A Comprehensive Evaluation of a Paid Social Media and Mass Media Gynecologic Cancer Campaign

Supporting Statement Part A – Justification

Point of Contact
Matthew Reynolds, MA
Division of Cancer Prevention and Control
Centers for Disease Control and Prevention
Telephone: 770-488-3054
Email: cdu4@cdc.gov

Revised December 31, 2014

Contents

Attachments

Attachment 1a.	Johanna's Law
Attachment 1b.	Public Health Service Act
Attachment 2a.	Federal Register Notice
Attachment 2b.	Summary of Public Comments
Attachment 3:	Women's Health Survey (.PDF file of screen shots)
Attachment 4:	Email Invitation, Reminder, and Information Sheet
Attachment 5:	IRB Approval Letter

Overview

This is a new Information Collection Request (ICR). Office of Management and Budget approval is requested for one year of data collection to evaluate the impact of a gynecological cancer awareness media campaign developed and implemented by the Centers for Disease Control and Prevention (CDC), Division of Cancer Prevention and Control (DCPC). Information will be collected through self-administered, Web-based surveys conducted in four cities (Milwaukee, WI; Cincinnati, OH; Las Vegas, NV; and San Antonio, TX) in the U.S at two points in time (a pre-campaign survey and a post-campaign survey). Respondents will be adult women ages 40-65. Existing survey panels will be utilized to recruit respondents for this evaluation study.

The media campaign is scheduled to launch by mid-January. The timing of the evaluation is determined by the timing of the media campaign. Thus, we request OMB approval by January 1 to allow for implementation of data collection by February 1.

A. JUSTIFICATION

A.1. Circumstances Making the Collection of Information Necessary

In 2006 Congress passed The Gynecologic Cancer Education and Awareness Act: P.L. 111-324, or "Johanna's Law" (see **Attachment 1a**), authorizing CDC to launch and evaluate a public health information campaign regarding gynecological cancers. Johanna's Law was signed in January 2007.

In response, CDC developed and implemented an awareness campaign aimed at educating women and health care providers about the signs and symptoms of the five main types of gynecologic cancer: ovarian, cervical, uterine, vaginal, and vulvar. More specifically, the congressionally-mandated campaign, entitled *Inside Knowledge: Get the Facts About Gynecologic Cancer*, seeks to increase women's intentions to seek medical attention for persistent symptoms that could be indicative of some of gynecological cancers, yet may sometimes be ignored or simply overlooked. The campaign's primary audience is women ages 40-65.

Development of the *Inside Knowledge* (IK) campaign was guided by formative research with women and health care providers (Focus Group Testing to Effectively Plan and Tailor Cancer Prevention and Control Communication Campaigns, OMB No. 0920-0800, exp. date 11/30/2014; updated to 12/31/2017). To disseminate the campaign's central messages, a range of mass media and electronic communication methods are employed, including Public Service Announcements (PSAs) for television and radio, and small media fact sheets available on the CDC website (see http://www.cdc.gov/cancer/knowledge). These communication materials focus on informing women about warning signs and symptoms that may be associated with gynecological cancers, and encourage women to seek health care for symptoms they may have. Campaign materials have been produced and disseminated in both English and Spanish.

CDC proposes a new information collection to fulfill the Congressional mandate for campaign evaluation. The study will rely on self-administered, Web-based surveys administered through Qualtrics, an online Web-based survey provider. The information collection instrument is included as **Attachment 3** (Women's Health Survey). Respondents will be women ages 40-65, as this is the target audience for the *Inside Knowledge* gynecologic cancer campaign. The evaluation will assess changes in cognitive and behavioral outcomes that are targeted by the IK campaign as a function of media campaign exposure. Information will be collected in four cities (Milwaukee, WI; Cincinnati, OH; Las Vegas, NV; and San Antonio, TX) to be selected from the Nielsen 35 – 45 Designated Market Area (DMA) range. We will implement a paid media campaign in two of the selected cities (Milwaukee, WI and San Antonio, TX) to augment the national *Inside Knowledge* campaign. The supplemental campaign will deliver a higher volume (i.e., "heavy up") of the campaign's existing media materials. The other two cities (Cincinnati, OH and Las Vegas, NV) will not receive any additional media and will serve as controls for this study. Information will be collected in all four cities pre-campaign, and again following 1 month of the campaign "heavy up" implementation (post-campaign). The proposed design is summarized in Table 1, below.

Table 1. Proposed Evaluation Design, with Target Number of Completed Surveys, By City and Campaign Treatment

Treatment	City	Number of Respondents	
		Pre-Campaign	Post-Campaign
"Heavy Up," i.e., Exposed to the National Inside Knowledge Campaign and a Paid Supplemental Media Campaign	Milwaukee, WI	303	303
	San Antonio, TX	303	303
"Control," i.e., Exposed Only to the National Inside Knowledge Campaign	Cincinnati, OH	303	303
	Las Vegas, NV	303	303
	Subtotal	1,212	1,212
	Grand Total	2,424	

This study design will allow CDC to address the following Specific Aim:

1. Assess the impact of the exposure to the IK media campaign on knowledge, attitudes, beliefs, behavioral intentions, and behaviors.

CDC's general authority to collect information is provided by the Public Health Service Act, 42 USC 241, Research and Investigation (**Attachment 1b**). OMB approval is requested for one year.

A.2. Purposes and Use of Information Collection

The information obtained from the proposed data collection activities will be used to inform CDC, policymakers, prevention practitioners, researchers, and the general U.S. population about the extent of women's exposure to campaign messages and the extent to which exposure to these

messages is associated with changes in women's knowledge of the gynecologic cancers and their willingness to seek medical care should they experience symptoms associated with gynecologic cancer. Specifically, this information collection will allow CDC to assess self-reported exposure to campaign efforts and assess whether women who were exposed to the campaign have higher knowledge of gynecological cancers, intentions to seek medical attention for gynecologic cancer symptoms, intentions to discuss symptoms with their doctor, self-reported visits to physicians, and visits to the *Inside Knowledge* campaign website than women not exposed to the campaign.

Findings from this evaluation will be used to guide future investments in the campaign and campaign implementation strategies.

A.3. Use of Improved Information Technology and Burden Reduction

This study will rely on self-administered Web surveys. Screen shots of the survey are included in Attachment 3. Online survey technology has gained salience as a survey technique as computers have become more widespread and the technology and methods to create valid web surveys have increased. The method's primary advantage over traditional paper-and-pencil surveys is to reduce the burden on respondents by facilitating completion and submission. Online surveys have the advantage of increased privacy for the participant (compared to telephone interviews). The online survey instrument will be programmed to utilize automated skip patterns to lead respondents through the instrument with the minimal number of questions appropriate. Skip patterns also ensure data quality and ease of completion. It can also be programmed with a variety of complex data validity checks including consistency checks, range checks (e.g., ensuring that percents cannot add to more than 100%), and a "sum to n" feature to ensure that questions such as "What percentage of..." add to 100 percent. Multiple survey question formats are supported by the software (e.g., "matrix" questions, which are tables containing multiple types of responses, numeric, text, radio button option, and drop down lists.) Respondents will also be able to exit and reenter the survey as many times as needed without losing their saved responses.

Throughout the survey development process, we have paid careful attention to question wording in order to ensure we are minimizing sources of bias to the extent possible, and have developed appropriate response categories for each question to ensure comparable information is gathered across data collections. We have also minimized the use of open-ended questions because of the added burden of recording and coding these responses; however, we have carefully selected questions that explore understanding of *Inside Knowledge* and have identified the need to include a limited number of other open-ended questions to elicit additional important information. We have organized the survey questions to facilitate completion of the survey, as question order can affect ease of survey administration and responses, and have included skip logic, which greatly assists in burden reduction for respondents.

A.4. Efforts to Identify Duplication and Use of Similar Information

The *Inside Knowledge* media campaign is a new campaign initiative, and to date, CDC has not conducted an in-depth campaign evaluation. There is no existing data source that that has

assessed the campaign's impact on women's awareness, knowledge, attitudes, intentions, and self-reported behaviors related to gynecologic cancer or exposure to the campaign. This proposed information collection, therefore, does not duplicate previous efforts.

In designing this study, we have taken several steps to ensure that this effort does not duplicate ongoing efforts and that no existing data sets would address the proposed study questions. We have carefully reviewed existing data sets to determine whether any of them are sufficient to address CDC's need for information on the effectiveness of the campaigns with respect to influencing key campaign outcomes of interest. We investigated the possibility of using existing data to examine our research questions. However, no other data source includes the necessary questions on awareness of individual ads and other campaign materials, and no other source contains all of the necessary outcome variables specific to campaign messages.

In an attempt to assess the knowledge and attitudes for seeking care for gynecological cancer symptoms that existed prior to or around the start of the intervention (2008) or at the start of the supplemental paid mass media activities, a search was conducted for data related to awareness and knowledge of gynecologic cancers and the campaign itself from multiple sources, including the Health Information National Trends Survey (HINTS; OMB No. 0925-0538, exp. 10/31/2014) (e.g., information on cervical cancer screening and awareness), the Porter Novelli HealthStyles survey (intention to seek care for abnormal gynecologic symptoms), and the National Health Interview Survey (NHIS; OMB No. 0920-0214, exp. 12/31/2016), a cross-sectional household interview survey with sampling and interviewing held continuously throughout each year (e.g., knowledge of the Human Papilloma virus vaccine and having a Pap smear during past 12 months in the Adult Access to Healthcare and Utilization questionnaire). None of these surveys contains relevant or comparable questions. However, a number of questions used to construct the Women's Health Survey instrument were drawn from prior, validated survey instruments and surveillance systems, such as from the National Cancer Institute's (NCI's) Health Information National Trends Survey (HINTS) and Porter Novelli's HealthStyles survey. Careful selection and development of survey items ensures that respondents can provide meaningful responses with minimal burden.

A.5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this data collection. .

A.6. Consequences of Collecting the Information Less Frequently

This is a one-time data collection and the purpose is to evaluate the implementation and outcomes of the *Inside Knowledge* campaign that CDC uses to increase knowledge and awareness of gynecologic cancer and its early symptoms. The campaign and its evaluation are mandated by Johanna's Law.

Currently, there is no other data source that collects this information. Collecting data at two time points is necessary to achieve the objectives of the evaluation and to measure the outcomes of

interest. It is necessary to conduct a baseline assessment to determine the extent, if any, of changes that occur in knowledge, attitudes, intentions, and behaviors as a result of the campaign.

A.7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This request fully complies with the guidelines in regulation 5 CFR 1320.5.

A.8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A.8.a. Federal Register Notice

As required by 5 CFR 1320.8(d), a 60-day Federal Register Notice requesting public comments on the proposed data collection was published in the *Federal Register* on February 26, 2014, Volume 79, No. 38, pages 10810-10811 (see **Attachment 2a**). CDC acknowledged receipt of two public comments from one commenter (**Attachment 2b**).

A.8.b. Efforts to Consult Outside the Agency

Leslie Snyder, PhD
Professor, Dept. of Communication
Center for Health Intervention & Prevention
2006 Hillside Road, Unit 1248
University of Connecticut
Storrs, CT 06269-1248
Office: 860 486-4383
Email: Leslie.Snyder@chip.uconn.edu

Punam Keller, PhD
Professor
Tuck School of Business at Dartmouth
100 Tuck Hall
Hanover, NH 03755
Office: 603-646-1336
Email: punam.a.keller@dartmouth.edu

Bradford W. Hesse, Ph.D.
Chief, Health Comm & Informatics Research Branch
Behavioral Research Program
Division of Cancer Control and Population Sciences
National Cancer Institute
9609 Medical Center Drive
Room 3E610, MSC 9761
Rockville, MD 20852

Phone: (240) 276-6721
Email: hesseb@mail.nih.gov

Michael Spitz
Vice President, Strategy
Klick Health
Phone: (416) 214-4977 x2252
Email: mspitz@klick.com

A.9. Explanations of Any Payment or Gift to Respondents

Health message development and testing occur in a highly dynamic, fast-paced environment. Utilization of existing respondent panels allows CDC/DPCP to obtain information quickly so that adjustments can be made, as needed, and health messages and campaigns can be modified rapidly if needed. Similar rapid turnaround techniques are used in the private sector.

The panels from which respondents will be drawn are established survey panels that each provide points as a reward for participation. Immediately upon completion of the survey, each respondent will be provided with a certain number of points that are equivalent to approximately $5.00. Those points are accrued with other points when the panelist takes part in other surveys. At any time, the panelist is able to redeem their points for different products, such as gift cards.

All of the panels used for this study independently manage the rewards programs for its panel and follow a strict privacy policy and safeguard the privacy of panel members at all times.

A.10. Assurance of Confidentiality Provided to Respondents

All procedures have been developed in accordance with federal, state, and local guidelines to ensure the rights and privacy of participants are protected and maintained. The Battelle Institutional Review Board (IRB) has reviewed and approved all instruments, consent materials, and data collection and management materials (see Battelle IRB approval notices in **Attachment 5**).

Privacy Act Determination: CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDHP) and CDC's Information Collection Review Office have reviewed this information collection request and have determined that the Privacy Act does not apply to this submission. No PII will be requested or collected as part of the survey data collections, and no information will be contained in the survey response database that could be tied directly to any individual or household. All reports produced will present results on an aggregate, not individual, level.

Safeguards: All data collected from the online survey data collections will be treated in a secure manner and will not be disclosed unless otherwise compelled by law. Only authorized members

of the project team will access and utilize the response database to conduct analyses and produce aggregate (not individual) level reports.

Consent: All potential respondents will be assured that, should they agree to participate, the information provided in their survey responses will be maintained in a secure environment and will be used only for research purposes.

Nature of Participation: Potential respondents in each city will be randomly selected from existing survey panels and will participate on a voluntary basis. The voluntary nature of the survey data collection will be explained to all potential respondents in the email invitation containing the survey link and on the surveys (e.g., landing page) (See Attachment 4).

A.10.1 Privacy Impact Assessment Information

Data will be collected via an online survey through Qualtrics' online survey research suite. The survey research suite is FISMA compliant. Through its network of partners who maintain online survey panels, Qualtrics will recruit women to participate in the online survey. Participants will receive an email inviting them to take the survey online. A reminder email will be sent approximately 7 days after the initial email.

The survey will assess women's self-reported exposure to campaign efforts and whether women who were exposed to the campaign have higher knowledge of gynecological cancers, intentions to seek medical attention for gynecologic cancer symptoms, intentions to discuss symptoms with their doctor, self-reported visits to physicians, and visits to the Inside Knowledge campaign website than women not exposed to the campaign. The initial items on the survey will ask respondents to provide information about: their current zip code of residence; the number of years/months they have lived in this zip code; and their age and gender. Responses to these items will be used for screening purposes to determine if the respondents are actually in the target audience. Only women between the ages of 40 and 65 who live in one of the selected cities and have lived there for more than 6 months will be eligible to complete the survey. The residency criterion is needed to ensure that respondents live in the markets where the mass media campaigns will be implemented, and thus have had the opportunity of being exposed to campaign ads.

Following the initial screening questions, the survey will include measures of: gynecologic health knowledge and related attitudes; gynecologic health behaviors and intentions; media use and awareness; exposure and reaction to television advertisements; medical history; and additional sociodemographic characteristics.

No personally identifying information will be collected. The information collected in this study will only be reported in aggregate. Results will shared through reports, presentations, and a peer-reviewed manuscript to inform CDC, policymakers, prevention practitioners, researchers, and the general U.S. population about the extent of women's exposure to campaign messages and the campaign's effectiveness.

No individually identifiable information will be collected. Participants will be told that their responses are voluntary and that they can choose not to answer any question. Prior to starting the survey, participants will be shown an informed consent statement and asked to click a button indicating that they agree to participate. Participants can also opt out of the survey at any time. Survey responses will be stored in Qualtrics' secure, password protected, encrypted environment. A de-identified dataset will be provided to Battelle and will be maintained electronically in the contractor's (Battelle's) FISMA-compliant computing environment. Only authorized study personnel will have password-protected access to the electronic files with the study data. No system linking individuals to their responses will be developed. No websites or website content will be directed at children 13 years of age or younger.

A.11. Justification for Sensitive Questions

The majority of questions asked will not be of a sensitive nature. There will be no requests for a respondent's Social Security Number (SSN), and data collected will not be presented with any personally identifiable information (PII) attached. Questions about *Inside Knowledge* campaign advertising concerning lifestyle (e.g., messages about gynecologic health behaviors and self-reported intentions, knowledge and awareness of gynecologic cancers and cancer symptoms) and some demographic information (e.g., age, gender, zip code, race, ethnicity, education level, marital status, employment status, and income) could be considered sensitive, but not highly sensitive. Respondents will be fully informed of applicable privacy safeguards to help address any concerns about inadvertent disclosure of sensitive information. To minimize the potential for negative reactions to any questions on sensitive topics, respondents will be:

- Informed that they may choose not to answer any questions that make them feel uncomfortable or that they simply do not wish to answer. They are free to skip any questions that they prefer not to answer.
- Informed that their answers will be treated in a secure manner.
- Informed that the online survey is entirely self-administered, which maximizes respondent privacy and eliminates their need to verbalize responses.
- Provided with a specific toll-free phone number (linking directly to the Battelle IRB Office) to call in case there is a question or concern about a sensitive question/issue.

In addition, most of the item collecting demographic data will be placed at the end of the questionnaire to avoid alienating respondents. Only demographic data items that will also be used as screeners to determine eligibility (i.e., age, gender and zip code) will be placed in the beginning of the surveys.

A.12. Estimated Annualized Burden Hours and Cost

A.12.a Estimated Annualized Burden Hours

Information will be collected through online questionnaires involving women aged 40 to 65 in four selected cities/DMAs (Milwaukee, WI; Cincinnati, OH; Las Vegas, NV; and San Antonio, TX). Screen shots of the survey instrument are included as **Attachment 3**. The same data

collection instrument will be used for all data collection. The estimated burden per response for a completed survey is 20 minutes.

Information will be collected at two time points in each city with cross-sectional samples of new participants at each point in time, with a goal of obtaining a total of 2,424 completed surveys (303 respondents per city X 4 cities X 2 time points). The total estimated burden for 2,424 completed surveys is 808 hours (2,424 responses X 20 minutes/response).

We anticipate having brief contact with approximately 606 respondents who discontinue their participation during or after completion of the initial Screening Section of the survey instrument. We estimate the burden for these individuals at 3 minutes per response. The total estimated burden for 606 incomplete surveys (Screening Section only) is 30 hours (606 responses X 3 minutes/response).

The total number of individual respondents is 3,030 (2,424 complete responses + 606 incomplete responses). The estimated participation rate is 80% (2,424 / 3,030).

This data collection will take place in 2015. The total estimated annualized burden hours are 838. Table A.12.A provides details about how this estimate was calculated.

Table A.12.A. Estimated Annualized Burden to Respondents

Type of Respondents	Form Name	No. of Respondents	No. of Responses per Respondent	Avg. Burden per Response (in hr)	Total Burden (in hr)
Women Ages 45-60 in Milwaukee, Cincinnati, Las Vegas, or San Antonio	Women's Health Survey (Screening Section only)	606	1	3/60	30
	Women's Health Survey (complete)	2,424	1	20/60	808
				Total	838

A.12.b Estimated Annualized Burden Costs

Respondents participate on a purely voluntary basis, and therefore, are subject to no direct costs, other than time to participate. There are also no startup or maintenance costs. Battelle has conducted many surveys of similar length and has examined diagnostic data from these prior surveys and estimates that data collection for this study will take approximately 20 minutes per respondent. According to the U.S. Department of Labor Bureau of Labor Statistics, as of August 19, 2013, the national median hourly wage is $16.71. Thus, assuming a median hourly wage of $16.71, the estimated 1-year annualized cost to participate will be $14,003. The estimated value

of respondents' time for participating in the information collection is summarized in Table A.12.B.

Table A.12.B. Estimated Annualized Burden Costs

Type of Respondents	Form Name	No. of Respondents	Total Burden (in hr)	Avg. Hourly Wage	Total Cost
Women Ages 45-60 in Milwaukee, Cincinnati, Las Vegas, or San Antonio	Women's Health Survey (Screening Section only)	606	30	$16.71	$501
	Women's Health Survey (complete)	2,424	808	$16.71	$13,502
				Total	$14,003

A.13. Estimate of Other Total Annual Cost Burden to Respondents or Record Keepers

None. There is no other total annual cost burden to respondents or record keepers resulting from this collection of information.

A.14. Estimates of Annualized Cost to the Federal Government

The total cost to the government is estimated as $874,850. The total cost includes $24,850 for CDC personnel expense associated with project management of the data collection contract with Battelle Memorial Institute. The estimated cost of the survey data collection component of the contract is $850,000.

CDC Staff Member	**Annual Salary**	**% Allocation (Annualized)**	**Cost**
GS-13	$ 98,000	20%	$ 19,600
GS-14	$ 105,000	5%	$5,250
		Subtotal (CDC Personnel)	$ 24,850
Total Contractor Costs for Survey Data Collection and Management		Subtotal (Contractor Personnel)	$ 850,000
		TOTAL	**$874,850**

A.15. Explanation for Program Changes or Adjustments

This is a new data collection.

A.16. Plans for Tabulation and Publication and Project Time Schedule

Exhibit A.16.1 Project Schedule

Project Activity	Dates
Survey data collection (baseline)	January 15, 2015
Intervention (campaign implementation)	February 1, 2015
Survey data collection (following intervention)	May 1, 2015
Survey response data file	May 15, 2015
Data file cleaning/editing	May 30, 2015
Data analysis	June 30, 2015
Final evaluation report writing and dissemination	August 1, 2015
Manuscript writing and submission	August 1, 2015

The surveys to be implemented for the outcome evaluation will help answer the following evaluation question:

- Do women who were exposed to the campaign have higher knowledge of gynecological cancers, intentions to seek medical attention for gynecologic cancer symptoms, intentions to discuss symptoms with their doctor, self-reported visits to physicians, and visits to the *Inside Knowledge* campaign website than women not exposed to the campaign?

Initial reporting and dissemination for the comprehensive evaluation will consist of the contractor developing a final evaluation activity report summarizing findings from the survey data collection effort and other evaluation activities conducted as part of the evaluation. In addition, CDC and the contractor will collaborate to develop a peer-reviewed manuscript with corresponding PowerPoint/multi-media presentations and press releases that will incorporate findings and results from the data collection and other evaluation activities.

A.17. Reason(s) Display of OMB Expiration Date is Inappropriate

Not applicable. The display of the OMB expiration date is not inappropriate.

A.18. Exceptions to the Certification Statement

There are no exceptions to the certification statement being sought.