Laying the Groundwork for Improvements to the Diagnostic Process for Breast Cancer Screening in Rural Areas

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Division of Public Health Sciences
9%-50% of women fail to follow-up after an abnormal mammogram.

Taplin, et al. Cancer Epi Biomarkers Prev, 21(10);2012

Delays in treatment > 90 days can lead to poorer survival for patients with breast cancer.

Benefits of Mammography are Realized through Completion of Diagnostic Process

Referral for screening mammogram → Screening Mammogram → Result reporting → positive → Referral for diagnostic mammogram or breast biopsy → Diagnostic Mammogram or breast biopsy → Result reporting → positive → Referral for breast biopsy → negative → Referral for breast biopsy → positive → Referral for treatment

Benefits of Mammography are Realized through Completion of Diagnostic Process
Multi-level Context of Healthcare Delivery

- Patients’ Needs & Resources
- Inner Setting of Primary Care
- Relationships with Other Organizations
- External Policies & Incentives
Timely Care After an Abnormal Mammogram Among Low-Income Women in a Public Breast Cancer Screening Program

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Measures of Diagnostic Process

- **Before**
  - Diagnostic Delay > 60 days: 33%
  - Treatment Delay > 90 days: 24%

- **After Case Management**
  - Diagnostic Delay > 60 days: 23%
  - Treatment Delay > 90 days: 14%

- **After Free Treatment**
  - Diagnostic Delay > 60 days: 20%
  - Treatment Delay > 90 days: 11%

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*Division of Public Health Sciences*
Breast Cancer Mortality in Missouri 2001-2013

Age adjustment uses 2000 standard population
Specific Aims

1. Learn how RHCs and FQHCs in rural areas assist women to complete diagnostic resolution after an abnormal mammogram.

2. Identify factors that support or hinder the process for diagnostic resolution.

3. Build relationships with key stakeholders who will be ultimately lead the improvement process.
Key Stakeholders and Advisors

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Community Representatives
- Show Me Healthy Women
- SoutheastHEALTH and Cancer Center
- Missouri Primary Care Association
- Missouri Association of Rural Health Clinics
- Missouri Department of Health and Senior Services

Research Team
- Julia Maki, PhD Program Coordinator
- Graham Colditz, MD PhD Co-Investigator
- Sarah Gehlert, PhD MSW Co-Investigator
- Jean Hunleth, PhD MPH Co-Investigator
- Emily Kryzer Research Assistant
- Beth Prusaczyk, MSW Practicum Student for PhD in Social Work
# Participating Clinics - Survey

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Clinics have procedures in place to assist patients with:

- Managing access challenges: 67%
- Managing psychosocial challenges: 70%
- Understanding what to expect: 85%
- Scheduling a breast biopsy: 89%
- Scheduling a diagnostic mammogram: 91%

Choices are not mutually exclusive
Where do Patients go for Diagnostic Services?

Data Sources: Washington University in St. Louis
Created by: Beth Prusaczyk, MSW
How are sites helping patients manage access challenges?

Clinic 1
“if they got that patient assistance account set-up it’s good for a year… and then once they [the patient] get that we do everything we can. We get blood work done. We get whatever diagnostics we need cuz we know we only have a year or a surgery”

Clinic 2
“the thing is to …get them to a general surgeon that takes their insurance… but fortunately most of them are gracious enough to work out some kind of payment system…when it’s a high suspicion of cancer “
Opportunities to Improve the Diagnostic Process

Clinic 1
“I would like to see, um after somebody’s referred we have a little checkbox and um sometimes we don’t hear back from wherever they went”

Patient
“they need to listen and be more educated about it. That even if it is mental illness presenting itself that it’s still presenting itself with symptoms that manifested from their trigger”
Next Steps for Project

Complete interviews with women

Finalize analysis of interviews and integrate with survey findings

Discuss key findings with stakeholders and strategies that can address the needs identified

Develop a proposal to test the strategies in a rural setting