**Introduction**

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

**Methods**

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

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

49 surveys fit the criterion and were used for analysis

**Results**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying at Altrusa House improved my/my family’s overall hospital experience.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I was better able to follow my/my family’s doctor’s recommendations because we were able to stay close to the hospital.</td>
<td></td>
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</tr>
<tr>
<td>My ability to stay close by improved my/my family member’s recovery.</td>
<td></td>
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</tr>
<tr>
<td>Altrusa House helped my family stay together during a very difficult time.</td>
<td></td>
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</tr>
</tbody>
</table>

**Discussion**

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

**References:**

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

**Contact:** acoakley@mcw.edu
Racial Disparities in Sacral Neuromodulation for Idiopathic Fecal Incontinence

Vienne Seitz¹, Jed Calata, MD², Ling Mei, MD³; Emily RW Davidson, MD⁴
Medical College of Wisconsin¹, Departments of Colorectal Surgery², Gastroenterology³, and Obstetrics & Gynecology⁴

Background

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

Methods

- This was a retrospective age-matched cohort study.
- Study subjects were female patients over the age of 18 who presented to Froedtert and affiliated clinics for idiopathic FI from 2010 to 2021.
- The two cohorts were patients who identified as non-Hispanic Black/African American ("Black") and non-Hispanic White/Caucasian ("White").
- The primary outcome was documentation of SNM as a treatment for FI.

Hypothesis

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

Fecal Incontinence Treatment Options

1. Fiber supplements, Antidiarrheals
2. Dietary changes
3. Pelvic floor physical therapy
4. SNM

Results

<table>
<thead>
<tr>
<th>Prevention/Referral of SNM</th>
<th>Black Patients (18.2%)</th>
<th>White Patients (29.3%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNM</td>
<td>14.5%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Pelvic floor physical therapy</td>
<td>17.7%</td>
<td>20.4%</td>
</tr>
<tr>
<td>GI</td>
<td>16.8%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

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

Discussion

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

Future Work

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

Acknowledgements

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

References

⁵,⁶,⁷ reference details are not provided in the image.

**Table Note:**

- * = p ≤ 0.05, ** = p ≤ 0.01, *** = p ≤ 0.001
**Development of an Internal Medicine Resident Continuity Clinic at the Sixteenth Street Community Health Centers**

Hilgeman, Brian MD AAHIVS FACP and Lyons, Amalia MD FACP

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

**BACKGROUND**

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

**SETTINGS**

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

**OBJECTIVES**

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

**DISCUSSION**

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

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Analytic Plan</th>
</tr>
</thead>
</table>
| Impact on resident interest and comfort in providing primary care for underserved, non-English speaking, LGBTQ, and PLWH populations | • Annual assessment of SSCHC residents versus other residents in:
  - Comfort/interest in targeted populations
  - Cultural competency in care questionnaire |
| Impact on recruitment of URM residents to program | • Pre/post URM resident enrollment in program
• Survey to residents of impact of SSCHC experience on rank order |
| Impact on SSCHC operations/finances | • Resident empanelment (Goal 100)
• Attending productivity per half day of resident clinic vs. half day of private clinic |
Medical Students Mentoring High School Students to Mitigate Adverse Childhood Experiences (ACE)

Drake Giese, BS¹; Katherine Ernst, BA¹; Olivia Newgaard, BS¹; Sindu Donepudi BS¹; Nicholas Weiler, BS¹; Jeff Fritz, PhD¹; Shannon Young, Ed.D.²

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

### Purpose
- Adverse Childhood Experiences (ACE) are defined as experiencing or witnessing violence, abuse, neglect, and other adverse events through childhood.
- ACE scores are calculated based on the total number of these experiences.
- As a child’s score increases, their school performance declines and are at an increased risk of poor future outcomes.
- To mitigate effects of ACEs, intervention at an early age is hypothesized to be beneficial.

One attempted intervention is a near-peer mentoring program for K-12 students with elevated ACEs at Enrich Excel Achieve Learning Academy (EEA) in Wausau, WI.

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

### Results

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

<table>
<thead>
<tr>
<th></th>
<th>EEA Data</th>
<th>Wisconsin Data</th>
<th>National Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ACEs</td>
<td>62%</td>
<td>53%</td>
<td>54%</td>
</tr>
<tr>
<td>1 ACE</td>
<td>13.3%</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>2 ACEs</td>
<td>6.7%</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>3 ACEs</td>
<td></td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>4 ACEs</td>
<td></td>
<td></td>
<td>4%</td>
</tr>
</tbody>
</table>

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

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

### Sources

INTRODUCTION

• Adverse childhood experiences (ACEs) are unfavorable circumstances encountered in childhood, including abuse, violence, and household mental health and substance use issues3. Detrimental stress due to ACEs can affect brain development and how the body responds to stress3.
• ACEs correlate with increased risk of asthma, depression, cancer, diabetes, smoking, heavy drinking, and decreased educational attainment4.
• Mind-body methods attenuate negative symptoms while promoting self-regulation and positive health, social, and academic behaviors5,6. Mindful coloring5 may be a method for at-risk children to benefit from these techniques.

PURPOSE

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

METHODS

• Six children ages 7-13 at Golden House Domestic Abuse Shelter participated in weekly sessions as availability allowed.
• Participants colored what they visualized during a self-affirming meditation reading.
• Identical pre-test and post-test surveys were administered each session assessing resilience4, hope5, and mood.

RESULTS

Hope Before and After

<table>
<thead>
<tr>
<th>Hope Score</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td></td>
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</tbody>
</table>

Hope Over Time

<table>
<thead>
<tr>
<th>Hope Score</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
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</table>

Resilience Before and After

<table>
<thead>
<tr>
<th>Resilience Score</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
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Resilience Over Time

<table>
<thead>
<tr>
<th>Resilience Score</th>
<th>Session 1</th>
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<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
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<tbody>
<tr>
<td>Average</td>
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Mood Before and After

<table>
<thead>
<tr>
<th>Mood Score</th>
<th>Pre-Test</th>
<th>Post-Test</th>
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<tbody>
<tr>
<td>Average</td>
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</table>

Mood Over Time

<table>
<thead>
<tr>
<th>Mood Score</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
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<tbody>
<tr>
<td>Average</td>
<td></td>
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</tbody>
</table>

CONCLUSIONS

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

REFERENCES

3. Dr. Christensen, Dr. Ferguson, and Dr. Lynch for their guidance and for making this project possible.

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

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

Background:

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

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

Methods

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

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

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

Conclusions

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

References

[8] Opioid Data Summary Dashboard | Wisconsin DHS (2022)

Acknowledgements

Thank you to The Saturday Clinic for the Uninsured for being our community partner!
Lethal Means Storage Program
Live Today- Put It Away: Safe Gun Storage Program

Medical College of Wisconsin - Captain John D. Mason Veteran Peer Outreach Program
Bertrand Berger, PhD, Susan Smykal, Mark Flower

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

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

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

Gun Shop retailers and range owners are provided free materials by the Captain John D. Mason Veteran Peer Outreach Program, a program at the Medical College of Wisconsin. These materials include:
- Question and Answer Sheet
- Tip Sheet for WI Retailers and Owners
- NSSF Posters
- Gun Safety 11th Commandment Guide
- Participation Agreement
- Certificate
- Example Contract for Gun Shops

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

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

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

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

CONTACT INFO
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Phone: (414) 955-8910
Email: mflower@mcw.edu
Web Site: https://www.betherewis.com/

Acknowledgments
Thanks to Susan Smykal, Mark Flower and Dr. Bertrand Berger, for their work in expanding the program and Jean Papalia for her expert consultation in the development of the program.
COVID-19 Impact on Emergency Front Line Responders in Northeast Wisconsin
Josh Christensen and Riley Coon

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

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

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

RESULTS

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

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

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

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

REFERENCES
2. Wu, C., McGoogan, M. M. (2020). JAMA. 2020. This study evaluated the effect of a COVID-19 exposure in first responders regarding their mental health. They found that COVID-19-related worry was incrementally associated with increased levels of anxiety and depression.
Effect of Mass Communication on Veteran Suicide Prevention: Help Seeking & Firearm Safety Behaviors

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

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

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

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

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

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

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

Website traffic to ReachOutWis.Org
(Sept 1, 2021 to Oct 26, 2022)
Users: 24,310
New Users: 24,193
Session: 27,782
Pages/Session: 1.51
Page Views: 41,966
Bounce Rate: 73.44%

Results/Achievements
Baseline Survey results
Firearm ownership
67% of Veterans own at least one firearm vs. 41% of non-Veterans.

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

Advertising over 1 year:
Primary media target demographic Males age 55+ (Veterans when possible)
12.2 Million Impressions!
plus Secondary media:
17.4 Million Impressions!

Survey results:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Baseline</th>
<th>Post -Advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>I visited websites related to safe storage of firearms and suicide prevention p &lt;.001</td>
<td>49%</td>
<td>96%</td>
</tr>
<tr>
<td>Saw advertising about veterans and suicide prevention in the past four months P &lt;.001</td>
<td>76%</td>
<td>90%</td>
</tr>
<tr>
<td>People should temporarily store firearms outside of the home there is a suicide crisis P &lt;.005</td>
<td>Agree 71%</td>
<td>Agree 83%</td>
</tr>
<tr>
<td></td>
<td>Unsure 16%</td>
<td>Unsure 12%</td>
</tr>
<tr>
<td></td>
<td>Disagree 13%</td>
<td>Disagree 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree 80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unsure 13%</td>
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<td></td>
<td></td>
<td>Disagree 7%</td>
</tr>
</tbody>
</table>
Blood Pressure and Medication Outcomes for Uninsured Adults Given Automatic Blood Pressure Cuffs

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

Introduction

• Hypertension is a major risk factor for heart disease and stroke, which are leading causes of death in the United States. 1
• The impacts of COVID-19 on chronic diseases, such as hypertension, are still being recognized. Annual blood pressure trends from April to December 2020 were significantly higher compared to 2019 (p=0.001) in the United States. 2
• A 10-mmHg reduction in systolic blood pressure (SBP) is associated with a 31% reduction in stroke risk. 3
• AHA/ACC 2017 guidelines for hypertension recommend using the office blood pressure (OBP) as the gold standard to measure individuals’ blood pressure, which is a primary determinant of cardiovascular disease risk. 4

Objective

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

Study Population

Table 1: Baseline Characteristics (n = 44)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean)</td>
<td>51 years (SD ± 10.5)</td>
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<tr>
<td>Gender (male)</td>
<td>56.8%</td>
</tr>
<tr>
<td>Race / Ethnicity</td>
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</tr>
<tr>
<td>Hispanic</td>
<td>40.9%</td>
</tr>
<tr>
<td>Black / African American</td>
<td>38.6%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>6.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>6.8%</td>
</tr>
<tr>
<td>Other / Not Specified</td>
<td>6.8%</td>
</tr>
<tr>
<td>English as Primary Language</td>
<td>50%</td>
</tr>
<tr>
<td>Current Smoker</td>
<td>40.9%</td>
</tr>
<tr>
<td>Health Conditions*</td>
<td></td>
</tr>
<tr>
<td>Heart Disease / MI / Stroke</td>
<td>20.5%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>38.6%</td>
</tr>
<tr>
<td>Diabetes / Pre-Diabetes</td>
<td>56.8%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>31.8%</td>
</tr>
<tr>
<td>BMI ≥ 30 kg/m²</td>
<td>29.5%</td>
</tr>
</tbody>
</table>

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

Methods & Statistics

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

Figure 2: The average change in systolic blood pressure (SBP) showed a significant decrease of 4.89 mmHg (p=0.004) and diastolic blood pressure (DBP) decreased 1.73 mmHg which was not significant. The post-intervention period ranged from approximately 3 to 10 months after enrollment.

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

Results

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

Mean Decrease in Blood Pressure (mmHg)

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

Discussion

Findings and Observations

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

Post-Hoc Discussion

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

Recommendation for Continuing the SMBP Program

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

Further Research

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

References

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

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

Introduction

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

Background

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

AMP Mission

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

AMP Programmatic Components

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

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

Benefits:

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

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

Results/Conclusions

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

Gender and Underrepresented Status

Academic Standing (during AMP)

Student Reflections

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

“Each session gradually helped me learn what I need to learn.”

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

Future Directions

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

References


Funding is currently provided by Advancing a Healthier Wisconsin (AHW# 3620567) from 2020-2024.
Utilization Rates of Dermatology Screening Certification Services in Nail Technicians Within the Wauwatosa Area

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

BACKGROUND

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

AIM

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

METHODS

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

RESULTS

<table>
<thead>
<tr>
<th>Declined to Participate</th>
<th>Agreed to Participate</th>
<th>Could Not Be Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>12</td>
<td>31</td>
</tr>
</tbody>
</table>

Number of Salons

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

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

CONCLUSION

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

FUTURE DIRECTIONS

- Further efforts will include in-person flyer distribution with a QR code (Figure 3).
- Inclusion zip codes will be broadened to the Greater Milwaukee Area (Figure 4).
- Our goal is to increase the number of survey respondents to better determine utilization rates of skin and nail cancer screening platforms amongst nail technicians.
Patients without health insurance and experiencing food insecurity are more likely to suffer from anxiety and depression – a cross-sectional study at a Milwaukee student-run free clinic

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

Results

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

Conclusions

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

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

Intimate partner violence (IPV) impacts over 12.5 million US adults. Over 1/3 of women experience physical violence, rape or stalking by an intimate partner in their lifetime. Annual cost in WI is estimated at $657 million and Milwaukee estimated at $113 million billion. IPV is underreported and leads to negative health outcomes. Identifying survivors of IPV early and connecting them with community resources can save lives. IPV service providers and community partners offer emergency shelter, safety planning, emotional support, and healing services.

Aims

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

Method

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

Discovery
• Form team of research collaborators consisting of specialists from medicine, nursing, social work, medical lab science, psychology, IPV survivors, IPV advocates, and leadership.
• Evaluate IPV screening through retrospective chart review and focus groups.

Engagement
• Develop an innovative community-academic partnership to advance, test and promote IPV screening and referral protocols.
• Educate providers regarding IPV screening and referral and compare outcomes to those of trained Advocates.

Action
• Disseminate sustainable IPV screening and referral processes within healthcare systems.
• Create policies in collaboration with key stakeholders at county and state level.

Results to Date

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

Conclusion

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

Acknowledgements

Project supported by:
• Grant funding from the Advancing a Healthier Wisconsin Endowment at the Medical College of Wisconsin
• Zilber Family Foundation
• IPV Survivors
• MCW– Department of Pediatrics

References

4. Marquette University, ¹Sojourner Family Peace Center, ²UW-Milwaukee, ³Medical College of WI, ⁴Virginia Commonwealth University
COMPARING ACCEPTABILITY OF HOME- VERSUS CLINIC-BASED ANAL SWABBING AMONG MEN WHO HAVE SEX WITH MEN: THE PREVENT ANAL CANCER STUDY

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

Background

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

Our goal
Compare acceptability of home versus clinic anal swabbing.

Methods

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

Results

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

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

Thank you to The PAC Self-Swab Study participants, study team, CAB, providers, & community clinics!
Continuing Community Engagement through Expanded Powered Mobility for Young Children with Special Needs: Go Baby Go! Milwaukee Improvements and Modifications

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

Go Baby Go! (GBG) is a nationwide community-based design and outreach program that provides modified ride-on cars to children 9 months to 5 years of age who experience limited mobility. GBG is an open-source program that was started at the University of Delaware by Dr. Galloway and provides cars to families at no cost. Dr. Galloway started the program because of a desire to provide children with limited mobility or cognitive delay an opportunity for independent mobility at a young age. Research has shown that independent mobility leads to an increase in a child’s social-emotional, cognitive, and motor skills. In this project, toy ride-on cars are modified technically and therapeutically to fit the specialized needs of each child. Examples include a therapy switch in place of a gas pedal, joystick control instead of a steering wheel, head and body support, custom harnesses, and padding to ensure a stable posture.

The GBG! MKE team is constantly working on improving the GBG! MKE program and family experience. This effort started in 2019 with a family satisfaction survey completed by the GBG! MKE families. Based on the 2019 recent survey, several challenges were identified including the following:
- 60% of children experienced difficulties driving a self-steer car due to cognitive delays and/or physical limitations.
- 27% of children were startled by the initial motion/start-up of the car.
- 27% of families experienced difficulties transporting the car in their vehicle.

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

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

In 2018 the GBG! MKE team started producing remote control cars. These cars are wired so that the child has to be pressing the adaptive switch and the parent has to be pressing the forward/backward button on the remote at the same time for the car to move. This keeps the child actively engaged with the motion while addressing the difficulties children were experiencing with the self-steer car.

In 2019 the GBG! MKE team started offering open gym time to families. This gym time is offered three days a week and is an opportunity for GBG! MKE families to use their cars indoors during the winter months. This will be offered to families again in 2022.

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

In 2021 the GBG! MKE team started to allow Marquette University engineering PT, and OT students the opportunity to watch GBG! fittings and learn about the clinical side of the program. Additionally, the OREC/MU,MCW team started offering engineering students the opportunity to practice their hands-on skills by completing mechanical and electrical modifications of the car under the guidance of the GBG! MKE engineer.

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

In 2022 the GBG! MKE team worked with a GBG! MKE mom to start a Facebook group where the families could post about their children, ask questions to other families with shared experiences, or provide feedback on the GBG! MKE program. In just a few months the group has almost 40 members.
Qualitative Assessment and Model Building: Uncovering the Medical School “Unspoken Curriculum” through a Community-Engaged Nutrition Education Program

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

Introduction

- Longitudinal volunteer experiences help students gain communication and interpersonal skills, practice teaching, and experience with the communities they serve.
- “Hidden Curriculum”: Aspects of education not formally taught in curriculum.
- “Unspoken curriculum”: Student participation in community-centered experiences and reflection exercises to gain confidence in skills within the community.
- The Food Doctors (TFD): medical student volunteer experience to teach nutrition education to elementary students in Milwaukee.
- Study Aim: capture reflections of how TFD experience impacts the connection to the community and patients.

Methods

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

- April 2021: Pilot interview
- Open-ended semi-structured interview questions focused on how TFD influenced personal and professional development

- Spring 2021: Interviews
- Grounded theory qualitative analysis on interview transcripts to identify common themes

- Fall 2022: Qualitative analysis
- Gauge participant reactions to the themes and how they relate to clinical life, discussing how it resonates with their personal experiences

Results

Figure 1 (above): Developmental Skills at Each Stage of the Unspoken Curriculum.

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

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

-Medical Student Reflection

Figure 2 (above): Map of Skill Development in the Unspoken Curriculum.

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

Discussion

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

Reflection:

Personal perfectionism: -Practice adaptability
Embracing vulnerability: -Recognize limits
-Ask for help
Community relationships: -Prepare for unanticipated outcomes
-Practice skills in safe environment

Skill development:

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

Conclusion

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

References

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

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

BACKGROUND

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

HYPOTHESIS

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

METHODS

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

RESULTS

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

CONCLUSION

- Complete multivariate analysis to identify drivers of security activation and assessment decisions to identify targets for quality improvement interventions.
- Disseminate findings to key stakeholders and hospital leadership at CW to improve awareness and develop an equitable security activation system.
- Develop a system for ongoing data collection and staff feedback on security activation patterns.
**Community Outreach as a Core Component of Professional Development in Resident Education: A Descriptive Abstract**

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

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

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

**Conclusion:** We propose the following specific aims will be met:
1) Educate medical residents in Milwaukee’s health disparities
2) Partner with organizations in SE Wisconsin to create a mutually beneficial relationship to improve the overall health of Wisconsin
3) Engage medical residents in cultural competencies such that they ultimately choose to practice in Wisconsin, thus decreasing health disparities and improving the health of the population

**Research Question:**
We propose that all PGY1 residents employed by The Medical College of Wisconsin and Associated Hospitals have a PDW, and this will directly impact the quality of care provided in SE Wisconsin by increasing trainee involvement in community service, addressing health disparities, and advocating for underserved patients.
Assessing and Improving Prominent Social Determinants of Health among Patients at a Student-Run, Milwaukee Free Clinic

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

Department of Family and Community Medicine, MCW-Milwaukee

Background

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

Aims

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

Methods

1. Data collection via REDCap surveys (October 2021 – ongoing).
2. Export REDCap data (.csv, Excel).
3. Clean and analyze data using R Studio. (Inclusion criteria: patients over 18 years old with at least one completed SDoH survey).
4. Generate figures and conclusions.

Results

- Figure 1a: Patient reported age and sex.
- Figure 1b: Patient reported race.
- Figure 1c: Patient reported ethnicity.
- Figure 2: Frequency of positive patient screening responses to 11 SDoH.
- Figure 3: Tetrachoric correlation heatmap displaying correlations between top five social needs.
- Figure 4a: Bar graphs displaying resource allocation for the top five SDoH needs.
- Figure 4b: Bar graphs displaying patient reported age and sex.
- Figure 4c: Bar graphs displaying resource allocation for the top five SDoH needs.
- Figure 4d: Bar graphs displaying resource allocation for the top five SDoH needs.
- Figure 4e: Bar graphs displaying resource allocation for the top five SDoH needs.
- Figure 5a-e: Bar graphs displaying patient reasons for refusing resources after screening positive for a top five social need.

Discussion

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

These results will inform:

- Improved care of this population.
- A novel workflow to be adopted by free clinics.

Certain SDoH correlate in screening:

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

Resource Allocation

- Understanding frequent resource allocation educates further investigation into resource success.

Resource Refusal Reasons

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

Limitations

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

Future Work

This study inspires future work to investigate:

- Patient-reported usefulness of the community resources provided for identified social needs.
- Longitudinal study of patient resource utilization and reported success/“helpfulness”.

Acknowledgements

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

References

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

Susan Smykal; Mark Flower; Bertrand Berger, PhD

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Objective</th>
<th>Method</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Approximately 70% of veterans who die by suicide are not utilizing VA health care.</td>
<td>• Engage the community through outreach events</td>
<td>• Joined SE WI Veteran Suicide Prevention Taskforce meeting with multiple veteran organizations regularly</td>
<td>The Captain Mason Program has pivoted and expanded, despite various obstacles, such as the COVID pandemic. The program has thrived as connections to veterans increased by 84% (from 120 to 222) since March 2020. Innovative ideas, veteran community partnerships and media exposure have propelled the program forward. This program is beneficial to locating veterans in the community and assisting them in connecting to VA healthcare or community resources to help prevent veteran suicide.</td>
</tr>
<tr>
<td>• MCW and VA Milwaukee are collaborating to address the veteran suicide crisis.</td>
<td>• Build partnerships with veteran organizations and community partners</td>
<td>• Joined veteran coalitions in Oshkosh, Green Bay, as well as Veterans Health Council</td>
<td></td>
</tr>
<tr>
<td>The Captain John D. Mason Veteran Peer Outreach Program’s was established in 2018. The program engages Veteran peer specialists to provide outreach in the community in order to: 1. engage veterans and their families in VA health care and community resources, 2. provide knowledge, resources and hope, to help prevent veteran suicide.</td>
<td>• Increase media exposure for the program</td>
<td>• Partnered with WDVA providing presentations for the Governor’s Challenge</td>
<td></td>
</tr>
<tr>
<td>The Captain Mason Program, through collaboration with MCW, Milwaukee VA, veteran organizations, and the community, will work to decrease suicide in southeastern Wisconsin and state-wide.</td>
<td></td>
<td>• Increased Social Media presence</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implemented Live Today – Put it Away! Wisconsin’s voluntary, temporary, safe storage of firearms program for individuals in a crisis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Through outreach we have become a resource to other groups (.e.g., Public Health, Police)</td>
<td></td>
</tr>
</tbody>
</table>

**Results/Achievements**

- 222 Veterans
- 33 Families
- 1,279 Followers
- 231 Outreach Events
- 104 Events Attended
- 66 Facebook Live Interviews
- 61 Presentations
- 124 Community Events

**Military Branch Served**

- Army: 61
- Marine: 29
- Navy: 29
- Air Force: 17
- Coast Guard: 1

**Community Contacts**

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

**Special Mentions**

- Active Member Southeastern Wisconsin Veteran Suicide Prevention Taskforce
- Active Member Governor’s Challenge – Area 3 Lethal Means
Using Community Engagement to Inform Health Disparity Reports for Healthy Metric

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

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

**Background**

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

**Objective**

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

**Methods**

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

**Participating Organizations**

<table>
<thead>
<tr>
<th>Health Dept</th>
<th>Health System</th>
<th>Payer</th>
<th>Community Orgs</th>
<th>Policymaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayfield County</td>
<td>Aspirus</td>
<td>Group Health Cooperative of Eau Claire</td>
<td>Invisible Reality Ministries</td>
<td></td>
</tr>
<tr>
<td>City of Cudahy</td>
<td>Marshfield Clinic</td>
<td>Quartz</td>
<td>MetaStar</td>
<td></td>
</tr>
<tr>
<td>City of Greenfield</td>
<td>Sixteenth Street</td>
<td>Rock County Cancer Coalition</td>
<td>Rock County Cancer Coalition</td>
<td></td>
</tr>
<tr>
<td>City of Racine</td>
<td>Stockbridge Munsee Clinic</td>
<td>United Way of Wisconsin</td>
<td>United Way of Wisconsin</td>
<td></td>
</tr>
<tr>
<td>Kenosha County</td>
<td>Wisconsin Association of Free &amp; Charitable Clinics</td>
<td>Wisconsin Institute for Healthy Aging</td>
<td>Wisconsin Institute for Healthy Aging</td>
<td></td>
</tr>
<tr>
<td>Oneida County</td>
<td>Wisconsin Hospital Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walworth County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Themes**

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

**Results**

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

**Conclusions**

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

This project is funded by the Advancing a Healthier Wisconsin Endowment and Wisconsin Partnership Program.
Harpist, Elizabeth Markell, CM-Th playing from her home in Oregon (left). Patient in ICU with music at bedside via iPAD (right). Photos used with permission.

Hypnosis

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

Methods

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

Background

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

Virtual Music Sessions

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

Discussion

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

Acknowledgements

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

References

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

Justin Chu, MA1; Phoebe Lim1; Malika Siker, MD1
1Medical College of Wisconsin, Milwaukee, WI

Background

The Hmong population in the US is recognized as medically underserved with numerous health disparities compared to other Asian populations and the general population.1,2,3 Nyob Zoo Milwaukee TV (NZ) is a Hmong-language television program that:
• Broadcasts monthly in southeastern Wisconsin, national audiences through social media.
• Engages with the community nonprofits to enrich education and health literacy.4

Partnership with the Asian Pacific American Medical Student Association (APAMSA) at the Medical College of Wisconsin fulfills goals to:
• Identify health topics of interest and record segments within NZ’s normal broadcast.5
• Address health concerns within the Hmong community.
• Provide relevant health information in an easily-digestible format to a broad audience.

Project Aims

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

Methods

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

Results

![Figure 1. Estimated TV and Social Media Views for Broadcasted Segments](image1)

![Figure 2. Estimated Viewership Trend from January – April 2019](image2)

Discussion

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

Viewership trends were inconsistent between monthly NZ broadcasts.

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

Future Work

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

Acknowledgements

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

References

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

Jordan Janusiak¹, Sydney Timmer-Murillo¹, PhD, Kaylen Vine², MS, Amir M. Forati³, Fahimeh Mohebbi³, Jessica Krukowsk³, Carissa Tomas¹, PhD, Rina Ghose³, MA, PhD, Jennifer Harris⁴, M.Ed., John Mantsch¹, PhD, Lucas Torres², PhD, Terri deRoon-Cassini¹, PhD
Medical College of Wisconsin¹, Marquette University², University of Wisconsin-Milwaukee³, Social Development Commission⁴

Introduction

Structural Racism and Discrimination

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

Methods

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

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

Preliminary Results

- Figure 3: Geospatial Visualization of Adults Ever Diagnosed with Depression
- Figure 4: Geospatial Visualization of Adults Reporting 14+ Days of Poor Mental Health in the Past Month

Discussion

Expected Outcomes:

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

Impact:

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

Citations

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

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

Cancer Center, Medical College of Wisconsin in Milwaukee

Introduction

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

Methods

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

Results

- TW awareness campaign, particularly in H/L communities.
- Analysis of pre- vs post-intervention evaluation data to assess program impact.
- Long-term follow-up (3 months) with participants to assess maintenance of acquired skills and knowledge from classes.

Table 1. Participant characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total N=28(100%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>28</td>
<td>50.04 ± 13.53</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back or African American</td>
<td>20 (71.4)</td>
<td>5 (17.9)</td>
</tr>
<tr>
<td>White</td>
<td>5 (17.9)</td>
<td>1 (3.6)</td>
</tr>
<tr>
<td>Asian</td>
<td>1 (3.6)</td>
<td>2 (7.1)</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>2 (7.1)</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic or Latino</td>
<td>23 (82.0)</td>
<td>2 (8.0)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>2 (8.0)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Comorbidities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>17 (60.7)</td>
<td></td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>9 (32.1)</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>16 (66.7)</td>
<td></td>
</tr>
</tbody>
</table>

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

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

- Latinos make up 18.7% of the U.S. population, but only 5% of the physician workforce and 6.2% of medical school matriculants.
- Underrepresented in Medicine (URM) teens express interest in careers in the STEM fields at the same rate as Caucasian teens.

**Critical timepoint:** Student's perceived enjoyment in the sciences, across all races, decreases between the fourth and eighth grades.

**EYES ON THE FUTURE**

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

**METHODS**

- 25 eighth-grade students were selected from Bruce Guadalupe Middle School.
- Selection was made by science teacher based on subject interest.
- Goal: Design and implement survey to assess student's attitudes about science and future career goals using a 5-point Likert scale.
- Analysis: used the mean of all non-missing items. Higher scores indicated more positive attitudes.

**RESULTS**

**TABLE 1: Demographics of Middle School Students**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre-Program Count</th>
<th>Post-Program Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>(N = 25)</td>
<td>(N = 25)</td>
</tr>
<tr>
<td>Boys</td>
<td>13 (54%)</td>
<td>12 (55%)</td>
</tr>
<tr>
<td>Girls</td>
<td>12 (46%)</td>
<td>13 (45%)</td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>24 (100%)</td>
<td>22 (100%)</td>
</tr>
<tr>
<td>White</td>
<td>3 (12%)</td>
<td>5 (21%)</td>
</tr>
<tr>
<td>Racial/ethnic minority</td>
<td>2 (8%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Plan to attend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After high school</td>
<td>25 (100%)</td>
<td>25 (100%)</td>
</tr>
<tr>
<td>Two-year college</td>
<td>3 (12%)</td>
<td>14 (60%)</td>
</tr>
<tr>
<td>Technical school, apprenticeship, or trade school</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Get a full-time job</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Never-more</td>
<td>3 (12%)</td>
<td>4 (18%)</td>
</tr>
</tbody>
</table>

*The values are given as the number of students, with the percentage in parenthesis.

**REFERENCES**


The Role of Trauma Clinic in Decreasing Community Violence and Recidivism

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

Department of General Surgery, Medical College of Wisconsin, Milwaukee, WI

Introduction

- Non-fatal gun injuries are a common cause of morbidity in city centers, without the publicity and interference that fatal gun injuries often garner.
- Once someone has been shot with a gun, their risk of being shot again in the following 10 years is 16%, with the number as high as 26% for high risk subgroups such as young African American males.
- In Milwaukee specifically, non-fatal gun injuries have increased 14% from 2020 to 2021.
- So far in 2022 homicides are up 100% compared to this time in 2021.
- To address the growing violence in Milwaukee, 414life was created by community leaders. 414life is a community-based violence prevention program that works on addressing the many complex factors that contribute to growing violence in Milwaukee.

Methods

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

Discussion

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

Future Work

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

Acknowledgements

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

References

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

Staci Young,1 David Frazer,2 Tim Meister,1 Tobi Cawthra, Laura Pinsoneault,3 Melinda Stolley1
1Medical College of Wisconsin, 2Center for Urban Population Health, 3Evaluation Plus

BACKGROUND

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

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

CCSN Initiative Framework

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

Work Group Locations

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

Partner with trusted community champion partner organizations: Three community organizations hire facilitators and evaluators and host work groups.

Develop work groups consisting of both community and faculty members

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

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

- Develop workgroup/efforts, and networking.

Aim 3: Evaluation

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

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

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

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

Process Overview

01 OBSERVE & UNDERSTAND

- Purpose: Co-learn with stakeholders and cancer researchers of varied backgrounds.
- Activity: Define the local scope of the problem

02 DISCOVER & DIGEST

- Purpose: Integrate diverse perspectives along biology to policy continuum.
- Activity: Conduct root cause analysis

03 DESIGN

- Purpose: Synthesize all analysis to-date.
- Activity: Design solution, budget & implementation

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

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

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

Next Steps

- Secure funding for Phase Two (project implementation) - Phase I funding will close in 2023 and each work group will need to demonstrate how the solutions identified will have a positive impact on the health of the selected community.
- Learn, grow, make mistakes and learn from them – there are many opportunities, successes, challenges, and missteps ahead. The developmental evaluation framework will aim to understand and harness this learning.
- Develop authentic community-academic partnerships – this is often easier said than done and the greatest variable is often TIME. Building relationships premised on trust and mutual respect is imperative to successfully moving the work forward and all stakeholders must commit to the process.
“It’s About Being Healthy” - Teaching Community Engagement through a Health Promotions Program Lens
Meghan Malloy¹, Bethany Korom¹, Caroline Remmers¹, Zecilia Alamillo-Roman², Shary Perez², Kelly Dione³, David Nelson, PhD, MS¹

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

Project Timeline

Objectives

• **Aim 1:** To engage with the community partner to identify themes that align with the principles of community engagement from previous health promotion program efforts.

• **Aim 2:** To create a teaching module to introduce community engagement to medical students early in their medical training

• **Aim 3:** To enhance community engagement vs service knowledge for medical students involved in specific health-promotion organizations

• **Aim 4:** To interpret community partner and family response alignment with the results from the teaching module focus groups

• **Aim 5:** To integrate community partner feedback with results from the teaching sessions to strengthen the teaching module for further dissemination and ensure its accuracy

Acknowledgements

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

- In 2019, the Milwaukee Health Care Partnership (MHCP) launched the Housing is Health (HIH) Program for homeless and vulnerably housed patients receiving care at hospitals in Milwaukee County.

- The goal of the HIH, in partnership with the Milwaukee County Housing Division and IMPACT Coordinated Entry (CE), is to navigate patients to housing resources to improve health outcomes and reduce ED visits, inpatient stays, and readmissions.

- In early 2022, HIH expanded to the seven largest safety-net primary care clinics (SNCs) in Milwaukee and added CE as the program’s housing referral intake partner.

Objective

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

Methods

- Referrals to the CE team were reviewed from February to April 2022. Data included were the date of the referrals, where referral was from, and narrative summaries documenting patient's housing needs.

- Each referral was categorized into 7 categories: Homeless Services, Doubled-Up (experiencing housing instability but temporarily staying with family or friends), Housing Quality, Affordable Housing, Eviction Prevention, Violence, and Unknown.

Results

- Homeless Services was the category with the most referrals from hospitals, followed by Doubled-Up, and Violence.

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

Conclusion

- Homelessness is more likely to be detected in hospital settings while housing insecurity is more likely to be surfaced in primary care settings.

- CE is applying this categorization system for ongoing HIH data collection.

- This review suggests enhanced focus on frontline staff training on identifying homelessness in hospitals and housing instability in the safety net clinic setting.
2. Methods

- The 35-question survey took place from September 2021 to March 2022 at Olive View in Los Angeles and ZSFG Emergency Departments in San Francisco. Both hospitals serve large portions of Latinx immigrant populations.

- Trained research assistants verbally consented participants in both English and Spanish after receiving their medical screening exam.

- Primary data analysis, using statistical software STATA, yielded COVID-19 infection and vaccine hesitancy rates divided according to documentation status.

- This analysis describes the effects of duration of stay, represented as those living in the US for 10 or less years and those over ten years of undocumented Latinx patients on vaccination hesitancy.

3. Results

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

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

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

4. Conclusion

- Our analysis demonstrates a lower vaccination rate among the undocumented Latinx who have resided in the US for over a decade. California is the leading state in undocumented healthcare, but our data demonstrates that we still have work to do. These results are instrumental in forming an education component to educate our patient population and physicians that everyone, regardless of legal status, has the right to get vaccines.
Introduction
As people live more urbanized lifestyles especially within densely populated areas, there is potential to lose daily contact with nature, diminishing access to the wide range of associated health benefits of interacting with nature. “Low socioeconomic and ethnic minority people have access to fewer acres of parks, fewer acres of parks per person, and to parks with lower quality, maintenance, and safety than more privileged people.” - Rigolon, 2016

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

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

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

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

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

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

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

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

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

References

Figure 1 - Park Proximity by Tract Groups - Milwaukee County:
- % of non-white group in “dead zones”
- Mostly white group had larger than average park size; non-white group had smaller than average park size

Figure 2 - Park Safety by Tract Groups:
- 200m buffer zone evaluated for applicable crimes
- Mostly non-white group 55 parks with above average crime
- Mostly white group 41 parks with above average crime
The role of peer support in the survivorship experience of African American prostate cancer survivors

Iwalola Awoyinka¹, Margaret Tovar¹, Staci Young¹, Melinda Stolley¹
¹Medical College of Wisconsin

Background and Purpose

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

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

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

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

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

Methods

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

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

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

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

Results

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

- Process diagnosis and reduce feelings of isolation
- Access to information
- Share without judgement
- Reduce stigma in community
- Benefits of peer support and sharing experiences

Sample quotes from interview participants.

- "You know, when you have it, you feel alone. They don’t understand what I went through. Well, these guys went through it too, so they can understand where you’ve been, what you’ve been through, so that makes a world of difference, you can feel comfortable and not intimidated, ‘cause we all went through the same thing, just different times."

- "When you’re with people that actually went through it, you can guide them on more of the things in and out. The thing that stopped me from getting radiation, aside from the organs melting, was there was one of the guys was a truck driver and after he had his radiation, he couldn’t sit for extended amounts of time. There were a bunch of guys that had different other stuff done that were like, not able to hold their urine and needing bags. And it was — and so it — I tried to uh [laughs] stay away from all those kind of things. And I really didn’t — I can’t say that I absolutely knew what treatment to take, but I just decided get it out of me, as much as you can."

- "You’re able to — to relate with relate with others who have gone through the same experience and get that recommendation from them. We shared whatsoever experiences we’ve had without judgement because everybody has gone through the same experiences. So, you don’t feel you are being judged or made fun of that. And these are all men, too. So, we shared freely with each other."

- "Well, I tell you this, they [MMF] did meet my expectations to agree where they taught me to accept. And at the same time, to not accept, but to learn from. What is it I have had? And then the same time, tell other people, other Black men, not be afraid. That when you go to the doctor, knowing and..."

Acknowledgements

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

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

Participant Demographics

<table>
<thead>
<tr>
<th>Mean, [range] or percent</th>
<th>(N = 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>68.6, [57 - 78]</td>
</tr>
</tbody>
</table>
| Combined family income   | > $59,999: 21.40%  
|                          | < $40,000: 21.40%  
|                          | $40,000 - $59,999: 21.40%  
|                          | $60,000 - $79,999: 28.60%  
|                          | > $80,000: 7.14%  
| Marital status           | Married/Living with partner: 71.40%  
|                          | Divorced: 28.60%  
| Education                | High school graduate or equivalent: 35.71%  
|                          | Associate degree, some college or 2-year certificate: 35.71%  
|                          | College graduate or higher: 28.60%  
| Employment               | Employed, full or part time: 64.30%  
|                          | Retired: 14.30%  
|                          | Other: 1.43%  
| Comorbidities (count)    | 1.3, 1.0 - 3.0  
| Treatment (percent yes)  | Surgery: 57.40%  
|                          | Radiation: 57.40%  
|                          | Hormones: 28.60%  

Key Findings

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

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

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

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

Enhancing efforts to create and activate social connections between survivors may offer additional opportunity to improve survivorship outcomes in AAPCS.
Precision Epidemiology: Using Next-generation Geospatial Analyses to Guide Community Level Responses in Diverse Segregated Metropolitan Regions

Cassandra Laibly\textsuperscript{1}, Amir Forati\textsuperscript{2}, Rina Ghose\textsuperscript{2}, Peter Brunzel\textsuperscript{2}, Mallory O’Brien\textsuperscript{3}, Constance Kostelac\textsuperscript{3}, Courtney Geiger\textsuperscript{4}, John Mantsch\textsuperscript{1}
\textsuperscript{1}Medical College of Wisconsin
\textsuperscript{2}University of Wisconsin Milwaukee
\textsuperscript{3}Project WisHope
\textsuperscript{4}City of Milwaukee Health Department

**Introduction**

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

**Methodology**

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

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

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

**Geospatial Analysis Driving Community Engagement**

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

**Conclusion and Future Directions**

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

**Acknowledgements**

This work was supported by a grant from the Foundation on Opioid Response efforts, FORE Grant Team, SPROUT Milwaukee, and multiple Milwaukee community leaders, stakeholders, and members.
First year results of a cancer disparities curriculum to address mistrust and misunderstanding between basic science researchers and community members

**BACKGROUND**

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

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

**Finding**

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

**Quantitative Results**

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

<table>
<thead>
<tr>
<th>Oct. 27 - Understanding the lived experience of all people</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tr>
<td>0% 14% 14% 14% 57%</td>
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<table>
<thead>
<tr>
<th>Dec. 1 - Biomedical research and the molecular events that cause cancer</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% 0% 0% 29% 71%</td>
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</table>

<table>
<thead>
<tr>
<th>Dec. 15 - Social determinants that impact the molecular causes of cancer</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>14% 0% 0% 14% 71%</td>
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</table>

**Qualitative Results**

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

- **What learnings from the course they have applied.**
  - It is not how I've applied learning...but how much more aware I am
  - Sharing knowledge gained with people I mentor
  - Read research...get a personal understanding not to be suspicious of researchers & overly protective of my community
- **What they would change about curriculum.**
  - Engagement and a structured learning environment...At least reflect on and bring for discussion
  - Would like...more collaborations & form relationships with the other programs members
  - Having more facilitated discussion surrounding [projects] would be helpful
- **What they would like to learn more about.**
  - Public-private or academic community partnerships to learn about what works & what doesn't
  - The complexities of collaborating across disciplines & how we as leaders can strengthen this relationship
  - How can we work more closely with policymakers to influence systemic change
- **What excited them about what they were learning.**
  - Seeing the intersection of the science and the real-world applications that affect the community
  - Excited by...how community scholars have so much to share that is otherwise missed by academics
  - The research around disparities is fascinating; I have many more questions

**Next Steps**

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

- **Create more opportunities for Scholars' Interactions**
  - Use meeting times for activities or small group discussion
  - Coach session facilitators to employ adult learning principles including a variety of learning domains and incorporating varied learning styles

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

- **Enhance understanding of projects**
  - Provide greater guidance to scholars on project focus (i.e., beyond community-based interventions)
  - Provide guidance on implementing projects through an alumni network
Lessons Learned about Conducting Community-Engaged Research during the COVID-19 Pandemic

Lora Daskalska 1 and Staci Young, PhD 2

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

Background

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

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

Methods

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

Healthcare partners

Individuals from the target population or content experts

Resource list

Minimizing risk protocol

Recruitment materials

Help with recruitment

Community-based organizations

Interview scope and guides

School Partners

Results

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

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

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

Future Work

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

Conclusions

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

Acknowledgements

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

References


Introduction

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

Methods

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

Results

- To date, 102 trainees have enrolled, 75% of whom are ‘underserved’ (Black (43%), Hispanic (17%), Hmong (3%), receiving public assistance (29%) &/or disabled (3%).
- 15 still in training
- 79/87 (91%) successfully completed 14-week course;
- 74 (73% of total) placed as MAs in a partner clinic
- Of those placed early (n=35), 29 (83%) remained in their positions after 6 months; 18/24 (75%) remain at 12 months.
- To date, 43 graduates have taken the national MA certification test and 42 (98%) have passed!
- Unanticipated barriers were overcome by a skilled and resourceful instructor, including a frequent move to on-line instruction due to COVID-19; and the need to provide support and resources to trainees facing social challenges at home.

Discussion

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