

2008-R-13

CIO Name: National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control

Project Title: Survey of community support interventions for mammography screening

Project Description and Objectives:

In 2003, 181,646 women developed breast cancer and 41,619 died from breast cancer (USCS). Mammography screening among women 40 and older every one to two years reduces breast cancer mortality by about 20-25% (Humphrey; USPSTF). Between 1990 and 2000 breast cancer mortality declined by 24% and approximately half of that decline has been attributed to mammography screening (Berry). Mammography screening is a key intervention in reducing breast cancer mortality.

Research on community interventions to increase mammography use has clearly demonstrated that the nine interventions recommended in the Community Guide for use by public health, community groups, health plans, and other organizations are effective in increasing mammography use (Community Guide web site; Appendix 1). Despite evidence documenting effectiveness of these community interventions, an Institute of Medicine panel reported that few interventions are consistently implemented in communities across the U.S. (Curry, Byers).

The primary objective of this project is to obtain baseline estimates of the frequency that the seven Community Guide recommended interventions that provide support to women for mammography screening are used or received by women age 40 and older in the United States:

1. Mail and telephone reminders to women from providers,
2. Incentives to women along with reminders,
3. Reducing structural barriers, e.g., mobile mammography,
4. Free or low cost mammography,
5. Health education using small media,
6. Health education using one-on-one education, and
7. Multi-component community programs using combinations of mass media and other interventions.

The research goal of this project is to obtain national level estimates that will be representative of U.S. women 40 and older, and help identify underutilized Community Guide interventions. The study should assess differences among women defined by demographic and socio-economic characteristics and other factors (e.g., community support, attitudes, and awareness). Outcomes from this research should include an analysis of which interventions have maximal impact on increasing mammography screening, recommendations to promote use of underutilized interventions, and identification of factors that impact the decision of women to obtain, or not to obtain, a mammography.

The proposed study should use validated survey methodology, in the form of a telephone survey, to learn from the proposed age cohort of women whether or not and how often they receive the seven interventions listed above.

Awardee Activities:

1. Proposed recruitment plan and selection criteria for identifying study participants. The study population should include a minimum of 1,000 women ages 40 and above, and the size should be based on appropriate sample size calculations. The group of women should be representative of the U.S. population in terms of age, race/ethnicity, income, region of residence, and insurance coverage. This may require that certain segments are over sampled. The awardee will be responsible to justify study population selection.
2. Strategies for enrolling the study population and a plan for non-compliant participants.
3. Human subjects review of activities and appropriate Institutional Review Board (IRB) and consent procedures to conduct the survey.
4. Proposed survey and methodology to collect the data that includes, at a minimum: age of participant, date of last mammogram, knowledge of mammography, receipt of and use of the seven Community Guide interventions, reasons for not receiving mammography, and suggestions for additional means to facilitate obtaining routine mammography screenings.
5. A description of how research findings will be analyzed and used to develop recommendations and propose interventions to increase use of underutilized Community Guide interventions.
6. Timeline of activities for the 2-year project period.

7. Dissemination plan for the results of the study.

CDC Activities:

1. Provide breast cancer science expertise and national survey research knowledge.
2. Share experience and expertise in Community Guide and community intervention research.
3. Offer information on the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and Comprehensive Cancer Control (CCC) programs.
4. Facilitate/participate in dissemination of study findings via reports and peer-reviewed publications as well as presentations at conferences and meetings.

Special Requirements: None

Additional Review Criteria: In addition to the standard review criteria used to evaluate the scientific and technical merit of applications (Significance, Approach, Innovation, Investigators, and Environment) the following additional review criteria specific to this PEP will be considered in the review process:

1. Experience in conducting national surveys.
2. Experience in telephone survey design and methodology.
3. Knowledge of mammography screening-related issues, such as access to care barriers and knowledge, attitudes, and beliefs about mammography screening.
4. Familiarity with the Task Force on Community Preventive Services' Guide to Community Preventive Services, specifically in the area of cancer.

Funding Preferences: None

Other Information: Below are references that will be helpful to potential applicants.

1. Berry DA, Cronin KA, Plevritis SK et al. Effect of screening and adjuvant therapy on mortality from breast cancer. *N Engl J Med* 2005; 353(17):1784-1792.
2. Borchardt J, Carey K, Coates RJ, Given LS, Lee NC, Colditz G (eds). A collaborative, comprehensive approach to fulfilling the promise of cancer prevention and control. *Cancer Causes and Control* 2005;16(Suppl 1):1-88.
3. Breen N, Meissner HI. Toward a system of cancer screening in the United States: trends and opportunities. *Annual Review of Public Health*

- 2005;26:561-582. Available from URL:
arjournals.annualreviews.org/doi/abs/10.1146/annurev.p
ublhealth.26.021304.144703.
4. Curry S, Byers T, Hewitt M, eds. *Fulfilling the Potential of Cancer Prevention and Early Detection*. Washington, DC: National Academies Press; 2003.
 5. Humphrey LL, Helfand M, Chan BK, Woolf SH. Breast cancer screening: a summary of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med* 2002 September 3;137(5 Part 1):347-60.
 6. Meissner HI, Smith RA, Rimer BK et al. Promoting cancer screening: Learning from experience. *Cancer* 2004; 101(5 Suppl):1107-1117.
 7. Ryerson B, Miller J, Eheman CR, White MC. Use of mammograms among women aged ≥ 40 years--United States, 2000-2005. *MMWR Morb Mortal Wkly Rep* 2007 January 26;56(3):49-51.
 8. Swan J, Breen N, Coates RJ, Rimer BK, Lee NC. Progress in cancer screening practices in the United States: results from the 2000 National Health Interview Survey. *Cancer* 2003; 97(6):1528-1540.
 9. Centers for Disease Control and Prevention. The National Breast and Cervical Cancer Early Detection Program 1991-2002 National Report. Atlanta, GA: U.S. Department of Health and Human Services; 2005. Available from URL:
http://www.cdc.gov/cancer/nbccedp/bccpdfs/national_report.pdf
 10. Guide to Community Preventive Services: Cancer. Available from URL:
<http://www.thecommunityguide.org/cancer/default.htm>
 11. Health People 2010: Cancer. Available at URL:
<http://www.healthypeople.gov/Document/HTML/Volumel/03Cancer.htm>

Project Period Length: No more than 2 years

Approximate Total Project Period Funding: \$500,000 (This amount is an estimate, and is subject to availability of funds and **includes direct and indirect costs, excluding the additional academic partner administrative costs.**)

Approximate Average Award: \$350,000 (This amount will be awarded during the first year of the project.); \$150,000 (This amount will be awarded during the second year of the project.)

Approximate Number of Awards: 1

NOTE: Applications must not exceed either the stated Project Period Length or the Approximate Total Budget Period funding per year. Applications in excess of these limits will be considered non-responsive and therefore will not be reviewed.