A Community-University Partnership Approach for Research and Quality Improvement across the Care Continuum to Reduce Breast Cancer Disparities at the Population Level

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OCOH – Community/University Partnerships: Potential Impacts on Health

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Learning Objectives

By the end of this presentation, attendees will be able to:

- Describe 1-3 characteristics of an operative community-university partnership
- Describe partnership-developed initiatives to reduce breast cancer disparities in the local region
- Explain the benefits of a population-level approach to reducing cancer disparities
What is breast cancer?

- Cancer begins when cells in a part of the body start to grow out of control.

- Cancer cell growth is different from normal cell growth. Instead of dying, cancer cells continue to grow and form new, abnormal cells.

- Breast cancer is a malignant tumor that starts in the cells of the breast.
Risk Factors

- Age
- Sex
- Family history
- Jewish ethnicity
- Height
- Weight
- Physical activity
- Alcohol
- Vitamins
- Birth weight
- Age at first period
- Age at first birth
- Number of births
- Breast feeding
- Oral contraception
- Age at menopause
- Post menopausal hormones
- Tamoxifen and Raloxifene
- Benign breast disease
- Ionizing radiation
Early Detection

- A mammogram is an x-ray of the breast

- Mammograms help find breast cancer early when treatments are most effective
Breast Cancer Death Rates
Missouri and U.S.

Data by Race
1975-2009

Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates (deaths per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: (≤1, 1-4, 5-9, ..., 80-84, 85+). Population counts for denominators are based on Census populations as modified by NCI. The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas. The 1969-2009 US Population Data File is used with mortality data.
Screening data

Missouri – 2010

Data by income

Mammograms within the past 2 years, women aged 40+

- Yes
- No

- Less than $15,000
- $15,000 - $24,999
- $25,000 - $39,999
- $35,000 - $49,999
- $50,000+
Screening data

Missouri – 2010

Data by education

Mammograms within the past 2 years, women aged 40+

- Yes
- No

- Less than H.S.
- H.S. or G.E.D.
- Some post-H.S.
- College graduate
Screening data

Missouri – 2010

Data by race

Mammograms within the past 2 years, women aged 40+

- White
- Black
Breast Cancer Death Rates

Missouri

Data by Race

1975-2009
Why the disparity?

- What are the underlying causes/contributing factors to high mortality rates?
- Do genetics play a role (e.g. aggressive tumor types, family history)?
- Are there factors that impact the start of treatment soon after diagnosis?
- How effective are cancer treatment/therapy?
- Are there challenges or barriers that prevent women from completing the full treatment course?
Goal of research

- Discovery
- Advances in population health
- Advances in communities
- Advances in clinical care
Goal of research

- Discovery
- Advances in clinical care
- Advances in communities
- Advances in population health
Program for the Elimination of Cancer Disparities (PECaD)

✓ Program of Siteman Cancer Center at Washington University School of Medicine

✓ Work through community partnerships to develop:
  • Outreach and education
  • Quality improvement and research
  • Training strategies

✓ Less burden from cancer disparities
Program for the Elimination of Cancer Disparities (PECaD)

- **Target areas:**
  - St. Louis metro (north city and county), St. Clair county, IL (east St. Louis), and Bootheel

- **Community Advisory Committee**

- **Cancer site-specific community partnerships**
  - Breast, Colorectal, Prostate
you can’t collaborate on your own, you know?
# Community Engagement/Community-based Participatory Research Principles

<table>
<thead>
<tr>
<th>Engagement Principles</th>
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<tbody>
<tr>
<td>1) Focus on local relevance and determinants of health</td>
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<tr>
<td>2) Acknowledge the community</td>
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<td>3) Disseminate findings and knowledge gained to all partners</td>
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<td>4) Seek and use the input of community partners</td>
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<td>5) Involve a cyclical and iterative process in pursuit of objectives</td>
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<td>6) Foster co-learning, capacity building, and co-benefit for all partners</td>
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<td>7) Build on strengths and resources within the community</td>
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<td>8) Facilitate collaborative, equitable partnerships</td>
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<td>9) Integrate and achieve a balance of all partners</td>
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<td>10) Involve all partners in the dissemination process</td>
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<tr>
<td>11) Plan for a long-term process and commitment</td>
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More + High Quality = Stronger Partnerships

Israel et al. 1998
Israel et al. 2003
Breast Cancer Community Partnership

- Established in 2007

- Members

- Dialogue → Priorities for Intervention → Strategies
  - Local and regional breast cancer disparity issues
Location of area where the unadjusted risk of late-stage (regional or distant) breast cancer is increased among women aged 50 years and older, 1996-1998.

Mario Schootman, Donna B. Jeff, William E. Gillanders, Yan Yan, Bruce Jenkins, Rebecca Aft

**Geographic Clustering of Adequate Diagnostic Follow-Up after Abnormal Screening Results for Breast Cancer among Low-income Women in Missouri**

Annals of Epidemiology Volume 17, Issue 9 2007 704 - 712

http://dx.doi.org/10.1016/j.annepidem.2007.03.017
Partnership Priorities (2007)

1. Greater awareness (prevention and access to care)
2. Impact of culture
3. Build relationship/trust with community
4. Strategy to help patients keep appointments
5. Adherence to routing screening
6. Health literacy/communication
7. Evaluation
Awareness

Even longtime smokers can reduce their cancer risk by quitting. Ask your doctor for resources and tools to help you quit.

Find out more, get your FREE Cancer Prevention Kit from the Program for the Elimination of Cancer Disparities.

Visit www.preventcancer.wustl.edu or call 800-600-3606.

Cancer screening SAVED MY LIFE.

Early detection is the key. It’s the difference between life and death.

Visit www.preventcancer.wustl.edu or call 800-600-3606.
Routine Screening

❖ Evaluation of screening and diagnostic efficiency across the entire system of care that provides service to vulnerable women
  • Primary care and specialty care
  • In and outside of WU and BJH

❖ Smaller workgroup led by the Integrated Health Network
  • Review current breast screening processes and develop recommendations to expedite care
# Recommendations for Breast Screening by the BCRI Workgroup

<table>
<thead>
<tr>
<th>Clinical Breast Exam</th>
<th>If Abnormal</th>
<th>Screening Mammogram</th>
<th>If Abnormal</th>
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</thead>
<tbody>
<tr>
<td>Primary care provider performs exam</td>
<td></td>
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<td></td>
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<tr>
<td>Clinical breast exam is abnormal</td>
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<td></td>
<td></td>
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<tr>
<td>Direct referred to breast health center for breast surgeon consultation</td>
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<td></td>
<td></td>
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<tr>
<td>7-14 days</td>
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<tr>
<td>Management of abnormal findings expedited at breast health center</td>
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<td></td>
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<tr>
<td>Screening mammogram is normal</td>
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<tr>
<td>Screening mammogram appointment scheduled when patient is present or on the phone</td>
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<tr>
<td>Screening mammogram is abnormal</td>
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<tr>
<td>2-3 days</td>
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<tr>
<td>Diagnostic mammogram automatically ordered</td>
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<tr>
<td>Screening mammogram films readily available</td>
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<tr>
<td>Diagnostic mammogram read and managed immediately</td>
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<tr>
<td>If needed, breast surgeon consultation occurs ASAP</td>
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<tr>
<td>0-14 days</td>
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<td>Management of abnormal findings expedited at breast health center</td>
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Benefits to Underserved Women

- Expedited care
- Efficient care
- Standardized referral procedures for all women
- System-wide coordination
  - All primary care and specialty care
  - In and outside of WU and BJH

- Population approach
  - Maximizes advantages across the entire system
  - Bigger impact potential on reducing breast cancer disparities
Help Patients Keep Appointments, etc...

- Patient navigation
- Betty Jean Kerr Peoples Health Centers (north county)
- Reinforce navigation infrastructure in the entire St. Louis metropolitan region

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<th>Need for navigation</th>
<th>Reach/Impact</th>
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<td>N=792 needed nav. (i.e. due/overdue for mmg)</td>
<td>n=751 navigated (94.8%)</td>
</tr>
<tr>
<td>90.8% minority</td>
<td>n=710 navigated women that received mmg (94.5%)</td>
</tr>
<tr>
<td>80.3% income ≤$25,000</td>
<td>Nearly the same as (---)</td>
</tr>
<tr>
<td>69.4%* uninsured or medicaid</td>
<td>Nearly the same as (---)</td>
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*n=842, per episode of navigation
To improve communication between regional safety-net providers

To develop more effective and efficient processes for breast cancer screening, referral, diagnosis, treatment, and follow-up/survivorship in the region

Navigators across the entire system

- All providers of breast health care in the region
- Full cancer continuum (outreach → screening → diagnosis → treatment → survivorship)
- Quarterly meetings
- Neutral location: St. Louis Public Libraries
Community Ownership

- The workgroup members own the workgroup
  - Meeting agenda
  - Discussion topics
  - Meeting frequency
  - Resources shared
Benefits

- Share best practices
- Continuous quality improvement
- Full cancer continuum (outreach → screening → diagnosis → treatment → survivorship)
- Population approach
  - All providers of breast health care in the region
  - System-wide coordination
  - Maximizes advantages across the entire system
  - Bigger impact potential on reducing breast cancer disparities
Opportunities for community-engaged quality improvement and research

Adapted from Taplin SH et al. J Natl Cancer Inst Monogr 2012;2012:2-10
Challenges

❖ Working across multiple organizations for a population impact

❖ Lots of players within organizations

❖ Developing mechanisms to maintain progress overtime in the complex system
Summary

- Through discussions within a community-university partnership
  
  - A community-relevant research project was developed
  
  - Results catalyzed all partners working collaboratively
  
  - Foster real improvement in breast health care for vulnerable women in the region to reduce breast cancer disparity
Acknowledgements

- Members of the Breast Cancer Community Partnership (BCaP)
- Local/regional community health centers and specialty-care providers
- St. Louis Integrated Health Network
- Alvin J. Siteman Cancer Center
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- PECaD Community Advisory Committee
- Graham Colditz, MD, DrPH, PECaD PI, Program Director

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