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FOOD ASSISTANCE

WIC Faces Challenges in Providing Nutrition Services



Contents

Letter		1
	Results in Brief	3
	Background	3
	WIC Faces Challenges in Delivering High-Quality Nutrition Services	6
	Approaches to Addressing WIC Challenges	37
	Conclusions	39
	Recommendations for Executive Action	39
	Agency Comments and Our Response	40
Appendix I	Stakeholders Providing Comments on Proposed Approaches for Overcoming Challenges Facing WIC	41
Appendix II	Program Tasks Identified by USDA	43
Appendix III	Approaches to Overcoming Challenges Facing WIC	45
Appendix IV	GAO Contacts and Staff Acknowledgments	64
	GAO Contacts	64
	Staff Acknowledgments	64
Tables		
	Table 1: Major New Program Requirements Since 1988	32
	Table 2: Sixteen Approaches to Addressing WIC Challenges	38
	Table 3: Automated Function Descriptions	43
Figures		
	Figure 1: Percentage of Medicaid Beneficiaries Enrolled in Managed Care, 1991-2000	7
	Figure 2: Percentage of WIC Expenditures for NSA – Including and Excluding Rebate Funds, Fiscal Years 1988-1999	35

Abbreviations

CDC	Centers for Disease Control and Prevention
EBT	electronic benefits transfer
FNS	Food and Nutrition Service
HHS	Department of Health and Human Services
NAWD	National Association of WIC Directors
NSA	Nutrition Services and Administration
PC	Participant and Program Characteristics
PedNSS	Pediatric Nutrition Surveillance System
PNSS	Pregnancy Nutrition Surveillance System
TANF	Temporary Assistance for Needy Families
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Nutrition Program for Women, Infants and Children



United States General Accounting Office
Washington, DC 20548

December 7, 2001

The Honorable Tom Harkin
Chairman
The Honorable Richard G. Lugar
Ranking Minority Member
Committee on Agriculture, Nutrition, and Forestry
United States Senate

The Honorable John A. Boehner
Chairman
The Honorable George Miller
Ranking Democratic Member
Committee on Education and the Workforce
House of Representatives

After nearly 30 years, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) has become one of the nation's most important nutrition assistance programs, serving almost half of all infants and about one-quarter of all children between 1 and 4 years of age in the United States. WIC is a federally funded grant program administered by the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS). In fiscal year 2000, WIC grants supported state-level provision of benefits to a monthly average of about 7.2 million participants, mostly low-income women and children at nutritional risk, through nearly 1,900 local agencies.

In fiscal year 2000, WIC provided about \$4.1 billion to fund program operations. Of that amount, about \$3 billion was for food grants and about \$1.1 billion was for Nutrition Services and Administration (NSA) grants. Food grants cover the cost of supplemental foods; typically, participants are given paper vouchers—usually referred to as checks—to obtain approved foods at authorized grocery stores. The nutrition services supported by NSA grants are (1) participant services – activities such as certifying that a woman or child is eligible to participate in the program, issuing food benefits, and making referrals to health and social services; (2) nutrition education – providing individual or group education designed to improve participants' dietary habits and health status; and (3) breastfeeding promotion and support – educating women about the benefits of breastfeeding and providing the support necessary to enable them to breastfeed.

To help the Congress better understand the costs of administering WIC and delivering nutrition services, the William F. Goodling Child Nutrition Reauthorization Act of 1998 (P. L. 105-336) directed GAO to assess various aspects of WIC's NSA. This report (1) describes the challenges that state and local WIC agencies face in providing nutrition services and administering the program and (2) identifies approaches to address these challenges. We have explored the advantages, disadvantages, and possible consequences of the approaches whenever possible. This report is the final in a series of reports providing the Congress with information about the WIC program.¹

To identify the challenges facing the program and approaches that could be used to address these challenges, we conducted a range of research. First, we conducted a review of WIC-related literature. We also analyzed information collected during our previous WIC work in this series, including the results of nationwide surveys of state and local WIC agencies² and case studies of six judgmentally selected WIC agencies.³ In addition, we analyzed historical program data provided by USDA, and we reviewed program regulations and policies as well as various WIC-related reports. Finally, we conducted interviews with program stakeholders, including USDA officials, state and local WIC agency officials, representatives from the Center for Budget and Policy Priorities, the American Enterprise Institute, and officials from the Department of Health and Human Services, including the Centers for Disease Control and Prevention (CDC).

¹ *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000); *Food Assistance: Activities and Use of Nonprogram Resources at Six WIC Agencies* (GAO/RCED-00-202, Sep. 29, 2000); *Food Assistance: Performance Measures for Assessing Three WIC Services* (GAO/01-339, Feb. 28, 2001); *Food Assistance: Research Provides Limited Information on the Effectiveness of Specific WIC Nutrition Services* (GAO-01-442, Mar. 30, 2001).

² For GAO/RCED-00-66, Mar. 6, 2000, we conducted nationwide surveys in 1999 of (1) 55 state-level agencies that operate in the 50 states and in the District of Columbia, American Samoa, the Commonwealth of Puerto Rico, Guam, and the U.S. Virgin Islands; (2) all 33 Indian tribal organizations; and (3) 1,780 local WIC agencies. That report contains a description of the survey methodologies.

³ For GAO/RCED-00-202, Sep. 29, 2000, we conducted a case study at a local WIC agency in each of the following five states: California, Georgia, Minnesota, Montana, and Pennsylvania. We also conducted a sixth case study at the WIC program sponsored by the Indian Tribal Organization of Zuni; this state-level WIC agency provides services directly to Zuni WIC participants. That report contains a description of the case study methodology.

We provided major stakeholders with a draft of the approaches that we identified and asked for their views regarding the advantages and disadvantages of each approach. Appendix I provides a list of the stakeholders who provided their views regarding the advantages and disadvantages of the identified approaches. We conducted our work between December 2000 and November 2001 in accordance with generally accepted government auditing standards.

Results in Brief

The WIC program faces the following challenges in delivering high-quality nutrition services: (1) coordinating its nutrition services with health and welfare programs undergoing considerable change; (2) responding to health and demographic changes in the low-income population that it serves; (3) recruiting and keeping a skilled staff; (4) improving the use of information technology to enhance service delivery and program management; (5) assessing the effect of nutrition services; and (6) meeting increased program requirements without a corresponding increase in funding.

We identified and assessed 16 approaches that could address aspects of the major challenges facing the program. Most of the approaches we identified address a specific aspect of more than one of the six major challenges facing the program. Four of the approaches focus on funding, four relate to performance or impact measurement, three address staffing issues, three relate to information technology, and two relate to the provision of nutrition services. While each of the approaches offer certain advantages, they also have potential negative consequences that policymakers should consider.

We are making recommendations to USDA that are intended to help the agency identify strategies to address program challenges in recruiting and retaining a skilled staff and assessing the effects of nutrition services. USDA officials generally agreed with the report's findings and recommendations.

Background

The WIC program was created in 1972 in response to growing evidence of poor nutrition and related health problems among low-income infants, children, and pregnant women. It is intended to serve as an adjunct to good health care during critical times of growth and development. In addition, WIC was designed to supplement the Food Stamp Program and other programs that distribute foods to needy families.

Several population groups are eligible for the supplemental foods and nutrition services offered by WIC. Eligible groups include lower-income pregnant women, nonbreastfeeding women up to 6 months postpartum, breastfeeding women up to 1 year postpartum, infants, and children up to age 5 who are at nutritional risk. WIC provides cash grants to support program operations at 88 state-level WIC agencies, including those in all 50 states, American Samoa, the District of Columbia, Guam, Puerto Rico, the U.S. Virgin Islands, and 33 Indian tribal organizations.

WIC Agencies Rely Primarily on Federal Funding to Provide Nutrition Services

Food and NSA grants are allocated to the state agencies through a formula based on caseload, inflation, and poverty indices. Small amounts are also set aside and distributed, at USDA's discretion, to fund updates to infrastructure—like the development of electronic benefit transfers—and to fund evaluations performed by state agencies. Some state-level agencies that operate the program at both the state and local levels retain all of their WIC grants. The remaining state-level agencies retain a portion (the national average is about one-quarter) of the funds for their state-level operations and distribute the remaining funds to nearly 1,800 local WIC agencies.

In 1998, state and local WIC agencies relied primarily on their federal NSA grant funds to support their NSA operations.⁴ Although no state-matching requirement exists for federal WIC funding, some state WIC agencies have received supplemental funds from their state governments for NSA. Some state and local WIC agencies also receive in-kind contributions, such as office space, from nonfederal sources such as local governments and private nonprofit agencies.

NSA Grants Support Several Services Provided to WIC Participants

NSA grants cover the costs of providing various nutrition services—participant services, nutrition education, and breastfeeding promotion. Participant services include numerous activities such as determining eligibility, food benefit distribution, screening for up-to-date immunizations, and referrals to other health or social services. Each of these activities includes many processes. For instance, we reported in September 2000 that certification involves identifying income, participation in a qualifying program such as Medicaid, pregnancy or

⁴ See *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000).

postpartum status, and medical or nutritional risks. The length of time that a person is certified to participate in the program typically ranges from 6 months to 1 year, depending on such factors as whether the participant is a woman, a child, or an infant.

Nutrition education consists of individual or group education sessions and the provision of information and educational materials to WIC participants. Regulations require that the nutrition education bear a practical relationship to participant nutritional needs, household situations, and cultural preferences. Nutrition education is offered to all adult participants and to parents and guardians of infant or child participants, as well as child participants, whenever possible. It may be provided through the local agencies directly or through arrangements made with other agencies. Individual participants are not required to attend or participate in nutrition education activities to receive food benefits.

Breastfeeding promotion activities focus on encouraging women to breastfeed and supporting those women who choose to breastfeed. Each local agency is required to designate a breastfeeding coordinator, and new staff members are required to receive training on breastfeeding promotion and support. WIC endorses breastfeeding as the preferred method of infant feeding.

Although state agencies must operate within the bounds of federal guidelines, they have the flexibility to adjust program services to meet local needs. States can add program requirements. For example, in 1999, Montana required its local agencies to formally document referrals made to WIC participants, though this is not required by program regulation. States that utilize local agencies to provide nutrition services also provide these local agencies with some discretion in implementing the local program. This means that the specifics of the WIC program can vary from state to state and locality to locality. In 2001, USDA and the National Association of WIC Directors (NAWD) distributed revised Nutrition Service Standards that provide WIC agencies with guidelines on providing high-quality nutrition services.

WIC Faces Challenges in Delivering High-Quality Nutrition Services

The WIC program faces the following challenges in delivering high-quality nutrition services: (1) coordinating its nutrition services with health and welfare programs undergoing considerable change; (2) responding to health and demographic changes in the low-income population that it serves; (3) recruiting and keeping a skilled staff; (4) improving the use of information technology to enhance service delivery and program management; (5) assessing the effect of nutrition services; and (6) meeting the increased program requirements without a corresponding increase in funding.

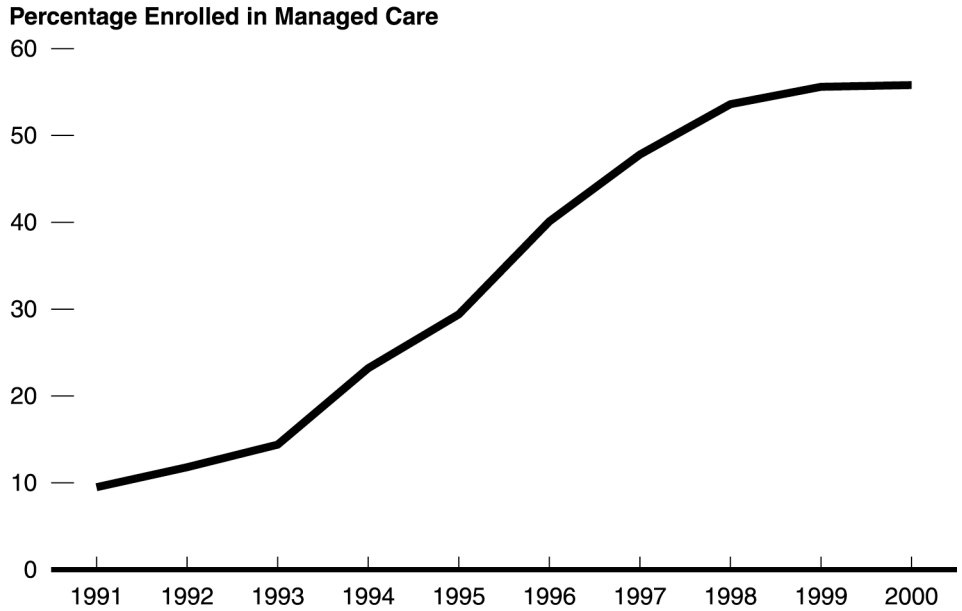
The Challenge of Adapting to Recent Changes in the Health and Welfare Delivery System

Over the past decade, major changes in the nation's health and welfare delivery systems have presented WIC agencies with the challenge of identifying and enrolling eligible participants and coordinating with other service providers in a new environment. More specifically, state Medicaid agencies' increased reliance on private managed care organizations has reduced the service delivery role of local public health agencies, the entities with which WIC agencies have had a long-established relationship. As a result, WIC's link to the health care system has been weakened, making it more difficult for WIC agencies to identify eligible individuals and coordinate services with their participants' health care providers. Additionally, changes brought about by welfare reform—which include the elimination of Temporary Assistance for Needy Families (TANF), Food Stamp, and Medicaid benefits for many individuals including noncitizens—have decreased WIC's ability to reach eligible individuals through these programs.

Health Care System Changes Make It More Difficult for WIC to Serve as an Adjunct to Health Care

Two recent and related changes in the health care system are presenting new challenges to WIC agencies in carrying out their referral, outreach, and coordination efforts. The first change is the rapid growth since 1991 in the percentage of Medicaid beneficiaries who are enrolled in managed care (see fig. 1).

Figure 1: Percentage of Medicaid Beneficiaries Enrolled in Managed Care, 1991-2000



Source: Health Care Financing Administration, Department of Health and Human Services, 2001.

This increase in the percentage of Medicaid beneficiaries receiving health services from managed care providers contributed, in part, to the second change: the reduction or elimination of direct health care services by many local public health departments. According to a national survey of local health departments offering comprehensive primary care services in urban areas in 1995, about 20 percent stopped providing such services to women and children by 1999.⁵ Similarly, about 9.4 percent of those offering comprehensive primary care services to women in nonurban areas in 1995 stopped providing such services by 1999, and 15.5 percent of nonurban agencies stopped providing such services to children.

With the reduction in the number of public health departments serving women and children, public health officials have increasingly turned to WIC to help address the health needs of low-income children. According to CDC, WIC has become the single largest point of access to health-

⁵ Institute of Medicine, *America's Health Care Safety Net*, National Academy Press: Washington, D.C., 2000.

related services for low-income preschool children. Consequently, the CDC has turned to WIC to provide services traditionally performed by local health departments, such as identifying children who are not fully immunized.

These changes have several implications for WIC. Historically, many WIC participants have been able to receive health services, such as pediatric care, at the WIC sites. This proximity could facilitate the required link between WIC services and health care; health care providers could easily refer Medicaid and uninsured patients to the WIC program, and WIC staff could easily refer WIC participants to appropriate health care services. This arrangement also made it more convenient for participants to schedule appointments for both WIC and health services. However, as Medicaid managed care providers have increasingly replaced local public health clinics as providers of maternal and child health care, this link between WIC services and health care has weakened. The convenience for many WIC staff and participants of having WIC and health care services co-located has been lost. As a result, many WIC agencies must extend their outreach efforts to contact people, especially uninsured individuals not connected with the health care system, who are eligible for WIC.

Given these changes, it will be a challenge for WIC to effectively coordinate its services with other health providers. Evidence already suggests that WIC agencies are struggling with this coordination. For example, a national survey conducted by the Women's and Children's Center at Emory University's Rollins School of Public Health found that only 26 percent of state WIC agencies had made specific arrangements, such as developing formal guidance, for the collaboration of services between WIC and managed care providers in 2000. The Center published a resource guide to assist in the collaboration between WIC and managed health care.⁶ The guide identified several barriers to the coordination between WIC and managed care providers and provided descriptions of strategies that state and local WIC agencies can use to overcome such barriers, though it suggests that employing suggested strategies will increase staff responsibility and program costs. The barriers include the following:

⁶ Bell, Karen N., *Collaboration between WIC and Managed Care: a Resource Guide*, Women's and Children's Center, Rollins School of Public Health (GA, May 2001) (<http://www.sph.emory.edu/wcc/wicmc/>).

Welfare Reform Has Increased Demands on WIC Outreach and Coordination

- **Lack of understanding.** WIC staff do not understand the managed care system and managed care providers do not understand WIC.
- **Lack of specific requirements.** State Medicaid agencies may not have instituted specific contractual requirements for managed care organizations or providers to make referrals or supply needed information to WIC agencies.
- **Communication difficulties.** Managed care providers' change in ownership has been accompanied by communication difficulties. The termination of Medicaid contracts with managed care providers and the location of some managed care provider headquarters in another state can also make communication difficult.

Welfare reform, which made major changes to the nation's social safety net, has also placed new demands on WIC's client services and outreach. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), which replaced the Aid to Families with Dependent Children with TANF, established a lifetime, 5-year time limit on the receipt of TANF benefits and required states to place work or work-related requirements on a percentage of households receiving TANF. The act also made several categories of noncitizens ineligible for TANF, food stamps, and Medicaid.

Welfare reform has contributed to the decline in the participation in public assistance programs. Various studies, including those that we have conducted, have concluded that the implementation of the provisions of welfare reform is associated with the decline of eligible individuals enrolled in the Food Stamp Program and Medicaid. Although we did not identify any nationwide assessment of welfare reform's impact on WIC participation, state and/or local WIC officials from all six of our case study agencies reported that welfare reform has decreased program participation by eligible individuals, including noncitizens and working women.

Declining participation in assistance programs may complicate WIC client services, such as making eligibility and referral determinations. Individuals who receive TANF, food stamps, or Medicaid automatically meet WIC's income eligibility requirement—documentation of their enrollment in one or all of these programs is sufficient proof that they qualify financially for WIC. However, as the number of WIC applicants who are enrolled in these programs decreases, WIC staff members may need to spend more time collecting and reviewing other documents to determine whether applicants meet income eligibility requirements. Moreover, the responsibility of WIC staff to make appropriate referrals to other

programs, both public and private, may grow at those agencies where WIC has become a gateway to the social safety net for low-income individuals.

Restrictions on providing welfare benefits to noncitizens may require WIC to increase its outreach efforts among these groups. With welfare reform, several categories of noncitizens are no longer eligible for TANF, food stamps, or Medicaid. However, noncitizens continue to be eligible for the WIC program. The National Advisory Council on Maternal, Infant and Fetal Nutrition, as well as WIC officials from several of our case studies, suggested that noncitizens may fear that participating in WIC could threaten their immigration status.

Welfare reform's emphasis on work has created the challenge of making WIC services accessible to a population with new demands on their time. In five of our six case study sites, WIC officials attributed declines in WIC participation, in part, to the increase in the number of women who were working or attending school due to welfare reform. At three case study sites, WIC officials indicated that the increasing numbers of working women placed increased pressure on WIC agencies to offer WIC services outside of normal working hours. Increasing access, which may involve offering evening or weekend hours, can result in higher costs to the WIC program.

The Challenge of Responding to New Health Concerns and Demographic Changes

WIC faces the challenge of responding to changes in the health and demographics of its participants and potential participants. The WIC population, like the general population, has experienced a dramatic increase in the prevalence of overweight and obesity and related diseases, such as diabetes. In addition, demographic changes, such as increases in WIC's ethnic population, have occurred during recent years. These changes have placed demands on WIC agencies to play a more active role in helping to treat and prevent nutrition-related health problems and adapting nutrition services to the evolving needs of program participants.

Obesity Epidemic Poses New
Challenges for Nutrition
Education

The nation's population has experienced a dramatic increase in the prevalence of overweight and obesity in recent years.⁷ According to the CDC, the prevalence of overweight and obesity has reached epidemic proportions. For example, the prevalence of overweight adults increased over 60 percent between 1991 and 2000. Research suggests that the prevalence of overweight and obesity is even higher among individuals who are low-income, a characteristic of the WIC population.

The surge in the prevalence of overweight and obesity is not limited to adults. According to the CDC pediatric nutrition surveillance data, which are collected primarily from the WIC program, the prevalence of overweight children age 2 and older (but younger than 5), increased by almost 36 percent from 1989 to 1999.⁸ In 1999, almost 10 percent of children in this age group were overweight or obese. Some children are at even greater risk. Hispanic children, a growing segment of the WIC population, had the second highest prevalence of being overweight according to the 1999 CDC pediatric surveillance data. For both adults and children, being overweight and obese is associated with a variety of health problems, including diabetes, heart disease, and some types of cancer. As the prevalence of overweight and obesity has increased, research suggests that the incidences of diabetes during pregnancy⁹ and diabetes in adults have also increased.¹⁰

Recognition of this epidemic, particularly its effect on low-income women and children, has increased the pressure on WIC agencies to adapt their nutrition services to help prevent and treat overweight, obesity, and

⁷ According to the CDC, obesity is defined as an excessively high amount of body fat in relation to lean body mass. Overweight refers to increased body weight in relation to height, when compared to some standard of acceptable or desirable weights. Body Mass Index (BMI), which measures a person's body weight divided by the square of his or her height, is more highly correlated with body fat than any other indicator of height and weight. Individuals with a BMI of 25 to 29.9 are considered overweight, while individuals with a BMI of 30 or more are considered obese.

⁸ These data have not been analyzed to compare the prevalence of overweight in children participating in WIC with children not participating in WIC.

⁹ Ferrara A, Quesemberry CP, Riley C, Hedderson MM, Kahn HS, "Changes in prevalence of gestational diabetes mellitus (GDM): Northern California, 1991-1999" [Abstract] *Diabetes*, 2001; 50 (Supplement 2). Presented at the 61st Scientific Section of the American Diabetes Association Meeting, Philadelphia, Jun. 22-26, 2001.

¹⁰ AH Mokdad, ES Ford, BA Bowman, DE Nelson, MM Engelgau, F Vinicor, and JS Marks, "Diabetes trends in the U.S.: 1990-1998" *Diabetes Care*, 2000 23: 1278-1283.

related health problems. In addition to helping to respond to this epidemic, WIC must continue to serve low-income women and children who are susceptible to other diseases, some new and some long-standing, such as anemia, HIV/AIDS, elevated levels of lead in blood, and tooth decay. The nutrition education and breastfeeding promotion activities provide an opportunity for WIC staff to help participants prevent these diseases. However, WIC faces several obstacles—such as limited time and resources—in adapting its nutrition education to respond to these new and long-standing health issues.

WIC staff has limited time to provide the type of counseling needed to discuss disease prevention. Our study of six local WIC agencies found that individual nutrition education sessions did not last long, ranging from an average of 4 minutes to 17 minutes among the six agencies. In addition, WIC regulations require only two nutrition education contacts during each 6-month WIC certification period. It is difficult to help prevent numerous nutrition-related diseases with a few brief nutrition education sessions.

WIC nutrition education was originally intended, according to USDA officials, to provide a relatively basic message about the value of good nutrition to low-income pregnant and postpartum women whose diets were inadequate. To help address more complex nutrition problems, such as obesity, according to a CDC expert on nutrition, WIC's nutrition education needs to be fundamentally changed in several ways. This expert indicated that nutrition education has focused traditionally on advising families to eat more fruits and vegetables. He suggests it now needs to focus more on teaching parents that they need to be responsible for the types of food offered to their children and let children decide how much to eat. In addition, the CDC expert indicated that the scope of nutrition education needed to be expanded to include such topics as physical activity, television viewing, and fast foods.

Local WIC agencies tend to rely on two techniques to provide nutrition education. According to a 1998 USDA survey, over three-quarters of local WIC agencies always used counseling/discussion and written materials to provide nutrition education.¹¹ Less than 10 percent of the agencies in the survey reported using other techniques such as food tasting or videos to provide nutrition education. Several experts have suggested that WIC

¹¹ Abt Associates, Inc., *WIC Participant and Program Characteristics 1998*, Food and Nutrition Service, USDA: Alexandria, VA, WIC-00-PC, May 2000.

agencies need to use multiple teaching techniques. They also suggested that these techniques be tailored to each participant and that the participant be included in designing the education that best meets his or her needs.

While USDA has undertaken several initiatives, existing resources appear to limit the program's ability to address emerging health issues.¹² To develop and implement a response to diseases such as obesity, WIC would need to devote additional resources to nutrition education, according to CDC and USDA officials. Devoting resources to address new health issues may come at the expense of other program priorities. In addition, current WIC program regulations on the use of resources may limit the effectiveness of the response to some emerging health issues. For example, costs associated with providing physical activity classes and equipment, which appear to be important in addressing weight problems, are not allowable expenditures.

Any strategies that WIC employs to address health issues such as obesity would have to contend with some formidable social forces. Two of these forces are the prevalence of advertising and the decrease in physical activity. Advertising has a significant impact on eating behaviors. For example, one study found that 1 or 2 exposures to advertisements of 10 to 30 seconds could influence preschool children to choose low-nutrition foods.¹³ Research also shows that several environmental trends, such as increased television viewing and increased consumption of fast foods, have contributed to obesity nationally.¹⁴

Participant Demographics Have Changed Over the Past Decade

According to government statistics, numerous changes in the demographics of the nation's population have occurred during the 1990s. Several of these changes—shifts in the population's ethnic composition, increases in the number of working women, and the growing number of preschool children enrolled in daycare—were also seen in the WIC-eligible

¹² According to USDA officials, these initiatives include the development of the WIC Works Resource System and funding grants to selected state agencies to explore strategies to address childhood obesity.

¹³ Borzekowski, Dina L. G., Robinson, Thomas N., "The 30-second effect: An experiment revealing the impact of television commercials on food preferences of preschoolers," *Journal of the American Dietetic Association*, Volume 101, Number 1; Jan. 2001, pp. 42-46.

¹⁴ French, Simone A., Story, Mary and Jeffery, Robert W, "Environmental Influences On Eating And Physical Activity," *Annual Review of Public Health*, 2001, Vol. 22: 309-335.

population. WIC is faced with the challenge of responding to each of these changes.

Ethnic Composition

Over the years, the ethnic composition of the WIC population has changed. In 1988, almost half of WIC participants were white and over one-quarter were African-American. The composition began to change in the mid-1990s when the number of Hispanic WIC participants began to grow. Between 1994 and 1998, the percentage of WIC participants who were Hispanic increased from 26 percent to 32 percent.¹⁵ During the same period, the percentage of WIC participants who were African-American declined from about 25 to 23 percent, while there were only slight changes among other racial or ethnic groups. Some WIC agencies serve more ethnically diverse communities than others. For example, three of our five local case study agencies served predominantly white communities, while two agencies served very diverse populations. One local agency director reported that less than one-quarter of their WIC participants spoke English as a primary language.

As a result of the changing make-up of WIC's participant population, WIC agencies are faced with the challenge of providing nutrition services that are culturally and ethnically appropriate, as the program requires. Recent data suggests that WIC agencies offer nutrition education in several languages. Over half of the local agencies responding to a 1998 USDA survey indicated that nutrition education was available in Spanish.¹⁶ Providing nutrition education and other services in a foreign language requires agencies to employ staff members who speak languages other than English or pay for interpreter services which can be costly.¹⁷ In addition, USDA and state and local WIC agencies have developed teaching materials, such as brochures, in foreign languages.

¹⁵ See *WIC Participant and Program Characteristics 1998* cited previously.

¹⁶ See *WIC Participant and Program Characteristics 1998* cited previously.

¹⁷ In April 2001, the American Medical Association requested that the Department of Health and Human Services not enforce department policy that requires physicians treating Medicaid patients to hire clinical interpreters to assist in the treatment of patients with limited English proficiency because the cost to retain an interpreter can exceed the Medicaid compensation for the care.

WIC agencies may need to increase staff awareness of the different nutritional needs and preferences of the various ethnic and cultural groups that they serve. For example, research conducted in the early 1990s involving urban African-American WIC mothers suggested a tendency to introduce infants to solid food in the first few weeks of life, rather than waiting 4 to 6 months, as recommended.¹⁸ This practice occurred despite receiving WIC counseling and educational materials. Understanding the distinctive nutritional preferences of participant groups requires WIC staff to dedicate time to studying different cultures and related health and nutrition research, a particularly challenging task for WIC agencies that serve several ethnic or cultural groups.

Working Women

As composition of the WIC population has changed, the percentage of women in the WIC program who work has increased, according to some state WIC officials. In 1998, about 25 percent of women who were certified or certified a child for the WIC program were employed, according to data provided by USDA.¹⁹ While no data exist on the change in recent years in the percentage of women participants who are working, data from Bureau of Labor Statistics suggest that work activity has increased in low-income households with children.²⁰ Between 1990 and 1999, the percent of children living below the poverty level in families maintained by two parents with at least one parent employed full-time increased from 44 to 52 percent. The percent of poor children living in families maintained by a single mother employed full-time increased from 9 to 18 percent.

To respond to the increase in working WIC families, WIC agencies are faced with the challenge of making nutrition services accessible to individuals with greater constraints on their time. Some WIC agencies have offered services that accommodate individuals who keep traditional

¹⁸ Bronner Y.L., Gross S.M., Caulfield L., Bentley M.E., Kessler L., Jensen J., Weathers B., Paige D.M., "Early Introduction of Solid Foods Among Urban African-American Participants In WIC," *Journal of the American Dietitians Association*, Apr. 99(4): 457-61. Bentley M., Gavin L., Black M.M., Teti L., "Infant Feeding Practices Of Low-Income, African-American, Adolescent Mothers: An Ecological, Multigenerational Perspective," *Social Science & Medicine*, 1999, V49, N8 (Oct.): 1085-1100.

¹⁹ Data provided by the Food and Nutrition Service, USDA, (Aug. 2001).

²⁰ Federal Interagency Forum on Child and Family Statistics, *America's Children: Key National Indicators of Well-Being, 2001*, Federal Interagency Forum on Child and Family Statistics, Washington, DC: U.S. Government Printing Office, Jul. 2001.

work hours. For example, 26 percent of the local WIC agencies responding to USDA's 1998 survey indicated that they offered extended hours, such as evening or weekend hours; fewer than 3 percent had mobile facilities that could potentially visit work or community sites.²¹ Four of our five local case study agencies offered extended hours on a few days each month, either in the evenings or on weekends, for a few hours.

Several factors may limit the ability of local agencies to improve access to services for participants who work. First, local agencies may lack the resources to pay for the staff or the security needed to have their sites open during evening or weekend hours. Second, federal regulations generally require participants to pick up vouchers in person when they are scheduled for nutrition education or for recertification, which limits WIC agencies' ability to employ other strategies such as mailing vouchers to participants' homes. Third, providing WIC services at nontraditional locations, such as grocery stores, that may be more convenient for those who work, may infringe on the participants' privacy and present a conflict of interest.

The increase in the number of WIC participants who work will make attaining some of WIC's goals, such as increasing breastfeeding, a greater challenge. Employer policies can affect the length of time a woman employee breastfeeds. One study found that the duration of the work leave significantly contributed to the duration of breastfeeding.²² In addition, businesses that employ WIC mothers may not provide accommodations that support daily breastfeeding needs. A 1996 survey of over 500 WIC mothers found that less than 2 percent of those who went to work or school reported having such accommodations, such as the ability to bring a baby with them or being provided facilities for breastfeeding.²³ In 2000, WIC mothers who worked full-time had the lowest breastfeeding rate for infants at 6 months of any category of WIC mothers, even though they initiated breastfeeding in the hospital at about the same rate as other

²¹ See *WIC Participant and Program Characteristics 1998* cited previously.

²² Roe, B., Whittington, L.A. Fein, S.B., Teisl, M.F., "Is there Competition between Breastfeeding and Maternal Employment?" *Demography*, Vol. 36, No. 2, May 1999, pp. 157-171.

²³ Bronner, Y., Gross, S. Caulfield L., Bently, M., Jensen, J. Kessler, L., Paige. D. "Influence Of Work Or School On Breastfeeding Among Urban African American WIC Participants," *Abstracts of the 124th Annual Meeting, American Public Health Association*, Nov. 17-21, 1996, New York City, Session #3090, p. 430.

mothers.²⁴ To respond to this challenge, WIC staff might need to work with employers and schools to encourage the adoption of procedures and facilities that support breastfeeding among employees and students.

Children in Daycare

As a result of the increase in the number of working parents, low-income children are increasingly placed in daycare. In a recent study, we concluded that since the implementation of TANF, more low-income children were in care outside the home and were in this care earlier in their lives.²⁵ Children who are in daycare may be unable to accompany their parents to WIC office visits for vouchers and nutrition education. As a result, WIC staff may have little opportunity to provide age-appropriate nutrition education directed at preschoolers, though evidence suggests such education contributes to positive eating behaviors. According to USDA's 1998 survey, only about 38 percent of local WIC agencies provided nutrition education directed to WIC preschoolers. Since meals and snacks are usually provided in daycare settings, daycare providers play an important role in shaping the nutritional behavior of preschoolers. As more low-income preschoolers enter daycare, WIC may need to explore ways to broaden its nutrition education efforts to include the daycare providers serving WIC children more systematically.

The Challenge of Maintaining a Skilled Staff

WIC faces the challenge of maintaining a skilled staff. The quality of nutrition services depends, to a large degree, on the skills of the staff delivering the services at the local WIC agencies. Yet, due in part to the widespread difficulty in hiring professionals, local agencies are increasingly relying on paraprofessionals to provide services. At the same time, social and systemic changes have heightened the need for WIC staff to learn new skills. However, investing in training is difficult for agencies with limited resources. Possible solutions to address WIC's staffing and training needs are unclear because the staffing needs have not been assessed and there is not a defined commitment to training.

²⁴ Abbott Laboratories, "Breastfeeding Trends in the U.S. and WIC Population Demographics," Presentation to the Panel to Evaluate USDA's Methods for Estimating Eligibility and Participation in the WIC Program, Committee on National Statistics, Commission on Behavioral and Social Sciences and Education, the National Academies, Washington, DC, Mar. 15, 2001.

²⁵ *Education and Care: Early Childhood Programs and Services for Low-Income Families* (GAO/HEHS-00-11, Nov. 15, 1999).

WIC Agencies Report a Shortage of Professionals That May Worsen

Many local WIC agencies recently reported an insufficient number of professional staff and difficulty acquiring professional staff members. A 1998 USDA survey found that 30 percent of local WIC agencies serving over 40 percent of WIC participants reported having too few professional staff members. About half of all WIC agencies reported having difficulty recruiting and hiring professional staff. We estimated, based on information obtained from our survey of local WIC agencies, that in fiscal year 1998 between 5 percent and 15 percent of local WIC agencies did not have a nutritionist or dietitian on staff.

The shortage of professional staff at WIC agencies is influenced by several factors, some of which are external to the WIC program. The most commonly reported difficulty associated with recruiting and hiring professional staff was that the salaries and/or benefits were not competitive. Another commonly reported difficulty was the lack of qualified applicants. According to a director of the American Dietetic Association, several factors may negatively affect the ability of WIC agencies to recruit registered dietitians, including the mundane nature of the work and the rural location of many agencies.

The shortage in professional staff may worsen in the coming years. According to the Association director, who is also a state WIC director, WIC's workforce is aging and a large number of professionals are expected to retire in the next few years.

WIC Agencies Increasingly Rely on Paraprofessionals to Deliver Services

Many local agencies are relying more on paraprofessionals to provide nutrition services. According to data from USDA surveys, paraprofessionals now perform tasks that were once performed by professionals. In 1988, fewer than 2 percent of local agencies reported using paraprofessionals to provide nutrition education to high-risk participants and between 11 and 18 percent reported using them to provide nutrition education to low-risk participants. By 1998, this had changed considerably. That year, about 17 percent of agencies used paraprofessionals, along with professionals, to provide nutrition education to high-risk individuals and between 42 percent and 50 percent used them to provide nutrition education to low-risk individuals.

The shift towards a greater reliance on paraprofessionals may be attributed to several factors. The difficulty in hiring professionals and the

foreign language skills more often possessed by paraprofessionals²⁶ may both play a role in this phenomenon. In addition, USDA officials pointed out that the required qualifications for competent professional authorities, who provide nutrition services, are “ridiculously low.”²⁷ Consequently, WIC agencies are able to hire paraprofessionals to positions previously filled by professionals.

As a result of the increased reliance on paraprofessionals, USDA officials and other experts have become concerned that the quality of nutrition services will suffer. The types of services that agencies offer may become increasingly limited without staff whose qualifications support a full range of services. Already, some WIC agencies have limited the services they provide. For example, in Montana where some local WIC agencies did not have registered dietitians on staff, state policy in 1999 prohibited all local WIC agencies from providing the type of nutrition counseling needed to address conditions such as gestational diabetes. According to a local agency director, not only did this restriction affect the quality of services provided to participants, but also it was a disincentive for registered dietitians to apply for WIC jobs because it limited their ability to use their skills.

Staff Lack Needed Skills, but Allocating Limited Resources to Training Is Difficult

Given the changes in the WIC population and the environment in which the program operates, WIC agencies face an increased challenge of ensuring that their staff have the skills and knowledge to provide effective nutrition services. Many WIC staff may not have the skills and knowledge necessary to meet new client needs. For example, CDC, USDA, and other experts suggest that WIC staff currently lack the skills to address some emerging complex health issues, such as obesity. In addition, WIC staff may not have the knowledge to navigate the new environment introduced by changes in the health and welfare system. For example, the Emory University Rollins School of Public Health publication has suggested WIC

²⁶ Several case study agencies relied on the paraprofessional staff to provide assistance in translation.

²⁷ Federal regulations require that every local agency have a competent professional authority and a designated breastfeeding promotion coordinator. The program does not require that competent professional authorities have a minimum level of professional training in nutrition, education, or counseling. Competent professional authorities can be either professionals—such as dietitians, nutritionists, nurses—or paraprofessionals, such as individuals who have completed competency-based training. The program also does not require that a competent professional authority provide the nutrition education or breastfeeding support.

staffs' lack of understanding of the managed health care system has posed a barrier to effective coordination with managed care providers.

To help address this lack of skills and knowledge on the part of WIC staff, more training may be needed. According to a CDC nutrition expert, to address emerging health problems, staff must learn to assess participants' willingness to improve their eating practices and to tailor education to improve participants' behaviors. In addition, WIC staff needs extra information to provide services in a changing social service environment. For example, they need to understand new requirements with which their participants must comply in order to obtain health care services from managed care providers.

While WIC regulations require that state agencies provide in-service training and technical assistance to professional and paraprofessional staff involved in providing nutrition education, USDA officials indicated that no defined commitment has been made to improve the training opportunities for WIC staff. Without such a commitment, some local WIC agencies may be less inclined to invest limited staff time or funding in training or continuing education. For example, one case study agency reported that, because funding constraints left the agency short-staffed, professional staff were performing more clerical duties and had little time for professional development. Another local WIC agency director indicated that her program could not afford to have her attend an annual NAWD conference, even though the conference was being held locally.

Lack of Data About the WIC Workforce Can Hinder Ability to Maintain Skilled Staff

USDA has no current data about the size and composition of the WIC workforce, a situation that makes addressing staffing and training problems difficult because little is known about the exact nature of the staffing problems. Until 1991, USDA did collect some detailed WIC staffing data for its annual report of WIC administrative expenditures. However, according to USDA officials, one of the reasons the agency stopped collecting these data was to reduce the reporting burden on WIC agencies. While surveys of local agencies conducted for the biannual participant and program characteristics study in 1996 and 1998 gathered some limited data regarding the sufficiency of staff levels, there has been no recent study on the size and composition of the WIC workforce.

The lack of data regarding the WIC workforce can present a barrier to developing and implementing strategies to address the workforce challenges facing the program. For example, in 1996 the National Advisory Council on Maternal, Infant, and Fetal Nutrition recommended that USDA explore with HHS revising the National Health Service Corps programs to

include nutrition services as a designated “primary health service.” This change would allow federal funds to be used to recruit and train registered dietitians and nutritionists to work in under-served areas. To do this, however, USDA needed data showing sufficient demand for registered dietitians and nutritionists in under-served communities. Although the Council repeated its recommendation in 2000, to date USDA has not collected data regarding the need for public health nutritionists in under-served areas. USDA is sponsoring a survey of the public health nutrition workforce. The survey results, expected to be published in 2002, will include a description of the qualifications, training needs, and other characteristics of the 1999-2000 WIC workforce. However, the survey will not provide information on the demand for dietitians and nutritionists in under-served areas.

The Challenge of Operating With Inadequate Information Technology

State and local WIC agencies are faced with the challenge of delivering participant services and managing program operations with outdated or unavailable information technology resources. More than half of state WIC agencies have management information systems that are not capable of automatically performing all the program tasks considered essential by USDA. In addition, while 16 states have been involved in the testing of electronic transfer of WIC benefits, only one statewide system has been implemented. Finally, almost one-fourth of the state WIC agencies, along with hundreds of local WIC agencies, do not have Internet access, limiting their ability to use online resources and communicate with other providers of nutrition and health services.

Automated Management Information Systems Not Meeting Operational Needs

According to a March 2001 USDA report, 56 percent of state WIC agency automated management information systems were not capable of performing, or efficiently performing, 1 or more of 19 essential program tasks. (A listing of the 19 essential program tasks is provided in appendix II.)²⁸ These tasks were singled out as basic functions that were essential for state agencies to automate in order to attain efficient program operations. For example, management information systems should be able to automatically assess whether an applicant’s income exceeds the maximum income level for eligibility based on data entered into the system. The system should also be able to produce food checks corresponding to the participant’s most recent food prescription at the

²⁸ See *Planning for WIC’s Future Technology Needs*, Food and Nutrition Service, USDA: Alexandria, VA, Mar. 2001.

time the participant is present to pick up the checks at the local clinic and to detect suspicious grocery store food coupon redemption activity.

The inability of WIC state agencies' automated management systems to perform essential tasks can encumber agencies' ability to efficiently administer program operations. For example, at a local WIC agency in Pennsylvania, we found that the staff was using hand-written index cards to keep track of participant information because they lacked a sufficient number of computers to perform that function. Also, the director at this agency had to spend 6 hours each month manually counting the number of participants in the program to generate the monthly participation report required by the state. This was necessary because the agency's management information system was not capable of automatically preparing the report.²⁹ A California WIC official told us that it was difficult for local WIC agencies' automated systems to create special reports. Because the reports could take up to several months to complete, some agencies opted not to generate them.³⁰ A USDA official told us that the poor quality of automated systems in some states negatively affects federal and state efforts to monitor WIC agencies. Because of computer inadequacies, some states have not been able to provide USDA with requested data on breastfeeding initiation rates, hampering officials' ability to assess the effectiveness of breastfeeding promotion.

Most states face one or more of the following obstacles that make it difficult to bring their automated systems up to the basic level of functionality:

- **Limited funds.** States must meet their management information needs almost entirely from their federal NSA grants. Other funds typically available from outside sources to help defray WIC costs, including those associated with information systems, have declined over the last decade.³¹ According to USDA, the cost of bringing WIC's essential program tasks up to standard in all states over the next 6 years is between \$147 million and \$267 million.

²⁹ The Pennsylvania WIC director reported that the state is in the process of upgrading its management information system; to date, the design phase has been completed. Hardware and software upgrades will occur over the next several years as resources permit.

³⁰ Computer upgrades giving California local WIC agencies the ability to prepare special reports were being planned at the time of our review.

³¹ See *Food Assistance: Activities and Use of Nonprogram Resources at Six WIC Agencies*, (GAO/RCED-00-202, Sep. 29, 2000).

Electronic Benefits Transfer
Can Streamline the Delivery of
WIC Benefits

- **Outdated technology.** According to USDA and other federal studies, the life cycle for a WIC automated system is 7 years. After that time, the states' systems do not lend themselves easily, if at all, to technological advances. About 34 percent of WIC state-level agencies have automated systems that have exceeded their life cycle, 28 percent have systems that will exceed their life cycles in 1 to 3 years, and 38 percent have systems with 4 or more years remaining in their life cycles.³²
- **Coordination with other systems.** WIC was designed to operate in conjunction with programs offered by other social and health-related service agencies. Changes that have occurred in these programs have complicated the ability of WIC program managers to define the functions that their automated systems must support and to identify the system requirements, including the necessary applications and hardware needed to effectively coordinate WIC with other programs.
- **Lack of information technology staff.** State and local WIC agencies have difficulty competing with the salaries and benefits offered by private sector employers. This can affect their ability to recruit and retain qualified information technology staff needed to develop and maintain their automated systems.

Currently, most WIC food transactions involve paper checks. However, concerns have been raised about the cost to grocers of processing checks and the inconvenience they present to WIC participants. Electronic benefits transfer (EBT), an automated process that allows food to be paid for electronically, offers an alternative to paper checks. With EBT, participants are given a plastic card, similar to a credit or debit card, containing their food benefit prescription to purchase benefits at the grocer's checkout. USDA and state WIC agencies are exploring the use of EBT in the WIC program to improve the benefit delivery process.

Paper checks have a number of drawbacks. A 2000 Food Marketing Institute study that compared the use of WIC's paper checks for the purchase of food to other methods—including cash, checks, credit and debit cards, food stamps, and EBT—found that WIC checks are among the most costly payment methods for food retailers.³³ The study indicated that the primary reasons for this higher cost are that store staff take more time to process paper checks when goods are purchased and to prepare checks

³² See *Planning for WIC's Future Technology Needs* cited previously.

³³ Food Marketing Institute *It All Adds Up: An Activity Based Cost Study of Retail Payments*, Food Marketing Institute: Washington, D.C., 2000.

for bank deposit. In addition to high costs, paper checks can cause confusion and delays for both the participant-shopper and the store clerk at the checkout counter and result in unwanted attention.³⁴

Thus far, EBT for WIC has proven to be much more expensive than paper for states testing this evolving technology, according to USDA officials. However, compared to the use of WIC paper checks, EBT is less expensive for food retailers because it reduces handling costs. In addition, EBT can provide participants with greater flexibility in purchasing food. For example, it will allow them to purchase their benefits in quantities as needed within their issuance period. With paper checks, a participant must purchase all items on the food instrument when shopping or forfeit the benefit. EBT can also provide state officials with documentation of WIC purchases for submitting rebate claims to food manufacturers. By tying EBT to a product code of authorized WIC foods, the program has assurance that participants purchase the prescribed foods and do not improperly substitute foods. EBT may also curtail the waste, fraud, and abuse that can occur with paper checks.

USDA is exploring the use of EBT to eliminate the need for paper checks. Since 1991, the agency has provided a total of about \$22 million for demonstration projects involving 16 states to explore the use of EBT technology for the delivery of WIC benefits. However, no one knows how soon the widespread use of EBT will be realized in each state, or exactly what form the new issuance system will take. As of October 2001, only Wyoming had implemented a statewide WIC EBT system. Federal legislation, developments in the food retail and electronic funds transfer industries, and emerging technologies will shape the timing and nature of EBT implementation.

According to USDA officials, WIC had two overall concerns in venturing into EBT: the technical feasibility and affordability of implementing EBT systems. In the few state projects where EBT has been tested, the first concern has been addressed—EBT is technically feasible. However, so far its affordability for use in WIC remains elusive. According to USDA officials, EBT costs are far beyond what most states can afford within their available NSA funds. WIC agencies would need to modify their NSA funding priorities or find new sources of funds to support their EBT

³⁴ See *Food Assistance: Working Women's Access to WIC Benefits*, (GAO/RCED-98-19, Oct. 16, 1997).

projects. USDA officials also told us that these costs have had to be funded by federal grants at the sacrifice of other competing program priorities.

Furthermore, because EBT processes differ in so many respects from those involving paper checks, agencies may face some of the following obstacles in implementing EBT:

- **Limited federal funds.** The potential cost of starting up and operating EBT is an issue of considerable importance to all state and local WIC agencies. These costs may not be covered by their NSA funds allocated for technology expenditures. As a result, WIC agencies would need to modify their NSA funding priorities or find new sources of funds to support their EBT projects.
- **Outdated technology.** Some local WIC agencies are unable to use EBT because they do not have computers, or they have computers that are unable to accommodate the necessary technology. WIC computer equipment must have the processing speed and communications capability to electronically transmit EBT data. In addition, software changes may also be needed to enable older systems to operate in conjunction with EBT.
- **Lack of an industrywide standard.** An industrywide standard for EBT systems that could be used for WIC transactions has not yet emerged. The various EBT technologies must be compatible with retailers' normal transaction systems to perform the purchase function. The integration of different EBT technologies requires a common operating system standard, such as those used by credit card companies. The absence of such a common nationwide standard makes the widespread development of EBT applications very difficult.

Internet Access Could Enhance Information Exchange

The Internet can be used by federal, state, and local agencies for a variety of purposes related to the WIC program. USDA uses the Internet to provide state and local WIC agencies with program information, such as eligibility guidelines, application instructions, program funding, participation rates, and current laws and regulations. USDA also uses the Internet to provide research and training to health and nutrition professionals, including those outside of WIC. USDA has plans to use the Internet to disseminate information to help reduce program fraud and to collect information directly from grocery stores participating in the WIC program. About half of the state agencies and some local agencies that have Internet access have established Web sites for their WIC programs. These sites have been used to provide information—including eligibility guidelines, application procedures, program benefits, and clinic

locations—to WIC participants and potential applicants. In addition, some local WIC agencies use the Internet to e-mail state agencies and obtain or provide information on nutrition activities and services.

According to USDA, 68 of the state-level WIC agencies had the capability to access the Internet as of July 2001. The capability of local WIC agencies to access the Internet is more difficult to ascertain. However, according to the Director of the National Association of WIC Directors, about half of their 600 local agency members currently have the ability to access the Internet.³⁵

While the Internet is being used extensively by USDA and many state and some local agencies, the following obstacles have discouraged or prevented some state and local WIC agencies from obtaining Internet access:

- **Limited funds.** Accessing the Internet requires the necessary computer equipment that many local WIC agencies and/or their clinics do not possess. The costs of computer installation must compete against other WIC funding demands, such as salaries, utilities, and supplies. Even with the necessary computer equipment, local WIC agencies and/or their clinics may choose to forgo Internet use in some areas because they may have to pay costly long distance charges for the telephone connections to the Internet provider from funds that are competing with other more essential program needs.
- **Security concerns.** Although local agencies may have the computer capability to access the Internet, concerns regarding the security vulnerabilities inherent with the use of the Internet, including unauthorized access to files and hostile ‘virus’ attacks on computer systems, may discourage its use. For example, the Pennsylvania WIC agency prohibits Internet connections by its local agencies primarily because of concerns regarding the potential harm that could result from the improper access to sensitive personal information gained by unauthorized persons.

³⁵ The National Association of WIC Directors represents the state, territorial, and Native American WIC directors and the nearly 1,900 local agencies that provide WIC services through more than 10,000 WIC clinics nationwide.

The Challenge of Assessing the Effect of Nutrition Services

In attempting to be responsive to recent requests from the Congress and others, WIC faces the challenge of assessing the effects of providing specific nutrition services. According to USDA officials, the focus on assessing the effects of specific nutrition services is a shift from the early years of WIC when assessments focused on the outcomes associated with overall program goals, such as reducing national rates of anemia, infant mortality, and low birth weight. In order to assess the effects of specific nutrition services, such as nutrition education, USDA needs good outcome measures for each service, consistent information from states regarding the attainment of goals and objectives for each service, and reliable research on the effectiveness of each service. However, to date, the agency has been able to collect data on only one outcome measure related to breastfeeding promotion and support. In addition, USDA has obtained inconsistent data on state goals and objectives and limited information from research studies on the effectiveness of specific nutrition services.

Only One Outcome Measure Has Been Implemented Thus Far

To meet the Government Performance and Results Act requirements, USDA has attempted to develop national outcome measures that would allow the agency to determine the effectiveness of WIC's nutritional services.³⁶ To date, USDA has had limited success in establishing national outcome measures for WIC's three key nutrition services—nutrition education, breastfeeding promotion and support, and health referrals.

USDA has been able to collect information on only one outcome measure: breastfeeding initiation rate. This measure helps determine the effectiveness of a single nutrition service, breastfeeding promotion and support. Not only is this outcome measure relevant to only one nutrition service, but it also looks at a limited aspect of this service. The breastfeeding initiation rate examines only one of several important aspects of the service's possible impact on breastfeeding. It does not measure the length of time that WIC mothers breastfeed infants because, despite USDA's effort to collect data on the duration of breastfeeding, most state agencies were unable to give the agency complete information on this measure. In addition, USDA was unable to collect data on an outcome measure that would determine the percentage of WIC infants' daily nutrition obtained through breastfeeding because the agency was unable to identify a viable way to collect these data.

³⁶ See *Food Assistance: Performance Measures for Assessing Three WIC Services* (GAO/01-339, Feb. 28, 2001).

Although USDA has identified outcome measures for other nutrition services, obstacles have hindered the agency's success in collecting relevant data. These obstacles include difficulties in identifying the type of data to collect because many variables may be influencing outcomes. For example, there are several other state and local programs that, like WIC, are aimed at improving health through nutrition education. Separating the effects of these efforts from those of the WIC program is difficult at best. USDA has also had few resources to collect appropriate data on measures it identifies. As a result, USDA is unable to implement most outcome measures. USDA's difficulties in measuring WIC outcomes are not unique. In a previous study, we found that programs that do not deliver a readily measurable product or service or are intergovernmental grant programs have difficulty producing performance measures.³⁷

USDA Has Limited Information Regarding State Goals and Objectives

As NSA grant recipients, state agencies are required to describe their goals and objectives for improving program operations in their annual program plan given to USDA. However, we found that for several reasons, this information does not provide USDA the data necessary to describe the extent to which WIC is meeting its intended NSA goals.

First, no requirement exists that state goals and objectives be reported in a consistent format to USDA. Without consistent information, it is difficult for USDA to aggregate reported state performance information on a regional or national basis. Second, there is no requirement that the goals or objectives be measurable. Our review of a sample of over 400 state goals and objectives for nutrition services from 25 state WIC agencies revealed that over half lacked key information, such as baseline or target values, needed to measure progress toward improving program operations.³⁸ Third, we observed that the specificity in the description of the goals or objectives varied significantly. For example, some objectives were short, general statements such as, "continue to improve the data integrity of the WIC data warehouse." Other objectives were very detailed,

³⁷ See *Grant Programs: Design Features Shape Flexibility, Accountability and Performance Information* (GAO/GGD-98-137, Jun. 22, 1998).

³⁸ Goals and objectives from fiscal year 2001 plans were provided to us by 74 state-level agencies. We randomly selected 25 of these agencies for this analysis. Each goal and objective was independently reviewed by two GAO analysts to determine whether or not the goal or objective could be measured and whether or not the goals and objectives focused on nutrition services. Discrepancies between the analysts were resolved, so that there was 100 percent agreement. The data presented here are based on the analysis of those goals and objectives that focused on nutrition services.

including such information as the activities undertaken to achieve the objective. Moreover, a wide range existed in the number of goals or objectives identified. For instance, one state had 2 goals and 2 objectives, while another state had 13 goals and no objectives, and still a third had no goals and 24 objectives.

Last, unlike the Department of Health and Human Services' (HHS) Maternal and Child Health Services Block Grant Program, state WIC goals and objectives are not readily available for review, nor is progress toward the goals automatically tracked. As of late 2000, USDA had not compiled the state goals and objectives. Nor did it have the capability to do so easily. The ability to automatically track outcomes appears to be limited, in part, by data collection at the state-level agencies. For example, according to USDA officials, fewer than half of the state-level agencies were able to provide sufficient data on the duration of breastfeeding because the automated information systems did not contain complete data on each participant.

Research That Determines the Effectiveness of WIC Services Is Limited

Few research studies exist on the effects of specific nutrition services. In a prior report, we identified seven such studies published between 1995 and 2000.³⁹ Four of the studies examined the impact of breastfeeding promotion and support, two focused on health care referrals, and one examined both nutrition education and breastfeeding promotion and support. However, the results of these studies provide few, if any, insights into the effects of specific WIC nutrition services. One reason so few successful impact studies exist is the difficulty many researchers face in conducting them. Researchers encounter difficulties because of the following:

- **Data constraints.** We found that the nature of available data severely limited the usefulness of several of the impact studies of WIC nutritional services. The three major sources of WIC data are USDA's WIC Participant and Program Characteristics (PC) data, and CDC's Pediatric Nutrition Surveillance System (PedNSS) and CDC's Pregnancy Nutrition Surveillance System (PNSS). The PC data, which has been collected every 2 years since 1988, provides a snapshot of the characteristics of WIC enrollees at the time data are collected. The PedNSS and PNSS annually track the health status of children and the risk factors of mothers who

³⁹ See [GAO-01-442](#) cited previously.

participate in selected federal programs, including WIC.⁴⁰ Since none of these data sources currently track the same individuals over time or collect information on the types of services that individual participants receive, researchers cannot use the data to associate WIC services with changes in participant characteristics. In addition, the available data from other national surveys may be too old to reflect current demographics or services.

- **Research design.** Research design can be problematic. To determine the effect of services, research must assess the extent to which program interventions impact its participants. To do this, other possible influences must be excluded, a task that is best accomplished through the use of random assignment whereby individuals are randomly placed in either a group receiving program services or a group denied program services.⁴¹ Research studies that employ random assignment can be problematic because some children will be denied program services. This is especially challenging for a program like WIC that has enough funds to serve all qualified applicants.
- **Program variation.** WIC agencies can provide their services differently, a fact that complicates drawing broad conclusions about services' effects. Because WIC is a grant program, state agencies are given the discretion to implement key program elements, such as the content of nutrition education, in a way that suits local needs. This discretion can lead to substantial variation in the services that WIC participants receive.
- **Lack of funding.** The lack of sufficient funding, according to USDA and CDC officials, is another factor that makes it difficult to conduct WIC-related research. Before 1998, USDA spent about \$3.5 million annually on WIC-related research—an amount that was insufficient to collect the primary data and conduct the complex research necessary to assess the effect of WIC services, according to USDA and CDC officials.⁴² This problem is not unique to USDA. In 1996, we surveyed 13 federal departments and 10 independent federal agencies and found that relatively

⁴⁰ In 1999, PedNSS tracked over 5.5 million WIC children with data submitted from 47 state-level agencies, while the PNSS tracked over 700,000 pregnant WIC women with data submitted by 26 state-level agencies.

⁴¹ Less rigorous quasiexperimental designs use methods other than random assignment to create comparison groups. For example, a set of individuals who have similar characteristics to the group receiving the program services under study might be selected and compared to the study group.

⁴² USDA's Economic Research Service has conducted WIC-related research since 1998. Funding for Economic Research Service projects in the WIC program area has declined from about \$2.8 million in fiscal year 1998 to about \$1.7 million in fiscal year 2000.

small amounts of resources were allocated for conducting program evaluations in fiscal year 1995 and these resources were unevenly distributed across the agencies.⁴³

The Challenge of Meeting Increased Program Requirements

WIC has been faced with the challenge of meeting additional program requirements with available resources. Since the late 1980s, a number of requirements have been placed on the program aimed at, among other things, containing the cost of food benefits, promoting breastfeeding, encouraging immunizations, and controlling program abuse. While these requirements have placed additional service delivery and administrative demands on WIC staff, they have not been accompanied by more funding per participant; the NSA grant per participant was established in 1989 and since then has only been adjusted for inflation. There is also evidence that nonfederal support for NSA may have decreased since fiscal year 1992. Nor have the additional demands been offset by reductions in other responsibilities. As a result, WIC agencies have had to cut costs and make changes in service delivery that potentially will have a negative impact on the quality of WIC services.

Increase in Program Requirements Has Affected Program Operations

Since the late 1980s, new requirements placed on the WIC program have directly affected service delivery and program administration. Table 1 shows some of the major federal requirements added since 1988 and the associated service and administrative responsibilities.

⁴³ See *Program Evaluation: Agencies Challenged by New Demand for Information on Program Results*, (GAO/GGD-98-53, Apr. 24, 1998).

Table 1: Major New Program Requirements Since 1988

Requirement	Source	Responsibilities
Contain food costs	The Child Nutrition and WIC Reauthorization Act of 1989 (P.L. 101-147); and the William F. Goodling Child Nutrition Reauthorization Act of 1998 (P.L. 105-336)	States must undertake cost containment measures, including contracts for the purchase of infant formula and, if possible, other WIC foods. Infant formula contracts are awarded on the basis of competitive bids from manufacturers.
Educate about drug and alcohol abuse and make related referrals	The Anti-Drug Abuse Act of 1988 (P.L. 100-690); and the Child Nutrition and WIC Reauthorization Act of 1989 (P.L. 101-147)	WIC agencies must provide substance abuse education to WIC participants, including the referral of participants for treatment. Local agencies are also required to maintain lists of local providers of substance abuse counseling and treatment.
Increase breast feeding promotion	The Child Nutrition and WIC Reauthorization Act 1989 (P.L. 101-147)	State WIC agencies must spend a specified minimum amount of NSA funds on breastfeeding promotion and support. States must also (1) designate an agency staff member to coordinate breastfeeding promotion efforts identified in the state plan of operation and administration and (2) provide training on the promotion and management of breastfeeding to staff members of local agencies who are responsible for counseling participants.
Outreach to homeless	The Hunger Prevention Act of 1988 (P.L. 100-435)	Local agencies must provide outreach to eligible homeless mothers, infants, and children.
Register voters	The National Voter Registration Act of 1993 (P.L. 103-31)	WIC agencies must serve as designated voter registration agencies and perform voter registration activities.
Enhance outreach to eligible participants	The Child Nutrition and WIC Reauthorization Act 1989 (P.L. 101-147)	Local agencies must make follow-up calls to pregnant applicants who miss appointments.
Improve program accessibility for working and rural women	The Child Nutrition Reauthorization Act 1989 (P.L. 101-147) and Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193)	Local agencies must schedule appointments to minimize the time employed participants or applicants are absent from the workplace. States must develop a plan to improve access to the program for participants and applicants who are employed or who reside in rural areas.
Document income	The William F. Goodling Child Nutrition Reauthorization Act of 1998 (P.L. 105-336)	Agencies must obtain documentation of applicants' family income or receipt of assistance from related programs such as Medicaid or Food Stamps.
Strengthen vendor monitoring	The William F. Goodling Child Nutrition Reauthorization Act of 1998 (P.L. 105-336)	States must identify vendors who have a high probability of program abuse and conduct compliance investigations of vendors.
Establish minimum requirements for immunization screening and referrals	Executive Memorandum (Dec. 11, 2000); and WIC Final Policy Memorandum No. 2001-7 (Aug. 30, 2001)	WIC agencies must place more emphasis on immunization screening and referral by (1) advising all applicants that immunization records are requested as part of the WIC certification process (though not required to obtain WIC benefits); (2) screening immunization status using documented records at subsequent certifications; (3) assessing the immunization status of children under 2 by counting the number of doses of specific vaccines that the child has received; and (4) providing information on recommended immunization schedules and refer those in need to immunization services.

Little is known about how much meeting these additional requirements will cost the program. Costs have been estimated for only two of these requirements. USDA estimated that strengthening vendor monitoring would cost states and local agencies about \$7 million annually. The

National Association of WIC Directors estimated that increasing the emphasis on immunization education, documentation, and referrals could cost as much as about \$37 million annually. Officials from the CDC agreed with NAWD's cost estimate.

In recognition of the increased demands that have been placed on the program, the Congress in recent years has reduced some requirements. However, according to USDA officials, these reductions do not offset the additional requirements. The reductions have generally been administrative in nature and have had little or no impact on the services provided directly to WIC participants. For example, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193) reduced some of the burden associated with the submission of annual program plans. States are no longer required to submit a full program plan each year; rather, after a submitted plan is approved, a state submits only substantive changes in subsequent years.

Federal mandates are not the only source of increased demands placed on the program. State WIC agency officials have considerable flexibility to impose additional program requirements in their states. To contain the cost of food, state officials have imposed a variety of limitations on the food WIC participants in their states can select. For example, some states require participants to purchase the lowest cost brand of an approved food item. Such requirements place administrative demands on NSA resources because local agency officials must monitor retailer and participant compliance with selection limitations. In addition, such requirements can increase the amount of time needed to explain food selection limitations to participants, reducing the time spent on needed nutrition education or counseling.

Grant Level Per Participant Has Not Been Adjusted, Except for Inflation

Each year, USDA must use a national per participant NSA grant amount, set by law, to determine the funding to be used for food and NSA grants.⁴⁴ This per participant grant amount is based on the national average of NSA grant expenditures that was made per participant per month in 1987, only

⁴⁴ In 1987, the national average of grants made to states per participant per month was \$8.24.

adjusted for inflation.⁴⁵ In fiscal year 2001, grant levels were based on a national average of \$12.27 per participant per month.

Before the average NSA grant per participant was used, funding for NSA was set at 20 percent of the total WIC appropriation.⁴⁶ Since then, the percentage of federal WIC funds dedicated to NSA has increased to about 27 percent—perhaps giving the impression that, with such a substantial portion of program funds, NSA funds are sufficient to cover the costs of additional responsibilities. However, this increase is not the result of more funds per participant being dedicated to NSA; rather, it is the result of a decrease in the amount of federal funds needed to cover the food purchasing portion of the program. Food costs have been dramatically reduced by the infant formula rebates, in which companies reimburse the WIC program a percentage of the cost of every can of formula purchased by program participants. USDA projects that in fiscal year 2001, savings from infant formula rebates will total about \$1.5 billion.⁴⁷ This amount covers the cost of about 28 percent of food benefits provided to participants.⁴⁸ If rebate savings are considered, NSA has remained roughly 20 percent of total program costs from 1988 through 1999. Figure 2 shows the percentage of program funds spent on NSA, including and excluding rebate savings.

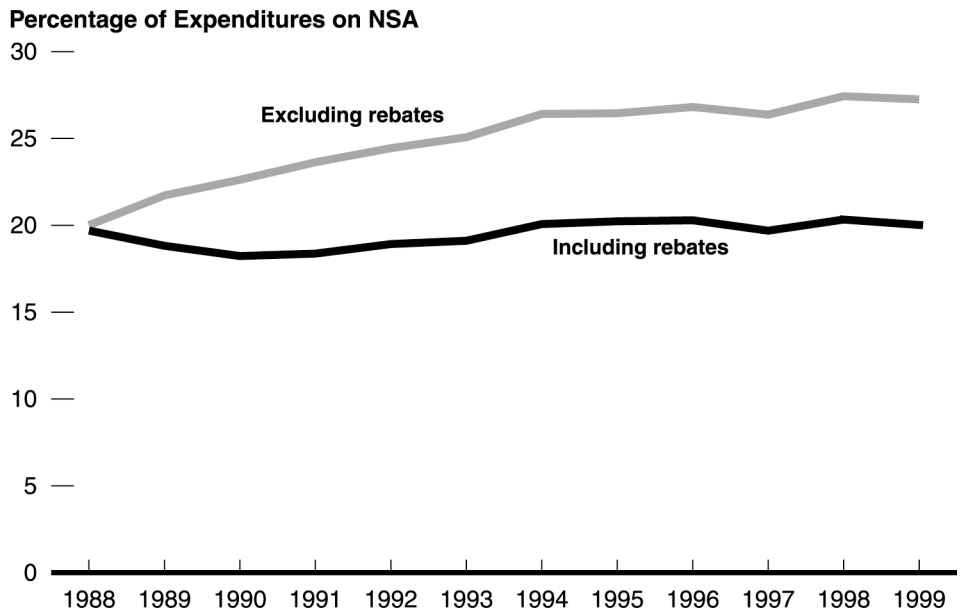
⁴⁵ USDA was required by law (P.L. 101-147) to use fiscal year 1987 as an adjustment for inflation. Starting in fiscal year 2001, in accordance with a change in the law (P.L. 106-224), USDA must now use the preceding fiscal year as the base year to adjust for inflation.

⁴⁶ USDA first used the average grant per participant in fiscal year 1990.

⁴⁷ Under P.L. 101-147 (Nov. 10, 1989), state agencies are required to procure infant formula using a competitive bidding system or an alternative method of cost containment that yields savings equal to or greater than those produced by a competitive bidding system. Some states had voluntarily negotiated sole source contracts with infant formula manufacturers before the sole source rebate requirement went into effect. Some groups of states jointly have contracted for a sole-source provider of infant formula. Therefore, the geographic area covered by some contracts may be larger than a single state.

⁴⁸ Current program regulations allow states to convert food funds to NSA funds to cover only current year expenditures under two conditions: (1) a state has an approved plan for food cost containment and increases in participation levels above the USDA-projected level and (2) a state's participation actually increases above the level projected by USDA.

Figure 2: Percentage of WIC Expenditures for NSA – Including and Excluding Rebate Funds, Fiscal Years 1988-1999



Source: GAO's analysis of USDA's data.

**Nonfederal Support for NSA
May Have Decreased**

State and local WIC agencies appear to be relying more heavily than they did in the past on federal grant funds to cover the costs for NSA. Based on our survey of state and local WIC agencies in fiscal year 1998, about \$57 million for NSA was received from sources other than the federal government. Most of these additional funds, \$38 million, were given to 11 state WIC agencies by their state governments. Local governments provided most of the remaining funds to local WIC agencies. While no good historical data exist on the level of funding state and local governments have provided specifically for NSA, USDA officials have found that the number of states providing funds to the WIC program for nutrition services has declined. In addition, those states that do provide funds have reduced the amount they contribute. For example, in fiscal year 1992, 18 states made about \$91 million in appropriated funds available for WIC, while in 2001, 13 states made about \$45 million available.

Some state and local agencies have sought additional funding for nutrition services by accessing other sources of funding. California WIC, for instance, has initiated the "WIC Plus" program to assist local agencies

interested in obtaining additional funding from other sources, such as reimbursements for nutrition services provided for WIC participants enrolled in Medicaid. The New York WIC program is currently formalizing an agreement with the state's TANF program to obtain funding for providing additional nutrition services for WIC participants enrolled in TANF.

However, the extent to which WIC agencies rely on other types of contributions has diminished. Historically, WIC agencies have made use of a variety of nonprogram resources, typically in-kind contributions such as donated space, to cover some of the costs of WIC's nutrition services and program administration. But, according to the California WIC director, the time and resources needed to apply for and administer additional funding, such as foundation grants, can prevent WIC agencies from seeking additional funding. A 1988 USDA study found that at 16 local agencies, the share of costs covered by such nonprogram resources was substantial—54 cents for every program dollar.⁴⁹ However, our recent work at six agencies found the share of costs covered by such resources to be much lower, ranging from 2 cents to 20 cents for every program dollar.

Balancing Increased Demands and Available Resources Can Compromise Service Quality

According to state and local WIC officials, responding to the increased demands placed on the program using existing resources has required actions, such as changes in service delivery and cost cutting, that may lower the quality of WIC services. Almost 40 percent of the local agencies responding to our survey reported that additional federal requirements have resulted in a decrease in the average amount of time spent providing nutrition services. State and local officials repeatedly raised the concern that the additional demands cut into the limited time available to provide nutrition education and counseling. According to one program expert, even the infant formula rebate requirement can cut into nutrition education because staff must take time to explain how the rebate works and what products are eligible.

According to the executive director of the National Association of WIC Directors, balancing increased program demands and available resources has forced some WIC agencies to cut costs by not increasing office space, personnel, and information technology in response to increasing needs. The 1998 USDA survey suggests that the negative consequences of such

⁴⁹ Abt Associates, Inc., *Synthesis of Case Study Findings in the WIC Program*, Food and Nutrition Service, USDA: Alexandria, VA, Dec. 1988.

cost cutting may be extensive.⁵⁰ According to that study, 22 percent of local agencies, serving almost 25 percent of all WIC participants, reported having inadequate office space. Additionally, 30 percent of local agencies serving about 41 percent of all WIC participants reported having insufficient numbers of professional staff. Finally, as reported earlier, 56 percent of state WIC agency automated management information systems were not capable of performing, or efficiently performing, 1 or more of 19 essential program tasks.

Approaches to Addressing WIC Challenges

We identified 16 approaches that could be considered to address 1 or more of the 6 major challenges facing the program. The approaches were identified based on the following assumptions: (1) WIC will continue to be administered by USDA, (2) income eligibility requirements will remain relatively unchanged, and (3) the program will continue to operate as a discretionary grant program. Each addresses a specific aspect of one or more of the six major challenges facing the program. For example, four of the approaches focus on funding; four relate to performance or impact measurement; three address staffing issues; three relate to information technology; and two relate to the provision of nutrition services. Most of the approaches also address other problems, even if tangentially. Table 2 shows the challenges we think each approach can help address. While each of the approaches offer certain advantages, they also have potential negative consequences that policymakers should consider.

During our work, we encountered other potential approaches in addition to the 16 we selected; however, we focused on those that most directly addressed the major challenges we identified. Our assumptions precluded some approaches, such as moving the administration of WIC from USDA to HHS, changing the program's income eligibility requirements to target lower income individuals, and making WIC an entitlement program. Such approaches may warrant further study.

A more detailed description of the approaches—including potential implementation strategies, a description of the rationale for considering each approach, and possible advantages and disadvantages—is provided in appendix III.

⁵⁰ Abt Associates, Inc., *WIC Participant and Program Characteristics 1998*, Food and Nutrition Service, USDA: Alexandria, VA, WIC-00-PC, May 2000.

Table 2: Sixteen Approaches to Addressing WIC Challenges

Approach	Challenge Area					
	Health and welfare delivery changes	Participant changes	Maintaining skilled staff	Information technology	Assessing services	Meeting requirements
Make WIC services more accessible to applicants and participants by increasing the variety of service providers.	X	X			X	
Improve WIC's ability to respond to new health issues, such as obesity and diabetes, and to participants' nutritional needs by expanding the range and scope of nutrition education.	X	X	X		X	
Assess the staffing needs of the state and local WIC agencies and develop strategies to address any shortcomings.			X		X	
Establish more stringent professional staffing requirements for local WIC agencies.			X		X	
Establish minimum continuing education requirements for WIC staff in the areas of nutrition, breastfeeding promotion, and counseling.			X			
Expedite the components of WIC's 5-Year Technology Plan related to (a) the development of a model management information system and (b) the facilitation the multistate acquisition of management information systems.		X		X		X
Ensure that all local WIC agencies have direct Internet access.				X		
Implement nationwide EBT for WIC food benefits.				X		
Develop and track national outcome measures for nutrition services and program coordination and integration.					X	
Require each state WIC agency to develop measurable goals that address state-specific issues and track progress toward meeting these goals.					X	
Collect more data relating to WIC participants and program interventions by expanding the CDC Pediatric and Pregnancy Nutrition Surveillance Systems.					X	
Develop a strategic plan to evaluate the impact of WIC's nutrition services.					X	
Provide states with greater flexibility to convert food funds into NSA funding.	X	X	X	X	X	X

Approach	Challenge Area					
	Health and welfare delivery changes	Participant changes	Maintaining skilled staff	Information technology	Assessing services	Meeting requirements
Increase the level of federal funding for WIC NSA.	X	X	X	X	X	X
Increase overall state contributions to WIC NSA.	X	X	X	X	X	X
Increase the level of WIC funding from other sources.	X	X	X	X	X	X

Source: GAO's analysis.

Conclusions

The WIC program is facing serious challenges in its efforts to deliver high-quality nutrition services. Changes in WIC's service environment and additional requirements are causing the program to strain to provide effective nutrition services. Program stress will likely increase in the future because the program is considered a major point of access to health services for low-income infants and preschool children, creating the expectation that the program can do even more to help address emerging health issues in this population.

In 2002, the Congress, through the reauthorization process, will begin to make decisions that could fundamentally affect the program's ability to meet the challenges it faces in the delivery of nutrition services. In essence, the Congress will be reexamining its expectations for the program and the resources needed to meet those expectations. In describing the major challenges facing the program and approaches that could help to address the challenges, this report provides a structure for carrying out that reexamination. Most of the approaches could involve basic changes in program structure or the way nutrition services are funded. Decisions to adopt such approaches—whether in part or in whole—ultimately rest with the Congress. However, in regard to two of the approaches—recruiting and keeping a skilled staff and assessing the effects of nutrition services—the Congress lacks some information that would benefit decisionmaking.

Recommendations for Executive Action

In order to help the Congress and USDA identify strategies to address the program's challenges in recruiting and retaining a skilled staff and assessing the effects of nutrition services, we recommend that the Secretary of Agriculture direct the Administrator of the Food and Nutrition Service to take the following actions:

-
- Work with Economic Research Service and the National Association of WIC Directors to conduct an assessment of the staffing needs of state and local WIC agencies. This assessment should examine factors such as staffing patterns, vacancies, salaries, benefits, duties, turnover, and retention.
 - Work with the Economic Research Service, the National Association of WIC Directors, and other stakeholders, including the CDC, to develop a strategic plan to evaluate the impacts of specific WIC nutrition services. This plan should include information on the types of research that could be done to evaluate the impacts of specific nutrition services as well as the data and the financial resources that would be needed to conduct such research.

Agency Comments and Our Response

We provided a draft of this report to USDA's Food and Nutrition Service for review and comment. We met with Food and Nutrition Service officials, including the Acting Administrator. The agency officials generally agreed with the report's findings and recommendations. The officials also provided some technical changes and clarifications to the report, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees; interested Members of the Congress; the Secretary of Agriculture; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others upon request.

If you or your staff have any questions about this report, please contact me or Thomas E. Slomba at (202) 512-7215. Key contributors to this report are listed in appendix IV.



Robert E. Robertson
Director, Employment, Workforce, and
Income Security Issues

Appendix I: Stakeholders Providing Comments on Proposed Approaches for Overcoming Challenges Facing WIC

American Dietetic Association
c/o Arizona Department of Health Services
Phoenix, AZ

American Enterprise Institute
Washington, D.C.

WIC/Supplemental Nutrition Branch
California Department of Health Services
Sacramento, CA

Center on Budget and Policy Priorities
Washington, D.C.

Department of Health and Human Services
City of Long Beach
Long Beach, CA

Food Research and Action Committee
Washington, D.C.

Food Marketing Institute
Washington, D.C.

Gallatin City-County Health Department
Bozeman, MT

National Advisory Council on Maternal, Infant & Fetal Health
c/o United Health Centers of San Joaquin Valley, Inc.
Parlier, CA

National Association of WIC Directors
Washington, D.C.

Maternal Child Health
Grady Health System
Atlanta, GA

Minnesota Department of Health
St. Paul, MN

**Appendix I: Stakeholders Providing
Comments on Proposed Approaches for
Overcoming Challenges Facing WIC**

Montana Department of Public Health and Human Services
Helena, MT

Pennsylvania Department of Health
Harrisburg, PA

Zuni WIC Program
Pueblo of Zuni, N.M.

Economic Research Service
U.S. Department of Agriculture
Alexandria, VA

Food and Nutrition Service
U.S. Department of Agriculture
Alexandria, VA

Office of Budget and Policy Analysis
U.S. Department of Agriculture
Washington, D.C.

Administration for Children and Families
U.S. Department of Health and Human Services
Washington, D.C.

Centers for Disease Control and Prevention
U.S. Department of Health and Human Services
Atlanta, GA

Health Resources and Services Administration
U.S. Department of Health and Human Services
Rockville, MD

Appendix II: Program Tasks Identified by USDA

This appendix describes the 19 essential program tasks, identified by USDA, that a WIC automated management information system should be able to perform in order for program operations to be efficient.

Table 3: Automated Function Descriptions

Function	Description
Certification periods	The system automatically calculates the date the certification is due to expire for each participant. The system does this by adding the appropriate number of days to the certification date that is captured in the system during certification.
Nutritional risk and priority status	Based on the nutrition and health information entered into the system by the certifying official and the priority system established by program regulations, the system assigns the participant a nutritional risk code and assigns a priority level. Where multiple risk factors exist, the system stores risk factors for each participant and assigns the highest applicable priority. At the state agency's discretion, the certifying official may override the code generated by the system.
Income eligibility	Based on the information provided by applicants and established income eligibility guidelines, the system calculates the applicant's income and flags individuals whose income exceeds program standards. For those determined to be eligible, the system automatically stores the information in the participant's certification record. Where the applicant is determined eligible based on adjunctive income eligibility, this information is also stored on the system.
Associate family members	Clinic staff enter information that applies to all family members into the system only once. The system automatically updates or modifies the participant records of all associated family members by linking the common family identification number. The family identification number is used to facilitate coordination of certification periods for family members, transferring families within the system, and food package tailoring when several family members are eligible to receive the full package. In addition, the system allows the user to print all of the food instruments for all members within a family when the parent or guardian is present for pickup. This is possible because the system is programmed to associate all family members with a family group identification number. Upon command, the computer sorts the WIC food checks by family, grouping them for each individual within the family, and prints those checks associated with the family when they are present for pickup.
Transfer of certification	The system enables local staff to easily transfer the participant from one agency to another. To facilitate transfers within the state, the system maintains statewide data on all certified participants. The staff at the participant's new location are able to access the participant's file to find out what foods were issued at the former local agency and when they were last issued as well as other information useful in providing continued health and nutrition-related services.
Electronic certification data Transmission	Participant certification data is sent to the central computer facility electronically either in real time or batched mode. Paper forms are not sent through the mail.
Track nutrition education contacts and topics covered	The system captures the nutrition education provided to each program participant throughout the certification period as well as nutrition education topic covered during nutrition education training.
Create food prescriptions	The system supports this function by allowing the certifying official to select a food package for issuance to a participant from a table of standard, pre-defined packages. However, the certifying official has the flexibility to alter a standard package or develop a new package from scratch by quickly selecting food items from tables to construct the package. The system is programmed with edits that prevent the user from issuing foods that are disallowed or quantities of food that exceed the regulatory limit based on participant category.

**Appendix II: Program Tasks Identified by
USDA**

Function	Description
Issue benefits on demand	Printing is done for each participant at the time the participant is present to pick up the food instruments. With this system there is no need fill out a food instrument by hand or to print any food instruments in advance. The printing of food instruments on demand reflects the most recent food package prescribed for the participant, and may include adjustments to the food package recorded in the system before printing to reflect late pick up of the instruments, as well as other anticipated changes such as category change (i.e., infant to a child). This approach to printing food checks is also used to reissue checks that are lost or stolen from the client.
Track referrals to other programs	The system captures the name of the programs to which the participant was referred.
Perform reconciliation	Issuance information includes the name of the participant, the participant's identification number, the food instrument serial number, the food package prescribed, the date the food instrument was issued, the date the food instrument expires, and the estimated value of the food instrument. Redeemed food instruments are processed through regular banking channels or through the state payment system for payment to the vendor's account. Each food instrument redeemed is matched with the issuance data maintained in the system, and a monthly report is produced that shows a summary of the disposition of food instruments and expenditures.
Dual participation reporting	The local worker has access to statewide data to determine whether a duplicate record exists on an individual who is newly certified for WIC. In an on-line system, the information is available immediately. In a distributed system, preliminary demographic data are recorded in the system. The information is matched against the database periodically to identify clinics where the applicant may already be participating. Where two separate state agencies operate within a state (e.g., a geographic state agency and an Indian tribal organization), the system produces a data tape or an electronic file for exchange. One or both of the state agencies involved perform a participant data match. This information is used to flag possible instances of dual participation for follow-up action.
Integrity profile	The WIC system produces report data in accordance with existing specifications and produces other vendor management reports deemed necessary by the state agency.
Rebate billing reports	Based on redemption data, the system produces a report that determines the number of cans of formula redeemed by brand name and by type, and the month the food instrument was valid for participant use. In addition, the number of full versus partial infant formula packages can be identified. The system also provides rebate-billing reports for rebated foods other than formula.
Participation reports	The system produces reports that summarize the number of participants served during a specified time period and for a specified area. This information is used for caseload management and funds management.
Participation characteristics data sets	The system produces a data tape for use in the biennial report to the Congress on WIC program and participant characteristics.
Identify redeeming vendors	The system is designed to accept basic transaction information pertaining to each authorized retailer either at the time of issuance or at the time of payment. Transactions are related to the vendor performing the redemption.
High-Risk vendor detection system	The system supports this function by flagging high-risk vendors based on suspicious redemption patterns.
Price editing for excessive charges	The system assigns a maximum value for each food instrument type. Once the food instrument is redeemed, the system automatically checks the redeemed price against the maximum value and rejects any food instruments exceeding the maximum amount.

Source: *Planning for WIC's Future Technology Needs*, Food and Nutrition Service, USDA: Alexandria, VA, Mar. 2001.

Appendix III: Approaches to Overcoming Challenges Facing WIC

1. **Make WIC services more accessible to applicants and participants by increasing the variety of service providers.**

This could be accomplished by the following:

- Change legislation to allow the states to use demonstration projects to test and evaluate the use of for-profit entities, such as health maintenance organizations, as local WIC agencies.¹
- Encourage or require state agencies to give a greater preference (consideration) to local agency applicants that provide a greater proportion of services (1) during evening or weekend hours, (2) at more convenient locations, and (3) in the native language of applicants or participants.

Rationale. WIC was designed to serve poor and low-income women and children as an adjunct to good health care; therefore, it should be highly accessible to this population. Service delivery by WIC agencies has become more difficult due to changing health and social services delivery systems and changing characteristics of the population served by the WIC program. By having greater variety of providers and service locations, applicants or participants may have greater access to WIC services.

Potential advantages of this approach include the following:

- Participation among working families and students may increase.
- At-risk individuals who do not have access to traditional clinics may be reached.
- Partnerships with other community organizations may be formed, reducing the funding required to support multiple locations.
- Additional providers may create a more competitive market for WIC services, improving customer service.
- The local WIC program may receive added exposure in the community, improving its ability to attract potential participants.

¹According to USDA's response, state agencies have the option to establish policy that permits for-profit entities to provide WIC clinic services (including intake, certification, and food instrument issuance). The state and/or local agencies must remain fully accountable for regulatory compliance by for-profit entities selected to serve as WIC clinics, and these entities must operate the program in a nonprofit manner. A written agreement or contract that clearly delineates that entity's WIC responsibilities and obligations is essential to compliance.

Potential disadvantages of this approach include the following:

- Authorized grocery store vendors that are allowed to provide space could compromise the independence of the state and local agencies in their vendor management roles and create the appearance of a conflict of interest.
 - The integration of WIC with health services may be more difficult if WIC is operated at alternative locations, such as grocery stores.
 - Inconsistent and inaccurate information may be provided at alternative locations, resulting in a lack of program continuity and standardization.
 - Staff members who are bilingual or willing to work evening and weekend hours or in low-income neighborhoods due to safety concerns are difficult to find.
 - Few new agencies are applying to be WIC providers.
 - WIC applicants, participants, staff and others may get confused about service delivery if multiple WIC providers exist without defined service boundaries.
2. **Improve WIC's ability to respond to emerging health issues, such as obesity and diabetes, and to participants' nutritional needs by expanding the range and scope of nutrition education.**

This could be accomplished by the following:

- Expand nutrition education and breastfeeding promotion curricula to include such topics as the benefits of physical activity and influence of media advertising on the food preferences of parents and children.
- Place greater emphasis during educational sessions on participants' eating, feeding, and shopping practices or behaviors.
- Increase the use of multiple strategies when counseling participants.
- Provide more age-appropriate nutrition education to preschool-age WIC participants.

Rationale. Over the past decade, the incidence of obesity and diabetes among adults and children has reached epidemic proportions, especially among lower income individuals. The nutrition education and breastfeeding promotion sessions provide an opportunity for WIC staff to help participants prevent these diseases. However, we observed that the quality of the nutrition education to WIC participants varied significantly. Experts indicate that nutrition counseling that addresses eating behaviors and/or that uses variety of teaching strategies can be more effective in preventing obesity and other nutrition-related illnesses.

Potential advantages of this approach include the following:

- Disease prevention may be less costly than treatment.
- Increased participant interest in nutrition classes may result in increased knowledge and application to daily life, leading to better health.
- Training professional staff to provide information on emerging health issues may improve image of WIC staff.
- Impressionable preschool children may be taught positive messages that can shape lifelong nutrition and health choices and help them influence parents and caregivers.
- Job satisfaction for registered dietitians, able to utilize more advanced skills, may improve.

Potential disadvantages of this approach include the following:

- Suggested strategies may require longer WIC appointments and participants may be too tired, busy, or stressed to take advantage of the education.
 - Too little research exists to determine most effective strategies.
 - Staff members lack expertise and training on various topics outside of basic nutrition.
 - Better nutrition education and breastfeeding promotion will require additional staffing and resources at the local agency level.
 - Parents may be inconvenienced by making pre-school children available for education because, with more parents working, children are infrequently at WIC sites.
3. **Assess the staffing needs of the state and local WIC agencies and develop strategies to address any shortcomings.**

This could be accomplished by the following:

- Conduct a national study to examine staff distribution, duties, recruitment, retention, and job satisfaction.
- USDA working with its partners—such as state WIC agencies, HHS, and NAWD—to develop and implement agreed upon strategies.

Rationale. Relatively little national data are available on the size and composition of WIC staff. However, indications from USDA surveys suggest that local WIC agencies are having difficulty recruiting and retaining professional staff. Because of the lack of national data, little is known about the exact nature of the staffing problems.

Potential advantages of this approach include the following:

- The opportunity may be created to define completely what tasks WIC should be undertaking at the various staffing levels, the level of effort needed, and the appropriate distribution of duties among various types of staff.
- Information may provide an objective basis for funding requests.
- The image associated with working for the WIC program among nutrition professionals may be improved, along with staff retention.
- The quality of nutrition services may be improved.

Potential disadvantages of this approach include the following:

- National data may not take into account the variations in state and local agency regulations or local job markets and may be difficult to interpret for local agencies.
 - Limiting the study to current staffing and duties, without first defining the tasks that WIC must complete to achieve the results the program is intended to achieve, would not be as valuable to improving services.
 - Additional resources are needed to assess and address staffing needs.
 - Some factors affecting staffing are independent of USDA.
4. **Establish more stringent professional staffing requirements for local WIC agencies.**

This could be accomplished by the following:

- Develop an ideal “staffing plan” based on the number of participants per agency. Such a plan would identify the types of duties performed by professional, paraprofessional and support staff to make the most effective and efficient use of available resources. Establish standards for staff-to-participant ratios, including the number of dietitians, nutritionists, or lactation specialists an agency should employ, or have access to, based on its number of participants.

Rationale. No requirement exists that local WIC agencies employ a dietitian, nutritionist, or lactation specialist or that their staff members have access to the services of these professionals. We observed that the availability of nutrition professionals who had sufficient time to provide individual counseling varied from agency to agency, resulting in a range of the quality of services provided. Without staffing requirements to ensure a minimum level of access to professional nutrition services, local agencies

may not be able to provide adequate services, especially to high-risk participants.

Potential advantages of this approach include the following:

- Proper staffing may increase participant satisfaction.
- Quality of services may be improved.
- Job satisfaction may be increased by clearly describing responsibilities for various staff members.
- The program may be better able to respond to emerging health issues.
- Funds needed to provide high-quality services may be more easily estimated.

Potential disadvantages of this approach include the following:

- NSA funding may need to be increased.
- Research is needed to determine what constitutes an “ideal staffing plan” and the tasks required by each occupation.
- The availability of professional staff may be limited in some areas.
- Staffing ratio needs to be based on the nutritional status of participants, rather than the number of participants.
- Legislative changes to the program may be needed.
- If standards focus on professionals, the role of paraprofessionals may be diminished.

5. Establish minimum continuing education requirements for WIC staff in the areas of nutrition, breastfeeding promotion, and counseling.

This could be accomplished by the following:

- Develop national training requirements for WIC service providers, both professional and support staff, with input from WIC-related professional associations and appropriate federal agencies, such as CDC.
- Require states to establish continuing education requirements for their WIC agencies.

Rationale. Currently, WIC staff are not required to continue their education, despite the fact that knowledge in the health and nutrition fields has evolved. Recent nutrition research has provided new information on diets to prevent illness, on innovations in nutrition counseling, and on new nutrition-related health concerns, such as the

epidemic rise in obesity. Requiring all WIC staff to receive continuing education, even those not required to meet professional certification and licensing requirements, could improve the quality of WIC services and enhance the professionalism of WIC staff.

Potential advantages of this approach include the following:

- The qualifications of WIC staff may improve.
- Staff retention and job satisfaction may be increased.
- The quality of nutrition services may be improved and the amount of misinformation provided to WIC participants may be decreased.
- Training could be more focused on program needs, not just on individuals' interests

Potential disadvantages of this approach include the following:

- Additional NSA resources are needed to implement training and continuing education requirements.
- It is unlikely that a universal plan could be devised to fit the wide range of availability of staff, costs and client needs at the local agencies.
- Training requirements may discourage employment in WIC if time and expense is to be assumed by employees.
- Reporting requirements may be increased at the state and local agencies to ensure compliance.

6. Expedite the implementation components of WIC's 5-Year Technology Plan related to the development of a model management information system and the facilitation of multistate acquisitions of management information systems.

This could be accomplished by the following:

- USDA could prepare a report for the Congress in the next 2 years that outlines the features of a model system, the legislative and regulatory changes required to facilitate multistate acquisitions, and the associated funding needs.

Rationale. USDA has identified 19 essential program tasks that WIC management information systems should be able to perform, such as participant certification, benefit delivery, vendor management, and funds management. Some of these tasks are currently beyond the capability of over half of the state agencies. USDA has also noted that about 60 percent of state systems have exceeded or will exceed their life cycles within 3

years. A model management information system and the facilitation, through state partnerships, of the acquisition of management information systems have the potential to accelerate the upgrade of state systems and promote greater standardization of needed program data.

Potential advantages of this approach include the following:

- The multistate purchase of equipment and services for new systems and/or upgrades may reduce administrative burdens for individual states, lower costs and save time, and accelerate the acquisition of system enhancements for some states.
- Greater consistency and standardization may occur in WIC assessments and service delivery.
- Program participation in CDC's pediatric and pregnancy nutrition surveillance systems may be improved.
- Program fraud may be decreased nationwide.
- Collaborative, nationwide technical standards may be created that could facilitate program communications, including the transfer and sharing of data.

Potential disadvantages of this approach include the following:

- State legislative and regulatory barriers may discourage multistate purchases of equipment and services.
- Sources of additional funds needed for development of standards and for implementation of the systems are uncertain.
- A system that has the flexibility to accommodate a wide range of state-specific requirements and applications will be difficult and expensive to create.
- USDA may not have the technical expertise necessary to develop a model management information system.
- Very often when model systems are developed, by the time they are completed, technology and program requirements have evolved sufficiently to render the model less useful than anticipated.

7. Ensure that all local WIC agencies have direct Internet access.

This could be accomplished by the following:

- Set a target date for state WIC agencies to ensure that all local agencies have direct access to the Internet.

Rationale. The Internet can be used by federal, state, and local agencies for a variety of purposes related to the WIC program. USDA uses the Internet to provide state and local WIC agencies with program information, such as eligibility guidelines, application instructions, program funding, participation rates, and current law and regulations. Yet, available information indicates that hundreds of local agencies lack direct Internet access. The lack of Internet access may be due to several factors, such as the availability of telephone lines and local Internet providers. The quality of WIC services could be improved by enabling all local WIC professionals to efficiently communicate directly with USDA, other WIC agencies, and nutrition or health experts via the Internet.

Potential advantages of this approach include the following:

- Local agency websites for communicating program access information may increase WIC participation.
- Nutrition education materials may be made more accessible.
- WIC staff may be given the option of distance learning and self-paced training opportunities.
- Nutrition, health, professional, and other information may be made more accessible, especially to remote locations.
- Staff effectiveness may greatly improve.
- Communication and reporting between federal, state, and local agencies may be facilitated.
- The Internet may help WIC staff to locate potential sources of financial support.

Potential disadvantages of this approach include the following:

- Added expense of hardware/software and Internet service may not be covered by state funding requiring the use of limited nutrition services and administrative funds.
- Internet expense may not be justified by its impact on program operations.
- Potential exists for abuse by WIC staff.
- Computer systems and participant records may be vulnerable to viruses or hackers.

8. Implement nationwide electronic benefit transfers for WIC food benefits.

This could be accomplished by the following:

- Set a target date for implementation of EBT systems.
- Test and evaluate a variety of EBT systems—such as smart card, magnetic strip, and Web-based technologies.
- Develop key infrastructure elements, such as a database of WIC-specific universal product codes, to support the implementation of EBT systems.

Rationale. WIC participants typically receive paper vouchers or checks to purchase specific foods prescribed by WIC staff. The grocery industry reports that transactions involving these vouchers or checks incur comparatively high costs. USDA and the WIC retail community have established goals to reduce the transaction costs for grocers and improve the buying experience for WIC participants. An EBT system has the potential to help WIC meet these goals, but the infrastructure is not yet in place to support these systems.

Potential advantages of this approach include the following:

- The timeliness and accuracy of financial transactions may be increased.
- Program fraud and abuse may be minimized.
- Paper use associated with voucher printing, storage, collection, and destruction may be reduced.
- Stigma associated with the paper transaction process may be diminished.
- Interstate transfer of participant certification may be facilitated.
- Opportunities to integrate the delivery of WIC and other services may be expanded.
- Lost or stolen EBT cards are more easily replaced.
- Food items may be more easily purchased as needed.
- Ability to monitor and collect information on products purchased may be increased.

Potential disadvantages of this approach include the following:

- Development and operational costs of EBT, particularly for small food retailers, could present a financial hardship that may decrease the number of stores that wish to participate in WIC.
- Mandating an implementation date for EBT does not suddenly imbue WIC clinics and state agencies with the interest and the technical understanding necessary to implement EBT.
- EBT infrastructure at the retail level, especially in rural areas, is not available to meet program needs.

- No commercial model of EBT exists.
 - Development and timely updating of a national system of specific WIC-approved food product codes necessary for the operation of an EBT system could be difficult, especially for states that use a 'lowest price' policy where products allowed by WIC can change from store to store or from day to day.
9. **Develop and track national outcome measures for nutrition services and program coordination and integration.**

This could be accomplished by the following:

- USDA working with its partners—such as state WIC agencies, HHS, and NAWD—to develop outcome measures.
- Draw outcome measures from CDC's pediatric and pregnancy surveillance systems (see approach #11).
- Drawing outcome measures from HHS' Healthy People 2010 objectives.
- Track the measures at the state and national levels.
- Report annual progress of achieving goals in a manner similar to that in the Web-based Maternal and Child Health Program information system.

Rationale. In response to the Government Performance and Results Act of 1993, USDA has attempted to develop national outcome measures for some of WIC's nutrition services. However, it has had very limited success establishing these measures because of resource constraints and difficulty identifying data. Moreover, USDA relies on the state and local agencies, as grant and subgrant recipients, to provide the services to help accomplish the program's goals and objectives. USDA currently requires state agencies to annually describe their goals and objectives for improving program operations, but it does not require that the state goals be consistent with any of the national goals or objectives. Developing some outcome measures that assess the coordination and integration of WIC services with other health or social service providers would highlight the federal-level objective to provide more consistent care to participants and reduce duplicative activities.

Potential advantages of this approach include the following:

- Data and information would be more available for future studies.
- Using the HHS Healthy People 2010 objectives is an excellent way to achieve consistency with coordinating agencies and programs.

- If WIC caseworkers focused on key objectives, clearer progress could be made, which would help the program justify funding from the Congress and state legislatures.
- Successful outcomes may lead to the identification and implementation of best practices.
- Accountability of state and local agencies may be increased, reducing the need for state and local site visits and monitoring.

Potential disadvantages of this approach include the following:

- The CDC's surveillance systems have significant limitations, including voluntary participation.
- Some jurisdictions might feel pressured to drop local priorities for national ones if outcome measures were defined the same for all jurisdictions.
- Different states, regions, and counties use different computer systems and coding schemes to record WIC data, making it difficult to compile data nationally or even statewide.
- Outcomes measured may be partially attributable to other programs or services, not just to WIC services.
- Focus on a limited set of outcomes may prompt programs to address outcomes that are easily measurable to the exclusion of others.

10. Require each state WIC agency to develop measurable goals that address state-specific issues and track progress toward meeting these goals.

This could be accomplished by the following:

- USDA and state agencies work as partners to develop state level measurable goals.
- Goals should be based on state health issues identified with CDC's pregnancy and pediatric surveillance systems and other systems.
- Goals should relate to quality of services—such as participant retention (particularly for children) and referral outcomes—in a way that can be quantified.
- Provide training or technical assistance to state agency staff in developing goals and objectives under the Government Performance and Results Act.
- Enhance state and local management information systems to support tracking goals (see approach #6).

Rationale. While USDA currently requires state agencies to describe their goals for improving program operations on an annual basis, the agency does not require that the goals be measurable. As previously described, about half of the state goals and objectives that we reviewed lacked key elements, such as baseline or target values, needed to measure progress. Using more measurable goals would enable WIC to demonstrate progress at the state level.

Potential advantages of this approach include the following:

- A focus on these measurable goals and objectives would help clinic staff nationwide focus on the common purpose of WIC without requiring agencies to employ the same strategies.
- Measurable goals may lead to more focused, meaningful state WIC plans.
- State and local agencies may be encouraged to focus on outcome goals rather than caseload.
- The ability to demonstrate and measure program effectiveness may support funding requests.

Potential disadvantages of this approach include the following:

- This approach does not take into account the differences in state operations and, more importantly, the differences in the type and degree of action required to improve program effectiveness for different states or regions.
- Data may not be available or reliable for identifying baselines or appropriate targets, or for monitoring progress.
- State agencies will require training to develop measurable goals.
- Attainment of some goals may also be dependent on other health programs.

11. Collect more data relating to WIC participants and program interventions by expanding the CDC pediatric and pregnancy nutrition surveillance systems.

This could be accomplished by the following:

- USDA works with its partners—such as HHS, state WIC agencies, and NAWD—to find ways for WIC to obtain more information from the pediatric and pregnancy nutrition surveillance systems.
- Increase the number of states and federal programs participating in pediatric and pregnancy nutrition surveillance systems.

- Increase the number of variables collected by the pediatric and pregnancy nutrition surveillance systems, to include data such as type of WIC nutrition interventions received and household socioeconomic status.

Rationale. CDC's pediatric and pregnancy nutrition surveillance systems track the health status of children and the risk factors of mothers who participate in selected federal programs. While data for WIC participants represent a substantial portion of the sample, not every state WIC agency participates. Moreover, the systems do not track individuals over time or collect information on the types of services that individual participants receive. Expanding the data collection associated with these systems would enable WIC to better track program performance and provide critical data needed to evaluate the effectiveness of WIC services.

Potential advantages of this approach include the following:

- Data collection systems, such as CDC's pediatric and pregnancy nutrition surveillance systems, may be an effective approach to improving the amount, national representation, and usefulness of data collected.
- Improved data may help justify funding and help ensure that it is targeted to treatments most likely to yield successes.
- Enhanced data systems may provide more relevant data for program planning, monitoring, and evaluation. With all states participating, the usefulness of the data collected is increased.
- Expansion and enhancement of an existing system may be less costly than creating a new system.

Potential disadvantages of this approach include the following:

- Additional resources may be needed for automated systems and staff training to enable some states to participate in CDC's pediatric and pregnancy nutrition surveillance systems.
- Much of the information in these systems is incomplete and contains many errors, which raises concerns about accuracy.
- Significant costs are associated with expanding participation in the surveillance systems, as well as increasing the number of variables in the questionnaires.
- The variety of counseling topics, the sensitivity of health related advice, and privacy concerns make nationwide data collection difficult.

12. Develop a strategic plan to evaluate the impact of WIC's nutrition services.

This could be accomplished by the following:

- Identify the research needed to determine the effects of WIC's nutrition service interventions on its participants.
- Identify necessary data and appropriate research methodologies.
- Identify resources required to conduct impact research.

Rationale. USDA currently spends about \$ 1.1 billion annually for NSA. In recent years, USDA has spent about \$2 million to \$3 million annually on WIC-related research. Yet, few research findings exist on the effectiveness of specific nutrition services. According to USDA officials, the money dedicated to research is insufficient to assess the effect of WIC services on participants, in part because of the need for primary data and the complex nature of the required methodologies.

Potential advantages of this approach include the following:

- Well-designed evaluation/research would make it possible to assess program impact and determine appropriate changes.
- Studying the effects of different nutrition promotion treatments is essential to helping WIC direct its nutrition promotion efforts to the activities and approaches most likely to yield the best results.
- The identification of the type of research and the resources needed would help to justify funding support required.

Potential disadvantages of this approach include the following:

- Assessing the effect of specific nutrition education interventions may be difficult.
- Several obstacles exist to evaluating the impact of WIC's nutrition services. These include: participants not being required to attend nutrition education, not having clear and well-defined outcomes, and adequate assessment tools not being available for measuring dietary intake and changes in dietary behavior.
- Research is difficult, time-consuming, and costly to conduct.
- Representative samples are difficult to gather from the different types of WIC agencies throughout the United States.
- Implementing a strategic plan to evaluate the impact of WIC's nutrition services would require a reliable, significant ongoing commitment of funding and staff resources.

13. Provide states with greater flexibility to convert food funds into NSA funding.

This could be accomplished by the following:

- Change legislation to permit states to (1) carry converted funds forward into subsequent years, (2) continually convert food funds resulting from program savings into NSA funding for the purposes of serving more participants, and/or (3) target some food funds to support high-cost nutrition service activities, such as home or hospital breastfeeding support.

Rationale. Current program regulations allow states to convert food funds to NSA funds to cover only current year expenditures that exceed their NSA grants under two conditions: (1) A state has an approved plan for food cost containment and for increases in participation levels above the USDA-projected level and (2) a state's participation actually increases above the level projected by USDA. However, the increased participation supported by the converted funds is not considered in the allocation for the next year. Officials from several state WIC programs and NAWD have indicated that the current conversion policies do not provide any incentives for states to aggressively pursue food cost containment strategies for the purposes of increasing participation. In recognition of the high costs associated with delivering nutrition services to some participants, recent legislation, P.L. 106-224, permits a state-level agency serving remote Indian or Native American villages to convert food funds to NSA funds to cover allowable costs, without having an increase in participation.

Potential advantages of this approach include the following:

- Flexibility may serve as an incentive or reward for containing food costs. For example, states may be more aggressive in using strategies to reduce food costs, including educating participants to be better shoppers, if they knew some of the money saved could be converted to NSA to improve nutrition services.
- States may have more control over their program budget.
- Barriers that states claim prevent them from using current conversion authority would be removed.
- Fund conversion for targeted purposes such as nutrition education, breastfeeding promotion, and or outreach may increase participation.

Potential disadvantages of this approach include the following:

- Increased conversion could limit the number of participants served by the program during times of growing caseloads and limited food funds.
- The quality of food packages provided to participants may suffer, which may also reduce participation.
- The portion of federal funds spent on NSA, viewed by some as an “administrative expense,” may be decreased, misrepresenting the funding requirements of the program.
- Unless an evaluation requirement is created, the effects of providing increased conversion authority would be unknown.
- Carrying forward converted funds into subsequent years could result in a significant portion of funds remaining unused and rolled forward from year to year.

14. Increase the level of federal funding for WIC NSA.

This could be accomplished by the following:

- Appropriate additional funds that increase the average grant per participant.
- Provide additional funds that target specific needs, such as the acquisition of management information systems.

Rationale. The federal grant level for NSA is based on the national average of NSA grant expenditures that were made per participant per month in 1987, adjusted for inflation. In fiscal year 2001, grant levels were based on a national average of \$12.27 per participant per month. Since the grant level was established, new demands have been placed on the program in part because of new program requirements, shifting demographics, emerging health needs, and changes in the health care and social service environment. In addition, our case studies suggest a decrease in the extent to which nonprogram resources, such as in-kind contributions, are covering nutrition service and administration costs.

Potential advantages of this approach include the following:

- The program may be better able to meet its responsibility as an adjunct to other health care services, including immunizations.
- The program may be able to fully implement interventions that have been demonstrated to improve immunizations among children enrolled in WIC.
- The program may be able to implement approaches to address challenges it faces that have been identified above.

- The recruiting and retention of staff may be improved by offering higher salaries and better benefits.
- Additional funds targeted for management information systems may help to improve the efficiency of client services and program management.
- Additional funds targeted for EBT may improve program integrity and streamline financial transactions and reporting.
- The program may be better able to adjust to changes in the characteristics of the population it serves and the environment in which it operates.
- The program may be better able to carry out additional responsibilities placed on it since 1987.

Potential disadvantages of this approach include the following:

- No guarantee exists that additional resources would improve outcomes.
- Additional funds for NSA would be perceived as reducing resources available to provide food benefits to potential participants.
- More federal funds could reduce the likelihood of state financial support of the program.
- Additional resources may be difficult to justify without specific information about how much it costs to provide essential services and/or the cost-effectiveness of nutrition services.

15. Increase overall state contributions to WIC NSA.

This could be accomplished by the following:

- Change WIC funding guidelines to require or encourage a state match, either monetary or in-kind, of some portion of WIC NSA funds.
- Ask states to provide a match for special purpose grants, such as continuing education for WIC staff.

Rationale. State agencies rely almost entirely on their federal grants to cover their WIC NSA costs. No state matching requirement exists for WIC—although some states volunteer support for WIC. In responding to our 1999 survey of state-level WIC agencies, 11 state-level agencies reported receiving state funds for WIC in fiscal year 1998. The state contributions ranged from less than 1 percent to just over 37 percent of their total NSA funds. Increasing the level of state contributions for WIC could help to enhance the quality of nutrition services.

Potential advantages of this approach include the following:

- More resources may enhance WIC services; for example, more funding would enable hiring more staff so more time could be spent on nutrition education with participants.
- An increase in state funds may increase program flexibility. For example, federal restrictions may not apply.
- State support and commitment to the program may be demonstrated with an increase in state funds.
- States may have a greater incentive to be efficient.
- Additional funding sources would strengthen partnerships and program services.

Potential disadvantages of this approach include the following:

- Federal funding may decline.
- States may divert funds from other public health programs.
- Some states may turn down federal funding, resulting in fewer resources available for WIC services.
- Some states, including those with a disproportionate portion of low-income population, may not be able to afford a match.
- Tension may be created between federal and state goals for the program.

16. Increase the level of WIC funding from other sources.

This could be accomplished by the following:

- Help state and local agencies in the area of resource development.
- Provide incentives or funding to support state and local fundraising efforts.
- Generate program-related income, such as from fees for nutrition education or breastfeeding support to noneligible individuals or processing vendor applications.

Rationale. State and local agencies use funding from other sources to enhance WIC services. California WIC has initiated a “WIC Plus” program to identify and obtain other sources of funds for the purpose of enhancing nutrition services. Also, the New York State WIC program is currently formalizing an agreement with the state’s TANF program; under this agreement, the TANF program would provide funds to WIC for additional nutrition services to TANF program participants who are also enrolled in WIC. However, based on our survey of local agencies, about 5 percent of

the funds received in fiscal year 1998 came from other sources. Obtaining additional funding from other sources may help improve the quality of WIC services.

Potential advantages of this approach include the following:

- Collaboration with other programs, such as TANF and Medicaid, may be increased if other programs paid WIC to provide services to their participants.
- Services may be enhanced and management information systems improved.
- Income from charging fees to non-WIC participants for some services may enhance the image of WIC and improve the quality of services offered.

Potential disadvantages of this approach include the following:

- Not all WIC agencies are able or willing to pursue additional funding.
- Staff time and resources are needed to administer income-generating efforts.
- Income could vary from year to year resulting in the variation of program services.

Appendix IV: GAO Contacts and Staff Acknowledgments

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