





Carbone Cancer Center UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Inspired by you

Meagan Sulikowski, MSW^{1,2}; Cibele Barbosa Carroll, MD, PhD³; Earlise Ward, PhD¹⁻³; Mary Henningfield, PhD^{1,2}; Ana Karina Cuellar-Montes, MSW, APSW⁴; Kristi Line, MA⁵; Ashley Smith, RN³; Danae Parks, BS^{1,2}; Sarina Schrager, MD^{1,2} ¹Wisconsin Research and Education Network (WREN), Madison, WI; ²University of Wisconsin–Madison Department of Family Medicine and Community Health, Madison, WI; ³University of Wisconsin-Madison Carbone Cancer Center, Madison, WI; ⁴UW Health Breast Center, Madison, WI; ⁵Prairie Ridge Health, Columbus, WI

Objective

To understand barriers and facilitators to mammography faced by women in rural Wisconsin who have not had a recent mammogram

Background

- In Wisconsin, female breast cancer is the second most common type of cancer and the fifth leading cause of cancer death in 2023.¹
- Compared with women in urban areas, women living in rural areas: ^{2,3}
- Have lower rates of screening mammograms
- Experience later stage diagnosis of breast cancer
- Have limited access to medical treatment
- Receive poorer quality of care
- We previously identified the need to collect insights from women not engaged in the healthcare system.⁷

Methods

Eligible women in the Prairie Ridge Health (PRH) service area (Dodge, Columbia, Jefferson counties) were invited to participate. PRH is a rural hospital in Columbus, Wisconsin.

Eligibility requirements

- Live within the PRH service area
- At least 40 years old
- Have not had a mammogram in the past 2 years
- Willing to answer questions in English or Spanish

Recruitment

• Women were recruited at in-person community events, via flyers at business, libraries, etc, through social media, and mailed letters.

Data collection

- Interview and focus group guide: designed to uncover attitudes towards mammograms, including facilitators and barriers.
- Recorded virtual 1:1 interviews and focus groups with eligible women.
- Recordings were transcribed verbatim and de-identified before data analysis.

Analysis

- Three researchers independently coded the transcripts and met to reach consensus on each code and to iteratively define themes.
- A final codebook of main themes and assigned codes was created.



Understanding barriers to screening mammography in Wisconsin: **A continued partnership with Prairie Ridge Health**

Results Mailed letters was the most successful recruitmen English speaking participants. • Personal contact in a safe environment to develop trust was more effective for Spanish speakers. Five interviews and four focus groups were led by two facilitators (January 2024-February 2025). Three participants identified as Latina and their meetings were facilitated by a Spanish-speaking team member. **Demographic Data (N=16)** Mean age, y (range 40-65) Has a bachelor's degree White Not Hispanic, Latino or Spanish Origin English as preferred language Reasons for not having a mammogram in the past 2 years PRH Service Area • TIME SPENT on travel, on scheduling, away from Burnett Wathburn Sawyer Price Oneida caregiving and work • FEAR of finding cancer, physical discomfort, radiation exposure, causing harm Marquette Green Lake Fond du Lac Sheboygan HEALTHCARE SYSTEM Standardized care Difficult to navigate Language barriers • Limited and lack of **INSURANCE COVERAGE** to cover HIGH COSTS **Beliefs Surrounding Mammogram**

"...there's been a lot of studies where the mammogram and densing and squishing the tissue has even spread and even created cancer."

"Images are typically of like older women like having them done. I don't consider myself of the age that like I'm there yet. So, like I typically like think of like a gray-haired like, you know, wrinkles, like my grandmother, so."

Reasons for Not Having a Mammogram:

"I lost my insurance when I got fired from my job for having cancer... I don't have any health insurance, so that's probably why, the main reason right now."

"And since the medicine in the United States is quite expensive, that's why I don't get them done." "So, I guess my primary care never really brought it up until recently and probably just my last visit."

| 50 |
|-----|
| 50% |
| 75% |
| 75% |
| 81% |



"Even though in my head, I knew I should [get a mammogram], and you call six different people, and you get transferred, and your insurance don't budge, and, you know, and your own doctor's office can't get it scheduled, that is repellent. It makes you not want to do it no matter how important I thought it was."

What would make it easier to get a mammogram?

- Utilize more **REFERRALS**
- More LOCATION and TIME options
- Increase TRANSPARENCY
- **IMPROVED** or **ALTERNATIVE** procedures
- **DISCUSSIONS** with doctor beforehand
- INDIVIDUALIZED care
- Better TRANSLATIONS and COMMUNICATION
- **INCREASING** procedure and clinic coverage
- Building **TRUST**

Mammography Facilitators

to catch early for sure". complicated." Not just for us Latinos."

Relationship with Healthcare

"We're just driven to be another statistic, another person to meet criteria." "I like to stay on more of the natural side,...like just not go to the doctors unless I really need it." ...honestly am not afraid to do it mammogram myself but I'm afraid everything I have to do, the obstacles in order to be able to do it."

Meaning of the Word Mammogram

"Getting your boobs squished." " I call it annoying." *"I just feel it's painful."*

Conclusions

- Spanish speakers.

Acknowledgments

References

2019;35(2):229-235. columbia/county/outcomes/overall/snapshot





"And then making sure that insurance covers all those tests because I feel like it's important

"For me, it ease of scheduling would be number one. You know, just stop making it so

"I wish the standards were more clear."

"That would make it easier, the United States' problem is the cost of medicine. The cost of medicine in the United States is overwhelmingly high. Its like health in this country is a luxury.

 Recruitment of women not involved in the health care system was challenging. Mailing letters was the most successful recruitment strategy for English speakers. Personal contact in a safe environment to develop trust was more effective for

 Improving communication with patients, providing patient-centered care, and optimizing scheduling process are potential ways health care systems could improve screening mammography rates in rural areas.

• Funded by the University of Wisconsin Carbone Cancer Center and the Department of Family Medicine and Community Health.

We thank the study participants for their time, engagement, and contributions to this work.

1. American Cancer Society, Cancer Statistics Center. Accessed June <u>19, 2023.</u> https://cancerstatisticscenter.cancer.org/#!/, 2. Chandak A, Nayar P, Lin G. Rural-urban disparities in access to breast cancer screening: a spatial clustering analysis. J Rural Health.

3. Thompson JA, Chollet-Hinton L, Keighley J, et al. The need to study rural cancer outcome disparities at the local level: a retrospective cohort study in Kansas and Missouri. BMC Public Health. 2021;21(1):2154. Published 2021 Nov 24.

4. Onitilo AA, Liang H, Stankowski RV, et al. Geographical and seasonal barriers to mammography services and breast cancer stage at diagnosis. Rural Remote Health. 2014;14(3):2738.

5. Andreason M, Zhang C, Onitilo AA, et al. Treatment differences between urban and rural women with hormone receptor-positive earlystage breast cancer based on 21-gene assay recurrence score result. J Community Support Oncol. 2015;13(5):195-201. 6. County Health Rankings & Roadmaps. Accessed May 10, 2022. https://www.countyhealthrankings.org/app/wisconsin/2022/rankings/

7. Carroll CB, Tevaarwerk AJ, Henningfield MF, Yuroff AF, Bolan C, Geiger K, Ward E, Schrager S. Identifying local facilitators and barriers to creening mammography within a rural acute care hospital service area. WMJ. 2024;123(4):259–266.