A Report to Congress – Executive Summary

Introduction

This report responds to a Congressional mandate for the Food and Nutrition Service (FNS) to establish a long-range plan for the development and implementation of State agency Management Information Systems (MIS) in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC Program).[1] In the development of this plan, FNS reviewed State agency system capabilities and consulted with the National Association of WIC State Directors (NAWD) as well as systems experts. The WIC 5-Year Technology Plan included in this Report to Congress outlines the Agency's goals, objectives, and strategies to address the current and future needs of WIC systems.

The WIC Program provides supplemental food, nutrition education, and health care referrals to low-income pregnant, breastfeeding and postpartum women, infants and children up to age five who are at nutritional risk. Automated systems are an integral part of the WIC Program infrastructure, impacting every area of operations and management. State agency systems process nearly $4 billion in food benefits annually and enable State agencies to serve over 7 million clients every month. Systems provide support in the areas of certification, nutrition education and health surveillance and referrals, food benefit issuance, food benefit redemption, settlement and reconciliation, vendor management, scheduling, reporting, and system administration.

The need for a long-range plan, as recognized by Congress, is based on the fact that WIC systems represent a large capital investment that requires careful planning, and rapid changes in technology present challenges in the management of these systems. While there are many MIS challenges facing the WIC Program nationally, the following major concerns stand out among the rest.

◊ Some WIC systems are extremely old and paper-intensive and many lack basic automated functions. These aging systems affect program efficiency and the quality of client services.

[1] William F. Goodling Child Nutrition Reauthorization Act of 1998.

- ◊ System-related costs are increasing, especially labor costs. New systems are expensive to develop and implement, and funds may be insufficient to sustain the on-going costs of these systems.[2]

- ◊ Funding for MIS is limited and there are competing priorities for the use of these funds.

- ◊ Funds typically available from outside sources to help defray WIC administrative and nutrition services costs have declined over the last decade, which has had an impact on the funds available for MIS.[3]

The WIC Program has grown in complexity over the last decade, and has become increasingly reliant on advanced technical solutions to manage program operations. Automated systems are essential to State and local operations, enabling agencies to carry out a myriad of program requirements. These systems have the potential to greatly improve program efficiency, effectiveness and accountability and to free local workers from routine and often complex administrative tasks, thereby enabling them to spend more time with clients. However, at the present time, there are varying degrees of capability among State agency systems. Moreover, funding for WIC system development has not kept pace with that available for other important publicly-funded programs.

FNS has identified system functions and goals that, once implemented, will improve program operations in those State agencies where systems are deficient. However, improvements in MIS will most likely occur very slowly over an extended period of time due to the constraints noted in this report. Funding strategies and an estimate of the funds needed to automate core system functions are discussed in the 5-Year Technology Plan that follows this executive summary.

Strategic Planning Process

To carry out the congressional mandate, FNS consulted with NAWD representatives and system experts to assess the state of WIC MIS systems nationwide and to develop a long-range plan to address system development and operational needs. An MIS workgroup was formed and began the process of identifying WIC MIS needs and challenges.

[2] The increase in system costs has not been quantified in this report, as cost data has not been consistently reported by State agencies.

[3] Source: General Accounting Office study, Food Assistance, Activities and Use of Nonprogram Resources at Six WIC Agencies, released September 29, 2000.

The workgroup first identified basic functions they felt were essential for State agencies to automate in order to allow for efficient program operations. For example, the workgroup felt systems should be able to automatically assess whether an applicant's family income exceeds the maximum income level for eligibility based on data entered into the system. This was one of 19 core functions the workgroup identified, and data was collected to determine how many WIC systems perform these automated functions. (A complete description of the core functions as well as why these functions were considered essential is provided at Attachment A.)

The workgroup then turned its attention to estimating what it would cost to bring systems that lacked the core functions up to this basic level of automation, as well as the funds that would be needed for the associated cost of maintaining and operating systems on an on-going basis. Data was collected from State agencies on system functions, cost, and age.

WIC Automation Challenges

Several MIS challenges have been identified that are unique to the WIC Program. Unlike other Federal programs for which there is a State match of Federal funds, WIC automation is funded almost entirely from Federal WIC grant sources.[4] (Attachment B provides a breakdown of the funding sources for WIC MIS.). The primary source of funds for MIS is the nutrition services and administration (NSA) grants. Automation is only one of many competing priorities for the use of these funds. Within their NSA budgets, State agencies must not only meet MIS needs, but also pay for critical functions and requirements of the Program, such as nutrition education activities, breastfeeding promotion and support, general administration expenses, salaries, vendor monitoring, screening for related health and social services, referrals, and nutritional risk assessments. Program regulations, that, once implemented, will strengthen program integrity, may also increase administrative costs for State agencies, thereby placing even greater demand on NSA funds.

Furthermore, information has recently become available indicating that the amount of funds typically available to State agencies from outside sources to help defray NSA costs has

[4] In fiscal year 1997, $1.9 million in State funds (from 5 States) was spent on WIC MIS. State funds represent 1.89 percent of all MIS expenditures in fiscal year 1997. (Source: FY 1997 FNS Survey of State Agency ADP Systems.). In addition, a limited amount of funds is available for MIS through WIC multi-purpose grants, and State agencies may also request operational adjustment (OA) funds (see Attachment B for more information).

significantly declined in recent years. The General Accounting Office (GAO) recently released the second in a series of studies on the costs of administering WIC and delivering nutrition services. In their case study, GAO compared the in-kind contributions that six WIC agencies received in 1999 with the in-kind contributions cited in a 1988 research study.[5] The share of costs covered by nonprogram resources at the six agencies in 1999 ranged from 20 cents to 2 cents for each dollar in costs covered with program funds, compared with 54 cents for each dollar in costs covered with program funds as cited in the 1988 study. The amount of in-kind contributions available affects State agencies' ability to pay NSA costs, including those related to MIS.

During periods of increased Program appropriations, available NSA funding generally increases in proportion to the food grant. In recent years, however, funding for the WIC Program has remained fairly stable. As a result, State agencies are not experiencing increases in their NSA grant as they have in the past. State agencies report that stable funding is adversely impacting their ability to pay for MIS systems. It affects their ability to cover fixed operating costs for ongoing maintenance and operations as well as basic systems development or major upgrades. Furthermore, stable funding requires State agencies to absorb State-mandated personnel pay increases, which drastically affects the amount of funds left for "programmatic" items.

A number of factors have put an additional strain on MIS funding needs in recent years. An assessment of State agency systems revealed that nearly half (56 percent) of the States' systems are not automated to perform one or more essential program tasks (i.e., core functions) or the tasks are not performed with optimal efficiency. In addition, several State agencies operate extremely paper-intensive systems, which means some NSA funds are being spent on filling out and tracking paper as opposed to being directed to valuable nutrition education activities and/or other client services. Moreover, there has been a substantial increase in recent years in the cost of new systems, and a number of WIC systems are aging and in need of replacement.

Electronic Benefit Transfer (EBT) is a relatively new WIC initiative currently being tested for it's potential application in the delivery of WIC benefits to program participants. Funding

[5] In-kind refers to something of value, such as office space, equipment, supplies, and services, that is donated from public or private sources at no cost to the WIC Program.

for EBT has been secured through FY 2001.[6] However, many State agencies will need to modernize their MIS systems as a precursor to EBT implementation. For example, local agency computer equipment must have the processing speed and communications capability to electronically transmit data to an EBT host. MIS software changes may be needed to enable older systems to interface with the EBT system.

The State of MIS – A National Profile

In order to determine the status of MIS among WIC State agencies nationwide, in 1998 and 1999 FNS conducted State surveys on system functionality and age.[7] An informal survey of FNS regional offices provided information on those State agencies that still compile paper forms and send them by courier to a central site for data entry, an outdated process some State agencies still employ due to lack of computers at the local level. Survey results were as follows.

- System Functionality. Of the 19 core functions identified by the MIS workgroup as appropriate targets for automation:
  - ◊ 44 percent of all 87 WIC State agencies have automated all 19 core functions; and
  - ◊ 56 percent of all 87 WIC State agencies have systems in need of varying degrees of modification to automate all 19 core functions.
- Age of Computer System. Survey results on the age of WIC systems showed that, of the 87 WIC systems:
  - ◊ 34 percent have exceeded their life-cycle;[8]
  - ◊ 28 percent will exceed their life-cycle in 1-3 years; and
  - ◊ 38 percent have 4 or more years left.

[6] EBT is currently being evaluated in a few small pilot sites for its possible use in WIC benefit delivery. FNS received authority to use $6 million to support EBT development in FY 2001. (See attachment B for more information on funding.) The data collected and discussed throughout this report focuses on the many tasks that systems perform to facilitate WIC operations using mainframe and client server technology.

[7] Source: Core Function Survey, August 1999 (updated for 20 State agencies in March 2000) and informal inquiry of Regional Offices in 1998 on number of State agencies without PC's at the local level. System age was reported through a State agency survey conducted in May 2000. All 87 WIC State agencies responded to the Core Function Survey. System age was estimated for San Felipe, NM, and Zuni, NM, as they did not respond to this survey question.

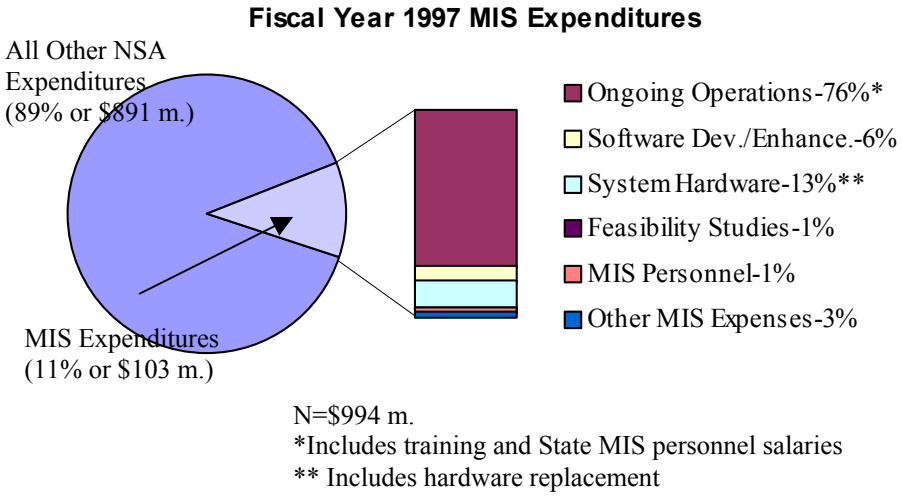
[8] "Life Cycle" is a term used to refer to the phases of a system's evolution from beginning to end. The system life-cycle concept evolved because of the need for managers to assess the totality of work to be undertaken, and to develop plans accordingly. The life-cycle on mainframe computers is 7-10 years and 3-5 years for personal computers. For this report, life-cycle for a WIC system is considered to be 7 years.

- Availability of Computers at Local Offices. An informal survey of FNS Regional Offices revealed that 4 WIC State agencies do not have Personal Computers (PC's) at local offices to facilitate participant certification processing and food instrument issuance and, therefore, are extremely paper-intensive. These four systems have also exceeded their viable life cycle.

- System Costs. System cost data was collected through a 1997 survey in which all 87 State agencies responded. The survey data revealed that:

  ◊ State agencies spent about 11 percent of their NSA grant on MIS in 1997; and
  ◊ MIS expenditures that year totaled $103.9 million.

The following chart shows MIS expenditures in proportion to all other NSA expenditures and a breakdown of the various line item MIS costs. Worth noting is the fact that ongoing operations represented a large portion (76 percent) of all MIS expenditures.



MIS Goals and Objectives

Three broad automation goals have been identified for WIC MIS: (1) improve customer service, (2) improve efficiency and effectiveness, and (3) ensure accountability and integrity in program operations. The objectives associated with the goals are listed below.

- Improve benefit issuance process.

- Improve accuracy in funds management.
- Facilitate coordination of services with other programs.
- Improve nutrition services.
- Streamline participant processing.
- Improve data collection and analysis for program management purposes.
- Provide adequate vendor information to ensure program integrity.

These objectives are related to the core functions identified, and are fully described in the Technology Plan.

FNS 5-Year Action Plan

FNS has developed a 5-year plan in consultation with NAWD and system consultants. This plan will be reassessed periodically and modified as necessary to accommodate the dynamics of the WIC Program and the changing needs of MIS. FNS will continue to work with NAWD and other partners in carrying out this plan. In brief, through this 5-year plan, FNS will take steps to facilitate State agency system procurements and other actions to improve MIS, including:

- Issue policy and/or guidance on MIS procurements:
  - Encourage transfer of systems or system components when feasible.
  - Encourage incorporation of core functions when systems are replaced.
  - Encourage system integration and cost-sharing with other programs and outside organizations.
  - Continue to promote the use of operational adjustment (OA) funds for MIS (see Attachment B for OA funds description).
- Explore development of model MIS system(s).
- Explore ways to facilitate multi-State procurements.
- Reexamine MIS survey instrument to better identify key information needed to analyze trends and share this information with State agencies.
- Provide guidance and technical assistance to State agencies on MIS development, such as the MIS Functional Requirements Document.
- Develop and implement a system replacement plan.

- Explore legislative changes to alleviate funding constraints and allow greater flexibility in the distribution of funds among State agencies and FNS Regional Offices.

- Explore possible partnerships with outside organizations and other federal programs to help fund WIC MIS.

- Explore the possibility of State funding in MIS development in those States where WIC system requirements are unique due to State-imposed specifications, and explore other possible State funding options.

MIS Vision

With the 5-Year Technology Plan, incremental improvements in WIC systems will be achieved over time. However, FNS has a vision for MIS that includes the following components:

- *Systems that meet national program goals and objectives while maintaining each State agency's unique operating needs and business practices.*
- *Systems that utilize state-of-the-art technology, providing efficiency, effectiveness and accountability in all aspects of WIC program operations.*
- *Funding that recognizes the cyclical nature of WIC MIS, providing for periodic system acquisitions as well as on-going operations and equipment maintenance needs.*
- *System planning and development that encompasses input from all MIS stakeholders including: WIC clients; system users; WIC state, local, and federal program managers; and partners such as the Maternal and Child Health Program, the Immunization Program, and the Medicaid Program.*