Breast cancer continues to be a major cause of mortality for African American women, ranking as the second leading cause of cancer death within this population. Low-income African American women are at relatively high risk for breast cancer mortality due in part to their limited mammography use.

The purpose of this randomized prospective study was to compare a tailored interactive computer intervention with a targeted video; both developed to increase mammography screening among low-income African American women who were non adherent to mammography at baseline. Both intervention groups were compared to a usual care group. Both targeted and tailored interventions used a combination of the Transtheoretical Model (TTM) and Health Belief Model (HBM) to develop intervention content.

A total of 299 African American women who were 45 to 75 and had not had a mammogram in the last 15 months were consented and randomly assigned to one of three groups: 1) Usual Care, 2) Targeted Video, and 3) Tailored Interactive Computer. Mean age was 50.63 and the average educational level attained was 12.34 years of formal school. A total of 33% were currently partnered and 67% did not live with a partner. Data were collected in person at baseline and at 3 months post intervention by telephone. Instruments measured theoretical beliefs of perceived risk, perceived benefits and barriers to mammography screening, self efficacy for mammography, and demographic variables. Validity and reliability had been established in prior work. Mammography status was measured by self-report and women were classified in Pre Contemplation (not thinking about having a mammogram), Contemplation (thinking about having a mammogram) or Action (had a mammogram after the intervention.

Results indicated that stage of mammography adoption did differ by intervention group (p<.04). For participants in the usual care group 32% were in Action at 3 months, versus 25% in the video group and 40% in the interactive computer group. Results indicate that a tailored interactive intervention resulted in the highest level of adherence post
intervention. Results can guide nurses to deliver interventions that will increase mammography screening in low-income African American women.

**Funding Sources**
National Cancer Institute