COMMUNITY-CENTERED PROCESS MAPPING TO IDENTIFY BREAST CANCER SCREENING BARRIERS

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Introduction

- Breakdowns or delays in breast cancer screening and diagnosis are amongst the leading cause of breast cancer mortality disparities (Yedjou 2019).

- Process mapping is a quality improvement tool that can be used to visually describe the flow of healthcare processes and identify breakdowns (Marriott 2018).

- Process mapping can reveal specific components of the screening process that can be targeted with interventions to reduce breast cancer disparities.

- Engaging community members can make initiatives more relevant, translatable, and sustainable, however there are few published examples of incorporating community members into quality improvement processes.

The **objective** of our study was to develop a community-centered process map to identify barriers and potential solutions to improve access to mammographic screening.
Methods

- A community-centered process map describing the screening mammography process was developed from the lived experiences concerns, and storytelling of community advisory group members.

- After development of the process map, structured brainstorming exercises were conducted to facilitate divergent thinking.
To develop the process map, we included local community partners [participants from the Wisconsin Network for Research (WINRS) Community Advisory on Research Design and Strategies (CARDS)].

CARDS participants are recruited from community centers and food banks that serve individuals from diverse racial, socioeconomic, and educational backgrounds.

Patients, clinicians, and academic researchers were involved in the map development using structured quality improvement guidelines.

Four 90-minute group meetings were held between May and September 2022.

Members were compensated for their time and participation. All sessions were audio-recorded and transcribed verbatim and HIPAA-trained transcribers to prepare for analysis.
First, the Mammogram Timeline (Figure 1.) was created by CARDS and utilized as a framework of important steps in the process of mammogram completion.

- Barriers and solutions as well as decision points were identified by members and categorized at each step.
Results

• Community advisory focus group was composed of 22 adults from low-income neighborhood in Madison, including 17 African Americans and 1 Latinx member.
• The most commonly mentioned barriers and solutions at each step are listed below.
• The Mammogram Process Map (Figure 2.) is an accumulation of solutions and barriers members identified along the pathway to mammogram completion.

Top barriers
(mentioned 6 times or more)

- pain/discomfort
- cost/coverage
- fear/anxiety
- lack of information/unfamiliarity

Top solutions
(mentioned 7 times or more)

- relationships
- reassurance
- safe or comforting physicians
- reminders
- more information
- free/low-cost mammo
To follow through this process map, start at **Due for mammogram**
- Blush pink colored boxes = barriers/ solutions highlighted by community partners

**Diagram Key**
- Start
- Decision point
- Process step/ activity
- Additional info
- End or delay in process

**Factors that impact timeliness:**
- Recent change in insurance/ doctor
- Family hx/ risk factors
- Reminders
- Social supports
- Language access
- Technology access

**Due for mammogram**

- **Is this a priority?**
  - **Yes**
    - **Know who to contact?**
      - **Yes**
        - **Schedule and prepare**
      - **No**
        - **Delay**
  - **No**
    - **Informed about mamm importance?**
      - **Yes**
        - **Delay**
      - **No**
        - **Unsure**

**Factors that impact priority:**
- Cost/coverage
- Anxiety/ fear
- Convenience
- Appnt availability outside workhours/
- No childcare

**Important information:**
- Starting age
- Frequency
- (Un)familiarity with process
- Handouts/ flyers on process

Figure 2a. Steps 1 & 2
(Continued on next slide)
Process Map

Considerations when scheduling:
- Knowing coverage/cost
- Long waitlists vs. ASAP availability
- Able to schedule with other apps
- Negative or positive past experiences

Factors that impact check-in & waiting experience:
- Arrived late
- Diversity/representation in staff
- Anxiousness
- Good vs. bad staff interactions
- Peaceful environment
- Privacy
- Distractions

Factors that impact mammogram exam:
- Arrived early
- Comfortable clothes
- Knowledge about what to expect
- Pain/discomfort

Possible reasons for lack of accessibility:
- No ride
- Gas = $$$
- Distance
- Unfamiliar location/building
- Unreliable buses
- Difficult parking infrastructure

Figures 2b. Steps 3-5
(Continued on next slide)
Figure 2c. Steps 6 & 7

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Process Map

- Distractions

Able to call about or mail results?

MyChart?

Results

Yes but bearable

No

Delay

Not accessible

Accessibility of Mychart? (jargon, language barriers, user friendly)

Accessible

Billing

Considerations for billing:
- More transparency on cost/coverage
- Payment plan clarity
- Resources/vouchers offered

Impact & implications of timely results:
- Radiologist shortage
- Delays in repeat or diagnostic imaging
- No home or incorrect address
- Barriers to technology or unfamiliarity
- Fear/anxiety of results
Discussion

- Community-centered process maps can be used to create step by step breakdowns of the mammographic screening process and identify delays.
- Multiple barriers and potential solutions were identified to improved access and adherence to mammography screening.
- Process mapping highlighted key patient-centered metrics that should be incorporated in patient-access dashboard.
- Future studies will used structured quality improvement methods to tests the impact of these potential intervention on improving mammography screening percentages.

Thank you for viewing

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