

## Mobile Mammography: A Community Based Approach to Breast Cancer Screening

Deborah C. Williamson, DHA, MSN, CNM  
MUSC College of Nursing  
Brenda Nickerson, MSN, RN  
MUSC Hollings Cancer Center

Purpose: To evaluate mobile mammography as a strategy for increasing mammography utilization in a population at risk for inadequate screening.

Method: Six hundred and seventy-four women who received mammography screening on a mobile van completed a self-administered questionnaire that collected information on history of mammography screening, factors associated with mammography utilization, and intent to have future mammograms. Inadequate mammography screening was defined as a history of inadequate interval screening, or never screened. Chi-square was used to test differences in proportionality, with statistical significance reported at  $p=.05$  or less.

Findings: Fifty-eight percent of women in the sample population reported inadequate screening. Women with a history of inadequate screening indicated that they would not have been screened if the van had not come to their community (ages 40-49,  $p=.005$ ,  $p<.01$ ; ages 50 and older,  $p=.000$ ,  $p<.001$ ). Factors associated with a history of inadequate screening included no health insurance, ( $p=.049$ ,  $p<.05$ ); no regular care provider ( $p=.000$ ,  $p<.001$ ); and, greater than 2 years from last clinical breast exam ( $p=.002$ ,  $p<.01$ ). Factors associated with adequate screening included knowledge of screening recommendations ( $p=.029$ ,  $p<.03$ ), and referral by the provider ( $p=.045$ ,  $p<.05$ ).

Discussion: The use of a mobile van increases mammography utilization for women with a history of inadequate screening. The importance of provider recommendation in mammography utilization reinforces the need for both in-reach and outreach recruitment activities for mammography screening. Providers need to improve the dialogue about breast cancer screening to facilitate the transition from the primary care visit to receiving mammography services. Local community health centers assisted in the recruitment and follow-up of study participants. Community health centers are valuable partners in community-based research because of insights about their patient population, established trust with the study population, and, awareness of issues relating to cultural competency.