Supporting Statement PART A

for Paperwork Reduction Act ICR

Evaluation of the Spanish-Language Campaign "Good Morning Arthritis, Today You Will Not Defeat Us."

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November 15, 2007

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A. JUSTIFICATION

1. Circumstances Making the Collection of Information Necessary

The regulatory authority for this data collection is found in Section 301 of the Public Heath Service Act (42 U.S.C. 241) as attached in Appendix A.

Arthritis is the leading cause of disability in the United States.[1] The statistics of arthritis are daunting – one in five people in this country have this chronic disease, and experience pain, aching, stiffness and/or swelling in or around one of their joints.[2] Arthritis affects individuals from all walks of life, ranging from the economically advantaged to the economically disadvantaged. It affects males and females, as well as individuals in a broad range of occupations, ranging from white collar professionals to blue collar laborers.[3] For many people with arthritis (PWA), arthritis invokes pronounced effects that shape lives in ways most people can't even imagine. Pain and limitations associated with arthritis can affect nearly all aspects of life, including an individual's physical, psychological, social and economic well-being.[4] This is

[1] National Arthritis Action Plan (NAAP): A Public Health Strategy, 1999.
[2] MMWR 2005;54(5):119–123.
[3] National Arthritis Action Plan (NAAP): A Public Health Strategy, 1999.
[4] "Secondary Literature Review," Unpublished Report for CDC, Prepared by Porter Novelli, March 24, 2000.

especially true for lower socioeconomic status (SES) individuals, who in general, may be more burdened by arthritis than others[5], given that arthritis can affect their mobility, productivity, and ability to earn a living. For these people, arthritis is often accompanied by the added burdens of concern for the future, feelings of hopelessness and despair, and a sense that their lives are generally not within their own scope of control.[6]

Hispanics are the fastest growing racial/ethnic group in the United States. From 1995 to 2050, the Hispanic population in the U.S. is projected to increase 258.3 percent. This translates into an estimated growth rate that is expected to exceed two percent annually until 2030. By 2010, it is likely that Hispanics will be the second largest racial/ethnic group in the U.S.[7] Communications interventions targeted at Hispanic PWA to promote physical activity/exercise are clearly needed. A variety of studies indicate that while the self-reported rate of arthritic conditions among Hispanics is not substantially higher than other

[5] MMWR 2006;55(40):1089-1092 "Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation" Hootman J, Bolen J, Helmick C, Langmaid G. United States, 2003-2005.

[6] "Gathering Insights from Lower SES Audiences. Exploration of Perceptions of Arthritis and Reactions to Self-Management Concepts." Formative Research Report for CDC, Prepared by Aeffect, Inc. August 29, 2000.

[7] "Population projections of the United States: 1995 to 2050." U. S. Bureau of the Census, Current Population Reports, P25-1130. Washington, DC: U.S. Government Printing Office.

population groups, they report a substantially higher rate of activity limitation attributable to arthritis.[8]

To counter the disparate burden of arthritis for lower SES PWA[9], CDC's Arthritis Program (AP) developed and evaluated a campaign designed to encourage lower SES African American (AA) and Caucasian individuals to engage in physical activity. Aeffect, a contractor, conducted the quantitative evaluation of this campaign for CDC. (0920-0627 "Physical Activity. The Arthritis Pain Reliever" campaign evaluation; expiration date 8/31/2005) This evaluation found significant positive changes in knowledge and self-reported levels of physical activity. CDC is now interested in evaluating a similar- Spanish language campaign targeted toward Hispanic lower SES PWA. This campaign is entitled "Good Morning Arthritis, Today you will not defeat us" The specific objectives of the campaign are to increase the target audiences':

- Belief that physical activity/exercise is an effective arthritis management strategy

[8] MMWR 2005;54(5):119-123 "Racial/Ethnic difference in the prevalence and impact of doctor-diagnosed arthritis" Bolden J, Sniezek J, Theis K, Helmick CG, Hootman JM, Brady TJ et al. United States 2002.

[9] MMWR 2006;55(40):1089-1092 "Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation" Hootman J, Bolen J, Helmick C, Langmaid G. United States, 2003-2005.

- Knowledge of the benefits of physical activity/exercise and appropriate types of physical activity/exercise for people with arthritis
- Confidence in their ability to be physically active/exercise
- Trial of physical activity/exercise behaviors

Campaign executions developed include an action message to be more physically active, a direct response vehicle (toll free number), and a prominent tagline (Good Morning, Arthritis, Today you will not defeat us). Print materials feature visuals of age appropriate PWA engaging in physical activity. (See samples in Appendix F). The campaign is designed for state and local implementation; no national campaign is planned.

The CDC Arthritis Program, working with Aeffect[10], is currently planning a quantitative evaluation of this campaign. The purpose of the evaluation is to determine if core campaign messages are reaching the target audience, and if so, how they are affecting the knowledge, beliefs, confidence, and behaviors of Hispanic lower SES PWA. The primary evaluation tool will be a 15 minute Computer Assisted Telephone Interviewing (CATI) questionnaire (including the screening questionnaire) administered in three

[10] Aeffect, Inc. is the research and consulting firm selected to conduct the evaluation

waves: pre-campaign, post-campaign, and six months after completion of the campaign.

For the purpose of this evaluation, the campaign will be conducted by four state Arthritis Programs, hopefully in late spring, 2008. Data will be collected in these four communities, as well as two comparison communities with high prevalence of Hispanic lower SES PWA.

2. Purpose and Use of Information Collection

The purpose of this information collection is to evaluate whether or not the campaign is effective in conveying the intended message and encouraging behavior change. Without benefit of the evaluation, CDC will be unable to determine the effectiveness of the campaign or formulate recommendations on appropriate use of the campaign.

More specifically, the evaluation will answer the question “does the evidence indicate that this campaign is an effective public health strategy to promote physical activity among Spanish-speaking people of Hispanic origin with arthritis?” State health departments will use the information gleaned from this evaluation to determine whether they should invest their limited state and federal arthritis dollars to implement this media campaign. This

information has practical utility because the evaluation will assess impacts of the campaign in a real-world setting, as it is implemented by state health departments and their partners, and has immediate relevance because CDC has funded 36 state health departments for arthritis programming. Without the information from this evaluation, states may be squandering both state and federal dollars on an ineffective public health intervention. The information from this campaign will also be used to guide CDC recommendations on the use of this campaign, and/or the need for modification of the campaign.

3. Use of Improved Information Technology and Burden Reduction

We will utilize Computer Aided Telephone Interviewing (CATI) to collect data from respondents within the target audiences. To further improve response rates and to better ensure that only respondents from the target audiences are contacted, we will purchase targeted lists of telephone numbers in geographic areas (neighborhoods) known to have higher proportions of lower SES individuals and Hispanic populations. Utilizing this list, we would apply RDD methods for data collection, such as randomly dialing each nth record, as well as tactical approaches to minimize non-response (i.e. dial-backs of households who were either not at home and/or initially refused to participate). To protect the confidentiality of respondents, names and phone

numbers will be removed from any data collected and CDC will not receive any data with personal identifiable information.

We have chosen telephone interviewing as opposed to in-person interviewing in order to minimize the respondent time investment and travel burden. Furthermore, this process is faster, more convenient, and more accurate than traditional paper surveys, thus reducing the total time needed for each interview.

4. Efforts to Identify Duplication and Use of Similar Information

This study has been custom designed to collect the necessary data associated with the Spanish language "Good Morning Arthritis, Today you will not defeat us" campaign. As previously mentioned, a similar evaluation was conducted on the English language version of a related campaign. Results from this evaluation will be compared with results from the first evaluation. To our knowledge, there are no other similar data available and no other controlled evaluation plans for the campaign.

5. Impact on small Businesses or Other Small Entities

No small businesses will be involved.

6. Consequences of Collecting the Information Less Frequently

The Centers for Disease Control and Prevention (CDC) Arthritis Program (AP) should be involved in this evaluation as CDC is currently funding 36 state health departments for arthritis programming. Without the information from this evaluation, states may be squandering both state and federal dollars on an ineffective public health intervention.

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

This evaluation fully complies with and meets all guidelines of 5 CFR 1320.5.

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

In compliance with the requirement of Section 3506 (c)(2)(A) of the Paperwork Reduction Act of 1995, the Centers for Disease Control and Prevention (CDC) provided an opportunity for public comment on this evaluation through publication of the 60-day notice in the *Federal Register*. A notice was published on March 22, 2006 (Vol. 71, No. 55, pp. 14531-14532). One public comment was received. A notice was published again on April 4, 2007 (Volume 72, Number 64, Pages 16369-16370); one comment was received and acknowledged. The Federal Register Notices are

enclosed in Appendices B1 and B2 along with a copy of the comments and CDC's response (Appendix C).

In the summer of 2006, CDC and Aeffect also obtained input on the evaluation plan and the questionnaire from experts in the fields of communication evaluation, evaluating physical activity, and arthritis campaign development. The experts included:

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From the input of the contributors above, CDC addressed recommendations from the experts and made revisions to the questionnaire and evaluation plan accordingly.

9. Explanation of Any Payment or Gift to Respondents

Respondents will not receive any payment or gift for their cooperation in completing the survey.

10. Assurance of Confidentiality Provided to Respondents

The CDC Privacy staff have reviewed this application and it has been determined that the Privacy Act is not applicable. No last names or addresses are being collected and only limited demographic information is being gathered. Therefore, the project does not meet the definition of a Privacy Act system of records. CDC and the data collection contractor, Aeffect™, have

also taken precautions to protect the identity of the respondents. At no time during the data collection will any personal identifying information be linked to the data set to be analyzed. All respondents will be contacted via a Computer Aided Telephone Interviewing (CATI) system. This means that the process of dialing phone numbers will be automated, thus decreasing the potential for interviewers to be exposed to the phone number.

Pre- and post-campaign respondents may be re-contacted once for a six month follow-up survey. In order to conduct the six month follow-up survey, respondents' first name and phone number will be retained in the pre- and post-campaign data collection. The sample list for the six month post-campaign follow up survey will be created by retrieving these phone numbers. Once contacted, respondents will be re-screened for prior participation on this survey. Once all data is collected, all phone numbers and first names will be destroyed prior to data analysis. No data analysis will be performed for any single respondent. All analysis will be conducted on an aggregate level. All data and reports released to the CDC will not contain any personal identifying information.

In order to build rapport and encourage accurate and honest answers, prior to the interview respondents will be assured that

all their responses will be held in a secure manner. Interviewers will also assure respondents that all data will be analyzed on an aggregate level. During the survey, interviewers will also be instructed to remind and assure respondents of the secure treatment of their response.

Aeffect™ is a member of and upholds the standards of respondent privacy and confidentiality set forth by the Qualitative Research Consultants Association (QRCA), the Council for Marketing and Opinion Research (CMOR), and the European Society for Opinion and Marketing Research (ESOMAR). Aeffect employees and subcontractors are required to sign a non-disclosure agreement that prohibits them from discussing or releasing any information related to client projects. A copy of this non-disclosure agreement is included in Appendix G. All analysis will be conducted on an aggregate level. All data and reports released to the CDC will not contain any personal identifying information.

CDC has determined that this project does not require IRB review and approval.

11. Justification for Sensitive Questions

Since the topic of arthritis may or may not be considered sensitive in nature, CDC and Aeffect have taken measures to ensure that the topic is handled in a professional manner that takes into consideration respondent burden. As noted above, all respondents will be repeatedly assured of the security of their responses to the questionnaire. Furthermore, CDC and Aeffect have also enlisted the input and advice of several experts from the field of arthritis prevention and communication evaluation. Questions about Race, Ethnicity, Income and Educational Level, which are potentially sensitive to a portion of respondents, are necessary within the screening/eligibility process in order to identify the intended target population.

12. Estimates of Annualized Burden Hours and Costs

The estimated number of participants in this research is n=2,400. Up to 60,000 potential respondents will be screened in order to obtain the target number of 2,400 respondents who are eligible and willing to participate. At the Pre- and Post- campaign data collection the respondents will participate in a phone survey requiring approximately 13 minutes. Response time will vary based upon the number of questions answered or skipped. Six months later, up to 2,400 respondents who completed an initial survey will be contacted again for a follow up survey (i.e., up to 2,400 persons from the initial survey will be contacted and screened,

until 600 eligible respondents are recruited). The total burden for all respondents is approximately 2,730 hours.

A12-1 Estimated Annualized Burden Hours

Type of Respondents	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Target Population of Hispanic Adults	Screener for Primary Pre- and Post Campaign Survey	60,000	1	2/60	2000
	Primary Pre- and Post Campaign Survey	2,400	1	13/60	520
	Screener for 6-Month Follow-up Survey	2,400	1	2/60	80
	6-Month Follow-up Survey	600	1	13/60	130
				Total	2,730

Annualized cost to respondents for the hour burden is estimated at $51,433 for all respondents. This is based on the average hourly earnings of $18.84 for all private industry and State and local government workers in the U.S. as provided by the Department of Labor Bureau of Labor Statistics (May 2006). The estimated cost to respondents, in terms of burden, is shown in a burden table below.

A12-2 Estimated Annualized Cost to Respondents

Form Name	Number of Respondents	Responses Per Respondent	Average Burden per Response (in hours)	Average Hourly Wage Rate	Cost to Respondents
Screener for Primary Pre- and Post Campaign Survey	60,000	1	2/60	$18.84	$37,680
Primary Pre- and Post Campaign Survey	2,400	1	13/60	$18.84	$9,797
Screener for 6-Month Follow-up Survey	2,400	1	2/60	$18.84	$1,507

6-Month Follow-up Survey	600	1	13/60	$18.84	$2,449
				Total	$51,433

13. Estimates of Total annual Cost Burden to Respondents or Record Keepers

Respondents will incur no capital or maintenance costs to complete this data collection.

14. Annualized Cost to the Government

The majority of the work associated with this research will be conducted by the contractor (Aeffect). CDC time and effort to oversee the work of the contractor and respond to contractor questions are estimated, based on prior experience with this type of evaluation, to require .2 FTE (.1 FTE for each of two Grade 14 staff members). The total cost to the Federal government is $562,114.($512,114 in contractor costs and $50,000 in CDC staff costs) This cost covers all research and reporting expenses for the 2.5 year duration of the project. Annualized cost for the 2.5 years of the project is $224,845 per year.

A14. Annualized Cost to Government

	Cost Category	Annualized Cost
Contractor	Data collection: Planning: Analysis: Reporting: Total:	$100,212 $17,004 $49,598 $38,031 $204,845
CDC Staff—2 Grade 14	Staff labor (0.2FTE @100.000/yr)	$20,000
Total annualized cost		$224,845

15. Explanation for Program Changes or Adjustments

This is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

Upon completion of the pre and post-campaign data collection, CDC and Aeffect will process two data tabulation banners per market and two comparative banners across markets (e.g. four experimental vs. two control market tabulations) utilizing tabulation software. Each banner will consist of tables with up to 20 subgroup columns (such as age, household income, gender, etc.) and each table will display results showing question frequencies, means, standard deviations, and statistically

significant difference markers between subgroups. The tables will be designed to allow for columnar comparisons of pre-campaign and post-campaign measures and testing of significance difference between these columns (t-tests and ANOVAS). Ultimately, the analysis of the pre-campaign data will allow for establishing a benchmark comparison against which the post-campaign and six-month follow up data can be compared for significant differences at the 95% confidence level.

After completion of the six-month follow up data collection, Aeffect™ and CDC will process four additional data tabulations per market, as well as two additional pre vs. post-campaign comparative tabulations. More advanced and robust analysis of the data utilizing univariate and multivariate statistical approaches will include making comparisons between the test and control markets using analysis of variance (ANOVA) and multiple regression. In addition, regression-discontinuity analysis will be utilized to specifically look at the effects of the campaign on two groups: the experimental group and the control group. We will then utilize regression to examine the degree to which intervention exposure is predictive of increased awareness of campaign messages, knowledge of physical activity, and confidence/trial of the behavior.

A complete time schedule for the entire project is as follows:

Activity	**Time Required**	**Start Date**
Field pre-campaign telephone survey	6 weeks	Immediately on OMB approval
Implementation of Campaign	6 weeks	2 months after OMB approval
Field post-campaign telephone survey	6 weeks	4 months after OMB approval
Field post-campaign follow up survey	4 weeks	9 months after OMB approval
Tabulations of pre-campaign data prepared	4 weeks	Immediately after collection of pre-campaign survey
Tabulations of post-campaign data prepared	6 weeks	Immediately after collection of post-campaign survey
Tabulations of six month follow up data prepared	6 weeks	Immediately after collection of six month follow up survey
Detailed written reports	4 weeks	Immediately after data tabulations of all surveys
Publication in public health journals	6 weeks	TBD

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

Exemptions for display of OMB expiration date are not being sought.

18. Exemptions to Certification for Paperwork Reduction Act Submission

Exemptions to certification for paperwork reduction act are not being sought.