

HINTS PROPOSAL

Proposed Title: Awareness of the Cancer Information Service: Sociodemographic and Personal Predictors

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Research questions:

1. Which sociodemographic characteristics are predictive of awareness of the Cancer Information Service or other national cancer information resources?
2. Is personal history of cancer predictive of awareness of the Cancer Information Service or other national cancer information resources?
3. Is “information seeking” predictive of awareness of the Cancer Information Service or other national cancer information resources?

Study description/rationale:

The Cancer Information Service (CIS), is a national information and education network is a program of the National Cancer Institute (NCI), the nation’s primary agency for cancer research. Established in 1975, the CIS operates a toll-free telephone service (1-800-4-CANCER), LiveHelp – an instant chat service connecting Internet users to CIS Information Specialists, a Partnership Program designed to reach minority and medically underserved populations, and a Collaborative Research Program designed to develop collaborative research projects with health communications researchers in the field.

Through the telephone service and LiveHelp, trained Information Specialist provide accurate, up-to-date information on a variety of topics to cancer patients, their families, the general public and health professionals. In 2002, the CIS received over 307,000 requests for service through its telephone service, through LiveHelp, and via email and written requests. The majority of users of the Information Service are women (74%). Forty-five percent of users are between the ages of 40 and 59 years of age. The vast majority of users are white (86%).

Over the years, budgetary constraints have resulted in uneven promotion of the CIS. Thus, it is not surprising that only 21.4% of HINTS respondents were aware of the CIS and 19.5% were aware of the 1-800-4-CANCER information number. Identifying the sociodemographic characteristics of respondents who have and have not heard of the CIS will help the NCI prepare, target, and possibly secure funding for a national promotion campaign. Additionally, understanding the cancer history and information seeking behavior of respondents who have or

have not heard of the CIS will help clarify the extent to which awareness of the CIS is fostered by personal experiences with cancer and the information seeking tendencies of respondents. Our analysis will help identify the sociodemographic and personal characteristics of individuals who have not been made aware of the services that CIS has to offer; these findings will help the CIS better target its future promotional efforts.

VARIABLE LIST

Dependent variables:

Hc34aNIH	Have you ever heard of NIH?
Hc34bACS	Have you ever heard of ACS?
HC34cCIS	Have you ever heard of CIS?
HC34dNCI	Have you ever heard of NCI?
HC34eCancerHotline	Have you ever heard of the 1-800-4-CANCER information line?
HC34fUSCenter	Have you ever heard of The United States Center for Cancer Prevention Research?

Possible predictor variables:

Spage	First, what is your age?
Spgender	Are you male or female?
Hs5healthinsurance	Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?
Dm1mainactivity	What is your employment status?
Dm2maritalstatus	What is your marital status?
Dm3achildrenunder5years	How many children live in your household who are under age 18?
Dm4hispanic	Are you Hispanic or Latino?
Dm5race(1-5)	What is your race?
Dm6education	Highest grade/year of school completed?
Recoded-Dm7(a-h)income	What is your income from all sources?
HC1UsualProvider	Is there a particular doctor, nurse, or other health professional you see most often?
Ch1everhadcancer	Ever been told by a doctor that you had cancer?
Ch2typeofspscancer	What type of cancer was it?
Ch3whendiagnosedcancer_unit	At what age or in what year were you first told you had cancer?
Ch4typeoffamilycancer	Have any of your <i>family members</i> ever had cancer?
Hc9seekcancerinfo	Have you ever looked for cancer info from any source?
Hc10otherseekcancerinfo	Excluding your doctor or other health care provider, has someone else ever looked for information about cancer for you?
Health seeking composite	Derived variable about attention to health information from TV, radio, newspaper. (Finney)

Method of analysis:

First, response patterns will be examined among all dependent variables to determine if responses follow a response set (e.g., respondents say “yes” to everything.) Respondents who have said “yes” to the false cancer organization (HC34fUSCenter) will be either eliminated from

the analysis or analyzed separately. Cross tabulations will be conducted to review differences in awareness by different demographic subgroups.

Signal detection methodology will be used to identify different subgroups that have high versus low rates of awareness of the Cancer Information Service (HC34c and HC34e) as well as other national cancer resources (HC34a, HC34b, HC34d). A *signal* is a binary outcome and the *detection* is the set of predictor variables (Kiernan, Kraemer, Winkleby, King, and Taylor, 2001). Subgroups identified using signal detection methodology are homogeneous with respect to the outcome of interest as well as key predictors or characteristics identified. Specification of these subgroups can have important implications for efforts to target promotions. Signal detection has been found to be especially useful in exploratory analyses in which predictors are likely to be highly collinear and interactions between independent variables exist (Kiernan, Kramemer, Windleby, King, and Taylor, 2001). Logistic regression will also be used to examine demographic predictors of awareness of the CIS, 1-800-4-CANCER, and other national cancer resources.

1. Kiernan, M., Kraemer, H.C., Winkelby, M.A., King, A.C., & Taylor, C.B. (2001). Do logistic regression and signal detection identify different subgroups at risk? Implications for the design of tailored interventions. *Psychological Methods*, 6(1), 35-48.
2. King, A.C., Kiernan, M., Oman, R.F., Kraemer, H.C., Hull, M., & Ahn, D. (1977). Can we identify who will adhere to long-term physical activity? Signal detection methodology as a potential aid to clinical decision making. *Health Psychology*, 16(4), 380-389.
3. Kornfeld, J., Fleisher, L., Ter Maat, J., Vanchieri, C., Hohenemser, L., & Stevens, N. (2998). Reaching Minority and underserved populations: The impact of the Cancer Information Service's Outreach Program. Part 3. *Journal of Health Communication*, 3 (Supplement), 36-49.
4. Muha, C., Smith, K.S., Baum, S., Ter Maat, J., & Ward, J.A. (1998). The use and selection of sources in information seeking: The Cancer Information Service Experience, Part 8. *Journal of Health Communication*, 3 (supplement), 109-120.

Targeted Journal: (if known)

Not known at this time.