide quality health education to community partner, Meta House
- Develop community health education skills in family medicine residents
- Learn about impact of leading health education groups on FM residents and their training

## Methods

- Engaged community partner Meta House by building upon longstanding relationship with CSM residency, collaborating with AS and NS FM residencies
- Completed needs assessment with Meta House team
- Co-created running topic list for health education groups
- Developed curricular and scheduling structure to support FM residents in teaching during Community Medicine and Behavioral Health rotations
- FM residents reviewed orientation materials and met with residency faculty to prepare for teaching experience
- FM residents completed written reflections about their experiences and participated in discussion with faculty to review best practices and address challenges
- FM residency faculty and staff held ongoing meetings with Meta House staff to assess needs

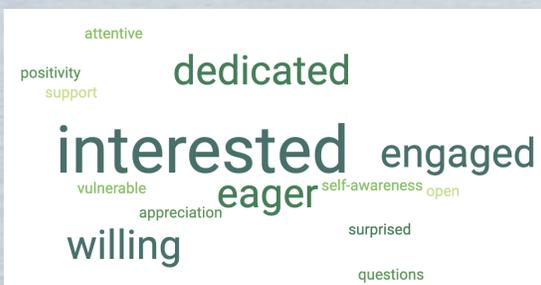
## Results

- Health education groups were held weekly over 14 months, with FM residents from the 3 programs rotating teaching responsibilities
- Eighteen FM residents submitted 21 reflections
- FM residents reflected on their experiences teaching, their assumptions and observations of working with the Meta House residents, and the orientation and training provided to them by the FM faculty
- Responses were reviewed and key topics, words, and themes were identified

### Rotating List of Topics

HIV/AIDS	Wellness	Meditation
Cancer Screening	Health Systems Navigation	Lead Screening
STIs	Family planning	Hypertension
Nutrition	Preventative Care	Sleep

### FM Reflections on Resilient Characteristics of Meta House Residents



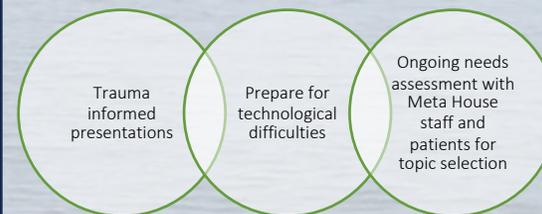
## FM Resident Reflections

Topic: Cancer Screening  
*"During my discussion, the women were able to talk about their experiences with endometriosis, pregnancy, cancer; instead of brushing these comments aside, the other women would commend the person speaking for their bravery"*

Topic: Wellness  
*"I realized how much I enjoyed engaging with a group of people who are interested in learning and hope to apply this to [office] visits for hypertension, diabetes"*

Topic: Hypertension  
*"Audience was much more engaged and wanting to ask questions than typical academic audience; challenged me to both engage but not let the lecture get too derailed"*

## Constructive Feedback



## Discussion

### Benefits of the program

- Strengthens FM resident awareness of community needs
- Increases FM resident understanding of addiction and recovery process
- Provides opportunity for FM residents to reflect on biases pertaining to vulnerable groups
- Builds skills for leading group discussions
- Improves patient-centered communication
- Fosters collaboration with community partner

### Challenges

- Better connect topics in context of substance use disorders and recovery
- Missed opportunities for co-learning and feedback as residents typically teach alone
- Cumbersome process for educational materials, submission of reflections, and data collection at multiple residencies

### Future Directions

- Understand impact on Meta House residents through collaboration with community partner
- Continue transition of project to new FM residency programs and continued group didactic reflection session
- Identify additional ways to strengthen community partnership with Meta House to address their needs and teach residents

## References

- Brown, N. W. (2018). Psychoeducational groups: Process and practice. Routledge.
- Smith, S. M., Wallace, E., O'Dowd, T., & Fortin, M. (2016). Interventions for improving outcomes in patients with multimorbidity in primary care and community settings. Cochrane Database of Systematic Reviews, (3).
- Baig, A. A., Benitez, A., Quinn, M. T., & Burnet, D. L. (2015). Family interventions to improve diabetes outcomes for adults. Annals of the New York Academy of Sciences, 1353(1), 89-112.

## Acknowledgements

- Meta House community partner patients and staff
- AS, CSM, and NS residents
- MCW Family Medicine Residency Program Coordinators

### BACKGROUND

- Medical encounters with law enforcement (LE) involvement can be challenging for healthcare workers (HCW).
  - Contentious interactions between HCW and LE
  - Impaired therapeutic relationship with patients due to perceived collusion between HCW and LE
- Pediatric LE-encounters are further complicated by ethical, medical, and legal considerations in minors
- Pediatric health equity and justice literature regarding LE-encounters is scant.
- We addressed this gap locally by creating the **Pediatrics-Law enforcement Alliance for Youth (PLAY)**

### OBJECTIVES

- Partner with Children's Wisconsin (CW), Wauwatosa Police Department, Milwaukee County Juvenile Detention Center, and Legal Action Wisconsin
- Process improvements for pediatric LE-encounters

### METHODS

- Create multidisciplinary team of key stakeholders (*Figure 1*) and establish institutional sponsorship



Figure 1. 2023 PLAY membership

- Current state assessment: chart review of 2021-2023 LE-encounters in CW Emergency Department
- Pulse surveys of HCW, LE, and PLAY partners
- Used preliminary findings to strategize quality improvement interventions.

### RESULTS

LE ENCOUNTER RATE IN CW EMERGENCY DEPARTMENT

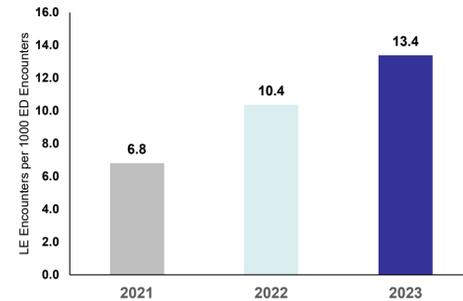


Figure 2. Pediatric Emergency Department (ED) encounters with law enforcement involvement are increasingly frequent at Children's Wisconsin. All-cause ED encounters decreased 2021-23.

SECURITY ASSESSMENT DOCUMENTATION IN EMERGENCY DEPARTMENT LE ENCOUNTERS

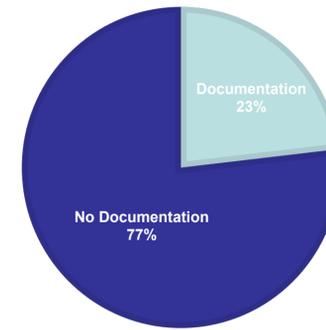


Figure 3. Chart review determined Security Assessment documentation was absent in >75% of 2022-23 LE encounters in the Children's Wisconsin ED. Security Assessment notes communicate reasons for LE presence, patient legal status, and the safety assessment and plan to healthcare workers.

### Healthcare Workers Law Enforcement Detention Center

Mixed messages from CW and LE	Medical jargon	Concerns about shackling sexual assault patients during exams
Persistent contact from LE begins to feel intimidating or harassing	Some community policing tactics are not well-suited to hospital environment	HIPAA violations
Unsure what information is okay to share with LE	Primary obligation is to community safety rather than an individual	Medical care required for children discharged to them (eg wound care)
Unsure how to advise patients, families	Responsibility for victim/suspect securement can conflict with medical and privacy needs	Challenges obtaining prescriptions
Unsure where to go for help		

Figure 4. Qualitative themes of concerns reported by representatives of PLAY community partners related to pediatric healthcare encounters with law enforcement involvement.

How confident are you in your knowledge of hospital policy, legal regulations and patient rights when you care for patients with law enforcement involvement?

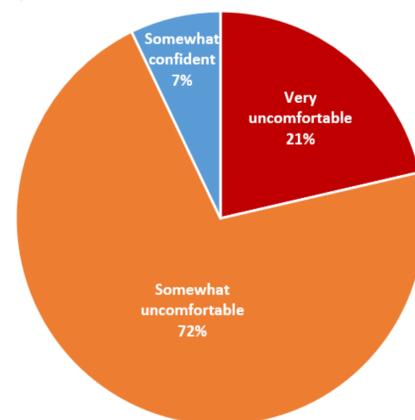


Figure 5. When polled, a minority (7%) of hospital clinical and administrative leaders reported confidence in their knowledge of patient rights in LE encounters.

### INTERVENTIONS

- Revised hospital policies to align with legal statutes, CW values, and trauma-informed care
- Hosted Department of Pediatrics Grand Rounds with legal expert on pediatric LE encounters.
- Leveraged CW electronic health record (EHR) to improve Public Safety documentation and generate real-time data reports (*Figure 6*)

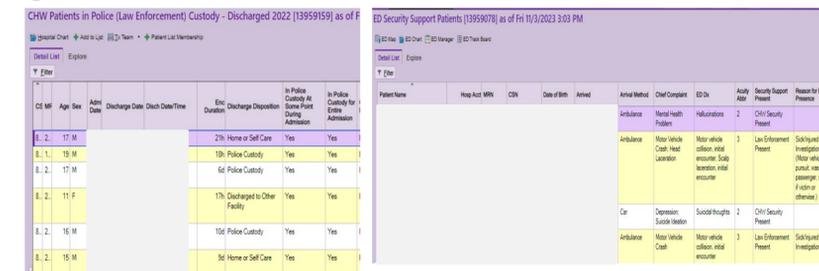


Figure 6. EHR reports for LE-encounters

### CONCLUSION

- Our work highlights need for guidance, documentation, and data-tracking in pediatric LE-encounters
- PLAY addressed these needs through policy revision, education, and EHR modifications.
- Next steps:
  - Medicolegal partnership with Legal Action Wisconsin
  - Represent CW in national collaborative *Healthcare Equity & Access for Law Enforcement-Involved Patients (HEALIP)*
  - Educate patients, healthcare workers, and LE on best practices for respecting patient rights during medical encounters and maintaining a safe healthcare environment.

### ACKNOWLEDGEMENTS

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Michael Levas, MD, MS (CW Vice Chair or Inclusion, Diversity, and Equity)

# Ubuntu Ethics as a Tool for Catholic Charities Milwaukee Refugee Integration in Wisconsin, United States of America



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## INTRODUCTION

- Globally, there is a surge in numbers of displaced people with record showing 101.1 million (UNCHR, 2022). See figure 1.
- Of the 101.1 million refugees in the world, 3.1 million are in the U.S. (U.S. Department of State, n.d.).
- Refugees' involvement in the policies that impact them is often low (Clark, 2023), hence, refugees hold little influence over the policies that affect them, leading to barriers on arrival.
- In 2019, Catholic Charities Milwaukee Refugee and Immigration Service (CCM-RIS) started using Ubuntu ethics (e.g., cultural humility) to guide their work.
- CCM-RIS is an attorney and integration driven program that helps refugees adjust to life in the U.S. and who are interested in citizenship.

### What is Ubuntu?

Ubuntu is an African philosophy that emphasizes the importance of groups coming together to address issues critical to their survival.

Samkange identifies Ubuntu ethics as kindness, courtesy, consideration and friendliness in the relationship between people, a code of behavior, an attitude to others and to life (qtd. in Mhlanga, 2020).

## OBJECTIVES

- Understand potential risk factors for refugee integration in Wisconsin, United States
- Understand CCM-RIS Ubuntu ethics strategies for integration
- Identify leverage areas for community organization to support integration efforts in Wisconsin

## METHODS

- Qualitative research method (Glaser and Strauss, 2017) through field notes, interviews, and content analysis.
- Appreciative inquiry (Cooperrider and Srivastva, 1987).
- Cultural humility method (Tervalon and Murray-Garcia, 1998).

## RESULTS

Noticeable in the CCM-RIS approach is that Ubuntu ethics provide a positive tool that fosters shared goals and collaboration between receiving communities and refugees. Valuing the dignity and humanity of displaced persons supports the solidarity work of Catholic Charities in Wisconsin. Utilizing Ubuntu ethics has led CCM-RIS to:

- 1 Increase collaboration with Milwaukee Public Schools to strengthen refugee integration efforts. See figure 3.
- 2 Increase number of newcomers who became citizens by 40%. See figure 2.
- 3 Strengthen parent engagement that fosters quality relationships among newcomers.

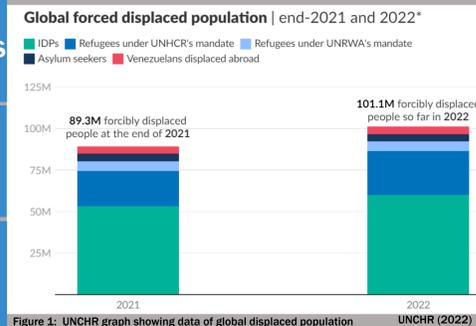


Figure 1: UNCHR graph showing data of global displaced population UNCHR (2022)

## DISCUSSION

### Potential Risk Factors

- Language, cultural differences, and institutional discrimination (WHO, 2022). Individual coping strength and resilience level.
- CCM-RIS programs leverage refugee community strengths and cultural humility, which are central to Ubuntu framework to integrate communities across southeastern Wisconsin.
- CCM-RIS provide case management and connect newcomers with employment opportunities to be self-reliance.



Figure 2: Citizenship celebration



Figure 3: Open House at Zablocki Community School

## REFERENCES

- Clark, S. (2023, May 10). Rethinking Irish Migration Governance: Why Refugees and Asylum Seekers Must Be Meaningfully Included in Policymaking Decisions. *The SAIS Review of International Affairs*. Retrieved October 10, 2023, from <https://saisreview.sais.jhu.edu/rethinking-irish-migration-refugees-asylum-seekers/>
- Mhlanga, J. (2020). Refugee Protection in the Era of Complex Migration Flows: A Reflection on Ubuntu and Social Work Practice. *African Journal of Social Work*, 10(1), 41-44.
- UNCHR (2022, June 16). UNCHR: Global Displacement Hits Another Record, Capping Decade-Long Rising Trend. <https://www.unhcr.org/news/unhcr-global-displacement-hits-another-record-capping-decade-long-rising-trend>
- UNCHR (2022, June 9). 2022 Data Showing the Number of Displaced People. <https://www.unhcr.org/refugee-statistics/download/>
- U.S. Department of State. (n.d.). *Refugee Admission*. <https://www.state.gov/refugee-admissions/>
- World Health Organization. (2022). *Mental Health*. [https://www.who.int/health-topics/mental-health#tab=tab\\_1](https://www.who.int/health-topics/mental-health#tab=tab_1)

## CONCLUSION

- Refugees came to the U.S with rich experience but they still struggle with adapting to the system.
- Ubuntu ethics can yield numerous benefits that foster cultural understanding and community growth.

## TAKE AWAYS

- Integration is an ongoing process.
- Ubuntu ethics/cultural humility can increase growth and community collaboration.

## ACKNOWLEDGEMENT

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## FOR MORE INFORMATION

