Economic Analysis of the National Program of Cancer Registries

Application for OMB Clearance

Supporting Statement

Part B—Statistical Methods

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Form 83-I

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B. STATISTICAL METHODS

B.1 Respondent Universe and Sampling Methods

The data collection process does not employ statistical methods. Data collection will take place for the entire universe; each of the 46 programs will be required to submit data. Choosing a smaller sample to survey will not allow for a comprehensive assessment of all registries. Variation that exists across the programs cannot be explained without detailed data from all programs. In addition, in order to guide individual program resource allocation decisions, data is required on an individual program level.

B.2 Procedures for the Collection of Information

We are developing a web-based version of the questionnaire, presented in attachment 3a, to collect information from the programs. All programs will receive training on using the web-based tool and a detailed interactive user's manual will be provided with the tool to assist the programs to provide the requested data accurately. Automated data checks will be incorporated in the tool and this will allow the programs to review and check data prior to transmission.

Once the data is received, they will be logged and archived. The cost data will then be reviewed for accuracy and completeness. Thorough data validation will be performed to assess the quality of the data available to perform the planned analysis. All data collected in the Cost Assessment Tool will be assessed for missing information (% of fields with missing data), and incorrect data (% data elements with formats that are not recognized; % with inappropriate range of values). We will also review whether the subcategories sum up to the expected total costs. Discrepancies between the total amount of funds expended annually and the total itemized costs will be identified. In-kind contributions will also be reviewed to ensure that only those contributions that represent true opportunity cost are included. The results will be assessed and reported on an annual basis.

Based on each program's submission, an Error Summary Report will be produced that contains counts and associated percentages for blank field errors, inter-field relationship errors and inter-record relationship errors, in each data set. The contractor will then have a conference call with program data managers who have error reports and, if necessary, identify strategies to improve the integrity of the data. We will then create an aggregated analysis file for generating reports and publications. All reports and publications based on the program data will be distributed to the NPCR registries, who will then have an opportunity to review and comment.

All data collection materials are included in the following attachments:

- Attachment 3a: Cost Assessment Tool
- Attachment 3b: Cost Assessment Tool User's Manual

B.3 Methods to Maximize Response Rates and Deal with Nonresponse

CDC expects that all the 46 programs will participate in this study. Therefore, there should be no nonresponse. We expect all NPCR registries to report data in a timely manner; however, programs that have difficulty submitting data will be provided with technical assistance. In addition, based on our experience during the pilot phase of this project, we are confident that all programs will be able to provide timely and accurate data.

Training in the use of the data reporting system will be provided to Registry Directors, Business Managers and Data Managers. Programs will also receive a Data User's Manual that provides complete written instructions regarding the cost data submission requirements. This document will support consistent submissions across programs.

B.4 Test of Procedures or Methods to be Undertaken

Site visits were undertaken to four registries to assess the ability of the programs to understand the data elements requested, identify the cost information required, and complete the questionnaire within the allocated timeframe. The site visit also provided an opportunity to identify the data collection burden to the programs. Overall, the registries were able to understand and provide key data elements required.

The information learned from the site visits was used to develop the Cost Assessment Tool and User's Guide (see **Attachment 3a and 3b**). As previously indicated, the Cost Assessment Tool and User's Guide were pilot tested by seven additional registries (see **Attachment 4** for listing). Feedback from these pilot registries were incorporated in order to create a web-based cost allocation tool that will serve as the data collection instrument for all of the NPCR programs. The web-based Cost Allocation Tool will also be pilot tested using a select group of registries.

B.5 Individuals Consulted on Statistical Aspects and Individuals and/or Analyzing Data

Florence Tangka, Ph.D. [770-488-1183] of the Division of Cancer Prevention and Control is the Principal Investigator and Technical Monitor for the study. She has overall responsibility for overseeing the design and administration of the survey and she will be responsible for analyzing the survey data.

The survey instrument, sampling and data collection procedures, and analysis plan were designed in collaboration with researchers at RTI under contract No. 200-2002-00575, Task Order No. 14 with the CDC. RTI will administer the survey.

Sujha Subramanian, Ph.D. [781-434-1749] has overall technical and financial responsibility for the study at RTI and led the RTI effort to design this protocol. Dr. Subramanian will direct the overall data collection effort.

Other personnel involved in design of the protocol and data collection instruments are:

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