

# The Delta Project: Increasing Breast Cancer Screening Among Rural Minority and Older Women by Targeting Rural Healthcare Providers

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**Purpose/Objectives:** To test a multimethod approach designed for rural healthcare providers to increase breast cancer screening among low-income, African American, and older women.

**Design:** Two-year experimental pretest/post-test with random assignment by group.

**Setting:** Primary healthcare providers' offices.

**Sample:** 224 nurses, physicians, and mammography technicians.

**Methods:** Standardized patients to observe and record healthcare providers' performances, followed by direct feedback, newsletters, posters, pocket reminder cards, and lay literature about screening to use in clinics.

**Main Research Variables:** Healthcare providers' knowledge and attitudes as measured by survey responses, skills as measured by a checklist, and the provision of breast cancer screening as measured by mammography facilities' data.

**Findings:** Healthcare providers significantly improved in demonstration of breast cancer screening practice after the intervention. Nurses performed significantly better than physicians on the breast examination during the post-test. More women older than 50 received mammograms in the experimental counties than in the comparison counties. Culturally sensitive lay literature is needed for African American women with low literacy.

**Conclusions:** Successful interventions included use of standardized patients to teach healthcare providers in their office settings, prompts such as posters and pocket reminder cards, and easy-to-read newsletters.

**Implications for Nursing:** Physicians and nurses play a powerful role in motivating women to have mammograms and clinical breast examinations and to practice breast self-examination. Interventions that help these providers fulfill that role should be implemented.

## Key Points . . .

- As a group, older women with lower income and less education have lower rates of breast cancer screening despite Medicare coverage of these services.
- Encouragement and instruction by healthcare professionals, particularly physicians, can increase breast cancer screening rates.
- Increasing healthcare professionals' knowledge and providing structured, multifaceted programs of instruction can increase screening rates in rural settings.
- Lay literature is lacking about breast cancer screening that is appropriate for African American women and women with low literacy that providers can use to reinforce teaching.

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An estimated 211,300 American women will be diagnosed with invasive breast cancer and an estimated 39,800 will die from the disease in 2003 (Susan G. Komen Breast Cancer Foundation, 2003). It is the leading cause of cancer deaths among women ages 40–59 (Susan G. Komen Breast Cancer Foundation). In general, the frequency of late-stage diagnosis and breast cancer mortality are higher among African American women (Dignan, 2000; Greenlee, Hill-Harmon, Murray, & Thun, 2001) and Caucasian women of low socioeconomic status (Franzini, Williams, Franklin, Singletary, & Theriault, 1997; Li, Burton, & Glass, 2001; Wells & Horm, 1992).