Supporting Statement: Part A

Automated Management Information System (MIS) for Diabetes Prevention and Control Programs

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(Revision)

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PART A: JUSTIFICATION

Abstract

The Center for Disease Control and Prevention (CDC) has collected performance and progress information from state-based diabetes programs since 1977. Initially, programs submitted narrative progress reports to CDC in hard-copy format. In 2000, CDC implemented an automated, web-based MIS that addressed the limitations of a non-standardized approach to information collection.

In the period of this Revision request, CDC will transition to an enhanced, revised MIS. The following changes are described: (1) Changes related to re-structuring the MIS for improved flow, continuity, and usability. (2) Changes relating to new reporting requirements for applicant programs. The new requirements will harmonize the progress and performance indicators for CDC-funded Diabetes Prevention and Control Programs with the indicators being implemented for other CDC-funded programs in Tobacco Prevention and Control, Behavioral Risk Factor Surveillance, and Healthy Communities. (3) The term "Prevention" will be incorporated into the title of the clearance, reflecting the increased emphasis on diabetes prevention in the work plans of state-based Diabetes Prevention and Control Programs. (4) A decrease in the number of respondents.

Implementation of the revised MIS is expected to result in a decrease in the burden to respondents. OMB approval is requested for three years.

1. Circumstances Making the Collection of Information Necessary

The CDC provides funding to state and territorial health departments to develop, implement, and evaluate systems-based Diabetes Prevention and Control Programs (DPCPs). DPCPs are population-based, public health programs that design, implement, and evaluate public health prevention and control strategies that improve access to and quality of care for all and reach communities most impacted by the burden of diabetes (e.g., racial/ethnic populations, the elderly, rural and the economically disadvantaged). These programs also support a broad range of public health activities that will reduce death, disability, and costs related to diabetes and its complications. These programs are a cornerstone of CDC's strategy for reducing the diabetes burden throughout the nation. The Diabetes Control Program is authorized under sections 301 and 317(k) of the Public Health Service Act [42 U.S.C. sections 241 and 247b(k)] (*1*) (**Attachment 1**). The Catalog of Federal Domestic Assistance (CFDA) number is 93.988.

Traditionally, CDC funds DPCPs with 5 year cooperative agreements. The programs are funded and supported by CDC's Division of Diabetes Translation (DDT) in the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Participants include 53 DPCPs representing all 50 states, the District of Columbia, and 2 U.S. territories. Awards to individual applicants are made for a 12-month budget period.

Continuation awards for subsequent budget periods are made on the basis of satisfactory progress in achieving both national and program-specific goals and objectives as well as on the availability of funds. CDC has collected information from DPCPs to monitor program activities and progress. Progress reports were initially submitted to CDC in hard-copy format. In 2000, CDC implemented an automated management information system (MIS) to address the limitations of the non-standard, paper-based reporting method. Since July 2000, the use of the MIS for data collection has established a more formal, systematic method of collecting information than has historically been requested from individual DPCPs and has standardized the content of this information.

In the period of this Revision request, CDC will transition to an enhanced, revised MIS, and requests OMB approval of the following changes: (1) Changes related to re-structuring the MIS for improved flow, continuity, and usability. (2) Changes relating to new reporting requirements for applicant programs. The new requirements will harmonize the progress and performance indicators for CDC-funded Diabetes Prevention and Control Programs with the indicators being implemented for other CDC-funded programs in Tobacco Prevention and Control, Behavioral Risk Factor Surveillance, and Healthy Communities. (3) The term "Prevention" will be incorporated into the title of the clearance, reflecting the increased emphasis on diabetes prevention in the work plans of state-based Diabetes Prevention and Control Programs. (4) A decrease in the number of respondents. OMB approval is requested for three years.

2. Purpose and Use of Information Collection

The MIS for DPCPs is designed to share information throughout the diabetes community about diabetes and related programs through a centralized Internet interface. The system generates reports including unique, ad hoc reports as well as the competitive and the continuation applications, supports queries, standardizes reporting procedures and fosters continuity and consistency among the DPCPs and the CDC Project Officers.

The MIS has facilitated CDC's ability to fulfill its obligations under the cooperative agreements; to monitor, evaluate, and compare individual programs; and to assess and report aggregate information regarding the overall effectiveness of the DPCP program. The MIS has also supported CDC's mission of reducing the burden of diabetes by enabling staff to more effectively identify the strengths and weaknesses of individual DPCPs and to disseminate information related to the successful public health interventions implemented by these organizations.

Specifically, CDC uses this information for program operations management and reporting purposes including:

- Identifying the need for ongoing guidance, training, consultation, and technical assistance in all aspects of diabetes prevention and control
- Evaluating the progress made by programs in achieving national and program-specific goals and objectives

- Identifying successful and innovative strategies and public health interventions to reduce the burden of diabetes
- Disseminating and sharing information among all DPCPs
- Monitoring the use of federal funds
- Evaluating and reporting on the overall effectiveness of the DPCP

The collected information is used by the DPCPs for enhanced efficiency in their program operations management and reporting purposes including:

- Shortening the information cycle - information the DPCPs enter into the system on an ongoing basis is available to DDT in real time. This facilitates better monitoring and tracking of their programs and helps create an organizational memory.
- Facilitates the comparison and analysis of information across DPCPs.
- Knowledge and experience sharing - the system facilitates sharing of programmatic information among DPCPs through the availability of key word searches and unique ad hoc reports.
- DPCPs and Project Development Officers use the information in the MIS to facilitate the technical assistance and consultation process.
- The aggregate information in the MIS is used to generate a variety of meaningful outputs using the Reporting Module. These reports assist CDC and DPCPs in program planning, financial management, resource allocation, and sharing 'best of practice' procedures. The system allows users to run customized queries and set their own parameters for defining the content of reports. Some examples of reports that the System can generate include:

  1) National level reports that represent aggregate level information from all DPCPs. For example, the number of DPCPs that utilize the services of full time epidemiologists and the tasks that are part of that staff person's position description.
  2) DPCP specific reports. For example, publications developed by a DPCP to educate providers about the importance of routine eye and foot exams.

This Revision request includes planned changes to the reporting requirements for DPCPs as outlined in the most recent Funding Opportunity Announcement (FOA). The revised information collection will harmonize the progress and performance indicators for diabetes control programs with the progress and performance indicators planned for programs in Tobacco Prevention and Control, Behavioral Risk Factor Surveillance, and Healthy Communities. The development of a common planning and evaluation framework for these programs, including a core set of common indicators, will improve CDC's ability to plan, compare and evaluate activities across a spectrum of chronic disease prevention and control initiatives. The tabs for items to be reported annually through the revised MIS are provided in **Attachment 3**. The tabs for items to be reported semi-annually through the revised MIS are provided in **Attachment 4.**

Implementation of the modified indicators will require some restructuring of the current MIS. An overview of the transition from the currently approved MIS to the revised MIS is provided in the Technical Appendix (**Attachment 5**).

The MIS also includes two modules that serve as adjunctive and optional tools for DPCPs: the Evaluation Tool Kit (ETK) and the Diabetes Indicators and Data sources Internet Tool (DIDIT) (**Attachment 6**). These modules do not involve data entry or burden to respondents, but provide technical references for DPCP personnel to improve surveillance and evaluation capacity at the local level, and will be retained in the revised MIS. The ETK aids DPCPs to expand their evaluation capacity and expertise and to incorporate evaluation into their program model. Evaluation has always been part of a work plan that is submitted in response to a request for appropriations (RFA), and evaluation questions are already part of the MIS. The ETK is designed to be a user-friendly online tool to help DPCPs develop an evaluation plan based on the CDC Evaluation Framework. It provides easy access to tested tools and methods consistent with the National Diabetes Program approach and CDC evaluation methodology.

The DIDIT provides DPCPs with information about diabetes indicators and related data sources in order to more effectively track the burden of diabetes in their states or territories. This improves the DPCPs' understanding of how to locate and compare existing data sources while enhancing the consistency with which estimates are computed. In summary, this powerful tool provides DPCPs with adequate information to either analyze data themselves or request data from other agencies to monitor indicators in their respective jurisdictions.

3. Use of Improved Information Technology and Burden Reduction

The web-based MIS collects standard data from every state-based program. The structure provided by the MIS reduces the grantees' need to interpret reporting requirements. By providing discrete data fields for specific data items, the MIS enables the DPCPs to analyze their data and to use that information for program planning, resource allocation, financial management. The electronic format also allows DPCPs to conduct interim self-assessments of progress toward meeting their objectives, and supports sharing of success stories with their constituents. This type of analysis would be extremely burdensome if collected and analyzed without an electronic MIS.

Without this standardized data collection CDC would need to revert to using time consuming, labor intensive manual procedures to evaluate the effectiveness of the DPCPs.

Use of this technology also promotes the cost-efficient and effective disbursement of available resources by the DPCPs.

- Reduces dependence on paper (and associated storage issues)
- Preserves integrity of historical documentation (editing access is restricted)

- Creates permanent institutional memory

4. Efforts to Identify Duplication and Use of Similar Information

The information reported by DPCPs to CDC describes state-based programs, resources, objectives, and accomplishments. The DPCPs are the only source of the relevant information.

5. Impact on Small Businesses or Small Entities

Respondents are state-based health departments who receive funding for diabetes control activities. No small businesses or entities will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

There are two information collections per year. Some items are reported on an annual schedule. The requirement for submission of an annual progress report (at minimum) was established by CDC's Procurement and Grants Office. In addition, some items are reported twice per year, as outlined in the Funding Opportunity Announcement (FOA). The information collection schedule allows DPCP staff to maintain compliance with reporting requirements, and allows CDC staff to monitor progress and provide appropriate technical assistance.

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

There are no special circumstances and the request fully complies with the regulation.

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

A. A Notice was published in the Federal Register on December 17, 2009, Vol. 74, No. 241, pp. 66974-66975. No public comments were received.

B. Sources consulted for the MIS design and development are listed in the initial OMB clearance document.

Additional ongoing consultation is provided by the MIS Advisory Group, specific-module workgroups, and ad hoc workgroups composed of representatives from CDC and DPCPs.

9. Explanation of Any Payment or Gift to Respondents

DPCPs do not receive payments or gifts for providing the information needed to monitor their progress and performance.

10. Assurance of Confidentiality Provided to Respondents

The CDC Privacy Act Officer reviewed this Request for OMB Clearance and determined that the Privacy Act does not apply. Respondents are state-based health departments providing information on their organizational goals, activities, performance metrics, and resources. Although one or more contact persons is identified for each responding health department, the contact person is speaking from their role as a representative of the health department, and the contact person does not provide personal information.

Data will be submitted to CDC using Internet-based communication protocols. A security plan has been developed that follows CDC protocol, and this security plan met CDC guidelines before electronic data collection began. The MIS allows varying degrees of access for Project Officers at CDC, state level officials, and other interested parties. System access can range from read-only access to full recoding privileges depending on the intended user. This assures that stored information is accessible yet secure. Northrup Grumman, the system contractor, oversees compliance with the written security plan developed by the CDC National Center for Chronic Disease Prevention and Health Promotion.

IRB approval is not needed for this information collection.

11. Justification for Sensitive Questions

As previously noted, the MIS does not collect identifiable personal information, but provides an efficient electronic means of collecting and organizing information about respondent organizations that was previously collected in hardcopy format. Although respondent organizations could view some of their performance data as sensitive, this information is necessary for evaluating and improving Diabetes Prevention and Control Programs. The security measures described above have been put in place to guard against inadvertent or inappropriate disclosure of information.

12. Estimates of Annualized Burden Hours and Costs

A. Estimated Annualized Burden Hours

The 53 respondents are Diabetes Prevention and Control Programs (DPCPs) in each of the 50 States, Puerto Rico, the Virgin Islands and the District of Columbia. All information is reported electronically through the Management Information System (MIS).

Attachment 3 (MIS Annual Report Tabs) is a summary of the information items reported to CDC once per year. The total estimated burden for the complete Annual Report is 51 hours. The estimated burden for each component of the Annual Report is as follows: Program Summary (12 hours), Resources: Personnel (13 hours), Resources:

Contracts (5 hours), Resources: Partners (10 hours), Resources: Budget Updates (6), and Planning: Data Sources (5).

Attachment 4 (MIS Semi-Annual Report Tabs) is a summary of the information items collected twice per year. The estimated burden for each Semi-Annual Report is 16.5 hours. The estimated burden for each component of the Semi-Annual Report is as follows: Action Plan: Project Period Objectives and Updates (5 hours), and Annual Objectives, Activities and Updates (11.5 hours).

The total annualized burden per respondent for all required reports is 84 hours, and the total estimated annualized burden for all respondents is 4,452 hours. Table A.12-1 provides a summary of respondent burden.

12-1 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)***
Diabetes Prevention and Control Programs	**Program Information:** Program Summary	53	1	12	636
	Resources: Personnel	53	1	13	689
	Resources: Contracts	53	1	5	265
	Resources: Partners	53	1	10	530
	Resources: Budget Updates	53	1	6	318
	Planning: Data Sources	53	1	5	265
	Action Plan Project Period Objectives & Updates	53	2	5	530
	Action Plan Annual Objectives & Activities & Updates	53	2	11.5	1,219
				Total	**4,452**

The MIS is being restructured to improve usability and reduce burden to respondents. A technical appendix on conversion from the current MIS to the revised MIS is included as **Attachment 5**. The MIS also includes tools and reference that do not impose a reporting burden on respondents but are provided as a service to DPCPs. A summary of these features is provided in **Attachment 6**.

B. Estimated Annualized Cost to Respondents

The estimated annualized cost to respondents is calculated by multiplying the estimated number of burden hours for maintaining the MIS times the average hourly wage for personnel who maintain the system. The average hourly wage of $29.00 is based on the average of all Program Coordinators as shown on CDC Extramural Programs Management Information System (EPMIS) reports. The total estimated annualized cost to respondents is $144,478. The calculations underlying this estimate are presented in Table A.12-2.

12-2 Estimated Annualized Cost to Respondents

Type of Respondents		*No. of Respondents*	*Number of Responses per Respondent*	*Average Burden per Response (in hours)*	*Average Hourly Wage Rate*	*Total Respondent Costs*
Program Coordinators for Diabetes Prevention and Control Programs	**Program Information** Program Summary	53	1	12	$29.00	$18,444
	Resources Personnel	53	1	13	$29.00	$19,981
	Resources Product	53	1	5	$29.00	$7,685
	Resources Partner	53	1	10	$29.00	$15,370
	Resources Budget Update	53	1	6	$29.00	$9,222
	Planning: Data Sources	53	1	5	$29.00	$7,685
	Action Plan Project Period Objectives & Updates	53	2	10	$29.00	$30,740
	Action Plan Annual Objectives & Activities & Updates	53	2	11.5	$29.00	$35,351

		Total	**$144,478**

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

All equipment costs were excluded from the capital cost estimates because the DPCP MIS is designed to operate on the existing hardware and communications infrastructure, use existing hardware and software at the State level, and use the public Internet domain for communications.

14. Annualized Cost to the Government

Total Operation and Maintenance Component

There is a development team of contractors (Northrup-Grumman) that work with CDC to ensure that the MIS is operating efficiently, and to coordinate the enhancements that are routinely added to the MIS. Contractor costs budgeted at $200,000 a year include: project manager, business analyst, database developer, developer/coder, and a usability engineer. There is also a technical writer available for developing the on-line help module. CDC encourages suggestions for enhancements to the system from the DPCPs and from CDC staff. In addition, usability tests are conducted periodically to ensure that the system design is user-friendly. As enhancements are added to the MIS, training is provided. The total operation and maintenance costs of the MIS are outlined in the table below. A special unit at CDC, known as the MIS User Support Team, now provides training, whenever needed, to DPCP and CDC staff. Since CDC staff now provides this training, there is no contractor training expense associated with the MIS. The total estimated annualized cost to the government is $354,224, as summarized in Table A.14-1.

TABLE 14-1 ANNUALIZED COST TO THE GOVERNMENT

Cost Type	Cost
MIS User Support Team *	$ 70,510
CDC Staff (Project Officer's Salaries)**	$ 83,714
Contractor Cost	$200,000
TOTAL	**$354,224**

*Based on: 1 GS 11 FTE @ 60%; 1 GS 11 FTE @ 25%; 1 GS 13 FTE @ 15%
** Based on: 10 GS 13 FTE @ 10%

15. Explanation for Program Changes or Adjustments

The total estimated annualized burden will decrease due to changes in two factors: (i) The number of awardees is being reduced from 59 to 53. In the upcoming OMB approval period, the Pacific Islands jurisdictions will operate under a separate funding agreement and are thus being deleted from the current request. (ii) The redesigned MIS increases the data entry efficiency thereby reducing the average annualized burden per respondent. The currently approved version of the MIS requires respondents to enter baseline information in year 1 of the 5-year funding period, followed by updates in subsequent years (through Update screens). In the future, baseline information for the revised MIS will be obtained from existing data resources (i.e., information collected during the competitive application process). Respondents will primarily be responsible for entering a limited amount of update information. In addition, the MIS is being restructured to operate more efficiently from the respondent's perspective. For example, the redesigned MIS is based on reconfigured tabs (or pages), and replaces many narrative text response fields with discreet data entry fields requiring responses selected from pick-lists and/or check-off boxes. This not only reduces the burden to the respondents but also provides for more accurate information retrieval

16. Plans for Tabulation and Publication and Project Time Schedule

TABLE 16-1 PROJECT TIME SCHEDULE	
Activity	Time Schedule
Grantees annual progress report due	November
CDC Technical Reviews due	December
Semi-annual progress report due	May
Training, Data Analysis and validation, and Technical support (as required)	Continuously

CDC provides training, data analysis and validation, and technical support to respondents on an as-needed basis.

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

The Diabetes Control Program Internet home page displays the expiration date for OMB approval of the information collection. No exceptions are requested.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.