Development and Evaluation of a Community-Based Intervention to Increase Breast Cancer Screening and Early Detection among Low-Income, African American Women

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National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

NBCCEDP provides breast and cervical cancer screening, diagnosis, and treatment to low income, medically underserved, and un-insured women (emphasizing recruitment of minority women) through states, tribes, and territories.
Study Purpose

To raise local awareness of the GA NBCCEDP

To increase mammography utilization among African-American women

Target Audience

NBCCEDP-eligible African-American women aged 40-64 years
Phase 1
Formative Research
Study Purpose

- To learn what factors influence NBCCEDP-eligible African-American women to get screened for breast cancer

- To determine the most viable media outlets to use to reach NBCCEDP-eligible women with breast cancer screening messages
Research Questions

- What factors influence NBCCEDP-eligible African American women to participate in the NBCCEDP?
- Why do NBCCEDP-eligible African American women not participate in the NBCCEDP?
- What are viable ways (e.g., messages, sources, channels) to disseminate information about NBCCEDP services to NBCCEDP-eligible African American women?
- What are the differences between NBCCEDP-eligible African American women age 40–49 and 50–64 that may have implications for development and dissemination of health messages to these populations?
## Segmentation

<table>
<thead>
<tr>
<th>City</th>
<th>Screened (Women screened in the past 24 months at their local BCCP)</th>
<th>Unscreened (Women not screened in the past three years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40–49 years</td>
<td>50–64 years</td>
</tr>
<tr>
<td>Savannah</td>
<td>1 group</td>
<td>1 group</td>
</tr>
<tr>
<td>Macon</td>
<td>1 group</td>
<td>1 group</td>
</tr>
<tr>
<td>Total</td>
<td>2 groups</td>
<td>2 groups</td>
</tr>
</tbody>
</table>
Focus Group (1) Key Findings

• Having a family history of cancer motivated participants to get a mammogram.

• Unscreened women who had not received a mammogram were unaware of the BCCP program offering no- or low-cost mammograms.

• The reasons why women did not get screened included concerns about: discomfort, embarrassment, radiation that may cause cancer, and what to do in terms of treatment if cancer was detected.

• Unscreened women were less trusting of medical system and low-cost services, more likely to see mammograms as painful and questioned accuracy of results.

• All participants indicated that they frequently listened to the radio.

• When asked about the radio as a health communication tool, participants commonly responded that it was a viable channel for delivering health messages.
Phase 2
Concept and Materials Testing
Study Purpose

• To test communication concepts and radio messages developed based on findings from Phase I.
The price of life is free with a mammogram.

The sooner you have a mammogram, the greater your chances of finding cancer in its early stages and making a full recovery. We are here to help you by providing mammograms at little to no cost at our facilities run by qualified medical professionals. It's a small price with big benefits for your life.

To find out about low- or no-cost mammograms, call Breast & More at 912-651-3378.
Think about what you’re not doing.

The sooner you have a mammogram, the greater your chances of finding cancer in its early stages and making a full recovery. We are here to help you by providing mammograms at little to no cost at our facilities run by qualified medical professionals. It’s a small price with big benefits for your life.

To find out about low- or no-cost mammograms, call BreasTest & More at 912-651-3378.
Community Awareness Print Materials

This is what you could be missing.

The sooner you have a mammogram, the greater your chances are of finding cancer in its early stages and making a full recovery. We are here to help you by providing mammograms at no cost** at our facilities run by qualified medical professionals. It’s a small price with big benefits for your life.

Haven’t had a mammogram?
Strength comes from within.

A mammogram is something we can’t do without.

If you’re over 40 or have a family history of breast cancer, it’s time for you to have a mammogram. And we are here to provide you one at little to no cost. We offer superior facilities where highly qualified medical professionals will test you. Show your strength and get tested today.

To find out about low- or no-cost mammograms, call BreasTest & More at 912-651-3378.
Long Live Life.

When you have a mammogram, your chances of finding cancer in its early stages and making a full recovery increase. And we are here to help you by providing mammograms at little to no cost. We offer superior facilities run by highly qualified medical professionals. It's your life, make the decision to live it as long as you can.

To find out about low- or no-cost mammograms, call BreasTest & More at 912-651-3378.
Community Awareness Print Materials

It takes the strength of a woman...

to realize the power of a mammogram.
You can't put a price on life.

The sooner you have a mammogram, the greater your chances of finding cancer in its early stages and making a full recovery. We are here to help you by providing mammograms at little to no cost at our facilities run by qualified medical professionals. It's a small price with big benefits for your life.

To find out about low- or no-cost mammograms, call BreastTest & More at 912-651-3378.
Community Awareness Print Materials

You can’t put a price on life.

Call 1-800-4-CANCER to schedule your mammogram today.

http://www.cdc.gov/cancer/healthdisparities/what_cdc_is_doing/aamm.htm
Focus Group (2) Key Findings

• Participants commonly focused on images more than on text. When commenting on text, respondents often recommended that phrases be concise and directive, such as “Go get a mammogram!”

• Women valued images of happy, healthy African American women and families in the concept boards. However, they said that the overall message in the concept boards is for everyone, not just Black women.

• Participants liked hearing African American voices in the radio messages. Across groups, however, they stressed that the messages are relevant for all women and should ideally appeal to African American as well as Caucasian women.

• Participants said that since African American women do not talk about their breasts with medical professionals, doctors and nurses fail to inform them about low- or no-cost services, such as mammograms, for which they may be eligible.
Phase 3
Implementation & Evaluation
The African American Women & Mass Media (AAMM) intervention


- Multi-media component (Savannah, Macon)
  - Radio airing of survivor stories
  - 30 sec and 60 sec radio spots
  - Monthly 60 min public affairs shows

- Community presence component (Savannah only)
  - Print media
  - Community events

- Columbus, GA (control site)
Community Events
Evaluation Plans

• Monitoring change in calls to 1-800-4CANCER (Awareness)

• Monitoring number of callers that report radio as information source (Awareness)

• Monitoring the number of women screened through local GA BCCP (Behavior)
Total AAMM Calls by Month and Site
7/08 – 9/09

Number of Calls Received

- Savannah
- Macon
- Columbus

Jul '08 | Aug '08 | Sept '08 | Oct '08 | Nov '08 | Dec '08 | Jan '09 | Feb '09 | Mar '09 | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sept '09
Percent of total calls heard on radio, by site and month

% of calls per site

Month

Sav
Mac
Col
Characterization of Callers
7/08 - 09/09

Total Calls by Site

- Savannah: 510 calls
- Macon: 325 calls
- Columbus: 184 calls
Who We Reached

- Proportion of Callers by Race
- Proportion of Callers by Caller Type
- Proportion of Callers by Health Insurance Status
- Proportion of Callers by Source of 1-800-4-CANCER Information
Source of information by race, calls to Health Dept.

*Other includes: From American Cancer Society (ACS), Breast Center, Cancer Hotline, Church, Client, Clinic, Counselor, Expo, Family Planning Clinic, First Choice, Governmentfoundation.org, Health Department, Hospital, Internet, Letter, Magazine, Medical Doctor, National Cancer Institute (NCI), Poster, Established Patient, Shelter, and Television
Summary of Caller Data

- More callers were African American in the intervention cities.
- The proportion of general public callers was greater in the intervention cities.
- A larger proportion of uninsured women called in from the intervention cities.
- People primarily heard the number to call in from a radio station in the intervention cities.
Total BCCP mammograms by African American women, by site and month
7/08 – 12/09

# Mammograms

Month

July '08 Aug '08 Sept '08 Oct '08 Nov '08 Dec '08 Jan '09 Feb '09 Mar '09 Apr '09 May '09 Jun '09 Jul '09 Aug '09 Sept '09 Oct '09 Nov '09 Dec '09

Col
Mac
Sav

\[ \bar{x} = 129 \]

\[ \bar{x} = 176 \]

36%
Mammograms by African American women, all sites

7/07 - 7/08, pre-intervention (MDE)
7/08 - 12/09, during intervention (GA)
Summary

• We have seen increased calls to 1800-4CANCER in intervention sites compared to the control.

• An increasing number of callers in the intervention sites report radio as their source of information.

• African American callers to health departments report radio, print, and 1800-4CANCER as information sources more often than other groups of women.

• The average number of African American women who obtained a mammogram through the BCCP increased in intervention sites during the campaign period.
Conclusion

- A community-based radio and print materials public health campaign appeared a viable communication method to reach and change knowledge, awareness, and behavior among African American women, and can ultimately be used to reduce health disparities in breast cancer.
Study Team

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The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.