

Bankhead-Coley Cancer Research Program

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*College of Information
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*2007 Program
New Investigator (3-year project)*

Project Title: Participatory Design & Evaluation of STEER: a Clinic-Based Tool to Help Health Providers Support Breast Cancer Care Needs in Rural Florida

Project Summary: While the development of highly-targeted therapies and increased use of mammography screening and adjuvant therapy services have contributed to the overall decline of breast cancer deaths, these benefits have not been equitable for rural, low SES and non-white women. This is particularly telling in Florida, which ranks third in the U.S. for total number of new cases and deaths from breast cancer. Although mammography screenings have helped stabilize breast cancer incidence and mortality nationwide, about one million women over 40 years old have never had a mammogram in Florida. Rural women, especially those who are of lower socio-economic status, who are less educated, and who are non-white, have far less access to cancer services and are less likely to have had a mammogram than urban women. Lack of physician recommendation and perceived barriers to accessing diagnostic and treatment services have been major factors that have hindered the uptake of regular mammography screenings. While the factors contributing to disparities in breast cancer incidence and mortality are numerous and complex, experts have pointed to failures in the healthcare system to deliver adequate and timely cancer care as a critical issue. This grant aims to: (1) use participatory approaches to design a clinic-based tool to help build rural health providers' capacity to improve screening rates and access to breast cancer care resources within rural non-white and low-SES populations; and (2) evaluate the system's usability, sustainability, and perceived benefits in a rural health clinic setting, as well as its effects on increasing physicians' breast cancer screening referrals and rural patients' adherence to breast cancer screening and treatment referrals. The proposed system, STEER (System for Tracking, Empowering, Equipping, and Reminding), will: send regular alerts to physicians to provide timely referrals in accordance with breast cancer screening guidelines; generate screening reminders that will include information and recommended actions tailored to patients' specific needs or perceived barriers to cancer care; provide a tool to collect information from at-risk patients and enable better tracking of patients throughout the cancer care continuum; and provide a tool to help monitor physician and patient adherence to breast cancer screening guidelines. It is hoped that STEER will be successful in helping rural healthcare providers give more timely breast cancer screening referrals, help empower patients to adhere to screening referrals, and better track patients at risk for breast cancer through the cancer care continuum. Automated reminder systems have been successful in increasing screening rates and patient adherence to screening appointments, but their sustainability in rural healthcare settings still needs investigation. This study seeks to develop an IT system that will not only be comprehensive and extensible but also sustainable in rural settings. It is hoped that the study will also enhance our understanding of how health IT systems should be designed in order to improve access among underserved populations and reduce disparities in the timely delivery of effective treatment and preventive interventions. Results of this study will be used to write a future grant testing the efficacy of a screening intervention using this enhanced STEER system on improving access to cancer care for medically-underserved rural populations.