WIC Nutrition Education Study: Phase I Report

May 2016

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The opinions expressed reflect those of the authors and not necessarily those of RTI International. This study was conducted under contract number AG-3198-D-12-0082 with the Food and Nutrition Service. This report is available on the Food and Nutrition Service web site: http://www.fns.usda.gov/research-and-analysis.

Suggested Citation:
U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. *WIC Nutrition Education Study: Phase I Report*, by Sheryl Cates, Kristen Capogrossi, Linnea Sallack, Karen Deehy Celia Eicheldinger, Shawn Karns, Samantha Bradley, Katherine Kosa, and Jenna Brophy. Project Officer: Karen Castellanos-Brown. Alexandria, VA: May 2016.

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Executive Summary

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is administered at the Federal level by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA), which provides grants to WIC State agencies (SAs) to provide program services to eligible participants. WIC SAs include State health agencies in all 50 geographic States, as well as 34 Indian Tribal Organizations (ITOs), five U.S. territories, and the District of Columbia (USDA, FNS, 2015b). WIC SAs provide program services, including nutrition education, either directly or through contracts or agreements with local health agencies and community-based organizations.

Nutrition education, the program feature often cited as pivotal to WIC's success, is designed to emphasize the relationship between nutrition, physical activity, and the health of pregnant, breastfeeding, and postpartum women, infants, and young children. According to Federal WIC Regulations, "Nutrition education, including breastfeeding promotion and support, shall be considered a benefit of the Program, and shall be made available at no cost to the participant. Nutrition education including breastfeeding promotion and support, shall be designed to be easily understood by participants, and it shall bear a practical relationship to participant nutritional needs, household situations, and cultural preferences including information on how to select food for themselves and their families" (USDA, FNS, n.d.). The Federal regulations and guidance provide a policy framework for delivering WIC nutrition education, but State and local WIC agencies have significant flexibility to design nutrition education appropriate for the demographics of their participants to achieve established goals. This flexibility has yielded a wide range of messages, delivery systems, approaches, and qualifications and training for WIC nutrition educators and variation in the nutrition education participants receive. The purpose of Phase I of the *WIC Nutrition Education Study* was to provide a comprehensive nationally representative description of WIC nutrition education processes and features. This executive summary presents the study methods and highlights key findings from Phase I of the study.[1]

Findings from Phase I demonstrate that nutrition education policies and practices are evolving in ways that address the needs identified 15 years ago as part of FNS's Revitalizing Quality Nutrition Services (RQNS) initiative and the associated WIC Program Nutrition Education Guidance and Value Enhanced Nutrition Assessment (VENA) guidance for conducting a comprehensive nutrition assessment to frame effective, participant-centered education. Many WIC staff members who plan, oversee, and provide nutrition education have extensive WIC experience and formal education and program training on participant-centered nutrition education skills. Interviews with site staff members revealed they are incorporating these skills into their individual counseling and group education sessions. Furthermore, it is evident that local agencies (LAs) and sites are incorporating the "Six Elements of Effective Nutrition Education" described in the 2006 WIC Program Nutrition Education Guidance into nutrition education practice, although with greater use of some elements than others.

[1] Phase II is a pilot study in six WIC sites to demonstrate and refine an evaluation of the impact of WIC nutrition education on participants' nutrition and other behaviors, and Phase III is the design of a national evaluation study based on findings from the pilot study. Phases II and III will be completed in fall 2017.

ES.1 Study Methodology

Phase I was designed to collect detailed, nationally representative data on nutrition education, including the environment, staffing, and resources for WIC nutrition education; the modes of education being used; and efforts to incorporate participant-centered approaches to help participants achieve their goals for improved nutrition and health. It also addresses the types and frequency of modes for delivering nutrition education, topics and techniques for delivering nutrition education, nutrition education exposure (number and length of contacts), and other features of nutrition education services.

The study synthesized data from nationally representative surveys of WIC LAs (the Local Agency Survey) and WIC sites[2] (the Site Survey), in-depth interviews with site staff members who work in a subset of sites that responded to the Site Survey, and data abstracted from WIC State Plans.

Local Agency and Site Surveys

The Local Agency and Site Surveys were designed to provide nationally representative descriptive information about nutrition education provided by all LAs and the service delivery sites they oversee. A two-stage sampling approach was used. In the first stage, a stratified probability proportional to size sample of LAs was selected. In the second stage, a simple random sample of sites (one to three sites) within each sampled LA was selected. The Local Agency and Site Surveys were administered November 2014 through February 2015 using a Web-based approach with paper versions available upon request. Surveys were completed with 893 LAs (unweighted response rate of 89%) and 1,401 sites (696 sites for Version 1 and 705 sites for Version 2) (unweighted response rate of 73%). All statistical estimates for the Local Agency and Site Surveys were generated by applying appropriate survey weights to the respondent data.

In-depth Site Interviews

To enrich the data collected via the surveys, qualitative data were obtained through in-depth telephone interviews with site staff members from a subset of 80 sites. The 30-minute interviews collected additional descriptive information on WIC nutrition education (e.g., how education is adapted to accommodate cultural or other preferences or what training has been most useful and why) and expanded on select survey topics such as goal setting and techniques for conducting effective one-on-one or group sessions. Sites were purposefully selected to include geographic diversity, a variety of facility types, and a diverse caseload size. The 80 sites selected were in 55 SAs: 43 geographic States, 10 ITOs, one territory, and the District of Columbia.

Abstraction of WIC State Plans

Data were abstracted from fiscal year 2014 WIC State Plans on a small number of key statewide policies and practices that affect nutrition education services in all LAs and sites in the State (e.g., educational materials provided by the SA and allowable modes of nutrition education). Data were obtained for 76 SAs: 50 geographic States, 20 ITOs, five territories, and the District of Columbia.

[2] WIC site is used as the generic term for locations where WIC services are delivered to participants. These locations are referred to as WIC clinics, WIC offices, WIC centers, and other terms unique to the SAs or LAs that provide the services.

ES.2 Key Findings

Facilities, Equipment, and Materials for Delivering Nutrition Education

Half of WIC sites are located in city, county, State, or U.S. territory health departments, and the other half are located in a wide range of government and nongovernment facilities. WIC sites vary in terms of the types of facilities, equipment, and materials available for providing nutrition education. The majority of sites have private rooms for one-on-one counseling, and for sites that provide group sessions, about half have a dedicated room or space for group education. Equipment and materials most often available to assist with provision of nutrition education include bulletin boards; DVD players/TVs; and racks, tables, or stands to display written materials. Fewer sites use equipment that promotes interaction such as equipment for food tastings or cooking classes. Section 3.2 provides more information on the types of facilities, equipment, and materials used for delivering nutrition education.

Number of Staff Members Who Provide Nutrition Education

The number of staff members available to provide nutrition education in WIC sites varies greatly and is associated with the number of WIC participants served (i.e., participant caseload). The mean number of nutrition educator full-time equivalents (FTEs) at a site is 5 and ranges from an average of 3 for very small sites (caseload $\leq$ 300) to 10 for large sites (caseload $\geq$ 2,500). As expected, parallel differences exist for site participant-to-FTE educator ratios, ranging from 65 participants to one FTE educator for very small sites (caseload $\leq$ 300) to 494 participants to one FTE educator for large sites (caseload $\geq$ 2,500). Section 3.3.2 provides additional detail on the number of staff members available to provide nutrition education.

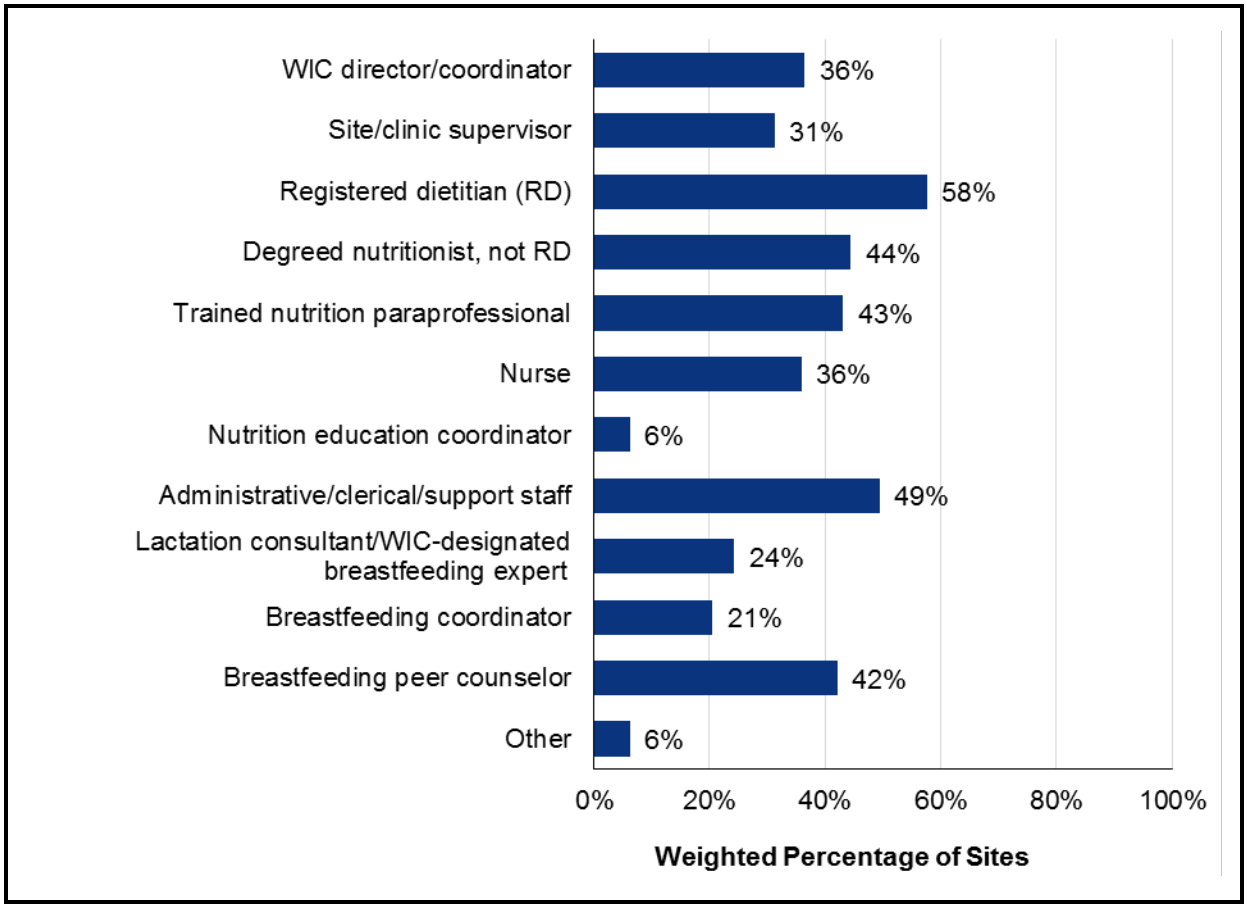
Types and Characteristics of Staff Members Who Provide Nutrition Education

WIC sites use several types of staff to provide nutrition education (referred to as nutrition educators); registered dietitians (RDs) are the most common (see **Exhibit ES-1**). Many sites also use degreed nutritionists (not RDs), trained nutrition paraprofessionals, administrative/clerical/support staff, nurses, and breastfeeding peer counselors to deliver nutrition education. Many nutrition educators are experienced and well educated; over half have worked for WIC for 7 or more years, and nearly two-thirds have a bachelor's or graduate degree. Further, many nutrition educators hold credentials such as RD, certified lactation consultant/certified lactation educator/certified lactation educator and counselor and/or registered nurse. Section 3.3.3 describes the characteristics of staff members who provide nutrition education and compares these findings with other studies.

Minimum Qualifications and Training for Nutrition Educators

Educational and credential requirements for nutrition educators are generally set by the SA. Most job types used by LAs for nutrition educators require a bachelor's degree, and some job types require an RD credential or a credential related to lactation expertise. LAs require training for new employees most often in the form of State-administered training programs, self-paced training modules, and on-the-job training with observation. Ongoing training for nutrition educators includes a wide array of topics related to participant-centered skills and approaches, as well as nutrition topics such as breastfeeding (see

Exhibit ES-1. Types of Staff Members Who Provide Nutrition Education (Weighted Percentage of Sites)



Sources: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,287 and number of nonrespondents = 114.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

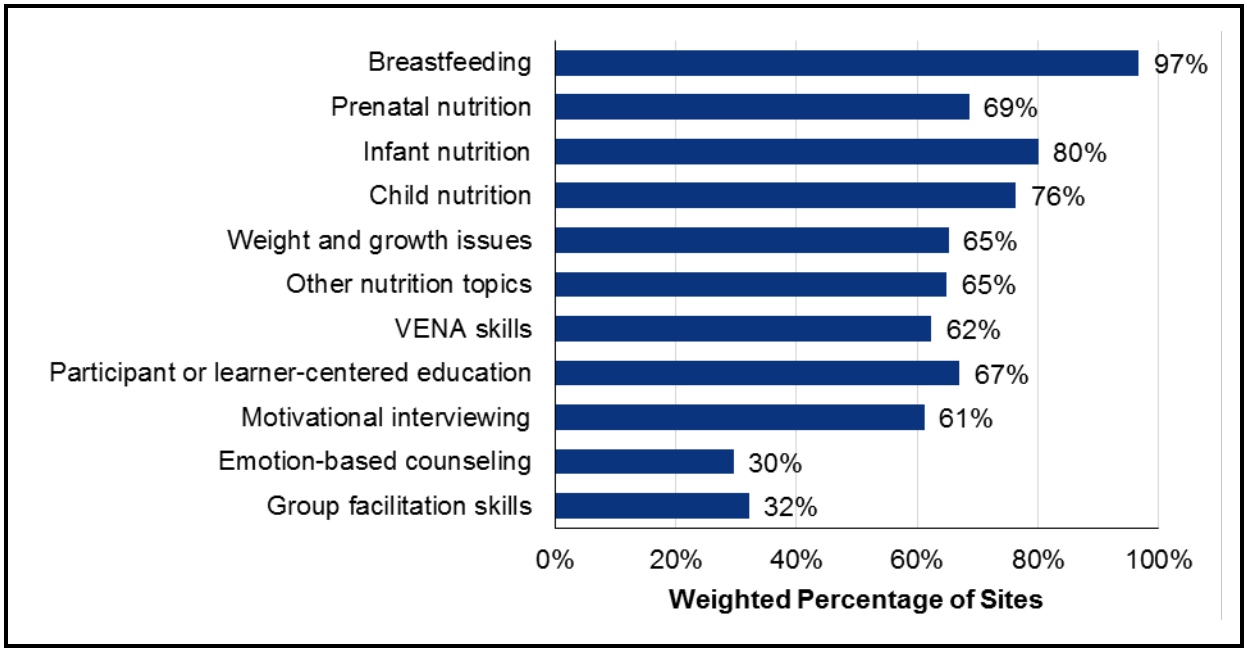
Respondents could select multiple responses.

Exhibit ES-2). In the interviews with site staff, individuals with more training reported making more changes in the approach they use to deliver nutrition education. Section 3.4 provides additional information on the minimum qualifications and training for nutrition educators.

Modes of Nutrition Education Offered

One-on-one, face-to-face nutrition counseling continues to be the universal delivery method for WIC nutrition education and is used by all sites. One-on-one counseling allows for more individualized sessions, particularly if participants are engaged and interested in the material. About half of sites provide group education sessions and half use off-site technology-based methods (e.g., Internet education) (see **Exhibit ES-3**). Fewer sites conduct one-on-one sessions by telephone or videoconferencing or use on-site technology-based methods. With the exception of one-on-one face-to-face counseling—which is used for all visit types—the method used to deliver nutrition education varies by type of visit. For example, group education sessions are most often used for secondary education follow-up visits. Section 4.2 provides more information on the modes of nutrition education offered, including differences in the types of modes offered by LA, site, and WIC participant characteristics.

Exhibit ES-2. Training Topics Provided to Nutrition Education Staff (Weighted Percentage of Sites)



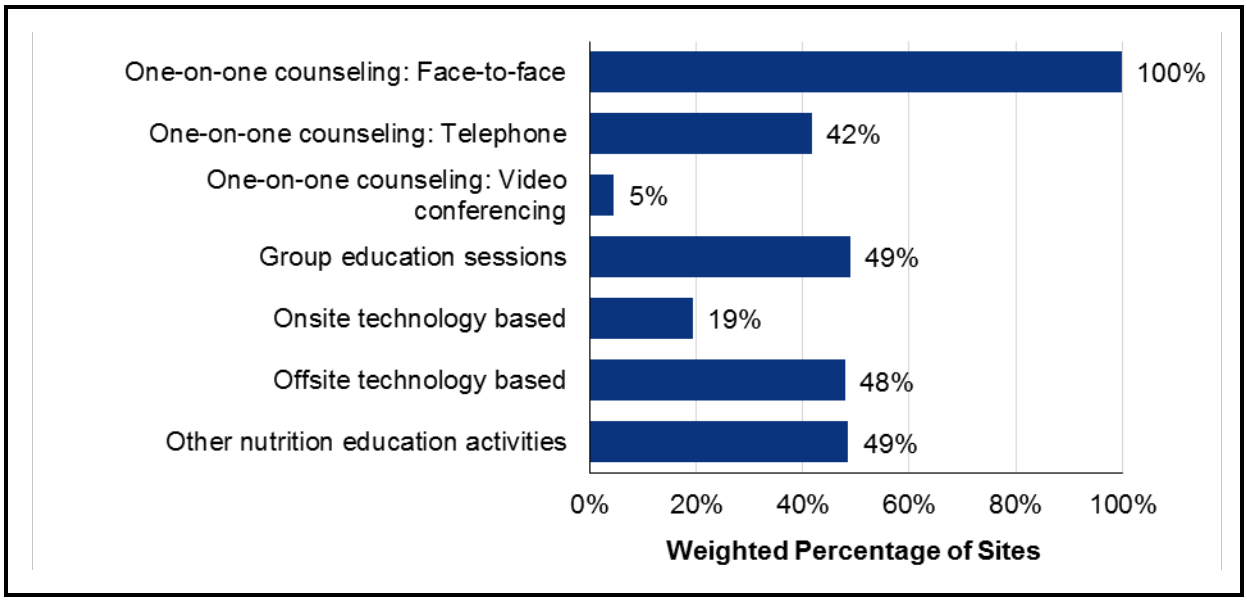
Source: 2014 Site Survey, Version 2. Number of respondents = 700 and number of nonrespondents = 5.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

Respondents were instructed to include all types of training (e.g., workshops, conferences, presentations at staff meetings).

Respondents could select multiple responses.

Exhibit ES-3. Modes Used by Sites to Provide Nutrition Education (Includes All Types of Visits) (Weighted Percentage of Sites)



Source: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,401 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Respondents could select multiple responses.

Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Shift toward Individualized Nutrition Education and Goal Setting

The study found that WIC staff members are striving to provide nutrition education that is individualized and tailored to the needs of each participant with participant involvement throughout the process. In the interviews with site staff, they emphasized the need to engage with participants and listen more, rather than telling them what they should be doing. They also reported that they adapt their counseling styles and content and the way they use reinforcement methods to fit the unique, individual needs and circumstances of their participants. Individualized nutrition education is one of the primary goals of RQNS and VENA, and this study shows there is buy-in and action among nutrition educators to achieve this goal. With the introduction of VENA in 2006, State and local WIC agencies have conducted staff training and implemented practices to strengthen nutrition assessment of participants. Staff members use the assessment results to provide targeted and relevant nutrition education to guide and support participants in making healthier eating and lifestyle choices.

Site staff members work with participants to set goals, and they are moving toward using goal-setting techniques that increase participant engagement in the goal-setting process. Most sites use individualized nutrition education approaches with the participant's needs guiding the goal-setting process. Site staff members interviewed report that participants are more responsive when goal setting is guided rather than demanded. Brochures or other written materials are often used to support information provided in nutrition education sessions and to help participants with tips or suggestions for achieving their goals. Section 4.3 provides additional information on the delivery of nutrition education in individual and group settings.

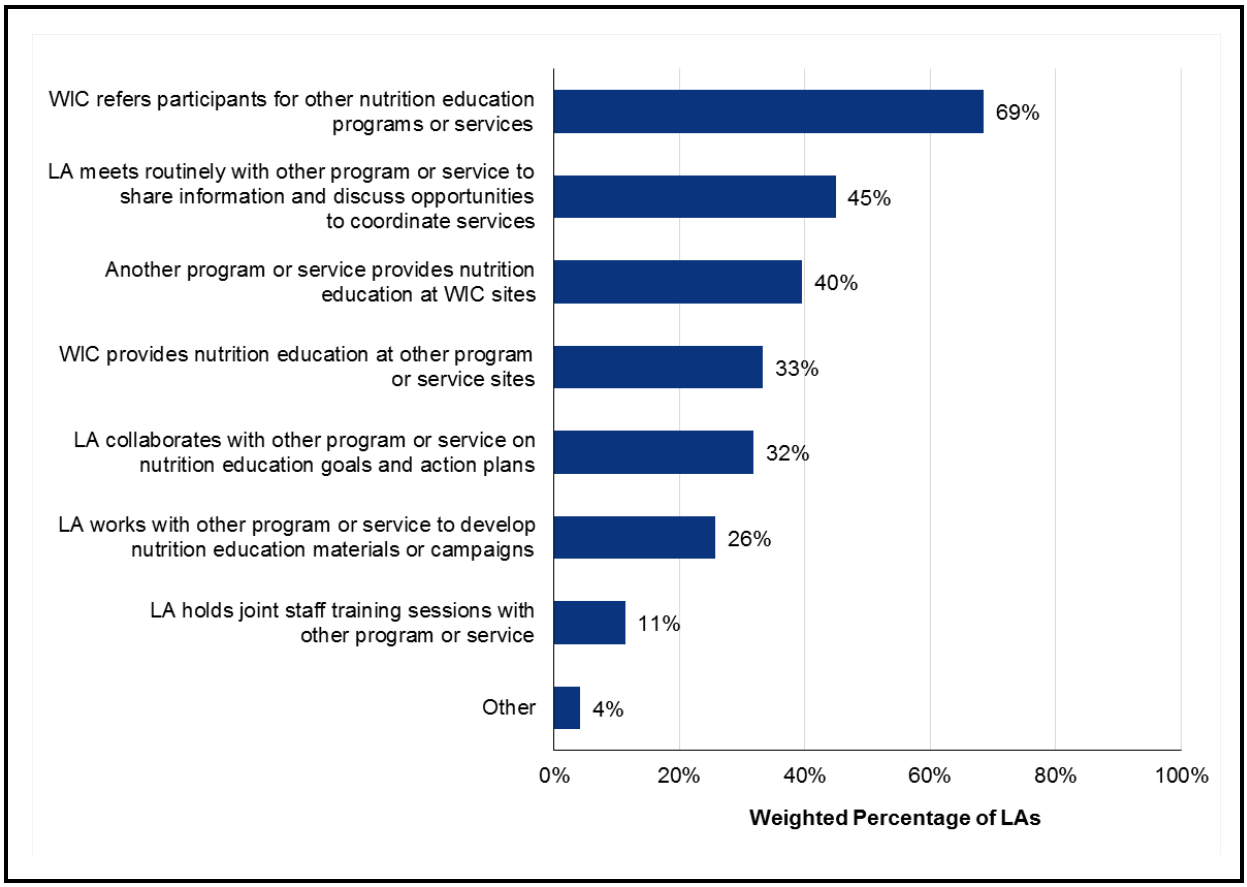
Nutrition Education Dosage

The frequency and amount of time site staff members spend with participants on nutrition education are tailored based on participants' nutritional needs, interest, and level of motivation for adopting healthy behaviors. Participants who are classified as high risk based on health and nutrition needs are generally offered more contacts than participants who are not high risk. The amount of time spent providing nutrition education varies based on the type of visit. Nutrition counseling sessions during certification visits average 19 minutes, one-on-one counseling sessions for secondary education follow-up visits average 12 minutes, and group secondary education follow-up sessions last an average of 21 minutes. However, according to site staff members interviewed, the amount of time spent on nutrition education is influenced by the participant's interest and engagement. Section 4.6 details the frequency and amount of time that staff members spend with participants on nutrition education.

Administration of WIC Nutrition Education

One-third of LAs reported receiving funding, materials, or "in-kind" (e.g., space and staff) support from sources other than the Federal or State WIC Program. Most often, this support was in the form of space or facilities. Many LAs coordinate the delivery of nutrition education with other local programs or services to provide consistent messages or share resources (see **Exhibit ES-4**). LAs reported they most often coordinate with cooperative extension offices or breastfeeding coalitions or task forces. The most common method of coordination is for the WIC site to refer participants to the other program or service. Many sites collect feedback from participants on the nutrition education they receive, most often through

Exhibit ES-4. Methods Used to Coordinate Nutrition Education with Other Programs/Services (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Only LAs that coordinate nutrition education with other programs or services were eligible to answer this question (n = 653). The number of respondents = 628 and number of nonrespondents = 25.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

a paper survey completed at the WIC site. Section 5 provides a detailed discussion of the study findings on the administration of WIC nutrition education.

ES.3 Conclusion

The purpose of the *WIC Nutrition Education Study* is to learn how nutrition education is being conducted (Phase I) and how best to evaluate the impact it has on participants (Phases II and III). This study is timely because WIC nutrition education has been undergoing a transformation since FNS launched the RQNS initiative in 1999. Results from the Phase I surveys and in-depth interviews show progress toward achieving an RQNS goal of enhancing and strengthening nutrition education through a more individualized, client-centered approach with a focus on motivating lifelong healthy behaviors.

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1. Introduction

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is administered at the Federal level by the U.S. Department of Agriculture's (USDA's) Food and Nutrition Service (FNS), which provides grants for program administration and operation to 90 WIC State agencies (SAs), including the 50 geographic States, 34 Indian Tribal Organizations, five U.S. territories, and the District of Columbia. While a few SAs provide program services directly to participants, most SAs provide services through contracts or agreements with local agencies (LAs). Within the approximately 1,900 LAs that WIC operates are approximately 10,000 clinic sites. An LA may serve as its own single service delivery location or may have multiple WIC clinics or sites[3] that provide direct nutrition services to participants. WIC services are provided at diverse locations, including county health departments, hospitals, mobile clinics (vans), community centers, schools, public housing sites, migrant health centers and camps, and Indian Health Service facilities. SAs that provide WIC services directly to participants at one or more sites may serve as both the SA and LA.

WIC's mission is to safeguard the health of low-income women, infants, and children up to age 5 who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, breastfeeding promotion and support, and referrals to health care (USDA, FNS, 2015c). WIC is recognized as a premier public health nutrition program that serves as an adjunct to health care to prevent occurrence of nutrition and health problems and to improve the nutritional and health status of participants. Nutrition education is the program feature often cited as pivotal to WIC's success. Federal regulations and guidance provide a policy framework, but State and local WIC agencies have significant flexibility to design nutrition education appropriate for the demographics of their participants to achieve established goals. This flexibility has yielded a range of messages, delivery systems, and approaches; qualifications and training for WIC educators; and variation in the nutrition education participants receive.

Recent national data are not available detailing the delivery of WIC nutrition education, and the efforts to evaluate the impact of WIC nutrition education on WIC participants' nutrition and other behaviors have been limited. To address these data gaps, in 2012, FNS contracted with RTI International and its team members Altarum Institute and researchers from the University of California, Agriculture and Natural Resources, Nutrition Policy Institute to conduct the *WIC Nutrition Education Study*. Phase I of the study provides a comprehensive nationally representative description of WIC nutrition education processes and features. Phase II is a pilot study in six WIC sites to demonstrate and refine an evaluation of the impact of WIC nutrition education on participants' nutrition and other behaviors, and Phase III is the design of a national evaluation study based on findings from the pilot study.

This report provides the results of Phase I of the study. The report synthesizes data from a nationally representative survey of WIC LAs (the Local Agency Survey), a nationally representative survey of WIC sites (the Site Survey), in-depth interviews with nutrition educators who work in a subset of sites that responded to the Site Survey, and data abstracted from WIC State Plans. Collectively, these data provide a rich description of how nutrition education is delivered in WIC programs throughout the United States.

[3] WIC site is used as the generic term for locations where WIC services are delivered to participants. These locations are referred to as WIC clinics, WIC offices, WIC centers, and other terms unique to the SAs or LAs that provide the services.

1.1 Overview of WIC Nutrition Education

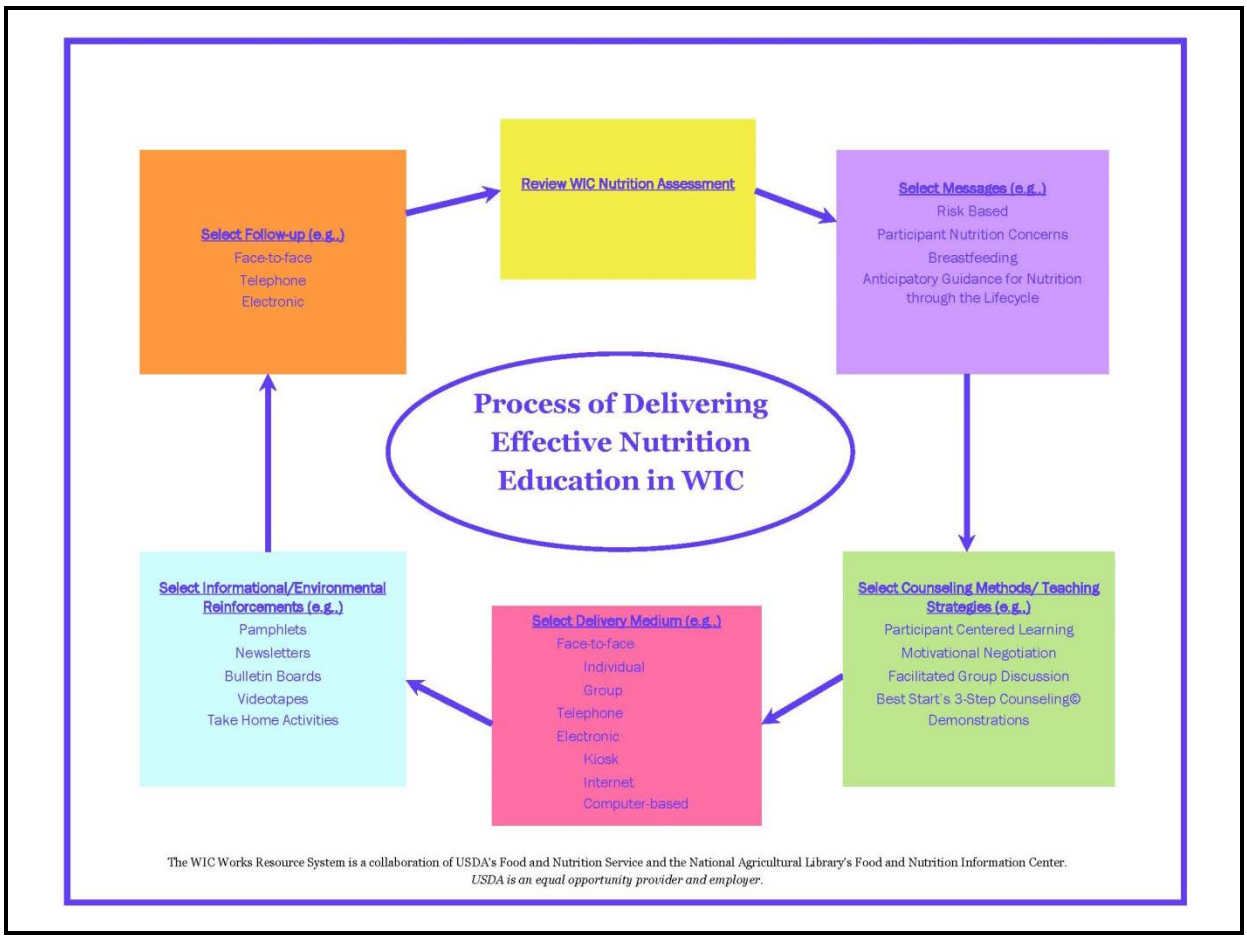
From its inception in 1972, WIC has integrated nutrition education with food assistance and coordination or referral to health care and social services for its participants. WIC nutrition education is targeted to participants during the prenatal, postpartum, and earliest years of life—from birth up to age 5 years. Given the tremendous reach of the program, the opportunity for nutrition education to affect pregnancy and health outcomes for women, as well as children's health behaviors for life, is unparalleled.

As stated in WIC Federal Regulations (USDA, FNS, n.d.), WIC nutrition education is intended to "1) emphasize the relationship between nutrition, physical activity, and health with special emphasis on the nutritional needs of pregnant, postpartum, and breastfeeding women, infants and children under five years of age; and 2) assist the individual who is at nutritional risk in achieving a positive change in dietary and physical activity habits, resulting in improved nutritional status and in the prevention of nutrition-related problems through optimal use of the WIC supplemental foods and other nutritious foods." The Federal Regulations further state that "[n]utrition education, including breastfeeding promotion and support, shall be considered a benefit of the Program, and shall be made available at no cost to the participant. Nutrition education including breastfeeding promotion and support, shall be designed to be easily understood by participants, and it shall bear a practical relationship to participant nutritional needs, household situations, and cultural preferences including information on how to select food for themselves and their families" (USDA, FNS, n.d.).

To achieve these goals and requirements, WIC SAs must ensure that nutrition education, including breastfeeding promotion and support, is made available to all participants through (1) developing and coordinating the nutrition education component of the program, (2) providing training and assistance to staff members who deliver nutrition education, (3) identifying or developing nutrition education resources and materials, and (4) establishing standards and monitoring procedures to ensure nutrition education requirements are met. At the local level, LAs must implement the Federal requirements for delivering nutrition education, including breastfeeding promotion and support, and develop an annual nutrition education plan for addressing the required number and periodicity of education contacts and for ensuring contacts are designed to meet participants' different cultural and language needs. To facilitate implementation of the nutrition education requirements, funding has been targeted to nutrition education throughout WIC's history with a longstanding requirement for SAs to spend one-sixth of their annual WIC Nutrition Services and Administration (NSA) grant for nutrition education.

In 1999, FNS launched an initiative called Revitalizing Quality Nutrition Services (RQNS). RQNS is "an evolving process of continuous program improvement" to enhance and strengthen nutrition services, including adopting a more client-centered nutrition education approach with a focus on motivating lifelong healthy behaviors (USDA, FNS, 2015d). RQNS is the underlying foundation of other FNS initiatives developed in collaboration with the National WIC Association including Value Enhanced Nutrition Assessment (VENA). VENA guidance (USDA, FNS, 2006a) for conducting a comprehensive nutrition assessment to frame effective, personalized education, referrals, and food packages was published in 2006. Also in that year, FNS published the WIC Program Nutrition Education Guidance (USDA, FNS, 2006b), which describes the integration of nutrition assessment and education and features for effective nutrition education (see **Exhibit 1-1**).

Exhibit 1-1. Process of Delivering Effective Nutrition Education



Source: U.S. Department of Agriculture, FNS 2006b. WIC Program Nutrition Education Guidance. Retrieved from https://wicworks.fns.usda.gov/wicworks//Learning_Center/ntredguidance.pdf

The WIC Program Nutrition Education Guidance provides both a policy framework for nutrition education that is consistent with the Federal regulations and technical assistance on effective approaches for achieving nutrition education goals. FNS has also made available a variety of tools and trainings to enhance and strengthen the effectiveness of WIC nutrition education services. The WIC Nutrition Services Standards (WIC NSS) (USDA, FNS, 2013a), recently updated in 2013, provides additional guidance on planning and providing quality nutrition services, including nutrition education and breastfeeding education, promotion, and support. Developed jointly by FNS and the National WIC Association, the WIC NSS and the accompanying self-assessment tool are intended to assist SAs and LAs in their continual efforts to improve the services they provide. Examples of other tools and training include the following:

- VENA resources found on the WIC Works Resource System's VENA Village;
- Web-based training modules (known as WIC Learning Online) and other materials found on the WIC Works Resource System;
- Special Project Grants awarded annually to help States develop, implement, and evaluate new or innovative methods of service delivery;

- special grants for breastfeeding peer counselor programs; and
- guidance and a model staff training curriculum on breastfeeding promotion and support and implementation and management of breastfeeding peer counselor programs.

FNS provides such guidance documents and resources (most available through the WIC Works Resource System [https://wicworks.fns.usda.gov/]) for SAs to use to develop nutrition services plans that support the goals of nutrition education and to establish standards and policies to implement nutrition education within their States.

In addition to FNS-provided guidance and resources, SAs also provide training and technical assistance to enable local WIC staff members to plan and deliver nutrition education within the State policy framework, and they monitor for effective implementation of nutrition education in local programs. Local WIC agencies and sites are the direct providers of nutrition education for the participants they serve. The LAs and sites plan and implement nutrition education within the SA framework; hire, train, and supervise the staff members who provide it; and oversee delivery of the services.

Although nutrition education is a key component of WIC, few studies of the program have provided comprehensive descriptions of nutrition education services. The most recent study that addresses nutrition education, the National Survey of WIC Participants II published in 2012, includes a limited description of nutrition education provided by LAs focusing on the following features at their main site: modes of nutrition education offered, the types of staff members who provide it, and the average duration of nutrition education sessions (USDA, FNS, 2012). The WIC Dynamics Study published by FNS in 1995 provided data on those nutrition education features as well as data on topics and resources used by WIC agencies (USDA, FNS, 1995). Two other studies of WIC nutrition education conducted by FNS during the 1990s examined processes and outcomes in six local WIC agencies that used a variety of different approaches to providing nutrition education (USDA, FNS, 1998) and evaluated the impact of three innovative nutrition education practices on women and children (USDA, FNS, 2001a,b). Neither of those studies was intended to present a nationally representative description of how WIC nutrition education is provided, and both were conducted before the start of the RQNS initiative.

Responding to the RQNS and RQNS-related initiatives, SAs and LAs have invested in efforts to assess their nutrition services, modify policies and practices, train staff members, and conduct other activities to revitalize and improve nutrition education. While some States use the term VENA for this ongoing initiative, others use the overarching term “participant-centered services” to represent this quality improvement process that touches on all aspects of WIC nutrition education and service delivery. WIC nutrition educators are adopting new education styles and techniques that focus on evoking a person’s own inner motivations for adopting healthy behaviors. Names given to these styles of nutrition education that incorporate common communication principles include motivational interviewing, participant-centered or client-centered counseling, three-step counseling, emotion-based counseling, and facilitated discussion. The fundamental spirit of these styles of nutrition education includes working collaboratively with each participant, eliciting and supporting their motivation to change, and respecting participants’ independent thoughts and actions.

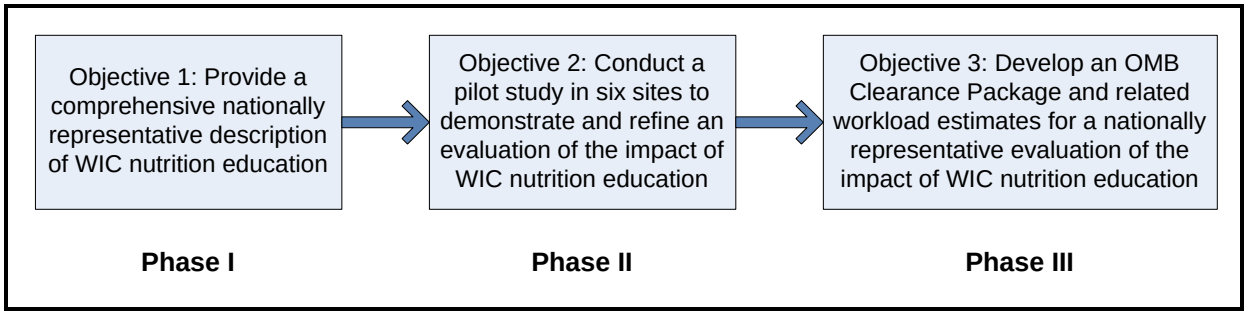
Other WIC program changes have influenced the approach and style of nutrition education provided by the program over the past decade. The expansion of the definition of nutrition education to include physical activity (WIC Reauthorization Act of 2004, P.L. 108-265) along with the Fit WIC initiative recommendation to "Adopt physical activity as an essential element of nutrition assessment and education" increased the emphasis on physical activity in nutrition education for women and children (USDA, FNS, 2005). The WIC food package changes implemented in 2009 (Revision in WIC Food Packages: Interim Rule 2007 and WIC Final Rule: Revisions in WIC Food Packages 2014; see http://www.fns.usda.gov/wic/wic-laws-and-regulations [USDA, FNS, 2015e]) provided the opportunity for better integration of nutrition education messages that align with the supplemental food packages (e.g., "eat more fruits and vegetables" and "make half your grains whole"). Lastly, technology provides new opportunities for disseminating information and reinforcing nutrition messages. Online nutrition education, text messaging, and social media approaches are expanding the nutrition education "toolbox."

1.2 Purpose and Research Objectives

1.2.1 Purpose of the *WIC Nutrition Education Study*

As shown in **Exhibit 1-2**, the objectives of the *WIC Nutrition Education Study* are aligned with the three phases of the study design. Phase I fills the information void regarding WIC nutrition education by providing answers to "what, how, who, when, where" and other frequently asked questions. It also provides an understanding of how nutrition education policies and practices align with WIC Program Nutrition Education Guidance and other Federal policy and regulatory requirements, as well as how such policies and practices respond to the RQNS initiative. The study examines both nutrition education given at the time of certification and secondary nutrition education provided at follow-up visits. The Phase I research questions focus on the key factors associated with nutrition education, including staffing patterns and qualifications of educators; methods, frequency, and duration of education; facilities and resources available; and approaches to address linguistically diverse participants. To answer these research questions, in Phase I a nationally representative survey of LAs (Local Agency Survey) and WIC sites (Site Survey) was conducted. The survey data were supplemented with in-depth telephone interviews with staff members at a subset of WIC sites.

Exhibit 1-2. Objectives for the *WIC Nutrition Education Study*



In addition to describing the current state of WIC nutrition education, the findings from the Local Agency and Site Surveys and interviews with site staff members helped inform the site selection for the Phase II pilot, which will explore how to evaluate the impact of WIC nutrition education on the nutrition and physical activity behaviors of women and children. In particular, the Phase I findings allowed for the selection of six sites that use a variety of nutrition education modes and dosage levels delivered in different settings. Data collection for Phase II started in July 2015 and includes both a process and impact evaluation in the six pilot sites. The process evaluation will describe the context for and implementation of nutrition education. Information from LA and site staff members and WIC participants is being collected using semi-structured interviews, observations of nutrition education delivery, a survey of nutrition educators, and participant focus groups. WIC administrative data from participating sites will also be requested. For the Phase II impact evaluation, data on 600 WIC participants at baseline, an interim time point, and a final time point are being collected. Analysis of the pilot study will provide information on the strength of association between exposure to WIC nutrition education and changes in participant outcomes (e.g., readiness for change, food acquisition, family meal practices, and dietary habits). This information is expected to yield valuable early evidence on the effects of nutrition education on participant behaviors.

Results from Phases I and II will provide the details and metrics necessary for preparing an Office of Management and Budget package for a nationally representative study of the impact of WIC nutrition education on WIC participants' behaviors (Phase III). A nationally representative impact evaluation would help inform and enhance WIC nutrition education policy and practice with regard to optimal educational topics and methods, strategies to maximize participant engagement, best approaches for delivery and reinforcement of messages, and ways to effectively prepare and support WIC nutrition educators.

1.2.2 Research Questions for Phase I

The FNS statement of work for Phase I specified 25 research questions to provide information on the following topics:

- LA and site characteristics
- description of LA nutrition education practices
- description of staffing patterns and training for staff members who provide nutrition education
- dosage and duration of nutrition education processes
- frequency of use of WIC nutrition education processes
- frequency of WIC nutrition education processes by geographic distribution
- frequency of WIC nutrition education processes by LA, site, and participant characteristics

Exhibit 1-3 lists each research question and provides a roadmap to the section(s) in the report where each question is addressed. Additionally, Appendix A lists the 25 research questions along with the data elements needed to address each question and the source for each data element (Local Agency Survey, Site Survey, site interviews, State Plans).

Exhibit 1-3. Research Questions for Phase I

	Research Questions	Report Section(s)
1.	At what number and type of sites is nutrition education delivered?	3.2, 4.2.2
2.	What is the staff-to-client ratio at sites delivering nutrition education by type of site?	3.3.2, 4.2.2
3.	What is the racial/ethnic composition of LA nutrition education staff?	3.3.3
4.	What is the availability of multilingual staff to provide nutrition education?	3.3.4
5.	What percentage of participants served by the LA are non-English speaking?	3.3.4
6.	What is LA policy for nutrition education staff minimum qualifications and training?	3.4.1
7a.	What is the organization and staff configuration of nutrition education personnel in LAs and sites?	3.3.1, 3.3.2
7b.	What facilities and equipment are available for delivering nutrition education?	3.2
8.	What facilities and activities are available for children and do organized group activities, include nutrition and physical activity?	3.2
9.	What State and local contributions to nutrition education resources are available?	5.2
10.	What are the modes for delivering nutrition education at certification and follow-up appointments and what is the frequency of each delivery mode?	4.2.1
11.	What reinforcers are used to support nutrition education and what is the frequency of these reinforcer modes?	4.4, 4.4.1, 4.4.2, 4.4.3, 4.4.4
12.	What type of staff members provide nutrition education and how many full-time equivalents (FTEs) are there of each type?	3.3.1, 3.3.2
13.	What are the credentials, capabilities, and characteristics of staff members who design and manage nutrition education?	3.3.3
14.	What are the credentials, capabilities, and characteristics of staff members who deliver nutrition education?	3.3.3
15.	How do characteristics and qualifications of LA staff providing nutrition education compare with prior studies, including the 2006 "WIC Staffing Data Collection Project?"	3.3.3
16a.	How do characteristics and language skills of local WIC agency staff providing nutrition education staff align with the characteristics and language skills of the local WIC population?	3.3.4
16b.	What methods of delivering nutrition education are used when the educator does not speak the participant's language?	3.3.4
17.	What types and intensity/duration of nutrition education training have been provided to staff during the past 2 years?	3.4.2
18.	What services/resources are employed to provide nutrition education that is easily understood by participants, taking into consideration cultural preferences and educational and environmental limitations?	3.3
19.	How often do LAs gather feedback from participants on nutrition education, and what methods do they use to obtain feedback, and which methods are most common?	5.4
20.	What processes are used for coordination of WIC nutrition education messages and delivery with other providers of nutrition education?	5.3
21.	What is the dosage of nutrition education offered to participants and how does this vary by participant characteristics, type of contact, mode of delivery, timing of delivery, and other factors?	4.6
22.	What is the dosage of nutrition education received by participants and how does this dosage vary by participant characteristic (e.g., WIC category), risk level, type of contact, mode of delivery, timing of delivery, or other factors?	4.6
23a.	What is the frequency of use of each mode of nutrition education for certification and follow-up appointments?	4.2.3
23b.	What is the frequency of use of each type of nutrition education reinforcer?	4.4
24.	What is the variation in frequency of nutrition education processes described above (mode and reinforcers) by geographical location, urbanicity, and LA size?	4.4.2, 4.4.4
25a.	How does the frequency of nutrition education processes used vary by LA characteristics including type and number of sites, caseload size and nutrition education staff-to-client ratio, racial/ ethnic composition of participants, percentage of participants who are non-English speaking, and staffing characteristics?	4.2; 4.3
25b.	How does the frequency of nutrition education processes used vary by NSA cost per participant?	5.5

Note: The section on high-risk participants (Section 4.5) is not directly linked to a research question.

1.3 Organization of the Report

The following sections describe the study methods and findings for the *WIC Nutrition Education Study*. Outlined below is a brief summary of each section:

- ***Section 2***: Provides an overview of the sampling approach, instrument development, data collection procedures, and analysis methods for the Local Agency Survey, Site Survey, and site interviews and describes the abstraction and analysis of data from the State Plans.
- ***Section 3***: Describes WIC sites and facilities and the staff members who deliver WIC nutrition education, including the training received.
- ***Section 4***: Describes the methods and frequency of use of different modes to provide nutrition education, types of reinforcements and follow-ups used, differences in WIC nutrition education by specific LA and site characteristics, and dosage of WIC nutrition education.
- ***Section 5***: Provides information on the administration of WIC nutrition education, including coordination with other organizations.
- ***Section 6***: Concludes the report by summarizing the key findings, discussing implications for the delivery of WIC nutrition education, and discussing lessons learned and future fielding considerations for the Local Agency and Site Surveys.

This report is supplemented with several appendices. Appendix A presents the research questions and data sources for Phase I. Appendix B provides the abstraction form for the WIC State Plans. Appendixes C through E provide data collections instruments used for the Local Agency and Site Surveys and interviews with site staff members. Appendix F provides information on the response rates, nonresponse bias analysis, and weighting procedures for the Local Agency and Site Surveys. Appendices G and H provide the characteristics of the respondents of the Local Agency and Site Surveys and interviews with site staff members. Appendices I and J provide the Phase I results in tabular format for the univariate and bivariate analysis, respectively. Appendix K provides additional analyses for continuous variables (e.g., mean, median, and mode).

2. Study Methods

This section describes the methods for conducting the abstraction of the State Plans, designing and administering the Local Agency and Site Surveys, and designing and conducting the in-depth interviews with a subset of respondents to the Site Survey. It also describes the analysis procedures for the State Plan abstraction, Local Agency and Site Surveys, and in-depth interviews. Appendix F includes additional detail on the study methods by describing the weighting and nonresponse bias analysis.

The study's Advisory Panel reviewed the proposed study design and survey instruments. The review process comprised an in-person meeting conducted in January 2013 to provide feedback on the proposed study design and a review of the draft data collection and analysis plan and survey instruments. As shown in **Exhibit 2-1**, the panel includes two individuals who work for WIC at the State or local level, thus offering substantial expertise in WIC program operations, and three individuals from academia with expertise in evaluating nutrition education interventions, behavioral nutrition, and child development.

Exhibit 2-1. Advisory Panel for the *WIC Nutrition Education Study*

Name	Institution/Organization	Areas of Expertise
Thomas Baranowski, PhD	Professor of Pediatrics, Baylor College of Medicine	▪ Behavioral nutrition research in children ▪ Fruit and vegetable intake, water consumption, physical activity, and obesity prevention ▪ Measures of self-efficacy
Maureen Black, PhD	Professor, University of Maryland School of Medicine	▪ Nutrition and child development research ▪ Nutrition interventions for young children ▪ WIC participant preferences related to WIC services
Isobel Contento, PhD	Professor of Nutrition Education, Teachers College, Columbia University	▪ Behavioral aspects of nutrition, particularly among children, including the transtheoretical model ▪ Evaluation of nutrition education and literacy
Jacqueline Marlette-Boras, MHS, RD, LDN	WIC Director Maryland WIC Program	▪ State Director of Maryland WIC Program ▪ Former President of the National WIC Association (NWA) Board of Directors ▪ Expertise in nutrition education service delivery and in WIC management information systems
Margaret Saunders, MS, RD	WIC Director Community and Economic Development Association of Cook County, Inc.	▪ Director of a large urban/suburban WIC agency ▪ Former President of the NWA Board of Directors ▪ Expertise in LA program operations

The data collection protocols and instruments were reviewed by the Office of Management and Budget (OMB) (OMB approval number 0584-0599) and by RTI's Committee for the Protection of Human Subjects, which operates as RTI's Institutional Review Board (IRB). The study was approved for exemption from IRB approval. It was not necessary for respondents to provide formal written or verbal consent because the study was considered low risk; a participant's consent to participate was implied by agreeing to complete the survey or interview.

2.1 Overview and Data Sources

Phase I was designed to provide a nationally representative description of WIC nutrition education, including the environment, staffing and resources for WIC nutrition education, the modes of education being used, and efforts to incorporate participant-centered approaches to help participants achieve their goals for improved nutrition and health. It also addressed the types and frequency of modes for delivering nutrition education, topics and techniques for delivering nutrition education, nutrition education exposure (number and length of contacts), and other features of nutrition education services.

Specifically, Phase I included two primary data collection components: (1) surveys of LAs and WIC sites designed to provide nationally representative information about all WIC LAs and sites and (2) in-depth interviews with staff from a subset of sites to provide detailed information on WIC nutrition education modes and techniques and descriptions of how WIC nutrition educators conduct one-on-one and group education sessions and use technology for delivering nutrition education. Additionally, these two data collection efforts informed the design of the Phase II pilot and the selection of sites for the pilot study. Additionally, relevant data were abstracted from the fiscal year (FY) 2014 State Plans to provide information on State agency (SA) policy for delivering nutrition education.

The statement of work for Phase I specified 25 research questions to provide information on the following topics:

- LA and site characteristics
- description of nutrition education practices
- description of staffing patterns and training for staff who provide nutrition education
- dosage and duration of nutrition education processes
- frequency of use of WIC nutrition education processes
- frequency of WIC nutrition education processes by geographic distribution
- frequency of WIC nutrition education processes by LA, site, and participant characteristics

Data needed to address the research questions for Phase I included SA, LA, and local WIC site sources as well as the FY 14 State Plans, data from FNS on Nutrition Services and Administration (NSA) local-level expenditures, and Census data for the location of sampled sites. **Exhibit 2-2** lists each data source and the information provided by that source. Appendix A lists the 25 research questions and the data source used to address each question.

Exhibit 2-2. Data Sources Used to Address Phase I Research Questions

Data Source	Provides Information On
Fiscal Year 2014 State Plans	SA policies for staff and processes for the delivery of nutrition education
Local Agency Survey	Nutrition education policies, practices, and features applicable to all sites managed by the LA and for data on the number and type of sites they operate
Site Survey	Nutrition education practices, methods, and activities and the characteristics of nutrition education staff and facilities at local sites operated by LAs
In-depth interviews with site staff	Detailed descriptions of nutrition education features and techniques
Census data	Ethnicity and race for the local population in which sampled sites are located
FNS 798-A reporting form for FY13	NSA local-level expenditures

2.2 Abstraction of WIC State Plans

Data were abstracted from FY 2014 State Plans on a small number of key statewide policies and practices that affect nutrition education services in all LAs and sites in the State. The State Plan documents were obtained from the FNS Regional Offices, which included State Plan Guidance subsections II: Nutrition Services (Section A Questions 3b–c, 3g, and 4b; Section C) and IV: Organization and Management (Section C Question 1a).

The items abstracted from these State Plan sections included SA policy on

- qualifications for nutrition education staff;
- minimum nutrition education standards for participant categories and number of nutrition education contacts, content, topics, and use of educational reinforcements;
- allowable methods of nutrition education;
- training for LA staff provided by the SA; and
- materials recommended/provided for use in nutrition education.

Appendix B provides a list of the items abstracted.

Trained data abstractors reviewed both the State Plan Guidance "checklist" forms and related documents (e.g., State policy and procedure manuals) to locate the relevant information. If information was incomplete or unclear after reviewing all available documents, the SAs were contacted by email or phone to collect missing information. A total of 33 SAs were contacted regarding one or more items. Data were entered using standardized codes and formats into a Microsoft Excel spreadsheet. To ensure accuracy and consistency in entering State Plan information, a second trained individual reviewed a random selection of coded entries. Ultimately, data were obtained for 76 of the 90 SAs. Respondents included all 50 geographic States, the five U.S. territories, 20 of the 34 Indian Tribal Organizations (ITOs), and the District of Columbia. For four SAs, data for FY 2014 were not available, so data for FY 2013 were used, and for four SAs the State Plan information was for FY 2013 and FY 2014.

The coded data in the Microsoft Excel sheet were converted to SAS® for data analysis. For each item that was abstracted, proportions were calculated for all SAs and by two categories: (1) the 50 geographic

States and the District of Columbia (n = 51) and (2) ITOs and territories (n = 25). The State Plan data were used to populate tables that describe the key policies of SAs; for example, the percentage of SAs that allow different types of nutrition education delivery methods and the percentage of SAs that recommend and make available nutrition education materials on specific topics. These tables and accompanying discussion provide context for the Local Agency and Site Survey results.

2.3 Local Agency and Site Surveys

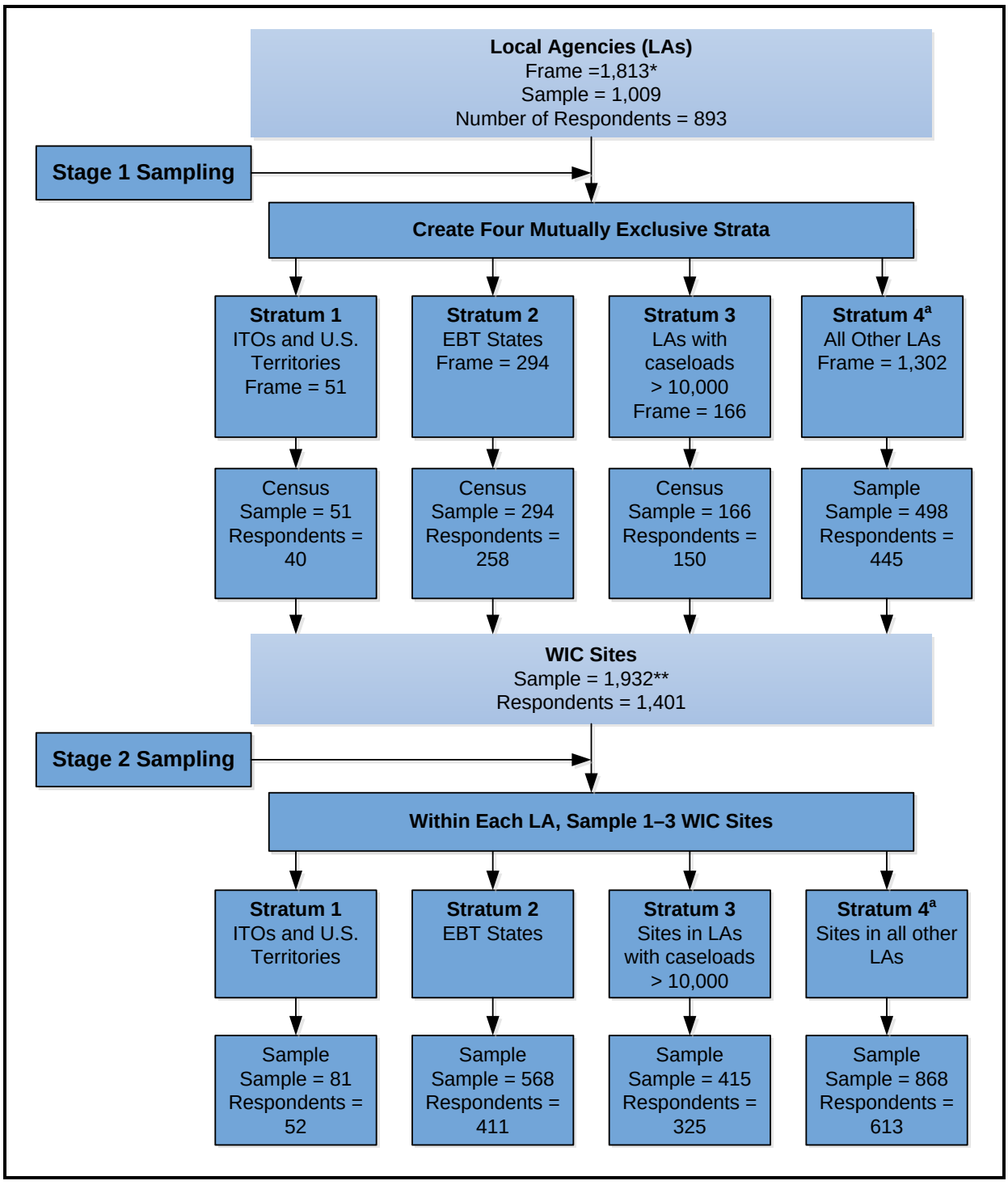
2.3.1 Sample Design

The Local Agency and Site Surveys were designed to provide nationally representative descriptive information about nutrition education provided by all LAs and the service delivery sites they oversee. The target population was all LAs and their affiliated sites that provide WIC services in the 90 SAs. To collect information from LAs and sites, a probability-based sample of LAs and sites was selected. In the first stage, a stratified probability proportional to size sample of LAs was selected. In the second stage, a simple random sample of sites within each sampled LA was selected. For each stage, a reserve sample was selected to ensure that a sufficient sample was available to achieve the targeted number of completed surveys with LAs and sites. **Exhibit 2-3** illustrates the sampling design and provides the frame counts, sample sizes, and number of respondents by stratum for both stages. The process for developing the frame and the sampling approach is described in more detail below.

The 2014 FNS WIC LA Directory (provided by FNS) and data from the Women, Infants, and Children Participant and Program Characteristics 2012 (PC 2012) public use data file were merged to create the list of all LAs (U.S. Department of Agriculture [USDA], FNS, 2013b). Information available on the FNS Web site was used to determine which SAs had implemented electronic benefits transfer (EBT) to identify the LAs that used EBT at the time of sample selection. The PC 2012 data file was used to determine the caseload for each LA (the most current source of information available for caseload), and the FNS WIC LA Directory identified the LAs authorized by ITOs and U.S. territories. This list of LAs served as the sampling frame for the LA sample.

Because a list of all WIC sites does not exist, it was necessary to create the sampling frame for the WIC site sample. Because the sample design required selecting only sites within sampled LAs, it was determined that the sampling frame of sites only needed to be developed for the sampled LAs. When available, site-level information from the PC 2012 was used to develop site lists for the sampled LAs. The PC 2012 did not have site-level information for 546 sampled LAs (including reserves). For these LAs, the site frames were constructed by requesting site lists from SAs for the specific LAs and, if not obtained directly from the SAs, by reviewing LA Web sites. Because approximately half of the sampling frame for the Site Survey comprised data from the PC 2012, it was likely that some selected sites would not be operational at the time of data collection. To compensate for the dated information, a reserve sample of sites was selected (described below in the *Simple Random Sample of Sites—Stage 2 Sampling* section).

Exhibit 2-3. Summary of Sampling Approach for the Local Agency and Site Surveys



[a] Includes Washington, DC.

* LAs found to be ineligible are not included in counts.

** Sites found to be ineligible are not included in counts.

Sample Design for LAs—Stage 1 Sampling

In the first stage of the sample design, four mutually exclusive strata were created:

1. LAs authorized by ITOs and U.S. territories (includes ITOs that use EBT)
2. LAs authorized by States using EBT Statewide
3. LAs with caseloads greater than 10,000 that were not ITOs/U.S. territories or LAs authorized by States using EBT
4. all other LAs[4]

The purpose of the stratification was to ensure representation of different types of LAs (i.e., ITOs, territories, and EBT States) and larger LAs, not necessarily for reporting the survey results. To obtain enough of a sample to meet FNS's precision requirements for subgroup analyses (± 0.05 at 95% level of confidence), a census of LAs in Strata 1, 2, and 3 was selected. A probability proportional to size (PPS) sample, where size was the participant caseload, was selected in Stratum 4. The SAS procedure SURVEYSELECT[5] was used to perform the PPS sample selection for Stratum 4, including a reserve sample of 100 LAs. After selecting the initial sample, SAs were asked to review the sample and reserve sample and identify any LAs that were nonoperational. Additionally, WIC State Web sites and their LA lists were reviewed to ensure all LAs in the census strata were selected. During this process, new LAs in census strata and nonoperational LAs were identified. Reserve LAs were released, and sample sizes in census strata were increased as appropriate. **Exhibit 2-4** details the final number of LAs surveyed after the review and the target number of survey respondents.

Exhibit 2-4. Local Agency Survey: Number of Eligible Local Agencies on Sampling Frame[a] and Number of Sampled Local Agencies

	Stratum 1 ITOs and U.S. Territories	Stratum 2 EBT States	Stratum 3 LAs with Caseloads > 10,000	Stratum 4 All Other LAs	Overall
Revised number of eligible LAs on sampling frame	51	294	166	1,302	1,813
Estimated[b] caseload of eligible LAs on survey frame	298,281	2,429,230	4,122,230	2,861,300	9,704,042
Final sample including activated reserves, excluding ineligibles (i.e., nonoperational)	51	294	166	498	1,009
Sampling fraction	100%	100%	100%	38%	56%
Target number of respondents (target 80% response rate)	40	235	133	398	806

[a] LAs found to be ineligible because they were no longer operational are not included in frame or sample counts.

[b] The final LA weights were used to estimate caseload by stratum. See Appendix F.4 for a description of the weighting process.

[4] This stratum includes Washington, DC.

[5] SAS software, Version 9.3 of the SAS System for XP_PRO. Copyright © 2002–2010 SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.

In the first stratum composed of all ITOs and U.S. territories, a census of LAs (n = 51) was surveyed. Similarly, in the second stratum composed of EBT States (Florida, Kentucky, Michigan, Nevada, New Mexico, Texas, Virginia, West Virginia, and Wyoming), another census (n = 294) of LAs was surveyed. In the third census stratum, comprising LAs with caseloads of more than 10,000, 166 LAs were surveyed. In the remaining stratum, 498 LAs were surveyed.

Simple Random Sample of Sites—Stage 2 Sampling

To gather site-level information, second-stage sampling was conducted by randomly selecting approximately 2,000 sites within the sampled LAs. The sample size of 2,000 sites provided enough of a sample to meet FNS's precision levels nationally (± 0.03 at 95% level of confidence) and at the subgroup level (± 0.05 at 95% level of confidence) for many subgroups of interest. The following steps were followed to determine the number of sites to sample per LA:

1. If an LA had only one site, the one site was selected.
2. For the remaining LAs, the sampling fraction was estimated to be 1/3, and each LA's number of eligible sites was multiplied by 1/3 to obtain the sample size. For example, if a given LA had 10 eligible sites, the calculation was 10*(1/3) = 3.33, rounded to 3, and 3 WIC sites were allocated to the given LA.
3. To minimize burden, the number of selected sites was capped at 3. This capping resulted in 49 unallocated sites that got randomly distributed to LAs where only 1 site was selected (if another site was available for selecting).
4. One additional reserve site (if available) was selected for all LAs.

Similar to the Local Agency Survey, prior to data collection, SAs were asked to review the sample and reserve sample of sites to identify any sites that were no longer operational. The starting sample size for data collection was 1,999 eligible sites, after the SAs reviewed the initial sample and reserves were released as appropriate. During data collection, 67 sites were found to be ineligible because they were no longer operational; thus, the final sample comprised 1,932 eligible sites. **Exhibit 2-5** details how the sample of 1,932 sites was allocated across the four strata and the target number of site respondents.

Exhibit 2-5. Site Survey: Estimated Number of Sites[a] from the PC 2012, Allocated Sample, and Estimated Number of Respondents by Stratum

	Stratum 1 ITOs and U.S. Territories	Stratum 2 EBT States	Stratum 3 Sites in LAs with Caseloads > 10,000	Stratum 4 All Other Sites	Overall
Estimated number of sites	323	1,347	1,826	4,255	7,751
Final sample including activated reserves, excluding ineligibles (nonoperational)	81	568	415	868	1,932
Estimated sampling fraction[b]	25%	42%	23%	20%	25%
Target number of respondents (target 80% cooperation rate among responding LAs)	69	472	345	706	1,592

[a] complete listing of WIC sites was not available. The number of sites was estimated using the responses to Local Agency Survey Question 1 that asked for the number of WIC sites each LA managed (Question 1) and the LA final analysis weights (see Appendix F.4).

[b] For Strata 1, 2, and 3, the sampling fraction is not an estimate because a census of LAs was selected and the number of sites for these LAs was available either directly from the LA's response to Question 1 or from the site frame. For Stratum 4, the final LA analysis weights (see Appendix F.4) and LA responses to Question 1 were used to estimate the total number of sites.

To reduce respondent burden, the questions for the Site Survey were divided between two survey versions given the large number of research questions to be addressed by the Site Survey. A set of core questions was included on both versions, and each version had a unique set of questions in addition to the core questions. The Site Survey version (Version 1 or 2) was randomly assigned to each LA, and all sites selected for the survey within an LA received the same version of the Site Survey. Thus, for questions that were included in only one version of the survey, the target sample size was about 800 sites (versus 1,592 for the core questions included in both versions).

2.3.2 Instrument Development and Testing

The Local Agency and Site Surveys were developed as Web-based surveys with paper versions available if requested by the LA or site respondents. The Local Agency Survey was designed to capture policies and features that are relevant to all sites managed by the LA, including policies for staff qualifications and training, allowable modes of nutrition education, and number and length of nutrition education contacts planned for participants in different program categories. The Site Survey asked about staffing, modes of nutrition education used (e.g., one-on-one counseling, group classes, technology), types of reinforcing methods used, space used for nutrition education, and other attributes of nutrition education at the site. In addition, the Site Survey included questions about ways that the site provides nutrition education (e.g., topics covered, techniques used).

The selected LAs were asked to respond to the Local Agency Survey and also to facilitate completion of the Site Survey for their selected sites. The surveys were designed to allow for entry of the responses for the Local Agency and Site Surveys at different times and by different individuals to facilitate having the most knowledgeable person respond to the survey questions. At the conclusion of the Local Agency Survey, the respondent was provided with a list of the names of their agency's site(s) selected for the Site Survey (up to three sites). The respondent for the Local Agency Survey was asked to designate an appropriate person to complete the survey for each sampled site and provide contact information (e.g., email address, mailing address [if completing paper version of survey], and phone number) for these respondents.

Survey Instrument Design and Pretest

Survey instrument development procedures included multiple reviews by FNS, the study Advisory Panel, and the National WIC Association (NWA) Local Agency Section and pretest interviews with representatives from LAs and sites. When available, relevant questions used in previous surveys were considered for inclusion in the Local Agency and Site Surveys. For the pretest, three LAs and three WIC sites in three different FNS regions were asked to complete the survey and participate in a telephone interview to provide feedback. Each pretest respondent was first asked to report the start and end times for the period when they completed the survey to provide an estimate of survey burden. The interviewer then used a debriefing guide to lead respondents through a discussion of the survey questions, including why they chose their responses and what questions, terms, or instructions, if any, were confusing or difficult to understand. Pretest respondents were also asked to identify questions that took the longest for response and why those questions were more time consuming. Lastly, they were asked which, if any, questions

required them to obtain or look up information before responding. Information gathered through the pretests was used to revise the survey instruments for the final version.

Appendices C and D provide the final survey instruments for the Local Agency and Site Surveys, respectively. The estimated burden for completing the Local Agency Survey was 45 minutes, and the estimated burden for completing the Site Survey was also 45 minutes.

Addressing Response Burden

Minimizing response burden is especially important for data collection from WIC LAs and sites because their focus is on providing services to participants. To balance the data collection necessary to address the study research questions with the goal of keeping response burden low, the data collection was divided between the Local Agency and Site Surveys. Dividing questions between two separate surveys provided the opportunity to have more than one individual respond to questions, and it also facilitated having the most knowledgeable respondent answer the survey questions. Additionally, as previously mentioned, two versions of the Site Survey were fielded to minimize response time for respondents to the Site Survey.

The surveys employed skip patterns to ensure that only the relevant questions were asked of respondents. For example, if a site did not provide group education, questions about methods used for group education or minutes of group education provided were not displayed in the Web survey. Additionally, the Web-based survey provided respondents the capability to save and exit the survey and restart the survey from where they left off if they were unable to complete all questions at one time. The first page of the survey provided a link to a pdf version of the survey if respondents wanted to view the questions before starting the survey.

2.3.3 Data Collection Procedures

Data collection for the Local Agency and Site Surveys took place over an approximate 12-week period, November 12, 2014, through February 4, 2015, with activities to "promote" the survey taking place as early as May 2013. Working with FNS, a communication plan was developed to ensure that proper protocols were followed and that information on the survey was clearly communicated to the FNS regional offices, SAs, LAs, and sites. The recruitment and follow-up procedures for the Local Agency and Site Surveys are summarized below.

Study Announcement

Early and ongoing communication about the Local Agency and Site Surveys with SAs and LAs promoted awareness of the survey and helped to achieve high response rates. As the initial communication step, informational flyers regarding the *WIC Nutrition Education Study* were distributed at NWA's Annual Education and Networking Conference in May 2013. Study brochures were distributed to attendees at this NWA annual conference the following year in May 2014. Following that conference, an email was sent to all WIC State Directors, and FNS sent an email to the Regional Offices at the end of May 2014 to announce the upcoming survey and interviews and provide the study brochure describing Phases I and II of the study, including the study objectives, approach, and timelines.

Following sample selection for the Local Agency Survey in August 2014, SAs received a second email to reintroduce the study, provide the study brochure and "frequently asked questions" (FAQs) document, request the SAs' assistance in encouraging LA response to the surveys and interviews, and request that the SAs review/update two forms to update the sample as described in Section 2.3.1. The first form was a list of their LA(s) selected for the survey and the name and contact information for an individual at each LA. They were asked to make any necessary revisions to the name and contact information and to indicate if any of the selected LAs were no longer operational or had no Internet access. SAs were also asked to review a second form that listed sites selected for each LA. SAs were asked to revise/update the site names if they were incorrect or missing, and they were asked to indicate if any sites were not operational.

As SA responses were received, LA and site survey contact databases were updated and, when necessary, replacements were determined for LAs and sites for those that were identified as nonoperational (as described in Section 2.3.1).

Recruitment Procedures

The recruitment of LAs started following OMB approval in November 2014 with an email to the contacts at the approximately 1,000 selected LAs. This communication introduced the study and surveys, explained how the survey would be conducted, and provided the FAQ document and the study brochure. The email described the survey topics and provided recommendations on who should respond to the survey and included instructions on changing the designated respondent if necessary. The email further explained that the instructions for completing the Local Agency Survey and the survey Web link would be provided the following week. The communication gave instructions for contacting the *WIC Nutrition Education Study* Help Desk and explained the option to complete the survey by paper.

The Local Agency Survey went "live" the following week. The contact for each selected LA received a survey invitation email that included the Web link to the survey, instructions for accessing the online survey, and the request to complete the survey within 3 weeks. At the end of the Local Agency Survey, the respondent was asked to designate an appropriate respondent for each of the sites selected for the Site Survey and to provide that person's contact information including email address. The survey provided an option for sites to complete the survey on paper rather than online and requested mailing information for sites that required paper surveys. Recruiting for the Site Survey occurred on a flow basis as Local Agency Surveys were submitted. Site Survey respondents received an email with introductory language about the study and instructions for contacting the help desk for assistance with the survey. Upon request, paper copies of the survey and prepaid return envelopes were mailed to 18 LAs and 58 sites, and the data were entered into the Web survey upon receipt of the completed surveys (78% of the paper surveys requested were completed).

Survey Support and Follow-Up Procedures

Survey help desk support was provided on all weekdays during the 12-week time period when LAs and sites were completing the survey. Survey respondents contacted the help desk via a toll-free phone number or study email address for technical issues associated with accessing the survey or submitting responses and requests for clarification on survey questions and instructions. Help desk staff adhered to a

short turnaround response time for all inquiries. Inquiries were addressed immediately or, at the latest, during the next business day. The majority of the calls were related to directing the survey link to the correct person or accessing the survey link.

Follow-up with nonresponsive LAs and sites included both email and phone reminders, as indicated in **Exhibits 2-6** and **2-7**.

Exhibit 2-6. Schedule for Reminders for Local Agency Survey

Reminder Number	Mode and Recipient	Sent On
1	Email to all sampled LAs	One week after survey launch
2	Email to nonresponsive LAs	Three weeks after survey launch
3	Email to nonresponsive LAs	Five weeks after survey launch
4	Email to nonresponsive LAs and LAs with nonresponsive sites (for Site Survey)	Eight weeks after survey launch
5	Email to SAs for nonresponsive LAs	Eight weeks after survey launch
6	Telephone calls to nonresponsive LAs	Five through 8 weeks after survey launch

Exhibit 2-7. Schedule for Reminders for Site Survey

Reminder Number	Mode and Recipient	Sent On
1	Email to all sampled sites for responding LAs	Three weeks after survey launch
2	Email to nonresponsive sites	Eight weeks after survey launch

2.3.4 Survey Response

Appendix F.2 provides information on calculating unweighted and weighted response rates for the Local Agency and Site Surveys.[6] As shown in **Exhibit 2-8**, surveys with 893 LAs were completed, and the overall unweighted response rate was 89%, with a response rate exceeding 80% for Strata 2, 3, and 4. The target number of completed surveys for every stratum was exceeded. Nearly all surveys were completed online; less than 2% (n = 13) were submitted on the paper survey form. Respondents who submitted a paper survey included LAs from all four strata, so it appears that type and size of LA did not influence the request for a paper survey; it was more of a preference of the respondent.

As shown in **Exhibit 2-9**, the total number of completed Site Surveys was 1,401. The number of respondents for Version 1 was 696, and the number of respondents for Version 2 was 705. The overall unweighted response rate among all sampled sites was 73%. Among sites in responding LAs (i.e., sites that received the Site Survey invitation and had an opportunity to respond), the unweighted cooperation rate for the Site Survey was 82%. As with the Local Agency Survey, most of the Site Surveys were

[6] The weighted response rates were weighted using the sample weights and are provided in Appendix F.2.

Exhibit 2-8. Information on Response Rates for the Local Agency Survey

Stratum	Number of Eligible Sampled LAs	Number of LA Respondents	Unweighted Response Rate[a]
1. ITOs/U.S. territories	51	40	78.4%
2. EBT States	294	258	87.8%
3. LAs with caseloads > 10,000	166	150	90.4%
4. All other LAs	498	445	89.4%
Overall	1,009	893	88.5%

[a] Unweighted response rate = Number of LA respondents/Number of eligible sampled LAs

Exhibit 2-9. Information on Response Rates for the Site Survey

Stratum	Number of Eligible Sampled Sites	Number of Eligible Sampled Sites Among Responding LAs	Number of Site Respondents	Unweighted Cooperation Rates (Among Responding LAs)[a]	Unweighted Response Rates (Among All Sampled LAs)[b]
1. ITOs/U.S. territories	81	64	52	81.3%	64.2%
2. EBT States	568	494	411	83.2%	72.4%
3. Sites in LAs with caseloads >10,000	415	376	325	86.4%	78.3%
4. Sites in all other LAs	868	773	613	79.3%	70.6%
Overall	1,932	1,707	1,401	82.1%	72.5%

[a] Unweighted cooperation rate = Number of site respondents/Number of eligible sampled sites among responding LAs

[b] Unweighted response rate = Number of site respondents/Number of eligible sampled sites

completed online with about 3% (n = 46) submitted on paper. Again, sites that submitted a paper survey included sites from all four strata, so it appears that type and size of the site did not influence the request for a paper survey; it was more of a preference of the respondent.

Although the project did not meet the target number of completed surveys (1,592), the sample size of 1,401 for all respondents almost meets the precision requirements nationally. Estimates around any proportion can be made with an interval of ± 0.035 with 95% confidence.

2.3.5 Nonresponse Bias Analysis

Because the response rate was less than 80% for the Site Survey, a nonresponse bias analysis was conducted as required by OMB to evaluate the potential for bias due to nonresponse. Nonresponse may cause bias in survey estimates if sample members who chose not to respond would have provided answers to questions that differ systematically from answers provided by sample members who chose to respond.

Appendix F.3 provides information on the approach used to conduct the nonresponse bias analysis and the results of this analysis. The nonresponse bias analysis was conducted by FNS region, the four-level stratification variable used in sample selection (stratum), and site participant caseload. The weighted distributions (or means) for respondents and nonrespondents were compared and the bias due to nonresponse was estimated. The analysis was conducted using the sample weights, and then the nonresponse bias analysis was repeated using the final analysis weights. Although no significant bias

existed before applying the final analysis weights, the final analysis weights bring the nonresponding distributions closer to the estimated population distributions. These findings suggest that there is no nonresponse bias in the weighted estimates based on the evaluation using FNS region, the four-level stratification variable, and site participant caseload.

No questions had item nonresponse greater than 30% so it was not necessary to address item nonresponse as required by OMB.

2.3.6 Weighting Procedures

All statistical estimates for the Local Agency and Site Surveys were generated by applying appropriate survey weights to the respondent data. The weighting procedures are detailed in Appendix F.1 (sample weights) and F.4 (final analysis weights). To summarize, for the Local Agency Survey the initial sample weights for nonresponse were adjusted to calculate the final analysis weights. For the Site Survey, the initial sample weights for nonresponse were adjusted, and then trimming and post-stratification adjustment factors were applied. The trimming adjustment reduced the size of three of the weights that were relatively large. The post-stratification adjustment maintains the desired site population counts by stratum and FNS region. Three analysis weights for the Site Survey were developed: the combined analysis weights (for questions included in both Versions 1 and 2), analysis weights for questions specific to Version 1, and analysis weights for questions specific to Version 2. Each set of weights yielded results that weight up to the total population of sites.

2.3.7 Data Preparation

The hard copy questionnaires were keyed into the online survey by trained data entry staff. For quality control purposes, all keyed data were visually verified by a second person for accuracy.

Prior to tabulating survey responses, the survey data were systematically examined to isolate and address data inconsistencies, reporting errors, or otherwise erroneous data. Specific data-cleaning procedures are described below.

- All numeric data (e.g., number of sites operated by the LA for each type of facility [Local Agency Survey, Question 2] or number of days the site is open per month [Site Survey, Question 1) were checked against expected or known ranges. In cases of outliers that were judged to be erroneous, the responses were set to data from a secondary source or the upper bound of the range (e.g., if the number of days the site is opened per month was entered as greater than 25, then the value was set to 25). In cases in which outliers could not be resolved and the outlier was judged to be erroneous, then the response was set to missing so that responses deemed to be erroneous would be excluded from the analysis.
- "Nested" questionnaire items were compared with "gate" items for confirmation of logic. In the case of ambiguities (e.g., nested item should be blank but contains a value), the "gate" question was treated as the key response. For example, Question 8 in the Local Agency Survey asked the respondent to provide the number of nutrition education contacts for each participant/certification period category that was applicable. If the respondent entered a response for "number of contacts" for a particular participant/certification period category but did not enter a response for

"Not applicable," then the variable for "Not applicable" was set to "0" (zero) to indicate that the participant/certification period category was applicable.

- "Other, specify" values were processed for possible up-coding into closed-ended response categories for the associated item. A new response option was created in cases where more than 3% of respondents provided the same response (e.g., for languages spoken by WIC participants [Local Agency Survey, Question 4], response categories for Burmese and Nepalese were added).

2.3.8 Data Quality Concerns and How They Were Addressed

Overall, data quality was good; however, there were some concerns about data quality for Question 9 in the Site Survey, Versions 1 and 2 (number of staff by job type and status—full time vs. part time) and Questions 10 through 15 in the Site Survey, Version 1 (these questions collect information on the characteristics of staff such as years of experience, education, credentials, race, ethnicity, and non-English speaking). Comparing information on site caseload (provided by the site's LA) with information on the number of staff (Question 9), it seems possible that some respondents may have misunderstood the question and provided counts for all the sites within the LA or for all staff (not just nutrition educators). The site-level data on caseload, full-time equivalents (FTEs) (calculated using the survey responses), and participant-to-staff ratio (calculated using caseload and FTEs) were reviewed to identify outliers. For any cases deemed to be outliers because the value for caseload was not consistent with the number of FTEs (suggesting an error in reporting the number of staff), the responses for Question 9 were set to missing so that their responses would be excluded from the analysis (53 respondents for Version 1 and 46 respondents for Version 2). Interestingly, in many cases, these same respondents seemed to have answered Questions 10 through 15 correctly because the counts for these questions were much lower than the counts for Question 9. In these cases, the responses for Questions 10 through 15 were included in the analysis for these questions.

For Version 1 of the Site Survey, for some respondents the sum of the number of staff for Question 9 was different from the sum of the number of staff for Question 10 (categorical variable for years of experience), Question 11 (education), and Question 13 (ethnicity). For Question 12 (credentials) and Question 14 (race), staff could be classified into more than one category so the total for these questions would not be expected to be the same as Question 9. Ratio adjustment to "force" the sums to match was not conducted for several reasons. First, it is not clear which number is correct: the sum from Question 9 or the sum from Question 10, 11, or 13. Also, because some of the questions cannot be summed, it is not clear how ratio adjustment would be done given the overlap. For these reasons, and because the questions are analyzed separately, ratio adjustment to force the sums to match was not used.

2.3.9 Data Analysis

Univariate analysis for all survey questions and bivariate analysis for a limited number of questions were conducted. At the request of FNS, multivariate (regression) analysis was conducted for participant-to-FTE educator ratio and mode of nutrition education.

Because of the complex nature of the sample design, analysis weights and applied statistical procedures that correctly accounted for the stratification and clustering were incorporated when calculating variances. An important assumption underlying the univariate and bivariate statistical tests is that the data are

independent and identically distributed. The analysis assumed the survey responses are independent of each other because survey responders did not consult each other when responding to the survey. Furthermore, the data are identically distributed because every survey responder had the same response options and thus the same probability of responding with a given response. Furthermore, by invoking the Central Limit Theorem, the larger sample sizes also ensure the data are independent and identically distributed (Fuller, 2009). The procedures for conducting each type of analysis are described below.

Univariate Analysis

Appendix I provides descriptive, tabular analysis for all survey questions. All univariate analyses were conducted using SAS, which uses appropriate adjustments for the sample design. Weighted proportions for questions in which respondents could select one or more responses from a list of responses (categorical variables) were computed. Weighted means for questions that required a numeric response from respondents (continuous variables) were computed. Respondents who did not answer the question (i.e., missing values) were not included in the calculation. The tables in Appendix I indicate the source of the data (Local Agency Survey, Site Survey Versions 1 and 2, Site Survey Version 1, or Site Survey Version 2) and provide the total number of respondents and nonrespondents for each question. For categorical variables, the unweighted number of responses for each response item, the weighted proportion, and the 95% confidence interval (CI) are provided.[7] The calculation of the CI adjusts appropriately for the sample design. The CIs were constructed using a logit transformation so that their endpoints lie between 0 and 1. For continuous variables, the mean and the 95% CI are provided. The median, mode, and range are provided for selected continuous variables (LA caseload, site caseload, FTE, and participant-to-FTE educator ratio) in Appendix K.

In some instances, it was necessary to create a derived variable for the analysis (e.g., number of FTEs or participant-to-FTE educator ratio). In these cases, the method used to derive the variable is described in the text where the results are presented.

Each table in Appendix I provides the data source (Local Agency Survey, Site Survey Versions 1 and 2, Site Survey Version 1, or Site Survey Version 2) and indicates the analysis weights used (Local Agency Survey weights, combined Site Survey weights, Version 1 Site Survey weights, or Version 2 Site Survey weights). Notes are provided to explain any abbreviations used in the table or to provide additional information (e.g., instructions provided to the respondent for answering the question). If only a subset of respondents answered a question, for example, sites that offer group education sessions, then this is noted in a footnote along with the number of respondents that were eligible to answer the question.

For many survey questions, respondents were allowed to select multiple responses and this is indicated in the tables, where applicable. For some questions, respondents were limited to a specific number of responses (e.g., select up to seven topics); this is indicated in the tables, where applicable, as well.

[7] An indication of the precision of survey estimates is the widths of the 95% CIs. For example, if the 95% CI for the percentage of LAs that use a specific mode is reported as (50%, 60%), this means that the probability that the true population value lies between 50% and 60% is 0.95. This means there remains a probability of 0.05 that the true population value lies outside the (50%, 60%) CI.

Most of the tables present information at the LA or site level (e.g., weighted percentage of LAs that use group education sessions). For questions from the Site Survey on staffing (Question 9 from Versions 1 and 2 and Questions 10 through 15 from Version 1), information is presented based on the number of nutrition educators (e.g., weighted percentage of nutrition education staff who are Hispanic or Latino). This is noted in the relevant tables.

Bivariate Analysis

Bivariate analysis was conducted to examine differences in nutrition education processes. This analysis examined differences in number of FTEs, modes of nutrition education used, types of reinforcements used, and types of follow-ups used by LA, site, and participant characteristics. LA characteristics used in the bivariate analysis were FNS region, urbanicity, survey stratum, participant caseload, and NSA cost per participant per month. Site characteristics included these same variables as well as facility type, participant-to-FTE educator ratio, and availability of a nutrition education coordinator. Participant characteristics assessed were primary language spoken (English vs. non-English), ethnicity, and race. With the exceptions noted below, information on LA, site, and participant characteristics was obtained from the survey data. All bivariate analyses were conducted using SAS, which uses appropriate adjustments for the sample design. The bivariate analysis results are presented in Appendix J.

To examine differences by urbanicity (urban vs. rural), information on ZIP code of the LA or site was used to determine population size for the Standard Statistical Metropolitan Area in which the LA or site is located; the LA or site was then classified as rural or urban based on the Census definitions of population size for urbanicity.

To examine differences by race and ethnicity of local participants, WIC PC 2012 data were considered to obtain information on these characteristics, but these data are not available for all sites. Instead, Census data were used to approximate the characteristics of the local WIC population. A spatial location for each WIC site was created using Esri® software through the process of geocoding. Geocoding takes an address and generates coordinates for it that can then be used to display locations on a map. The geocoded address of each WIC site was used to obtain demographic information about the area in which the WIC site is located. The ethnic (Hispanic or Latino) and racial composition (using standard Census definitions of race) of the census tract that each WIC address was located in was compiled from 2007 through 2011 American Community Survey data. This compilation included counts for the number of women aged 18 to 44 living below poverty by race. Spatial operations were subsequently performed to conflate census tracts with ZIP code tabulation to determine counts of 18- to 44-year-old women by racial group living in each ZIP code. For race, a bivariate variable (White vs. non-White) was created. Non-White included the following categories: Black alone, American Indian/Alaska Native alone, Asian alone, Native Hawaiian/Pacific Islander alone, some other race alone, and two or more races. The quartiles for the race and ethnicity variables were used to create four analysis categories for the bivariate analysis.

To examine differences in nutrition education processes among LAs with different levels of WIC NSA expenditures, data on annual NSA expenditures reported by SAs for FY 2013 (from FNS 798-A reporting form) and data on number of participants served by each SA (from the PC 2012 data file) were used to calculate an NSA cost per participant per month. Data from the NSA Cost Survey conducted by FNS

were considered, but information on NSA local-level expenditures was only available for a subset of LAs. For SAs that reported both state-level and local-level expenditures, the local-level expenditures were used to calculate the monthly cost per participant using caseload data on the number of participants served per month. When NSA expenditures were reported as state-level only (for some ITOs and U.S. territories), the state-level expenditures were used to calculate a cost per participant. The monthly cost per participant for each SA was applied to all LAs in the state that responded to the Local Agency Survey. The cost per participant used for this analysis includes only NSA expenditures reported by the SA and does not reflect differences in expenditures that may exist among LAs in the state or additional funding or in-kind support an LA may have available for providing nutrition education. The quartiles for the NSA cost per participant variable were used to create four analysis categories for the bivariate analysis.

Statistical testing was conducted for differences. For categorical variables (e.g., mode), the Rao-Scott design-adjusted chi-square goodness-of-fit test was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. For continuous variables (e.g., FTEs), the Wald's F test was used to test the hypothesis of equal means. This test appropriately adjusts for the sample design. The variance was estimated using the Taylor series linearization.

When cell counts are small (e.g., 20 through 50), the variability is too high (not precise) for the estimates to be reliable. The estimates are unbiased; however, the width of the confidence interval would be very wide, making the estimate not very useful. The "†" symbol is used to indicate results that do not meet the criteria for statistical reliability (relative standard error [RSE] > 30%). In these cases, the results should be interpreted with caution.

Multivariate Analysis

Multivariate regression analysis was conducted to (1) investigate the association between the number of FTEs and site characteristics and (2) investigate the association between mode of nutrition education (onsite technology based, and offsite technology based) and site and participant characteristics. The analyses were conducted with the survey weights using Stata®, which uses appropriate adjustments for the sample design. The results of these analyses are provided in Sections 3 and 4.

To better understand the factors that are associated with the variation in participant-to-FTE educator ratio, multivariate regression analysis was conducted using multiple linear regression. Including all of the independent variables into the model at the same time, this type of modeling provides information about the direct effects of the independent variables on the dependent variable. The dependent variable was participant-to-FTE educator ratio. The independent variables included the following (unless otherwise noted, the source of the variable was the Site Survey):

- indicator variable for providing group education sessions (1 = yes, 0 = no)
- indicator variable for providing offsite technology-based nutrition education (1 = yes, 0 = no)
- indicator variable if the site was located in an urban area (1 = urban, 0 = rural)[8]

[8] Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area in which the site is located; the site was then classified as rural or urban based on the Census definitions of population size for urbanicity.

- indicator variables for the type of facility in which the site is located (health department, other health related, stand-alone, and nonprofit (1 = yes, 0 = no)[9]
- indicator variables for the source of staff (all staff work only for WIC and all staff work for WIC and other programs (1 = yes, 0 = no)[10]
- continuous variable for the percentage of FTEs who are professional staff[11]

Additionally, multivariate regression analysis was conducted using multinomial logit regression to understand the factors associated with sites using group sessions, onsite technology, and offsite technology for nutrition education. For this analysis, three separate models were run with the dependent variables being an indicator variable for whether the site uses group sessions, onsite technology, or offsite technology. Again, all of the independent variables were entered into the model at the same time, which provides information about the direct effects of the independent variables on the dependent variable. The independent variables included the following:

- indicator variable if the site was located in an urban area (1 = urban, 0 = rural)
- indicator variables equal to one for the various FNS regions (omitting the Midwest region variable to use as the comparison region)
- indicator variables for facility type (omitting the "other" variable to use as the comparison facility type)
- indicator variable for whether the site is in an EBT State (1 = yes, 0 = no)
- indicator variable for whether the site is in an ITO (1 = yes, 0 = no)
- indicator variable for whether there is a nutrition education coordinator on site (1 = yes, 0 = no)
- indicator variable for whether there is a breastfeeding peer counselor on site (1 = yes, 0 = no)
- continuous variable for site caseload
- continuous variable for the percentage of local WIC participants who are non-White
- continuous variable for the percentage of local WIC participants who are Hispanic

Limitations

A few limitations should be considered when interpreting the results of the Local Agency and Site Surveys. First, although the overall response rates were high, response rates for territories and ITOs were relatively lower compared with other types of LAs/sites. As previously discussed, a nonresponse bias

[9] Responding LAs provided the facility type for each site selected for the Site Survey. Facility types were collapsed into five categories of similar types for the model. Sites that are a stand-alone WIC site or located at a health department each got an indicator variable. Because of small sample sizes for sites located at different types of nonprofit locations, sites located at a school, faith-based center, or a community-based center were grouped into the "nonprofit" facility type. Because of small sample sizes for sites located at different types of health-related facilities, sites located at a hospital, Indian Health Service, Federally Qualified Health Center, or a nonprofit health facility were grouped into the "other health related" facility type. All other facility types including mobile vans, government facilities that do not provide health services, and other were grouped into the "other facility type" variable and was the omitted indicator variable.

[10] Source of staff was a categorical variable from Question 8 of the Site Survey. The omitted indicator variable was "some staff work for WIC only and other staff work for WIC and other programs."

[11] Percentage of FTEs who are professional staff is the sum of the professional staff categories from Question 9 of the Site Survey (WIC director/coordinator, site/clinic supervisor, nutrition education coordinator, registered dietitian, degreed nutritionist, nurse, lactation consultant, and breastfeeding coordinator) divided by the sum of professional and nonprofessional staff (trained nutrition paraprofessional, administrative/clerical/support staff, and breastfeeding peer counselor).

analysis was conducted for the Site Survey. The findings from this analysis suggest there is no nonresponse bias in the weighted estimates based on the evaluation using FNS region, the four-level stratification variable, and site participant caseload; however, data were not available to assess other characteristics, so some nonresponse bias may exist.

A second potential limitation is the data quality for the questions on the number and types of nutrition educators and their characteristics (as discussed in Section 2.3.7 on pages 21–22). The results for these questions should be interpreted with caution because of concerns about the accuracy of the data. There were no concerns about data quality for any other questions in the Local Agency and Site Surveys.

In some cases, cell counts are small; thus, the estimates may not meet the requirements for statistical reliability. For the bivariate analysis, a footnote is provided to indicate when results do not meet the criteria for statistical reliability (RSE > 30%). In these cases, the results should be interpreted with caution.

Finally, as is the case with any survey, agency staff self-reported the data. Although information on recommended staff/job types was provided to complete the survey at the LA and site levels and respondents were offered the flexibility to have someone else at the LA or site complete the survey, in some cases, the person completing the survey may not have been the most knowledgeable person at the LA or site. Also, to minimize respondent burden, for some questions, respondents were asked to make estimates instead of running a report or looking up the requested information in records, so, in some cases, the estimated data provided by respondents may be inaccurate.

Section 6.2 provides suggestions for addressing these limitations in future iterations of these surveys or conducting other related surveys of WIC LAs and sites.

2.3.10 Respondent Characteristics

Appendix G provides the weighted responses to the questions on respondent demographics for the Local Agency Survey (Table G-1) and Site Survey (Table G-2).

As summarized below, respondents to the Local Agency Survey were generally well educated and experienced:

- 69% of respondents indicated that their primary role was WIC director/coordinator
- 53% of respondents have a bachelor's degree and 31% have a graduate degree
- 45% of respondents are registered dietitians (RDs), 33% are a certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC), and 31% are licensed dietitians/nutritionists
- 62% of respondents have 11 or more years of WIC experience

For the Site Survey, the responses to the demographic questions for Versions 1 and 2 were compared, and no statistically significant differences between the two versions were found. Seventy-six percent of respondents to the Site Survey indicated that they also completed the Local Agency Survey (n = 1,048); thus, they did not have to complete the demographic questions again (they were allowed to skip these

questions and responses to the Local Agency Survey were used). For these 1,048 sites, the email address for the Local Agency Survey respondent was compared with the email address for the Site Survey respondent, and only 60% were actually the same, suggesting that about 16% of Site Survey respondents may have erroneously indicated they completed the Local Agency Survey (when in fact they did not) or the individual who received the Site Survey to complete forwarded it to the Local Agency Survey respondent for completion. As a result, some of the demographic data reported for the Site Survey respondents may not be accurate.

The demographic characteristics for respondents to the Site Surveys are summarized below.

- 54% of respondents indicated that their primary role was WIC director/coordinator, 11% are site/clinic supervisors, and 11% are RDs
- 58% of respondents have a bachelor's degree and 32% have a graduate degree
- 53% of respondents are RDs, 34% are licensed dietitians/nutritionists, and 29% are CLC/CLE/CLEC
- 66% of respondents have 11 or more years of WIC experience
- 79% of respondents design or oversee WIC nutrition education
- 59% of respondents spend 25% or more of their time providing nutrition education to WIC participants

2.4 In-depth Site Interviews

Although the Local Agency and Site Surveys provided the data needed to develop a broad description of WIC nutrition education, there are limits to the depth of data collection through a Web survey. To enrich the data collected via the surveys, qualitative data were obtained through in-depth telephone interviews with nutrition educators from a subset of sites. The interviews were designed to obtain additional descriptive information on WIC nutrition education (e.g., how education is adapted to accommodate cultural or other preferences or what training has been most useful and why) and to expand on select survey topics (e.g., goal setting, techniques for conducting effective group sessions). Additionally, the interviews helped characterize how sites deliver nutrition education and identify sites desirable for the Phase II pilot.

2.4.1 Selection of Sites

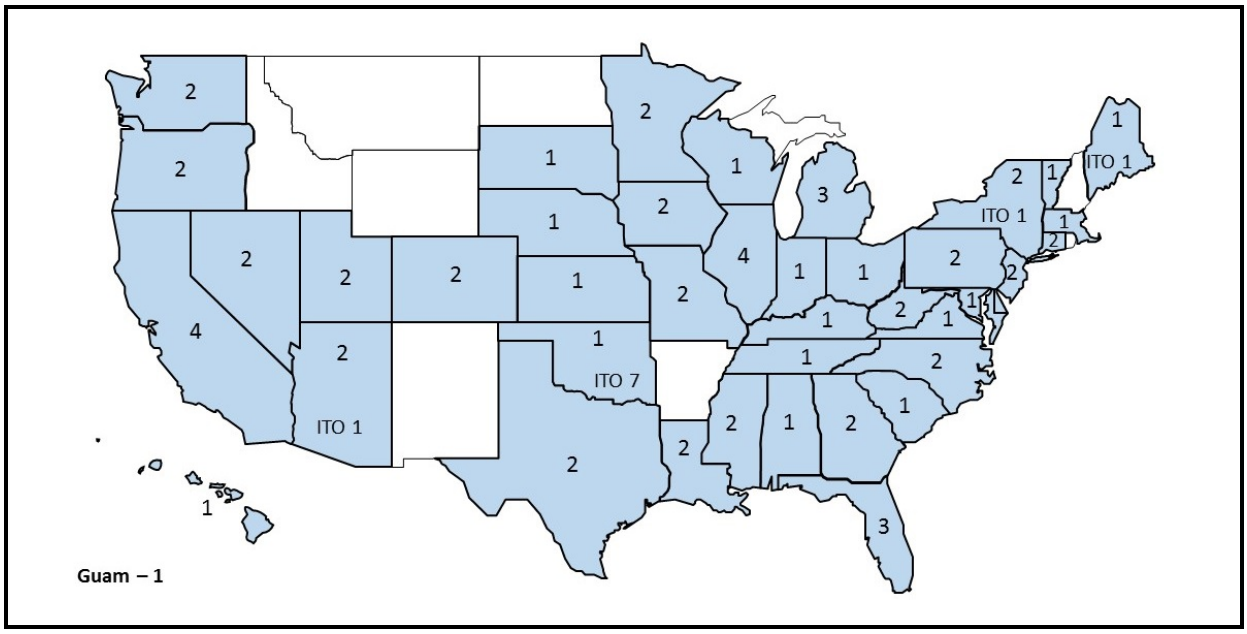
Based on responses to the Local Agency and Site Surveys, 80 sites were selected for in-depth interviews to characterize how nutrition education is delivered and to gain a better sense of the diversity of WIC nutrition education approaches and techniques. Half of the sites were selected from within each of the strata in the study (10 sites for each stratum: ITOs and U.S. territories, EBT States, LAs with caseloads > 10,000, and all other LAs). These sites were purposefully selected to include geographic diversity and a variety of site types (e.g., local health department, State-run, nonprofit organizations). Because two of the strata are based on caseload size of the LA, and one includes ITOs and U.S. territories, which generally have sites with smaller caseloads, the selection of 40 sites also achieved diverse caseload size. The remaining 40 sites were chosen to reflect the diversity in the mode and dosage of WIC nutrition education with consideration given to geographic diversity and caseload size. This selection strategy was designed

to ensure that the interviews addressed the research questions and captured a sense of the diversity and the most common practices used in WIC nutrition education.

To ensure timely completion of the interviews, the sites were selected in two replicates of 40 sites each. Sites for the first replicate were selected about 5 weeks following the launch of the Local Agency Survey when over half of the survey responses had been received. At 8 weeks after the launch of the Local Agency Survey, selected questions from the Local Agency and Site Surveys were analyzed (using an interim dataset) to determine the modes and dosage of nutrition education. These data were used to select the second group of 40 sites.

The 80 sites selected were in 55 SAs: 43 geographic States, 10 ITOs, one territory, and the District of Columbia (see **Exhibit 2-10** for the location of the selected sites).

Exhibit 2-10. Geographic Location of Sites for In-depth Interviews



Notes: Blue shading indicates SA for in-depth interview respondents and the number of respondents.

2.4.2 Instrument Development and Testing

The interview guide was designed to gather information during a 30-minute interview on the following topical areas: nutrition education techniques and practices for one-on-one and group sessions, use of technology-based education and reinforcement materials, and coordination of nutrition education activities with other programs. The guide included open-ended questions requesting descriptions of nutrition education practices and interviewee impressions of effectiveness of those practices, as well as insights regarding using skills learned in training sessions, usefulness of nutrition education reinforcers, and strategies for coordination of WIC nutrition education with other programs. Interviewees who conduct one-on-one nutrition counseling or group education were asked to describe a recent education session in detail. **Exhibit 2-11** describes the five modules and associated interview topics included in each module.

Exhibit 2-11. Modules and Topics for In-depth Interviews with Sites

Module	Interview Topics
A: One-on-One Nutrition Education	▪ How topics are determined ▪ Length of sessions ▪ If/how goals are established and what follow-up on goals occurs ▪ How one-on-one education differs for various types of WIC visits ▪ How information or approach is adapted for different cultural or other needs ▪ What training has been most helpful and how skills have been used ▪ Opinions about nutrition education one-on-one counseling features that are effective ▪ If/how participant readiness for change is measured
B: Group Education Sessions	▪ Topics discussed and how they were determined ▪ Length of session ▪ Materials used ▪ Questions or comments from participants ▪ For most recent session, opinions of what went well and what did not go well and of what participants liked or did not like about the session ▪ Opinion about nutrition education group features that are most effective ▪ What training has been most useful and how skills have been used ▪ Description of how nutrition education is provided to groups who do not speak English ▪ Description of any group education sessions or activities targeted to child participants
C: Technology-Based Nutrition Education	▪ How technology-based nutrition education is implemented onsite and outside of the WIC site ▪ Participant feedback on experience with technology-based education
D: Nutrition Education Reinforcers	▪ Types of nutrition education reinforcers used (e.g., bulletin boards, pamphlets) ▪ Opinions about effectiveness and impact of reinforcers ▪ Use of text messages, email, and social media as reinforcers and feedback from participants about these
E: Coordination of Nutrition Education Activities with Other Programs	▪ Description of coordination activities with other programs ▪ Opinion about strategies that are most effective ▪ Challenges experienced in coordinating with other programs and how these were addressed

Following review and comment on the draft interview guide by FNS, the study Advisory Panel, and NWA LA Section, the guide was pretested with five individuals in three LAs (different from the LAs used for pretesting the Phase I surveys). Each interview module was pretested with at least two individuals and in most cases three individuals. Pretest respondents worked in LAs in three FNS regions including LAs of different sizes and types.

For each pretest respondent, two or more modules were implemented during a 30-minute interview. During the interview, questions were noted that required use of probes or that respondents asked the interviewer to repeat or rephrase, and the number of questions completed in the 30-minute time period was recorded. Immediately following the completion of the module questions, a debriefing guide was used for a discussion of the questions asked in the in-depth interview, including identifying questions or terms that were confusing or difficult to answer. The pretest results were used to refine the questions and to assess how many modules are reasonable to complete in a 30-minute interview period.

2.4.3 Data Collection

Recruiting Selected Sites and Conducting the Interviews

To recruit the sites for the interviews, an email was sent to the contacts for the Local Agency Survey notifying them that one of their sites was selected for the interviews and to request their assistance in working with the site to schedule the interview. The email explained the interview topics and suggested job titles/roles of individuals who may be most appropriate for the interview as well as the planned date range of the interviews, length of the interviews, and other logistical information. When the LA contacts provided the name and contact information for the recommended interview respondents, the respondents were called to schedule an interview date and time.

Each interview took about 30 minutes to complete. The interviews were conducted by telephone in English by four interviewers and note takers who all had past experience working in State or local WIC programs as well as training and experience in conducting qualitative interviews. The interviewers and note takers received training on the protocol and interview guide for this study prior to beginning the interviews. Each interview was customized based on the responses to the screening questions on job roles and nutrition education modes used at the site (i.e., the modules of questions asked were based on job functions of the respondent and modes used at the site). Most respondents were asked questions from two to three modules to ensure the interview was completed in 30 minutes. To ensure that all modules were asked in at least 10 interviews, the order of the modules was varied based on module selection criteria (e.g., module A was the first asked during some interviews, module C in some). Following each interview, the interviewer and note taker immediately conducted a debriefing call to review and clarify notes. With agreement of the interview respondents, the interviews were tape recorded for use in reviewing notes, quality control review, and analysis.

Interview Response

Of the original 80 sites that were invited to participate in the interview, 74 agreed to participate (92.5% response rate). LA contacts for six of the selected sites either refused or did not respond to the invitation emails or phone calls. Six replacement sites were selected and agreed to participate in the interview process. The 80 interviews took place over a 9-week period. **Exhibit 2-12** provides the number of modules covered during the 80 site interviews.

Exhibit 2-12. Number of Completed Site Staff Interviews by Module

	Module	Number of Interviews
Module A	One-on-One Nutrition Education	72
Module B	Group Education Session	24
Module C	Technology-Based Nutrition Education	30
Module D	Nutrition Education Reinforcers	32
Module E	Coordination of Nutrition Education Activities	43

2.4.4 Analysis Approach

Preparing the Data for Analysis

The interview data were collected on an interview data entry template in Microsoft Word. Two trained staff members participated in each interview—the interviewer and the note taker/data entry staff person ("note taker"). During the interview, the note taker captured responses to the interview questions, including both closed-ended responses (e.g., "yes" or "no") and open-ended text entry. The interviewer and note taker discussed the interview responses immediately following each interview to clarify the notes and highlight key points and quotes from respondents. Finalized notes and the recording of the interview were uploaded to a secured site.

After each interviewer had conducted two interviews, the analyst reviewed the interview forms, listened to the recordings, and facilitated a meeting with the interviewers to provide guidance and clarification for the remaining interviews. Throughout the interview period, the analyst reviewed interview forms for completeness and consistency, using the recordings for reference, and requested revisions and additions if needed.

Analysis Procedures

The data collected through the interviews were analyzed using two approaches depending on the type of question. Close-ended interview responses (e.g., yes/no responses, length of group education session) were entered into a Microsoft Excel database for data cleaning followed by analysis of the close-ended data using SAS software for tabulations of respondent demographics and other characteristics.

Open-ended interview responses were uploaded from the interview form and coded in QSR International NVivo Version 10. With oversight from the task leader, a single analyst with training and experience conducting qualitative research systematically analyzed the interview responses to identify common themes (e.g., approaches to working with participants on goal setting, changes made in nutrition education techniques in response to training), discover new or emergent themes and exceptions to these themes, and ascertain similarities and differences among the groups of interview respondents. Interview responses were reviewed to identify, where possible, trends across sites and respondent attributes and differences between the sites and respondents. With oversight from the task leader, the same analyst also reviewed the responses to identify quotations and compile "stories" of nutrition education to support key findings in the descriptive report on nutrition education.

3. Description of WIC Sites, WIC Nutrition Education Staff, and Minimum Qualifications and Training

This section begins with a summary of the key findings pertaining to the topics presented in this section (Section 3.1), followed by a more detailed discussion of the study findings. Section 3.2 provides descriptive information on the WIC sites where nutrition education[12] is delivered, Section 3.3 describes the types and number of staff members who provide nutrition education and the characteristics of these staff, and Section 3.4 describes the minimum qualification requirements for nutrition educators and the type and amount of training provided. Unless otherwise indicated, the questions reported on in this section did not pertain to a specific visit type; thus, the findings are a reflection of nutrition education provided at all types of visits, including nutrition education provided at the time of certification and secondary nutrition education provided at follow-up visits. These findings are based on responses to the Local Agency and Site Surveys and information from the State Plans on State agency (SA) policy for staff credentials and training. Where appropriate, these findings are supplemented by findings from the interviews with site staff.

3.1 Overview

Several key findings were revealed from the Local Agency and Site Surveys as well as the interviews with site staff. First, **sites vary in terms of the types of facilities, equipment, and materials available for providing nutrition education**. The majority of sites have private rooms for one-on-one counseling, and for sites that provide group sessions, about half have a dedicated room or space for conducting group sessions. More information on the types of facilities, equipment, and materials that are available can be found in Section 3.2.

Second, **WIC sites use several types of staff to provide nutrition education (referred to as nutrition educators) with registered dietitians (RDs) as the most common, and many of these staff members are experienced and well educated**. Over half of nutrition educators have worked for WIC for 7 or more years, nearly two-thirds have a bachelor's or graduate degree, and many have credentials such as an RD (24%), certified lactation consultant or educator (24%), and/or registered nurse (RN) (17%). More information on the types of staff members who provide nutrition education and their credentials can be found in Section 3.3.

Third, **the number of staff members available to provide nutrition education in WIC sites varies greatly**. The mean number of full-time-equivalent (FTE) nutrition educators is 5 and ranges from an average of 3 for very small sites (caseload $\leq$ 300)[13] to 10 for large sites (caseload $\geq$ 2,500). As expected, similar differences exist for the participant-to-FTE educator ratio, a measure of the number of WIC participants per nutrition educator. More information on the number of staff members available to provide nutrition education can be found in Section 3.3.2.

[12] Respondents were instructed to include breastfeeding education as part of nutrition education.

[13] Caseload was provided by responding local agencies (LAs) for the sites selected for the Site Survey. Respondents were instructed to provide the site's monthly caseload or participation and to provide an estimate if this information was not readily available.

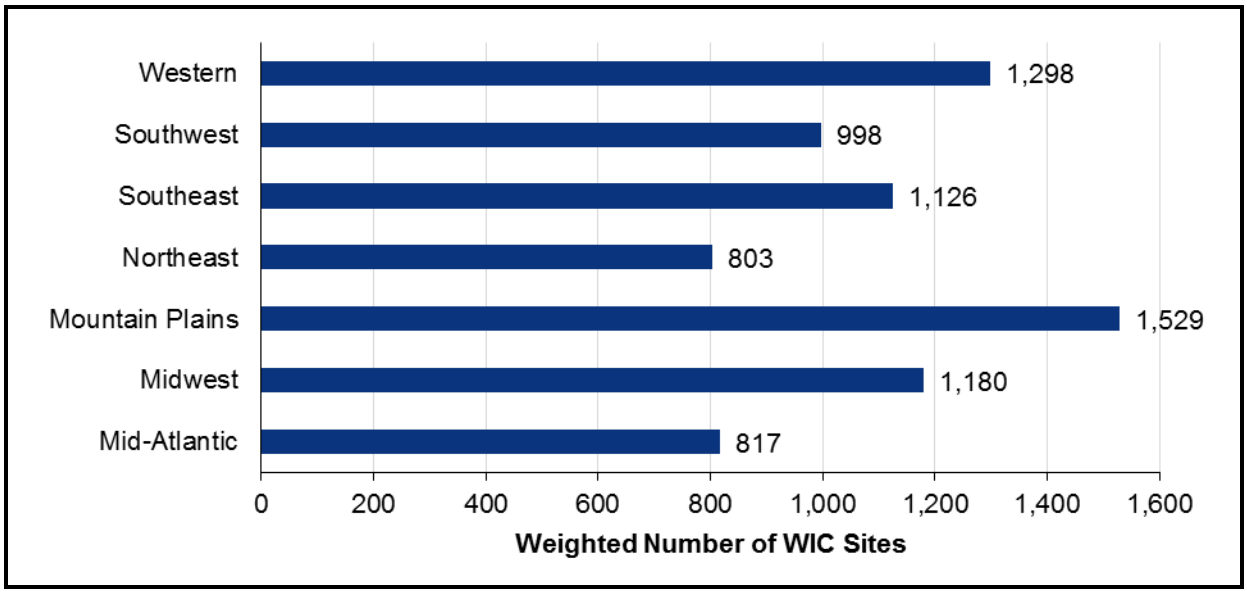
Fourth, **training for nutrition educators includes a wide array of topics related to participant-centered skills and approaches, as well as nutrition topics such as breastfeeding**. In the interviews with site staff, individuals with more training reported more changes in their approach to nutrition education. More information on nutrition education staff qualifications and training can be found in Section 3.4.

3.2 Description of WIC Sites, Facilities, and Equipment

The Local Agency Survey and Site Surveys collected descriptive information on the number of sites where nutrition education is delivered, the types of facilities in which WIC sites are located, other services available at or near the location of the WIC site, the number of days per month that nutrition education is provided, and the types of facilities and equipment available at sites for delivering nutrition education. Findings on these topics are summarized below and supplemented by findings from the interviews, where appropriate.

The weighted number of WIC sites providing nutrition education as reported by local agencies (LAs) is 7,750.[14] **Exhibit 3-1** (Tabulated as Appendix I, Table I-1)[15] shows the weighted number of WIC sites that provide nutrition education by Food and Nutrition Service (FNS) region as reported by LAs. The region with the greatest number of WIC sites providing nutrition education is the Mountain Plains region, followed by the Western, Midwest, and Southeast regions.

Exhibit 3-1. Weighted Number of WIC Sites that Provide Nutrition Education by FNS Region



Source: 2014 Local Agency Survey. Number of respondents = 893 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

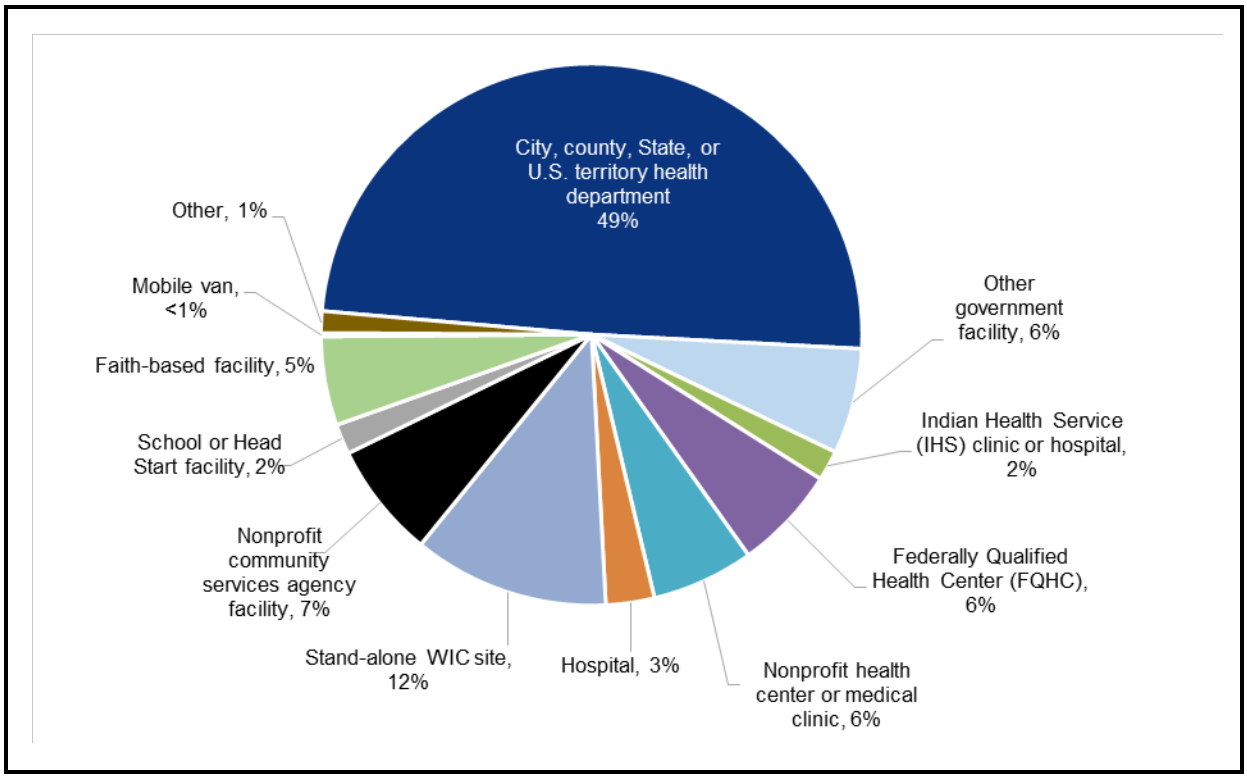
Respondents were instructed to include full-time, part-time, temporary, satellite, and mobile sites.

[14] The estimate of 7,750 is lower than the estimated 10,000 WIC sites cited on FNS's Web site (http://www.fns.usda.gov/wic/about-wic-wic-glance). The current study is unable to directly assess the difference between the number of WIC sites reported in the current study and number of WIC sites reported by FNS; however, the estimate from the current study is limited to sites that provide nutrition education, which could explain some of the difference observed.

[15] Appendix I provides the results for each survey question with the unweighted number of respondents, the estimate, and the 95% confidence interval for the estimate.

Exhibit 3-2 (Tabulated as Appendix I, Table I-2) shows the types of facilities in which WIC sites are located as reported by LAs. Respondents were instructed to count each site once in the type of facility that is the best match and to consider the organization that operates/owns the facility, which may not be the organization that operates the WIC program. Of the WIC sites providing nutrition education, 49% are located in city, county, State, or U.S. territory health departments (not including government-run hospitals), and 12% are stand-alone WIC sites. Smaller percentages are located in a variety of other types of facilities.

Exhibit 3-2. Types of Facilities in Which WIC Sites that Provide Nutrition Education Are Located (Weighted Percentage of Sites Based on Local Agency Survey Responses)



Source: 2014 Local Agency Survey. Number of respondents = 883 and number of nonrespondents = 10.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

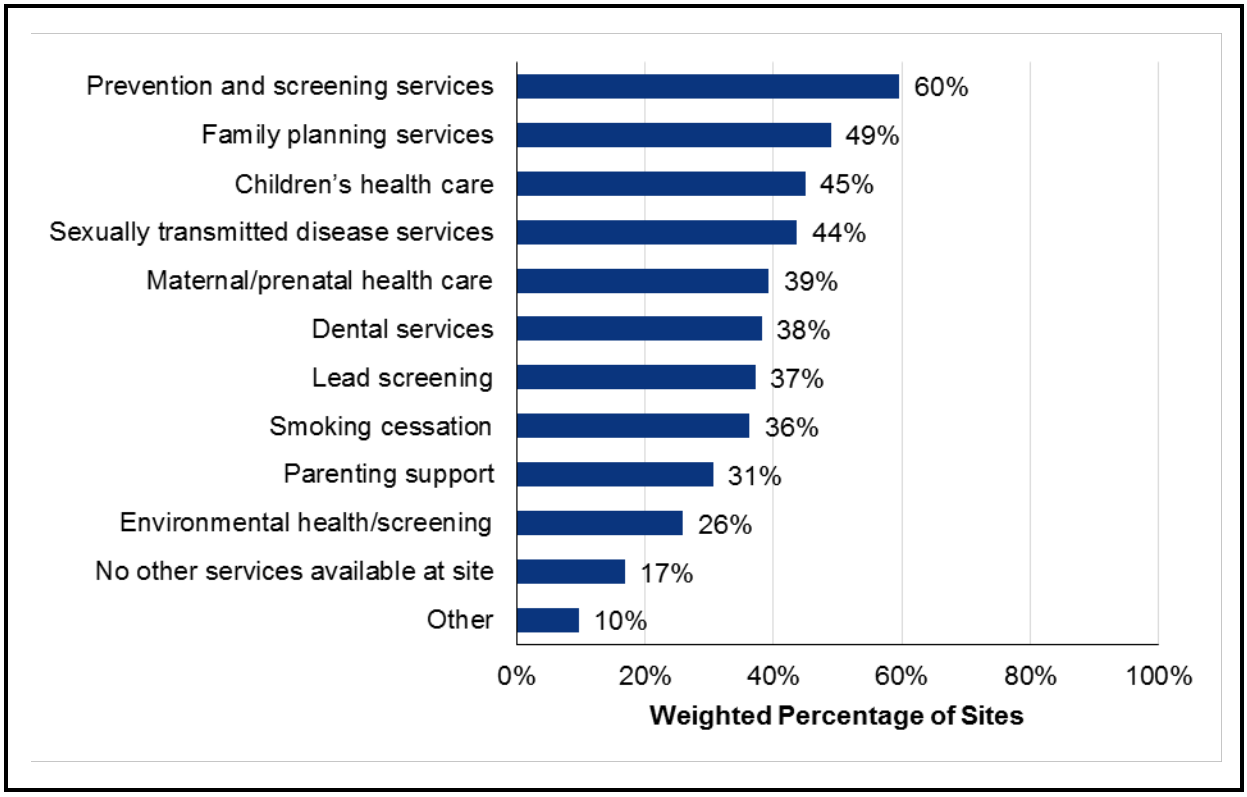
Respondents were instructed to count each site once in the type of facility that is the best match.

The type of facility in which the WIC site is located may affect delivery of nutrition education. During the interviews with site staff, some interviewees reported they often travel to satellite sites, such as a church or community center, to provide WIC services, including nutrition education, which presents a unique set of challenges, such as limited space and lack of privacy.

- *"Sometimes we do various outreach clinics where we may be working in a big open space and we don't have enough privacy or confidentiality; sometimes that hinders what people are willing to tell us."*
- *"Since all of my clinics are traveling clinics, it is hard for us to have a stationary bulletin board at a site, so we have these display boards, and on both sides we are able to put on educational materials."*

For many WIC sites, additional health and other services are available at the site location in addition to WIC. **Exhibit 3-3** (Tabulated as Appendix I, Table I-4) shows the types of additional services available at or near the site. Sixty percent of sites reported the availability of prevention and screening services (e. g., vision, early and periodic screening, and immunization). Other commonly reported services included family planning (49%), children's health care (45%), and services for sexually transmitted diseases (44%).

Exhibit 3-3. Additional Services Available at or Near WIC Sites (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 1. Number of respondents = 679 and number of nonrespondents = 17.

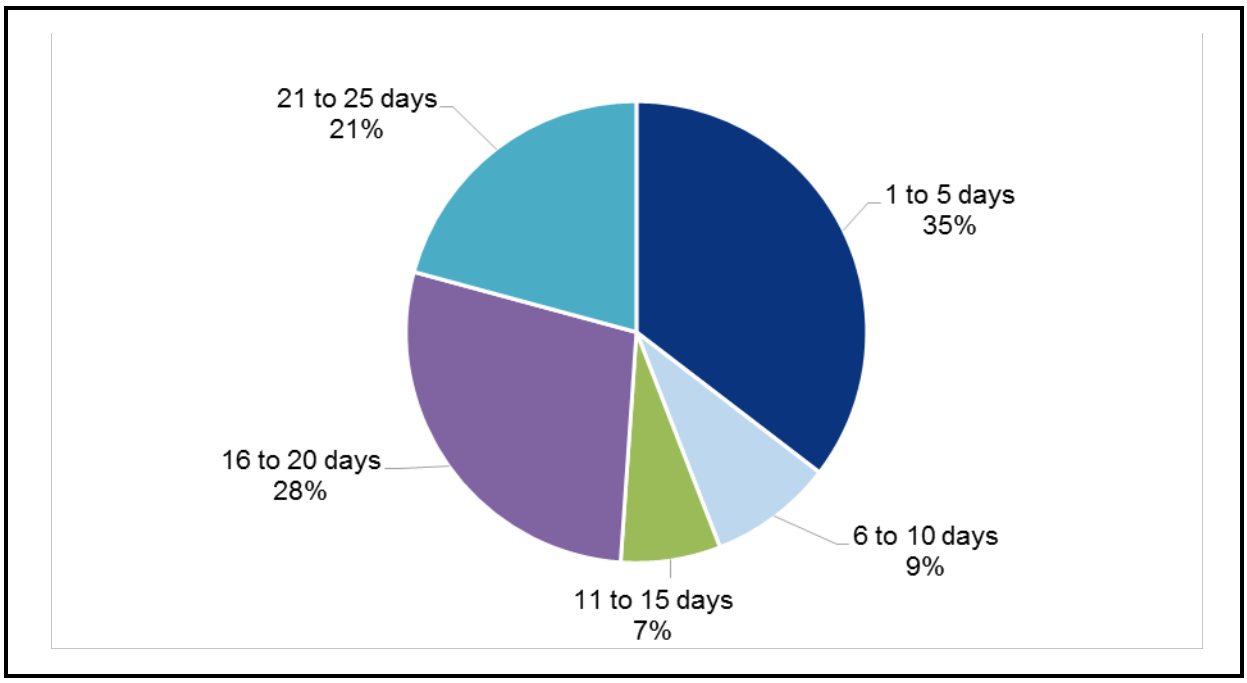
Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights.

Respondents could select multiple responses.

The Site Survey collected information on how many days per month the site provides nutrition education to participants. Respondents were instructed to count days when any form of nutrition education is provided and, if it varies from month to month, enter the number of days WIC nutrition education services were provided last month. As shown in **Exhibit 3-4** (Tabulated as Appendix I, Table I-3), about half of sites (49%) provide nutrition education more than 15 days each month.

Exhibit 3-5 (Tabulated as Appendix I, Table I-5) details the facilities, equipment, and materials available to sites for providing nutrition education as reported by respondents to the Site Survey. The majority of sites (77%) use a private room for one-on-one counseling.

Exhibit 3-4. Days per Month Nutrition Education is Provided (Weighted Percentage of Sites)



Source: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,401 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Respondents were instructed to enter the number of days WIC nutrition education services were provided during the last month if the number of days varies from month to month.

About 49% of sites offer group education sessions. These sites use a variety of settings to conduct group sessions depending on the facilities available. Fifty-two percent of sites have a designated room or space that is used predominately for group education, 36% use a multipurpose room that is used for group education and other meetings (not a waiting room), 26% use a general open area, and 23% use a private room that is used for both one-on-one counseling and group education.

In addition to rooms used for one-on-counseling sessions and group sessions, some sites have other rooms or areas available for the delivery of nutrition education. Many sites (64%) have a designated room or area for providing breastfeeding education, 58% have a room or area for viewing nutrition education or breastfeeding videos, 39% have a room or area for providing WIC orientation to families, and 36% have a room or area for conducting nutrition education activities with children.

Sites have an assortment of equipment or materials available to use for reinforcing nutrition education. Most sites (78%) have bulletin boards with nutrition information, 68% have DVD players and TVs for showing nutrition information, and 63% have a rack/table/stand with written nutrition education materials (e.g., brochures).

Exhibit 3-5. Facilities and Equipment for Delivering Nutrition Education (Weighted Percentage of Sites)

Facilities/Equipment	Weighted % of Sites
Settings Used for One-on-One Counseling (n = 696, nonrespondents = 0)	
Private room	77.0
Modular office/cubicle	15.5
Open area with no partitions and staff at tables	12.7
Open area with no partitions and staff at desks that are arranged for privacy	7.6
Area with movable partitions separating it from other space	6.2
Other	0.8
Settings Used for Group Education among Sites that Provide Group Education Sessions (n = 376, nonrespondents = 8)[a]	
Designated room or space used predominantly for group education	52.3
Multipurpose room used for group education and other meetings, but not a waiting room	36.2
General open area	25.9
Private room used for both one-on-one counseling and group education	22.6
Other	0.8
Rooms/Areas Available at or Near Site (n = 689, nonrespondents = 7)	
Designated room/area where breastfeeding education is provided	64.4
Room/area for viewing nutrition education or breastfeeding videos	57.6
Room/area for providing WIC orientation to families	38.5
Room/area for nutrition education activities with children	36.0
Kitchen/area for cooking classes or recipe preparation demonstrations	22.0
None of the above	18.0
Equipment or Materials Available (n = 690, nonrespondents = 6)	
Bulletin boards for nutrition education information	77.8
DVD player and TV for showing nutrition education information	68.4
Rack/table/stand with written nutrition education materials for participants to select	62.6
Display tables with nutrition information	52.2
Nutrition newsletters	34.7
Computer, kiosk, or tablet computer for nutrition education	25.5
Equipment for simple food tasting	18.7
Equipment for teaching cooking classes	15.9
Nutrition education curricula or materials targeted to children	33.1
Other	3.2
None of the above	1.6

Source: 2014 Site Survey, Version 1

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights.

Respondents could select multiple responses.

[a] Only sites that provide group education sessions were eligible to answer this question (n = 384).

3.3 Description of Staff Members Who Provide WIC Nutrition Education

The types and number of staff members who provide nutrition education and the characteristics of these staff, including their education and credentials, may influence the quality of nutrition education delivered to WIC participants. The Local Agency Survey collected information on the types of staff members who provide nutrition education and policies on staff qualifications. The Site Survey collected more detailed

information to characterize staff members who provide nutrition education (i.e., nutrition educators). When answering these questions, respondents were instructed that if the number of nutrition education staff members varies on different days, then they should respond about staffing for a "typical" day or use the most common/frequent staffing pattern for the site. Respondents were also instructed to count staff members who provide nutrition education using any method and to exclude translators or interpreters who assist nutrition educators.

As discussed in Section 2.3.8, it appears that some respondents had difficulties answering the questions in the Site Survey on the number and types of staff members who provide nutrition education (Versions 1 and 2) and the credentials and characteristics of these staff members (Version 1 only). Comparing information on site caseload (provided by the site's LA) with information on the number of staff members (Question 9 from the Site Survey), it seems possible that some respondents may have misunderstood the question and provided counts for *all the sites* within the LA or for *all staff members* (not just nutrition educators). Some respondents may have had difficulty accurately counting staff members who provide nutrition education at a site where the employees perform multiple functions or work in multiple programs, as is the case in many WIC sites, or when there is variation in the staff who work at the site from day to day. The site-level data on caseload, FTEs (calculated using the survey responses), and participant-to-FTE educator ratio (calculated using caseload and FTEs) were reviewed to identify and remove any apparent outliers. Because of this issue and other issues outlined in Section 2 with regard to inconsistencies in respondents' answers, there are concerns about data quality when reporting on the types and number of staff members who provide nutrition education and the credentials and characteristics of these staff. This is noted as a footnote in the relevant exhibits where these results are presented. Section 6.2 provides suggestions for improving how this information is collected in future surveys.

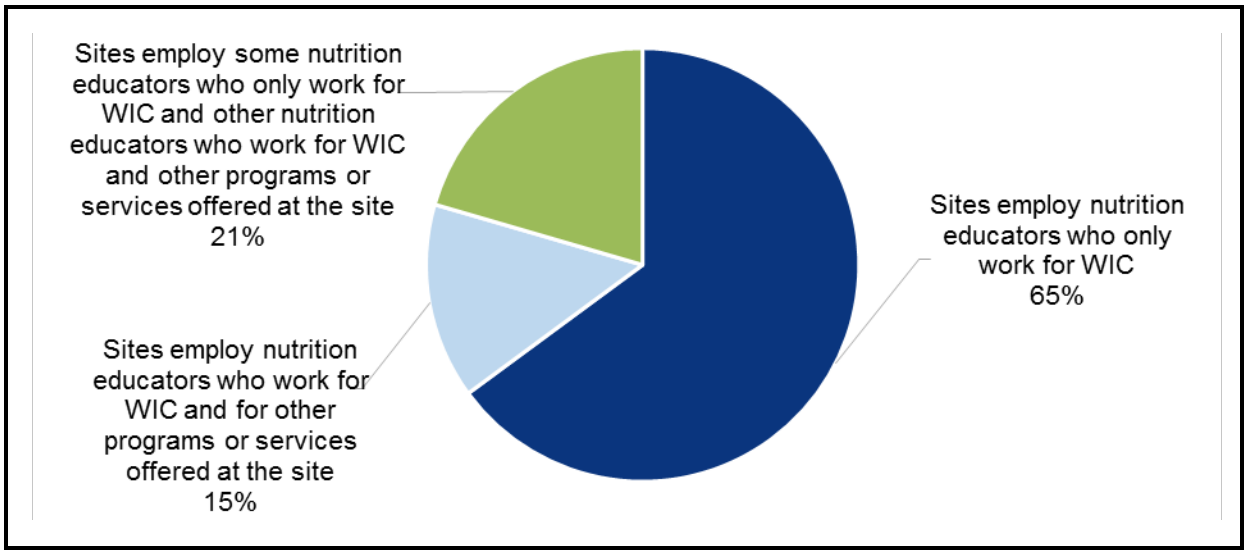
Findings on staffing for WIC nutrition education delivery are summarized below, supplemented by findings from the interviews, where appropriate.

3.3.1 Types of Staff Members Who Provide Nutrition Education

As shown in **Exhibit 3-6** (Tabulated as Appendix I, Table I-9), 65% of WIC sites employ nutrition educators who only work for WIC. The remaining sites employ nutrition educators who work for WIC and other programs or services offered at the same location (15%) or a combination of nutrition educators who work only for WIC and some who work for WIC and other programs and services offered at the same location (21%).

Site Survey respondents were asked to report on the number of staff members who provide nutrition education at the site in different job classifications and types. **Exhibit 3-7** (Tabulated as Appendix I, Table I-7) shows the weighted percentage of sites that have staff members who deliver nutrition education in each job classification or type. RDs are the type of staff used most frequently to deliver nutrition education with 58% of sites reporting use of RDs. The findings are generally similar to those reported in the National Survey of WIC Participants II, which found that RDs are most likely to take part in nutrition education delivery (U.S. Department of Agriculture [USDA], FNS, 2012).

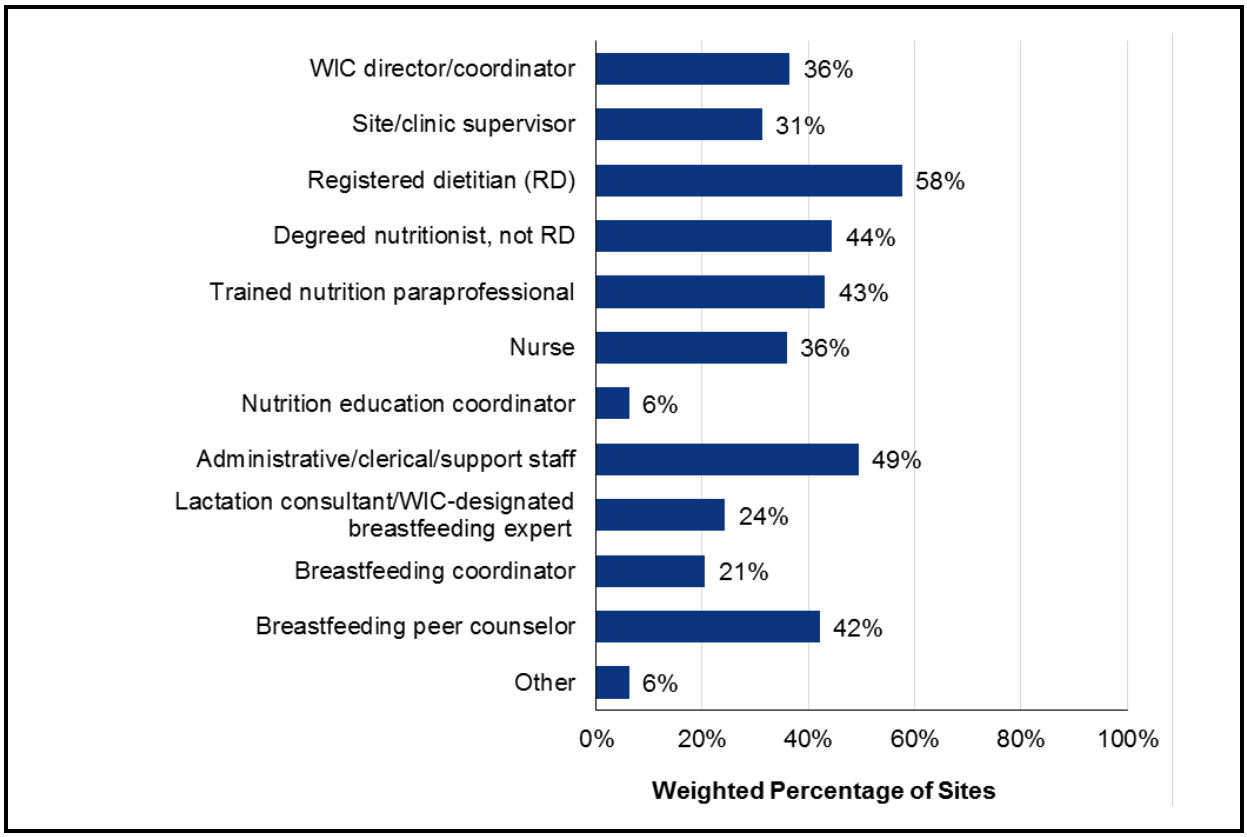
Exhibit 3-6. Employment Status of WIC Site Staff Members Who Provide Nutrition Education (Weighted Percentage of Sites)



Source: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,401 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Exhibit 3-7. Types of Staff Members Who Provide Nutrition Education (Weighted Percentage of Sites)



Sources: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,287 and number of nonrespondents = 114.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Respondents could select multiple responses.

Other types of staff members whom sites report have a role in providing nutrition education include administrative/support staff (49% of sites), degreed nutritionists (not RD), trained nutrition paraprofessionals, and breastfeeding peer counselors (all reported by about 40% of sites). The high percentage of sites that report administrative/clerical/support staff indicates sites included staff job classifications or types that assist with the delivery of nutrition education, for example, administrative staff members who provide information on monthly nutrition topics, as well as those who provide nutrition counseling or facilitate group education.

3.3.2 Number of Staff Members Who Provide Nutrition Education

The Site Survey collected information on the number of staff members in each job classification or type for full-time staff members (work on WIC activities 32 or more hours/week) and two categories for part-time staff members: 21–31 hours/week or 20 or fewer hours/week. Respondents were instructed that if a staff member performs more than one role, they should count them only once in the job classification for their primary role. This information was used to compute FTEs by assigning full-time staff members a value of "1," part-time staff members who work 21–31 hours a week a value of "0.65" (the midpoint of 21–31 divided by 40), and part-time staff members who work 20 or fewer hours/week a value of "0.30."[16] **Exhibit 3-8** (Tabulated as Appendix J, Table J-1, and Appendix I, Table I-8) shows the mean number of FTEs per site by type of staff member or job classification for all sites and by site caseload size.[17]

For all sites, the mean number of FTEs varied by job classification or type from less than one (1) for staff members in a director or supervisory role to 2.2 for trained nutrition paraprofessionals. The mean FTEs for RDs, the type of staff members who most frequently deliver nutrition education, is 1.0 FTE per site. Not surprisingly, the mean number of FTEs varies by site size (statistically significant differences were found at $p < .0001$). The results shown in Exhibit 3-8 suggest that larger sites have a higher mean number of FTEs than smaller sites. The FTE estimates for the nurse and lactation consultant/breastfeeding expert job types are higher than anticipated. Many individuals with these job types work part time at the WIC site and the exact number of part-time hours is not known, so the estimates used in the calculation (as previously discussed) may be inflated, thus overstating the FTE estimates.

Exhibit 3-9 (Tabulated as Appendix J, Table J-5) provides the mean number of staff members providing nutrition education per site, the mean number of FTEs, the mean caseload per site, and the mean participant-to-FTE educator ratio for all sites and by caseload size categories. Participant-to-FTE educator ratio was calculated using FTEs. For all sites, the mean caseload per site is 1,325 participants with an average of 251 participants per one educator. Statistically significant differences in participant-to-FTE educator by site size were found at $p < .0001$. The participant-to-FTE educator ratio ranges from 65 participants to one nutrition educator for very small sites (caseload ≤ 300) to 494 participants to one

[16] Because some WIC staff work for WIC and other organizations (e.g., those who work for a WIC site located at a health department), there is a significant variation among the number of hours worked by part-time staff. The assumption of 0.30 used for part-time staff who work 20 or fewer hours/week was based on feedback provided by the Advisory Panel and current and former members of the National WIC Association Board of Directors.

[17] Site caseload size refers to the average monthly participation or caseload at a site. The LA for each responding site provided information on site caseload. Respondents were instructed to provide the site's monthly caseload or participation and to provide an estimate if this information was not readily available. Four categories were defined for site size (very small, small, medium, and large) based on the quartile distribution for caseload.

Exhibit 3-8. Mean FTEs per Site Who Provide Nutrition Education by Site Caseload Size

Job Classification/Type of Staff	All Sites	Very Small: 300 or Fewer	Small: 301–900	Medium: 901–2,499	Large: 2,500 or More	*p*-value
WIC director/coordinator	0.8	0.7	0.9	0.9	1.0	<.0001****
Site/clinic supervisor	0.9	0.6	0.8	0.9	1.1	<.0001****
Registered dietitian (RD)	1.0	0.7	0.7	1.1	1.8	<.0001****
Degreed nutritionist, not RD	1.5	1.0	1.0	1.5	2.4	<.0001****
Trained nutrition paraprofessional	2.2	0.9	1.3	2.1	4.6	<.0001****
Nurse	1.1	0.9	1.1	1.2	2.2	.0008***
Nutrition education coordinator	0.8	0.5	0.9	0.8	0.9	<.0001****
Admin/clerical/support staff	1.7	0.8	1.2	1.8	3.4	<.0001****
Lactation consultant/WIC-designated breastfeeding expert	1.0	0.7	0.8	1.0	1.4	.0003***
Breastfeeding coordinator	0.7	0.5	0.7	0.8	0.9	<.0001****
Breastfeeding peer counselor	0.7	0.5	0.5	0.7	1.1	<.0001****

Sources: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,287 and number of nonrespondents = 114.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed.

The Wald's F test was used to test the hypothesis of equal means, which appropriately adjusts for the sample design. The variance was estimated using the Taylor series linearization. The *p*-values indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Exhibit 3-9. Information on Site Participant-to-FTE Educator Ratio by Site Caseload Size

	All Sites	Very Small: 300 or Fewer	Small: 301–900	Medium: 901–2,499	Large: 2,500 or More	*p*-value
Mean number of staff members providing nutrition education per site	6.3	4.2	4.7	7.0	11.6	<.0001****
Mean FTEs of staff members providing nutrition education	4.8	2.5	3.4	5.6	10.3	<.0001****
Mean caseload per site	1,325.0	123.2	577.6	1,514.8	4,390.3	<.0001****
Mean participant-to-FTE educator ratio	250.5	65.4	228.9	345.6	494.3	<.0001****

Source: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,287 and number of nonrespondents = 114.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed.

The Wald's F test was used to test the hypothesis of equal means, which appropriately adjusts for the sample design. The variance was estimated using the Taylor series linearization. The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

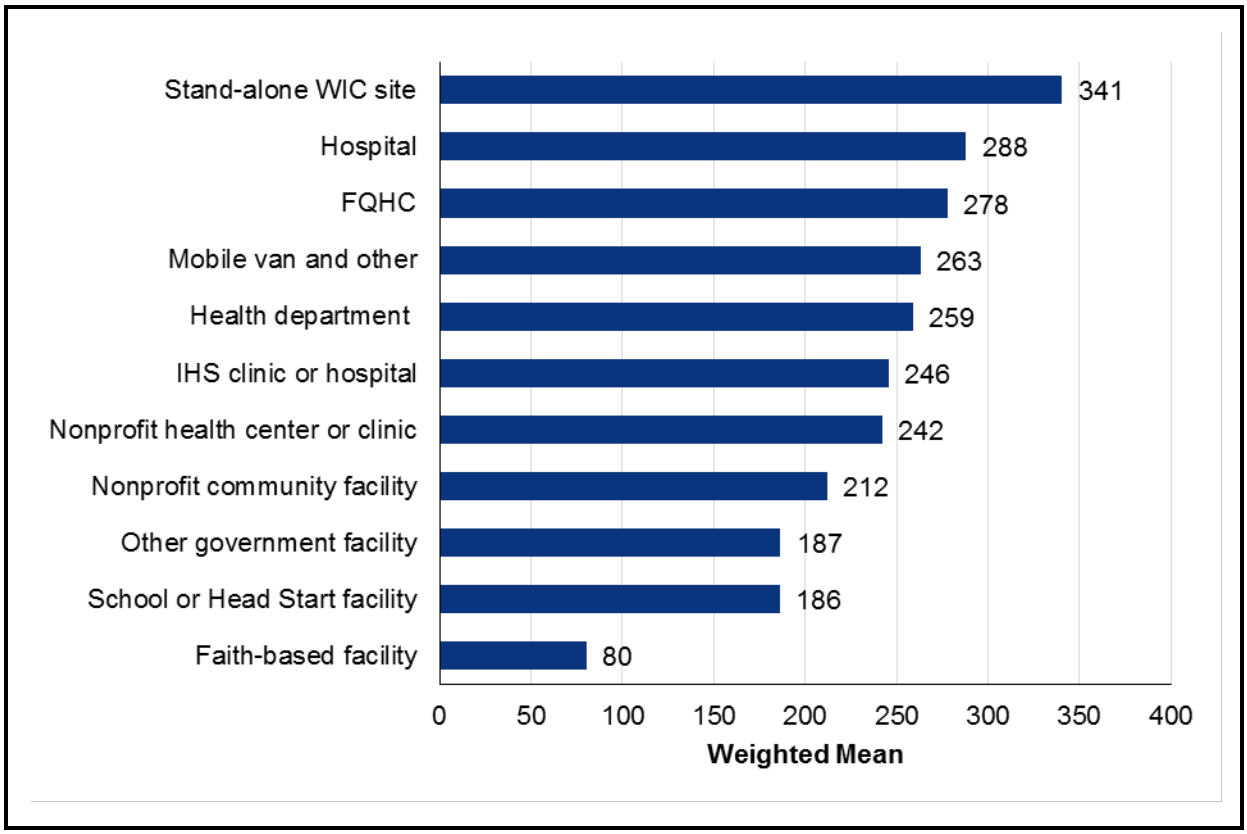
**** Indicates statistical significance if the *p*-value is ≤ .0001.

educator for large sites (caseload ≥ 2,500). Thus, as the number of participants served by sites increases (i.e., caseload), the participant-to-FTE educator ratio increases as well. Appendix K provides information on the overall variability of the estimates for site FTEs and site participant-to-FTE educator ratio including the mean, median, mode, and range.

As mentioned previously, respondents included all staff members who have a role in providing nutrition education when answering the staffing questions, although some staff members may have a very limited role such as assisting with an online module or a self-study quiz. Many times supervisors even assist in nutrition education. As a result, the estimates of participant-to-FTE educator ratio may be understated, suggesting a smaller number of participants per educator than actually exists.

Exhibit 3-10 (Tabulated as Appendix J, Table J-4) provides information on participant-to-FTE educator ratio by the type of facility in which the site is located. The participant-to-FTE educator ratio ranges from 80 for faith-based facilities to 341 for stand-alone WIC sites; statistically significant differences by facility type were found at $p < .0001$. These results suggest that faith-based facilities have a lower ratio than other types of facilities, perhaps because faith-based facilities have smaller caseloads. Conversely, stand-alone WIC sites have a higher ratio than other types of facilities due to their relatively larger caseloads.

Exhibit 3-10. Weighted Mean Site Participant-to-FTE Educator Ratio by Type of Facility



Sources: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,287 and number of nonrespondents = 114.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed.

To better understand the factors associated with the variation in participant-to-FTE educator ratio, multivariate regression analysis was conducted using multiple linear regression. Including all of the independent variables in the model at once provides information about the direct effects of the independent variables on the dependent variable. The dependent variable was the participant-to-FTE

educator ratio. The independent variables included the following: an indicator variable for providing group education sessions, an indicator variable for providing offsite technology-based nutrition education, an indicator variable if the site was located in an urban area, indicator variables for the type of facility in which the site is located (health department, other health-related, stand-alone, and nonprofit), indicator variables for source of WIC staff (all the staff members work only for WIC and all the staff members work for WIC and other programs), and a continuous variable for the percentage of FTE nutrition educators who are professional (vs. nonprofessional) staff. The multiple regression model with all of the predictors produced $R^2 = .173$, indicating that the model sufficiently predicts the effects of the various factors on the participant-to-FTE educator ratio.[18]

Results of the analysis are shown in **Exhibit 3-11**. Results show that offering group education sessions or offsite technology-based nutrition education is associated with the participant-to-FTE educator ratio at a positively statistically significant level. If either of these methods is offered, the ratio is higher, meaning that the number of participants per educator is higher. These findings suggest that WIC sites are providing group nutrition education sessions and/or offsite technology to extend their reach to more participants. Being located in an urban area also has a large, positive statistically significant association with the ratio compared with being located in a rural area. This indicates that if the site is located in an urban area, the ratio is higher, meaning that the number of participants per educator is higher.

Exhibit 3-11. Results of Multivariate Analysis for Site Participant-to-FTE Educator Ratio

Variables	Coefficient Estimate	Standard Error	*p*-value
Site offers group nutrition education sessions (1 = yes)	41.34	15.76	.009**
Site offers offsite technology nutrition education (1 = yes)	45.52	14.59	.002**
Site located in urban area (1 = yes)	113.48	13.21	.000***
Site located in a health department (1 = yes)	55.21	23.32	.018*
Site located in other health-related facility (1 = yes)	20.48	25.03	.414
Stand-alone WIC site (1 = yes)	75.74	34.26	.027*
Site located in non-profit facility (1 = yes)	−69.51	26.33	.008**
All staff members at site work only for WIC (1 = yes)	62.71	20.36	.002**
All staff members at site work for WIC and other programs (1 = yes)	−30.74	26.20	.241
Percentage of FTE nutrition educators who are professional staff	15.67	33.82	.643
Constant	55.21	34.54	.110

Source: 2014 Site Survey Versions 1 and 2.

Notes: Number of strata = 4, number of primary sampling units (PSUs) = 726, and number of observations = 1,278. $R^2 = 0.173$

Analysis was conducted using the combined Site Survey weights.

For indicator variables for the type of facility in which the site is located, the omitted variable was "other facility types" which includes mobile van, government facility that does not provide health services, and other.

For indicator variables for source of WIC staff, the omitted variable was "some staff work only for WIC and other staff work for WIC and other programs."

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

[18] R^2 is a statistical measure that explains how well the model fits the data. Models that predict human behavior are expected to have R^2 values less than 0.5.

In most cases, the type of facility in which the site is located is also statistically significantly associated with the participant-to-FTE educator ratio. For sites located in a nonprofit facility (community service agency, school or Head Start, or faith based), the ratio is lower, meaning that the number of participants per educator is lower compared with the "other facility types" category. For sites located in health departments or stand-alone WIC sites, the ratio is higher, meaning that the number of participants per educator is higher compared with the "other facility types" category. For sites located in other health-related facilities (hospital, Indian Health Service facility, federally qualified health center, or nonprofit health facility), there is no statistically significant effect on the ratio.

For sites in which all staff members work only for WIC, the participant-to-FTE educator ratio is higher compared with sites that have some staff members who work for WIC only and others who work for WIC and other programs. For sites in which all staff members work for both WIC and other programs, there is no statistically significant effect on the ratio. The percentage of FTE nutrition educators who are professional staff members does not have a statistically significant effect on the ratio.

The results of the multivariate analysis suggest that the modes of nutrition education offered, the type of facility in which the site is located, and whether staff members work only for WIC are associated with the participant-to-FTE educator ratio.

3.3.3 Characteristics of Staff Members Who Provide Nutrition Education and Comparisons with Other Studies

Version 1 of the Site Survey asked respondents to report on several characteristics of staff members who provide nutrition education at the site. The questions asked for a count of staff members who have the characteristics of interest, for example, years of WIC experience, but did not ask for characteristics of each individual staff member. For the question regarding years of WIC experience and educational level, the survey instructed the respondent to count both full- and part-time staff with each staff member counted only one time and to include WIC experience at the site as well as experience at other sites or local programs/agencies. Questions regarding credentials and race instructed respondents to count staff members in multiple credential or racial categories if appropriate. **Exhibit 3-12** (Tabulated as Appendix I, Table I-10) displays the characteristics of WIC staff members who deliver nutrition education at WIC sites. These results include any staff person, regardless of the number of hours worked. Most nutrition educators are experienced and have college degrees. As reported by sites, 56% of staff members who provide nutrition education have worked for WIC for 7 or more years and 61% have a bachelor's or graduate degree. Many nutrition educators have credentials: 24% are RDs, 24% are a certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC), and 17% are RNs. Regarding ethnicity and race, 18% are Hispanic or Latino and 75% are White.

The profile of the WIC nutrition education staff from the Site Survey was compared with findings from the WIC Staffing Data Collection Project (USDA, FNS, 2006c) and the Survey of the Public Health Nutrition Workforce (Haughton & George, 2007). The WIC Staffing Data Collection Project, a pilot study conducted with 12 LAs, was conducted to develop and test data collection instruments that allow LAs to report WIC staffing information (for all staff members, not just those who provide nutrition

Exhibit 3-12. Characteristics of WIC Site Staff Members Who Deliver Nutrition Education (Weighted Percentage of Nutrition Education Staff)

	Weighted Percentage of Nutrition Education Staff
Number of Years of Experience Working for WIC Program (n = 680, nonrespondents = 16)	
Less than 1 year	10.9
1–2 years	12.6
3–6 years	21.0
7–10 years	17.2
11–20 years	21.5
More than 20 years	16.9
Highest Degree Received (n = 682, nonrespondents = 14)	
High school diploma or GED	21.4
Associate's degree	13.9
Bachelor's degree	50.7
Graduate degree	9.9
Unknown	4.1
Credentials Held (n = 666, nonrespondents = 30)[a]	
Registered dietitian (RD)	24.2
Licensed dietitian/nutritionist (LD/LN)	12.0
Dietetic technician, registered (DTR)	1.6
Registered nurse (RN)	16.5
Licensed practical nurse (LPN)	3.0
International Board Certified Lactation Consultant (IBCLC)	6.0
Certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC)	23.8
Certified medical assistant (CMA)	0.7
Ethnicity (n = 686, nonrespondents = 10)	
Hispanic or Latino	17.6
Not Hispanic or Latino	73.4
Unknown	9.0
Race (n = 680, nonrespondents = 16)[a]	
American Indian or Alaska Native	3.9
Asian	3.5
Black or African American	11.1
Native Hawaiian or other Pacific Islander	0.3
White	74.5
Unknown	10.0

Source: 2014 Site Survey, Version 1

Notes: The Site Survey collected information on the number of nutrition educators in each category. This information was used to estimate the percentage of staff members in each category across all responding sites. Estimates were weighted using the Version 1 Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed.

[a] Respondents could count staff members in more than one category.

education) and provide FNS with information on availability and usefulness of a variety of LA staffing-related data as well as the feasibility of collection and relevant feedback on data collection methods and sources of information. The Site Survey found that 61% of nutrition educators have a bachelor's or graduate degree compared with 35% for the WIC Staffing Data Collection Project. This difference is likely attributable to the fact that the WIC Staffing Data Collection Project was a pilot study with 12 LAs and asked about all staff, and the Site Survey was a nationally representative survey of 1,401 sites and collected information specific to staff members who provide nutrition education; thus, the data from the Site Survey are likely to be more representative of the population of sites.[19]

Exhibit 3-13 compares results of the Site Survey with the Survey of the Public Health Nutrition Workforce Survey (Haughton & George, 2007). The 2006–2007 Public Health Nutrition Workforce Survey was a census of all public health nutrition personnel in the United States, including its territories and Tribal organizations in a public health nutrition program or service under the purview of the State's or territory's official health agency. Every person classified or functioning as a nutritionist or nutrition paraprofessional in a public health program at the State or local level was asked to complete the questionnaire; thus, the survey was not limited to people who provide nutrition education (as was the case for the Site Survey). Nutritionists or dietitians by education or training who were in non-nutrition-related positions were not asked to complete the questionnaire; these individuals may or may not have a role in delivering nutrition education. The results were reported for the public health nutrition workforce overall (n = 10,683) and for the WIC (n = 9,467; 88.6%) and non-WIC (n = 1,216; 11.4%) workforces. The data shown in Exhibit 3-13 are limited to the WIC workforce. Despite the differences noted in the study populations for the two surveys, the results are generally similar. For example, according to the Site Survey, 61% of WIC nutrition educators have a bachelor's or graduate degree versus 70% for WIC staff members according to the 2006–2007 Public Health Nutrition Workforce Survey. When comparing the results of the two surveys in terms of types of credentials held, the results are similar for RDs (both surveys reported about one-fourth of staff members have an RD). The percentage of staff members who are licensed dietitians/nutritionists (LD/LN) was higher for the Public Health Nutrition Workforce Survey (21%) than for the Site Survey (12%). The Site Survey reported a higher percentage of RNs (17%) compared with the Public Health Nutrition Workforce Survey (2%). These differences may be attributable to the fact that the Public Health Nutrition Workforce Survey was not limited to nutrition educators and included both State and local nutrition staff, while the Site Survey included only nutrition educators at the local level. Also, the Public Health Nutrition Workforce Survey collected characteristics of each individual respondent, while the Site Survey captured counts of nutrition education staff members who have characteristics of interest. Comparing the race and ethnicity of WIC staff for the two surveys, both surveys reported similar results.

[19] Data were not available from the WIC Staffing Data Collection Project to make comparisons for other characteristics of WIC nutrition education staff.

Exhibit 3-13. Comparison of Profile of WIC Site Nutrition Education Staff from the Site Survey with the Survey of the Public Health Nutrition Workforce[a]

	Site Survey (n = 686)		Unweighted % of WIC Respondents from the Public Health Nutrition Workforce Survey (n = 9,467)
	Unweighted % of Nutrition Education Staff	Weighted % of Nutrition Education Staff	
Highest Degree Received			
High school diploma or GED	22.5	21.4	21.3
Associate's degree	13.4	13.9	7.7
Bachelor's degree	49.3	50.7	45.5
Graduate degree	11.2	9.9	24.7
Unknown	3.7	4.1	0.8
Credentials Held[b]			
Registered dietitian (RD)	26.6	24.2	26.1
Licensed dietitian/nutritionist (LD/LN)	12.9	12.0	21.2
Dietetic technician, registered (DTR)	1.8	1.6	1.5
Registered nurse (RN)	14.7	16.5	1.8
Licensed practical nurse (LPN)	3.3	3.0	0.8
International Board Certified Lactation Consultant (IBCLC)	6.4	6.0	3.2
Certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC)	26.4	23.8	20.6
Certified medical assistant (CMA)	0.9	0.7	NA
Ethnicity			
Hispanic or Latino	17.3	17.6	20.9
Not Hispanic or Latino	75.5	73.4	69.0
Unknown	7.2	9.0	10.1
Race[b]			
American Indian or Alaska Native	4.1	3.9	4.9
Asian	4.2	3.5	5.6
Black or African American	12.0	11.1	12.1
Native Hawaiian or other Pacific Islander	0.4	0.3	0.9
White	75.0	74.5	69.3
Unknown	8.4	10.0	7.2

Sources: 2014 Site Survey, Version 1. Survey of the Public Health Nutrition Workforce (Haughton & George, 2007). Responses shown are for WIC workforce.

Notes: The Site Survey collected information on the number of nutrition educators in each category. This information was used to estimate the percentage of staff members in each category across all responding sites. Estimates were weighted using the Version 1 Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed. NA = not asked.

[a] Data were not available from the Public Health Nutrition Workforce Survey (e.g., the standard errors for the estimates) to test whether differences were statistically significant.

[b] Respondents could count staff members in more than one category.

3.3.4 WIC Staff Support for Non-English-Speaking Participants

WIC program regulations and FNS nutrition education guidance highlight the importance of addressing individual needs and cultural preferences in delivering nutrition education. Providing nutrition education that can be understood by participants who do not speak English is critical for responding to individual needs.

For 16% of WIC sites, all of their participants speak English as their primary language (i.e., no non-English speaking participants) and for 3% of sites most participants (91 to 100%) are non-English speaking (see **Exhibit 3-14** [Tabulated as Appendix I, Table I-22]). Among sites with non-English-speaking participants, most (95%) reported having participants who speak Spanish. Twenty percent or more of sites reported having participants who speak the following languages: Arabic (22%), American Sign Language (20%), and Vietnamese (20%). Other languages were reported by fewer than 20% of sites (see Appendix I, I-22 for a complete listing of languages).

Exhibit 3-14. Percentage of WIC Participants Who Speak a Language Other than English as Their Primary Language (Weighted Percentage of Sites)

Percentage of WIC Participants	Weighted % of Sites
None (Primary language is English)	16.4
1–5%	30.6
6–10%	10.4
11–30%	16.7
31–50%	8.7
51–70%	8.8
71–90%	5.7
91–100%	2.7

Sources: 2014 Site Survey, Version 1. Number of respondents = 696 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights.

The results from the Site Survey were compared with the 2012 National Survey of WIC Participants II (NSWP II) (USDA, FNS, 2012), which included a survey of 503 LAs, and the results are generally similar. For example, the NSWP II reported that for 14% of WIC sites, all of the participants at the site spoke English, similar to the 16% reported in the Site Survey.

For 48% of sites, none of their nutrition educators provide nutrition education in a language other than English, and for 13% of sites, most of their educators (91 to 100%) provide nutrition education in a language other than English (see **Exhibit 3-15** [Tabulated as Appendix I, Table I-23]). Among sites with nutrition educators who provide nutrition education in languages other than English, 91% of sites have educators who speak Spanish (see Appendix I, Table I-23 for a complete listing of languages spoken for WIC nutrition educators).

Although Spanish is readily spoken in most WIC sites, other languages spoken by WIC staff members may not always be closely aligned with the languages spoken by WIC participants at their sites. It is important to note that the survey did not collect data on the number or percentage of participants who speak each non-English language, only the percentage who speak a language other than English. The number of participants at each site who speak languages other than Spanish may be small, making the alignment of participant and nutrition educator language less of a concern.

Exhibit 3-15. Percentage of WIC Site Staff Members Who Provide Nutrition Education in a Language Other than English (Weighted Percentage of Sites)

Percentage of WIC Site Staff	Weighted % of Sites
None	48.4
1–5%	—(n/a)[a]
6–10%	0.5
11–30%	16.0
31–50%	12.8
51–70%	6.9
71–90%	3.0
91–100%	12.5

Source: 2014 Site Survey, Version 1. Number of respondents = 566 and number of nonrespondents = 126.

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights. See Section 2.3.8 on data quality concerns for this question and how they were addressed.

[a] An estimate is not provided because no respondents selected this response.

Additional analysis was conducted to better understand how the ethnicity and language skills of WIC nutrition educators align with the local WIC population.[20] To assess the alignment of ethnicity, two variables were used: (1) percentage of staff members who are Hispanic/Latino and (2) percentage of local participants who are Hispanic/Latino. Each variable had the same response options: none, 1 to 5%, 6 to 10%, 11 to 35%, 36 to 100%. Information on the percentage of staff members who are Hispanic/Latino was available from Version 1 of the Site Survey. Information on the percentage of participants who are Hispanic/Latino was estimated using Census data, as described in Section 2.3.9. A cross-tabulation using the two variables was then run. Each site was then assigned to one category (high, medium, or low) based on the alignment of the characteristics of staff members and participants:

- High alignment = the percentage category for staff was the same as the percentage category for participants (e.g., both the staff and participants are in the 6 to 10% category)
- Medium alignment = the percentage category for staff was one category lower or higher than the percentage category for participants (e.g., staff is the 6 to 10% category and participants is the 11 to 35% category)
- Low alignment = the percentage category for staff was two or more categories lower or higher than the percentage category for participants (e.g., staff is the 6 to 10% category and participants is the 36 to 100% category)

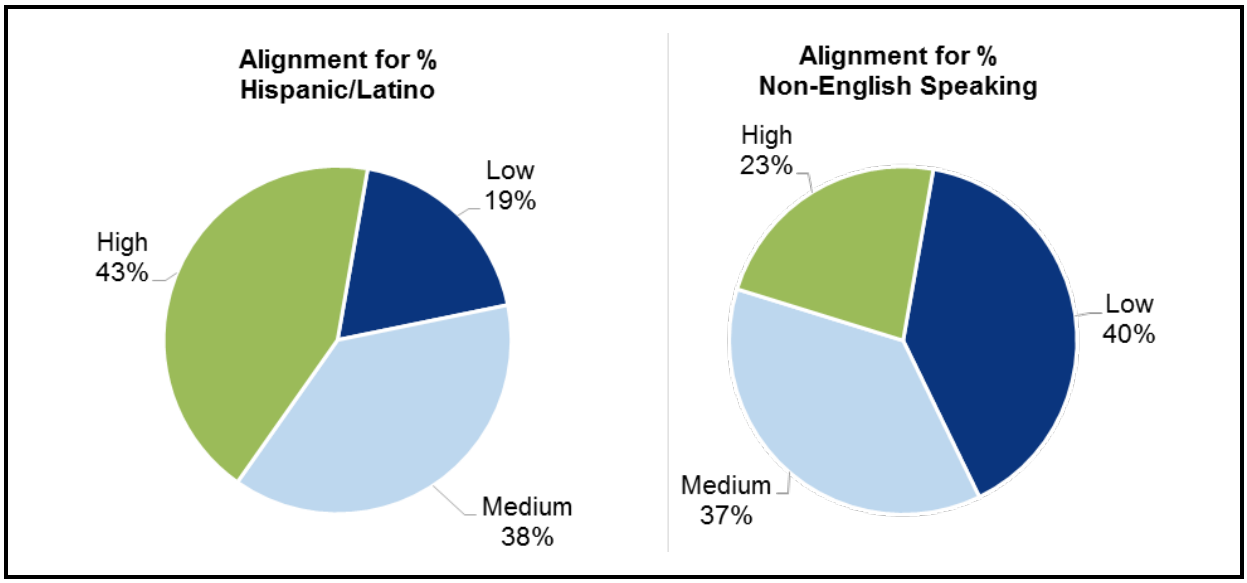
A similar approach was used to assess alignment of language skills for staff members and participants. Two variables were used for this analysis: (1) percentage of staff members who are non-English speaking and (2) percentage of local participants who are non-English speaking. Each variable had the same response options: none, 1 to 5%, 6 to 10%, 11 to 30%, 31 to 50%, 51 to 70%, 71 to 90%, 91 to 100%. Information on the percentage of staff members who are non-English speaking and the percentage of participants who are non-English speaking was available from Version 1 of the Site Survey. A cross-tabulation using the two variables was then run. Each site was then assigned to one category (high,

[20] It was not possible to assess the alignment for race because the race question in the Site Survey allowed respondents to categorize staff into one or more categories, so comparisons were not possible with the participant data, which did not allow for more than one race.

medium, or low) based on the alignment of the characteristics of staff members and participants as described above.

Exhibit 3-16 (Tabulated as Appendix I, I-24) presents the results of this analysis. About 81% of sites had high or medium alignment for Hispanic/Latino (i.e., the percentage category for staff was equal to or one category higher or lower than the percentage category for participants). These findings suggest that for 81% of sites, the percentage of WIC nutrition educators at a site who are Hispanic/Latino is similar to the percentage of WIC participants at the site, suggesting a good match between the ethnicity of staff and participants.

Exhibit 3-16. Alignment of Characteristics of WIC Site Nutrition Educators with Local WIC Participants



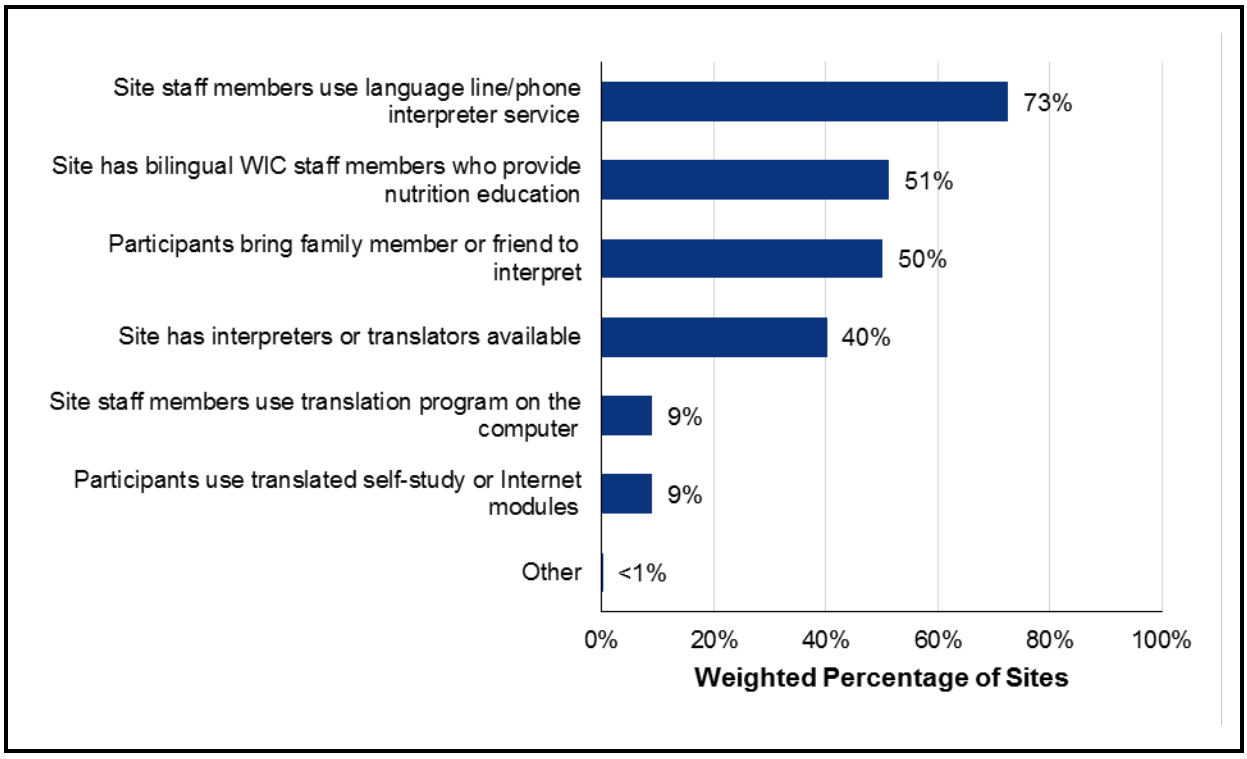
Source: 2014 Site Survey, Version 1 and Census data on ethnicity. Number of respondents for Hispanic/Latino analysis = 624; number of respondents for non-English-speaking analysis = 567.

Notes: Non-English speaking includes Spanish and all other languages.

About 60% of sites had high or medium alignment for non-English-speaking participants (i.e., the percentage category for staff was equal to or one category higher or lower than the percentage category for participants). These findings suggest that for 60% of sites, the percentage of WIC nutrition educators who speak a language other than English is similar to the percentage of WIC participants at the site who speak a language other than English; however, this does not necessarily mean that the non-English language(s) spoken by participants is(are) the same non-English language(s) spoken by staff. The survey data did not allow for this level of comparison. Also, these findings suggest that about 40% of sites may not have sufficient staff members who are non-English speaking to serve non-English-speaking populations.

Exhibit 3-17 (Tabulated as Appendix I, Table I-25) details the methods used by sites to provide nutrition education to non-English-speaking participants for sites reporting they serve a non-English-speaking population. Almost three-quarters of sites (73%) reported using a language line/phone interpreter service for any type of visit. Local WIC staff members often use this service to help them communicate with participants who speak a language other than English. The service provides immediate access to

Exhibit 3-17. Methods Used by Sites to Provide Nutrition Education to Non-English-Speaking Participants (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Only sites that provide nutrition education to non-English-speaking participants were included in the analysis (n = 659). Number of respondents = 659 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

Respondents could select multiple responses.

interpreters who participate in a nutrition education session to interpret for the staff member and participant. Additionally, about half of sites either reported having bilingual staff members who provide nutrition education (51%) or non-English-speaking participants bring a family member or friend to interpret (50%).

The delivery of nutrition education to non-English-speaking participants was explored in the interviews with site staff. Although the majority of interviewees who provide nutrition education to non-English speakers reported being able to communicate successfully with them, some, particularly those whose clientele is mostly English speaking, shared that they have encountered communication challenges and lack available alternatives and strategies for communication. When interacting with Spanish-speaking participants, some interviewees reported they have only enough Spanish skills to have a discussion about food and nutrition and complete a WIC visit. Respondents frequently referred to this as "WIC Spanish." Although they are able to communicate adequately, they shared that their limited Spanish skills inhibit their ability to use a participant-centered style of nutrition education. Using open-ended questions was noted particularly as a problem because of the longer answers provided by participants. For these appointments, nutrition educators tend to use a more directive approach. Interviewees also discussed adapting their approach when faced with a language barrier during a WIC visit. They reported simplifying

the language used and limiting discussion topics. Several interviewees also noted that they use more visual nutrition reinforcers with participants who may have difficulty understanding English.

- *"For me, it is the language barrier. We see a lot of Spanish- speaking participants here and trying to ask a lot of open-ended questions, do the counseling session in Spanish, while still focusing on PCE* [participant-centered education] *is one of the challenges."*
- *"I do sessions in Spanish, I wouldn't say I'm completely fluent in Spanish but I can do the WIC-type Spanish. I can tell if they are understanding what we are talking about. If they are not, then I use different ways of explaining it or different techniques, like pointing at pictures in handouts or using food models."*
- *"Since we have the Spanish interpreter* [for group education], *sometimes the participation is a little bit different because some* [participants] *are waiting to answer in English, but they are waiting for the interpreter, so sometimes that takes a little bit longer but overall it goes well."*

3.4 Nutrition Education Staff Qualifications and Training

This section provides descriptive information on the qualifications of and training provided to staff members who provide nutrition education. Based on information from the State Plans and findings from the Local Agency Survey, information is provided on SAs' and LAs' policies for minimum qualifications (education and credentials) and training. Next, information is presented on the types of training provided or sponsored by SAs and LA policy and procedures for ongoing training of nutrition educators. Findings from the Local Agency and Site Surveys on the specific types of training offered, the percentage of staff members receiving different types of training, and the annual number of hours of training received are presented. These findings are supplemented by qualitative information from the interviews with site staff.

3.4.1 Policies on Staff Qualifications and Training

Exhibit 3-18 (Tabulated as Appendix I, Table I-12) provides information on SA staffing standards relevant to staff members who provide nutrition education. The most common standard prescribed by SAs is the requirement for specific credentials (79% overall), and more than half of SAs have specific requirements for paraprofessionals (56%). Compared with Indian Tribal Organizations (ITOs) and territories, geographic States[21] have more prescriptive staffing requirements across all standards; for example, 94% of the geographic States have standards for required credentials compared with 46% of ITOs and territories.

Exhibit 3-19 (Tabulated as Appendix I, Table I-13) provides information on SA policies pertaining to the types of staff members who are allowed to provide general nutrition education or high-risk nutrition education contacts as reported in the fiscal year (FY) 2014 State Plans. For general nutrition education, most SAs allow a wide range of staff members to provide nutrition education contacts.

[21] The geographic States category includes the District of Columbia.

Exhibit 3-18. State Agency Policy on Prescribed Staffing Standards (Unweighted Percentage of State Agencies)

Standard	Geographic States and District of Columbia (n = 48)	ITOs and Territories (n = 22)	All SAs (n = 70)
Credentials	93.8	45.5	78.6
Staffing levels	54.2	27.3	45.7
Staff-to-participant ratio standards	47.9	13.6	37.1
Paraprofessional requirements	66.7	31.8	55.7
Other[a]	25.0	9.1	20.0
Not applicable	2.1	45.5	15.7

Source: Abstraction of 2014 State Plans, n = 70. Data were not available for 20 SAs that were mainly ITOs. Multiple responses allowed.

[a] Write-in responses included "Paraprofessionals are only used for breastfeeding," "Peer counselor requirements," "bilingual," and "knowledge in computer systems."

Exhibit 3-19. State Agency Policy on Staff Members Allowed to Provide Nutrition Education (Unweighted Percentage of State Agencies)

	Geographic States and District of Columbia (n = 51)	ITOs and Territories (n = 24)	All SAs (n = 75)
General Nutrition Education			
Paraprofessionals[a]	76.5	87.5	80.0
Licensed practical nurses	66.7	37.5	57.3
Registered nurses	90.2	37.5	73.3
BS in home economics	84.3	37.5	69.3
BS in the field of human nutrition	94.1	66.7	85.3
Registered dietitian or MS in nutrition (or related field)	88.2	83.3	86.7
Dietetic technician (2-year program completed)	72.6	37.5	61.3
Other	41.2	29.2	37.4
High-Risk Nutrition Contacts			
Paraprofessionals[a]	3.9	12.5	6.7
Licensed practical nurses	13.7	16.7	14.7
Registered nurses	52.9	16.7	41.3
BS in home economics	35.3	8.3	26.7
BS in the field of human nutrition	60.8	50.0	57.3
Registered dietitian or MS in nutrition (or related field)	94.1	95.8	94.7
Dietetic technician (2-year program completed)	17.7	20.8	18.7
Other	37.3	41.7	38.7

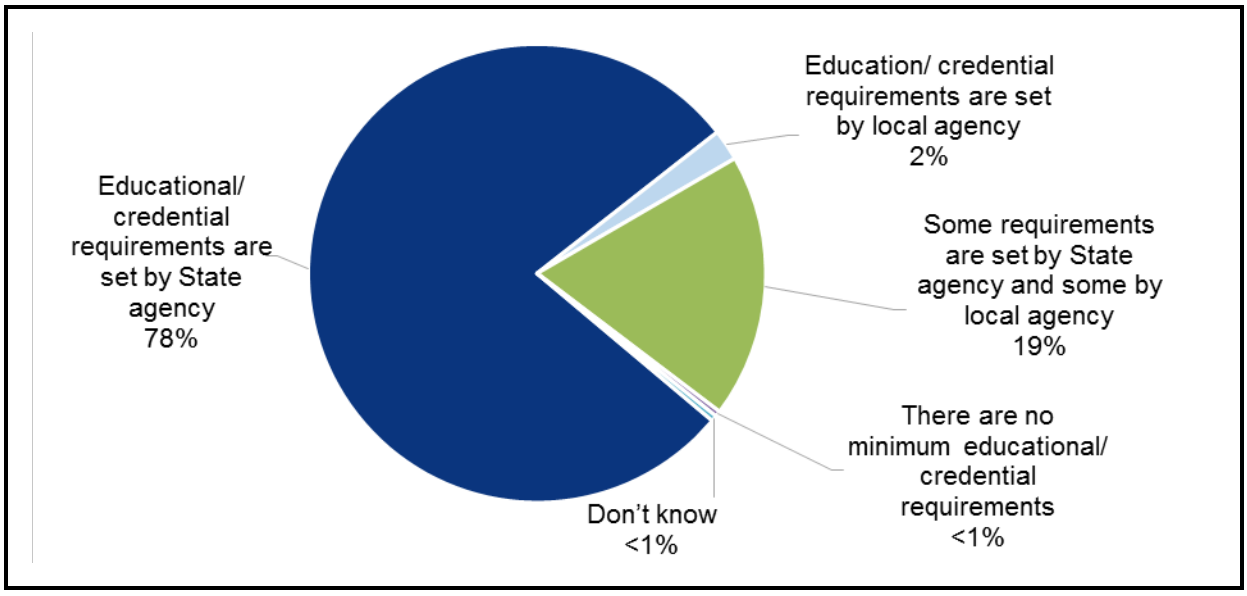
Source: Abstraction of 2014 State Plans, n = 75. Data were not available for 15 SAs that were all ITOs. Multiple responses allowed.

[a] Per FY 2014 State Plan Guidance, paraprofessionals are individuals without a BS degree with formal WIC training by the SA or LA.

Nearly all SAs allow RDs or individuals with an MS degree in nutrition or a related field (95% of SAs) to provide nutrition education to high-risk participants, and over half of SAs (57%) allow staff members who have a bachelor's degree in human nutrition to deliver nutrition education to high-risk participants. Only 7% of SAs allow paraprofessionals to provide nutrition education to high-risk individuals.

The Local Agency Survey collected information on how policies are set for minimum educational or credential requirements for nutrition educators. These results are presented in **Exhibit 3-20** (Tabulated as Appendix I, Table I-14). Consistent with information from the State Plans, for 78% of LAs, these requirements are set by SAs, and for 19% of LAs, some requirements are set by the SA and some by the LA.

Exhibit 3-20. How Policies Are Set for the Minimum Educational and Credential Requirements for Staff Members Who Provide Nutrition Education (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 874 and number of nonrespondents = 19.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Exhibit 3-21 (Tabulated as Appendix I, Table I-15) shows the most common minimum education requirements required by LAs for different types of staff members who provide nutrition education. Nearly all LAs have policies that stipulate minimum educational requirements. Most LAs require that nonprofessional staff, such as administrative/clerical/support staff, breastfeeding peer counselors, and trained nutrition paraprofessionals, have at least a high school diploma or GED. Many LAs require that specific types of staff members have a bachelor's degree. In addition to RDs and degreed nutritionists who are not RDs, some LAs require the following job classifications/types of staff members to have a bachelor's degree:

- nutrition education coordinators (74% of LAs)
- WIC director/coordinator (70% of LAs)
- site/clinic supervisors (61% of LAs)

Few LAs require that staff members have a graduate degree.

Exhibit 3-21. Local Agency Policy for the Minimum Educational Requirements for Staff Members Who Provide Nutrition Education

Job Classification/ Type of Staff	Minimum Education Level Most Often Required			
	High School Diploma/GED	Associate's Degree	Bachelor's Degree	Graduate Degree
WIC director/coordinator			●	
Site/clinic supervisor			●	
Registered dietitian (RD)[a]			●	
Degreed nutritionist, not RD[a]			●	
Trained nutrition paraprofessional	●			
Nurse		◒	◒	
Nutrition education coordinator			●	
Administrative/clerical/support staff	●			
Lactation consultant/WIC-designated breastfeeding expert	◒		◒	
Breastfeeding coordinator			●	
Breastfeeding peer counselor	●			

● = Indicates 50% or more of LAs have this requirement.

◒ = Indicates 30–49% of LAs have this requirement.

Source: 2014 Local Agency Survey. Number of respondents = 862 and number of nonrespondents = 14.

[a] By definition, individuals in these job classifications would have to have a BA, so this is not a required LA policy.

Exhibit 3-22 (Tabulated as Appendix I, Table I-16) shows the most common types of credentials required by LAs for different types of staff members who provide nutrition education. Credentials are not required by all LAs, and rates of requirement vary by job classification/types of staff. Most supervisory positions, for example, have higher rates of credential requirements. In addition to RDs, some LAs require the following job classifications/types of staff to hold an RD credential:

- nutrition education coordinators (48% of LAs)
- WIC director/coordinators (46% of LAs)
- site/clinic supervisors (35% of LAs)

Lactation consultants/WIC-designated breastfeeding experts are required to be either International Board Certified Lactation Consultant (IBCLC) or CLC/CLE/CLEC certified by about 43% of LAs, and breastfeeding coordinators are required to be CLC/CLE/CLEC certified by 37% of LAs. Other job classifications/types of staff, including degreed nutritionists, trained nutrition paraprofessionals, administrative/clerical/support staff, nurses, and breastfeeding peer counselors, are typically not required to hold specific credentials. This may be because these types of positions involve other types of training, experience, or other formal certification separate from the credentials listed here.

Exhibit 3-22. Local Agency Policy for Required Credentials for Staff Members Who Provide Nutrition Education

Job Classification/ Type of Staff	Credentials Most Often Required								
	RD	LD/LN	DTR	RN	LPN	IBCLC	CLC/CLE/ CLEC	CMA	None
WIC director/coordinator	◒								◒
Site/clinic supervisor	◒								◒
Registered dietitian (RD)[a]	●								
Degreed nutritionist, not RD[a]									●
Trained nutrition paraprofessional									●
Nurse				●					
Nutrition education coordinator	◒								◒
Administrative/clerical/support staff									●
Lactation consultant/WIC-designated breastfeeding expert						◒	◒		
Breastfeeding coordinator							◒		
Breastfeeding peer counselor									●

● = Indicates 50% or more of LAs have this requirement.

◒ = Indicates 30–49% of LAs have this requirement.

Source: 2014 Local Agency Survey. Number of respondents = 860 and number of respondents = 16.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. RD = registered dietitian; LD/LN = licensed dietitian/licensed nutritionist; DTR = dietetic technician, registered; RN = registered nurse; LPN = licensed practical nurse; IBCLC = International Board Certified Lactation Consultant; CLC/CLE/CLEC = certified lactation consultant/certified lactation educator/certified lactation educator and counselor; CMA = certified medical assistant.

Respondents could select multiple responses.

[a] By definition, individuals in this job classifications would have to have an RD, so this is not a required LA policy.

LAs require training for new employees in the form of State-administered training programs, self-paced training modules, and on-the-job training with observation. **Exhibit 3-23** (Tabulated as Appendix I, Table I-17) shows the types of training that LAs require for new employees of different job classifications/types of staff. LAs often require multiple types of trainings with similar frequencies. State-administered training programs, self-paced training modules, and on-the-job training with observation are required by at least 50% of all LAs for every job classification/type of staff. Competency-based or certification programs are required by at least 30% of LAs for every job classification except administrative/clerical/support staff and breastfeeding peer counselors. These results show that new employees of all job classifications/types of staff members who provide nutrition education are required to undergo multiple forms of training at the majority of LAs.

3.4.2 Description and Frequency of Staff Training

Exhibit 3-24 (Tabulated as Appendix I, Table I-18) identifies the types of training provided or sponsored by SAs for professional and paraprofessional staff members who provide nutrition education, as reported in State Plans. The most common type of training provided on a regular basis is breastfeeding promotion/support, provided by 85% of all SAs for professional staff and 72% of all SAs for paraprofessional staff. Value Enhanced Nutrition Assessment (VENA) competency training is provided or sponsored on a regular basis by many SAs for professional staff (61% of SAs) and paraprofessional staff (49% of SAs). Other types of training are provided on a regular basis less frequently.

Exhibit 3-23. Local Agency Policy for Required Training for New Employees Who Provide Nutrition Education

Job Classification/ Type of Staff	Training Most Often Required for New Employees			
	Competency-Based or Certification Program	State-Administered Training Program	Self-Paced Training Modules	On-the-Job Training with Observation
WIC director/coordinator	◒	●	●	●
Site/clinic supervisor	◒	●	●	●
Registered dietitian (RD)	◒	●	●	●
Degreed nutritionist, not RD	◒	●	●	●
Trained nutrition paraprofessional	◒	●	●	●
Nurse	◒	●	●	●
Nutrition education coordinator	◒	●	●	●
Administrative/clerical/support staff		●	●	●
Lactation consultant/WIC-designated breastfeeding expert	●	●	●	●
Breastfeeding coordinator	◒	●	●	●
Breastfeeding peer counselor		●	●	●

● = Indicates 50% or more of LAs have this requirement.

◒ = Indicates 30–49% of LAs have this requirement.

Source: 2014 Local Agency Survey. Number of respondents = 867 and number of nonrespondents = 9.

Notes: Competency-based was defined in the survey as an educational approach based on a predetermined set of knowledge, skills, and abilities that the student is expected to accomplish.

Respondents could select multiple responses.

The most common type of training provided on an as-needed basis is cultural competencies, provided or sponsored by 57% of SAs for professional staff and by 45% of SAs for paraprofessional staff. The results suggest that geographic States are generally more likely to provide training on a regular basis for both professional and paraprofessional staff, while ITOs and territories are more likely to provide training on an as-needed basis. This may be because many ITOs and territories administer smaller programs than geographic States and have fewer staff members to train and fewer staff members to provide the training.

The Local Agency Survey collected information on LA policy and procedures for ongoing training for nutrition educators. As shown in **Exhibit 3-25** (Tabulated as Appendix I, Table I-19), 65% of LAs reported they implement their SA's requirements for ongoing training, 16% have their own requirements based on a specific number of hours per month or year (instead of or in addition to their SA requirements), and 28% have no policy for ongoing training.

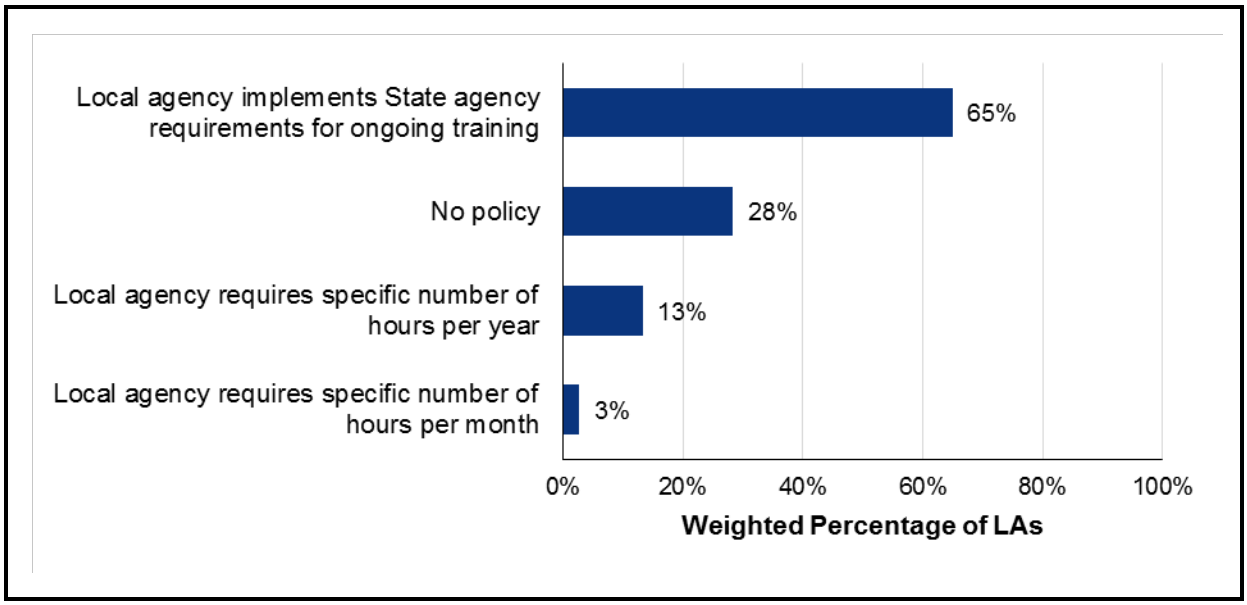
A variety of methods are used to provide ongoing training to the staff, and many LAs use more than one type of method. As shown in **Exhibit 3-26** (Tabulated as Appendix I, I-19), ongoing training is most often provided to staff members via SA or LA webinars (83%), national/State/regional conferences or workshops (80%), or self-study training modules or courses (76%) or during LA or site staff meetings (74%).

Exhibit 3-24. Unweighted Percentage of State Agencies that Provide or Sponsor Training for Staff Members Who Provide Nutrition Education by Type of Training

	Geographic States and District of Columbia (n = 50)		ITOs and Territories (n = 24)		All SAs (n = 74)	
	Regular Basis	As-Needed Basis	Regular Basis	As-Needed Basis	Regular Basis	As-Needed Basis
Professional Staff Training						
General nutrition education methodology	64.0	50.0	37.5	54.2	55.4	51.4
Nutrition counseling techniques	78.0	34.0	33.3	62.5	63.5	43.2
Breastfeeding promotion/support	96.0	22.0	62.5	33.3	85.1	25.7
Cultural competencies	56.0	52.0	20.8	66.7	44.6	56.8
Customer service	64.0	42.0	41.7	41.7	56.8	41.9
VENA staff competency training	76.0	36.0	29.2	62.5	60.8	44.6
Other	32.0	10.0	12.5	4.2	25.7	8.1
Paraprofessional Staff Training						
General nutrition education methodology	46.0	28.0	54.2	37.5	48.7	31.1
Nutrition counseling techniques	46.0	18.0	37.5	41.7	43.2	25.7
Breastfeeding promotion/support	72.0	14.0	70.8	33.3	71.6	20.3
Cultural competencies	42.0	38.0	25.0	58.3	36.5	44.6
Customer service	52.0	28.0	50.0	29.2	51.4	28.4
VENA staff competency training	52.0	16.0	41.7	50.0	48.7	27.0
Other	26.0	8.0	12.5	4.2	21.6	6.8

Source: Abstraction of 2014 State Plans, n = 74. Data were not available for 16 SAs that were mainly ITOs. Multiple responses allowed.

Exhibit 3-25. Local Agency Policy for Ongoing Training for Nutrition Educators (Weighted Percentage of Local Agencies)



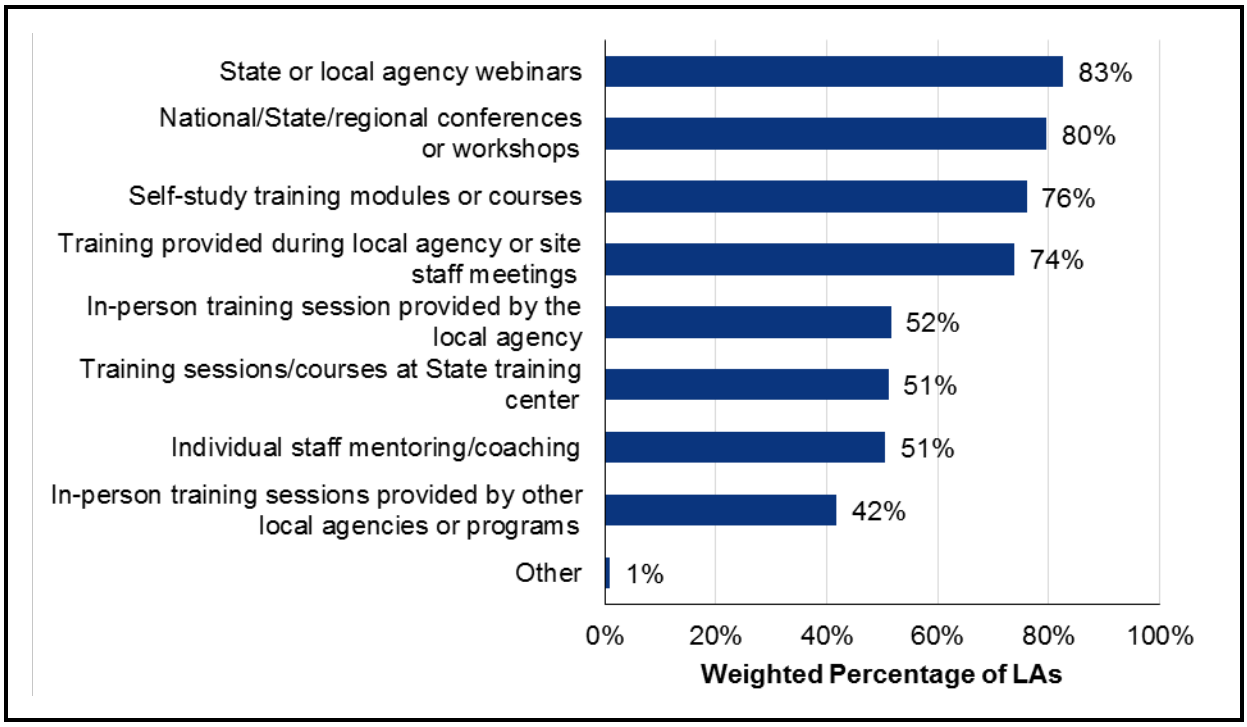
Source: 2014 Local Agency Survey. Number of respondents = 874 and number of nonrespondents = 19.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents were instructed to not include continuing education required to maintain a credential.

Respondents could select multiple responses.

Exhibit 3-26. How Ongoing Training is Usually Provided to Nutrition Educators (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 866 and number of nonrespondents = 27.

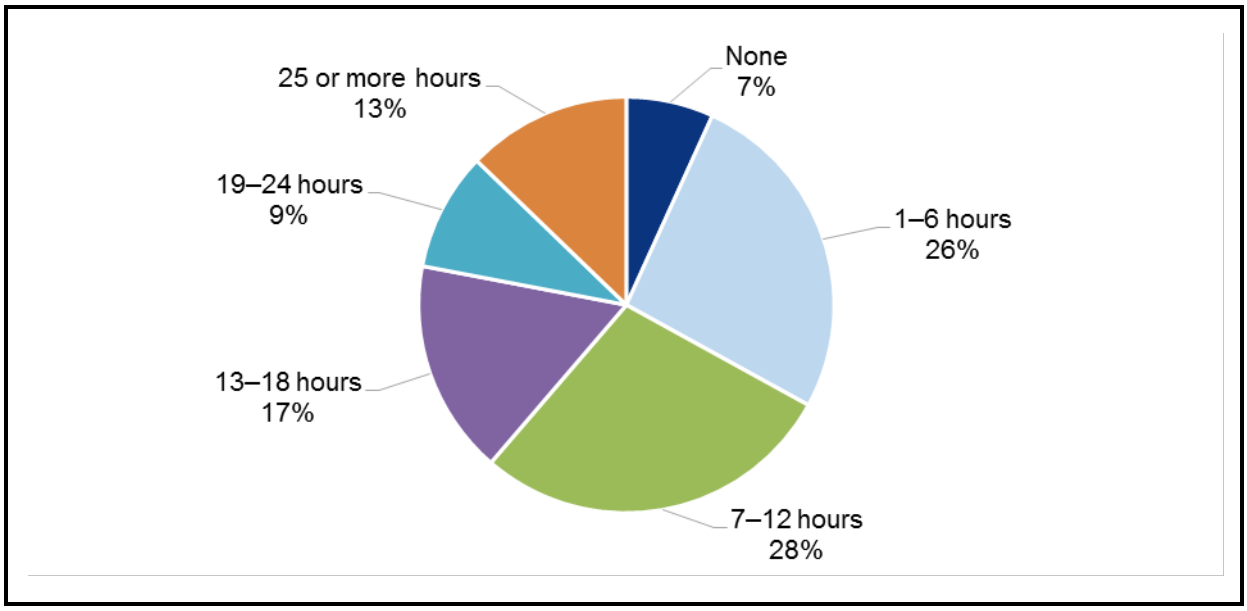
Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

Variability was also observed with regard to the number of hours of training provided annually to each nutrition educator. As shown in **Exhibit 3-27** (Tabulated as Appendix I, Table I-19), 7% of LAs provide no ongoing training, 54% of LAs provide 1 to 12 hours, 26% provide 13 to 24 hours, and 13% provide 25 or more hours.

The Local Agency Survey collected information on specific training pertaining to delivering nutrition education that was offered during the past 24 months and the estimated percentage of nutrition educators receiving those types of training. **Exhibit 3-28** (Tabulated as Appendix I, Table I-20) provides the weighted percentage of LAs reporting the percentage of nutrition education staff members who received training on specific topics during the past 24 months. Respondents were instructed to include training that was provided by their LA, by their SA, and any outside training. Sixty-one percent of LAs reported that 76 to 100% of their nutrition educators received training on skills related to VENA and participant/learner-centered education. More than one-half of LAs reported 76 to 100% of their nutrition educators received training on the following topics: communication skills (55% of LAs), motivational interviewing (52% of LAs), and goal setting (52% of LAs). The other types of training asked about in the survey were not widely offered by LAs.

Exhibit 3-27. Number of Hours of Nutrition Education Training Provided Annually to Each Staff Member Who Provides Nutrition Education (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 852 and number of nonrespondents = 41.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Exhibit 3-28. Percentage of Nutrition Educators who Received Training on Specific Topics during the Past 24 Months (Weighted Percentage of Local Agencies)

Topics	None	1–25%	26–50%	51–75%	76–100%	Don't Know
3-step counseling[a]	36.5	11.1	4.9	4.2	23.5	19.7
Facilitated group discussion	35.6	14.6	7.3	5.7	27.6	9.2
Motivational interviewing	11.3	13.1	10.4	6.4	52.4	6.5
Communication skills	8.8	12.7	9.3	7.4	55.3	6.6
Goal setting	12.8	11.6	9.0	7.9	52.3	6.4
Emotion-based counseling	33.3	9.4	7.5	6.7	30.2	12.9
Skills related to VENA and participant/learner-centered education	8.3	10.4	8.2	8.2	60.5	4.5
Foreign language	76.5	10.6	2.8	1.1	2.9	6.2
Other	—(n/a)[b]	14.1	7.3	8.5	63.3	6.9

Source: 2014 LA Survey

Notes: Estimates were weighted to represent the population of LAs using the LA Survey weights. The number of respondents who provided a response for at least one topic = 856. The overall number of nonrespondents for this question = 37.

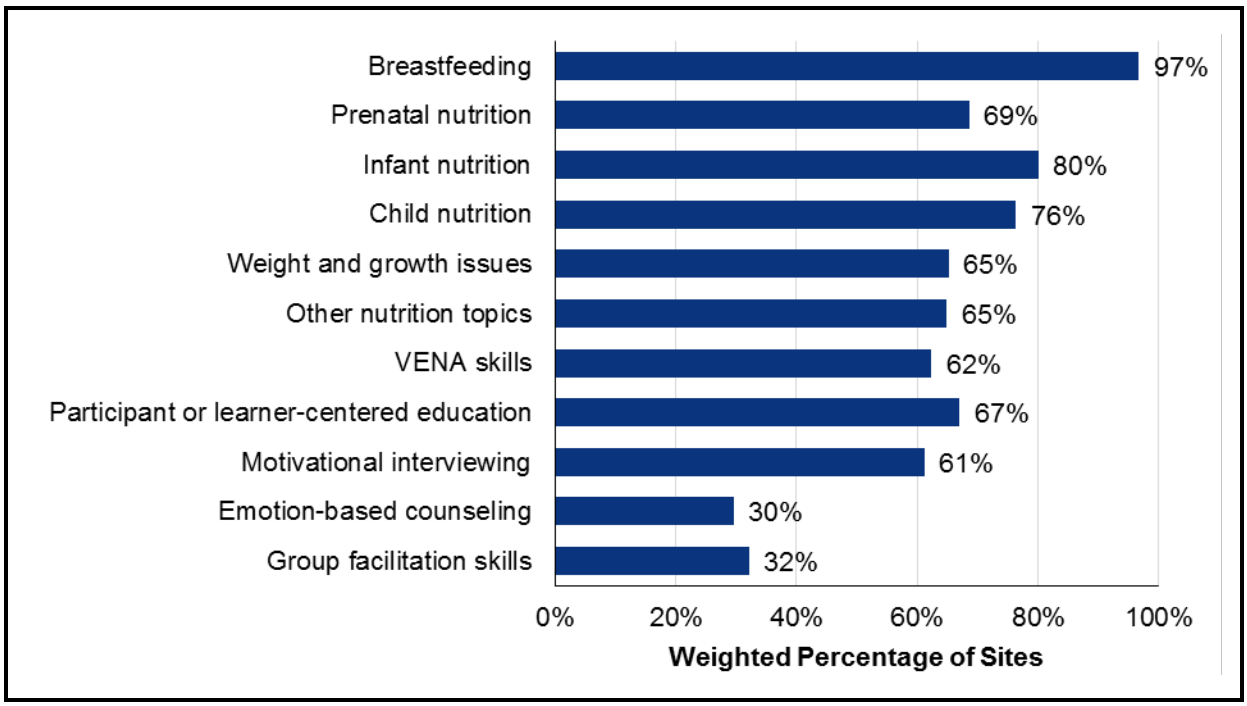
Respondents were instructed to include training that was provided by the LA, SA, and any outside training and to estimate this information if it was not readily available.

[a] 3-step counseling refers to a participant-centered strategy for counseling that involves asking questions to understand a participant's motivations and needs, affirming feelings, and providing education.

[b] An estimate is not provided because no respondents selected this response.

Additional information on the types and number of hours of training provided to nutrition educators was collected in the Site Survey. Respondents were asked to indicate which training topics, including both nutrition content topics and nutrition education methods, the nutrition education staff members at the site had received over the past 12 months. For those topics selected, they were asked to estimate the number of hours of training per staff member who received it during the past 12 months. They were not asked to provide data on the number of staff members who received the training or the specific job classifications of the staff members who participated in the training. **Exhibit 3-29** (Tabulated as Appendix I, Table I-21) shows the weighted percentage of sites that provided training on specific topics in the past 12 months, and **Exhibit 3-30** (Tabulated as Appendix I, Table I-21) shows the mean number of hours of training (among sites that provided the type of training). Almost all sites (97%) reported they provided training on breastfeeding in the past 12 months and the mean annual hours of breastfeeding training per staff member was 13 hours. The WIC Breastfeeding Policy Inventory (USDA, FNS, 2015a) collected data regarding LA staff training on breastfeeding. This study reported that breastfeeding promotion training is provided by most LAs to newly hired staff members with job roles as peer counselors (98% of LAs), breastfeeding coordinators and nutritionists (about 90% of LAs), and clerks (60% of LAs). A similar percentage of LAs also reported providing ongoing breastfeeding promotion training for these staff. Training on other nutrition or health topics (prenatal, infant, or child nutrition; weight and growth issues; and other nutrition topics) was also widespread, offered by 65 to 80% of sites, with an average of 5 to 7 hours of training per staff member annually.

Exhibit 3-29. Training Topics Provided to Nutrition Education Staff (Weighted Percentage of Sites)



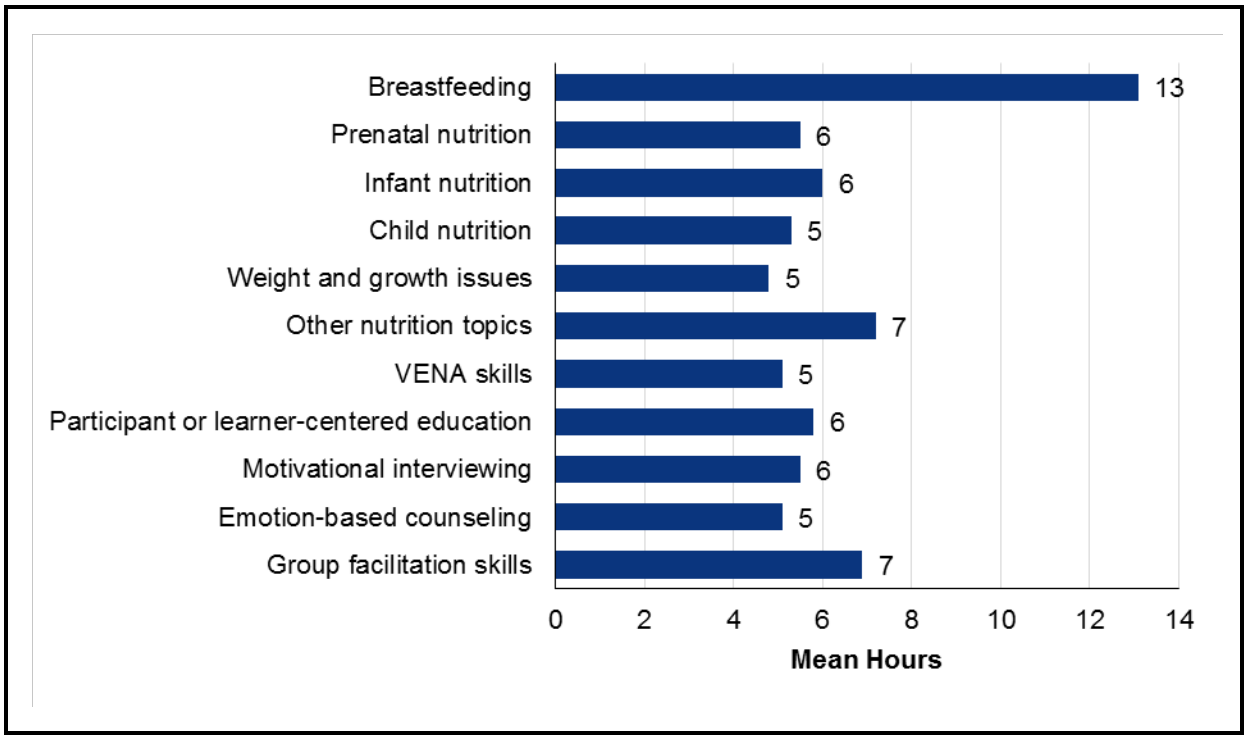
Source: 2014 Site Survey, Version 2. Number of respondents = 700 and number of nonrespondents = 5.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

Respondents were instructed to include all types of training (e.g., workshops, conferences, presentations at staff meetings).

Respondents could select multiple responses.

Exhibit 3-30. Mean Number of Training Hours Provided during the Past 12 Months to Nutrition Education Staff (For Topics in which Training Was Received)



Source: 2014 Site Survey, Version 2. Number of respondents = 700 and number of nonrespondents = 5.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

Respondents were instructed to include all types of training (e.g., workshops, conferences, presentations at staff meetings).

About two-thirds of sites reported providing training on methods for delivering nutrition education, including VENA skills (62% of sites), participant or learner-centered education (67%), and motivational interviewing (61%), with an average of 5 to 6 hours of training per staff member annually on these topics. Less than one-third of sites reported providing training on emotion-based counseling or group facilitation skills; however, those sites that provide training on these topics report 5 to 7 hours on these topics annually.

In the interviews with site staff, interviewees were asked to describe the training they have received from WIC to help them develop their nutrition counseling skills, whether they have made changes based on the training received, the challenges to incorporating new skills, and assistance received after training to incorporate new skills. Some interviewees reported receiving very little training, while others reported receiving frequent, ongoing training. Interviewees who received frequent and ongoing training tended to describe large changes in the way they approach nutrition education following participation in training.

- *"I've made big changes to my counseling technique from trainings. We used to do 24-hour recall, food frequency but now it's back to client centered. We try to focus on what the participant sees as a concern or what the participant wants to know."*
- *"I was not very optimistic about it, but getting so much support from the State office was great. It just takes time but seeing how people react to it and how much easier it really is in counseling sessions was amazing. You can see change happening which leads to job satisfaction."*

— *"Sometimes you go to training and you remember and after a while you go back to your old ways. They keep sending information every two or three months to help us get back on track … to do it client-centered instead of the way we did it before."*

Interviewees receive training from a variety of sources and through various modes. Sources include training offered by their SAs and LAs and also training presented by external trainers. Modes of training include State and national WIC conferences, webinars, and other online training.

— *"Every year, we have our State WIC conference, and they usually have speakers come and* [present on] *how to better engage* [our] *clients and things we can do to improve our counseling skills. Every year, we kind of get a little bit more continuing education on that."*

— *"The State has trained us. We've had different regional trainings, State conferences for VENA. They brought in speakers from* [another State] *a couple of times."*

A source of training frequently mentioned by interviewees is the WIC Works Resource System, an online education, training, and resource center for WIC staff (http://wicworks.fns.usda.gov/) (see **Exhibit 3-31**). Among many electronic resources the WIC Works Resource System offers a set of online learning courses for WIC staff training (WIC Learning Online). This resource system also houses many other electronic resources, including but not limited to sharing galleries, a bulletin board exchange, and an education and training material database, in addition to the other resources previously noted in Section 1.1. In addition, this Web site encompasses the WIC Nutrition Services Standards and the Loving Support Makes Breastfeeding Works campaign Web sites. Interviewees described the WIC Works Resource System as a valuable resource.

— *"There is the WIC Works Web site where you can get a lot of information that I use often. We like to look at bulletin board ideas and look at what other programs across the country are doing. There's a whole VENA section, so we like looking at that and getting different ideas on how to ask things. We use it for a lot of different things. We don't want to reinvent the wheel if it's already out there, so we try to find it."*

— *"With group classes, we use things like WIC Works, how other States were doing their group classes. And I am trying to think of some State years ago who did that participant-centered emotion-based messaging. That is how we started doing things like that. So looking at what others States did."*

Interviewees described different types of training they have received on participant-centered counseling. Terms used to describe these trainings included VENA, motivational interviewing, participant-centered education, guided goal-setting, emotion-based counseling, stages of change, and group facilitation skills. Although the trainings have different names, interviewees described a common focus: improving interactions and communication with WIC participants.

— *"We've had training in VENA, motivational interviewing, BePC (Be Person-Centered training). BePC was really helpful because it talks more about what the participant wants and really enhancing their whole entire visit."*

— *"We did what they call participant-centered services. It was participant-centered education, and then they changed it to participant-centered services. So we did that. Here at our location, we do further training on that. We do trainings quarterly."*

Exhibit 3-31. WIC Works Web Site Homepage

— *"We have had a lot of training. We have done the circle charts, the Learning to Listen, Learning to Teach. We have done the Fish Training. We have done lots of trainings with regards to readiness for change, open-ended questions, the circle charts, and the proper way to approach difficult participants."*

Conversely, some interviewees have had very little training, or the training that they have received is related to changes in procedures, not necessarily training on how to improve their counseling skills.

— *"There is not a whole lot of training that we get. We don't go to trainings on counseling. If there is a State training, it is a webinar, and it is usually when something is about to change, like when we changed to low-fat milk."*

Interviewees discussed changes they have made in their interactions with WIC participants based on the training they have received. Changes included shifts in their approaches to one-on-one counseling and group education style. They reported engaging the participants more throughout WIC discussions and the goal-setting process. Many interviewees reported being less prescriptive about goal-setting, focusing instead on motivating and encouraging participants to talk and share and set their own health and nutrition-related goals through the use of open-ended questions.

- *"I remember starting at WIC straight out of school, and I just wanted to overload the client with information, lecture them, and give them handouts. After I received the VENA training, my counseling did change. I was able to be more of an active listener, and I asked better open-ended questions rather than just yes or no questions."*
- *"I have changed the way I do group sessions based on my training at WIC. The PCE training I've received over the last few years has moved our groups to be more participant led; being a facilitator versus a teacher."*

To incorporate new skills after training, some interviewees received assistance/support via staff meetings, peers, SA materials, and direct/indirect mentoring. A common theme revealed in the interviews with site staff members was that ongoing support helps break old habits and integrate new approaches.

- *"To support incorporation of the training we have received, some things we do is webinars. We get monthly VENA suggestions and highlights from the State level. Any meetings we have, VENA is always a topic of discussion."*
- *"We do monthly staff meetings, and we go over one of the PCE principles, a different one each month. That helps reinforce what I have learned. The manager at our sites observes your counseling and lets you know where you are at and what you need to work on."*

Several interviewees mentioned they have received one-on-one mentoring sessions after training and described this as instrumental in helping them incorporate new skills in their daily discussions with participants. Several interviewees believe that being mentored is particularly important for adopting this style of participant-centered counseling.

- *"When you get constructive criticism is when you can say wow, you know what? She is right. I need to do this a little differently. It is fine to learn about VENA and the client-centered approach when you think you are doing it the right way, but it is nice to have someone come in and watch you and say maybe this could be done a different way to make your interviewing a little bit more effective."*
- *"He comes in and observes me and gives me some more tips on how to do one thing or the other, and he will give me feedback on the new technique that I try. It is very helpful."*

Other interviewees mentioned they have received assistance from fellow WIC staff members after training and shared stories of mutual support as they learn new skills. Several interviewees described discussing challenging situations and how to approach them with their peers and observing one another, which provides an opportunity to experience different styles and ways to address certain topics.

- *"Our nutritionists talk with each other, they talk about what works and what doesn't work at our staff meetings. We help each other figure out which are the best methods."*
- *"Sometimes nutritionists observe someone else doing group education if someone is really skilled at one of the education topics. After training, I've received feedback from my group and listening to what worked well with other nutritionists."*
- *"We have three nutritionists here, and we meet on a regular basis to talk a lot and share ideas and different ways to approach challenging, sensitive subjects,* [like] *childhood obesity."*

4. Description of WIC Nutrition Education Processes

This section begins with a summary of the key findings pertaining to the topics presented in this section (Section 4.1), followed by a more detailed discussion of the study findings. Section 4.2 describes the types and frequency of methods used to provide nutrition education. Section 4.3 provides descriptive information on one-on-one counseling sessions, group education sessions, and technology-based nutrition education, including information on goal setting. Section 4.4 describes the types of reinforcements and follow-up methods used to enhance the delivery of nutrition education. Section 4.5 describes differences in nutrition education for participants identified as high risk, and Section 4.6 concludes this section with information on dosage of nutrition education. These findings are based on responses to the Local Agency and Site Surveys and information from the State Plans on State agency (SA) policy for delivery of nutrition education. Where appropriate, these findings are supplemented by findings from the interviews with site staff.

4.1 Overview

The Local Agency and Site Surveys and the interviews with site staff members revealed four key findings. First, **one-on-one nutrition counseling continues to be the primary delivery method for WIC nutrition education followed by group education and technology-based modes**. One-on-one counseling allows for more individualized sessions, particularly if participants are engaged and interested in the material. Section 4.2 provides additional information on the types of modes used to deliver nutrition education.

Second, **WIC nutrition education has become more individualized and tailored to the needs of each participant and participant involvement throughout the process has increased**. In the interviews with site staff, they emphasized the need to engage with participants and listen more, encouraging the participants to do more of the talking.

— *"I came from the old school of here I am, Miss Nutritionist here, and I'm going to help you by telling you what you need to change … we know that doesn't work. It really doesn't. We have to sit back in our chairs and listen more and talk less."*

Section 4.3 provides additional information on the delivery of nutrition education in one-on-one and group sessions.

Third, **nutrition educators widely use goal setting and are increasingly using guided goal setting with more participant engagement in the process**. Again, individualized nutrition education with a focus on participant needs is increasingly prevalent at sites. Nutrition educators are finding that participants are more responsive when goal setting guides them to identify their own goals rather than having goals assigned to them.

— *"Rather than just laying down a goal for them, what I think you need to change, it is definitely important to talk with them about what they want to change … so they have a more vested interest in it."*

— *"I usually say if there is just one thing you could change in your child's diet, what would you change? I ask questions about what they want to change and try to help them make a goal out of it."*

Section 4.3 provides additional information on goal setting.

Fourth, **nutrition educators are tailoring the frequency and amount of time they spend with participants on nutrition education based on their nutritional needs, interest, and level of motivation for adopting healthy behaviors**. Participants who are classified as high risk based on health and nutrition needs are generally offered more contacts (3.4 contacts on average) compared with participants who are not high risk (3.0 contacts on average). The amount of time spent providing nutrition education varies based on the type of visit. Nutrition counseling sessions during certification visits average 19 minutes, one-on-one counseling sessions for secondary education follow-up visits average 12 minutes, and secondary group education sessions are, on average, 21 minutes in length. However, according to site staff members who were interviewed, the amount of time spent on nutrition education is influenced by the interest and engagement of the participant. Section 4.6 provides additional information on dosage of nutrition education.

4.2 Modes Used for the Delivery of Nutrition Education

The Local Agency and Site Surveys collected information on the modes used to provide nutrition education by type of visit. Unless specified, respondents answered for nutrition education in general, considering all visit types and all modes. In addition, the Site Survey asked about the frequency of use of different modes of nutrition education by type of visit. It should be noted that respondents were instructed to include breastfeeding education as part of nutrition education. This section summarizes the modes used for delivering nutrition education and their frequency of use, and the differences in modes used by type of visit, local agency (LA) and site characteristics, and WIC participant characteristics.

4.2.1 Types of Modes Used

SAs allow for a variety of modes for delivering nutrition education as abstracted from the State Plans, as shown in **Exhibit 4-1** (Tabulated as Appendix I, Table I-26). All SAs allow face-to-face nutrition education (individual or group). Nutrition education via telephone is also widely allowed; 66% of SAs allow this method. Nearly half of SAs allow the use of technology-based nutrition education (i.e., online/Internet).

Exhibit 4-2 (Tabulated as Appendix I, Table I-28) provides information on the modes used by sites to deliver nutrition education. These results are inclusive of all visit/appointment types. As expected, there is generally alignment between the types of modes allowed by SAs and the types of modes actually used by sites.

According to WIC Program Nutrition Education Guidance, interactive nutrition education is delivered through individual (one-on-one) or group sessions with participants (U.S. Department of Agriculture [USDA], Food and Nutrition Service [FNS], 2006b). Interactive nutrition education uses "strategies that

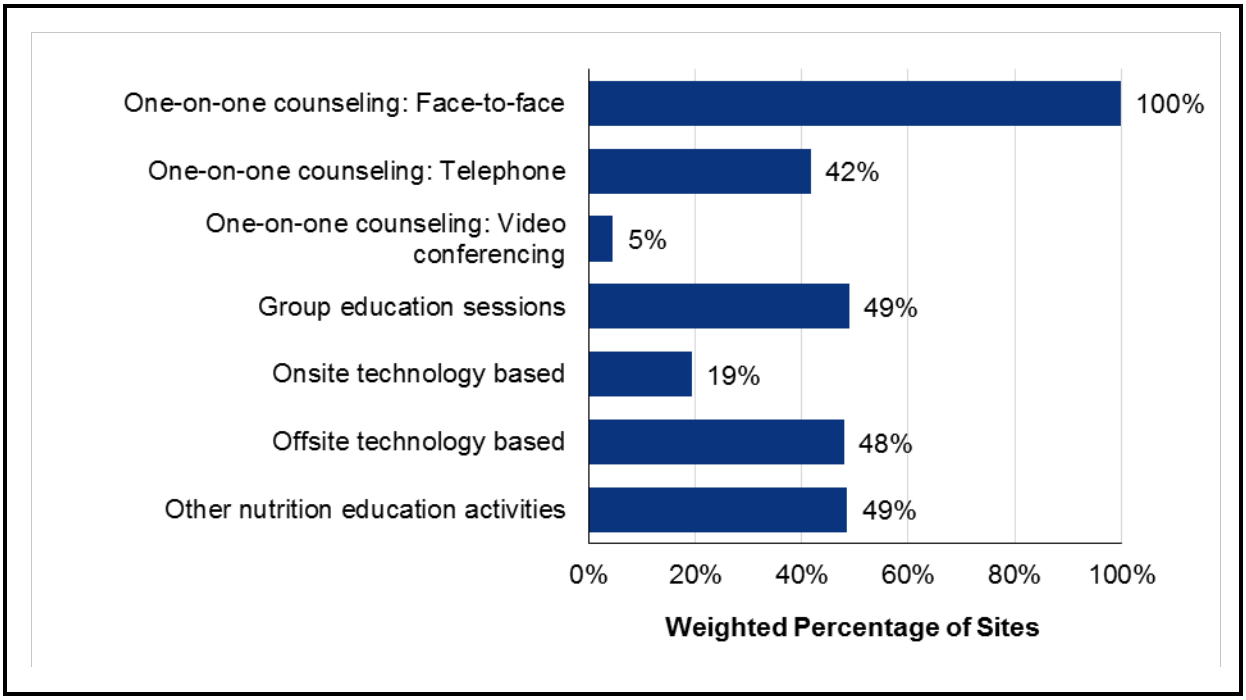
Exhibit 4-1. State Agency Policy on Allowable Methods of Nutrition Education (Unweighted Percentage of State Agencies)

	Geographic States and District of Columbia (n = 51)	ITOs and Territories (n = 25)	All SAs (n = 76)
Face-to-face, individually or group	100.0	100.0	100.0
Online/Internet	64.7	8.0	46.1
Telephone	70.6	56.0	65.8
Food demonstration	82.4	64.0	76.3
Delivery method performed by other agencies, such as EFNEP	70.6	36.0	59.2
Other[a]	51.0	20.0	40.8

Source: Abstraction of 2014 State Plans, n = 76. EFNEP = Expanded Food and Nutrition Education Program. ITO = Indian Tribal Organizations. Data were not available for 14 SAs that were all ITOs. Multiple responses allowed.

[a] Most common "other" responses were kiosks, video conferencing, and take-home materials and activities.

Exhibit 4-2. Modes Used by Sites to Provide Nutrition Education (Includes All Types of Visits) (Weighted Percentage of Sites)



Source: 2014 Site Survey, Versions 1 and 2. Number of respondents = 1,401 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Respondents could select multiple responses.

engage the participants in identifying individual goals or important issues as well as creating solutions that work for them" (USDA, FNS, 2006b, p. 4). All sites reported using face-to-face, one-on-one counseling sessions. One-on-one counseling by telephone or videoconferencing is an alternative to face-to-face counseling when participants are unable to come to WIC sites because of geographical, health, or other circumstances and may be used for follow-up education for breastfeeding for new mothers. Forty-two percent of sites reported using telephone conferencing and 5% of sites reported using one-on-one videoconferencing. Nearly half of sites (49%) reported using group education sessions, another alternative for interactive nutrition education.

Although FNS considers face-to-face personalized contact to be the optimal method for providing nutrition education, technology-based nutrition education may meet the needs of participants by using a variety of delivery media while still providing an effective nutrition education contact (USDA, FNS, 2006b). Participants use offsite technology-based methods, such as Internet-based nutrition education modules, at a location other than the site via the Internet (e.g., their home or library). Participants use onsite technology based methods, such as a computer, kiosk, or tablet, while at the site. Offsite technology-based methods (48% of sites) are more widely used than onsite technology-based methods (19% of sites).

Exhibit 4-3 (Tabulated as Appendix I, Table I-30) provides information on modes used to deliver nutrition education by type of visit/ appointment type as reported by sites. With the exception of face-to-face, one-on-one counseling (which all or nearly all sites use for all visit types), the method used to deliver nutrition education varies by type of visit.

Types of WIC Appointments/Visits and Definitions Used in Survey

Certification visit—enrollment, recertification

Mid-certification visit—prenatal trimester visit, infant/child mid-certification, breastfeeding mid-certification

Secondary education follow-up visit—group classes, food benefit issuance/pick-up education, breastfeeding follow-up, low risk follow-up

High-risk follow-up visit—nutritionist visit, nutrition counseling visit, high-risk group classes

Other—write in response, responses included: breastfeeding visits or support group, Internet/online classes, food/formula package changes, walk-in appointments/issues

To take a closer look at how the mode of nutrition education varies by type of visit or appointment, **Exhibit 4-4** (Tabulated as Appendix I, Table I-30) provides information on the modes used to deliver nutrition education for enrollment certification and secondary education follow-up appointments as reported by sites. Most sites use face-to-face, one-on-one counseling sessions for enrollment (100% of sites) and follow-up (93% of sites) appointments. Across all sites, one-on-one counseling by telephone is used more often for follow-up appointments than for enrollment (28% vs. 14%). One-on-one video counseling is rarely used by sites for enrollment or follow-up appointments (2% of sites).

Across all sites, group education sessions are used more often for follow-up appointments (44% of sites) than for enrollment appointments (19% of sites). And while technology-based methods are seldom used for enrollment appointments, offsite technology-based methods are more common for follow-up appointments (44% of sites).

Exhibit 4-3. Modes Used to Deliver Nutrition Education by Type of Visit/Appointment (Weighted Percentage of Sites)

Modes	Enrollment Certification (n = 1,381)	Recertification (n = 1,381)	Mid-Certification (n = 1,319)	Secondary Education Follow-Up (n = 1,354)	High-Risk Follow-Up (n = 1,309)	Other Type of Visit (n = 47)
One-on-one counseling: Face-to-face (in WIC site)	99.9	99.6	99.5	92.6	99.5	72.9
One-on-one counseling: Telephone	14.1	10.0	13.7	27.8	32.3	28.9
One-on-one counseling: Video conferencing	1.9	2.2	1.2	2.3	3.7	4.2
Group education sessions	18.7	7.5	11.5	44.3	9.5	32.0
Onsite technology based	7.6	4.5	7.8	17.5	4.8	0.7
Offsite technology based	14.4	7.8	11.8	44.2	7.1	20.7
Other nutrition education activities[a]	24.9	19.3	22.5	43.5	20.2	19.8
Don't know	—(n/a)[b]	0.2	0.1	1.0	0.1	2.3

Source: 2014 Site Survey, Versions 1 and 2. The number of respondents = 1,401 and the number of nonrespondents = 0.

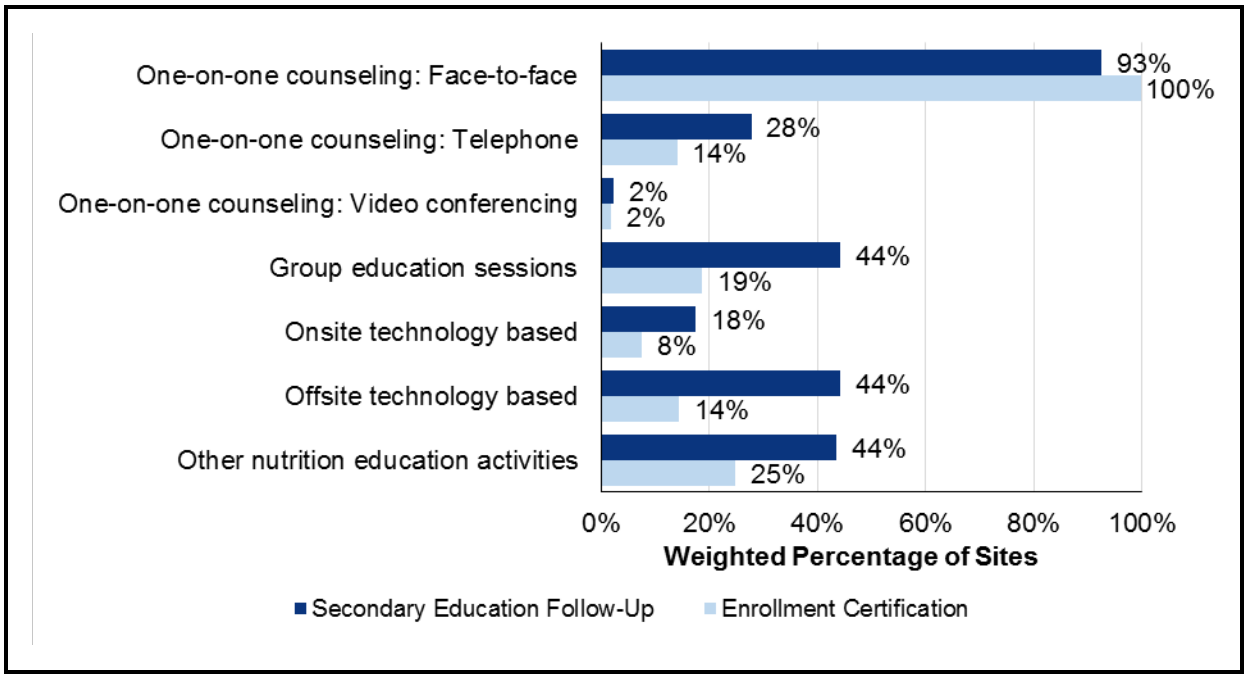
Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The unweighted number of sites that provide each type of visit is shown in the column header.

Respondents could select multiple responses.

[a] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

[b] An estimate is not provided because no respondents selected this response.

Exhibit 4-4. Modes Used to Deliver Nutrition Education at Certification and Follow-Up Appointments (Weighted Percentage of Sites)



Source: 2014 Site Survey, Versions 1 and 2. The number of respondents = 1,401 and the number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Respondents could select multiple responses.

4.2.2 Differences in Types of Modes Used by Geography, LA, Site, and Participant Characteristics

To explore how the mode of nutrition education method used varies by LA and site characteristics, bivariate analysis (cross-tabulations) was conducted for FNS region, urbanicity, and site caseload size. Additionally, using data from the Site Survey, bivariate analysis was conducted for facility type, participant to full-time equivalent (FTE) educator ratio, availability of a nutrition education coordinator, and local WIC participant characteristics (race, ethnicity, and non-English speaking). The results of this analysis based on responses to the Site Survey are presented below. The results for some modes and characteristics should be interpreted with caution; as noted by the "†" symbol, these results do not meet the criteria for statistical reliability (relative standard error [RSE] > 30%). Results for the Local Agency Survey are provided in Appendix J (Tables J-6a, J-7a, and J-8a).

Differences by Geography

Exhibit 4-5 (Tabulated as Appendix J, Table J-17) shows results for the differences in modes of nutrition education by the seven FNS regions based on responses to the Site Survey. Among sites that provided one-on-one counseling, either face-to-face or by videoconference, the analysis did not indicate statistically significant differences across FNS regions. However, among sites that provide one-on-one counseling by telephone, group education sessions, and on- and offsite technology-based methods, significant differences exist across regions.

- The use of one-on-one telephone counseling was more prevalent for the Western and Southwest regions (around 50% of sites).
- The use of group education sessions was more prevalent in the Southwest, Northeast, and Western regions; more than two-thirds of sites located in those three regions used group education sessions (76% in the Southwest, 72% in the Northeast, and 67% in the Western region).
- The use of offsite technology-based methods varied by region; the Southwest region reported the highest use (78% of sites).

Exhibit 4-6 (Tabulated as Appendix J, Table J-18) shows results for the differences in modes of nutrition education by the urbanicity of the site location (rural vs. urban) based on responses to the Site Survey.[22] Among sites that provide one-on-one counseling (face-to-face, telephone, or video) or onsite technology-based methods, the analysis indicated no statistically significant differences by urbanicity. However, among sites that provide group nutrition education sessions and offsite technology-based methods, the analysis did indicate a significant difference across urbanicity; these methods are used more widely in urban sites.

Although results were generally similar for the Local Agency and Site Surveys, some differences existed. When comparing the Local Agency and Site Survey responses across regions, fewer LAs report using one-on-one telephone counseling across all regions compared with the sites (LAs range from

[22] Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area in which the site is located; the site was then classified as rural or urban based on the Census definitions of population size for urbanicity.

Exhibit 4-5. Differences in Modes of Nutrition Education by FNS Region Based on Responses to the Site Survey (Weighted Percentage of Sites)

Modes	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		*p*-value
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	
One-on-one counseling: Face-to-face	221	100.0 (n/a)	176	100.0 (n/a)	304	100.0 (n/a)	148	100.0 (n/a)	250	100.0 (n/a)	168	99.6 (98.8, 100.0)	133	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	127	55.3 (44.2, 66.3)	96	49.1 (35.7, 62.5)	64	22.8 (15.6, 30.0)	35	34.4 (21.2, 47.7)	92	43.7 (34.3, 53.1)	56	43.0 (29.4, 56.5)	59	39.2 (24.7, 53.6)	.0117**
One-on-one counseling: Video conferencing	7	8.4 (0.0, 18.9)†	9	5.3 (0.0, 12.1)†	12	7.1 (0.9, 13.4)†	1	0.4 (0.0, 1.2)†	2	0.9 (0.0, 2.1)†	6	4.9 (0.0, 11.0)†	5	3.7 (0.0, 7.9)†	.3815
Group education sessions	154	66.6 (56.7, 76.5)	124	75.6 (65.8, 85.4)	112	42.5 (34.6, 50.3)	114	72.2 (60.5, 83.9)	150	46.0 (36.9, 55.1)	45	15.3 (9.2, 21.3)	69	41.7 (30.5, 53.0)	<.0001****
Onsite technology based	28	13.7 (3.9, 23.4)†	36	13.0 (7.1, 18.9)	78	34.4 (25.5, 43.3)	2	2.2 (0.0, 5.2)†	67	25.6 (17.3, 33.8)	32	17.7 (7.2, 28.1)†	38	25.9 (13.5, 38.3)	.0005***
Offsite technology based	112	51.0 (39.7, 62.4)	124	77.5 (68.5, 86.6)	99	43.4 (35.3, 51.4)	7	6.1 (0.0, 12.9)†	165	59.2 (49.2, 69.2)	82	48.7 (35.6, 61.8)	65	36.3 (22.0, 50.6)	<.0001****

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,401 respondents (nonrespondents = 0). CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Exhibit 4-6. Differences in Modes of Nutrition Education by Urbanicity of Site Location Based on Responses to the Site Survey (Weighted Percentage of Sites)

Modes	Sites in Rural Location		Sites in Urban Location		*p*-value
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	
One-on-one counseling: Face-to-face	352	100.0 (n/a)	1,037	99.9 (99.6, 100.0)	(n/a)[a]
One-on-one counseling: Telephone	132	41.5 (33.1, 50.0)	393	42.1 (37.1, 47.2)	.9057
One-on-one counseling: Video conferencing	15	6.7 (1.9, 11.5)†	25	3.7 (0.8, 6.5)†	.2522
Group education sessions	132	34.8 (27.4, 42.2)	629	54.4 (49.2, 59.7)	<.0001****
Onsite technology based	66	19.6 (12.1, 27.0)	215	19.5 (15.5, 23.5)	.9847
Offsite technology based	140	40.4 (32.0, 48.8)	511	51.7 (46.4, 56.9)	.0283*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,390 respondents (nonrespondents = 0). 11 respondents were excluded from the analysis because information on urbanicity (based on ZIP code for site location) was not available. CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

A post-hoc analysis testing for statistical differences between each subgroup was not conducted. The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

17% to 49% and sites range from 23% to 55%). There is a large difference between LA and site results for group education sessions in the Midwest region with LAs reporting a much higher use of group sessions (44% for LAs compared with 15% for sites). This difference may be attributable to the Local Agency Survey respondents answering the question based on the modes used across all sites managed by the LA as the survey instructed, whereas the Site Survey respondent answered for the specific modes used at that particular site.

Differences by Facility Type, Caseload, and Staffing

Appendix J, Table J-10 provides results for the differences in modes of nutrition education by facility type based on responses to the Site Survey. Statistically significant differences exist by type of site for sites that provide group education sessions and offsite technology-based methods. For example, about 60% or more of stand-alone WIC sites, hospitals, Federally Qualified Health Centers, and Indian Health Service facilities reported using group education sessions compared with other types of facilities. Offsite technology is used by more health departments (55%) and stand-alone WIC sites (57%) than other types of facilities.

Exhibit 4-7 (Tabulated as Appendix J, Table J-11) shows results for the differences in modes of nutrition education by site caseload size. There was a statistically significant difference in the percentage of sites that provide group nutrition education sessions as well as offsite technology-based methods; larger sites are more likely to use these methods.

Exhibit 4-8 (Tabulated as Appendix J, Table J-12) shows results for the differences in modes of nutrition education by site participant-to-FTE educator ratio. As expected, these results are similar to those for site caseload size. Among sites that provide group education sessions and offsite technology-based methods, statistically significant differences exist by participant-to-FTE educator ratio; sites with a higher participant-to-FTE educator ratio are more likely to use these methods. For sites providing group education, 67% of sites with a participant-to-FTE educator ratio of 401+ provide group education sessions compared with 32% of sites with a ratio of less than 100. Similarly, 58% of sites with a ratio of 401+ provide offsite technology-based methods compared with 40% of sites with a ratio of less than 100.

There are also statistically significant differences in modes of nutrition education by availability of a nutrition education coordinator at the site, as Appendix J, Table J-16 indicates. Sites that provide telephone counseling, group education sessions, and on- and offsite technology-based methods are more likely to have a nutrition education coordinator.

Differences by Participant Race, Ethnicity, and Language

Exhibit 4-9 (Tabulated as Appendix J, Table J-13) shows that among sites that provide group education sessions a statistically significant difference exists across the ethnic composition of local participants. These findings suggest that as the percentage of Hispanic/Latino participants increases, the likelihood of providing group sessions increases. For example, for sites with no Hispanic/Latino participants, 35% of sites provide group sessions, whereas for sites having 36% or more Hispanic/Latino participants, 72% of sites provide group sessions. Additional analysis is needed to determine if these differences are attributable to factors related to ethnicity, such as geographic region or urbanity.

Exhibit 4-10 (Tabulated as Appendix J, Table J-14) shows that there are statistically significant differences in the use of group education sessions and offsite technology-based methods by the racial composition of local participants. These findings suggest that as the percentage of non-White participants increases, the likelihood of using these modes of nutrition education increases. For example, for sites with less than 10 percent non-White participants, 35% of sites provide group sessions, whereas for sites in which 56% or more of participants are non-White, 66% of sites provide group sessions. Again, these differences may be attributable to factors correlated with race, such as geographic region or urbanity.

Results in Table J-15 of Appendix J show that the only significant difference in the frequency of nutrition education methods by the percentage of non-English speaking participants is the provision of group education sessions. Similar to the findings for ethnicity, the likelihood of providing group education sessions generally increases as the percentage of non-English-speaking participants increases.

Exhibit 4-7. Differences in Modes of Nutrition Education by Site Caseload Size Based on Responses to the Site Survey (Weighted Percentage of Sites)

Modes	Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		*p*-value
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	
One-on-one counseling: Face-to-face	363	99.7 (99.2, 100.0)	348	100.0 (n/a)	353	100.0 (n/a)	336	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	149	43.5 (34.7, 52.3)	132	44.7 (36.9, 52.5)	119	38.9 (30.1, 47.8)	129	37.8 (30.3, 45.3)	.6256
One-on-one counseling: Video conferencing	16	5.7 (1.2, 10.1)†	12	7.4 (0.4, 14.4)†	4	1.8 (0.0, 3.5)†	10	2.4 (0.8, 4.1)†	.1338
Group education sessions	124	28.3 (21.3, 35.3)	173	48.8 (39.7, 57.8)	211	55.9 (47.2, 64.6)	260	75.3 (68.4, 82.3)	<.0001****
Onsite technology based	62	17.5 (10.5, 24.4)	61	16.2 (10.6, 21.8)	83	22.1 (16.2, 27.9)	75	23.4 (14.9, 31.9)	.4266
Offsite technology based	150	37.6 (29.4, 45.8)	152	48.9 (39.7, 58.0)	170	53.8 (45.7, 62.0)	182	56.6 (48.3, 65.0)	.0096**

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,401 respondents (nonrespondents = 0). CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Exhibit 4-8. Differences in Modes of Nutrition Education by Site Participant-to-FTE Educator Ratio Based on Responses to the Site Survey (Weighted Percentage of Sites)

	Ratio Is Less than 100		Ratio Is 101 to 225		Ratio Is 226 to 400		Ratio Is 401 or Greater		
Modes	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face	321	99.7 (99.1, 100.0)	311	100.0 (n/a)	346	100.0 (n/a)	308	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	128	44.1 (34.8, 53.5)	121	43.9 (35.9, 51.9)	136	48.4 (39.5, 57.2)	105	32.5 (25.2, 39.9)	.1055
One-on-one counseling: Video conferencing	15	5.7 (0.8, 10.5)†	8	4.5 (0.5, 8.4)†	7	5.4 (0.0, 12.9)†	6	2.2 (0.3, 4.1)†	.7967
Group education sessions	131	32.1 (24.2, 39.9)	156	46.3 (38.4, 54.1)	205	55.2 (46.5, 63.9)	210	67.3 (59.5, 75.1)	<.0001****
Onsite technology based	48	16.1 (8.5, 23.6)	68	20.1 (14.2, 25.9)	55	14.1 (9.6, 18.6)	71	25.7 (16.6, 34.9)	.1333
Offsite technology based	130	40.2 (31.2, 49.1)	146	45.0 (37.1, 52.8)	154	49.1 (40.3, 57.9)	160	57.7 (49.2, 66.3)	.0494*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,287 respondents (nonrespondents = 0). 114 respondents were excluded because information on participant-to-FTE educator ratio was not available. CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Exhibit 4-9. Differences in Modes of Nutrition Education by Ethnic Composition of Local Participants Based on Responses to the Site Survey (Weighted Percentage of Sites)

	No Hispanic/Latino Participants		1–10% Participants Are Hispanic/Latino		11–35% Participants Are Hispanic/Latino		>36% or More Participants Are Hispanic/Latino		
Modes	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face	288	100.0 (n/a)	364	99.7 (99.0, 100.0)	320	100.0 (n/a)	343	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	101	41.5 (31.8, 51.2)	130	43.3 (35.0, 51.5)	120	42.5 (35.0, 50.0)	143	41.8 (33.5, 50.0)	.9918
One-on-one counseling: Video conferencing	8	6.9 (0.0, 14.5)†	7	1.9 (0.1, 3.7)†	10	4.5 (0.8, 8.1)†	13	4.5 (0.3, 8.8)†	.4314
Group education sessions	112	34.6 (25.9, 43.4)	185	44.3 (36.4, 52.1)	177	51.5 (43.2, 59.7)	256	71.5 (63.7, 79.3)	<.0001****
Onsite technology based	67	20.6 (14.2, 27.1)	73	20.8 (13.1, 28.5)	63	16.8 (11.7, 21.9)	60	18.4 (10.5, 26.2)	.8381
Offsite technology based	127	47.5 (38.2, 56.8)	170	47.2 (38.9, 55.4)	151	48.0 (39.6, 56.5)	175	55.6 (47.2, 64.0)	.5201

Sources: 2014 Site Survey, Versions 1 and 2. Data on ethnic composition of participants were obtained using Census data. U.S. Census Bureau. (5 November 2014). American Community Survey, 2011 American Community Survey 5-Year Estimates, Table B01001; generated by K. Everett; using American FactFinder; Retrieved from http://factfinder2.census.gov

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,316 respondents (nonrespondents = 0). 85 respondents were excluded from the analysis because information on ethnicity was not available. CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. The *p*-values listed in the table indicate if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Exhibit 4-10. Differences in Modes of Nutrition Education by Racial Composition of Local Participants Based on Responses to the Site Survey (Weighted Percentage of Sites)

Modes	<10% of Participants Are Non-White		11—30% Participants Are Non-White		31—55% Participants Are Non-White		>56% Participants Are Non-White		*p*-value
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	
One-on-one counseling: Face-to-face	345	100.0 (n/a)	359	100.0 (n/a)	297	100.0 (n/a)	314	99.6 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	140	45.9 (38.0, 53.8)	128	42.8 (34.4, 51.2)	119	40.4 (31.1, 49.7)	107	38.4 (29.9, 46.8)	.6488
One-on-one counseling: Video conferencing	8	3.2 (0.5, 5.9)†	13	3.6 (0.7, 6.4)†	3	1.2 (0.0, 3.1)†	14	10.2 (1.1, 19.3)†	.0160*
Group education sessions	142	34.9 (27.8, 42.0)	191	46.5 (38.6, 54.5)	193	57.8 (47.9, 67.6)	204	66.2 (58.5, 73.9)	<.0001****
Onsite technology based	61	15.6 (10.7, 20.5)	74	17.6 (12.6, 22.7)	62	23.1 (13.5, 32.7)	66	22.7 (15.0, 30.5)	.3103
Offsite technology based	142	39.7 (32.5, 47.0)	184	52.4 (44.4, 60.3)	155	56.9 (47.9, 65.9)	142	51.8 (42.8, 60.9)	.0217*

Sources: 2014 Site Survey, Versions 1 and 2. Data on the race composition of participants were obtained using Census data. U.S. Census Bureau. (5 November 2014). American Community Survey, 2011 American Community Survey 5-Year Estimates, Table B01001; generated by K. Everett; using American FactFinder; Retrieved from http://factfinder2.census.gov

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,316 respondents (nonrespondents = 0). 85 respondents were excluded from the analysis because information on race was not available. CI = confidence interval, n/a = not applicable. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown. The results for this response option were not statistically significant.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. The *p*-values listed in the table indicates if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Multivariate Analysis

Multivariate regression analysis was conducted using multinomial logistic regression to try to understand the factors associated with using group sessions, onsite technology, and offsite technology for delivering nutrition education. Including all of the independent variables into the model at the same time provides information about the direct effects of the independent variables on the dependent variable. For this analysis, three separate models were run with the dependent variables being an indicator variable for whether the site uses group sessions, onsite technology, or offsite technology. The independent variables included variables for urbanicity, FNS region, type of facility in which the site is located, whether the site is in an electronic benefits transfer (EBT) State, whether the site is in an Indian Tribal Organization (ITO), availability of a nutrition education coordinator onsite, availability of a breastfeeding peer counselor onsite, site caseload, percentage of local participants who are Hispanic, and percentage of local participants who are non-White.

Exhibit 4-11 provides the marginal effects of the analysis. Results indicate that site caseload is a statistically significant determinant for the provision of group education sessions and offsite technology-based nutrition education at a site. For example, an increase in site caseload of 1,000 participants increases the probability of using group sessions by 10% and the probability of using offsite technology-based education by 3%.

Region is often a statistically significant indicator for each of these modes. For example, sites located in the Northeast region are 37% more likely to provide group sessions than sites in the Midwest region (the omitted variable in the analysis) and 50% less likely than sites in the Midwest region to provide offsite technology-based nutrition education. Sites located in an EBT State are 12% more likely to provide group sessions compared with sites in non-EBT States and are 9% less likely to provide onsite technology-based nutrition education. Sites located in an ITO are 43% less likely to provide offsite technology-based nutrition education compared with sites not located in an ITO. Urbanicity of the site location and the type of facility in which the site is located are not statistically significant indicators of nutrition education mode. Additional research is needed to understand the factors influencing these differences.

Sites that have a breastfeeding peer counselor are 14% more likely to provide group sessions compared with sites that do not have a breastfeeding peer counselor. However, the availability of a breastfeeding peer counselor at the site is not a statistically significant indicator for onsite or offsite technology-based nutrition education. Furthermore, the availability of a nutrition educator coordinator at the site is not a statistically significant indicator of nutrition education mode.

The percentage of non-White WIC participants is associated with the modes of nutrition education offered. A one-unit (one percentage point) increase in the percentage of non-White participants increases the probability of the site providing group education sessions by 30% and offsite technology-based nutrition education by 24%. The percentage of Hispanic WIC participants is not a statistically significant indicator for mode of nutrition education.

Exhibit 4-11. Results of Multivariate Analysis for Type of Mode Used by Sites

Variables	Group Sessions			Onsite Technology Based			Offsite Technology Based		
	Marginal Effect	Standard Error	*p*-value	Marginal Effect	Standard Error	*p*-value	Marginal Effect	Standard Error	*p*-value
Site is located in an urban location (1 = yes)	0.01	0.06	.898	0.00	0.04	.923	−0.01	0.06	.891
Site caseload	0.0001	0.00	.000***	0.00001	0.00	.175	0.00003	0.00	.035*
Site is located in EBT State (1 = yes)	0.12	0.05	.024*	−0.09	0.03	.001**	0.01	0.06	.897
Site is located in health department (1 = yes)	0.13	0.08	.119	−0.04	0.09	.645	0.15	0.11	.199
Site is located in other health-related facility (1 = yes)	0.05	0.09	.598	−0.10	0.06	.090	0.07	0.12	.562
Stand-alone WIC site (1 = yes)	0.13	0.09	.172	0.03	0.10	.767	0.16	0.12	.179
Site is located in a nonprofit facility (1 = yes)	0.01	0.09	.904	−0.04	0.08	.637	0.13	0.12	.286
Site is an ITO (1 = yes)	−0.21	0.12	.071	−0.05	0.07	.453	−0.43	0.04	.000***
Nutrition educator coordinator at site (1 = yes)	0.01	0.08	.906	0.10	0.06	.080	0.06	0.08	.480
Breastfeeding peer counselor at site (1 = yes)	0.14	0.04	.002**	0.02	0.03	.567	0.02	0.05	.756
Percentage of local WIC participants who are non-White	0.30	0.09	.001**	0.05	0.06	.410	0.24	0.10	.014*
Percentage of local WIC participants who are Hispanic	0.11	0.11	.299	0.07	0.08	.398	−0.09	0.11	.429
Site located in Mid-Atlantic region (1 = yes)	−0.14	0.08	.101	−0.01	0.05	.799	−0.25	0.07	.000***
Site located in Mountain Plains region (1 = yes)	−0.30	0.07	.000***	−0.06	0.04	.149	−0.01	0.09	.912
Site located in Northeast region (1 = yes)	0.37	0.06	.000***	−0.17	0.02	.000***	−0.50	0.04	.000***
Site located in Southeast region (1 = yes)	−0.15	0.07	.042*	0.07	0.06	.212	−0.23	0.07	.000***
Site located in Southwest region (1 = yes)	0.22	0.08	.004**	−0.09	0.03	.004**	0.23	0.10	.016*
Site located in West region (1 = yes)	0.16	0.08	.061	−0.12	0.03	.000***	−0.09	0.08	.255

Source: Site Survey Versions 1 and 2

Notes: Number of strata: 4; Number of primary sampling units (PSUs): 711; Number of observations: 1,208. The results were weighted using the combined Site Survey weights.

Marginal effects were calculated at the means of the independent variables. For type of facility in which the site is located, the omitted variable was "other facility type," which includes mobile van, government facility that does not provide health services, and other. For FNS region, the omitted variable was "Midwest."

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

4.2.3 Frequency of Use of Different Modes for Providing Nutrition Education

The Site Survey collected information on the frequency of modes used for delivering nutrition education by type of visit (Tabulated as Appendix I, Tables I-31–I-35). The results for certification visits are shown in **Exhibit 4-12** (Tabulated as Appendix I, Table I-31). Face-to-face, one-on-one nutrition education counseling is almost always used for certification visits (92% of sites). The other modes of nutrition education are rarely or occasionally used for certification visits. For example, 79% of sites never use group education sessions at certification. Similar results were observed for mid-certification visits (Tabulated as Appendix I, Table I-32).

Exhibit 4-12. Frequency of Use of Different Modes for Delivering Nutrition Education for Certification Visits (Weighted Percentage of Sites)

Modes	Never	Rarely (<10%)	Occasionally (11–39%)	Sometimes (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face	—(n/a)[a]	—(n/a)[a]	0.5	0.2	7.4	92.0
One-on-one counseling: Telephone	62.7	24.1	5.4	6.8	0.9	0.2
One-on-one counseling: Video conferencing	95.1	2.2	2.3	0.2	0.2	0.1
Group education sessions	78.6	6.2	4.1	3.5	2.3	5.2
Onsite technology based	85.8	6.9	5.2	1.0	0.1	0.9
Offsite technology based	79.1	8.5	7.6	2.1	2.2	0.4

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at certification visits were eligible to answer this question (n = 695). The number of nonrespondents = 10. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown.

[a] An estimate is not provided because no respondents selected this response.

For secondary education follow-up appointments, **Exhibit 4-13** (Tabulated as Appendix I, Table I-33) shows that 52% of sites almost always use face-to-face, one-on-one nutrition education. The use of telephone counseling, video conferencing, and onsite technology-based methods is rare. However, group education sessions and offsite technology-based methods are more frequently used for follow-up appointments than for certification visits; 40% of sites use group education sessions and 33% use offsite technology-based methods at least occasionally.

For secondary education follow-up appointments for high-risk participants, **Exhibit 4-14** (Tabulated as Appendix I, Table I-34) shows that 91% of sites almost always use face-to-face, one-on-one counseling sessions. The use of any other method is very rare, probably because of the special needs of high-risk participants.

Exhibit 4-13. Frequency of Use of Different Modes for Delivering Nutrition Education for Secondary Education Follow-Up Visits (Weighted Percentage of Sites)

Modes	Never	Rarely (<10%)	Occasionally (11–39%)	Sometimes (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face	0.9	7.6	10.2	12.8	16.4	52.2
One-on-one counseling: Telephone	55.1	28.7	9.7	4.6	1.5	0.4
One-on-one counseling: Video conferencing	99.1	0.8	0.1	—(n/a)[a]	—(n/a)[a]	—(n/a)[a]
Group education sessions	46.9	13.1	11.8	10.4	7.3	10.5
Onsite technology based	75.9	12.3	5.2	3.2	2.1	1.4
Offsite technology based	47.9	18.9	16.6	6.1	6.3	4.2

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at secondary education follow-up visits were eligible to answer this question (n = 685). The number of nonrespondents = 11. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown.

[a] An estimate is not provided because no respondents selected this response.

Exhibit 4-14. Frequency of Use of Different Modes for Delivering Nutrition Education for High-Risk Follow-Up Visits (Weighted Percentage of Sites)

Modes	Never	Rarely (<10%)	Occasionally (11–39%)	Sometimes (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face	0.6	0.3	2.3	1.0	5.1	90.6
One-on-one counseling: Telephone	49.5	29.2	12.1	4.9	3.2	1.1
One-on-one counseling: Video conferencing	95.9	1.7	2.0	—(n/a)[a]	0.1	0.3
Group education sessions	87.3	5.9	2.3	1.9	0.3	2.3
Onsite technology based	90.4	5.8	1.8	0.4	0.7	1.0
Offsite technology based	83.6	10.2	3.6	0.7	1.0	1.0

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at high-risk follow-up visits were eligible to answer this question (n = 669). The number of nonrespondents = 8. For brevity, the results for the response option "Other Nutrition Education Activities" (defined in the survey as "monthly topics, worksheets, videos, and self-study modules") are not shown.

[a] An estimate is not provided because no respondents selected this response.

4.3 Description of Nutrition Education Delivery

The Site Survey collected detailed information on delivering nutrition education, including how topics are determined, topics most often discussed by type of participant, goal setting, and activities/resources used. The quantitative information, combined with the qualitative information from the interviews with sites, provides a rich description of the delivery of nutrition education to WIC participants. These findings are summarized below for one-on-one counseling sessions, group education sessions, and technology-based nutrition education.

4.3.1 One-on-One Counseling Sessions

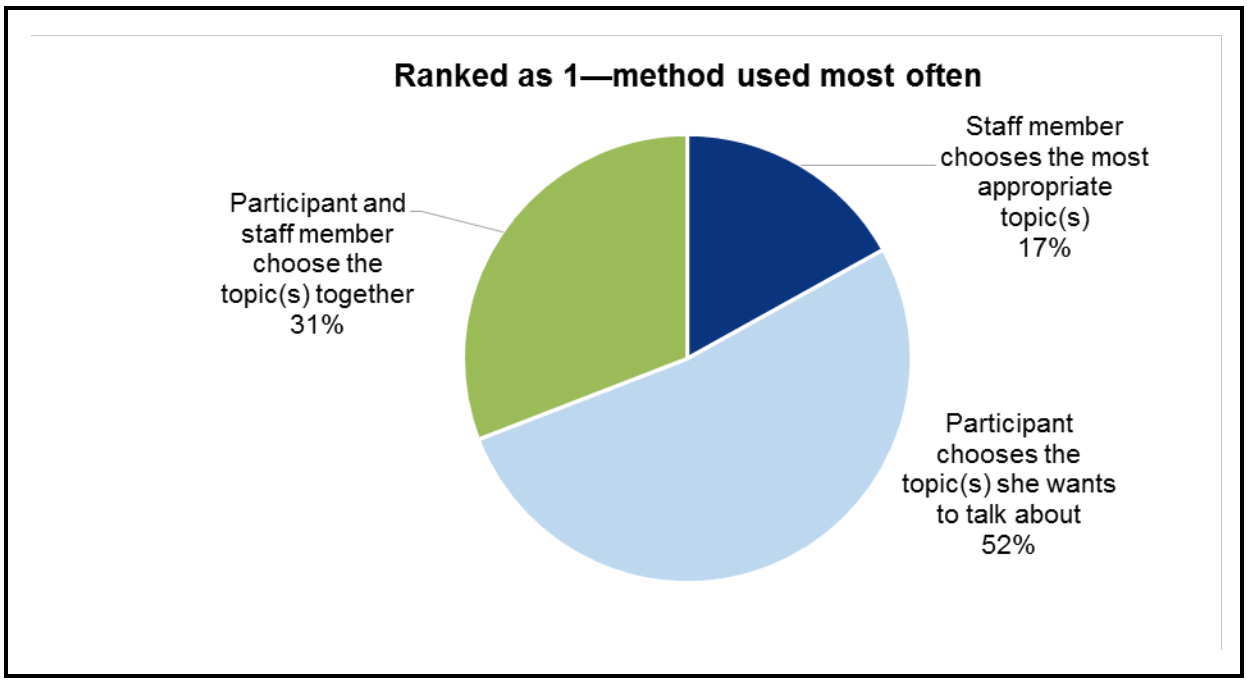
As discussed previously, face-to-face, one-on-one counseling sessions are the most common method of nutrition education and are used by nearly all sites. This section summarizes information on how

discussion topics are determined, the most common topics discussed, barriers and facilitators of nutrition counseling, and participant goal setting.

How Discussion Topics Are Determined

Respondents to the Site Survey were asked to rank the methods used to determine discussion topics for most one-on-one counseling sessions. As shown in **Exhibit 4-15** (Tabulated as Appendix I, Table I-36),[23] 52% of sites ranked "participant chooses the topic(s) she wants to talk about" as the method used most often to determine discussion topics for most one-on-one counseling sessions at a site. Thirty-one percent of sites ranked "participant and staff member choose the topic(s) together" as the method used most often, and 17% ranked "staff member chooses the most appropriate topic(s)" as the method used most often. Keep in mind that the rankings are survey respondents' perceptions of how discussion topics are determined, not those of WIC participants or an observer. Also, social desirability bias (i.e., the tendency to provide the "correct" response) could potentially inflate these results.

Exhibit 4-15. Methods Used Most Often to Determine Discussion Topics for Most One-on-One Counseling Sessions Topics (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 584 and number of nonrespondents = 121.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

During the interviews with site staff, 72 of the 80 interviewees discussed how they provide one-on-one counseling sessions. To determine discussion topics for counseling sessions, most interviewees use a combination of the participant's nutrition risk and interests; some focus more on anthropometric or assessment-based risk factors, while others focus more on participant-identified interests.

[23] Item nonresponse for this question was 17%. Although this level of item nonresponse is acceptable according to Office of Management and Budget (OMB) guidelines (30%), it is relatively higher than item nonresponse for other questions in the Site Survey. This suggests that some respondents may have found it difficult to answer this question.

- *"The key techniques are finding a balance between talking about what we as nutritionist see as risks and what the participant wants to talk about and address for their family."*
- *"We first ask them if they have any concerns and start there. If they don't have any concerns, we go over the risk factors and see if they want to make any changes or do they have any questions. We go with what the client wants to discuss first."*
- *"There is quite a bit of probing questions and information gathering before I decide what to educate on or what to talk about and also based on her needs and interest."*

During the interviews with site staff, respondents described a different process for determining discussion topics for other types of one-on-one appointments as compared with the certification appointments described above. They shared that certifications cover a broad range of nutrition topics associated with the assessment process. In addition to collecting anthropometric and other health data, nutrition assessments include questions about participants' diet or infant and child feeding practices. While some sites have participants complete a diet assessment form before meeting with WIC staff, in other sites the WIC staff members ask participants these questions during the certification visit. One-on-one secondary education visits and mid-certification visits were described by most interviewees as more targeted with education focused on priority areas identified during the certification visit.

- *"With certification, you're covering all the basics. With the follow-up your focus is on their goal, checking on how they are doing with their goal. For the first session you are reviewing the questionnaire, looking over the questionnaire and finding out what they are interested in, what they need help with. Then the next visit you can focus on the goal, you don't have to go over* [the] *questionnaire."*
- *"For certifications, we have the specific assessment questions that we go through and then we do our nutrition education based on that. Always, we base it on what they are interested in or concerned about as well. For one-on-one* [follow-up]*, we can spend more time just talking to them about that, as opposed to asking specific questions. That would be the main difference."*

Circle charts or other visual aids are tools that educators can use to help participants choose discussion topic(s). Circle charts display pictures of possible topics relevant to the participant—each circle represents a topic. The nutrition educator asks the participant to choose one topic as the focus of their discussion. About 56% of sites reported that they never or rarely use circle charts, and 23% of sites reported using circle charts sometimes or occasionally, suggesting the use of such charts is not widespread (Tabulated as Table I-37 of Appendix I).

During the interviews with site staff, some interviewees did mention using circle charts. One type of circle chart used is a pictorial menu of nutrition topics from which participants may choose. Educators shared that circle charts may include empty circles that educators can fill with topics that arise during the assessment or discussion. The educators would then use the chart to focus the nutrition education discussion.

- *"We have some set topics already in the circles and 3 blank circles. As we talk with the parent, we put in topics they are interested in, so after we have gathered information and what questions they have, then when we go into counseling, we ask what topic on the form would they like to*

discuss, and they are allowed to pick as many as they want, and that's where we work our counseling into."

At some sites, the focus of individual one-on-one secondary education sessions includes a monthly or quarterly nutrition topic that is the same for all individuals. This monthly or quarterly theme is a general nutrition topic that is relevant for all participants. Topics often include seasonal themes such as food safety during the summer or farmers' markets in the fall.

— *"The topic of the month is issued by the State for mid-cert visits. For example, January and February is dental care, and it discusses oral care for infants and the importance of pregnant moms seeing the dentist and everyone in the household brushing teeth at least twice a day, flossing daily and seeing the dentist twice a year."*

— *"We have a quarterly topic so we kind of try to touch on certain ideas every quarter. Everybody in the tri-monthly order will get the topic. We research what people are interested in, or if all the parents have been asking a lot about a certain topic, then we will research that and possibly use that as our next nutrition ed, so that will open up more questions for everyone. The topic we are using right now for nutrition education is how to use frozen fruits and vegetables since the fresh stuff is out of season."*

Topics Most Often Discussed

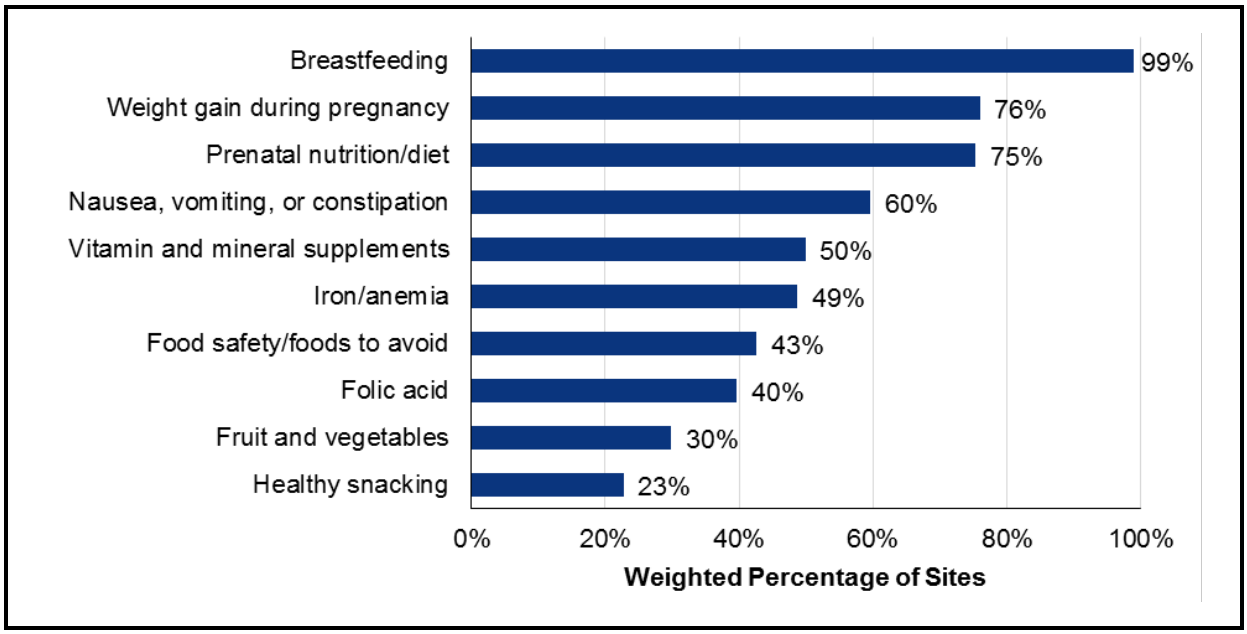
The Site Survey asked respondents to select from lists of 19 to 29 topics (specific to each participant type) the 7 topics that nutrition educators at the site discuss most often with participants.

The 10 topics most often discussed with women participants (pregnant, breastfeeding, and other postpartum [nonbreastfeeding]) are shown in **Exhibits 4-16** through **4-18** (Tabulated as Appendix I, Table I-38 through I-40). The topics most often discussed are breastfeeding and infant feeding (all three categories of women), weight gain (only for pregnant women), and weight loss (only for breastfeeding and other postpartum women). For pregnant women, prenatal nutrition/diet and nausea, vomiting, and constipation are also often discussed. For breastfeeding women, vitamin and mineral supplements are often discussed, and for other postpartum women, physical activity and iron/anemia are also often discussed.

As shown in **Exhibit 4-19** (Tabulated as Appendix I, Table I-41), the four topics most often discussed with parents or caregivers of infants in one-on-one counseling sessions are

- breastfeeding,
- introduction of solid foods,
- formula preparation/feeding, and
- infant growth and development.

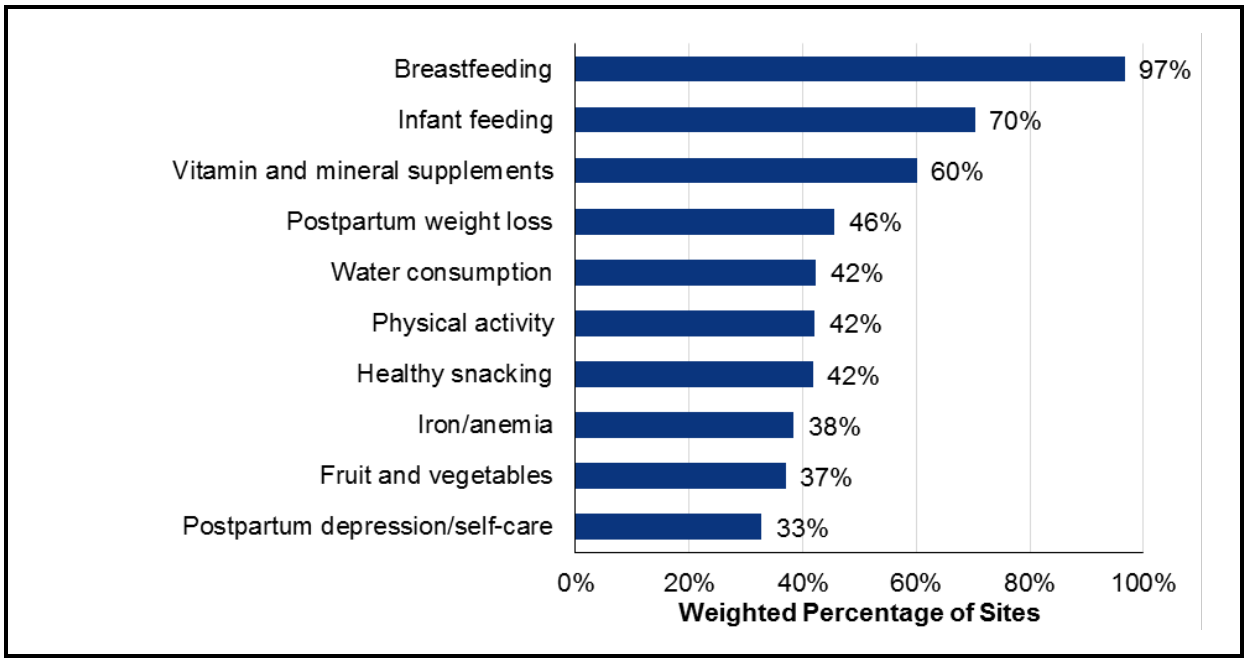
Exhibit 4-16. Topics Most Often Discussed with Pregnant Women in One-on-One Counseling Sessions: (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 647 and number of nonrespondents = 9 (49 respondents selected more than 10 responses and were excluded from the analysis).

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics. The Web-based survey would accept more than seven responses. "Top ten" topics shown.

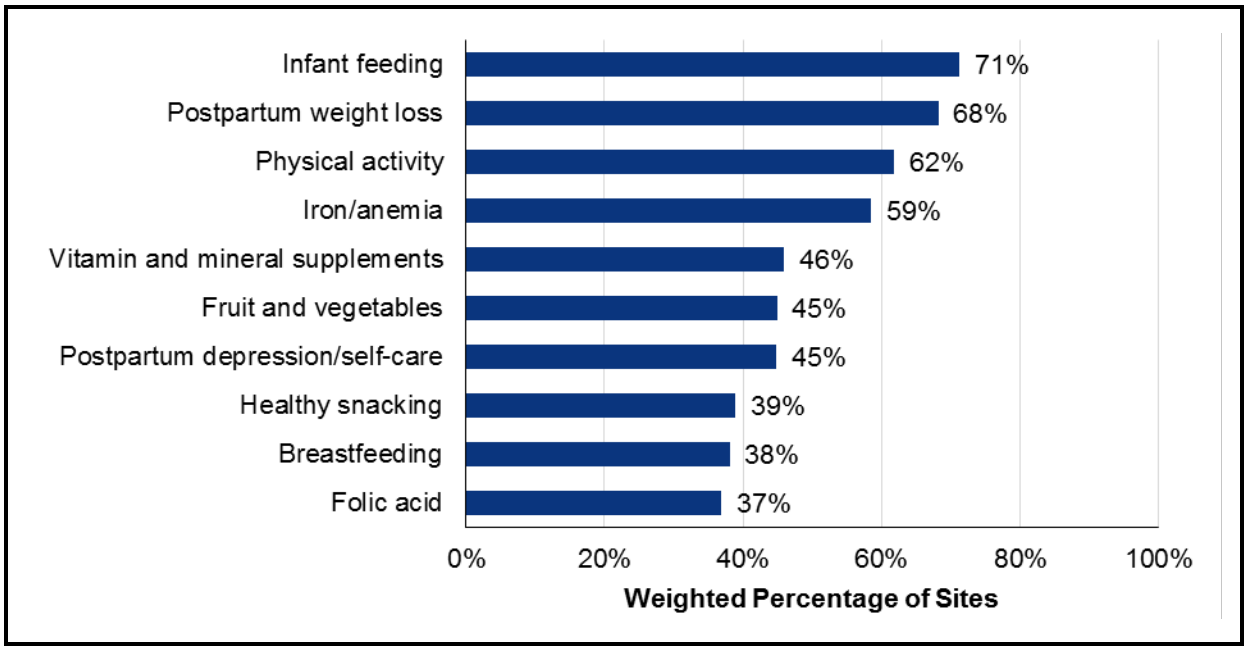
Exhibit 4-17. Topics Most Often Discussed with Breastfeeding Women in One-on-One Counseling Sessions (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 663 and number of nonrespondents = 9 (33 respondents selected more than 10 responses and were excluded from the analysis).

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics. The Web-based survey would accept more than seven responses. "Top ten" topics shown.

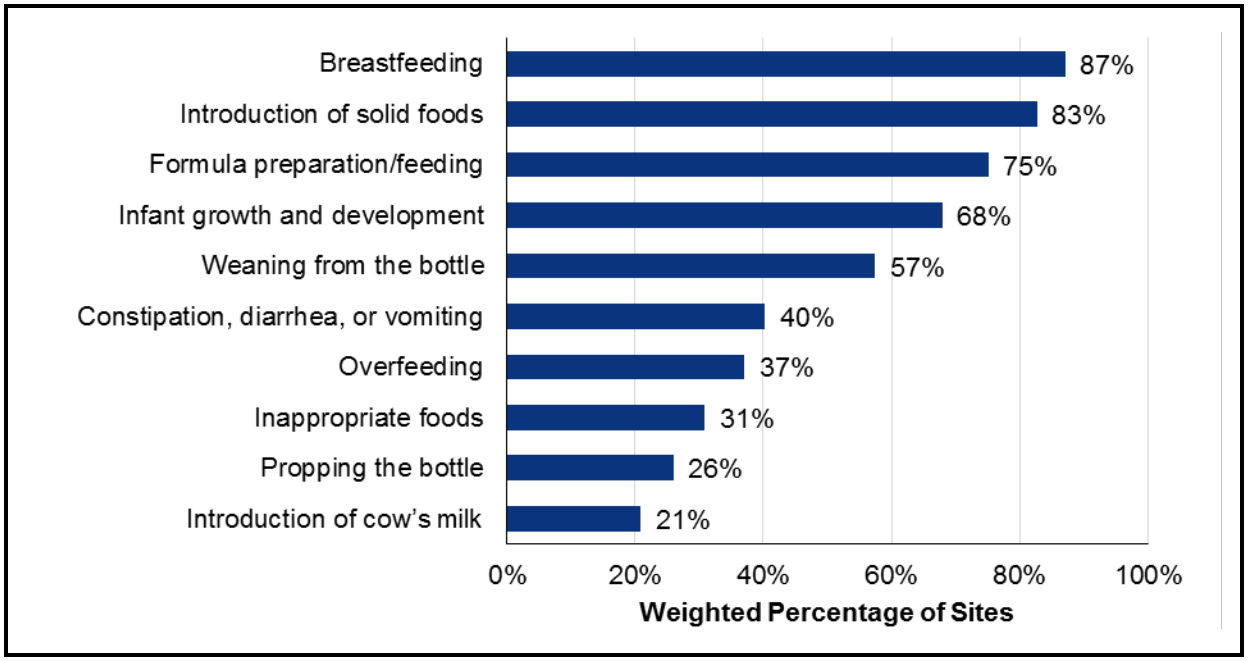
Exhibit 4-18. Topics Most Often Discussed with Postpartum (Nonbreastfeeding) Women in One-on-One Counseling Sessions (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 663 and number of nonrespondents = 9 (33 respondents selected more than 10 responses and were excluded from the analysis).

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics. The Web-based survey would accept more than seven responses. "Top ten" topics shown.

Exhibit 4-19. Topics Most Often Discussed with Parents or Caregivers of Infants in One-on-One Counseling Sessions (Weighted Percentage of Sites)



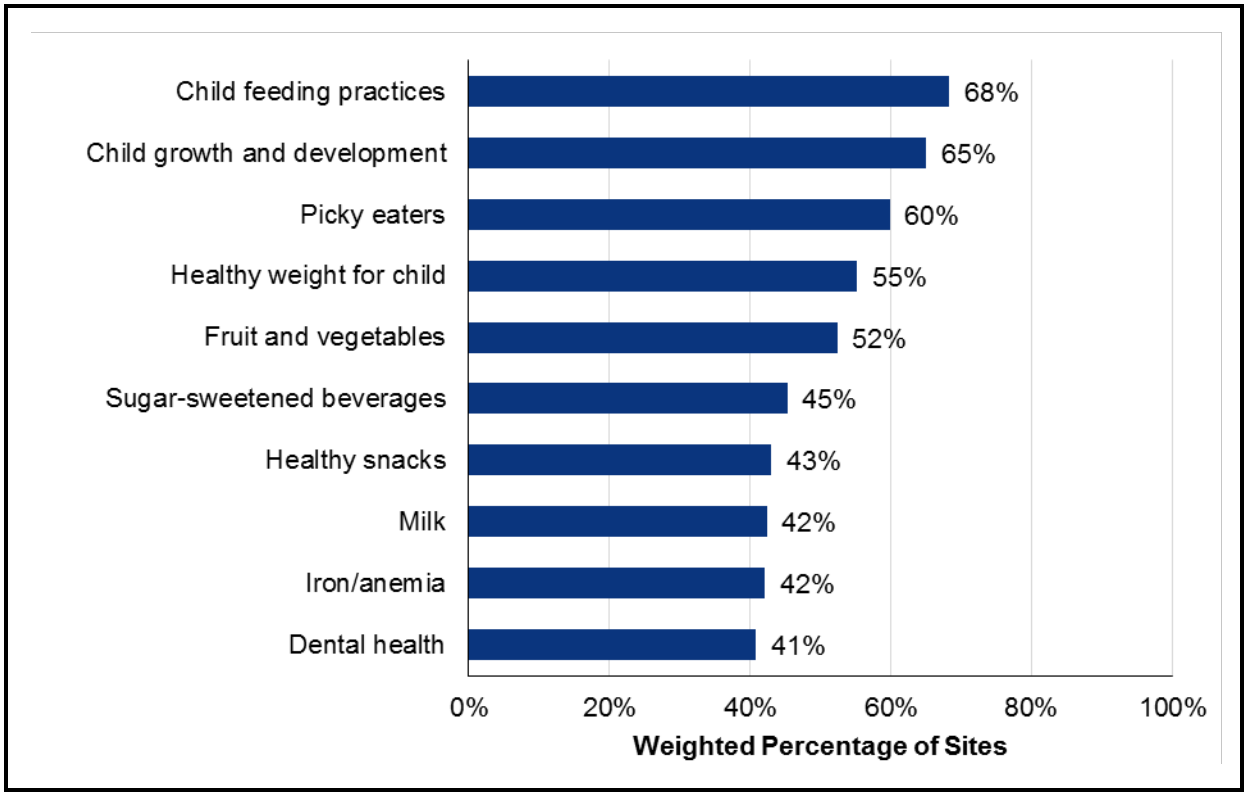
Source: 2014 Site Survey, Version 2. Number of respondents = 695 and number of nonrespondents = 10.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics; the Web-based survey would not accept more than seven responses. "Top ten" topics shown.

As shown in **Exhibit 4-20** (Tabulated as Appendix I, Table I-42), the four topics most often discussed with parents or caregivers of children in one-on-one counseling sessions are

- child feeding practices,
- child growth and development,
- picky eaters, and
- healthy weight for child.

Exhibit 4-20. Topics Most Often Discussed with Parents or Caregivers of Children in One-on-One Counseling Sessions (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 695 and number of nonrespondents = 10.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics; the Web-based survey would not accept more than seven responses. "Top ten" topics shown.

To support consistent nutrition education messages across FNS programs, FNS recently released core messages on four key topics: child feeding, fruit and vegetables, milk, and whole grains (see www.fns.usda.gov/ core-nutrition/background). Of those core message topics, 68% of sites selected "child feeding" as one of the most often discussed topics with parents/caregivers of children; however, fewer selected topics related to specific foods that are the subject of core messages: 52% selected "fruit and vegetables," 42% selected "milk," and less than 5% selected "whole grains" as topics most often discussed.

Barriers and Facilitators of Nutrition Counseling

During the interviews with site staff, interviewees revealed they deal with a wide range of challenging and complex issues during one-on-one counseling sessions, including health, behavioral, and psychosocial problems, such as feeding challenges, failure to thrive, food allergies, and gastrointestinal issues. According to some interviewees, participants with these concerns usually meet with a more experienced nutrition educator such as a registered dietitian or licensed nutritionist.

- *"One of the children was autistic, and mom was having a lot of challenges with textures; just getting the child to eat things. He was drinking a lot of milk and Pediasure."*
- *"It is her second pregnancy, and she has clinical depression and is obese. She is unwilling to gain weight during the pregnancy. The key topic I discussed was ensuring that she was getting care for depression."*
- *"Sometimes if we have someone who is maybe homeless, I would tailor the education to what is most concerning to them at that point. Maybe it isn't fruits and vegetables but finding additional food resources in the area that they would be able to get, considering their transportation and things like that."*

Many interviewees mentioned that one-on-one counseling sessions are more conversational than in the past with more interactive discussion. In using more open-ended questions, site staff members are trying to be more effective by talking less and encouraging participants to talk more, consistent with Value Enhanced Nutrition Assessment (VENA) and participant-centered education.

- *"I think just engaging the participant, getting them to partake in a large part of the conversation, having a two way conversation instead of me just talking at them. I want to engage them and see what their concerns are, what their questions are. I want them to lead the session more so than myself."*
- *"My big thing that I try to remind myself to do is to stop talking and try to let the participant do the talking. That is a big one that I am working on. I feel like I often try to step in and say "oh, I know what you could do about that" or "here is what I've done." I am trying to tell fewer stories about myself and hear more stories about what works in their lives."*

Nonetheless, some interviewees mentioned they have clients who are difficult to engage in conversation, particularly those who are more interested in receiving their WIC benefits than receiving nutrition education. For these participants, interviewees reported limiting nutrition education messages during their sessions.

- *"Just lack of participation is a challenge. When we want to talk to them, they already put up that barrier that 'I am not here to listen to what you have to say. I just want my checks, and I am gonna go.'"*
- *"If they are not as responsive, I try to give them one piece of information for them to take away. I focus on just a single item rather than a vast amount of information."*

During the interviews with site staff, many interviewees discussed several strategies for effective nutrition counseling, including listening, building rapport, limiting the number of discussion topics, and affirming positive nutrition-related behaviors. The most frequently mentioned strategy was listening, reported by more than one-third of respondents as a key technique for making counseling sessions effective.

Respondents reported that active listening allows them to individualize and target their goal-setting strategies and the nutrition education they provide.

- *"Definitely active listing because if you are not listening, then you can't affirm what they are saying or help them set goals if you haven't been able to really listen. It makes them feel heard, and if they are heard then it is more likely that they would want to be engaged in setting their own goals…"*
- *"They don't necessarily tell us, "I would like to discuss this, that or the other" but in their conversation, they kind of reveal themselves to us. We pick up on things that they are saying, and we will turn it into a discussion about nutrition or physical activity."*
- *"Rapport is the biggest. Having a comfortable atmosphere where people can talk about things and feel like they are being heard and being respected for who they are and what information they have to offer as well."*

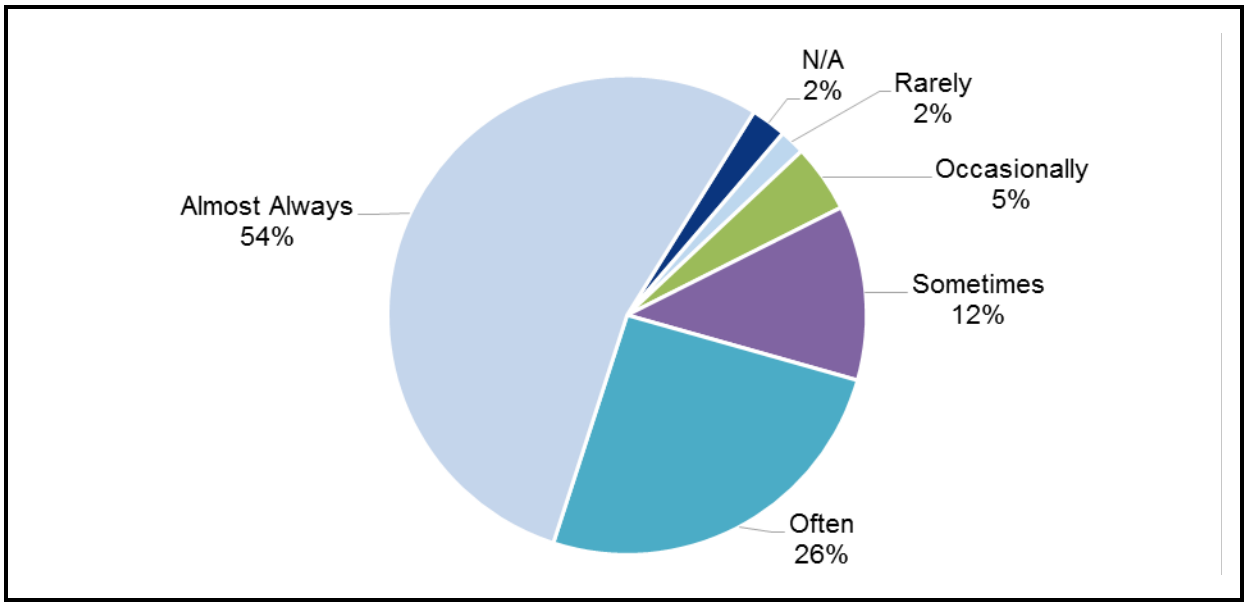
Frequency and Methods Used for Setting Participant Behavior Goals

One of the "Elements of an Effective Nutrition Education Contact/Intervention" described in the WIC Program Nutrition Education Guidance is "Messages that engage the participant in setting individual, simple and attainable goals and provide clear and relevant 'how to' actions to accomplish those goals" (USDA, FNS, 2006b, p. 3). WIC nutrition educators increasingly use motivational interviewing techniques incorporating goal-setting strategies to accomplish this principle in the FNS guidance. As shown in **Exhibit 4-21** (Tabulated as Appendix I, Table I-43), the use of goal setting is widespread. Eighty percent of sites reported that participant behavioral goals (e.g., nutrition or physical activity) are almost always or often set during one-on-one counseling sessions at the site. In contrast, 4% of sites reported that participant behavioral goals are rarely set during one-on-one counseling sessions or goal setting is not part of one-on-one counseling sessions.

Respondents to the Site Survey were asked to rank the methods used to select participant goals for most one-on-one counseling sessions. As shown in **Exhibit 4-22** (Tabulated as Appendix I, Table I-44),[24] 49% of sites ranked "participant usually identifies the goal(s)" as the method used most often. Thirty-eight percent of sites ranked "participant and staff member usually select the goal(s) together" as the method used most often, and 13% ranked "staff member usually suggests the goal(s)" as the method used most often. Keep in mind that the rankings are survey respondents' perceptions of how participant goals are selected, not those of WIC participants or observers. Also, social desirability bias (i.e., the tendency to provide the "correct" response) could potentially inflate these results.

[24] Item nonresponse for this question was 16%. Although this level of item nonresponse is acceptable according to OMB guidelines, it is relatively higher than item nonresponse for other questions in the Site Survey. This suggests that some respondents may have found it difficult to answer the ranking question.

Exhibit 4-21. Frequency that Participant Behavioral Goals Are Set During One-on-One Counseling Sessions (Weighted Percentage of Sites)

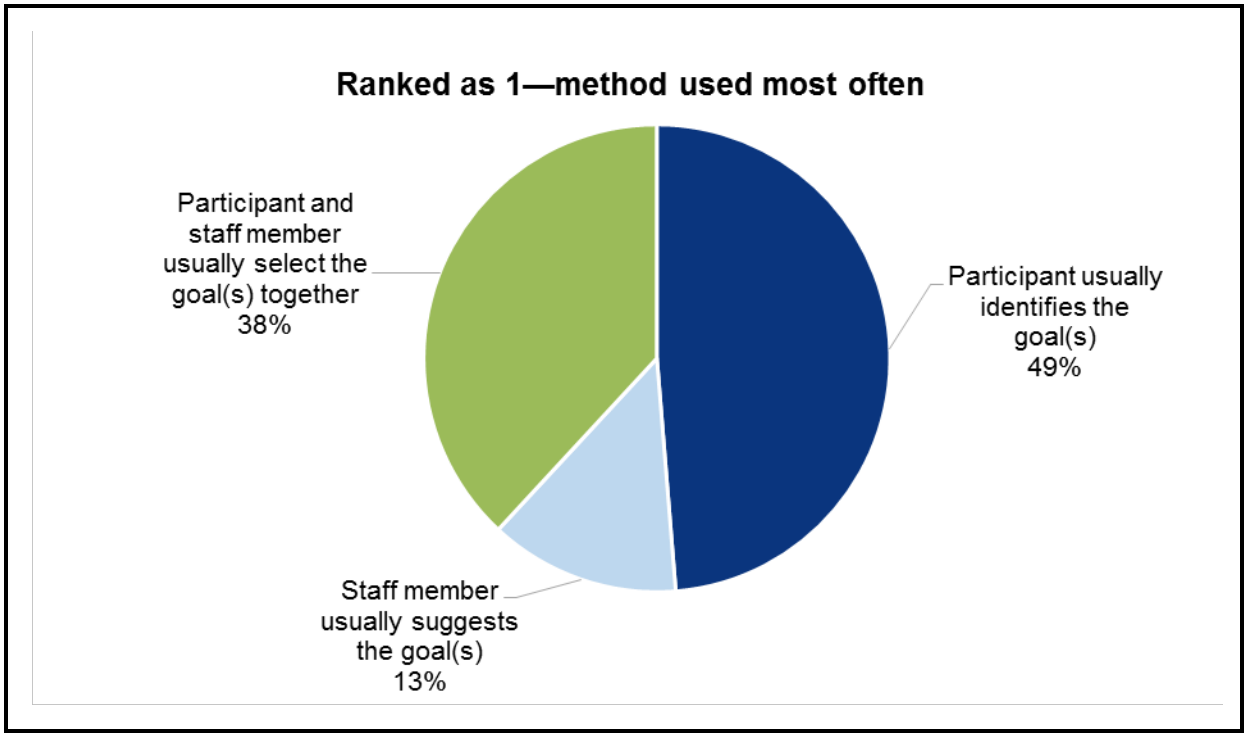


Source: 2014 Site Survey, Version 2. Number of respondents = 705 and number of nonrespondents = 0.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

N/A: Not applicable; goal setting is not part of one-on-one counseling sessions.

Exhibit 4-22. Methods Used Most Often to Select Participant Goals for Most One-on-One Counseling Sessions (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Number of respondents = 592 and number of nonrespondents = 113.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

During the interviews with site staff, nearly all interviewees said they work with participants to set goals, and most believed that goal setting is more effective if the participants pick the goals they want to work on.

- *"I like to think of it as teamwork. What is important to them and what motivates them to make a change, so just kind of guiding them through that process and making sure they know it is not for me, it's for them. We want it to be something that they can envision themselves doing."*
- *"Along the way, I've developed a better understanding of how to ask questions and how to work with clients to help them feel supported and appreciated and validated for where they are at and where they might want to go and not my own agenda."*

While many interviewees reported trying to encourage participant-selected goals, others described using staff-directed goals, particularly when a participant has difficulty setting goals or is unfamiliar with the concept or process of setting goals. Typically, staff-directed goals tend to focus on nutrition risk factors. In general, however, the majority of interviewees reported that they are shifting to a more participant-led goal-setting process, leading to more effective one-on-one nutrition education discussions.

- *"In previous years, I was more concerned about what my goals for them were. We need to focus more on what their goals for their families are. It's a fine balance of telling them what you need to tell them and having them set their own goals."*
- *"Before, it was just do this. I am telling you to do this. Take that bottle and throw it away. Now, it is like if you don't want to talk about weaning from the bottle that is fine with me. Let's talk about something else."*

During the interviews with site staff, the majority of interviewees reported measuring participant readiness to change either formally (i.e., "Stages of Change" model) or informally (i.e., verbal cues) and reported adapting their counseling style based on participant readiness to change. They provide more extensive information and specific referrals to those who are more likely to change.

- *"Their stage of change impacts how I interact with them. If they are very early in stage of change, you need to explain to them why it is beneficial whereas if they are ready to change you can move on to giving examples and/or providing recipes and actual foods to make it happen, make it real."*
- *"If someone indicates they are not ready for change or not thinking about change, we will educate at the level they are at. If someone is not ready for that then we accept that and let them know we are here if they need information. But if they show a greater interest, then we will spend more time providing resources and information that they need."*

Interviewees identified effective strategies for goal setting, including limiting the number of goals and making goals specific, achievable, and measurable.

- *"Most of the goals that we try to set will be realistic, measurable, and that they can complete by the next visit; something they can do over two months."*
- *"Limiting goals to one or two things and making them achievable so they feel good they're making the changes and will want to make more changes in the future."*

Interviewees provided a range of responses regarding how they respond when a participant is not interested in setting goals. The majority agreed it is ineffective to force participants to choose a goal and usually advise participants that WIC staff members will offer strategies and referrals when they are ready to make a change.

- *"If they are not wanting to set a goal or are not interested, I say that's fine, it's their choice. If they don't want to set a goal, why would I set a goal for them? They're not going to follow through."*

However, a few interviewees conveyed they think participant goal setting is obligatory and required by their SA.

- *"I don't typically let them leave without setting some kind of a goal."*
- *"I am required to have some sort of health and nutrition goal assigned to each participant that leaves my office with their secondary contact. If they get to a point where they refuse, I remind them that part of receiving benefits from the WIC program is participating in the nutrition education along with setting health and nutrition goals for your child."*

4.3.2 Group Education Sessions

As discussed previously, about 49% of sites offer group education sessions, and when offered, its use is often limited to secondary follow-up visits. This section summarizes information on the percentage of participants who receive group education sessions, facilitators to group education, how topics for group education sessions are determined, and the topics most often discussed.

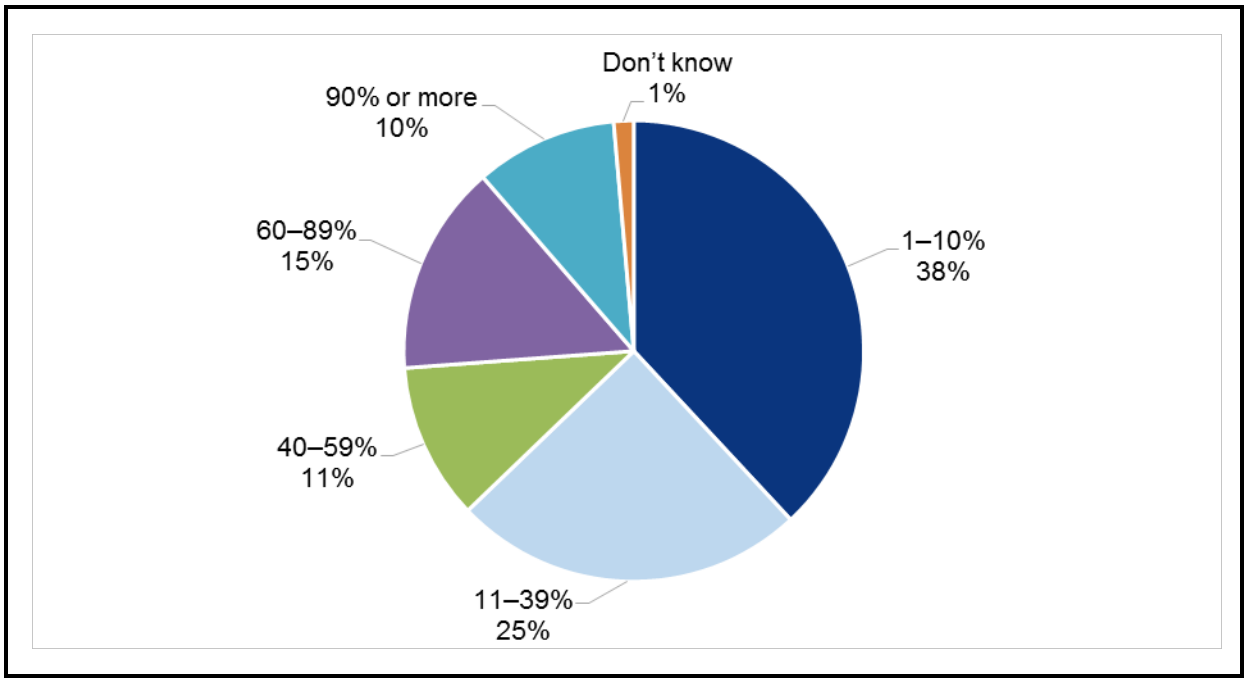
Percentage of Participants who Receive Nutrition Education through Group Sessions

For LAs that offer group sessions, respondents were asked to estimate the percentage of participants served at all sites operated by their LA that receive group nutrition education. These results are shown in **Exhibit 4-23** (Tabulated as Appendix I, Table I-47). Among LAs that offer group education sessions, the percentage of participants receiving group education varied. About 38% of LAs reported that less than 10% of participants served at all sites operated by the LA receive group education, whereas 25% of LAs reported that 60% or more of participants served at all sites receive nutrition education through group sessions.

During the interviews with site staff, 24 of the 80 interviewees discussed how they deliver nutrition education using group education sessions. The majority of those interviewed felt that group sessions are an effective method to provide nutrition education to multiple participants at one time and beneficial to participants who have the opportunity to share ideas and strategies with one another.

- *"They like to see they are not the only one going through this, and they like the support and resources we can help them with."*
- *"They like having the feedback from other moms, seeing how other moms relate to the cold weather out there to keep their kids healthy, how they are keeping their kids active. They help each other figure out dinner ideas."*

Exhibit 4-23. Percentage of Participants Served at All Sites Operated by the Local Agency who Receive Nutrition Education through Group Sessions (Weighted Percentage of Local Agencies that Offer Group Sessions)



Source: 2014 Local Agency Survey. Only respondents that provide group education sessions were included in the analysis for this question (n = 581). Number of respondents = 570 and number of nonrespondents = 11.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents were instructed to estimate if numbers were not readily available.

Facilitators of Effective Group Education Sessions

Interviewees provided several suggestions for making group education sessions effective, which included choosing an appropriate topic, engaging participants, and using visual aids. To engage participants, many interviewees reported they ask open-ended questions to elicit participants' thoughts and experiences to facilitate a discussion that is relevant to them.

- *"I think it is important to try and get your audience to engage in the conversation to make it more of a discussion, more than just me talking and them listening. I think they get more from it if they are participating in the discussion."*
- *"We really try to practice participant-centered nutrition education here. We allow the participants to talk to each other, to take the conversation and run with it. We allow the participants to talk to each other and learn from each other."*
- *"I try to ask questions to grab them and make them want to participate. I think participants learn more when they're participating and not just listening."*

As shown in **Exhibit 4-24** (Tabulated as Appendix I, Table I-48), sites use a variety of activities and resources to engage participants during group education sessions. The activities or resources used most often by sites are educational props (breastfeeding dolls or food containers), icebreakers/warm-up activities, and informational charts or displays. PowerPoint presentations, food sampling/demonstrations, and physical activity are never or rarely used by most sites.

Exhibit 4-24. Frequency of Activities or Resources Used during Group Education Sessions (Weighted Percentage of Sites)

Activities/ Resources	Never	Rarely (<10%)	Occasionally (11–39%)	Sometimes (40–59%)	Often (60–89%)	Almost Always (≥90%)
Icebreakers/warm-up activities	9.6	12.2	10.9	12.2	19.9	35.2
Discussions between pairs of WIC participants	15.9	23.4	17.6	18.9	14.4	9.8
Educational props	5.7	7.4	11.2	20.2	28.0	27.5
Informational charts or displays	5.8	7.9	16.3	26.5	24.3	19.2
Food sampling/ demonstrations	33.4	25.5	16.5	14.5	4.8	5.2
Hands-on activity or game	21.0	26.0	19.4	14.4	11.8	7.4
Physical activity	37.5	36.6	16.4	6.8	2.7	—(n/a)[a]
PowerPoint presentation	53.5	15.1	7.4	9.0	5.3	9.7
Video/DVD	18.6	16.1	20.3	21.5	17.7	5.7

Source: 2014 Site Survey, Version 2. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). The overall number of respondents to this question = 376 and the number of nonrespondents = 6.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

[a] An estimate is not provided because no respondents selected this response.

During the interviews with site staff, interviewees mentioned they use several visual aids or props, like food models, poster boards, and breastfeeding dolls, during group education sessions to reinforce discussion content and to appeal to visual learners.

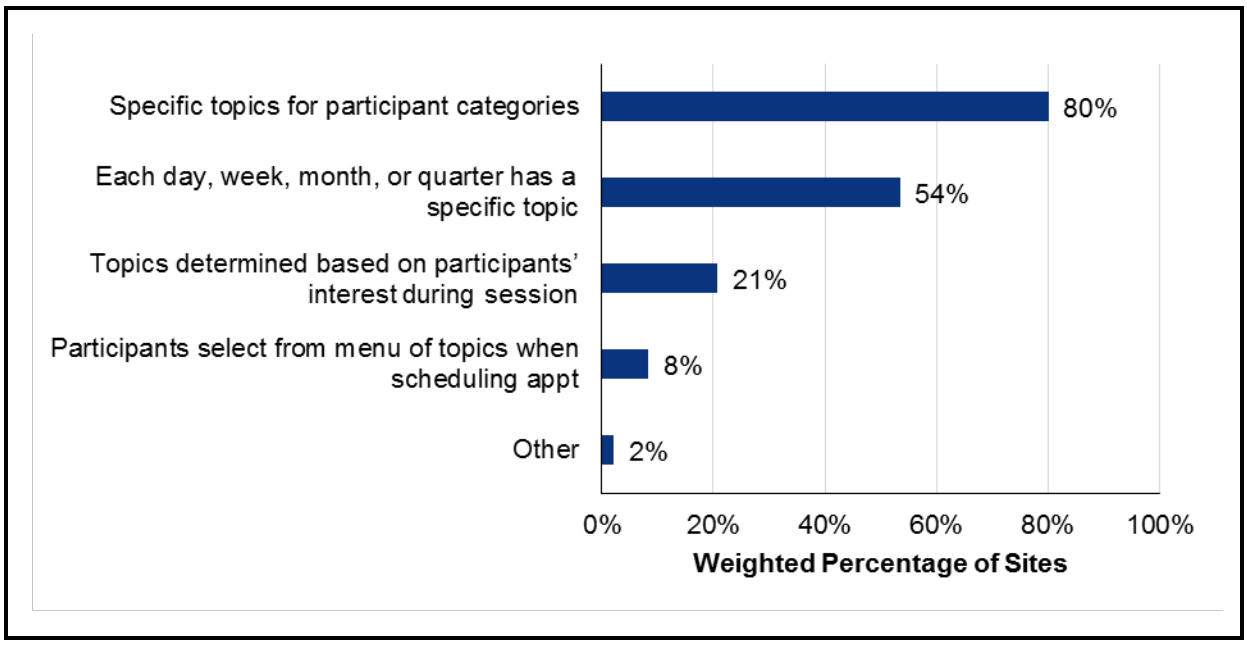
- *"For this class, I use a breast model. You can pull back a layer and see the milk ducts and the nerves behind the breast. You can explain to them how your body knows to make milk and how your baby latching to the breast and stimulates production. I also use belly balls to show the size of the baby's stomach during the first few days of life."*
- *"I also think it is helpful to use some sort of props, whether it is the breast model, or if it is a different class, using fat tubes or sugar tubes, depending on what we are talking about. I always try to have some sort of visual."*

How Discussion Topics Are Determined

Sites that provide group education were asked how they select topics for the group sessions. As shown in **Exhibit 4-25** (Tabulated as Appendix I, Table I-49), the method most often used (80% of sites) to determine topics for group education sessions is to have specific topics for participant categories (e.g., breastfeeding class for prenatal or breastfeeding participants, infant class for parents of infants). More than half of sites (54%) reported there is a specific topic each day, week, month, or quarter.

During the interviews with site staff, interviewees commented that their methods for choosing topics for group sessions varied. Some interviewees facilitate groups with a specific topic and lesson plans in mind, while others allow participants' interests to determine the topic for discussion. The majority of interviewees described a hybrid approach, in which the facilitator chooses a topic/lesson plan but allows the interests of the group to guide the discussion. Sources for topics/lesson plans include WIC Works Resource System, the Internet, and SA-supplied materials.

Exhibit 4-25. Methods Used to Determine Discussion Topics for Group Education Sessions (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). Number of respondents = 370 and number of nonrespondents = 14.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights.

Respondents could select more than one response.

- *"I leave the topic up to them, and I facilitate the discussion."*
- *"We have for the prenatal class an outline of information that we cover, and we have standard packets of information that we give to people."*

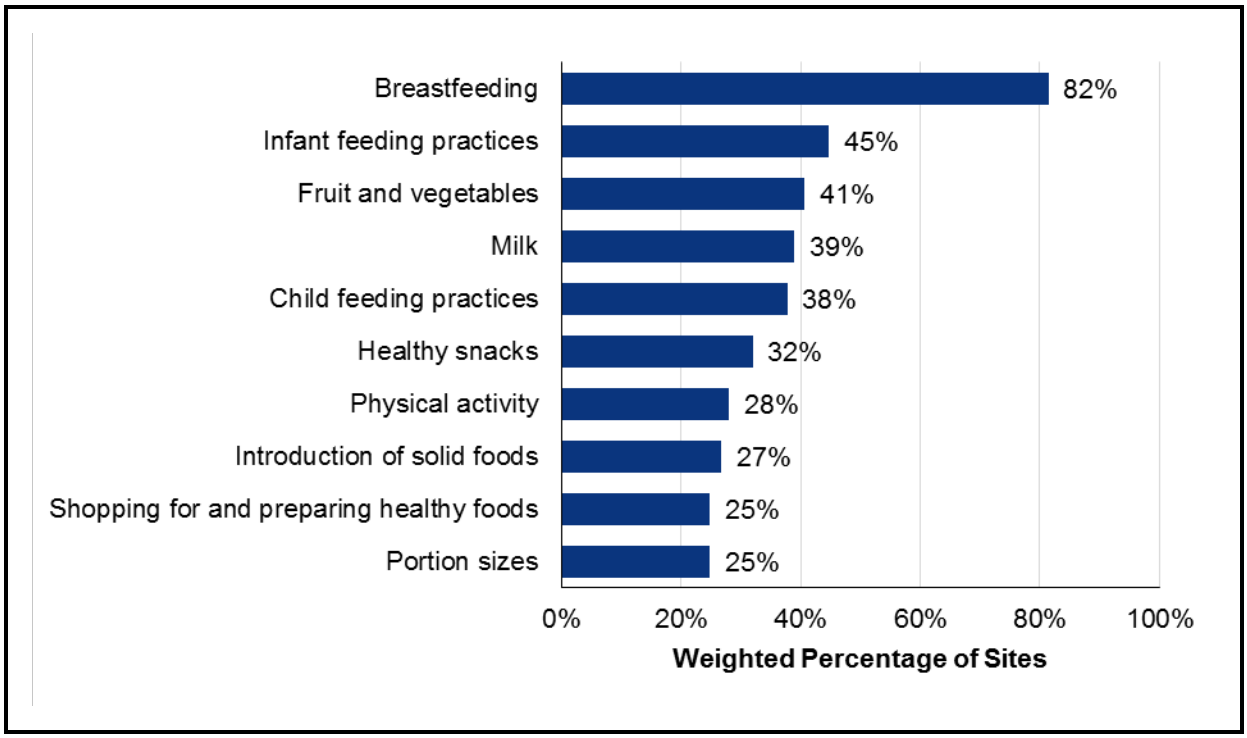
Topics Most Often Discussed

The Site Survey asked respondents to select from a list of 25 topics the 7 topics that nutrition educators at the site discuss most often during group education sessions over the past 6 months. As shown in **Exhibit 4-26** (Tabulated as Appendix I, Table I-50), the topic most often discussed was breastfeeding (82% of sites), and about 40% of sites discussed infant feeding practices, child feeding practices, fruit and vegetables, and milk. Other topics were less widely discussed, suggesting greater diversity in topics for group education sessions.

During the interviews with site staff, interviewees described some challenges they face when facilitating group education sessions. A common challenge mentioned was how to respond when a participant shares incorrect information with the group.

- *"A challenge is when people bring up inappropriate topics, like giving wrong advice. We talk about why it might not be the thing to do; have them realize how it wouldn't be the thing to try."*

Exhibit 4-26. Topics Most Often Discussed during Group Education Sessions during the Past 6 Months (Weighted Percentage of Sites)



Source: 2014 Site Survey, Version 2. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). Number of respondents = 376 and number of nonrespondents = 8.

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Respondents were instructed to choose up to seven topics; the Web-based survey would not accept more than seven responses. "Top ten" topics shown.

Another challenge mentioned was getting participants to attend group education sessions at the specified time.

— *"It is very hard to do group education here especially with parents of WIC participants. It is hard to get them to come."*

In addition to providing group education sessions for pregnant and postpartum women and parents/caregivers, a few interviewees mentioned their sites also offer group education sessions or activities specifically targeted to children, like storytelling and physical activity, which have been well received by children and caregivers alike. Several interviewees who facilitate groups for children reported using Fit WIC materials, which were developed through a USDA-funded childhood obesity initiative.

— *"Willow is a puppet used to engage children in talking about fruits and vegetables. We explore the texture, smell, colors, and origins of fruits and vegetables. We put together a simple recipe for the kids to help prepare and taste. We asked the kids to "nibble" the prepared foods to try them. This last session topic was specific to fruit. We did a breakfast kebob. One participant's parent shared that it was her child's first time eating pineapple, and the child liked it."*

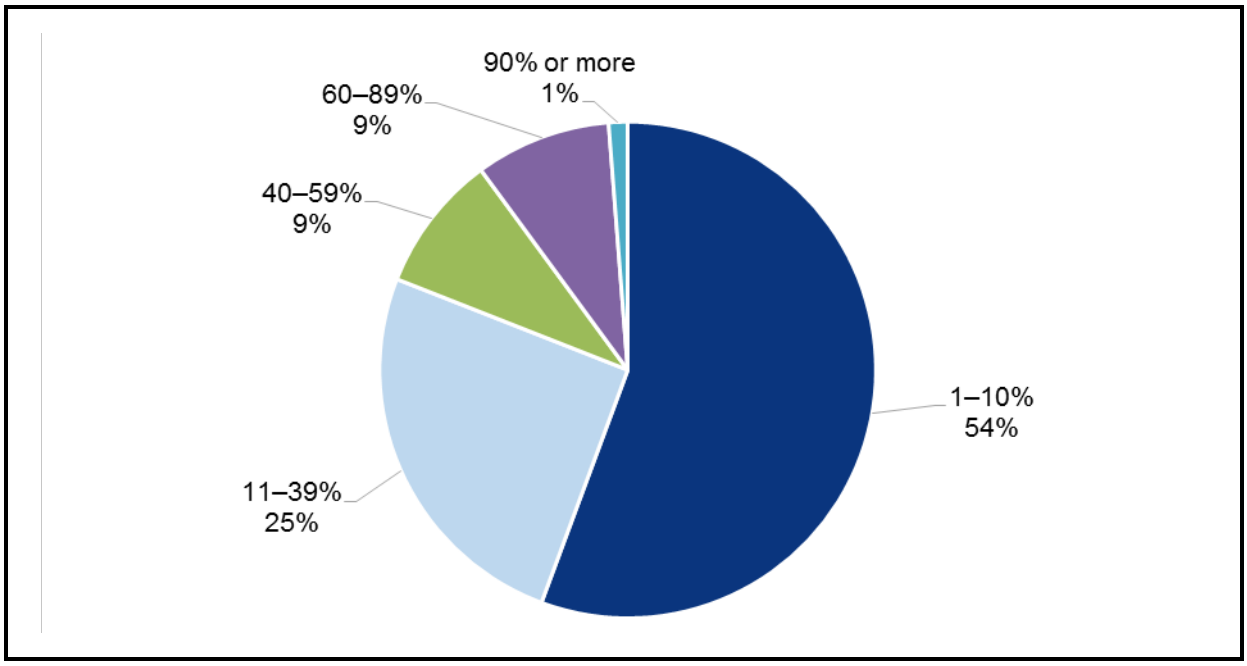
— *"We have a Kids Club class that rotates the topic every six months. They have a 'Kids in the Kitchen Class' where they do hands-on snack preparation, like making 100% whole wheat soft pretzels. Those classes are targeting the kids and teaching to them. We tell parents to bring their kids to the class because the class is for them. We've done a nutrition story time class. We've*

done an exercise class where there's an obstacle course on the floor for the kids to do. We've done a gardening class with kids. All of our classes are offered monthly."

4.3.3 Technology-Based Nutrition Education

As discussed previously, about 48% of sites use offsite technology-based education, usually for secondary follow-up visits. For LAs that offer offsite technology-based education, the Local Agency Survey collected information on the percentage of participants served at all sites operated by the LA that receive nutrition education using this method. These results are shown in **Exhibit 4-27** (Tabulated as Appendix I, Table I-51) and suggest that among LAs that use this mode a limited number of participants receive technology-based nutrition education. About 54% of LAs reported less than 10% of participants served at all sites operated by the LA receive technology-based nutrition education, and 25% reported 11 to 39% of participants served at all sites operated by the LA receive technology-based nutrition education.

Exhibit 4-27. Percentage of Participants Served at All Sites Operated by the Local Agency that Receive Offsite Technology-Based Education (Weighted Percentage of Local Agencies that Offer Technology-Based Education)



Source: 2014 Local Agency Survey. Only respondents that provide offsite technology-based nutrition education were included in the analysis (n = 432). Number of respondents = 421 and number of nonrespondents = 11.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents were instructed to estimate if numbers were not readily available.

During the interviews with site staff, 30 of the 80 interviewees discussed how their site uses offsite technology-based nutrition education. Interviewees described technology-based nutrition education as effective, and most stated they have received positive participant feedback about their experiences using technology-based nutrition education. However, a few interviewees stated that Internet education has yet to gain popularity among participants because it is a fairly new option at their sites. Of the interviewees from sites where it is a new option, some expressed their hope that participants will adapt and feel comfortable using technology-based nutrition education.

- *"They tend to like it. Those that have actually utilized online nutrition education, I would say 60-70% stick with it. They prefer that."*
- *"It is going really well. I was surprised by the high number of participants that have actually done it. We have gotten a lot of good feedback."*
- *"We don't have very many that use it, I think they aren't receptive to it because of time or they haven't thought of using it, or just because it is new, and they aren't taking the initiative to do it."*

A small number of interviewees mentioned their site uses computer kiosks and computers or laptops to provide participants with onsite technology-based nutrition education.

- *"We have a kiosk in our waiting room with a direct link to the WICHealth.org. We have it up and running on check pick up days."*

Of these interviewees, some reported their kiosks had the same lessons as those offered offsite via the Internet, while others reported the kiosk lessons are different from the lessons available on the Internet. Several interviewees reported their onsite kiosks were broken or no longer used.

- *"Our online requires JAVA and that isn't always on their phone so then they can come in and use the mini-laptops instead."*

Many interviewees said offsite technology-based nutrition education via the Internet is mainly used as an option for secondary education. While some sites offer offsite technology-based nutrition education to all participants, at other sites, it is only allowable as a secondary education option for certain participant categories.

- *"It is only for low risk clients, and we do not like to have our prenatals do the kiosk or the Internet, because there is so much that can change with the prenatal in 3 months."*
- *"Any WIC participant is eligible. Only non-high risk participants are able to complete it as a nutrition education contact. High-risk can access it; they just have to see a nutritionist too."*

The main source of offsite technology mentioned by interviewees is WICHealth.org. Interviewees discussed reasons why technology-based nutrition education is popular with participants. The reasons most frequently given were convenience, no travel, and the ability to self-select one or more nutrition education topics.

- *"They really like the option of just doing the lesson online, having the ability of doing the lesson at home, at their own pace and their convenience, sitting at home and doing the lesson whenever they have time to do the lesson."*
- *"We have a lot of rural homes in this part* [of the State]*, and transportation is very difficult for participants, so participants prefer to make as few trips to the WIC office. A lot of time WIC participants have to pay someone to bring them to WIC."*
- *"For a class that they are coming in for, we are telling them what the topic is, and we're choosing the topic for them. Whereas when they go online, they can choose it themselves, what interest them, and what concerns they have. They get the choice."*

Some interviewees reported that younger participants are more likely to use Internet education and provide positive feedback about their experiences. Interviewees shared that younger participants are

familiar with receiving information electronically, and many prefer this learning style. Smart phone compatibility was mentioned as an important feature for Internet education, especially for younger participants.

- *"For the young ones, it is what they are used to. They are used to being on their phone. They are used to using the Internet. It is very user friendly for them. They are already on their phone anyway so let's just do the class on the phone. It seems to catch their attention more. So for me, for my young teenagers, it really is a very good tool."*
- *"I have the young ones because I am near a high school.* [They] *love it and come back and say 'I did it, and it is so much easier than me coming in here to your classroom.'"*

Some interviewees mentioned technology-based nutrition education is ineffective for people who do not have Internet access or do not feel comfortable using a computer. The most frequently mentioned drawback of using Internet lessons as secondary education was that participants are unable to engage with site staff members if they have questions about the content.

- *"If they have a question about something they are reading, they can't ask me right away."*
- *"Anyone that would need more clarification about a subject, they don't have the opportunity to talk to us and ask that question. Or if they don't have Internet access or aren't computer savvy."*

Once a participant completes technology-based nutrition education offsite, some sites require participants to print and bring a certificate of completion to the site, while staff members at other sites access the certificate on behalf of a participant. Although most interviewees reported participants who complete offsite nutrition education do not need to meet with nutrition staff members when they receive their WIC benefits, a few interviewees stated their sites require their participants to meet with site staff members briefly to discuss the nutrition education they completed offsite and set a behavioral goal before receiving their WIC benefits. Some interviewees reported that they follow up with participants via phone, while others reported they usually follow up with participants at their next WIC one-on-one counseling session.

- *"The Internet option is a great option for them, and we can follow* [up] *with a phone call to see what they learned from the lesson."*
- *"We use the questions from the module as follow-up at their next visit."*
- *"When we ask what they learned, we might even learn something we can share with other clients, and we can offer suggestions."*

4.4 Types of Reinforcements and Follow-Ups Used

According to WIC Program Nutrition Education Guidance, reinforcements such as "informational materials and teaching aids provide the opportunity for selected nutrition messages to be repeated. Repeated exposure to a nutrition message has been shown to facilitate adoption of the message by the client" (USDA, 2006b, p. 5). The guidance further states that use of certain reinforcements (e.g., publications/pamphlets, take-home activities/newsletters) independent of other nutrition education elements is not deemed effective and, therefore, should not be counted as a nutrition education contact.

Another component of WIC nutrition education is follow-up. According to WIC Program Nutrition Education Guidance, follow-up provides "an opportunity for both the nutrition educator and the

participant to examine progress toward goals, to provide positive support, to identify barriers that may be hindering the participant's progress and to reassess and refine future nutrition education plans. Follow-up provides ongoing support by reinforcing nutrition education message(s) and the participants' nutrition education goal(s)" (USDA, 2006b, p. 5).

Summarized below are the findings from the Local Agency Survey on the types of reinforcement methods used onsite and offsite and nutrition educators' use of various follow-up methods. These findings are supplemented with information from the interviews with site staff members (32 of the 80 interviewees discussed their use of reinforcement methods).

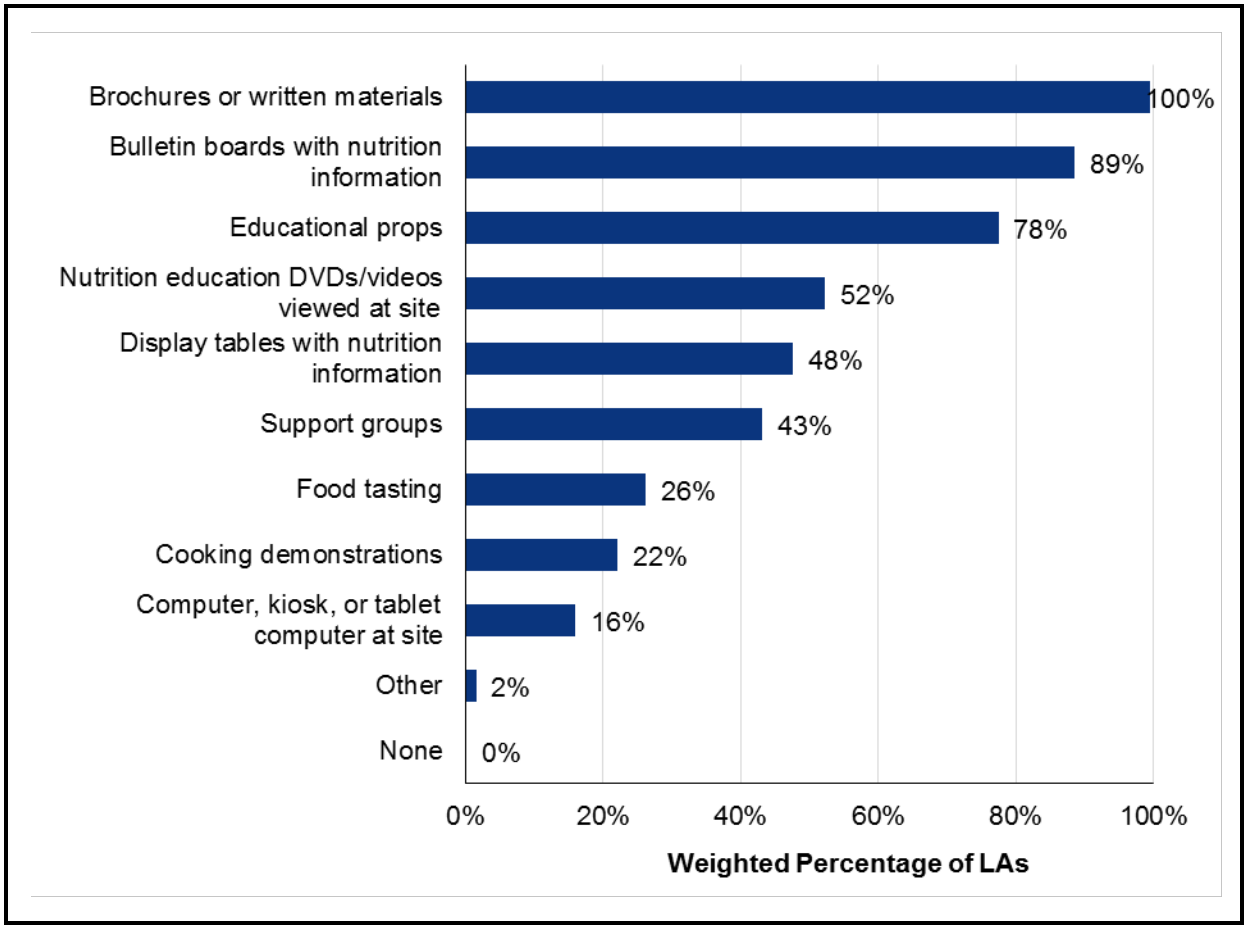
4.4.1 Onsite Reinforcement Methods

Nutrition educators use a variety of onsite methods to reinforce the information provided in nutrition education sessions. As shown in **Exhibit 4-28** (Tabulated as Appendix I, Table I-52), all LAs reported that nutrition educators use brochures or other written materials to support the information provided in nutrition education sessions. Bulletin boards with nutrition information (89% of LAs) and educational props, such as food containers, breastfeeding dolls, and physical activity items (78% of LAs), are also widely used to support the information provided in nutrition education sessions. The use of multiple reinforcement methods is common. Almost three-fourths of LAs reported the use of four or more onsite methods to reinforce information provided in nutrition education sessions.

When asked during interviews which materials or items used to reinforce nutrition education were most effective, the most commonly mentioned items were bulletin boards, DVDs, and nutrition education materials. When asked why these items were effective, many interviewees reported that having multiple ways to reinforce nutrition education is important because people have different learning styles; some people are more visual learners, whereas others like to read or hear the information. Reinforcing nutrition education messages in several different ways is effective in helping participants engage with and use the information. Bulletin boards are used not only to reinforce nutrition education strategies via visually appealing pictures and interesting topics but also to provide secondary education. Participants view the material on the board and then complete a quiz or questionnaire about the information. Often a nutrition educator will discuss with the participant her thoughts about the information and answer any questions she may have.

According to several interviewees, DVDs or video streaming are frequently used in the WIC reception area while participants are waiting for their WIC visit. DVDs are also used as part of group education sessions, although some interviewees shared that they are reducing the use of DVDs in favor of facilitated group discussions. DVDs are often given to participants to take home. Popular topics for DVDs include breastfeeding and physical activity.

Exhibit 4-28. Use of Onsite Reinforcement Methods (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey, Number of respondents = 878 and number of nonrespondents = 15.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

According to interviewees, other materials used to reinforce nutrition education include food models, displays of fat and sugar content in certain foods, and visuals of baby bottle tooth decay. Some interviewees also reported their sites use small giveaways to reinforce nutrition education. Participants also respond favorably to materials with recipes and are most receptive to information on pregnancy and infant nutrition, according to interviewees.

- *"I'm a visual learner, so I think sometimes people need to see pictures. Like the size of a baby's stomach to show them if they are feeding 4 oz. of formula and the mom complains the baby is spitting up, then showing them a picture of the stomach size might help."*
- *"People really learn when they can see it, touch it, smell it, and talk about it when you are right there. Allowing for that multiple sense reinforcement is most effective. Everybody is different, and everybody learns in a different way so they are all effective for different people."*
- *"The handouts are most effective because participants can put the information on the refrigerator and refer back to it if, for example, the participant forgets what they're supposed to be feeding them at what age."*

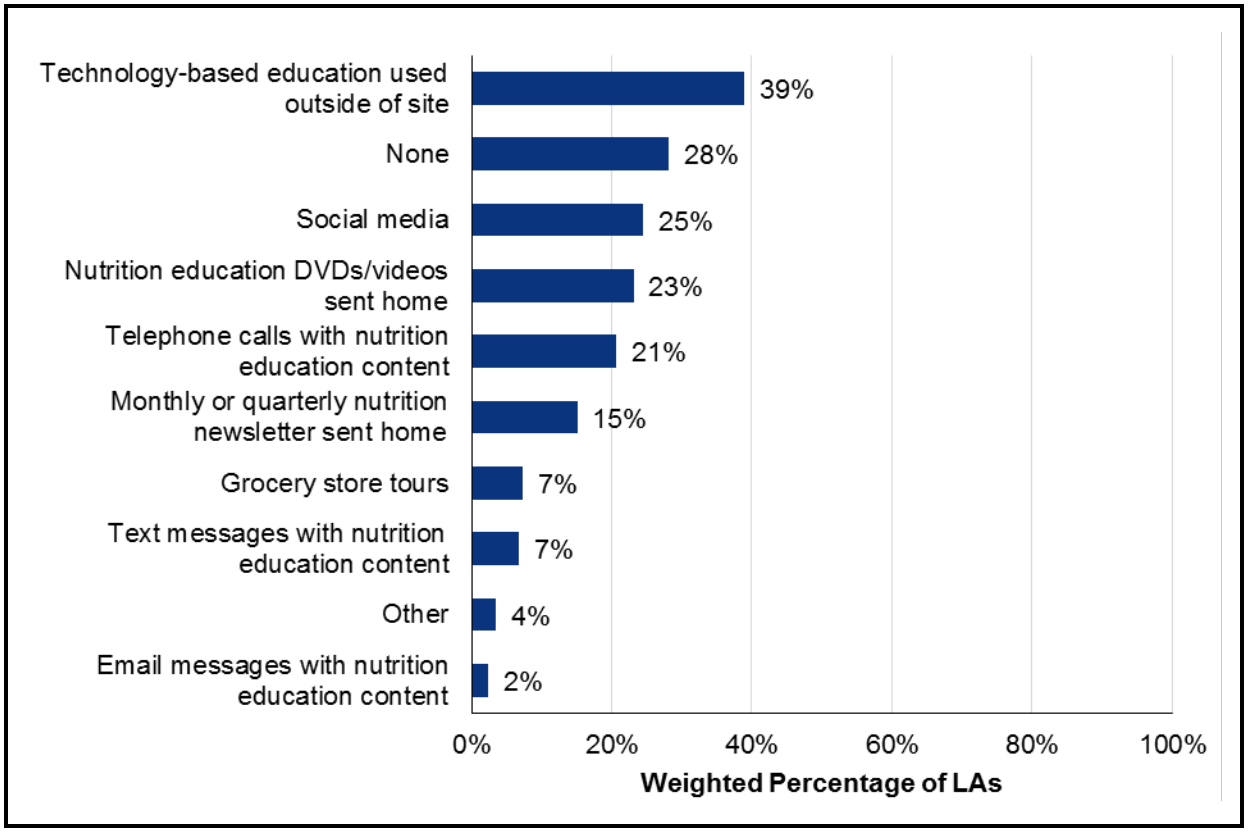
Some interviewees mentioned that sharing and discussing nutrition education materials during nutrition education contacts will make it more likely a participant will take and use the information in the material.

- *"Anything has to be presented or talked about to be effective. Just handing someone a pamphlet is always going to be ineffective in my opinion."*
- *"Make sure the nutrition education message is getting to the participant. If the information is given and not explained, like most things in life, if you are simply given a piece of paper, you might not use it."*

4.4.2 Offsite Reinforcement Methods

As shown in **Exhibit 4-29** (Tabulated as Appendix I, Table I-53), the use of offsite reinforcement methods is not as widespread as the use of onsite methods. Twenty-eight percent of LAs reported not using any offsite reinforcement methods, and 31% of LAs use only one method to reinforce nutrition education (data not shown). The most common method of reinforcement used offsite is technology-based education (39% of LAs). Because this percentage is similar to the percentage of LAs that allow for offsite technology-based nutrition education for secondary education, they may view this method as achieving two purposes. About 25% of LAs reported the use of social media to reinforce nutrition education; however, few LAs reported the use of text messaging or email as an offsite reinforcement method.

Exhibit 4-29. Use of Offsite Reinforcement Methods (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 842 and number of nonrespondents = 51.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

During interviews with site staff, several interviewees reported their sites use Facebook to connect with participants via their LA or SA page; however, the majority of interviewees shared they have not received a large response from participants using this method. In addition, some interviewees reported using texting programs, like Text4Babies, Moment, and other apps, to reinforce nutrition education. Some interviewees also reported that breastfeeding peer counselors have had success communicating with participants via text messaging.

- *"Originally she was making daily posts. She said that we really don't have that many followers. She said the feedback that she has gotten is that when she asks people to follow our page or like us on Facebook that a lot of people aren't interested. I don't know if that is a WIC stigma. They don't want to like WIC or follow us. So she doesn't have a lot of participation."*
- *"The program automatically sends out 4 messages a week based on the woman's stage of gestation. Once they deliver, the platform changes and they receive postpartum messages. The prenatal message includes educational videos and questions. People respond to the text messages, and their Peer Counselor is there to respond, or if it is out of their scope, then the IBCLC will respond or even call. We find out if they have delivered, and we can quickly find out about any problems.… The pilot showed that women who received text messages supplemented less and breastfed longer."*

Almost all interviewees reported that they adapt their counseling styles and content and the way they use reinforcement methods to meet the unique, individual needs or circumstances of their participants. Most adaptations are based on levels of education and reading ability, age, and culture. For those with limited education, nutrition educators reported using simpler language and fewer nutrition education messages per session. Participants who had a higher education level tend to share more detailed information and more resources to find additional information.

- *"If it is a literacy thing, you make them simple questions, find out what they are thinking, those kinds of things. Use smaller words."*
- *"If they are very interested in a topic and their education level is high and they want more, we are going to go more in-depth and give them specific Web sites they could check and different handouts. If they are at a more basic level, then we are going to try to scale down what we are discussing and switch to basic and try to educate them on their level."*

Nutrition educators discussed adapting their education messages based on age when working with young parents or with grandparents who are the primary or secondary guardians for the children. Interviewees shared that, for young people, educators will often simplify their language and may be more directive with their suggestions.

- *"If my client is a 16-year-old pregnant woman for the first time, it is a very different conversation than with a 34-year-old woman who has 4 children."*
- *"The other day I had a 13-year-old that just had a baby. So I knew I had to work hard to get her to understand what she needed to do as far as feeding the formula."*

During interviews, nutrition educators also noted adapting their nutrition education based on the culture of the participant. They shared that they may ask about foods important in the participant's culture or

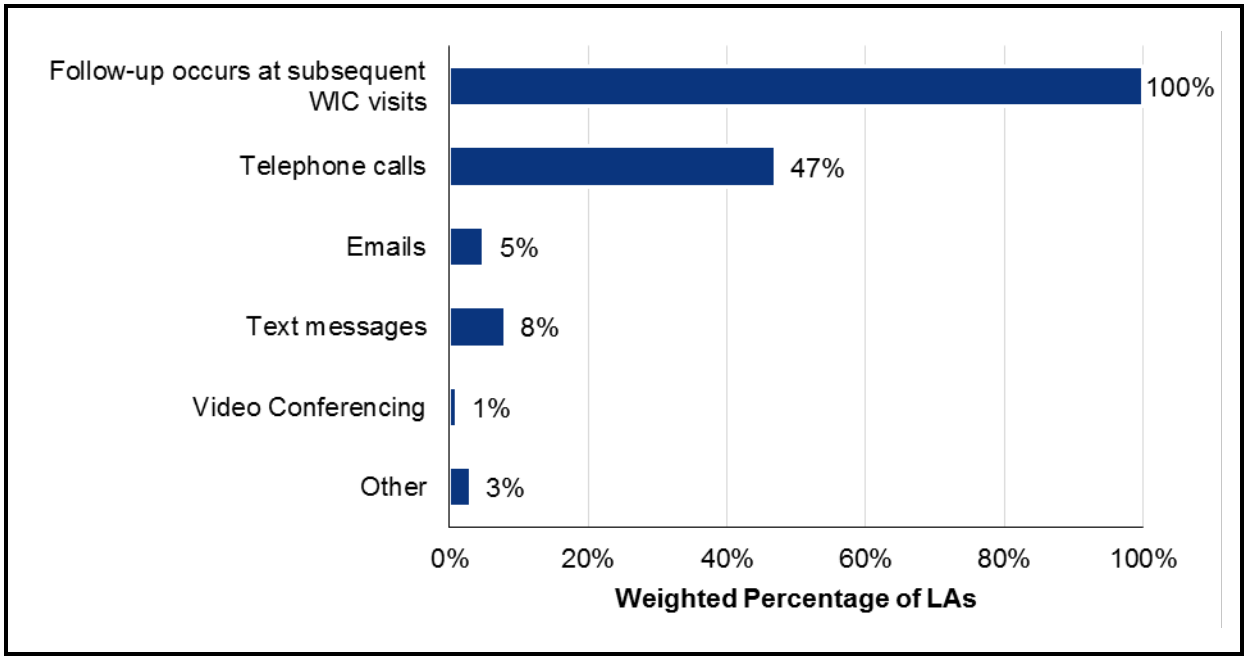
engage them by asking about food and nutrition customs and practices. Interviewees reported that this helps build rapport and trust with the participant while helping them individualize the education offered to that participant.

- *"We learn about the foods that they eat and try to help them eat healthier within those foods. Everybody doesn't eat hamburgers and American style food."*
- *"You kind of adapt to each culture individually. You ask them, what is it that you usually do in your culture after giving birth and you adapt your education to that."*

4.4.3 How Sites Follow Up with Participants

To encourage participants to adopt the goals they set during one-on-one sessions, nutrition educators may follow up with participants about the goals or concerns (e.g., breastfeeding, weight-loss goals) they expressed during nutrition contacts. **Exhibit 4-30** (Tabulated as Appendix I, Table I-46) shows how sites follow up with participants. All LAs reported follow-up occurs at subsequent WIC visits, and nearly half (47%) also contact participants by telephone before their next scheduled visit to follow up.

Exhibit 4-30. How Educators Follow Up with Participants about Goals and Concerns that Were Discussed during Nutrition Contacts (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 880 and number of nonrespondents = 13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

4.4.4 Differences in Types of Reinforcement and Follow-Up Methods Used by LA Characteristics

Analyses were also conducted to understand how the use of reinforcement and follow-up methods varies by FNS region, urbanicity, and LA caseload size based on findings from the Local Agency Survey (tabulated as Appendix J, Table J-6 [b, c, d]; Table J-7 [b, c, d]; and Table J-8 [b, c, d]).

For the use of onsite reinforcements, data analysis revealed statistically significant differences in the use of the following methods:

- computer/kiosk/tablet computers by FNS region—the highest use was in the Mid-Atlantic (35%); by urbanicity—use was 18% among LAs in urban areas; and by caseload size—the highest use was among very large LAs (23%);
- cooking demonstrations by FNS region—the highest use was in the Northeast (41%); by urbanicity—use was 25% among LAs in urban areas; and by caseload size—the highest use was among very large LAs (36%);
- educational props by urbanicity—use was 81% among LAs in urban areas;
- nutrition education videos/DVDs by FNS region—the highest use was in the Southwest (79%); by urbanicity—use was 56% among LAs in urban areas; and caseload size—the highest use was among very large LAs (68%);
- support groups by FNS region—the highest use was in the Northeast (69%); by urbanicity—use was 47% among LAs in urban areas; and caseload size—the highest use was among very large LAs (60%);
- display tables with nutrition information by FNS region—the highest use was in the Northeast (67%);
- bulletin boards with nutrition information by FNS region—the highest use was in the Mid-Atlantic (94%) and by caseload size—the highest use was among very large LAs (94%); and
- food tastings by FNS region—the highest use was in the Northeast (45%) and by caseload size—the highest use was among very large LAs (37%).

For the use of offsite reinforcements, data analysis revealed statistically significant differences in the use of the following methods:

- nutrition newsletters by FNS region—the highest use was in the Northeast (27%);
- nutrition education videos/DVDs by FNS region—the highest use was in the Southwest (66%);
- offsite technology-based methods by FNS region—the highest use was in the Southwest (58%);
- social media by FNS region—the highest use was in the Midwest (35%); and
- grocery store tours by FNS region —the highest use was in the Northeast (22%) and by urbanicity—use was 12% among LAs in urban areas.

No statistically significant differences exist among types of reinforcers used offsite by caseload size.

For the use of follow-up methods, data analysis revealed statistically significant differences in the use of the following methods:

- text messages by FNS region—the highest use was in the Mountain Plains (16%) and
- telephone calls by FNS region—the highest use was in the Northeast (63%).

No statistically significantly differences exist among types of follow-ups used.

4.5 Nutrition Education for Participants Who Are Identified as High Risk

WIC participants may be identified as high risk if they have certain conditions (e.g., poor weight gain for pregnant women or failure to thrive for infants and children). The criteria for identifying participants as high risk vary based on the SA's policies. The WIC Nutrition Services Standards, jointly authored by FNS and the National WIC Association, recommend "nutrition services associated with 'high-risk' include, among other elements, an individual care plan, more frequent nutrition education contacts and the provision of nutrition services by a registered dietitian (or other professional)" (USDA, FNS, 2013a, pp. 14–15). The Local Agency and Site Surveys collected information on the nutrition education policies and protocols in place for providing nutrition education to participants and any modifications made to nutrition education for participants identified as "high risk" and/or participants with nutrition risks requiring special attention.

As shown in **Exhibit 4-31** (Tabulated as Appendix I, Table I-55), nearly all LAs (99%) reported that their SA has nutrition education policies and protocols for participants identified as high risk, and 95% of LAs classify participants into risk levels (e.g., high risk vs. not high risk). Many LAs reported that modifications are made to nutrition education based on a participant's risk level. For example, 88% of LAs reported that nutrition education is provided by a dietitian, nutritionist, or other health professional to participants identified as high risk. In addition, 66% of LAs reported that more detailed and individualized care plans are prepared for participants identified as high risk, and 65% of LAs reported that one-on-one counseling is used with participants identified as high risk instead of group sessions or other modes of nutrition education. Results from the Site Survey are nearly identical.

4.6 Dosage of WIC Nutrition Education

When considering the impact of nutrition education on participants' nutrition and other behaviors, it is important to consider dosage, that is, the frequency and duration of the nutrition education received (Olander, 2007). The Local Agency and Site Surveys collected information on the number of contacts by participant category and certification period and the length (i.e., amount of time) of the contacts. Based on the review of State Plans, 98% of geographic States and the District of Columbia and 88% of ITOs and territories have requirements for the minimum number of contacts to provide to different categories of participants (see **Exhibit 4-32** [Tabulated as Appendix I, Table I-54]).

Exhibit 4-31. Policies and Protocols in Place for Providing Nutrition Education to Participants Who Are Identified as High Risk (Weighted Percentage of Local Agencies)

	Weighted % of LAs
State agency has nutrition education policies and protocols for participants who are identified as high risk (Number of respondents = 887, nonrespondents = 6)	
Yes, has policies/protocols	98.8
No, does not have policies/protocols	1.2
Local Agency classifies participants into nutrition risk levels (e.g., high risk, not high risk) (Number of respondents = 888, nonrespondents = 5)	
Yes, classifies participants	95.2
No, does not classify participants	4.8
Modifications made based on participant's risk levels or nutrition risks (Number of respondents = 880, nonrespondents = 13)	
No modifications	1.2
More nutrition education contacts	49.3
Nutrition education from a dietitian, nutritionist, or other health professional	88.2
Longer appointment times	29.5
One-on-one counseling instead of group sessions or other types of education	65.3
More detailed and individualized care plans	65.8
More follow-up on referrals	51.0

Sources: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

Exhibit 4-33 (Tabulated as Appendix I, Table I-56 and Table I-58) shows the mean number of nutrition education contacts for the certification period *planned* by LAs for participants who are not high risk, and **Exhibit 4-34** shows the number of contacts *offered* by sites to participants who are not high risk.[25] The results for planned vs. offered contacts are generally similar. For prenatal women, the number of contacts offered varies by trimester, ranging, on average, from 3.5 contacts for women in their first trimester to 2 contacts for women in their third trimester. For breastfeeding women, infants, and children with a 12-month certification period, the mean number of contacts is 4, and the number of contacts drops to 2 for a 6-month certification period. Postpartum women who are not breastfeeding have an average of 2 contacts. By Federal directive, all WIC participants have the opportunity to participate in nutrition education at least two times during a 6-month certification period or quarterly for a 12-month certification period (WIC Federal regulations 246.11 [e]). Thus, these results demonstrate that LAs are meeting minimum Federal WIC requirements.

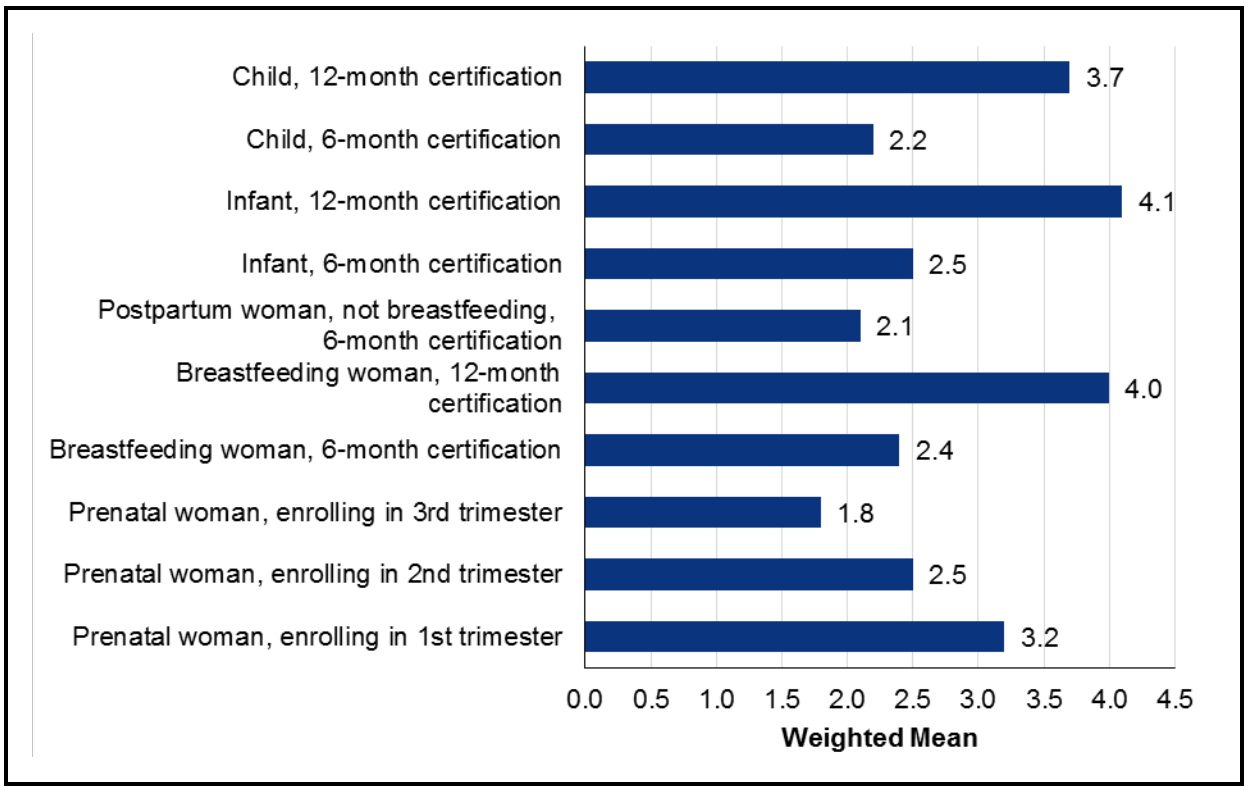
[25] Respondents to the Local Agency and Site Surveys were instructed to provide the number that is planned for the majority of participants even though the number of contacts may vary based on individual needs. Respondents to the Site Survey were instructed to provide estimates based on their experience and that it was not necessary to run a report or review participant records to answer the question.

Exhibit 4-32. State Agency Policy on Requirements for Minimum Nutrition Education Standards (Unweighted Percentage of State Agencies)

	Geographic States and District of Columbia (n = 50)	ITOs and Territories (n = 25)	All SAs (n = 75)
Participant Categories for Which Standards Are Specified			
Breastfeeding women	98.0	100.0	97.3
Postpartum women	96.0	96.0	98.7
Children	96.0	96.0	96.0
Infants	98.0	96.0	97.3
High-risk participants	98.0	92.0	96.0
Areas Addressed by the Standards			
Number of contacts	98.0	88.0	94.7
Content (WIC appropriate topics)	92.0	84.0	89.3
Nutrition topics relevant to participant assessment	96.0	80.0	90.7
Appropriate use of educational reinforcements	78.0	80.0	78.7

Source: Abstraction of 2014 State Plans, n = 75. Data were not available for 15 SAs that were mainly ITOs. Multiple responses allowed.

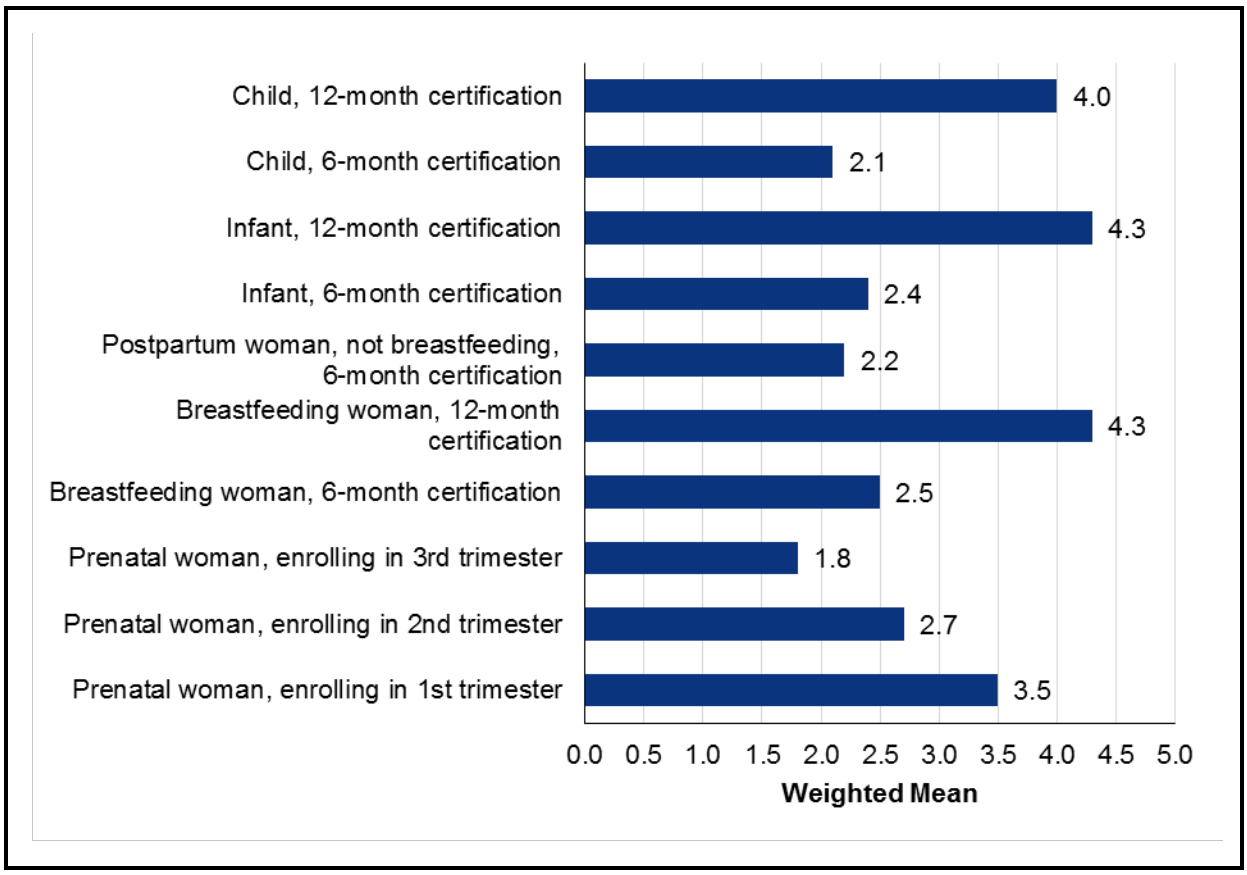
Exhibit 4-33. Number of Nutrition Education Contacts Planned by Local Agencies for Participants Who Are Not High Risk



Source: 2014 Local Agency Survey. Number of respondents varied based on participant category. Overall number of nonrespondents = 34.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Prenatal certification period begins at enrollment and ends 6 weeks postpartum.

Exhibit 4-34. Number of Nutrition Education Contacts Offered by WIC Sites for Participants Who Are Not High Risk



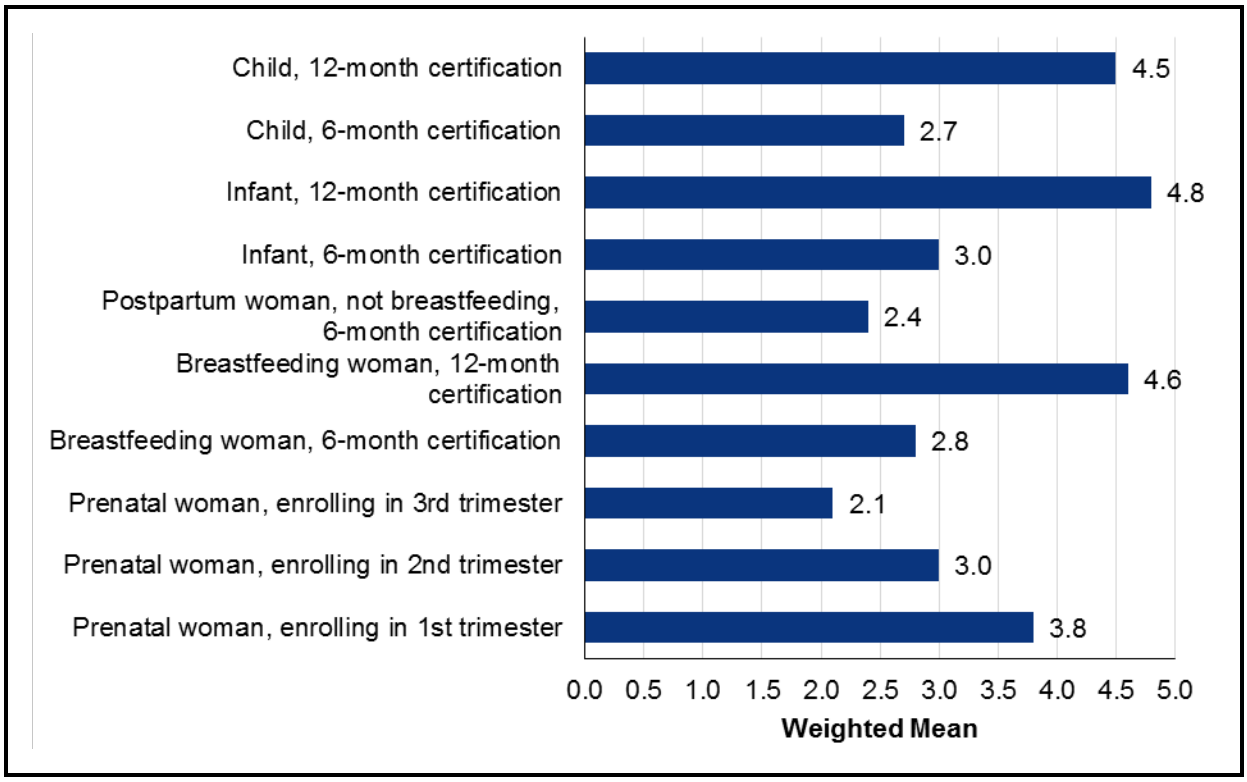
Source: 2014 Site Survey, Versions 1 and 2. Number of respondents varied based on participant category. Overall number of nonrespondents = 38.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. Prenatal certification period begins at enrollment and ends 6 weeks postpartum.

Exhibit 4-35 (Tabulated as Appendix I, Table I-57 and Table I-59) shows the mean number of nutrition education contacts for the certification period *planned* by LAs for high-risk participants, and **Exhibit 4-36** shows the number of contacts *offered* by sites to participants who are high risk. The results for planned vs. offered contacts are similar. Contrasting the results for high-risk participants with non-high-risk participants, the analysis indicated no differences in the mean number of offered contacts for prenatal and breastfeeding women with a 6-month certification. However, for all other participant types and certification periods, the mean number of contacts increases by about one contact compared with participants who are not high risk: three contacts for a 6-month certification and five contacts for a 12-month certification.

The Site Survey also collected information on the estimated percentage of participants who receive the number of offered contacts, recognizing that some participants may miss their nutrition education appointments or refuse to take part in nutrition education (Tabulated as Appendix I, Table I-58 and Table I-59). For non-high-risk participants, this percentage varies from 74 to 80% for women (prenatal, postpartum, and breastfeeding) and from 77 to 83% for infants and children. Similar results were observed for high-risk participants.

Exhibit 4-35. Number of Nutrition Education Contacts Planned by Local Agencies for Participants Identified as High Risk



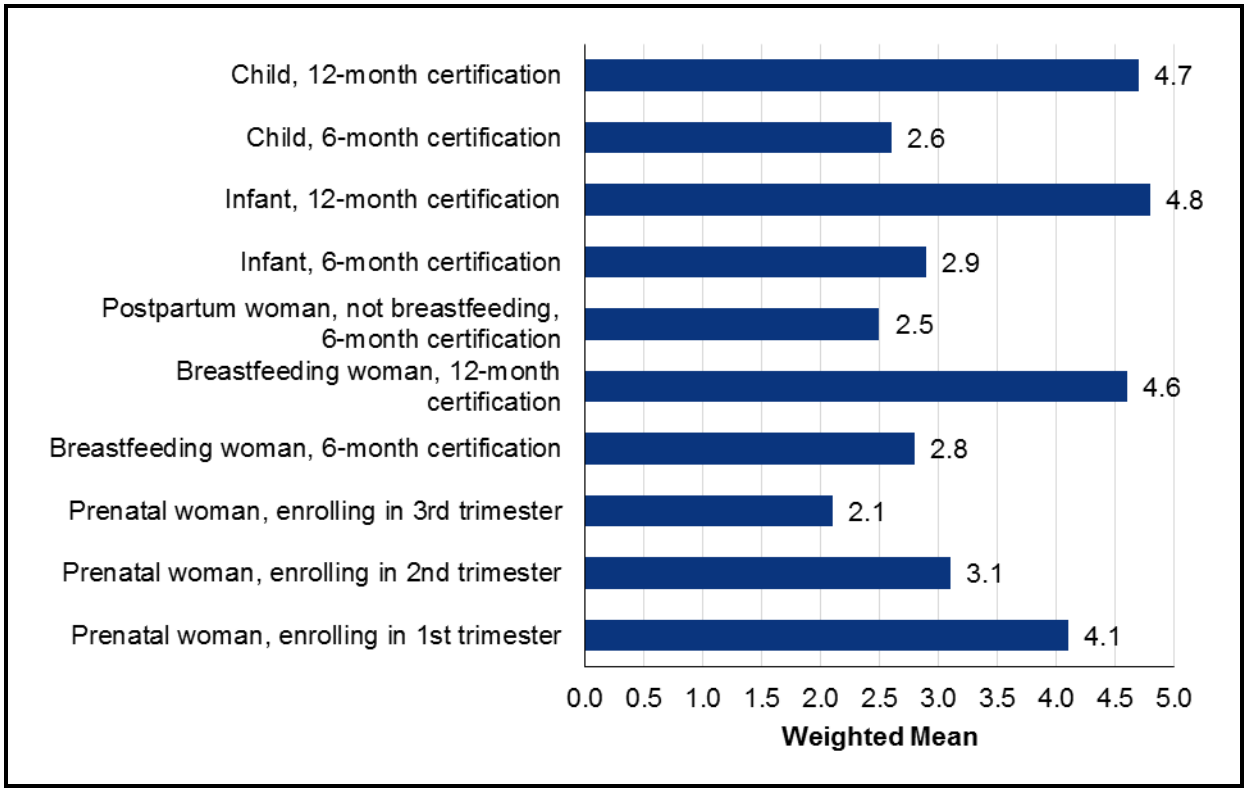
Source: 2014 Local Agency Survey. Only LAs that classify participants into nutrition risk levels were eligible to answer this question (n = 850). Number of respondents varied based on participant category. Overall number of nonrespondents = 40.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Prenatal certification period begins at enrollment and ends 6 weeks postpartum.

The Site Survey collected information on the amount of time that nutrition education is provided to participants.[26] The amount of time that sites provide nutrition education varies by the type of certification visit, as shown in **Exhibit 4-37** (Tabulated as Appendix I, Table I-62). For enrollment certification visits, 41% of sites spend 11 to 20 minutes on nutrition education and 19% report spending 21 to 30 minutes (an average of 19 minutes across all sites). For recertification visits, the average amount of time ranges from 14 to 26 minutes, depending on the number of family members and whether the individual is high risk.

[26] Information from the Local Agency Survey on the amount of time planned for providing nutrition education by type of visit is provided in Appendix I (tabulated as Appendix I, Tables I-60 and I-61).

Exhibit 4-36. Number of Nutrition Education Contacts Offered by WIC Sites for Participants Who Are High Risk



Source: 2014 Site Survey, Versions 1 and 2. Only sites that classify participants into nutrition risk levels were eligible to answer this question (n = 1,289). The number of respondents varies by participant category. The overall number of nonrespondents for this question = 57.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. Prenatal certification period begins at enrollment and ends 6 weeks postpartum.

Exhibit 4-37. Amount of Time Sites Provide Nutrition Education by Type of Certification Visit (Weighted Percentage of Sites)

	Mean Minutes	Less than 5 Minutes	5–10 Minutes	11–20 Minutes	21–30 Minutes	31–45 Minutes	46–60 Minutes	More than 60 Minutes	Don't Know
Enrollment certification (n = 1,378)	19.2	0.7	25.4	41.1	19.2	8.3	4.5	0.7	n/a[a]
Recertification, not high risk, 1 person (n = 1,374)	13.9	4.0	40.9	39.1	12.7	2.5	0.6	0.1	0.1
Recertification, high risk, 1 person (n = 1,368)	19.3	0.3	15.9	46.6	28.0	7.5	1.5	0.2	n/a[a]
Recertification, 2 or more family members (n = 1,375)	25.7	0.1	6.5	35.5	31.2	17.5	8.8	0.8	n/a[a]

Source: 2014 Site Survey, Versions 1 and 2. The number of respondents varied by type of visit and is shown above. Number of nonrespondents = 0 for each visit type.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Respondents were instructed to not include time spent on determining eligibility or conducting assessments.

[a] An estimate is not provided because no respondents selected this response.

For secondary education follow-up visits, **Exhibit 4-38** (Tabulated as Appendix I, Table I-63) indicates sites spend an average of 12 minutes with non-high-risk participants and 19 minutes with high-risk participants for individual sessions. Group sessions last 11 to 20 minutes in 36% of sites, and 21 to 30 minutes in 22% of sites (an average of 21 minutes across all sites).

Exhibit 4-38. Amount of Time Sites Provide Nutrition Education by Type of Follow-Up Visit (Weighted Percentage of Sites)

	Mean Minutes	Less than 5 Minutes	5–10 Minutes	11–20 Minutes	21–30 Minutes	31–45 Minutes	46–60 Minutes	More than 60 Minutes	Don't Know
Mid-certification (n = 1,304)	14.0	4.2	36.7	46.0	9.6	1.5	1.6	0.0	0.3
Secondary education follow-up, individual (n = 1,336)	11.7	9.7	47.2	35.0	5.4	0.6	1.3	0.1	0.6
Secondary education follow-up, group (n = 961)	20.6	3.4	18.4	35.7	21.9	10.3	4.9	1.0	4.4
High-risk follow-up (n = 1,298)	18.5	0.9	17.7	48.3	25.7	5.4	2.0	n/a[a]	0.0

Source: 2014 Site Survey, Versions 1 and 2. The number of respondents varied by type of visit and is shown above. Number of nonrespondents ranged from 0 to 3 depending on the type of visit.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights.

Respondents were instructed to not include time spent on determining eligibility or conducting assessments.

[a] An estimate is not provided because no respondents selected this response.

In discussing frequency and duration of nutrition education with site staff members during the site interviews, interviewees shared that frequency is based on the policy for issuance of food benefits, generally 3 months, with exceptions for high-risk participants. They also shared that certification visits generally take longer, include a nutrition assessment, and cover a wider range of topics, while secondary education and mid-certification visits are shorter and generally focus on priority issues identified during the certification visit, which is consistent with the Local Agency and Site Survey findings.

- *"The norm is if they are not at huge risk, it is every 3 months we see them. If there is more need, we can see them monthly, that is no issue. We've done weight checks every couple of weeks if that is needed. It is on an as-needed basis. We try to individualize because everybody is different and everybody has a different need."*
- *"During the certification we tend to spend more time with the client, whereas a mid cert is really a mini visit. We still talk about what they want to talk about. We see how they are doing, if they have any questions, or if they want any information, we do that."*

Furthermore, interviewees reported that ultimately the length of WIC visits is affected by participants' engagement levels. Almost all interviewees discussed nutrition educators' efforts to individualize the nutrition education they provide to participants.

- *"It has to be individualized. One of the biggest variables is the participant's motivation for being there. I'm going to talk more to a participant who is interested in hearing nutrition education versus someone who is not interested."*
- *"Obviously if they are enthusiastic and they want all this information then we go into more depth and give them what they want. If they express no interest whatsoever then we will make the visit shorter."*

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5. Administration of WIC Nutrition Education

This section provides a detailed discussion of the study findings on the administration of WIC nutrition education. Section 5.2 describes the sources of nutrition education materials and the sources and types of non-WIC support provided for delivering nutrition education. Section 5.3 describes coordination with other programs for delivering nutrition education. Section 5.4 discusses the frequency and methods used for collecting feedback from participants on their nutrition education experience. Section 5.5 concludes with information on how the use of nutrition education processes varies by Nutrition Services and Administration (NSA) cost per participant. These findings are based on information from the State Plans and the Local Agency Survey and supplemented with findings from the interviews with site staff.

5.1 Overview

Several key findings were revealed from the data collected in the Local Agency Survey, site interviews, and analysis of State Plans regarding administration of WIC nutrition education. First, State agencies (**SAs) are the primary source of nutrition education materials**. Local agencies (LAs) report that SAs are the primary source of non-technology-based materials (97% of LAs) and technology-based materials (68% of LAs). U.S. Department of Agriculture (USDA), Food and Nutrition Service (FNS) was the second most frequently reported source of non-technology-based materials. More information on the sources of nutrition education materials can be found in Section 5.2.

Second, **many LAs coordinate delivery of nutrition education with other programs or services.** LAs most often coordinate with Cooperative Extension (42% of LAs), breastfeeding coalitions or task forces (42% of LAs), and Head Start (38% of LAs). The most common way LAs coordinate with other programs or services is through referral of participants to other nutrition education programs or services (69% of LAs). More information on the coordination of nutrition education with other programs and services is provided in Section 5.3.

Third, **most LAs obtain feedback from participants to identify areas of concern and thus help improve the delivery of nutrition education**. Most LAs (83%) report using paper surveys administered at the WIC site to collect participant feedback. More information on the frequency and methods used to collect participant feedback is provided in Section 5.4.

5.2 Sources of Nutrition Education Materials

Exhibit 5-1 (Tabulated as Appendix I, Table I-64) presents the topics of nutrition education materials that SAs recommend and make available to sites. More than 95% of SAs recommend and make available the following topics in English: general nutrition, maternal nutrition, infant nutrition, child nutrition, and breastfeeding promotion and support. At least 75% of SAs recommend and make available these same topics in Spanish materials; however, the geographic States and the District of Columbia generally recommend and make available Spanish materials more often than Indian Tribal Organizations (ITOs) and territories. Compared with the geographic States and the District of Columbia, ITOs and

Exhibit 5-1. Unweighted Percentage of State Agencies that Recommend and Make Available Specific Nutrition Education Materials

	Geographic States and District of Columbia (n = 50)	ITOs and Territories (n = 22)	All SAs (n = 72)
Materials are Recommended/Made Available in English			
General nutrition	96.0	95.5	95.8
Specific nutrition-related disorders	80.0	77.3	79.2
Maternal nutrition	98.0	100.0	98.6
Infant nutrition	98.0	100.0	98.6
Child nutrition	98.0	100.0	98.6
Nutritional needs of homeless	24.0	40.9	29.2
Nutritional needs of migrant farmworkers and their families	20.0	27.3	22.2
Nutritional needs of Native Americans	24.0	68.2	37.5
Nutritional needs of teenage prenatal women	52.0	72.7	58.3
Breastfeeding promotion and support	98.0	100.0	98.6
Danger of harmful substances/secondhand smoke during pregnancy	94.0	90.9	93.1
Food safety	86.0	81.8	84.7
Physical activity	90.0	86.4	88.9
Materials are Recommended/Made Available in Spanish			
General nutrition	92.0	50.0	79.2
Specific nutrition-related disorders	68.0	31.8	56.9
Maternal nutrition	90.0	45.5	76.4
Infant nutrition	88.0	45.5	75.0
Child nutrition	88.0	45.5	75.0
Nutritional needs of homeless	10.0	9.1	9.7
Nutritional needs of migrant farmworkers and their families	18.0	4.6	13.9
Nutritional needs of Native Americans	8.0	9.1	8.3
Nutritional needs of teenage prenatal women	50.0	31.8	44.4
Breastfeeding promotion and support	92.0	50.0	79.2
Danger of harmful substances/secondhand smoke during pregnancy	86.0	40.9	72.2
Food safety	70.0	31.8	58.3
Physical activity	76.0	36.4	63.9

Source: Abstraction of 2014 State Plans, n = 72. Data were not available for 18 SAs that were mainly ITOs. Multiple responses allowed.

territories more often recommend and make available materials in English on the nutritional needs of the following populations:

- teenage prenatal women (73% versus 52%)
- Native Americans (68% versus 24%)
- the homeless (41% versus 24%)

Exhibit 5-2 (Tabulated as Appendix I, Table I-65) provides information on the sources of nontechnology- and technology-based nutrition education materials, as reported by respondents to the Local Agency Survey. Most local agencies (LAs) reported receiving nutrition education materials from their SA (97% of LAs for non-technology-based materials and 68% of LAs for technology-based materials). Two-thirds of LAs reported receiving nontechnology-based nutrition education materials from USDA, FNS.

Exhibit 5-2. Sources of Nutrition Education Materials as Reported by Local Agencies (Weighted Percentage of Local Agencies)

	Weighted % of LAs
Sources for nontechnology-based materials (e.g., lesson plans, pamphlets, videos) (n = 879, nonrespondents = 14)	
State agency	96.8
Local agency	55.7
Individual WIC sites	20.0
WIC Works Resource System	54.5
USDA, FNS	66.7
Non-WIC sources	42.2
Other	1.4
Sources for technology-based nutrition education materials among LAs that use technology to deliver nutrition education (n = 462, nonrespondents = 10)[a]	
Developed or provided by State agency	68.2
Developed by LA	8.0
Developed by individual WIC sites	5.1
Downloaded or obtained from WIC Works Resource System	19.9
Developed by USDA, FNS	20.5
Developed by non-WIC sources	11.3
wichealth.org (write-in response)	8.3
Other	4.0
Don't know	2.9

Source: 2014 Local Agency Survey

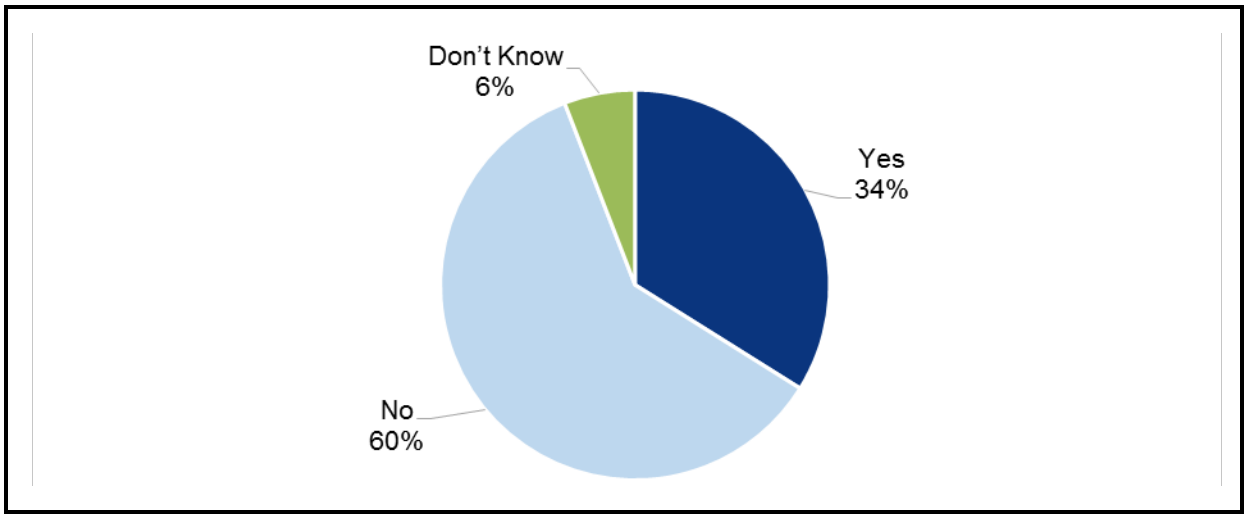
Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

[a] Only respondents that use technology-based nutrition education were eligible to answer this question (n = 472).

As shown in **Exhibit 5-3** (Tabulated as Appendix I, Table I-66), 34% of LAs reported receiving funding, materials, or "in-kind" support from sources other than the Federal or State WIC Program. **Exhibit 5-4** (Tabulated as Appendix I, Table I-67) provides the sources and types of non-WIC support that these LAs receive to deliver nutrition education. LAs reported receiving space/facilities from their local government or agency (38% of LAs) and other local sources (30%). Additionally, LAs reported receiving nutrition education materials/supplies from the State government (15%), their local government or agency (23%), and other local sources (22%).

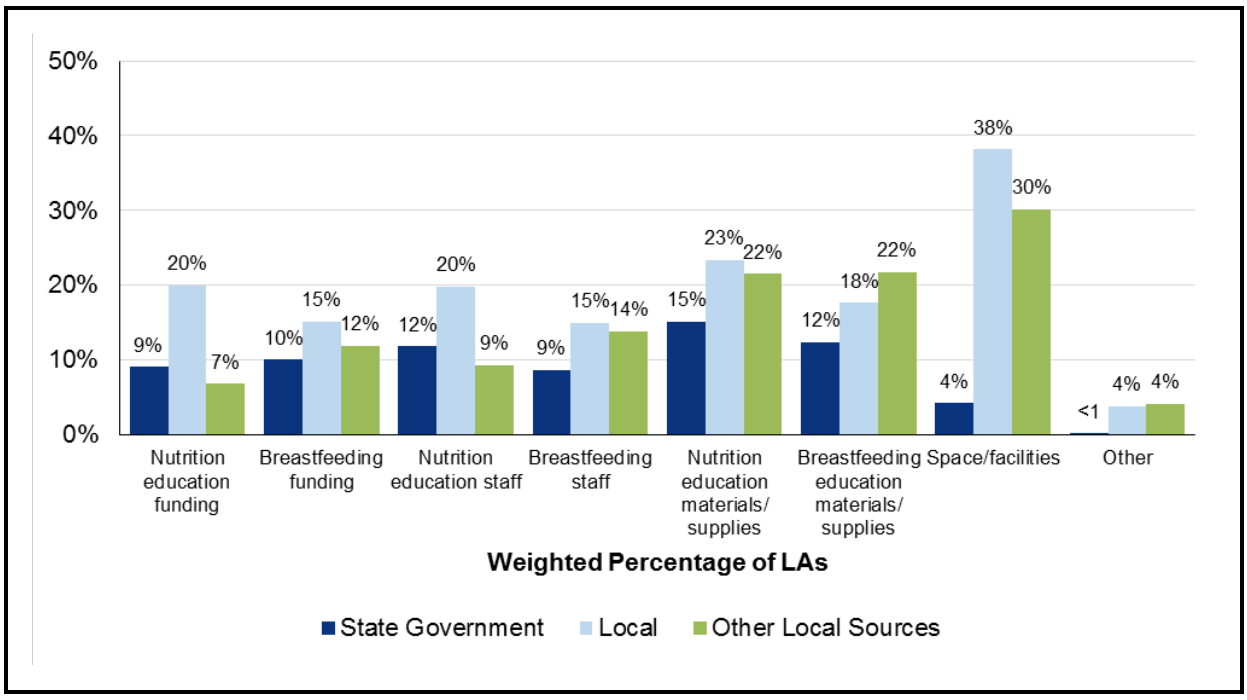
Exhibit 5-3. Whether Local Agencies Receive Funding, Materials, or "In-Kind" Support from Non-WIC Sources (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Respondents = 891 and nonrespondents = 2.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Exhibit 5-4. Sources and Types of Non-WIC Support Received by Local Agencies (Weighted Percentage of Local Agencies that Receive Support)



Source: 2014 Local Agency Survey. Only LAs that receive funding, materials, or "in-kind" support from sources other than the Federal or State WIC Program were eligible to answer this question (n = 277). The number of respondents = 268 and number of nonrespondents = 9.

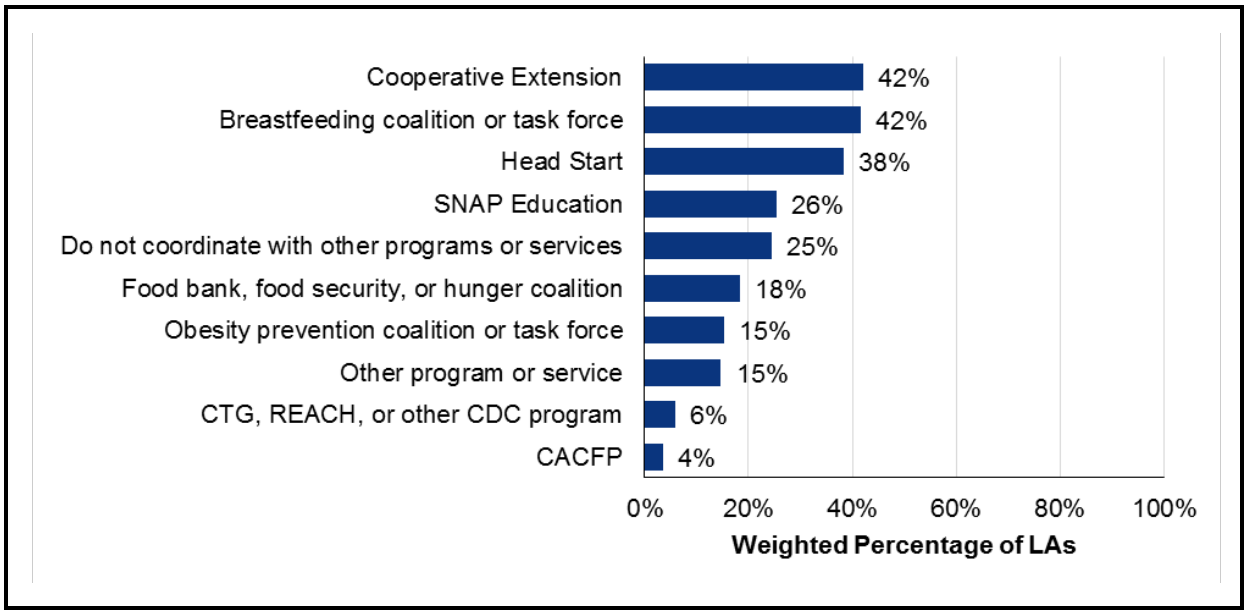
Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

5.3 Coordination of Nutrition Education with Other Programs and Services

Many LAs coordinate the delivery of nutrition education with other local programs or services to provide consistent messages or share resources. **Exhibits 5-5** and **5-6** (Tabulated as Appendix I, Table I-68) provide information on the programs or services that LAs work with to coordinate nutrition education activities (e.g., education materials, campaigns, classes) and the methods they use to coordinate nutrition education with these programs or services. Respondents were instructed to not include coordination for outreach or referral purposes when answering these questions. Many LAs coordinate their efforts with one or more organizations. About 42% coordinate their activities with Cooperative Extension, 42% of LAs work with a breastfeeding coalition/task force, and 38% coordinate with Head Start.

Exhibit 5-5. Programs or Services Local Agencies Work with to Coordinate Nutrition Education Activities (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 879 and number of nonrespondents = 14.

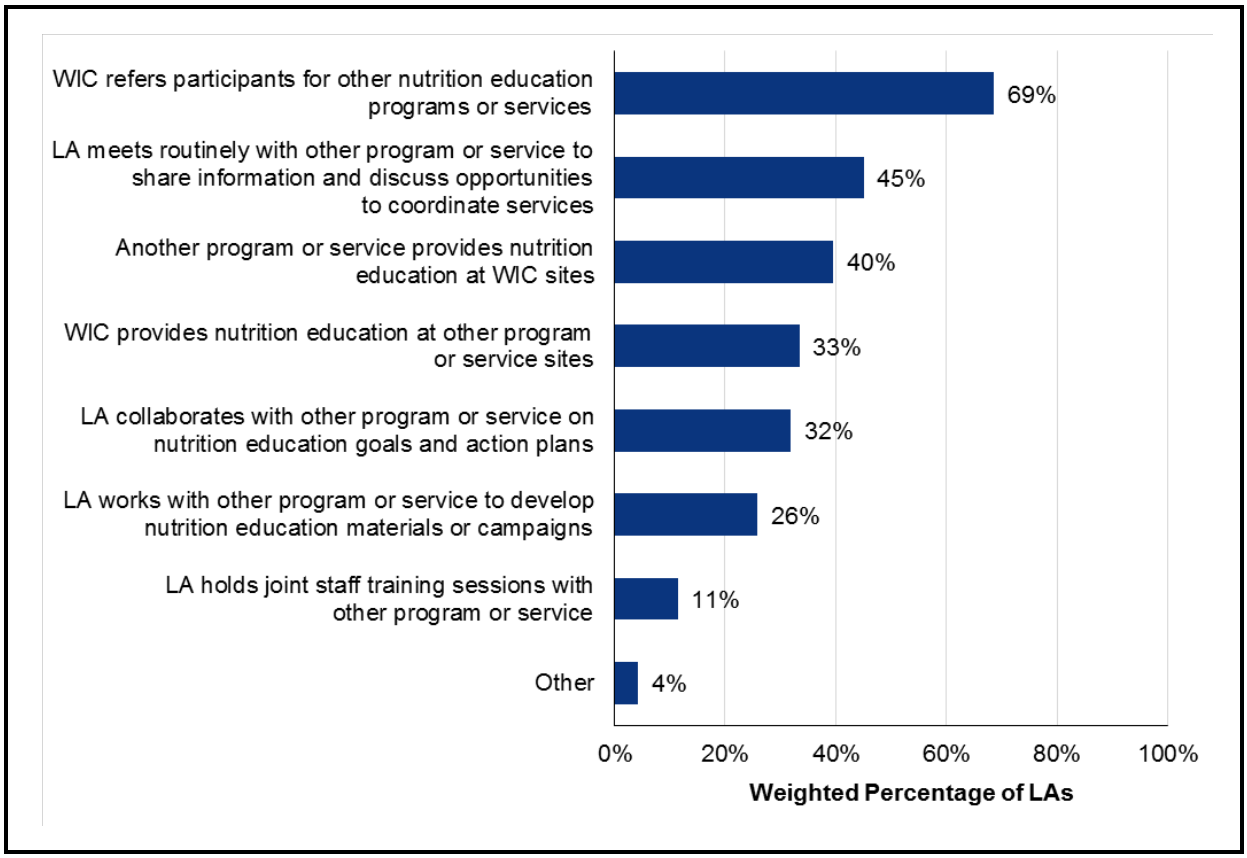
Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

To coordinate nutrition education activities (see **Exhibit 5-6**), 69% of LAs refer participants to other nutrition education programs or services. Forty-five percent of LAs meet routinely (e.g., monthly, quarterly) with other programs/services to share information and discuss opportunities to coordinate services. LAs reported reciprocal nutrition education activities: 40% have other programs or services to provide nutrition education at WIC and 33% provide it for other programs. Other methods of coordination are not widespread.

During the interviews with site staff, 43 of the 80 interviewees discussed the coordination of nutrition education with other organizations. Interviewees named several coordinating partners at the local, State, and Federal level, including Supplemental Nutrition Assistance Program Education (SNAP-Ed), dental programs, local hospitals, grocery stores, libraries, food banks, and farmers' markets.

Exhibit 5-6. Methods Used to Coordinate Nutrition Education with Other Programs/Services (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Only LAs that coordinate nutrition education with other programs or services were eligible to answer this question (n = 653). The number of respondents = 628 and number of nonrespondents = 25.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select multiple responses.

— *"As far as nutrition education goes, we have a SNAP-Ed program that is located within the same building as several of our clinics. They do cooking demonstrations, which is something we promote to our WIC families since they may want to attend a cooking demonstration."*

The most frequently mentioned partner was Expanded Food and Nutrition Education Program (EFNEP), which is often administered by Cooperative Extension.

— *"We work with Extension to coordinate in offering Project Fresh. We also work with the hospital to offer a cooking class every other month. We sign up our clients to attend cooking class and taste different recipes."*

During the interviews with site staff, interviewees described a wide range of activities used to coordinate nutrition education activities with other programs and services, including referrals, health fairs, and collaboration with task forces and coalitions. Examples include:

— *"Some of the Cooperative Extension offices across the State have nutritionists or family educators and sometimes that person comes to our office and leaves materials and we refer families to her as needed."*

- *"We have a breastfeeding coordinator who attends the consortium meetings. She brings back that information to us. Our coordinator is involved with the obesity prevention task force. She attends monthly meetings. It is basically 20 people from around the community and they talk about events, how to get information out to the public, and anything that pertains to WIC our coordinator brings it back to us. If there are outreach events, we coordinate attendance."*

Interviewees described methods for coordinating nutrition education with other programs/services. Most often, interviewees stated that they travel to the offices of other programs/services to provide staff members with information about WIC and provide participants with nutrition education classes or presentations, and vice versa. That is, the educators from other programs/services come to the WIC office to talk to WIC staff members about the types of services they offer and provide WIC participants with nutrition education. For example, EFNEP staff members often go to a WIC office to provide WIC participants with group classes, cooking classes, food tastings, and other information sharing activities. Interviewees explained that these types of nutrition education sessions sometimes serve as a secondary education contact for WIC participants, but more often, they reinforce nutrition education messages.

- *"In two of our sites, we have two Extension staff that come and do nutrition education with our participants at those sites. They both are usually there every month, weather permitting, and they bring some wonderful educational materials with them, like recipe books, and those are all geared to the WIC foods that we provide."*
- *"We actually invite speakers from Extension or Master Gardner for instance. We offer the classroom and the kitchen equipment if they want to do a food demo, and we have nutrition education money we can use to buy food if they can't bring food. The Master Gardner class has been very well received because we do a potted garden. We buy plants from a local nursery, like tomatoes, green peppers, and herbs for an Italian garden. The participants can take 4-8 plants with them."*

Interviewees described strategies that have been most successful in terms of coordinating nutrition education with other programs/services. Communication and "co-location" were the most frequently mentioned strategies. Some interviewees suggested that with ongoing communication it is more likely that coordination efforts will take place and nutrition education messages will be coordinated among different programs. When programs are in the same location or run by the same parent agency/department, coordinating with other programs/services is easier because several barriers to coordination are reduced, such as lack of time, travel issues, and communication challenges.

- *"We are all saying the same message, and people are getting the same message. If we are all giving the same message, that is really important, and in order to do that, we all have to work together."*
- *"With Head Start, we are right across the hall so we have stacks of their applications and often help with filling out applications and just referring kids that might be eligible for Head Start. And then just to make things easy for people participating in Head Start, we do a lot of scheduling in conjunction with when they will be arriving or coming out of school. So parents can come and see us and then drop their kids off."*

Interviewees described challenges or barriers to coordinating nutrition education with other programs/services. Several interviewees shared that without an organized plan to integrate coordination

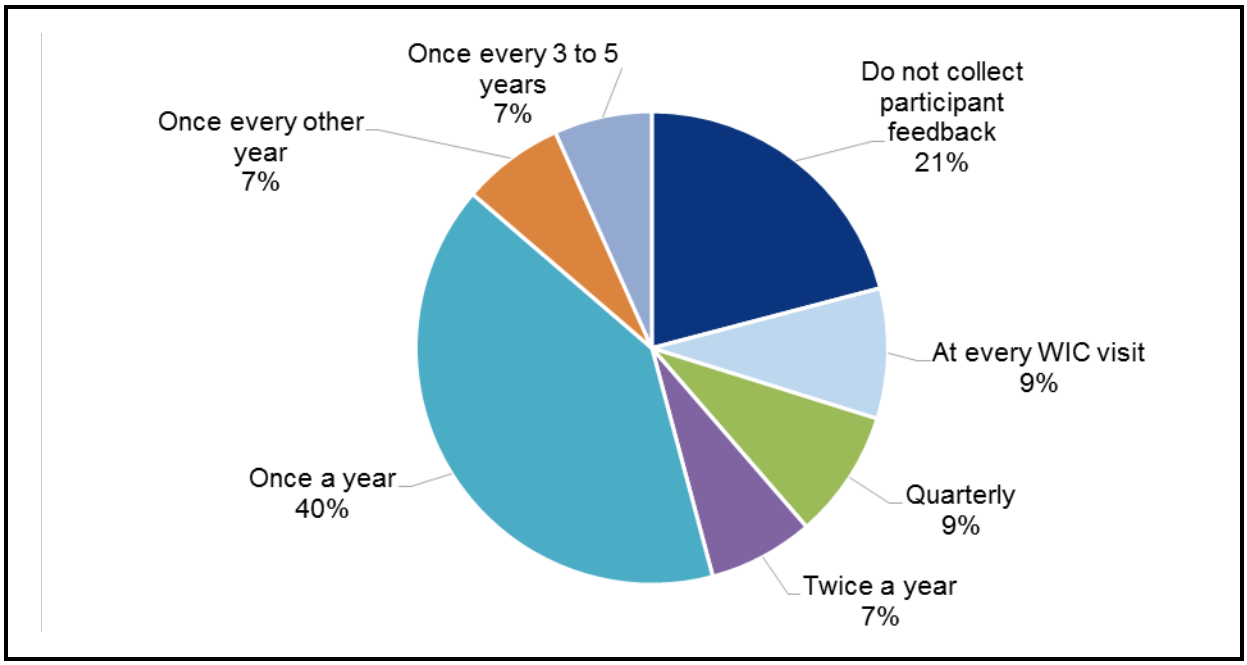
into the WIC service delivery model, coordination often does not take place. Other barriers included staff turnover, limited time, and miscommunication around scheduling.

— *"You have to make the time to do it. You have to set up a plan and stick to it, don't deviate. That seems to work best. For instance, Cooking Matters is every September, and that works. Be consistent."*

5.4 Methods for Obtaining Participant Feedback

Information collected on participant feedback can be used to identify areas of concern and thus improve the delivery of nutrition education. **Exhibits 5-7** and **5-8** (Tabulated as Appendix I, Table I-69) provide the frequencies and methods used by LAs to collect feedback from participants about the nutrition education they receive. Twenty-one percent of LAs do not collect such feedback. When feedback is collected, it is most often collected annually (40% of LAs). Most LAs (83%) reported using paper surveys that are completed during WIC visits to collect participant feedback.

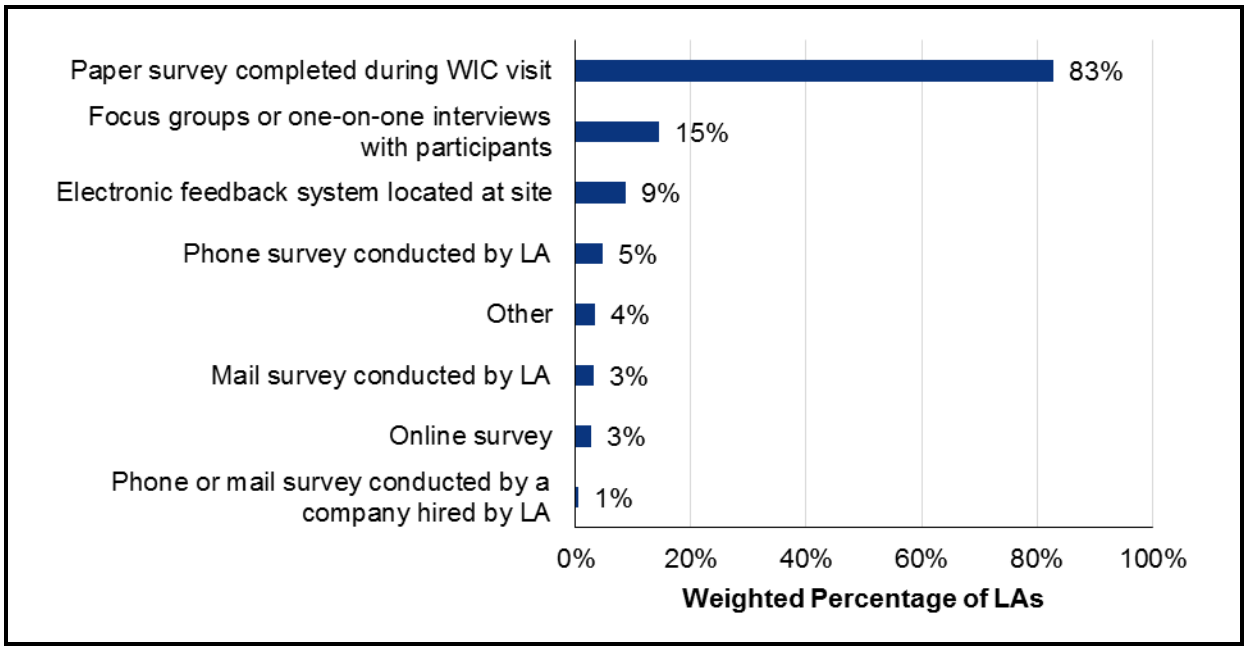
Exhibit 5-7. Frequency with Which Local Agencies Collect Participant Feedback on Nutrition Education (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 867 and number of nonrespondents = 26.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Exhibit 5-8. Methods Used to Collect Participant Feedback on Nutrition Education (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Only LAs that collect participant feedback were eligible to answer this question (n = 729). Number of respondents = 711 and number of nonrespondents = 18.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

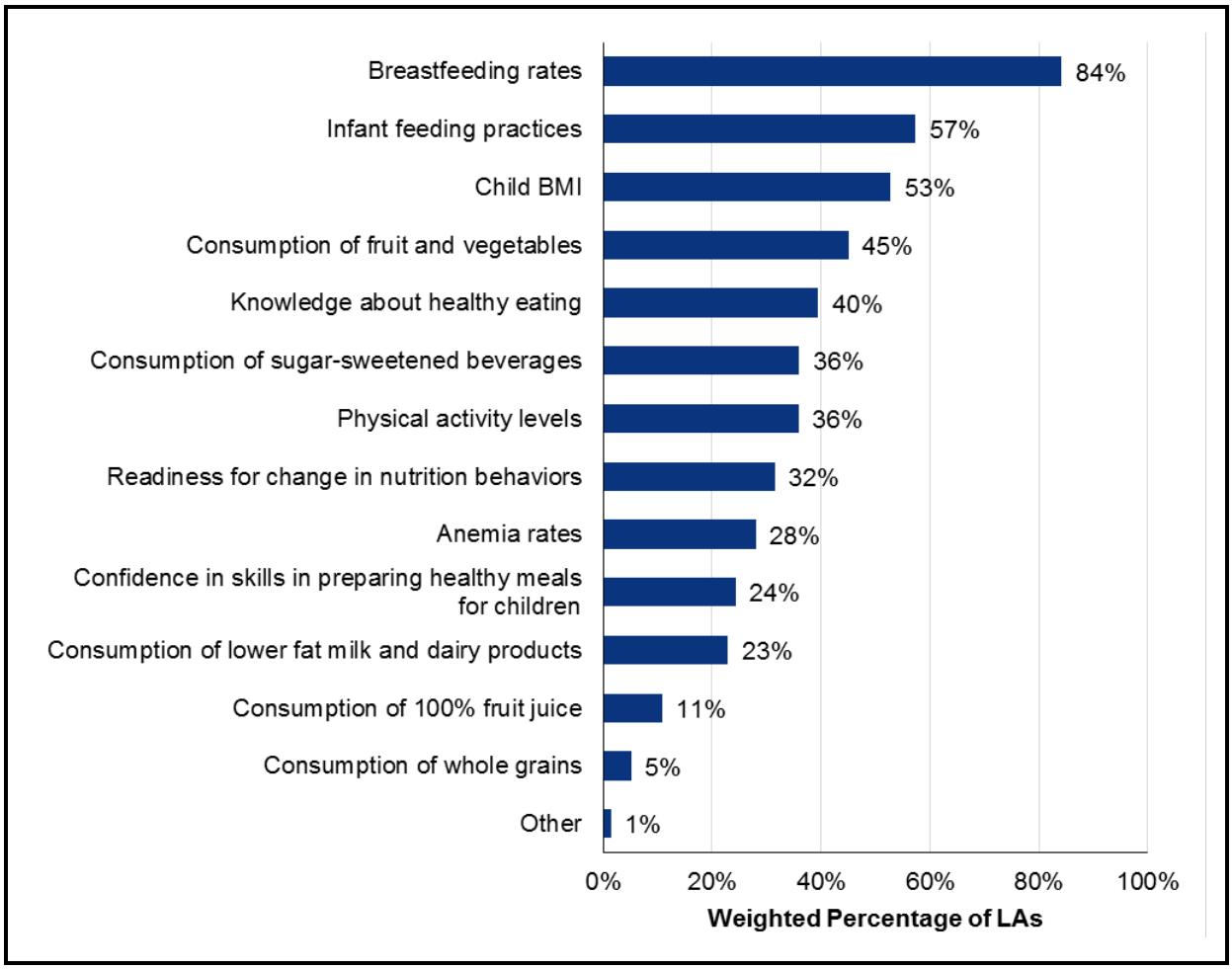
Respondents could select multiple responses.

Local Agency Survey respondents were asked to select (up to five responses) outcome measures they considered most important to include if they were evaluating the impact of nutrition education on participant outcomes (see **Exhibit 5-9** [Tabulated as Appendix I, Table I-70]). Respondents identified the following as the most important outcomes: breastfeeding rates (84% of LAs), infant feeding practices (57%), children's body mass index (BMI) (53%), and fruit and vegetable consumption (45%). With the exception of BMI, these outcomes are included in the Phase II pilot impact evaluation study.

5.5 Use of Nutrition Education Processes by NSA Cost per Participant per Month

Exhibit 5-10 (Tabulated as Appendix J, Table J-20a) shows the percentage of LAs that use various modes of nutrition education by local NSA cost/participant/month. Statistically significant differences by category of NSA cost/participant/month were found for one-on-one telephone counseling, group education sessions, and onsite technology-based nutrition education. For example, 75% of LAs in SAs with an NSA cost/participant/month ranging from $11.97 to $13.00 offer group education sessions, whereas about 50 to 56% of LAs with an NSA cost/participant/month less than $11.97 or more than $13.00 offer group education sessions. Differences were also observed in the use of telephone calls to follow up with participants and some types of onsite reinforcements (computer/kiosk/tablet computer, cooking demonstrations, display tables with nutrition information, food tastings, and support groups) and the use of monthly or quarterly nutrition newsletters sent home (results tabulated in Appendix J, Tables J-20b through J-20d).

Exhibit 5-9. Recommendations for Behavioral Outcomes to Include in an Impact Evaluation of WIC Nutrition Education (Weighted Percentage of Local Agencies)



Source: 2014 Local Agency Survey. Number of respondents = 869 and number of nonrespondents = 24.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights.

Respondents could select up to five responses.

Exhibit 5-10. Differences in Nutrition Education Delivery by NSA Cost per Participant per Month

Modes	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		*p*-value
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	
One-on-one counseling: Face-to-face (in WIC site)	234	100.0 (n/a)	202	100.0 (n/a)	237	100.0 (n/a)	218	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	56	23.1 (17.9, 28.3)	95	45.9 (39.9, 52.0)	85	37.5 (31.6, 43.5)	70	43.1 (36.1, 50.2)	.0007***
One-on-one counseling: Video conferencing	5	3.9 (0.8, 7.0)†	7	3.9 (1.3, 6.6)†	15	4.1 (2.8, 5.3)	5	2.9 (0.7, 5.1)†	.9553
Group education sessions	153	55.2 (48.8, 61.6)	161	75.1 (69.4, 80.7)	152	50.4 (44.4, 56.3)	121	56.2 (49.5, 62.9)	.0025**
Onsite technology based	53	21.8 (16.7, 26.8)	58	30.4 (24.8, 36.1)	73	23.4 (19.3, 27.6)	31	13.0 (8.7, 17.3)	.0086**
Offsite technology based	110	53.6 (47.4, 59.8)	116	50.4 (44.3, 56.5)	134	42.3 (36.8, 47.7)	76	43.8 (36.9, 50.7)	.1948

Source: 2014 Local Agency Survey. NSA local-level expenditure data used to estimate the local NSA cost per participant per month for each SA were from FNS 798-A reporting form for FY13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents = 891. Two respondents were excluded from the analysis because information on NSA cost per participant per month was not available. Analysis categories based on quartile distribution for the NSA cost per participant per month variable. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design. The *p*-values listed in the table indicates if a statistical difference between at least two subgroups was found. Additional analysis is needed to determine which subgroups were different from each other.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

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6. Conclusion

The purpose of the *WIC Nutrition Education Study* is to learn how nutrition education is being conducted (Phase I) and how best to evaluate the impact it has on participants (Phases II and III). This study is timely because WIC nutrition education has been undergoing a transformation since the Food and Nutrition Service (FNS) launched the Revitalizing Quality Nutrition Services (RQNS) initiative in 1999. The goal of RQNS is to enhance and strengthen nutrition education through a more client-centered approach with a focus on motivating lifelong healthy behaviors. Results from the Phase I surveys and in-depth interviews show progress toward achieving this goal. The Phase I research questions focus on the key factors associated with nutrition education, including staffing patterns and qualifications of educators; methods, frequency, and duration of education; facilities and resources available; and approaches to address linguistically diverse participants. This section summarizes key findings from the study and discusses the implications for delivering WIC nutrition education; presents lessons learned from conducting the Local Agency and Site Surveys and recommendations for changes if FNS conducts similar surveys in the future; offers suggestions for future research using the data from the Local Agency and Site Surveys; and concludes with information on next steps, including how the Phase I findings will be used to inform Phases II and III of the study.

6.1 Key Findings and Implications

FNS describes the RQNS as "an evolving process of continuous program improvement involving partners at the Federal, State and local level" (U.S. Department of Agriculture [USDA], FNS, 2015d). According to FNS, the RQNS initiative was motivated by WIC studies conducted in the 1990s, including the WIC Nutrition Education Assessment Study published in 1998 (USDA, FNS, 1998) and the WIC Infant Feeding Practices Study published in 1997 (USDA, FNS, 1997). These studies indicated a need for WIC to strengthen its services, particularly the nutrition education offered to participants through efforts to

- adopt a more behavioral approach in nutrition education,
- be more client oriented, and
- focus on healthy behaviors for life.

Over the past 15 years, the Federal, State, and local RQNS efforts have directed policy, training, and financial resources. Phase I of the *WIC Nutrition Education Study* explores progress in strengthening nutrition education by describing the current policies, practices, and environments for delivering nutrition education. Findings from the study demonstrate that nutrition education policies and practices are evolving in ways that address the needs identified 15 years ago.

6.1.1 Facilities and Resources for Delivering Nutrition Education

The study found that approximately 7,750 WIC sites provide nutrition education, the cornerstone of the WIC program. Nearly half of all WIC sites that provide nutrition education are located in city, county, State, or U.S. territory health departments. The types of facilities where WIC sites are located provide a variety of other services; the most common is prevention and screening services such as immunizations and child health screening. Sites also vary in terms of the types of facilities, equipment, and materials available for providing nutrition education. The majority of sites have private rooms for one-on-one

counseling. For sites that provide group education, about half have a dedicated room or space for providing nutrition education, while other sites rely on a multiple-purpose room or other setting to provide group sessions.

6.1.2 Staffing and Training of WIC Nutrition Educators

The study found great diversity in the types and number of staff available for conducting nutrition education. WIC sites use several types of staff to provide nutrition education. Registered dietitians (RDs) are the type of staff most frequently reported as conducting nutrition education with 58% of sites using RDs as nutrition educators (see Exhibit 3-7). Degreed nutritionists (non-RD), nutrition paraprofessionals, nurses, and administrative/clerical staff members are among the variety of other types of staff members who have a role in providing nutrition education.

The number of nutrition educators in WIC sites varies greatly. The average number of full-time equivalent (FTE) nutrition educators is 5 and ranges from an average of 3 for very small sites (caseload ≤ 300) to 10 for large sites (caseload ≥ 2,500). Parallel differences exist for participant-to-FTE educator ratio: very small sites (caseload ≤ 300) have an average of 65 participants per educator and large sites (caseload ≥ 2,500) have an average of 494 participants per educator.

WIC staff members who plan, oversee, and provide nutrition education have extensive WIC experience and formal education and program training on participant-centered nutrition education skills. Most nutrition educators are experienced and well educated. As reported by sites, over half of nutrition educators have worked for WIC for 7 or more years. Many have a bachelor's or graduate degree and hold one or more credentials such as RD, certified lactation consultant/certified lactation educator/certified lactation educator and counselor and/or registered nurse.

Most State agencies (SAs) have qualification and training requirements for nutrition educators. Training provided by the SA, local agency (LA), or site includes a wide array of topics related to participant-centered skills as well as breastfeeding and nutrition topics. Specifically, about two-thirds of sites provide training on methods for delivering nutrition education, including Value Enhanced Nutrition Assessment (VENA) skills, participant- or learner-centered education, and motivational interviewing, and average 5 to 6 hours of training on those topics per staff person annually. A variety of methods are used to provide ongoing training, including SA or LA webinars, self-study training modules or courses, and training conducted during LA or site staff meetings. The interviews with site staff revealed that those who reported more training also reported more changes in their approach to nutrition education. Ongoing support helps nutrition educators integrate new approaches and helps prevent "back slipping" into old, comfortable habits that may negatively affect the quality of nutrition education delivered.

Interviews with site staff members revealed they are incorporating these skills into their individual counseling and group education sessions. They emphasized the importance of understanding participant needs and interests, of listening rather than telling, and of guiding participants in identifying meaningful goals and ways to achieve them. The site staff members interviewed who described having the most extensive training and support for applying participant-centered skills also described making more changes in their nutrition education approach. This suggests that emphasis on skills-based training, plus

support for nutrition educators as they put training into practice, is important for the continuous program improvement envisioned by the RQNS initiative.

6.1.3 Delivery of WIC Nutrition Education

The study found that one-on-one, face-to-face nutrition counseling continues to be the primary delivery method for WIC nutrition education. These findings are consistent with previous studies, including the WIC Nutrition Education Assessment Study (USDA, FNS, 1998) and the more recent National Survey of WIC Participants II (USDA, FNS, 2012). All sites use one-on-one counseling to provide nutrition education especially for the initial certification and recertification visits. One-on-one counseling has been the primary mode of nutrition education since the program's inception and continues to be the dominant approach, in part, because it provides the best opportunity for individualized nutrition education.

While one-on-one counseling is the primary delivery method, WIC staff members use a variety of other methods for nutrition education, particularly at follow-up visits. Group education and offsite technology-based methods are frequently used for follow-up visits. Telephone and video conferencing and onsite technology-based methods are not used as frequently; however, many sites provide these as options to offer flexibility for participants who cannot come to the WIC site or prefer self-directed nutrition education.

The "Six Elements of Effective Nutrition Education" described in the 2006 WIC Program Nutrition Education Guidance (USDA, FNS, 2006b) were addressed in Phase I of this study, and it is evident that LAs and sites are incorporating these elements into nutrition education practice, albeit with greater progress in some elements than others. As recommended in the guidance, nutrition educators consider the results of nutrition assessment, including the participant's needs, interests, and circumstances, to determine how best to provide education that will support participants to adopt and maintain healthy behaviors. Participants are heavily involved in selecting the topics ("messages") discussed during education sessions and in setting meaningful goals. Site staff members interviewed emphasized "participant-driven" goals as most likely to be achieved.

Several formats are used to reinforce nutrition messages, with more options in use at the WIC sites than offsite. Printed materials, bulletin boards, and DVDs are the predominant forms with some movement toward phone calls and technology for reinforcing nutrition information. Follow-up on nutrition messages and participant goals is most likely to occur at future WIC visits, but phone calls and technology are also emerging as follow-up options. Use of technology-based education and electronic formats for following up and reinforcing nutrition messages is likely to continue to increase as electronic benefits transfer (EBT) for food delivery is implemented nationwide and as technology continues to become more accessible to program participants. As this evolves, WIC programs will benefit from understanding the most effective approaches for delivering participant-centered nutrition education, reinforcement, and follow-up through onsite and offsite technology.

The study found that WIC nutrition education is moving toward a more individualized and tailored approach focused on meeting the needs of each participant with a higher level of participant involvement throughout the process. In the interviews with site staff, interviewees emphasized the need to engage with

participants and listen more rather than telling them what they should be doing. Interviewees reported that they adapt their counseling styles and content and the way they use reinforcers to fit the unique, individual needs/circumstances of their participants. This is one of the primary goals of VENA and WIC nutrition educators seem to be working to achieve this goal.

In line with VENA principles, to determine discussion topics for one-on-one counseling sessions, most nutrition educators use a combination of the participant's nutrition risk and interests identified through nutrition assessment, and some educators put more focus on anthropometric or assessment-based risk factors, while others focus more on participant-identified interests. According to nutrition educators who were interviewed, the goal is to find a balance between the two.

There is also a shift toward guided goal setting with more participant engagement in the process. Again, individualized nutrition education with a focus on participant needs, interests, and goals is increasingly prevalent at sites. Nutrition educators report they are finding that participants are more responsive when goal setting is guided rather than demanded. Brochures or other written materials are often used to support information provided in nutrition education sessions and to help participants with tips or suggestions for achieving their goals.

The study found that LAs and sites have policies and protocols in place to ensure participants have access to nutrition education at least two times during a 6-month certification period and once per quarter during a 12-month period. For most sites, participants certified for 12 months receive one-on-one nutrition education at mid-certification visits and those with high-risk health or nutrition conditions receive additional education sessions provided by RDs or other professional staff. These findings demonstrate that Federal requirements for nutrition education are in place nationwide, providing the framework for accomplishing the goals of this important program component. The amount of time spent during nutrition education sessions varies; more minutes are spent on certification and high-risk visits than secondary or follow-up visits. Nutrition educators who were interviewed said that they spend more time with participants who are interested and engaged in the nutrition education sessions.

Because RQNS is a "continuous program improvement" initiative, changes in WIC nutrition education documented in this study represent progress during the early years of the initiative. Ongoing attention to strengthening nutrition education policy and practice is essential for achieving the goal of RQNS: "to enhance and strengthen the effectiveness of WIC nutrition services so that WIC will continue to be the premiere national public health nutrition program, helping participants to achieve and maintain optimal nutritional status" (USDA, FNS, 2015d).

6.2 Lessons Learned from Conducting the Local Agency and Site Surveys

The Local Agency and Site Surveys were nationally representative surveys of LAs and WIC sites conducted using a Web-based survey using a two-stage sampling approach. The survey procedures included communication activities before the launch of the survey to inform the WIC community about the survey and several iterations of follow-ups by email and telephone to encourage response to the survey. Both the Local Agency and Site Surveys achieved high response rates and yielded high-quality data, with the exception of the data on nutrition educator staffing collected in the Site Survey. Lessons

learned from conducting the surveys and suggestions for improving future iterations of these surveys or conducting other related surveys of WIC LAs and sites are summarized below.

6.2.1 Data Collection Methods

A variety of activities were conducted to inform FNS Regional Offices, SAs, LAs, and sites about the study and survey, including distributing study informational materials at National WIC Association annual meetings and sending announcement emails and study brochures to the FNS Regional Offices and SAs in advance of the survey. This upfront communication helped create awareness and buy-in for the survey from the WIC community and helped reinforce the legitimacy of the study prior to the launch of the survey.

Nearly all LAs and sites completed the survey online; thus, it is reasonable to use Web surveys to conduct future data collection from LAs and sites. Although the survey instrument for the Site Survey was translated into Spanish for sampled sites in Puerto Rico, this was not necessary because the individuals in the sampled sites were able to complete the English version; thus, for future surveys, translation may not be necessary.

The two-stage survey approach worked well. At the end of the Local Agency Survey, the respondent was asked to provide the contact information for Site Survey respondents for the one to three selected sites, with the option to provide their own contact information to receive the Site Survey. To assist with identifying appropriate respondents, the LA Survey instructions included a description of who would be best suited to answer the Site Survey questions and the option to view a copy of the Site Survey. For many LAs, the same individual completed both the LA Survey and Site Survey either because they identified themselves as most knowledgeable or appropriate to respond to both surveys or because they are the only individual at the LA who provides nutrition education (e.g., LA serves a small number of participants). An enhancement for future surveys would be to provide an option for a respondent to move immediately to a Site Survey after completing a Local Agency Survey if they consider themselves to be the appropriate respondent for both surveys.

If the Site Survey respondent also completed the Local Agency Survey, they did not have to respond to questions regarding their demographic information (e.g., number of years of WIC experience) a second time. It appears that about 15% of Site Survey respondents may have erroneously indicated that they completed the Local Agency Survey, when in fact it appears that they did not do so based on a comparison of the email addresses for the Local Agency and Site Survey respondents. Thus, for future surveys, it is recommend that all Site Survey respondents complete the demographic questions regardless of whether they completed the Local Agency Survey to ensure this information is captured correctly.

Multiple, well-timed targeted follow-ups helped increase response rates; thus, following a similar approach for future surveys is recommended. Because some LA and Site Survey respondents were unable to receive email directly from the survey system because of email filters, it was necessary to send reminder emails to nonrespondents from alternative email accounts to ensure they were aware of the survey and received the link to complete it. This approach will be important for future surveys. By

targeting final email and phone follow-up efforts to nonresponding LAs with multiple selected sites, the effectiveness of these follow-up attempts was increased.

Although the cooperation rate for the Site Survey was good among all sampled LAs (73%), it was relatively low (55%) for very small sites (sites with caseloads ≤ 300) among all sampled LAs. Examining the cooperation rates for very small sites by stratum, it was lowest for sites affiliated with an Indian Tribal Organization (ITO) or territory (Stratum 1). This is likely related to the limited number of staff at these sites and to the small size of WIC programs administered by many of the ITOs and territories. In some cases, WIC services are provided at only one site, and only one staff member has the knowledge necessary to respond to the LA and Site Surveys. Because the response rate for ITOs and territories was higher on the LA Survey, it appears that the knowledgeable staff member completed the LA Survey but did not complete the Site Survey either because of time constraints or because they did not understand that the two surveys collected different information. The relatively low cooperation rate among very small sites for the Site Survey can also be attributed to the lower response rate for ITOs and territories to the LA Survey because sites affiliated with a nonresponding LA did not have the opportunity to respond to the Site Survey. Previous research determined response rates were generally lower for smaller organizations compared to larger organizations because of similar concerns observed in the current study (Cates et al., 2005). For future surveys with small LAs that operate one site, merging the questions into one survey or allowing the respondent the option to move on to the questions about the site immediately following the questions about the LA may be beneficial to increasing the cooperation rates.

6.2.2 Survey Instruments

The estimated burden for completing the Local Agency Survey was 45 minutes, and the estimated burden for the Site Survey was also 45 minutes. Respondents did not report via the survey help desk toll-free line or email account that the surveys required more than 45 minutes, suggesting that the burden estimate was accurate. Based on the response rates achieved, it appears that the survey burden was appropriate and acceptable to most respondents.

Based on the review of the survey data, several revisions to the Site Survey are recommended. Questions in Version 2 of the Site Survey asked respondents to rank the method used most often, next most often, and least often for determining discussion topics for one-on-one sessions (Question 18) and for selecting participant goals (Question 24). The item nonresponse for these questions was relatively high compared to other questions (approximately 18% versus 0 to 8%, respectively). The difference likely is attributed to ranking questions being more complex compared to other survey questions (e.g., multiple choice questions). For future iterations of the survey, FNS may want to revise these questions.

As discussed in Section 2, it appears that some respondents did not correctly answer the questions on number and types of nutrition educators (Versions 1 and 2 of the Site Survey, Question 9) and the characteristics of nutrition educators (Version 2 of the Site Survey, Questions 9 through 15). In some cases, it appears that respondents may have answered for all staff members at the site or LA rather than focusing on the staff members who provide nutrition education at the site, as instructed. Some respondents may have had difficulty accurately counting staff who provide nutrition education at a site where employees perform multiple functions or work for multiple programs, as is the case in many WIC

sites, or when there is variation in the staff who work at the site from day to day. Also, looking across these questions, it appears that some respondents were inconsistent when answering them (i.e., the total number of staff for one question did not match the total number of staff in subsequent questions). Because it was believed that these questions might be challenging for respondents to complete, a worksheet[27] that respondents could print out and use when answering these questions was provided; however, even with the worksheet, identification of race/ethnicity and other staff characteristics may have been difficult. For future data collection on staffing at WIC sites, alternative data collection approaches should be considered. For example, it may be necessary to select a sample of sites and conduct a phone interview with the LA or site supervisor or conduct an in-person survey of staff members at the site.

Question 15 in Version 2 of the Site Survey asked for the number of staff who provide nutrition education in languages other than English. Eighteen percent of respondents did not answer this question. It may be that respondents who left the question blank meant "zero" or "none" or did not know. For future iterations of the survey, including "none" and "don't know" as response options is recommended.

Finally, the software used to program the online survey instrument had limited capabilities for conducting efficient verification checks and alerting respondents to potential errors (e.g., providing a pop-up box if inconsistent responses were entered). Because of the lack of these checks, it was necessary to conduct additional data cleaning. For future surveys, using software that can easily be programmed to perform verification checks is recommended; however, the balance between verification checks and response burden should be considered.

6.3 Suggestions for Future Research

The Local Agency and Site Surveys provide nationally representative information about staffing patterns and qualifications of educators; methods, frequency, and duration of nutrition education; and facilities and resources available for delivering nutrition education. Thus, the surveys are a useful and valuable resource with which to perform additional research.

The following are suggestions for future research using data from the Local Agency and Site Surveys; some of these suggestions were offered by the study Advisory Panel. FNS may want to consider using these datasets to conduct multivariate analysis to investigate the following:

- site (e.g., the use of EBT) and participant characteristics that differentially affect the use of telephone counseling;
- site and participant characteristics that differentially affect the frequency with which different modes are used to provide nutrition education (for different visit types);
- site and participant characteristics that differentially affect dosage (number of contacts and duration) of nutrition education;
- site, participant, and nutrition educator (e.g., credentials, training received) characteristics that differentially affect the frequency that participants' behavior goals are set;

[27] The worksheet was a table/grid that respondents could use to count the number of staff in each characteristic category (e.g., Hispanic or Latino, not Hispanic or Latino, unknown). A copy of the worksheet is provided in Appendix D.

- site and nutrition educator characteristics that differentially affect the amount of training received by nutrition educators;
- site and nutrition educator characteristics that differentially affect whether nutrition educators receive training on VENA or participant/learner-centered education methods;
- site characteristics (e.g., modes of nutrition education, caseload) that differentially affect the number of days that nutrition education is offered; and
- nutrition educator characteristics that differentially affect the frequency of use of activities or resources in group education.

6.4 Next Steps

The *WIC Nutrition Education Study* was designed so that the results from Phase I would inform Phase II, a pilot study with six WIC sites to demonstrate and refine an evaluation of the impact of WIC nutrition education on the nutrition and physical activity behaviors of women and children. The findings from the Site Survey and site interviews were used to inform the selection of the six pilot sites. In particular, to select sites that are diverse in terms of dosage of nutrition education, data from the Site Survey on frequency, duration, mode, use of learner-centered nutrition education, and use of reinforcers were examined. Also, factors that are expected to enable the dosage of nutrition education such as the site participant-to-educator ratio and the extent of training of WIC nutrition educators in VENA or learner-centered education approaches were considered. Enrollment activities and baseline data collection were conducted for the pilot study in July 2015. A total of 878 participants were enrolled into the study (pregnant or postpartum women or the caregiver of a child on WIC). The data collection for the process evaluation component of the study was completed in October 2015.

In addition, information from the Site Survey and findings from the observations of nutrition educators and survey of nutrition educators that are being conducted as part of the Phase II pilot will be used to create variables that characterize the dosage of nutrition education at the site level. These variables will be used in a dose-response model to estimate the impact of WIC nutrition education on the nutrition and physical activity behaviors of women and children. Separate dose-response models that take into consideration dosage of WIC nutrition education at the participant level will also be estimated.

The findings from the Phase II pilot will be used in Phase III to design a nationally representative impact evaluation and an Office of Management and Budget package for the data collection. Such a study would help inform and enhance WIC nutrition education policy and practice with regard to optimal educational topics and methods, strategies to maximize participant engagement, best approaches for delivery and reinforcement of messages, and ways to effectively prepare and support WIC nutrition educators.

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APPENDIX A:
PHASE I RESEARCH QUESTIONS AND DATA SOURCES

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Table A-1. Research Questions and Data Sources for Phase I

Research Questions	Census Data	State Plans	LA Survey	Site Survey	Site Interviews
1. At what number and type of sites is nutrition education delivered?			●		
2. What is the staff-to-client ratio at sites delivering nutrition education by type of site?				●	
3. What is the racial/ethnic composition of LA nutrition education staff?				●	
4. What is the availability of multilingual staff to provide nutrition education?				●	
5. What percentage of participants served by the LA are non-English speaking?			●	●	
6. What is LA policy for nutrition education staff minimum qualifications and training?		●	●		
7a. What is the organization and staff configuration of nutrition education personnel in LAs and/or sites?			●	●	
7b. What facilities and equipment are available for delivering nutrition education?				●	
8. What facilities and activities are available for children and do organized group activities, include nutrition and physical activity?				●	●
9. What State and local contributions to nutrition education resources are available?		●	●		
10. What are the modes for delivering nutrition education at certification and follow-up appointments and what is the frequency of each delivery mode?		●	●	●	●
11. What reinforcers are used to support nutrition education and what is the frequency of these reinforcer modes?			●		●
12. What type of staff provide nutrition education and how many full-time equivalents (FTEs) are there of each type?			●	●	
13. What are the credentials, capabilities and characteristics of staff who design and manage nutrition education?			●		
14. What are the credentials, capabilities and characteristics of staff who deliver nutrition education?				●	

(continued)

Table A-1. Research Questions and Data Sources for Phase I (continued)

Research Questions	Census Data	State Plans	LA Survey	Site Survey	Site Interviews
15. How do characteristics and qualifications of LA staff providing nutrition education compare with prior studies, including the 2006 "WIC Staffing Data Collection Project"?				●	
16a. How do characteristics and language skills of local WIC agency staff providing nutrition education staff align with the characteristics and language skills of the local WIC population?	●			●	
16b. What methods of delivering nutrition education are used when the educator does not speak the participant's language?				●	
17. What types and intensity/ duration of nutrition education training have been provided to staff during the past 2 years?		●	●	●	●
18. What services/resources are employed to provide nutrition education that is easily understood by participants, taking into consideration cultural preferences, educational and environmental limitations?				●	●
19. How often do LAs gather feedback from participants on nutrition education and what methods do they use to obtain feedback and which methods are most common?			●		
20. What processes are used for coordination of WIC nutrition education messages and delivery with other providers of nutrition education?			●		●
21. What is the dosage of nutrition education *offered* to participants and how does this vary by participant characteristics, type of contact, mode of delivery, timing of delivery, and other factors?		●	●		
22. What is the dosage of nutrition education *received* by participants and how does this dosage vary by participant characteristic (e.g., WIC category), risk level, type of contact, mode of delivery, timing of delivery, or other factors?				●	●
23a. What is the frequency of use of each mode of nutrition education for certification and follow-up appointments?			●	●	
23b. What is the frequency of use of each type of nutrition education reinforcer?			●		●

(continued)

Table A-1. Research Questions and Data Sources for Phase I (continued)

Research Questions	Census Data	State Plans	LA Survey	Site Survey	Site Interviews
24. What is the variation in frequency of nutrition education processes described above (mode and reinforcers) by geographical location, urbanicity, and LA size?	●		●	●	
25a. How does the frequency of nutrition education processes used vary by LA characteristics including type and number of sites, caseload size and nutrition education staff-to-client ratio, racial/ ethnic composition of participants, percentage of participants that are non-English speaking, and staffing characteristics?	●		●	●	
25b. How does the frequency of nutrition education processes used vary by Nutrition Services and Administration (NSA) cost per participant?			●[a]		

[a]We also used NSA Local-level Expenditures data for FY 2013 reported by State Agencies (from FNS 798-A reporting form).

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APPENDIX B:
ABSTRACTION FORM FOR WIC STATE PLANS

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Exhibit B-1. State Plan Abstraction Items

Research Question	State Plan Item	State Plan Section	State Plan Guidance / Instruction[a]
6. What is LA policy for nutrition education staff minimum qualifications and training?	Qualifications and training requirements for nutrition education staff	IV. Organization and Management C. Local Agency Staffing	1. Staffing Standards a. The State agency prescribes local agency staffing standards that include: ☐ credentials ☐ staffing levels ☐ staff-to-participant ratio standards ☐ paraprofessional requirements ☐ other (specify): ☐ not applicable
		II. Nutrition Services A. Nutrition Education	3. Nutrition Education Contacts g. Check the following individuals allowed to provide general or high-risk nutrition education: General Nutrition Education / High-risk Nutrition Contact ☐ ☐ Paraprofessionals (non B.S. degree with formal WIC training by SA or LA) ☐ ☐ Licensed Practical Nurses ☐ ☐ Registered Nurses ☐ ☐ B.S. in Home Economics ☐ ☐ B.S. in the field of Human Nutrition ☐ ☐ Registered Dietitian or M.S. in Nutrition (or related field) ☐ ☐ Dietetic Technician (2-year program completed) ☐ ☐ Other (specify):

(continued)

Exhibit B-1. State Plan Abstraction Items (continued)

Research Question	State Plan Item	State Plan Section	State Plan Guidance / Instruction[a]
9. What State and local contributions to nutrition education resources are available?	Materials recommended or provided for use in nutrition education	II. Nutrition Services A. Nutrition Education	4. Nutrition Education Materials a. The State agency recommends and/or makes available nutrition education materials for the following topics: ☐ General nutrition — English ☐ Spanish ☐ Other languages _____ ☐ Specific nutrition-related disorders — English ☐ Spanish ☐ Other languages _____ ☐ Maternal nutrition — English ☐ Spanish ☐ Other languages _____ ☐ Infant nutrition — English ☐ Spanish ☐ Other languages _____ ☐ Child nutrition — English ☐ Spanish ☐ Other languages _____ ☐ Nutritional needs of homeless — English ☐ Spanish ☐ Other languages _____ ☐ Nutritional needs of migrant farmworkers & their families — English ☐ Spanish ☐ Other languages _____ ☐ Nutritional needs of Native Americans — English ☐ Spanish ☐ Other languages _____ ☐ Nutritional needs of teenage prenatal women — English ☐ Spanish ☐ Other languages _____ ☐ Breastfeeding promotion and support (including troubleshooting problems) — English ☐ Spanish ☐ Other languages _____ ☐ Danger of harmful substances (alcohol, tobacco and other drugs), as well as secondhand smoke during pregnancy and breastfeeding — English ☐ Spanish ☐ Other languages _____ ☐ Food safety — English ☐ Spanish ☐ Other languages _____ ☐ Physical activity — English ☐ Spanish ☐ Other languages _____

(continued)

Exhibit B-1. State Plan Abstraction Items (continued)

Research Question	State Plan Item	State Plan Section	State Plan Guidance / Instruction[a]
10. What are the modes for delivering nutrition education at certification and follow-up appointments and what is the frequency of each delivery mode?	Allowable methods of nutrition education	II. Nutrition Services A. Nutrition Education	3. Nutrition Education Contacts c. The State agency allows the following nutrition education delivery methods: ☐ face-to-face, individually or group ☐ online/Internet ☐ telephone ☐ food demonstration ☐ a delivery method performed by other agencies, that is, EFNEP ☐ other (specify):
17. What types and intensity/duration of nutrition education training have been provided to staff during the past 2 years?	Training for local staff provided by the State Agency	II. Nutrition Services C. Staff Training	The State agency provides or sponsors the following training for WIC competent professional authorities:

	Professional		Paraprofessional	
	Regularly	As Needed	Regularly	As Needed
General nutrition education methodology	☐	☐	☐	☐
Nutrition counseling techniques	☐	☐	☐	☐
Breastfeeding promotion/support	☐	☐	☐	☐
Cultural competencies	☐	☐	☐	☐
Customer service	☐	☐	☐	☐
VENA staff competency training	☐	☐	☐	☐
Other (specify):	☐	☐	☐	☐

(continued)

Exhibit B-1. State Plan Abstraction Items (continued)

Research Question	State Plan Item	State Plan Section	State Plan Guidance / Instruction[a]
21. What is the dosage of nutrition education *offered* to participants and how does this vary by participant characteristics, type of contact, mode of delivery, timing of delivery and other factors?	Minimum standards for frequency of nutrition education	II. Nutrition Services A. Nutrition Education	3. Nutrition Education Contacts b. The State agency has developed minimum nutrition education standards for the following participant categories: ☐ pregnant women ☐ breastfeeding women ☐ postpartum women ☐ infants ☐ children ☐ high-risk participants The minimum nutrition education standards address: ☐ number of contacts ☐ content (WIC appropriate topics) ☐ nutrition topics relevant to participant assessment ☐ appropriate use of educational reinforcements (videos, brochures, posters, etc.)

[a]The instructions from the State Plan Guidance document are provided. For State Agencies that do not follow this format in their State Plan, we abstracted the required data using the template as a guide.

APPENDIX C:
SURVEY INSTRUMENT FOR THE LOCAL AGENCY SURVEY

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ID:_____, date: __/__/__

OMB Control Number: 0584-0599
Expiration date: 10/31/2017

WIC Nutrition Education Study

Local Agency Survey

Thank you for completing the Local Agency Survey for the WIC Nutrition Education Study (NEST). This survey is being conducted for the USDA, Food and Nutrition Service (FNS) to collect information that will provide a description of how WIC agencies provide nutrition education to participants. Your local agency/program was randomly selected as part of a group of about 1,000 agencies to represent all local WIC agencies in the nation. Your responses to the survey questions will be combined with responses from the other agencies to develop a comprehensive picture of the methods, staffing, resources, and facilities used to deliver nutrition education in local WIC sites. Your input is critical in achieving the study's goal of providing a comprehensive description of WIC nutrition education. The information you provide will help strengthen and enhance WIC nutrition education efforts and highlight the efforts across the country to promote healthy eating and physical activity practices among WIC participants.

Local agencies, sites, and individual respondent names will not be identified in any study reports or publications. Although survey responses will be identifiable to FNS, the responses will not be used for compliance or monitoring activities.

Please complete this survey within 3 weeks of the date you received the request to participate in the study.

Most questions include a checkbox to check the response(s). Some questions require that you enter numbers or text responses. Please use blue or black ink to complete the survey. The survey will take about 45 minutes to complete.

Nutrition Education Survey Help Desk

If you have any problems completing the survey, please contact:

Phone: 1-877-575-5375

Email: wic-ne-study@altarum.org

WIC Sites

For all survey questions, nutrition education includes breastfeeding education.

1. How many WIC sites operated by your local agency/program provide nutrition education? *(Count any facility or location where your local agency provides nutrition education including full-time, part-time, temporary, satellite, and mobile sites.)*

   Number of sites _____

2. Of the WIC sites that provide nutrition education, how many are located in each type of facility listed below? *(Count each site once in the type of facility that is the **best** match. Consider the organization that owns/operates the site's facility, which may not be the organization that operates the WIC program.)*

Type of Facility	Number of Sites
City, county, state or U.S. territory health department (not including government-run hospitals)	
Government facility that does **not** provide public health or healthcare services (e.g., community center, government service center, courthouse)	
Indian Health Service (IHS) clinic or hospital	
Federally Qualified Health Center (FQHC)	
Nonprofit health center or medical clinic (not including IHS or FQHC)	
Hospital (not including IHS hospital)	
Stand-alone WIC site (e.g., leased space in shopping center or other commercial space)	
Nonprofit community services agency facility (e.g., Economic Opportunity Commission, Community Action Agency)	
School or Head Start facility	
Faith-based facility	
Mobile van	
Other (describe): _____	

3. About what percentage of participants served by your local agency speak a language other than English as their **primary** language? *(Include participants served at all sites. Please estimate if this information is not readily available.)*

   - ☐ None → **GO TO QUESTION 5**
   - ☐ 1–5%
   - ☐ 6–10%
   - ☐ 11–30%
   - ☐ 31–50%
   - ☐ 51–70%
   - ☐ 71–90%
   - ☐ 91–100%

4. Other than English, what languages are spoken by participants served by your local agency? *(Check all that apply.)*

   - ☐ Spanish
   - ☐ Arabic
   - ☐ American Sign Language
   - ☐ Cambodian/Khmer
   - ☐ Cantonese/Mandarin
   - ☐ Farsi
   - ☐ French/Creole
   - ☐ Fulani
   - ☐ Hindi
   - ☐ Hmong
   - ☐ Korean
   - ☐ Laotian
   - ☐ Portuguese
   - ☐ Punjabi
   - ☐ Russian
   - ☐ Somali
   - ☐ Swahili
   - ☐ Tamil
   - ☐ Tagalog
   - ☐ Urdu
   - ☐ Vietnamese
   - ☐ Other (describe): _____

High-Risk Participants

5. Does your State agency have nutrition education policies and/or protocols for participants that are identified as high risk?

   - ☐ Yes
   - ☐ No

6. Does your local agency classify participants into nutrition risk levels (e.g., high risk, not high risk)?

   - ☐ Yes
   - ☐ No

7. What, if any, modifications to nutrition education does your local agency make based on participant's risk levels or nutrition risks? For this question, "high risk" includes participants identified as high risk and/or participants with nutrition risks requiring special attention. *(Check all that apply.)*

   ☐ There are no modifications to nutrition education for high-risk participants.

   ☐ High-risk participants receive more nutrition education contacts.

   ☐ High-risk participants receive nutrition education from a dietitian, nutritionist, or other health professional.

   ☐ High-risk participants are given longer appointment times.

   ☐ High-risk participants receive one-on-one counseling instead of group sessions or other types of education.

   ☐ High-risk participants receive more detailed and individualized care plans.

   ☐ There is more follow-up on referrals for high-risk participants.

   ☐ Other (describe): _____

Nutrition Education Contacts and Methods

For all questions, nutrition education includes breastfeeding education.

8. How many nutrition education contacts does your local agency **plan** for the following participant categories and time periods? While the number of contacts varies based on individual needs, enter the number that is planned for the **majority of participants** in the category. *(Count all contacts planned during the certification period beginning with the certification visit. Select "Not Applicable" for any category/time period that is not applicable to your local agency.)*

Participant Category and Time Periods	Not Applicable	8a. Number of Nutrition Education Contacts for Participants who are NOT High Risk	8b. Number of Nutrition Education Contacts for Participants who are High Risk*
Prenatal woman, enrolling in 1st trimester	☐		
Prenatal woman, enrolling in 2nd trimester	☐		
Prenatal woman, enrolling in 3rd trimester	☐		
Breastfeeding woman, 6-month certification period	☐		
Breastfeeding woman, 12-month certification period	☐		
Postpartum woman, not breastfeeding	☐		
Infant, 6-month certification period	☐		
Infant, 12-month certification period	☐		
Child, 6-month certification period	☐		
Child, 12-month certification period	☐		

*High risk includes participants identified as high risk and/or participants with nutrition risks requiring special attention.

9. During what types of visits does your local agency provide nutrition education contacts? *(Check all that apply.)*

   ☐ Certification visit (e.g., enrollment, recertification)

   ☐ Mid-certification visit (e.g., prenatal trimester visit, infant/child mid-certification, breastfeeding mid-certification)

   ☐ Secondary education follow-up visit (e.g., group classes, food issuance/pick-up education, breastfeeding follow-up, low risk follow-up)

   ☐ High-risk follow-up visit (e.g., nutritionist visit, nutrition counseling visit, high-risk group classes)

   ☐ Other (describe): _____

10. How much time is **planned** for providing nutrition education during each type of visit? *(Check one response for each type of visit.)*

Type of Visit	Less than 5 Min	5–10 Min	11–20 Min	21–30 Min	31–45 Min	46–60 Min	More than 60 Min	Not Applicable	Don't Know
Enrollment certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: Not high risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: High risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: 2 or more family members	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (individual)	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (group)	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

11. What methods are used to provide nutrition education? *(Check all methods that are used for each type of visit.)*

Type of Visit	One-on-one counseling: Face-to-face (in WIC site)	One-on-one counseling: Telephone	One-on-one counseling: Video conferencing	Group education sessions	Technology-based nutrition education used by participants at site (e.g., computer, kiosk, tablet)	Technology-based nutrition education used by participants offsite via Internet (e.g., Internet-based nutrition education modules)	Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	Not Applicable	Don't know
Enrollment Certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary Education Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

12. About what percentage of participants served at **all sites** operated by your local agency receive nutrition education through the method(s) included below? *(Please estimate if this information is not readily available. Check one response for each method.)*

    a) Group education sessions

    - ☐ None
    - ☐ <10%
    - ☐ 11–39%
    - ☐ 40–59%
    - ☐ 60–89%
    - ☐ 90% or more
    - ☐ Don't know

    b) Technology-based nutrition education used by participants offsite (e.g., Internet-based nutrition education modules)

    - ☐ None
    - ☐ <10%
    - ☐ 11–39%
    - ☐ 40–59%
    - ☐ 60–89%
    - ☐ 90% or more
    - ☐ Don't know

Nutrition Education Reinforcement Practices and Sources

13. How does your local agency follow up with participants about their goals or concerns discussed during nutrition contacts (e.g., breastfeeding issues, weight-related goals)? *(Check all that apply.)*

    - ☐ Follow-up occurs at subsequent WIC visits
    - ☐ Telephone calls
    - ☐ Emails
    - ☐ Text messages
    - ☐ Video conferencing
    - ☐ Other (describe): _____

14. What methods does your local agency use to reinforce the information provided in nutrition education sessions? *(Check all that apply for each type of method.)*

    a) Onsite Methods

    - ☐ Brochures or written materials
    - ☐ Bulletin boards with nutrition information
    - ☐ Computer, kiosk, or tablet computer at site
    - ☐ Cooking demonstrations
    - ☐ Display tables with nutrition information
    - ☐ Educational props (e.g., food containers, breastfeeding dolls, physical activity items)
    - ☐ Food tasting
    - ☐ Nutrition education DVDs/videos viewed at site
    - ☐ Support groups (e.g., parenting or breastfeeding group)
    - ☐ None
    - ☐ Other (describe): _____

    b) Offsite Methods

    - ☐ Email messages with nutrition education content
    - ☐ Grocery store tours
    - ☐ Monthly or quarterly nutrition newsletter sent home
    - ☐ Nutrition education DVDs/videos sent home
    - ☐ Social media (e.g., Facebook, Twitter)
    - ☐ Technology-based education used outside of site (e.g. Internet modules)
    - ☐ Telephone calls with nutrition education content
    - ☐ Text messages with nutrition education content
    - ☐ None
    - ☐ Other (describe): _____

15. What is the source of nutrition education materials (e.g., lesson plans, pamphlets, videos) used by your local agency? *(Check all that apply.)*

    - ☐ Your State agency
    - ☐ Your local agency
    - ☐ Individual WIC sites
    - ☐ National WIC Works Resource system
    - ☐ USDA, Food and Nutrition Service
    - ☐ Non-WIC sources
    - ☐ Other (describe): _____

16. What is the source of the technology-based nutrition education used by your local agency? *(Check all that apply.)*

- ☐ Do not use technology-based nutrition education
- ☐ Developed or provided by your State agency
- ☐ Developed by your local agency
- ☐ Developed by individual WIC sites
- ☐ Downloaded or obtained from national WIC Works Resource system
- ☐ Developed by USDA, Food and Nutrition Service
- ☐ Developed by non-WIC sources
- ☐ Don't know
- ☐ Other (describe): _____

Policies on Staff Qualifications and Training

The next questions ask about staff your local agency employs to provide nutrition education and your **local agency hiring policies** for minimum education, credentials, and training requirements.

17. Who provides nutrition education at your local agency? *(Check all job classifications/types that apply.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

18. Which **best** describes how policies are set for the minimum educational and/or credential requirements for staff who provide nutrition education? *(Check one response.)*

    ☐ Educational/credential requirements are set by State agency
    ☐ Education/credential requirements are set by local agency
    ☐ Some requirements are set by State agency and some by local agency
    ☐ There are no minimum educational/credential requirements
    ☐ Don't know

19. At your local agency, what is the policy for the **minimum educational requirements** for staff who provide nutrition education? *(Check one response for each job classification/type of staff. Check "Not Applicable" if the local agency does not have staff in this category.)*

Job Classification / Type of Staff who Provide Nutrition Education	Degree Required				No Minimum Requirement	Not Applicable
	High School Diploma / GED	Associate's Degree	Bachelor's Degree	Graduate Degree		
WIC director/coordinator	☐	☐	☐	☐	☐	☐
Site/clinic supervisor	☐	☐	☐	☐	☐	☐
Registered dietitian (RD)	☐	☐	☐	☐	☐	☐
Degreed nutritionist, not RD	☐	☐	☐	☐	☐	☐
Trained nutrition paraprofessional	☐	☐	☐	☐	☐	☐
Nurse	☐	☐	☐	☐	☐	☐
Nutrition education coordinator	☐	☐	☐	☐	☐	☐
Administrative/clerical/support staff	☐	☐	☐	☐	☐	☐
Lactation consultant/WIC-designated breastfeeding expert	☐	☐	☐	☐	☐	☐
Breastfeeding coordinator	☐	☐	☐	☐	☐	☐
Breastfeeding peer counselor	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐

20. At your local agency, what **credentials** are required for staff who provide nutrition education? *(Check all that apply for each job classification/type of staff. Check "Not Applicable" if the local agency does not have staff in this category.)*

    Credential is a certification from a professional association or training program.

Job Classification/Type of Staff who Provide Nutrition Education	Credential(s)								No Credential Requirements	Not Applicable
	RD	LD/LN	DTR	RN	LPN	IBCLC	CLC/CLE/CLEC	CMA		
WIC director/coordinator	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Site/clinic supervisor	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Registered dietitian (RD)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Degreed nutritionist, not RD	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Trained nutrition paraprofessional	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Nurse	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Nutrition education coordinator	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Administrative/clerical/support staff	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Lactation consultant/WIC-designated breastfeeding expert	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Breastfeeding coordinator	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Breastfeeding peer counselor	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

RD = Registered Dietitian; LD/LN = Licensed Dietitian/Licensed Nutritionist; DTR = Dietetic Technician, Registered; RN = Registered Nurse; LPN = Licensed Practical Nurse; IBCLC = International Board Certified Lactation Consultant; CLC/CLE/CLEC = Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor; CMA = Certified Medical Assistant

21. At your local agency, what **training is required for new employees** who provide nutrition education? *(Check all that apply for each job classification/type of staff. Check "Not Applicable" if the local agency does not have staff in this category.)*

Job Classification / Type of Staff who Provide Nutrition Education	Required Training					No Training Requirements	Not Applicable
	Competency-Based* or Certification Program	State-Administered Training Program**	Self-Paced Training Modules***	On-the-Job with Observation	Other		
WIC director/coordinator	☐	☐	☐	☐	☐	☐	☐
Site/clinic supervisor	☐	☐	☐	☐	☐	☐	☐
Registered dietitian (RD)	☐	☐	☐	☐	☐	☐	☐
Degreed nutritionist, not RD	☐	☐	☐	☐	☐	☐	☐
Trained nutrition paraprofessional	☐	☐	☐	☐	☐	☐	☐
Nurse	☐	☐	☐	☐	☐	☐	☐
Nutrition education coordinator	☐	☐	☐	☐	☐	☐	☐
Administrative/clerical/support staff	☐	☐	☐	☐	☐	☐	☐
Lactation consultant/WIC-designated breastfeeding expert	☐	☐	☐	☐	☐	☐	☐
Breastfeeding coordinator	☐	☐	☐	☐	☐	☐	☐
Breastfeeding peer counselor	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐

*An educational approach based on a predetermined set of knowledge, skills, and abilities that the employee is expected to accomplish.

**Examples of state-administered training programs include state training center and regional training.

***Examples of self-paced training include paper, online, and DVD.

Staff Training

22. Does your local agency have a policy that requires ongoing training on nutrition education for any staff members who provide it? Do **not** include continuing education required for maintaining a credential. *(Check all that apply.)*

    - ☐ Yes, local agency requires specific number of hours per month
    - ☐ Yes, local agency requires specific number of hours per year
    - ☐ Yes, local agency implements State agency requirements for ongoing training
    - ☐ No local agency policy requiring ongoing training

23. How is ongoing nutrition education training usually provided to staff? *(Check all that apply.)*

    - ☐ National/State/regional conferences or workshops
    - ☐ Training sessions/courses at State training center
    - ☐ In-person training sessions (e.g., conferences, workshops) provided by your local agency
    - ☐ In-person training sessions (e.g., conferences, workshops) provided by other local agencies or programs
    - ☐ State or local agency webinars
    - ☐ Self-study training modules or courses (online or print copy)
    - ☐ Training provided during local agency or site staff meetings
    - ☐ Individual staff mentoring/coaching
    - ☐ Other (describe): _____

24. About how many hours of nutrition education training does your local agency provide each year to each person who provides nutrition education? *(Check the response that represents the approximate hours **per staff member per year**.)*

    - ☐ None
    - ☐ 1–6 hours
    - ☐ 7–12 hours
    - ☐ 13–18 hours
    - ☐ 19–24 hours
    - ☐ 25 or more hours

25. **In the past 24 months**, about what percentage of staff members who provide nutrition education were trained in the methods listed below? Include training that was provided by your local agency, State agency, and any outside training. *(Please estimate if this information is not readily available. Check one response for each method.)*

Topics	None	1–25%	26–50%	51–75%	76–100%	Don't Know
3-step counseling	☐	☐	☐	☐	☐	☐
Facilitated group discussion	☐	☐	☐	☐	☐	☐
Motivational interviewing	☐	☐	☐	☐	☐	☐
Communication skills	☐	☐	☐	☐	☐	☐
Goal setting	☐	☐	☐	☐	☐	☐
Emotion-based counseling	☐	☐	☐	☐	☐	☐
Skills related to Value Enhanced Nutrition Assessment (VENA) and/or participant/learner-centered education	☐	☐	☐	☐	☐	☐
Foreign language (e.g., Spanish)	☐	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐	☐

Design and Oversight of Nutrition Education

26. How does your local agency **design and oversee** implementation of nutrition education? *(Check one response.)*

    Design includes developing lesson plans, protocols, and materials for nutrition education. Oversee includes directing, managing, or supervising the implementation of nutrition education.

    ☐ One individual designs and oversees nutrition education for all sites.
    ☐ A team of two or more individuals designs and oversees nutrition education for all sites.
    ☐ Each site designs and oversees its own nutrition education.
    ☐ State agency designs nutrition education and local agency or sites oversee nutrition education.
    ☐ State agency designs and oversees nutrition education. → **GO TO QUESTION 30**
    ☐ Other (describe): _____

27. Who designs and/or oversees nutrition education at your local agency? *(Check all job classifications/types that apply.)*

    - ☐ WIC director/coordinator
    - ☐ Site/clinic supervisor
    - ☐ Registered dietitian (RD)
    - ☐ Degreed nutritionist, not RD
    - ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
    - ☐ Nurse
    - ☐ Nutrition education coordinator
    - ☐ Lactation consultant/WIC-designated breastfeeding expert
    - ☐ Other (describe): _____

28. Are you one of the individuals who designs and/or oversees nutrition education at your local agency?

    - ☐ Yes
    - ☐ No → **GO TO QUESTION 30**

29. How many years of work experience do you have at WIC designing and/or overseeing nutrition education?

    - ☐ Less than 1 year
    - ☐ 1–3 years
    - ☐ 4–6 years
    - ☐ 7–10 years
    - ☐ 11–20 years
    - ☐ More than 20 years

Coordination with Other Programs and Services

30. Does your local agency receive funding, materials, or "in-kind" support (e.g., space, staff, materials) for nutrition education or breastfeeding from any source other than the Federal or State WIC Program?

    - ☐ Yes
    - ☐ No → **GO TO QUESTION 32**
    - ☐ Don't Know → **GO TO QUESTION 32**

31. For each non-WIC type of support (funding, materials, or "in-kind") indicate the source of the support provided to your local agency. *(Check all that apply for each type of support. For types of support that you do not receive, check "Not Applicable.")*

Type of Support	Source			Not Applicable
	State Government (other than WIC)	Local Government or Agency	Other Local Sources	
Nutrition education funding	☐	☐	☐	☐
Breastfeeding funding	☐	☐	☐	☐
Nutrition education staff	☐	☐	☐	☐
Breastfeeding staff	☐	☐	☐	☐
Nutrition education materials/supplies	☐	☐	☐	☐
Breastfeeding education materials/supplies	☐	☐	☐	☐
Space/facilities	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐

32. What programs or services does your local agency work with to coordinate nutrition education activities (e.g., educational materials, campaigns, classes)? (*Do **not** include coordination for outreach or referral purposes. Check all that apply.)*

- ☐ Do not coordinate nutrition education with other programs or services → **GO TO QUESTION 34**
- ☐ Breastfeeding coalition or task force
- ☐ Child and Adult Care Food Program (CACFP)
- ☐ Community Transformation Grant (CTG), REACH, or other CDC program
- ☐ Cooperative Extension (Expanded Food and Nutrition Education Program [EFNEP] or other services)
- ☐ Food bank, food security, or hunger coalition
- ☐ Head Start
- ☐ Obesity prevention coalition or task force
- ☐ Supplemental Nutrition Assistance Program (SNAP) Education
- ☐ Other program or service (describe): _____

33. How does your local agency coordinate nutrition education with these other programs or services? *(Check all that apply.)*

- ☐ We develop nutrition education materials or campaigns together.
- ☐ Another program or service provides nutrition education at WIC sites.
- ☐ WIC provides nutrition education at other program or service sites.
- ☐ WIC refers participants for other nutrition education programs or services.
- ☐ We collaborate on nutrition education goals and action plans.
- ☐ We hold joint staff training sessions.
- ☐ We meet routinely (e.g., monthly, quarterly) to share information and discuss opportunities to coordinate services.
- ☐ Other (describe): _____

Participant Feedback and Nutrition Education Evaluation

34. How often does your local agency collect feedback from participants about the nutrition education they receive?

- ☐ Do not collect participant feedback → **GO TO QUESTION 36**
- ☐ At every WIC visit
- ☐ Quarterly
- ☐ Twice a year
- ☐ Once a year
- ☐ Once every other year
- ☐ Once every 3 to 5 years

35. How does your local agency collect feedback from participants about the nutrition education they receive? *(Check all that apply.)*

- ☐ Paper survey completed during WIC visit
- ☐ Phone survey conducted by your agency
- ☐ Mail survey conducted by your agency
- ☐ Phone or mail survey conducted by a company hired by your agency
- ☐ Electronic feedback system located at site (e.g., touch-screen survey)
- ☐ Focus groups or one-on-one interviews with participants
- ☐ Other (describe): _____

36. If your local agency were to conduct an evaluation of the impact of nutrition education on participant outcomes, which outcome measures would be most important to include? *(Check up to five responses.)*

- ☐ Anemia rates
- ☐ Body mass index (BMI) of children
- ☐ Breastfeeding rates
- ☐ Confidence in skills in preparing healthy meals for children
- ☐ Consumption of fruit and vegetables
- ☐ Consumption of lower fat milk and dairy products
- ☐ Consumption of fruit juice (100% juice)
- ☐ Consumption of sugar-sweetened beverages (e.g., soda, sweetened fruit drinks)
- ☐ Consumption of whole grains
- ☐ Infant feeding practices
- ☐ Knowledge about healthy eating
- ☐ Physical activity levels
- ☐ Readiness for change in nutrition behaviors
- ☐ Other (describe): _____

37. Other than increased funding, what additional resources or information would assist your local agency in providing high-quality nutrition education to participants?

_____

_____

_____

_____

_____

_____

_____

_____

About You

Thank you for responding to the questions about nutrition education. The next questions are about you.

38. Which job titles or roles do you have? *(Check all that apply.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

If you chose only one response for Question 38, **GO TO QUESTION 40.**

39. Which **best** describes your **primary** role in the WIC Program? *(Check one response.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

40. What is the highest degree you have completed?

- ☐ High school diploma or GED
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate degree

41. Which, if any, of the following credentials do you have? *(Check all that apply.)*

- ☐ Registered Dietitian (RD)
- ☐ Licensed Dietitian/Nutritionist (LD/LN)
- ☐ Dietetic Technician, Registered (DTR)
- ☐ Registered Nurse (RN)
- ☐ Licensed Practical Nurse (LPN)
- ☐ International Board Certified Lactation Consultant (IBCLC)
- ☐ Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)
- ☐ Certified Medical Assistant (CMA)
- ☐ No credentials
- ☐ Other (describe): _____

42. How many years have you worked for the WIC Program? *(Include time at this agency and other WIC experience.)*

- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–10 years
- ☐ 11–20 years
- ☐ More than 20 years

WIC Sites Selected for Site Survey

Up to three of your sites were selected to complete a Site Survey as part of the WIC Nutrition Education Study. The name(s) of the site(s) is listed in the table below. For **each** site, please:

(1) Identify the individual who knows the most about the site's methods, materials, space, and staffing for nutrition education and provide the requested contact information. Possible job titles for the Site Survey respondent include Local Agency Director, Site/Clinic Supervisor, Site WIC Coordinator, Regional Nutritionist, Regional Nutrition Coordinator, Nutrition Education Coordinator, Competent Professional Authority or Senior Nutritionist.

(2) Enter the ZIP code of the site location, provide the site's monthly caseload/participation, and select the type of facility where the site is located.

(3) Notify the individual(s) that you selected them to complete the Site Survey. They will receive an email with instructions for completing the Site Survey. If they cannot complete a web survey on the Internet, a paper survey and prepaid return envelope will be sent to them at the mailing address you enter.

If you are the most appropriate individual to respond to the questions about the site(s), please enter your name and contact information. If one individual is the most appropriate to answer for two or more sites, you can select the same respondent for more than one site and you will not need to enter the name and contact information again.

For "Type of Site," enter the letter associated with the type that is the **best** match for the site facility.

A. City, county, state or U.S. territory health department (not including government-run hospitals)
B. Government facility that does **not** provide public health or healthcare services (e.g., community center, government service center, courthouse)
C. Indian Health Service (IHS) clinic or hospital
D. Federally Qualified Health Center (FQHC)
E. Nonprofit health center or medical clinic (not including IHS or FQHC)
F. Hospital (not including IHS facility)
G. Stand-alone WIC site (e.g., leased space in shopping center or other commercial space)
H. Nonprofit community services agency facility (e.g., Economic Opportunity Commission, Community Action Agency)
I. School or Head Start facility
J. Faith-based facility
K. Mobile van
L. Other

Please provide *either* the Site Survey respondent's email address or mailing address. A mailing address is required only if the respondent cannot complete an online survey and must receive a paper survey.

	[Name of First Site]	**[Name of Second Site]**	**[Name of Third Site]**
Is this site currently operational?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Site Survey Respondent First Name		☐ Same as Site 1 **(GO TO AVERAGE MONTHLY CASELOAD AT SITE)**	☐ Same as Site 1 ☐ Same as Site 2 **(GO TO AVERAGE MONTHLY CASELOAD AT SITE)**
Site Survey Respondent Last Name			
Site Survey Respondent Job Title			
Site Survey Respondent Phone Number (Enter area code and phone number.)			
Site Survey Respondent Email Address (if available)			
Site Survey Respondent Mailing Address (Enter street number and name or post office box, city, state and zip code.)			
ZIP Code **of Site**			
Average Caseload or Participation/Month (If this information is not available, please provide estimate.)			
Type of Site (Enter letter for type that best describes this site's facility)			

Thank you for responding to the Local Agency Survey for the WIC Nutrition Education Study.

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APPENDIX D:
SURVEY INSTRUMENTS FOR THE SITE SURVEY

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SITE SURVEY VERSION 1

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OMB Control Number: 0584-0599
Expiration date: 10/31/2017

WIC Nutrition Education Study

Site Survey (Version 1)

Thank you for completing the Site Survey for the WIC Nutrition Education Study (NEST). This survey is being conducted for the USDA, Food and Nutrition Service (FNS) to collect information that will provide a description of how WIC sites provide nutrition education to participants. This site was randomly selected as part of a group of about 2,000 sites that represent all WIC sites in the nation. Your responses to the survey will be combined with responses from the other sites to develop a comprehensive picture of the methods, staffing, resources, and space used to deliver nutrition education in local WIC sites. Your input is critical in achieving the study's goal of providing a comprehensive description of WIC nutrition education. The information you provide will help strengthen and enhance WIC nutrition education efforts and highlight the efforts across the country to promote healthy eating and physical activity practices among WIC participants.

Local agencies/programs, sites, and individual respondent names will not be identified in any study reports or publications. Although survey responses will be identifiable to FNS, the responses will not be used for compliance or monitoring activities.

Please complete this survey within 3 weeks of the date you received the request to participate in the study.

Most questions include a box ☐ for you to check response(s). A few questions require that you enter numbers or text responses. Please use blue or black ink to complete the survey. The survey will take about 45 minutes to complete. We recommend that you review the questions before beginning the survey so that you can obtain any information needed to respond or ask other staff at the site to assist with answering some of the questions.

Site Survey for [Insert Name of Site]

Questions 10 through 16 ask about the characteristics of staff members who provide nutrition education (e.g., education, credentials, etc.). You can use the enclosed optional form to help answer these questions. You do not need to return the form, only the completed survey.

Nutrition Education Survey Help Desk

If you have any problems completing the survey, please contact:

Phone: 1-877-575-5375

Email: wic-ne-study@altarum.org

Nutrition Education Contacts and Methods

For all questions, nutrition education includes breastfeeding education.

1. How many days per month does the site provide WIC nutrition education services? *(Count days when any form of nutrition education is provided. If it varies from month to month, enter the number of days WIC nutrition education services were provided last month.)*

   Number of days: _____

2. Are participants at the site classified into nutrition risk levels (e.g., high risk, not high risk)?

   ☐ Yes
   ☐ No

3. What, if any, modifications to nutrition education does the site make based on participant's risk levels or nutrition risks? For this question, "high risk" includes participants identified as high risk and/or participants with nutrition risks requiring special attention. *(Check all that apply.)*

   ☐ There are no modifications to nutrition education for high-risk participants.
   ☐ High-risk participants receive more nutrition education contacts.
   ☐ High-risk participants receive nutrition education from a dietitian, nutritionist or other health professional.
   ☐ High-risk participants are given longer appointment times.
   ☐ High-risk participants receive one-on-one counseling instead of group sessions or other types of education.
   ☐ High-risk participants receive more detailed and individualized care plans.
   ☐ There is more follow-up on referrals for high-risk participants.
   ☐ Other (describe): _____

4. In the first column, enter the number of nutrition education contacts the site **offers** (i.e., makes available) during a certification period for each participant category and time period. While the number of contacts varies based on individual needs, enter the number that is offered to the **majority of participants** in the category. *(Count all contacts beginning with the certification visit; for example, if prenatal women who enroll in the 1st trimester are offered nutrition education at their initial visit and two more contacts during their prenatal certification period, enter "3." Check NA for any category/time period that is not applicable at the site.)*

   In the second column, enter the **estimated** percentage of participants who **receive** that number of nutrition education contacts during their certification period. *(Please estimate based on your experience. You do not need to run a report or review participant records to answer this question.)*

   a) Participants who are NOT high risk

Participant Category and Time Periods	**NA**	**Number of Nutrition Education Contacts Site <u>Offers</u> during Certification Period**	**Estimated Percentage of Participants who <u>Receive</u> this Number of Contacts (%)**
Prenatal woman, enrolling in 1st trimester	☐		
Prenatal woman, enrolling in 2nd trimester	☐		
Prenatal woman, enrolling in 3rd trimester	☐		
Breastfeeding woman, 6-month certification period	☐		
Breastfeeding woman, 12-month certification period	☐		
Postpartum woman, not breastfeeding	☐		
Infant, 6-month certification period	☐		
Infant, 12-month certification period	☐		
Child, 6-month certification	☐		
Child, 12-month certification	☐		

b) Participants who are high risk and/or have nutritional risks requiring special attention

Participant Category and Time Periods	NA	Number of Nutrition Education Contacts Site Offers during Certification Period	Estimated Percentage of Participants who Receive this Number of Contacts (%)
Prenatal woman, enrolling in 1st trimester	☐		
Prenatal woman, enrolling in 2nd trimester	☐		
Prenatal woman, enrolling in 3rd trimester	☐		
Breastfeeding woman, 6-month certification period	☐		
Breastfeeding woman, 12-month certification period	☐		
Postpartum woman, not breastfeeding	☐		
Infant, 6-month certification period	☐		
Infant, 12-month certification period	☐		
Child, 6-month certification	☐		
Child, 12-month certification	☐		

5. During what types of visits does the site provide nutrition education contacts? *(Check all that apply.)*

   ☐ Certification visit (e.g., enrollment, recertification)

   ☐ Mid-certification visit (e.g., prenatal trimester visit, infant/child mid-certification, breastfeeding mid-certification)

   ☐ Secondary education follow-up visit (e.g., group classes, food issuance/pick-up, breastfeeding follow-up, low risk follow-up)

   ☐ High-risk follow-up visit (e.g. nutritionist visit, nutrition counseling visit, high-risk group classes)

   ☐ Other visits (describe): _____

6. What methods are used to provide nutrition education? *(Check all methods that are used for each type of visit.)*

Type of Visit	One-on-one counseling: Face-to-face (in WIC site)	One-on-one counseling: Telephone	One-on-one counseling: Video conferencing	Group education sessions	Technology-based nutrition education used by participants at site (e.g., computer, kiosk, tablet)	Technology-based nutrition education used by participants offsite via Internet (e.g., Internet-based nutrition education modules)	Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	Type of Visit Not Provided	Don't Know
Enrollment Certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary Education Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

7. On average, how much time do staff members who provide nutrition education at the site spend providing nutrition education during each of the following types of WIC visits? Do **not** include time spent on eligibility (e.g., income and residency) or assessment (e.g., weighing/measuring, blood work, reviewing nutrition questionnaires). *(Check one response for each type of visit.)*

Type of Visit	Less than 5 Min	5–10 Min	11–20 Min	21–30 Min	31–45 Min	46–60 Min	More than 60 Min	Not Applicable	Don't Know
Enrollment Certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: Not high risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: High risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: 2 or more family members	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (individual)	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (group)	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

Nutrition Education Staff

The next questions ask about the staff members at the site who provide nutrition education. If the number of these staff varies on different days, respond about staffing for a "typical" day or use the most common/frequent staffing pattern for the site. Count staff who provide nutrition education using any method. Do **not** include translators or interpreters who assist nutrition educators.

If you completed the optional form, you can refer to this form to answer Questions 10 through 16 on the characteristics of staff members who provide nutrition education.

8. Which **best** describes the staff members who provide nutrition education at the site? *(Check one response.)*

   ☐ All of them work **only** for WIC.

   ☐ All of them work for WIC **and** for other programs or services (e.g., immunizations, family planning) offered at the site.

   ☐ Some of them work only for WIC and some work for WIC and other programs or services offered at the site.

9. For each job classification/type of staff, enter the number of staff who currently provide nutrition education at the site who work full time and the number who work part time. *(Check NA for any type of staff that is not applicable at the site. If a staff member works 32 or more hours/week on WIC, count them in the Full-Time Staff column and if less than 32 hours/week on WIC, count them in the Part-Time Staff column appropriate for the number of hours they work per week. If a staff member* ***performs more than one role****, count them only once in the job classification/type for their* ***primary*** *role.)*

Job Classification/Type of Staff	**NA**	**Number of Full-Time Staff** (work on WIC activities 32 or more hours per week)	**Number of Part-Time Staff** (work on WIC activities 21–31 hours per week)	**Number of Part-Time Staff** (work on WIC activities 20 or fewer hours per week)
WIC director/coordinator	☐			
Site/clinic supervisor	☐			
Registered dietitian (RD)	☐			
Degreed nutritionist, not RD	☐			
Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)	☐			
Nurse	☐			
Nutrition education coordinator	☐			
Administrative/clerical/support staff	☐			
Lactation consultant/WIC-designated breastfeeding expert	☐			
Breastfeeding coordinator	☐			
Breastfeeding peer counselor	☐			
In the spaces below, enter any job classification/type not included in the list above and the number of staff.				
Other:	☐			
Other:	☐			
Other:	☐			

If you completed the optional form you can refer to this form to answer Questions 10 through 16 on the characteristics of staff members who provide nutrition education.

10. How many years have staff members who provide nutrition education at the site worked for WIC? *(Count both full-time and part-time staff and count each staff member only one time for the total number of years they have worked for WIC. Include time worked at this site or local agency/program and time at other WIC sites or local agencies.)*

Number of Years Worked at WIC	Number of Staff who Provide Nutrition Education
Less than 1 Year	
1–2 Years	
3–6 Years	
7–10 Years	
11–20 Years	
More Than 20 Years	

11. What is the educational level of individual staff members who provide nutrition education at the site? *(Count both full-time and part-time staff and count each staff member only **one time** for the **highest degree** they have received.)*

Education Level (Highest Degree Received)	Number of Staff who Provide Nutrition Education
High school diploma or GED	
Associate's degree	
Bachelor's degree	
Graduate degree	
Unknown	

12. How many of the staff members who provide nutrition education at the site have one or more of the credentials* listed below? *(If a staff member has more than one credential, count them **for each credential** they have; for example, if a staff member is both an RD and a LD/LN, count them in each credential group. If no staff members have any of these credentials, check "None of these credentials" box).*

Credentials	Number of Staff who Provide Nutrition Education
Registered Dietitian (RD)	
Licensed Dietitian/Nutritionist (LD/LN)	
Dietetic Technician, Registered (DTR)	
Registered Nurse (RN)	
Licensed Practical Nurse (LPN)	
International Board Certified Lactation Consultant (IBCLC)	
Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)	
Certified Medical Assistant (CMA)	
None of these credentials	☐

*A credential is a certification from a professional association or training program.

13. What is the ethnicity of staff members who provide nutrition education at the site? *(If you do not know the ethnicity of a staff member, count them in the "Unknown" category.)*

Hispanic or Latino Ethnicity	Number of Staff who Provide Nutrition Education
Hispanic or Latino	
Not Hispanic or Latino	
Unknown	

14. What is the race of staff members who provide nutrition education at the site? *(Staff members may be included in more than one category. If you do not know the race of a staff member, count them in the "Unknown" category.)*

Race	Number of Staff who Provide Nutrition Education
American Indian or Alaska Native	
Asian	
Black or African American	
Native Hawaiian or other Pacific Islander	
White	
Unknown	

15. How many staff members provide nutrition education in a language other than English? *(Do not include interpreters and translators.)*

    Number of staff: _____ → **IF 0, GO TO QUESTION 17.**

16. Other than English, what languages are spoken by staff who provide nutrition education at the site? *(Check all that apply.)*

    - ☐ Spanish
    - ☐ Arabic
    - ☐ American Sign Language
    - ☐ Cambodian/Khmer
    - ☐ Cantonese/Mandarin
    - ☐ Farsi
    - ☐ French/Creole
    - ☐ Fulani
    - ☐ Hindi
    - ☐ Hmong
    - ☐ Korean
    - ☐ Laotian
    - ☐ Portuguese
    - ☐ Punjabi
    - ☐ Russian
    - ☐ Somali
    - ☐ Swahili
    - ☐ Tamil
    - ☐ Tagalog
    - ☐ Urdu
    - ☐ Vietnamese
    - ☐ Other (describe): _____

Site and Participant Characteristics

17. In addition to WIC, which of the following services are available at or near the site? *(Check all that apply.)*

- ☐ Children's health care
- ☐ Dental services
- ☐ Environmental health/screening
- ☐ Family planning services
- ☐ Lead screening
- ☐ Maternal/prenatal health care
- ☐ Parenting support
- ☐ Prevention and screening services (e.g., vision, early and periodic screening, immunizations)
- ☐ Sexually transmitted disease services
- ☐ Smoking cessation
- ☐ There are no other services available at this site.
- ☐ Other (describe) _____

18. What settings at the site are used for **one-on-one counseling**? *(Check all that apply.)*

- ☐ Private room (full walls and door, e.g., office, exam/lab room)
- ☐ Modular office/cubicle (with full or partial walls)
- ☐ Area with movable partitions separating it from other space
- ☐ Open area with no partitions and staff at desks that are arranged for privacy
- ☐ Open area with no partitions and staff at tables (e.g., waiting room, community center room)
- ☐ Other (describe): _____

19. What settings at the site are used for **group education sessions**? *(Check all that apply.)*

- ☐ Designated room or space used predominately for group education
- ☐ Multi-purpose room used for group education and other meetings, but not a waiting room (e.g., conference room, auditorium)
- ☐ General open area (e.g., waiting room, open room where all WIC activities take place)
- ☐ Private room used for both one-on-one counseling and group education
- ☐ Other (describe): _____
- ☐ This site does not provide group education sessions.

20. Which, if any, of these rooms/areas are available at or near the site? *(Check all that apply.)*

- ☐ Designated room/area where breastfeeding education is provided
- ☐ Kitchen/area for cooking classes or recipe preparation demonstrations
- ☐ Room/area for nutrition education activities with children
- ☐ Room/area for providing WIC orientation to families
- ☐ Room/area for viewing nutrition education or breastfeeding videos
- ☐ None of the above

21. Which, if any, of these equipment items or materials does the site have available for providing nutrition education? *(Check all that apply.)*

- ☐ Bulletin boards for nutrition education information
- ☐ Computer, kiosk, or tablet computer for nutrition education
- ☐ Display tables with nutrition information
- ☐ DVD player and TV for showing nutrition education information
- ☐ Equipment for teaching cooking classes (e.g., stove, refrigerator)
- ☐ Equipment for simple food tasting (e.g., blender, crock pot)
- ☐ Nutrition education curricula or materials targeted to children (e.g., Sesame Workshop, kid's camp)
- ☐ Nutrition newsletters
- ☐ Rack/table/stand with written nutrition education materials for participants to select
- ☐ None of the above
- ☐ Other (describe): _____

22. About what percentage of participants served at the site speak a language other than English as their **primary** language? *(Please estimate if this information is not readily available. You do not need to run a report or review participant records to answer this question.)*

- ☐ None → **GO TO QUESTION 24**
- ☐ 1–5%
- ☐ 6–10%
- ☐ 11–30%
- ☐ 31–50%
- ☐ 51–70%
- ☐ 71–90%
- ☐ 91-100%

23. Other than English, what languages are spoken by participants served at the site? *(Check all that apply.)*

- ☐ Spanish
- ☐ Arabic
- ☐ American Sign Language
- ☐ Cambodian/Khmer
- ☐ Cantonese/Mandarin
- ☐ Farsi
- ☐ French/Creole
- ☐ Fulani
- ☐ Hindi
- ☐ Hmong
- ☐ Korean
- ☐ Laotian
- ☐ Portuguese
- ☐ Punjabi
- ☐ Russian
- ☐ Somali
- ☐ Swahili
- ☐ Tamil
- ☐ Tagalog
- ☐ Urdu
- ☐ Vietnamese
- ☐ Other (describe): _____

Questions about You

Thank you for responding to the questions about nutrition education. The next questions are about you.

24. Did you complete the Local Agency Survey for the local agency/program that oversees this site?

- ☐ Yes → **GO TO QUESTION 30**
- ☐ No

25. Which job titles or roles do you have? *(Check all that apply.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

If you chose only one response for Question 25, **GO TO QUESTION 27.**

26. Which **best** describes your **primary** role in the WIC Program? *(Check one response.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

27. What is the highest degree you have completed?

- ☐ High school diploma or GED
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate degree

28. Which, if any, of the following credentials do you have? *(Check all that apply.)*

- ☐ Registered Dietitian (RD)
- ☐ Licensed Dietitian/Nutritionist (LD/LN)
- ☐ Dietetic Technician, Registered (DTR)
- ☐ Registered Nurse (RN)
- ☐ Licensed Practical Nurse (LPN)
- ☐ International Board Certified Lactation Consultant (IBCLC)
- ☐ Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)
- ☐ Certified Medical Assistant (CMA)
- ☐ No credentials
- ☐ Other (describe): _____

29. How many years have you worked for the WIC Program? *(Include time at this local program and other WIC experience.)*

- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–10 years
- ☐ 11–20 years
- ☐ More than 20 years

30. As part of your job, do you design and/or oversee nutrition education at the site? (Design includes developing lesson plans, protocols, or materials for nutrition education. Oversee includes directing, managing or supervising the implementation of nutrition education.)

- ☐ Yes
- ☐ No

31. As part of your job, about what percentage of your time each month is spent providing nutrition education to WIC participants?

- ☐ Less than 25%
- ☐ 25–49%
- ☐ 50–74%
- ☐ 75–100%

32. Please use the space below to share a brief description of any special nutrition education activities or approaches used at the site.

_____

_____

_____

_____

Thank you for completing the Site Survey for the WIC Nutrition Education Study!

Nutrition Education Staff Summary

Instructions: This is an **optional form** you can use to gather information about the staff at the site that provide nutrition education. Listed below each column heading is the corresponding survey question. An example of how to complete the form is shown in the first line.

First Name and Last Initial of Staff at the Site *who Provide Nutrition Education*	**Number of Years Worked at WIC** *Question 10* (Select one)						**Education Level – Highest Degree Received** *Question11* (Select one)					**Credentials** *Question 12* (Select all that apply)									**Ethnicity** *Question 13* (Select one)			**Race** *Question14* (Select all that apply)						**Languages Spoken Other than English** *Question 16* (Select all that apply)	
	Less than 1 year	1 – 2 years	3 – 6 years	7 – 10 years	11 – 20 years	More than 20 years	High school or GED	Associate's Degree	Bachelor's Degree	Graduate Degree	Unknown	Registered Dietitian (RD)	Licensed Dietitian/Nutritionist (LD/LN)	Dietetic Technician, Registered (DTR)	Registered Nurse (RN)	Licensed Practical Nurse (LPN)	International Board Certified Lactation Consultant (IBCLC)	Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)	Certified Medical Assistant (CMA)	None of these credentials	Hispanic or Latino	Not Hispanic or Latino	Unknown	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Unknown	Spanish	All other languages (specify)
Employee A.		X					X					X					X				X							X		X	
1.																															
2.																															
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SITE SURVEY VERSION 2

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Site Survey for *[Insert Name of Site]*

OMB Control Number: 0584-0599
Expiration date: 10/31/2017

WIC Nutrition Education Study

Site Survey (Version 2)

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB number. The valid OMB control number for this information collection is 0584-0599. The time required to complete this information collection is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Thank you for completing the Site Survey for the WIC Nutrition Education Study (NEST). This survey is being conducted for the USDA, Food and Nutrition Service (FNS) to collect information that will provide a description of how WIC sites provide nutrition education to participants. This site was randomly selected as part of a group of about 2,000 sites that represent all WIC sites in the nation. Your responses to the survey will be combined with responses from the other sites to develop a comprehensive picture of the methods, staffing, resources, and space used to deliver nutrition education in local WIC sites. Your input is critical in achieving the study's goal of providing a comprehensive description of WIC nutrition education. The information you provide will help strengthen and enhance WIC nutrition education efforts and highlight the efforts across the country to promote healthy eating and physical activity practices among WIC participants.

Local agencies/programs, sites, and individual respondent names will not be identified in any study reports or publications. Although survey responses will be identifiable to FNS, the responses will not be used for compliance or monitoring activities.

Please complete this survey within 3 weeks of the date you received the request to participate in the study.

Most questions include a box ☐ for you to check response(s). A few questions require that you enter numbers or text responses. Please use blue or black ink to complete the survey. The survey will take about 45 minutes to complete. We recommend that you review the questions before beginning the survey so that you can obtain any information needed to respond or ask other staff at the site to assist with answering some of the questions.

Nutrition Education Survey Help Desk

If you have any problems completing the survey, please contact:

Phone: 1-877-575-5375

Email: wic-ne-study@altarum.org

Site Survey for [Insert Name of Site]

Nutrition Education Contacts and Methods

For all questions, nutrition education includes breastfeeding education.

1. How many days per month does the site provide WIC nutrition education services? *(Count days when any form of nutrition education is provided. If it varies from month to month, enter the number of days WIC nutrition education services were provided last month.)*

   Number of days: _____

2. Are participants at the site classified into nutrition risk levels (e.g., high risk, not high risk)?

   ☐ Yes
   ☐ No

3. What, if any, modifications to nutrition education does the site make based on participant's risk levels or nutrition risks? For this question, "high risk" includes participants identified as high risk and/or participants with nutrition risks requiring special attention. *(Check all that apply.)*

   ☐ There are no modifications to nutrition education for high-risk participants
   ☐ High-risk participants receive more nutrition education contacts
   ☐ High-risk participants receive nutrition education from a dietitian, nutritionist or other health professional.
   ☐ High-risk participants are given longer appointment times.
   ☐ High-risk participants receive one-on-one counseling instead of group sessions or other types of education.
   ☐ High-risk participants receive more detailed and individualized care plans.
   ☐ There is more follow-up on referrals for high-risk participants.
   ☐ Other (describe):_____

4. In the first column, enter the number of nutrition education contacts the site **offers** (i.e., makes available) during a certification period for each participant category and time period. While the number of contacts varies based on individual needs, enter the number that is offered to the **majority of participants** in the category. *(Count all contacts beginning with the certification visit; for example, if prenatal women who enroll in the 1st trimester are offered nutrition education at their initial visit and two more contacts during their prenatal certification period, enter "3." Enter NA for any category/time period that is not applicable at the site.)*

   In the second column, enter the **estimated** percentage of participants who **receive** that number of nutrition education contacts during their certification period. *(Please estimate based on your experience. You do not need to run a report or review participant records to answer this question.)*

   a) Participants who are NOT high risk

Participant Category and Time Periods	**NA**	**Number of Nutrition Education Contacts Site Offers during Certification Period**	**Estimated Percentage of Participants who Receive this Number of Contacts (%)**
Prenatal woman, enrolling in 1st trimester	☐		
Prenatal woman, enrolling in 2nd trimester	☐		
Prenatal woman, enrolling in 3rd trimester	☐		
Breastfeeding woman, 6-month certification period	☐		
Breastfeeding woman, 12-month certification period	☐		
Postpartum woman, not breastfeeding	☐		
Infant, 6-month certification period	☐		
Infant, 12-month certification period	☐		
Child, 6-month certification	☐		
Child, 12-month certification	☐		

b) Participants who are high risk and/or have nutritional risks requiring special attention

Participant Category and Time Periods	**NA**	**Number of Nutrition Education Contacts Site <u>Offers</u> during Certification Period**	**Estimated Percentage of Participants who <u>Receive</u> this Number of Contacts (%)**
Prenatal woman, enrolling in 1st trimester	☐		
Prenatal woman, enrolling in 2nd trimester	☐		
Prenatal woman, enrolling in 3rd trimester	☐		
Breastfeeding woman, 6-month certification period	☐		
Breastfeeding woman, 12-month certification period	☐		
Postpartum woman, not breastfeeding	☐		
Infant, 6-month certification period	☐		
Infant, 12-month certification period	☐		
Child, 6-month certification	☐		
Child, 12-month certification	☐		

5. During what types of visits does the site provide nutrition education contacts? *(Check all that apply.)*

   ☐ Certification visit (e.g., enrollment, recertification)

   ☐ Mid-certification visit (e.g., prenatal trimester visit, infant/child mid-certification, breastfeeding mid-certification)

   ☐ Secondary education follow-up visit (e.g., group classes, food issuance/pick-up, breastfeeding follow-up, low risk follow-up)

   ☐ High-risk follow-up visit (e.g. nutritionist visit, nutrition counseling visit, high-risk group classes)

   ☐ Other visits (describe): _____

6. What methods are used to provide nutrition education? *(Check all methods that are used for each type of visit. Check NA if the site does not provide this type of visit.)*

Type of Visit	One-on-one counseling: Face-to-face (in WIC site)	One-on-one counseling: Telephone	One-on-one counseling: Video conferencing	Group education sessions	Technology-based nutrition education used by participants at site (e.g., computer, kiosk, tablet)	Technology-based nutrition education used by participants offsite via Internet (e.g., Internet-based nutrition education modules)	Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	Type of Visit Not Provided (NA)	Don't Know
Enrollment Certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary Education Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk Follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

7. On average, how much time do staff members who provide nutrition education at the site spend providing nutrition education during each of the following types of WIC visits? Do **not** include time spent on eligibility (e.g., income and residency) or assessment (e.g., weighing/measuring, blood work, reviewing nutrition questionnaires). *(Check one response for each type of visit.)*

Type of Visit	Less than 5 Min	5–10 Min	11–20 Min	21–30 Min	31–45 Min	46–60 Min	More than 60 Min	Not Applicable	Don't Know
Enrollment Certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: Not high risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: High risk, 1 person	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recertification: 2 or more family members	☐	☐	☐	☐	☐	☐	☐	☐	☐
Mid-certification	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (individual)	☐	☐	☐	☐	☐	☐	☐	☐	☐
Secondary education follow-up (group)	☐	☐	☐	☐	☐	☐	☐	☐	☐
High-risk follow-up	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐

Nutrition Education Staff

The next questions ask about the staff members at the site who provide nutrition education. If the number of these staff varies on different days, respond about staffing for a "typical" day or use the most common/frequent staffing pattern for the site. Count staff who provide nutrition education using any method. Do **not** include translators or interpreters who assist nutrition educators.

8. Which **best** describes the staff members who provide nutrition education at the site? (*Check one response.)*

   ☐ All of them work **only** for WIC.

   ☐ All of them work for WIC **and** for other programs or services (e.g., immunizations, family planning) offered at the site.

   ☐ Some of them work only for WIC and some work for WIC and other programs or services offered at the site.

Site Survey for *[Insert Name of Site]*

9. For each job classification/type of staff, enter the number of staff who currently provide nutrition education at the site who work full time and the number who work part time. *(Enter NA for any staff type that is not applicable at the site. If a staff member works 32 or more hours/week on WIC, count them in the Full-Time Staff column and if less than 32 hours/week on WIC, count them in the Part-Time Staff column appropriate for the number of hours they work per week. If a staff member **performs more than one role**, count them only once in the job classification/type for their **primary** role.)*

Job Classification/Type of Staff	**NA**	**Number of Full-Time Staff** (work on WIC activities 32 or more hours per week)	**Number of Part-Time Staff** (work on WIC activities 21–31 hours per week)	**Number of Part-Time Staff** (work on WIC activities 20 or fewer hours per week)
WIC director/coordinator	☐			
Site/clinic supervisor	☐			
Registered dietitian (RD)	☐			
Degreed nutritionist, not RD	☐			
Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)	☐			
Nurse	☐			
Nutrition education coordinator	☐			
Administrative/clerical/support staff	☐			
Lactation consultant/WIC-designated breastfeeding expert	☐			
Breastfeeding coordinator	☐			
Breastfeeding peer counselor	☐			
In the spaces below, enter any job classification/type not included in the list above and the number of staff.				
Other:	☐			
Other:	☐			
Other:	☐			

Nutrition Education Practices

The next questions ask about the nutrition education practices and approaches used at the site.

10. During **certification visits** (enrollment or recertification), how often does the site use the methods listed below to provide nutrition education? *(Check one response for each method.)*

    ☐ **Check the box and go to Question 11 if the site does not provide certification visits.**

Method	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face (in WIC site)	☐	☐	☐	☐	☐	☐
One-on-one counseling: Telephone	☐	☐	☐	☐	☐	☐
One-on-one counseling: Video conferencing	☐	☐	☐	☐	☐	☐
Group education sessions	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **at site** (e.g., computer, kiosk, tablet)	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **offsite** via Internet (e.g., web-based nutrition education modules)	☐	☐	☐	☐	☐	☐
Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	☐	☐	☐	☐	☐	☐

11. During **mid-certification visits**, how often does the site use the methods listed below to provide nutrition education? *(Check one response for each method.)*

☐ **Check the box and go to Question 12 if the site does not provide mid-certification visits.**

Method	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face (in WIC site)	☐	☐	☐	☐	☐	☐
One-on-one counseling: Telephone	☐	☐	☐	☐	☐	☐
One-on-one counseling: Video conferencing	☐	☐	☐	☐	☐	☐
Group education sessions	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **at site** (e.g., computer, kiosk, tablet)	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **offsite** via Internet (e.g., web-based nutrition education modules)	☐	☐	☐	☐	☐	☐
Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	☐	☐	☐	☐	☐	☐

12. During **secondary education follow-up visits**, how often does the site use the methods listed below to provide nutrition education? *(Check one response for each method.)*

☐ **Check the box and go to Question 13 if the site does not provide secondary education follow-up visits.**

Method	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face (in WIC site)	☐	☐	☐	☐	☐	☐
One-on-one counseling: Telephone	☐	☐	☐	☐	☐	☐
One-on-one counseling: Video conferencing	☐	☐	☐	☐	☐	☐
Group education sessions	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **at site** (e.g., computer, kiosk, tablet)	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **offsite** via Internet (e.g., web-based nutrition education modules)	☐	☐	☐	☐	☐	☐
Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	☐	☐	☐	☐	☐	☐

13. During **high-risk follow-up visits**, how often does the site use the methods listed below to provide nutrition education? *(Check one response for each method.)*

☐ **Check the box and go to Question 14 if the site does not provide high-risk follow-up visits.**

Method	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face (in WIC site)	☐	☐	☐	☐	☐	☐
One-on-one counseling: Telephone	☐	☐	☐	☐	☐	☐
One-on-one counseling: Video conferencing	☐	☐	☐	☐	☐	☐
Group education sessions	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **at site** (e.g., computer, kiosk, tablet)	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **offsite** via Internet (e.g., web-based nutrition education modules)	☐	☐	☐	☐	☐	☐
Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	☐	☐	☐	☐	☐	☐

14. During **other types of visits** (not including certification, mid-certification, secondary education follow-up, and high-risk follow-up visits), how often does the site use the methods listed below to provide nutrition education? *(Check one response for each method.)*

    ☐ **Check the box and go to Question 15 if the site does not provide other types of visits.**

Method	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
One-on-one counseling: Face-to-face (in WIC site)	☐	☐	☐	☐	☐	☐
One-on-one counseling: Telephone	☐	☐	☐	☐	☐	☐
One-on-one counseling: Video conferencing	☐	☐	☐	☐	☐	☐
Group education sessions	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **at site** (e.g., computer, kiosk, tablet)	☐	☐	☐	☐	☐	☐
Technology-based nutrition education used by participants **offsite** via Internet (e.g., web-based nutrition education modules)	☐	☐	☐	☐	☐	☐
Other nutrition education activities (e.g., monthly topic, worksheets, videos, self-study modules)	☐	☐	☐	☐	☐	☐

15. How does the site follow up with participants about their goals or concerns discussed during nutrition contacts (e.g., breastfeeding issues, weight-related goals)? *(Check all that apply.)*

- ☐ Follow-up occurs at subsequent WIC visits
- ☐ Telephone calls
- ☐ Emails
- ☐ Text messages
- ☐ Video conferencing
- ☐ Other (describe): _____

16. How does the site provide nutrition education to participants who do **not** speak English? *(Check all that apply).*

- ☐ Not applicable--the site only has English-speaking participants.
- ☐ The site has bilingual WIC staff members who provide nutrition education.
- ☐ The site has interpreters or translators available.
- ☐ Site staff members use language line/phone interpreter service.
- ☐ Site staff members use translation program on the computer.
- ☐ Participants bring family member or friend to interpret.
- ☐ Participants use translated self-study or Internet modules.
- ☐ Other (describe): _____

17. In the first column, check "Yes" or "No" to indicate if staff members who provide nutrition education at the site have received training on the topic during the past 12 months. In the second column, for each topic that you check "Yes," **estimate** the number of hours of training on that topic **per staff member** during the past 12 months. Include all types of training (e.g., workshops, conferences, presentations at staff meetings).

Topic	Included in Training during Past 12 Months?	If Yes, Estimated Number of Training Hours per Staff Member in Past 12 Months
Breastfeeding	☐ Yes ☐ No	
Prenatal nutrition	☐ Yes ☐ No	
Infant nutrition	☐ Yes ☐ No	
Child nutrition	☐ Yes ☐ No	
Value Enhanced Nutrition Assessment [VENA] skills	☐ Yes ☐ No	
Participant or learner-centered education	☐ Yes ☐ No	
Motivational interviewing	☐ Yes ☐ No	
Emotion-based counseling	☐ Yes ☐ No	
Group facilitation skills (e.g., facilitated group discussion)	☐ Yes ☐ No	
Weight and growth issues (prenatal weight gain, infant/child growth and weight gain)	☐ Yes ☐ No	
Other nutrition topics	☐ Yes ☐ No	

18. How are discussion topics determined for most of the one-on-one counseling sessions at the site? *(Choose **up to three** methods and rank them by entering "1" for the method used most often, "2" for the method used next most often, and "3" for the method used next most often.)*

    _____ The staff member chooses the most appropriate topic(s).
    _____ The participant chooses the topic(s) she wants to talk about.
    _____ The participant and staff member choose the topic(s) together.
    _____ Other (describe): _____

19. How often are circle charts or other visual aids used to help participants choose discussion topic(s)? (Circle charts display pictures of possible topics relevant to the participant with each circle representing a topic. The nutrition educator asks the participant to choose one topic as the focus of their discussion.)

    ☐ Circle charts or other visuals are **not** used
    ☐ Rarely
    ☐ Occasionally
    ☐ Sometimes
    ☐ Often
    ☐ Almost always

Site Survey for *[Insert Name of Site]*

20. For each category of **women** participants, which **seven** topics do nutrition educators at the site discuss most often? *(Check **up to seven** topics for each category.)*

Topic	Pregnant	Postpartum	Breastfeeding
Breastfeeding	☐	☐	☐
Calcium intake	☐	☐	☐
Cooking/meal preparation	☐	☐	☐
Diabetes	☐	☐	☐
Dental care	☐	☐	☐
Folic acid	☐	☐	☐
Food safety/foods to avoid	☐	☐	☐
Fruit and vegetables	☐	☐	☐
Having enough to eat	☐	☐	☐
Healthy snacking	☐	☐	☐
High blood pressure/hypertension	☐	☐	☐
Infant feeding	☐	☐	☐
Iron/anemia	☐	☐	☐
Milk (lower fat choices/consumption)	☐	☐	☐
Nausea, vomiting, or constipation	☐	☐	☐
Physical activity	☐	☐	☐
Pica (eating non-food items)	☐	☐	☐
Postpartum depression/self-care	☐	☐	☐
Postpartum weight loss	☐	☐	☐
Prenatal nutrition/diet	☐	☐	☐
Preparing for a healthy pregnancy	☐	☐	☐
Protein intake	☐	☐	☐
Shopping for and preparing healthy foods	☐	☐	☐
Sugar-sweetened beverages	☐	☐	☐
Vitamin and mineral supplements	☐	☐	☐
Water consumption	☐	☐	☐
Weight gain during pregnancy	☐	☐	☐
Whole grains	☐	☐	☐
If there are other topics not listed above that are frequently discussed with women participants, enter them below.			
Other:	☐	☐	☐

21. Which **seven** topics do nutrition educators at the site discuss most often with **parents/caregivers of infants*?*** *(Check **up to seven** topics.)*

- ☐ Breastfeeding
- ☐ Colic
- ☐ Constipation, diarrhea, or vomiting
- ☐ Food intolerances/allergies
- ☐ Formula preparation/feeding
- ☐ Infant feeding practices
- ☐ Infant growth and development
- ☐ Introduction of cow's milk
- ☐ Introduction of solid foods
- ☐ Inappropriate foods (e.g., high-fat foods, fast foods, honey)
- ☐ Iron/anemia
- ☐ Overfeeding
- ☐ Parenting
- ☐ Physical activity
- ☐ Propping the bottle (leaving infant unattended with bottle)
- ☐ Sugar-sweetened beverages
- ☐ Water consumption
- ☐ Weaning from the bottle
- ☐ Other (describe): _____

22. Which **seven** topics do nutrition educators at the site discuss most often with **parents/caregivers of children?** *(Check **up to seven** topics.)*

- ☐ Child growth and development
- ☐ Child feeding practices
- ☐ Constipation, diarrhea, or vomiting
- ☐ Cooking/meal preparation
- ☐ Dental health
- ☐ Family meals
- ☐ Fruit and vegetables
- ☐ Healthy snacks
- ☐ Healthy weight for child
- ☐ Inappropriate/sometimes foods (e.g., high-fat foods, fast foods)
- ☐ Iron/anemia
- ☐ Milk (lower fat choices/consumption)
- ☐ Parenting
- ☐ Physical activity
- ☐ Pica (eating non-food items)
- ☐ Picky eaters
- ☐ Portion sizes
- ☐ Screen time
- ☐ Shopping for and preparing healthy foods
- ☐ Sugar-sweetened beverages
- ☐ Water consumption
- ☐ Weaning from the bottle
- ☐ Whole grains
- ☐ Other (describe): _____

23. During one-on-one counseling sessions at the site, how often are participant behavioral goals (e.g., nutrition or physical activity) set?

- ☐ Goal setting is not part of one-on-one counseling sessions
- ☐ Rarely
- ☐ Occasionally
- ☐ Sometimes
- ☐ Often
- ☐ Almost always

24. How are participant goals selected for most of the one-on-one counseling sessions? *(Choose **up to three** methods and rank them by entering "1" for the method used most often, "2" for the method used next most often, and "3" for the method used next most often.)*

    _____The participant usually identifies the goal(s).

    _____The staff member usually suggest the goal(s).

    _____The participant and staff member usually select the goal(s) together.

    _____Other (describe): _____

If the site does not provide group education sessions, **GO TO QUESTION 28**.

25. How often do nutrition educators at the site use the following activities or resources during group education sessions? *(Check one response for each activity or resource.)*

Activity or Resource	Never	Rarely (<10%)	Occasionally (11–39%)	Some-times (40–59%)	Often (60–89%)	Almost Always (≥90%)
Icebreakers/warm-up activities	☐	☐	☐	☐	☐	☐
Discussions between pairs of WIC participants	☐	☐	☐	☐	☐	☐
Educational props (e.g., breastfeeding dolls, food containers)	☐	☐	☐	☐	☐	☐
Informational charts or displays	☐	☐	☐	☐	☐	☐
Food sampling/ demonstrations	☐	☐	☐	☐	☐	☐
Hands-on activity or game	☐	☐	☐	☐	☐	☐
Physical activity	☐	☐	☐	☐	☐	☐
PowerPoint presentation	☐	☐	☐	☐	☐	☐
Video/DVD	☐	☐	☐	☐	☐	☐

26. How are the topics for group education sessions at the site determined? (*Check all that apply.)*

    ☐ Each day, week, month, or quarter has a specific topic.

    ☐ There are specific topics for participant categories (e.g., breastfeeding class, infant class).

    ☐ Participants select from a menu of topics when they schedule their appointments.

    ☐ Topics are determined based on participants' interest during each group session.

    ☐ Other (describe): _____

27. Thinking about the group education sessions at the site over the past 6 months, which **seven** topics were discussed most often? *(Check **up to seven** topics.)*

- ☐ Breastfeeding
- ☐ Child feeding practices
- ☐ Cooking/meal preparation
- ☐ Dental health
- ☐ Fruit and vegetables
- ☐ Healthy snacks
- ☐ Healthy weight for child
- ☐ Healthy weight for mother
- ☐ Infant feeding practices
- ☐ Infant/child growth and development
- ☐ Introduction of solid foods
- ☐ Inappropriate/sometimes foods (e.g., high-fat foods, fast foods)
- ☐ Iron/anemia
- ☐ Milk (lower fat choices/consumption)
- ☐ Parenting
- ☐ Physical activity
- ☐ Picky eaters
- ☐ Portion sizes
- ☐ Prenatal nutrition/diet
- ☐ Shopping for and preparing healthy foods
- ☐ Sugar-sweetened beverages
- ☐ Water consumption
- ☐ Whole grains
- ☐ Weaning from the bottle
- ☐ Other (describe): _____

Questions about You

Thank you for responding to the question about nutrition education. The next questions are about you.

28. Did you complete the Local Agency Survey for the local agency/program that oversees this site?

- ☐ Yes → **GO TO QUESTION 34**
- ☐ No

29. Which job titles or roles do you have? *(Check all that apply.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

If you chose only one response for Question 29, **GO TO QUESTION 31**.

30. Which **best** describes your **primary** role in the WIC Program? *(Check one response.)*

- ☐ WIC director/coordinator
- ☐ Site/clinic supervisor
- ☐ Registered dietitian (RD)
- ☐ Degreed nutritionist, not RD
- ☐ Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aide, competent paraprofessional authority, diet technician, social services technician)
- ☐ Nurse
- ☐ Nutrition education coordinator
- ☐ Administrative/clerical/support staff
- ☐ Lactation consultant/WIC-designated breastfeeding expert
- ☐ Breastfeeding coordinator
- ☐ Breastfeeding peer counselor
- ☐ Other (describe): _____

31. What is the highest degree you have completed?

- ☐ High school diploma or GED
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate degree

32. Which, if any, of the following credentials do you have? *(Check all that apply.)*

- ☐ Registered Dietitian (RD)
- ☐ Licensed Dietitian/Nutritionist (LD/LN)
- ☐ Dietetic Technician, Registered (DTR)
- ☐ Registered Nurse (RN)
- ☐ Licensed Practical Nurse (LPN)
- ☐ International Board Certified Lactation Consultant (IBCLC)
- ☐ Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)
- ☐ Certified Medical Assistant (CMA)
- ☐ No credentials
- ☐ Other (describe): _____

33. How many years have you worked for the WIC Program? *(Include time at this local program and other WIC experience.)*

- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–10 years
- ☐ 11–20 years
- ☐ More than 20 years

34. As part of your job, do you design and/or oversee nutrition education at the site? (Design includes developing lesson plans, protocols, or materials for nutrition education. Oversee includes directing, managing or supervising the implementation of nutrition education.)

- ☐ Yes
- ☐ No

35. As part of your job, about what percentage of your time each month is spent providing nutrition education to WIC participants?

- ☐ Less than 25%
- ☐ 25–49%
- ☐ 50–74%
- ☐ 75–100%

36. Please use the space below to share a brief description of any special nutrition education activities or approaches used at the site.

_____

_____

_____

_____

Thank you for completing the Site Survey for the WIC Nutrition Education Study!

APPENDIX E:
INTERVIEW GUIDE FOR THE INTERVIEWS WITH SITE STAFF

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OMB Control Number: 0584-0599
Expiration date: 10/31/2017

WIC NUTRITION EDUCATION STUDY

Interview Guide for Phase I Site Interviews

State: _____

Local agency no. _____ **Site no.** _____

Respondent name and title: _____

Phone: _____

E-mail address: _____

Date/time of interview: _____

Interviewer name: _____

Interview Procedures

The interviews will build on the Phase I survey responses to provide a more comprehensive picture of how nutrition education services are provided in the sites selected for the interviews. Interviewers will have the relevant responses to the Local Agency and Site Surveys available at the time of the interviews.

The target respondents who will be recruited for the interviews are site staff members who provide nutrition education 10 or more hours per week on average. Some of the respondents may have the additional role of site supervisor, breastfeeding coordinator or lead over nutrition education at the site. The interview guide includes five modules:

- Module A: One-on-one nutrition education
- Module B: Group education sessions
- Module C: Technology-based nutrition education
- Module D: Nutrition education reinforcers
- Module E: Coordination of nutrition education activities with others

At the time the interview is scheduled, the interviewer will ask the two questions included in the Classification Questions for Module Administration section to classify the respondent by primary job role and type of nutrition education they use. The order of interview module administration will be determined by the respondent's classification. Because each respondent completes only a subset of questions, the average burden per respondent is 30 minutes.

Introduction

Thank you for taking the time for this interview. The U.S. Department of Agriculture's Food and Nutrition Service (FNS) has contracted with RTI International and its partners from Altarum Institute and the University of California, Berkeley to conduct a nationally representative study of WIC nutrition education processes in local sites. As part of the study, Altarum is conducting interviews with sites that responded to a recent survey about nutrition education, and your [name of site] was selected. Altarum is a nonprofit health and nutrition policy research and consulting organization, and our work focuses on helping improve the health and nutrition status of children, families, and adults. My name is [Interviewer Name] and I work for Altarum.

I will be asking you questions about how you provide nutrition education. The information you provide will be combined with information from the other sites we are interviewing, and nothing that you tell me will be identified in our report as coming from you, your local agency, or site. I expect that the interview will take about 30 minutes. Before I begin, do you have any questions?

Classification Questions for Module Administration

[Interviewer Instructions: Based on the responses to the first two questions, determine the order of module administration in the table below the questions. Ask as many questions as possible from the selected modules within the 30-minute interview window.]

1. What is your **primary** job or role at the WIC site? *(Probe as needed to identify which of the roles below is most appropriate.)*

   - ☐ WIC director/coordinator → Role = X
   - ☐ Site/clinic supervisor → Role = X
   - ☐ Registered dietitian → Role = X
   - ☐ Degreed nutritionist, not RD → Role = X
   - ☐ Trained nutrition paraprofessional → Role = Y
   - ☐ Nurse → Role = X
   - ☐ Nutrition educator coordinator → Role = X
   - ☐ Administrative/clerical/support staff → Role = Y
   - ☐ Lactation consultant/WIC-designated breastfeeding expert → Role = Y
   - ☐ Breastfeeding coordinator → Role = Y
   - ☐ Other (describe): _____ → Role = Y

2. Which of the following types of nutrition education do you provide as part of your job? *(Read list and select all that apply.)*

   - ☐ One-on-one counseling → Education Type = 1
   - ☐ Group education sessions → Education Type = 2
   - ☐ Assist participants with technology-based nutrition education (either offsite via Internet or onsite via computer, kiosk, tablet) → Education Type = 3

Role	Education Type	Order of Module Administration
X	1	E, D, A
X	1, 2	B, A, E, D
X	1,3	A, C, E, D
X	1, 2, 3	C, E, D, B, A
Y	1	A, D, E
Y	1, 2	B, A, D, E
Y	1,3	C, A, D, E
Y	1, 2, 3	C, B, A, D, E

Module A: One-on-One Nutrition Education

I have several questions about individual, also called one-on-one counseling, nutrition education sessions you provide.

A1. Please think about your most recent one-on-one nutrition education session.
   a. Describe the participant/parent that you worked with and the reason for the session, for example, certification, high-risk counseling, secondary education.
   b. What topics did you discuss?
   c. How did you decide what topics to discuss?
   d. What information did you share?
   e. What questions or concerns did the participant have? How did you address these questions or concerns?
   f. What, if any, goals were set?
   g. About how long was the session?
   h. Was all of the time spent on nutrition education? If no, what amount was for nutrition education?
   i. Was this session different from a typical session? If so, how?
   j. How was the next nutrition education or follow-up visit determined?

A2. Are there differences in your one-on-one counseling sessions during certification visits and other visits?
   a. If no, go to Question A3.
   b. If yes, please describe what is different.

A3. Do you help participants set behavioral goals?
   a. If no, skip to Question A5.
   b. If yes, please describe how you work with participants to set goals.

   Probe:

   - *How are the goals determined?*
   - *How do you work with participants who say they don't want to set goals?*

A4. What is your process for following up on behavioral goals?

   Probe:

   - *Do you access information about previously established goals before conducting individual nutrition sessions?*
   - *How do you work with participants to assess their progress on goals?*

A5. Do you adapt or change your approach to one-on-one nutrition education for different types of participants (for example, different education levels/literacy levels or different cultures)?
   a. If no, go to Question A6.
   b. If yes, please describe how you adapt or change it.

A6. Do you measure a participant's readiness to change when providing one-on-one nutrition education?

a. If no, go to Question A7.

b. If yes, please describe how you measure it and how, if applicable, it changes your approach to providing nutrition education.

A7. Please describe the training that you have received from WIC to help you develop your nutrition counseling skills.

a. Have you made changes in your discussions with participants based on the training you received from WIC? If yes, please describe the changes.

b. What, if any, are the challenges to incorporating the new skills into your daily counseling sessions with participants?

c. What, if any, help did you receive after training to incorporate the new skills?

A8. What do you think are the key techniques for making a one-on-one nutrition education session effective?

Probe:

- *What nutrition education strategies work best?*
- *What strategies have you tried that did not work?*

Module B: Group Education Sessions

I have some questions about the group education sessions you conduct at your site.

B1. Think about your last group session. Can you describe it to me?

a. How many participants were in the session?

b. Which WIC participant categories were included in the group?

c. How long did the session last?

d. What language was used to conduct the session?

e. What topics did you discuss?

f. How did you decide to discuss these topics?

g. What materials did you use in the session (for example, handouts, visuals, videos, flip charts)?

h. How did the participants respond to the topics?

i. What comments or questions did the participants have about the topic?

j. What went well or did not go well about the session?

k. What did the participants really seem to like or not like about the session?

l. Was this session different from your usual experience with group sessions? If so, how?

B2. After a participant attends a group education session, what is the typical procedure for scheduling their next nutrition education contact?

Probe:

- *When is the participant offered nutrition education again?*
- *How is this determined?*

B3. What do you think are the key techniques for making a group session effective?

Probe:

- *What nutrition education strategies work best?*
- *What strategies have you tried that did not work?*

B4. Please describe what, if any, training you have received on providing group education.

Probe:

- *When was the training offered?*
- *How long was the training?*
- *Where was it provided?*
- *Was the training required?*

a. What has been most useful to you in developing your group education skills?

b. What, if any, help did you receive after training to incorporate the new skills?

c. What, if any, training would you like to have that would help you improve your group education skills?

B5. Does your site provide group education for participants who don't speak English?

a. If no, go to Question B5.

b. If yes, how does your site do this?

Probe:

- *If groups are provided in languages other than English, are the staff who lead the group fluent in the language or is an interpreter used?*
- *If both English- and Spanish-speaking participants are included in one group, how do you provide the education?*

B6. Does your site offer group sessions or activities for children?

a. If no, Module B is finished.

b. If yes, please describe these.

Probe:

- *What activities or materials are used?*
- *What topics are covered?*
- *How frequently does your site conduct these?*

c. If yes, what feedback have you had from children and parents who take part in these sessions or activities?

Module C: Technology-Based Nutrition Education

I have some questions about the use of technology-based nutrition education with your participants.

C1. My understanding is that your site offers participants the opportunity to receive nutrition education via the Internet <u>outside</u> of the WIC office. Is that correct? Are you familiar with Internet nutrition education?

a. If no, skip to Question C4.

b. If yes, ask Questions C2 through C4.

c. If don't know, Module C is finished.

C2. Please tell me how Internet nutrition education is implemented at your site.

Probe:

- *Who is eligible to receive Internet education?*
- *Who develops the Internet education? Is there a web link that I can follow to see it?*
- *How do you explain Internet education to participants?*
- *Do you know when a participant has completed Internet education? If so, how?*

C3. What, if any, feedback have you received from participants about their experience using Internet education?

C4. What aspects of internet education do you feel make it effective with participants?

a. What aspects of internet education do you feel make it ineffective with participants?

C5. My understanding is that your site offers technology-based nutrition education <u>onsite</u> using a computer, kiosk, tablet, or similar device. Are you familiar with the nutrition education provided this way?

a. If no, Module C is finished.

b. If yes, ask Questions C5 and C6.

c. If don't know, Module C is finished.

C6. Please tell me how onsite technology-based nutrition education, using a computer, kiosk, tablet, or similar device, is implemented at your site.

Probe:

- *Who is eligible to receive onsite technology-based education?*
- *Who develops the education materials/modules that participants use on these devices? Is there a web link or description of these modules that I can get from you?*
- *How do you explain onsite technology-based education to participants?*
- *How do you know when a participant has completed onsite technology-based education?*

C7. What, if any, feedback have you received from participants about their experience using onsite technology-based education?

Module D: Nutrition Education Reinforcers

I have some questions about materials and items your site uses to reinforce nutrition education provided in individual or group sessions.

D1. I see on the completed survey for your site that you have *[insert names of reinforcer items selected on the survey]*.

a. What impact, if any, do you think these have on reinforcing nutrition education or helping participants with healthy behaviors?

b. Which items do you think are most effective? Why?

D2. I see on the completed survey for your site that you use text messages, email, or social media (for example, Facebook and Twitter) to reinforce nutrition education.
   a. Please describe how your site is using these.
   b. What feedback have you heard from participants about this?

Module E: Coordination of Nutrition Education Activities with Others

I see on the completed survey for your site that your local agency and site coordinate nutrition education with other programs and services including *(Reference the names of programs and services selected on the Local Agency Survey.)*

E1. Are you familiar with how your local agency or site coordinates with these other programs?
   a. If no, Module E is finished.
   b. If yes, ask Questions E2 through E4.
   c. If don't know, Module E is finished.

E2. Please describe how you coordinate nutrition education activities with these programs or services.

E3. Which coordination strategies have been most successful?
   a. What has made these successful?

E4. Please describe any challenges you have encountered with coordinating nutrition education with other programs or services.
   a. *[If any were described]* How have those challenges been addressed?

That ends my interview questions. Now I have just a few questions about you. We will use this information to help describe the individuals who participated in these interviews.

Demographic Questions

1. How many years have you worked for the WIC Program? *(Include your time at this site and other WIC experience.)*
   - ☐ Less than 1 year
   - ☐ 1–3 years
   - ☐ 4–6 years
   - ☐ 7–10 years
   - ☐ 11–20 years
   - ☐ More than 20 years

2. During your time working for WIC, how many years have you provided nutrition education as part of your job?

   - ☐ Less than 1 year
   - ☐ 1–3 years
   - ☐ 4–6 years
   - ☐ 7–10 years
   - ☐ 11–20 years
   - ☐ More than 20 years

3. What is your age?

   - ☐ 24 or younger
   - ☐ 25–34
   - ☐ 35–44
   - ☐ 45–54
   - ☐ 55 or older

That concludes the questions. Do you have any comments that you would like to add? Thank you very much for your time and input for the WIC Nutrition Education Study.

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APPENDIX F:
WEIGHTING PROCEDURES, RESPONSE RATE CALCULATIONS, AND NONRESPONSE BIAS ANALYSIS

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This appendix provides the results of the weighting procedures for the Local Agency and Site Surveys and the nonresponse bias analysis for the Site Survey. In the first section (**F.1 Sample Weights**), we describe the creation of the sample weights for the Local Agency and Site Surveys. This is the first step in the weighting procedures. In the next section (**F.2 Response Rates**), we present the weighted and unweighted response rates. In the third section (**F.3 Nonresponse Bias Analysis**), we present the results of the nonresponse bias analysis. The nonresponse bias analysis uses the sample weights and the results of the nonresponse bias analysis to help guide the adjustments made to the sample weights for nonresponse. We investigate nonresponse using the sample weights and again using the final analysis weights. In the final section (**F.4 Final Analysis Weights**), we describe the creation of the final analysis weights. The final analysis weights are the sample weights adjusted for nonresponse and post-stratified to population totals. We used the final analysis weights for all analyses of the Local Agency and Site Survey data.

F.1 Sample Weights

The first step in creating the final analysis weights was to create the sample weights (also referred to as the design weights). The sample weights were designed to adjust for over- or undersampling and reflect the probability of selection. The sample weights were created for each selected LA or site.

The sampling weight for each sampled LA was the reciprocal of its probability of selection. For all of the LAs in Stratum 1, 2, or 3 where we selected a census, the probability of selection was equal to 1. For the remaining LAs (those in Stratum 4), we selected the LAs probability proportional to size (PPS), where size was the participant caseload. The probability of selection for LA *i* in the 4th sampling stratum was

$$\pi(i) = \left\{ \frac{n * m_i}{M} \right.,$$

where

- n = the number of LAs selected in sampling stratum 4,
- m_i = the size measure (participant caseload) for unit i, and
- M = the sum of all the participant caseloads across all the LAs in Stratum 4.

For all LAs with only one site available, the probability of selection for the single site was equal to 1. For LAs with two or more sites, the probability of selection for site *t* in LA *i* was

$$\pi_i(t) = \left\{ \frac{n_i}{N_i} \right.,$$

where

n_i = sample size for LA *i* and

N_i = population size for LA *i*.

For example, one of the sampled LAs had 12 sites. We selected 3 of the sites; thus, the probability of selection for these three sites equaled 3/12 = 0.25.

The LA and site sampling weights are the inverse of their probability of selection. For the LAs in Strata 1, 2, and 3, the probability of selection equals 1; thus, the sampling weights also equal 1. For the Stratum 4 LAs, the probability of selection is proportional to the LA's participant caseload (see formula above). LAs with a larger caseload have a higher probability of selection and a smaller weight than LAs with smaller caseloads.

Similarly, for the sampled sites, the sampling weight equals the inverse of the probability of selecting the given site. If the selected LA has only one site, the sampling weight equals 1/1=1. In the example above, the probability of selection was 0.25 for the three selected sites; therefore, the sample weight for the three selected sites is 1/0.25 = 4.

We scaled the LA sample weights (LAWT) so that the sum equals the total number of LAs on the sampling frame. We applied similar scaling to the site sample weights (SiteWT) so that the sum equals the total number of sites within each of the sampled LAs.

F.2 Response Rates

The weighted[1] and unweighted response rates for both Local Agency and Site Surveys, by the frame variables listed in Table F-1, are presented in this section. For the unweighted response rates, we used the formulas in the Office of Management and Budget's (OMB's) *Standards and Guidelines for Statistical Surveys* (2006). See Attachment 1 at the end of this appendix for the weighted and unweighted response rate formulas.

[1] The weighted response rates are weighted using the sample weights.

Table F-1. Frame Variables Used in the Nonresponse Bias Analysis and Nonresponse Weight Adjustments

LA-Level Variables	
FNS region	FNS region
Size based on number of site per LA	4-level categorical variable; small = 1 site, medium = 2 or 3 sites, large = 4 to 6 sites, very large = 7 or more sites
4-level stratification variable	Stratification variable used in sampling; 1 = LAs in ITOs/U.S. territories, 2 = LAs in EBT states, 3 = LAs with participant caseload greater than 10,000 that were not ITOs/U.S. territories or LAs authorized by States using EBT; 4 = all other LAs
Site-Level Variables	
FNS region	FNS region
Size based on site participant caseload	4-level categorical variable; very small ≤ 300, small = 301–900, medium = 901–2,499, large ≥ 2,500[a]
4-level stratification variable	Stratification variable used in sampling; 1 = sites in LAs in ITOs/U.S. territories, 2 = sites in LAs in EBT states, 3 = sites in LAs with participant caseload greater than 10,000 that were not ITOs/U.S. territories or LAs authorized by States using EBT; 4 = all other sites

[a] For site size, we created a 4-level categorical variable using the quartiles from the continuous total site participant caseload variable. To be able to calculate response rates, we had to use the 4-level categorical variable, but for the nonresponse bias analysis, we used the original continuous variable (see **Section F.3 Nonresponse Bias Analysis**).

Table F-2 provides the LA weighted and unweighted response rates, number of eligible surveyed LAs, number of Local Agency Survey respondents, and number of Local Agency Survey nonrespondents both weighted and unweighted. The overall weighted response rate for the Local Agency Survey was 86.9%, and the overall unweighted response rate was 88.5%. The weighted and unweighted response rates for Strata 1, 2, and 3 are equal because the sample weights equal 1 in these strata. As expected, Stratum 1 had the lowest weighted and unweighted response rate (78.4%) because many ITOs have a limited number of staff; thus, it is more burdensome for them to participate in surveys. The response rate for large LAs, where size was based on the number of sites within a LA, was noticeably high at 92.8% (weighted and unweighted).

For the Site Survey, we calculated the weighted and unweighted response rate as well as the weighted and unweighted cooperation rates. The response rates for the Site Survey are calculated as described in Attachment 1 using the OMB formulas. The cooperation rates, however, are slightly different. To calculate the cooperation rates, we considered only sites (responding and nonresponding) that are within *responding LAs*. For example, in Stratum 1 the unweighted response rate is 64.2%. This is calculated by dividing the number of Stratum 1 respondents by the number of eligible surveyed sites and multiplying it by 100

Table F-2. Local Agency Survey Weighted and Unweighted Response Rates

Variable	Number of Eligible[a] Sampled LAs	Number of LA Respondents	Number of LA Non-respondents	Unweighted Response Rates	Weighted[b] Number of LA Respondents	Weighted[b] Number of LA Non-respondents	Weighted[b] Response Rates
Size Based on Number of LAs per Site							
Small: 1 site	233	198	35	85.0%	479	112	81.1%
Medium: 2 or 3 sites	310	277	33	89.4%	492	54	90.2%
Large: 4 to 6 sites	229	198	31	86.5%	312	50	86.1%
Very large: 7 or more sites	237	220	17	92.8%	292	23	92.8%
FNS Region							
Mid-Atlantic	94	74	20	78.7%	92	21	81.1%
Mountain Plains	129	118	11	91.5%	319	46	87.4%
Midwest	195	176	19	90.3%	376	50	88.2%
Northeast	104	94	10	90.4%	169	16	91.1%
Southeast	204	188	16	92.2%	234	25	90.4%
Southwest	124	112	12	90.3%	168	18	90.1%
Western	159	131	28	82.4%	217	61	78.2%
Stratum							
1. LAs in ITOs/U.S. territories	51	40	11	78.4%	40	11	78.4%
2. LAs in EBT states	294	258	36	87.8%	258	36	87.8%
3. LAs with participant caseload greater than 10,000	166	150	16	90.4%	150	16	90.4%
4. All other LAs	498	445	53	89.4%	1,126	175	86.5%
Overall	1,009	893	116	88.5%	1,574	238	86.9%

[a] Ineligibles were removed from the response rate calculations and were not counted toward population totals.

[b] LA design (sample) weights were used to calculate the weighted response rates.

(52/81 * 100 = 64.2%).[2] In Stratum 1, the unweighted cooperation rate is 81.3%. This is calculated by dividing the number of Stratum 1 respondents by the number of eligible surveyed sites *within responding LAs* multiplied by 100 (52/64 * 100 = 81.3%). The overall weighted site response rate was 77.0% (72.5% unweighted), and the overall weighted site cooperation rate was 84.0% (82.1% unweighted). Table F-3 provides the Site Survey weighted and unweighted cooperation rates (among responding LAs), and Table F-4 provides the Site Survey weighted and unweighted response rates (among sampled LAs). In general, the weighted Site Survey response rates are higher than the unweighted Site Survey response rates. The weighted response rates reflect sites with larger sample weights, which were the sites more likely to respond, thus increasing the weighted response rates.

F.3 Nonresponse Bias Analysis

The final unweighted response rate for the Local Agency Survey was 88.5% and 72.5% for the Site Survey. According to the OMB standards, a nonresponse bias analysis is required if the response rates are less than 80%. Thus, a nonresponse bias analysis was conducted for the Site Survey but not for the Local Agency Survey.

The first part of the Site Survey nonresponse bias analysis was to examine the

- weighted (using the sample weights) number of respondents, nonrespondents, and estimated population counts;
- weighted (using the sample weights) distributions of the respondents, nonrespondents, and estimated population; and
- estimated bias and *p*-value due to nonresponse.[3]

We conducted this analysis by FNS Region and the four-level stratification variable used in sample selection (stratum). Table F-5 presents the results of this analysis. Although the estimated bias for all the levels of FNS region and stratum were nonzero, all were relatively small and none were large enough to be statistically significant (*p*-value > 0.05). The largest bias was for Stratum 4 where the respondent distribution differed from the

[2] See **Section F.3 Nonresponse Bias Analysis** for tables displaying the number sampled and number responded by the variables in Table F-2.

[3] The estimated bias is the difference between the weighted mean of the respondents and the weighted mean of the selected sample. The estimated bias is calculated first using the sample weights and again using the final analysis weights. The SUDAAN® procedure DESCRIPT (RTI International, 2012) was used to calculate the *p*-value that was used to determine whether the estimated biases are significant at the 5% level. Although the individual error rate for the tests is 0.05, the family-wise error rate (probability of falsely finding one or more significant differences among all the significance tests) is much larger. However, because this was an exploratory analysis and we want to be able to identify all potential bias, we decided to leave the significance level at 0.05 for all the tests instead of adjusting it downward to control the family-wise error rate.

Table F-3. Site Survey Weighted and Unweighted Cooperation Rates (Based on Response among Responding LAs)

Variable	Number of Eligible[a] Sampled Sites Among Responding LAs	Number of Site Respondents	Number of Site Non-respondents	Number of Sites Identified as Ineligible during Data Collection	Unweighted Cooperation Rates	Weighted[b] Number of Site Respondents	Weighted[b] Number of Site Non-respondents	Weighted[b] Cooperation Rates
Size Based on Site Caseload								
Very small: 300 or fewer	447	366	81	67	81.9%	940	188	83.3%
Small: 301–900	411	348	63	0	84.7%	1,001	189	84.1%
Medium: 901–2,499	442	353	89	0	79.9%	984	209	82.5%
Large: 2,500 or more	407	334	73	0	82.1%	963	152	86.4%
FNS Region								
Mid-Atlantic	164	133	31	10	81.1%	512	85	85.7%
Mountain Plains	202	169	33	9	83.7%	398	74	84.4%
Midwest	301	250	51	8	83.1%	513	90	85.1%
Northeast	187	148	39	3	79.1%	318	83	79.3%
Southeast	367	304	63	17	82.8%	736	192	79.3%
Southwest	222	176	46	6	79.3%	721	114	86.4%
Western	264	221	43	14	83.7%	690	101	87.2%
Stratum								
1. LAs in ITOs/U.S. territories	64	52	12	8	81.3%	253	26	90.6%
2. LAs in EBT states	494	411	83	22	83.2%	993	168	85.6%
3. LAs with participant caseload greater than 10,000	376	325	51	19	86.4%	1,390	233	85.7%

(continued)

Table F-3. Site Survey Weighted and Unweighted Cooperation Rates (Based on Response among Responding LAs) (continued)

Variable	Number of Eligible[a] Sampled Sites Among Responding LAs	Number of Site Respondents	Number of Site Non-respondents	Number of Sites Identified as Ineligible during Data Collection	Unweighted Cooperation Rates	Weighted[b] Number of Site Respondents	Weighted[b] Number of Site Non-respondents	Weighted[b] Cooperation Rates
4. All other LAs	773	613	160	18	79.3%	1,251	312	80.1%
Overall	1,707	1,401	306	67	**82.1%**	3,887	738	**84.0%**

[a] Ineligibles were removed from the cooperation rate calculations and were not counted toward population totals.

[b] Site design (sample) weights were used to calculate the weighted cooperation rates.

Table F-4. Site Survey Weighted and Unweighted Response Rates (Based on Response among Sampled LAs)

Variable	Number of Eligible[a] Sampled Sites	Number of Site Respondents	Number of Site Non-respondents	Unweighted Response Rates	Weighted[b] Number of Site Respondents	Weighted[b] Number of Site Non-respondents	Weighted[b] Response Rates
Size Based on Site Caseload							
Very small: 300 or fewer	672	366	306	54.5%	940	614	60.5%
Small: 301–900	411	348	63	84.7%	1,001	189	84.1%
Medium: 901–2,499	442	353	89	79.9%	984	209	82.5%
Large: 2,500 or more	407	334	73	82.1%	963	152	86.4%
FNS Region							
Mid-Atlantic	215	133	82	61.9%	512	193	72.6%
Mountain Plains	219	169	50	77.2%	398	97	80.5%
Midwest	335	250	85	74.6%	513	164	75.8%
Northeast	210	148	62	70.5%	318	121	72.4%
Southeast	396	304	92	76.8%	736	250	74.6%
Southwest	242	176	66	72.7%	721	142	83.5%
Western	315	221	94	70.2%	690	198	77.7%
Stratum							
1. Sites in ITOs/U.S. territories	81	52	29	64.2%	253	47	84.2%
2. Sites in EBT states	568	411	157	72.4%	993	296	77.1%
3. Sites that are part of LAs with participant caseload greater than 10,000	415	325	90	78.3%	1,390	350	79.9%
4. All other sites	868	613	255	70.6%	1,251	472	72.6%
Overall	1,932	1,401	531	72.5%	3,887	1,164	77.0%

[a]Ineligibles were removed from the response rate calculations and were not counted toward population totals.

[b]Site design (sample) weights were used to calculate the weighted response rates.

Table F-5. Comparison of Population, Respondent, and Nonrespondent Distributions and Estimated Bias Using Sample Weights

Variable	Estimated Population Counts for Sites (Using Sample Weights)	Weighted Number of Site Respondents (Using Sample Weights)	Weighted Number of Site Nonrespondents (Using Sample Weights)	Estimated Distribution of Total Sites Among Sampled LAs (Using Sample Weights)	Weighted Distribution of Site Respondents (Using Sample Weights)	Estimated Bias (Using Sample Weights) Due to Nonresponse	*p*-value for Estimated Bias
FNS Region							
Mid-Atlantic	817	572	244	0.105	0.104	0.0016	0.9312
Mountain Plains	1,529	983	546	0.197	0.178	0.0190	0.6482
Midwest	1,180	918	262	0.152	0.166	−0.0142	0.4687
Northeast	803	551	252	0.104	0.100	0.0037	0.8124
Southeast	1,126	795	331	0.145	0.144	0.0010	0.9429
Southwest	998	802	196	0.129	0.145	−0.0167	0.4517
Western	1,298	893	405	0.167	0.162	0.0055	0.8079
Stratum							
1. LAs/sites in ITOs/U.S. territories	323	253	70	0.042	0.046	−0.0042	0.7883
2. LAs/sites in EBT states	1,347	993	354	0.174	0.180	−0.0063	0.7247
3. LAs with participant caseload greater than 10,000 (sites part of these LAs)	1,826	1,390	436	0.236	0.252	−0.0166	0.5164
4. All other LAs/sites	4,255	2,878	1,377	0.549	0.522	0.0270	0.4187
Overall	7,751	5,514	2,236	1.000	1.000	0.0000	n/a

n/a = not applicable

population distribution by 0.027 (p-value = 0.4187). A difference so small with a p-value so large suggests no bias due to nonresponse. We conducted a slightly different nonresponse bias analysis for site participant caseload because it is a continuous variable (compared with the categorical variables FNS region and sampling stratum). Instead of evaluating the counts and distributions, we evaluated the weighted means. Specifically, using the sample weights we calculated the estimated population mean site participation caseload and the weighted mean site participation caseload among responding sites, the estimated bias, and the corresponding p-value[4] (see Table F-6). The estimated population mean site participation caseload is 1,369 and the weighted mean site participation caseload among responding sites is 1,413. The estimated bias is 1,369 − 1,413 = −44. This result was not significant (p-value = 0.6977), suggesting no bias due to nonresponse in the mean site participant caseload.

Table F-6. Estimated Population Mean Site Caseload, Weighted (Using Sample Weights) Mean Site Caseload among Responding Sites, Estimated Bias, and *p*-value

Variable	Population Mean (Using Sample Weights)	Weighted Mean (Using Sample Weights) Among Responding Sites	Estimated Bias (Using Sample Weights) Due to Nonresponse	*p*-value for Estimated Bias
Mean site caseload	1,369	1,413	−44	0.6977

After we created the final analysis weights (see **Section F.4 Final Analysis Weights**), we repeated the nonresponse bias analysis using the final analysis weights. This was done to determine if the estimated bias due to nonresponse was reduced by using the final analysis weights. The results using the final analysis weights are presented in Tables F-7 and F-8.

By applying the final analysis weights the estimated bias for FNS region and stratum is reduced to zero and remains nonsignificant (p-value > 0.9) for all levels of the two variables. The estimated bias for mean site participant caseload (1,369 − 1,396 = −27, p-value = 0.8016) was also reduced when using the final analysis weights. Although no significant bias existed before applying the final analysis weights, these results suggest the final analysis weights bring the nonresponding distributions closer to the estimated population distributions.

[4] We used the SUDAAN® procedure DESCRIPT to calculate the p-value and determine whether the estimated biases were significant at the 5% level for the continuous site participation caseload variable.

Table F-7. Comparison of Population and Respondent Distributions and Estimated Bias Using the Final Analysis Weights

Variable	Estimated Population Counts for Sites (Using Sample Weights)	Weighted Number of Site Respondents (Using Final Analysis Weights)	Estimated Distribution of Total Sites Among Sampled LAs (Using Final Analysis Weights)	Weighted Distribution of Site Respondents (Using Final Analysis Weights)	Estimated Bias (Using Final Analysis Weights) Due to Nonresponse	*p*-value for Estimated Bias
FNS Region						
Mid-Atlantic	817	817	0.105	0.105	0.0000	>0.9999
Mountain Plains	1,529	1,529	0.197	0.197	0.0000	>0.9999
Midwest	1,180	1,180	0.152	0.152	0.0000	>0.9999
Northeast	803	803	0.104	0.104	0.0000	>0.9999
Southeast	1,126	1,126	0.145	0.145	0.0000	0.9972
Southwest	998	998	0.129	0.129	0.0000	>0.9999
Western	1,298	1,298	0.167	0.167	0.0000	>0.9999
Stratum						
1. Sites in ITOs/U.S. territories	323	323	0.042	0.042	0.0000	>0.9999
2. Sites in EBT states	1,347	1,347	0.174	0.174		>0.9999
3. Sites part of LAs with participant caseload greater than 10,000	1,826	1,826	0.236	0.236	0.0000	>0.9999
4. All other sites	4,255	4,255	0.549	0.549	0.0000	>0.9999
Overall	7,751	7,751	1.675	1.675	0.0000	n/a

n/a = not applicable

Table F-8. Estimated Population Mean Site Caseload, Weighted (Using Final Analysis Weights) Mean Site Caseload among Responding Sites, Estimated Bias, and *p*-value

Variable	Population Mean (Using Final Analysis Weights)	Weighted Mean (Using Final Analysis Weights) Among Responding Sites	Estimated Bias (Using Final Analysis Weights) Due to Nonresponse	*p*-value for Estimated Bias
Mean site caseload	1,369	1,396	−27	0.8016

F.4 Final Analysis Weights

The final analysis weights were calculated following nine steps. Each step is explained in greater detail below.

1. Calculate the LA sample weights (LAWT)—see Section F.1
2. Calculate the LA nonresponse adjustment factor (NRLAADJ)
3. Calculate the LA final analysis weights using this formula:

   Final LA Analysis Weights = LAWT*NRLAADJ
4. Calculate the site sample weights (SAWT)—see Section F.1
5. Calculate the site nonresponse adjustment factor (NRSiteADJ)
6. Calculate a site weight trimming adjustment factor (TRIMADJ)
7. Calculate a site post-stratification adjustment factor for the site weights (PSADJ)
8. Calculate the final Site Survey analysis weights (for all respondents) using this formula:

   Final Site Analysis Weights = LAWT* NRLAADJ* SAWT* NRSiteADJ* TRIMADJ*PSADJ
9. Calculate the final Site Survey weights for survey versions 1 and 2[5]

Step 1. Calculate the LA sample weights (LAWT). The calculation of the LA sample weights is described in **Section F.1 Sample Weights**. The LA sample weights equaled 1 for all LAs in Strata 1, 2, and 3 and were proportional to the LA caseload for all the LAs in Stratum 4.

[5] There were two versions of the Site Survey. Within each version, there was a set of questions common to each version and a set of questions unique to that version. Thus, it was necessary to create three sets of analysis weights for the Site Survey: the combined weights (for all respondents), the Site Survey version 1 analysis weights, and the Site Survey version 2 analysis weights.

The sum of the LA sample weights across all the sampled LAs is 1,813, which is also the total number of LAs on the frame (see Section 2.3.1 Sample Design).

Using the LA sample weights and the responses to Question 1 in the Local Agency Survey that asked for the number of sites operated by the LA that provide nutrition education, we estimated the population total number of sites by stratum and FNS region. Because in Strata 1, 2, and 3 we implemented a census, the population totals are the same as the totals reported by the LAs. Stratum 4 is an estimate based on the Stratum 4 LA design weights and LA response rate.

Step 2. Calculate the LA nonresponse adjustment factor (NRLAADJ). To calculate the nonresponse adjustment factor for the Local Agency Survey, we used the SUDAAN procedure WTADJUST (RTI International, 2012), which uses a constrained logistic model to predict the likelihood of responding as a function of a set of explanatory variables and calculate a nonresponse adjustment factor. We included the following in the logistic model as main effects: stratum (STRATUM), number of sites per LA (NUMSITES), and FNS region (REGION). We also included the interaction of NUMSITES and STRATUM as well as the interaction of NUMSITES and REGION in the logistic model. The interaction terms were included to force the nonresponse weight adjustments to reproduce the estimated population total number of sites by stratum and FNS region as described in Step 1.

Step 3. Calculate the LA final analysis weights. The LA final analysis weights were calculated by multiplying the LA sample weights (LAWT) from Step 1 by the nonresponse adjustment factor (NRLAADJ) from Step 2.

The LA final analysis weights were reviewed for unusually large weights using the SAS procedure PROC UNIVARIATE. The average LA final analysis weight was 1.23, and the weights ranged from 0 to 14.95. The spread of the weights was reasonable, and the unequal weighting effect was 1.58, suggesting that the LA final analysis weights did not need any adjusting. We also checked the sum of the LA final analysis weights by stratum and overall to ensure sums equaled the frame counts overall and by stratum (see Table F-9). Additionally, we checked the weighted frequency of the number of sites by stratum and region using the final LA analysis weights to verify that the counts equaled the estimated counts calculated in Step 1. Because all of the sums matched (the weighted number of LAs, using the final LA weights, by stratum matches the population total, by stratum, from the LA frame) as expected, we decided post-stratification of the LA final analysis weights was not needed.

Table F-9. Final LA Analysis Weights Summary

Variable	Population of LAs from Frame	Estimated Population of LAs Using Sample Weights	Weighted (Using the Final LA Analysis Weights) Number of Local Agency Survey Respondents
Stratum			
1. LAs in ITOs/U.S. territories	51	51	51
2. LAs in EBT states	294	294	294
3. LAs with participant caseload greater than 10,000	166	166	166
4. All other LAs	1,302	1,302	1,302
Overall	1,813	1,813	1,813

Step 4. Calculate the site sample weights (SAWT). Section **F.1 Sample Weights** describes the calculation of the site sample weights. The Site Survey sample weights equaled 1 for sites that are part of LAs where only one site was available for sampling. For all other sites, the site sample weights equaled the inverse of the probability of selection. The sum of the site sample weights across all the sites sampled is 5,262, which is the number of eligible sites among the sampled LAs.[6] (Furthermore, the sum of the site sample weights within each LA matches the number of sites in that LA.)

Step 5. Calculate the site nonresponse adjustment factor (NRSiteADJ). To calculate the nonresponse adjustment factor for the Site Survey, we also used the SUDAAN procedure WTADJUST. We included in the logistic model as main effects stratum, site participant caseload, and region.

Step 6. Calculate a site weight trimming adjustment factor (TRIMADJ). Once the nonresponse adjustment factors for the Site Surveys were complete, we were able to calculate preliminary site analysis weights by multiplying the nonresponse adjustment factors by the sample weights (as was done for the LA final analysis weights). We calculated the preliminary site analysis weights so we could evaluate them for unusually large weights and determine if any weight adjustments were needed.

[6] Approximately half of the site frame came from the WIC Program and Participants Characteristics 2012 (PC 2012) database, which is approximately 3 years old; thus, information on the number of sites is likely more accurately represented from the LA survey responses to Question 1. For this reason, when calculating the site sample weights, we used the responses to the Local Agency survey for Question 1 for all responding LAs. For nonresponding LAs, we used information obtained from the site frame.

Three of the preliminary site analysis weights were considered very large (81, 141, and 207 because the next largest weight was 59. We used the SUDAAN WTADJUST procedure to calculate a weight trimming adjustment factor that would reduce the size of these three large weights. After applying the weight trimming factor, the weights were reduced to 76, 82, and 82.

Step 7. Calculate a site post-stratification adjustment factor (PSADT). While we were reviewing the preliminary site analysis weights, we calculated the weighted number of sites by stratum and region to determine if the counts equaled the estimated population counts determined in Step 1. The counts were off slightly; thus, we decided to post-stratify the weights using the SUDAAN WTADJUST procedure.[7] The post-stratification procedure outputs the adjustment factor needed to maintain the desired site population counts by stratum and region (see Step 1).

Step 8. Calculate the final Site Survey analysis weights. The final Site Survey analysis weights were calculated as the product of the final LA weights, the site sample weights, and each of the adjustment factors created in Steps 5 through 7. The sum of the final Site Survey analysis weights by stratum and region is shown in Table F-10. This table shows that the sum of the site weights equals the weighted number of sites as reported by LAs for responding LAs and the number of sites from our site frame for nonresponding LAs using the LA sample weight, by stratum and by region (for all sites and by versions 1 and 2), thus illustrating the site weights appropriately represent the full population of sites.

Step 9. Calculate the final Site Survey weights for survey versions 1 and 2. There were two versions of the Site Survey. Each version included a common set of questions as well as a set of questions specific to each version. We developed two additional final Site Survey weights using the SUDAAN WTADJUST procedure: final Site Survey analysis weight version 1 and final Site Survey analysis weight version 2. We included in the logistic models as main effects STRATUM, CASELOAD, and REGION (the same model that was used to calculate *NRSiteADJ*).

There were 696 Site Survey version 1 respondents and 705 Site Survey version 2 respondents. The weights developed for each version adjust the final Site Survey analysis weights so that each set of version respondents weight back up to the total number of sites as shown in the last two columns of Table F-11.

[7] Steps 6 and 7 were done simultaneously using the SUDAAN WTADJUST procedure.

Table F-10. Final Site Analysis Weights Summary

Variable	Weighted Total Number of Sites as Reported by LAs Using the LA Sample Weight	Weighted Total Number of Sites as Reported by LAs Using the LA Final Analysis Weight	Weighted Total Number of Sites Using the Final Site Analysis Weights (n=1,401)	Weighted Total Number of Sites Using the Final Site Survey Version 1 Analysis Weights (n=696)	Weighted Total Number of Sites Using the Final Site Survey Version 2 Analysis Weights (n=705)
Stratum					
1. LAs/sites in ITOs/U.S. territories	323	323	323	323	323
2. LAs/sites in EBT states	1,347	1,347	1,347	1,347	1,347
3. LAs with participant caseload greater than 10,000 (sites part of these LAs)	1,826	1,826	1,826	1,826	1,826
4. All other LAs/sites	4,255	4,255	4,255	4,255	4,255
FNS Region					
Mid-Atlantic	817	817	817	817	817
Mountain Plains	1,529	1,529	1,529	1,529	1,529
Midwest	1,180	1,180	1,180	1,180	1,180
Northeast	803	803	803	803	803
Southeast	1,126	1,126	1,126	1,126	1,126
Southwest	998	998	998	998	998
Western	1,298	1,298	1,298	1,298	1,298

Table F-11. Example of Calculating a Weighted Mean Using the LA Final Analysis Weights on a Subset of LAs

ID (1)	Final Analysis Weights (2)	Participant Caseload (3)	Weighted Participant Caseload (4)
Resp1	1.008	13,377	1.008*13,377 = 13,484.016
Resp2	1.531	1,351	1.531*1,351 = 2,068.381
Resp3	1.231	1,065	1.231*1,065 = 1,311.015
Resp4	0.996	1,458	0.996*1,458 = 1,452.168
Total	4.766	16,298	18,315.580

The *SUDAAN Language Manual, Volumes 1 and 2, Release 11* provides the exact formula for the weight adjustment factors, described above, that the SUDAAN WTADJUST procedure (RTI International, 2012) calculated. Attachment 2 also provides the formula.

F.5 Example Using Final Analysis Weights

In this section, we present examples of how to use the final analysis weights to calculate a weighted mean "by hand" as requested by FNS (**F.5.1 Calculating a Weighted Mean "By Hand"**) and using SAS survey procedures (**F.5.2 Using Weights with SAS Survey Procedures**).

F.5.1 Calculating a Weighted Mean "By Hand"

In this example, we calculate the weighted mean participant caseload for Stratum 1 LAs located in urban areas within the Western Regional Offices. Four respondents to the LA survey meet this criterion. Table F-11 presents the LA final analysis weights and participant caseload for these four LAs. The steps in calculating the weighted mean are:

1. Multiply the LA final analysis weight by the LA participant caseload for LAs in the subgroup of interest (Stratum 1 LAs located in urban areas within the Western Regional Offices in this specific example). In Table F-11, the Resp1 final analysis weight is 1.008 and the participant caseload is 13,377, and the product of these two values is 1.008*13,377 = 13,484.016. This value is the LA's *weighted participant caseload* and can be found in the fourth column of Table F-11. This step is done for each respondent.
2. Sum the LA's weighted participant caseload (calculated in Step 1) across all the LAs in the subgroup of interest. This sum equals 18,315.580 in this specific example. This is the *weighted total participant caseload* for the Stratum 1 LAs located in urban areas within the Western Regional Offices.
3. Sum the LA's final analysis weights (found in column two) for the LAs in the subgroup of interest. This sum equals 4.766 in this specific example.

4. To calculate the weighted mean divide the weighted total participant caseload (Step 2) by the sum of the LA's final analysis weights (Step 3). In this specific example, the weighted mean caseload is 18,315.580/4.766 = 3,842.967.

F.5.2 Using Weights with SAS Survey Procedures

The application of the final analysis weights is typically done within a software package such as SAS using procedures specifically designed to handle weights and sample design features such as stratification. Below we present three examples using the LA weights:

Example 1: An example using the SAS procedure PROC SURVEYFREQ to calculate the weighted frequency of LAs for each FNS region. We demonstrate how to incorporate the sample stratification variable STRATUM and the finite population correction factor[8] (fpc) to correctly calculate the variance and standard errors.

Example 2: An example using the SAS procedure PROC SURVEYMEANS to calculate the weighted mean LA participation caseload for each FNS region. Also illustrates how to incorporate the sample stratification variable and fpc.

Example 3: An example using the SAS procedure PROC SURVEYMEANS and a "where" statement to subset the population down to Stratum 1 LAs in urban areas within the Western Regional Offices. This example is done to allow a comparison of the results when calculating a weighted mean "by hand" and by using the PROC SURVEYMEANS procedure.

Example 1. PROC SURVEYFREQ

The SAS code for calculating the weighted frequency of LAs for each FNS region is:

```
proc surveyfreq data=laweights_final n=la_fpc;
strata stratum;
weight wtfinal;
tables region_name;
run;
```

The statement "n=la_fpc" indicates to SAS there is a dataset called "la_fpc" that has a variable called "_TOTAL_" (the SAS procedure expects this variable so it is not specifically called out in the SAS code) that is the population total number of LAs for each stratum. This information allows SAS to calculate the fpc. The statement "strata stratum" indicates to SAS the sampling stratification variable. The statement "weight wtfinal" indicates to SAS the LA weight variable is called "WTFINAL."

[8] The formula for calculating the fpc is the square root of N – n divided by N-1, where N is the population total by stratum and n is the sample size by stratum. The fpc is always less than 1. The fpc is multiplied by the standard error, thus reducing the standard error. The larger the portion of the total population sampled the more the fpc reduces the standard error.

The output for the PROC SURVEYFREQ code is:

The SURVEYFREQ Procedure

Data Summary	
Number of Strata	4
Number of Observations	1,009
Number of Observations Used	893
Number of Obs with Nonpositive Weights	116
Sum of Weights	1812.75503

Region_name					
Region_name	**Frequency**	**Weighted Frequency**	**Std Dev of Wgt Freq**	**Percent**	**Std Err of Percent**
MARO	74	113.69381	9.47058	6.2719	0.5409
MPRO	118	364.93853	31.42349	20.1317	1.5822
MWRO	176	425.91046	27.06418	23.4952	1.4370
NERO	94	185.00587	16.80545	10.2058	0.9417
SERO	188	259.28011	13.81123	14.3031	0.7989
SWRO	112	185.97430	15.77770	10.2592	0.8641
WRO	131	277.95195	22.15436	15.3331	1.1875
Total	893	1813	30.62634	100.000	

The **Data Summary** in the output indicates 1,009 observations were read into the procedure. This is the total number of LAs sampled. Of the 1,009 observations, 893 were used in the SURVEYFREQ procedure. This is the number of responding LAs. The sum of the weights is 1,813 and that is the estimated total number of LAs in the population.

In the frequency table in the second column (**Frequency**), the unweighted number of LAs in each FNS region is listed. Notice the total is the same as the number of LA respondents (n = 893). The next column (**Weighted Frequency**) is the weighted number of LAs. Notice the total is the same as the estimated population total number of LAs (n = 1,813). The fourth column (**Std Dev of Wgt Freq**) is the standard deviation of the weighted frequency. The fifth column (**Percent**) is the weighted percent, and the final column (**Std Err of Percent**) is the standard deviation of the weighted percent.

Example 2. PROC SURVEYMEANS

The SAS code for calculating the weighted means of LAs for each FNS region is:

```
proc surveymeans data=laweights_final n=la_fpc;
strata stratum;
weight wtfinal;
domain region_name;
var caseload;
run;
```

The statements "n=la_fpc," "strata stratum," and "weight wtfinal" mean the same in the PROC SURVEYMEANS procedure as the PROC SURVEYFREQ. The statement "domain region_name" tells SAS to calculate the weighted means by FNS region.

The output for the PROC SURVEYMEANS code is:

The SURVEYMEANS Procedure

Data Summary	
Number of Strata	4
Number of Observations	1,009
Number of Observations Used	893
Number of Obs with Nonpositive Weights	116
Sum of Weights	1812.75503

Statistics						
Variable	**Label**	**N**	**Mean**	**Std Error of Mean**	**95% CL for Mean**	
caseload	LA participant caseload	893	5353.200802	147.373192	5063.96086	5642.44074

Domain Statistics in Region_name							
Region_name	**Variable**	**Label**	**N**	**Mean**	**Std Error of Mean**	**95% CL for Mean**	
MARO	**caseload**	LA participant caseload	74	9678.829316	989.059002	7737.66648	11619.9922
MPRO	**caseload**	LA participant caseload	118	1955.925588	159.248861	1643.37804	2268.4731
MWRO	**caseload**	LA participant caseload	176	3106.934964	176.548974	2760.43359	3453.4363
NERO	**caseload**	LA participant caseload	94	4500.712692	326.017482	3860.85903	5140.5663
SERO	**caseload**	LA participant caseload	188	7214.739991	350.226932	6527.37200	7902.1080
SWRO	**caseload**	LA participant caseload	112	7945.819107	716.029236	6540.51433	9351.1239
WRO	**caseload**	LA participant caseload	131	8582.544549	728.083108	7153.58241	10011.5067

The **Data Summary** information is the same as what was presented in the PROC SURVEYFREQ output. Next, the weighted participant caseload overall mean is shown and then the means by FNS region. The sample sizes overall and for each FNS region are listed under the column **N**. Note the sample sizes are not inflated by the weights. The weighted means are presented in the fourth column (**Mean**). The standard error of the mean (**Std Error of Mean**) and the 95% confidence limits for the mean (**95% CL for Mean**) follow.

Example 3. Weighted Mean Participant Caseload for Stratum 1 LAs Located in Urban Areas within the Western Regional Offices

The SAS code for calculating the weighted mean participant caseload for Stratum 1 LAs located in urban areas within the Western Regional Offices is:

```
proc surveymeans data=laweights_final n=la.la_fpc;
strata stratum;
where stratum = 1 & region_name = "WRO" & place = "URBAN";
weight wtfinal;
var caseload;
run;
```

The "where" statement tells SAS to subset down to Stratum 1 LAs located in urban areas within the Western Regional Offices (WRO).

The output for the PROC SURVEYMEANS code is:

The SURVEYMEANS Procedure

Data Summary	
Number of Strata	1
Number of Observations	5
Number of Observations Used	4
Number of Obs with Nonpositive Weights	1
Sum of Weights	4.76662075

Statistics						
Variable	**Label**	**N**	**Mean**	**Std Error of Mean**	**95% CL for Mean**	
caseload	LA participant caseload	4	3843.455589	2592.906219	−4408.3292	12095.2404

The weighted mean from the SURVEYMEANS procedure is 3,843.456. In comparison when calculated "by hand" the weighted mean is 3,842.967. The difference between the two numbers is due to the rounding to 3 decimals when the mean was calculated "by hand."

F.6 References

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ATTACHMENT 1: RESPONSE RATE FORMULAS

For the unweighted response rates, we used the formula in OMB's *Standards and Guidelines for Statistical Surveys* (2006):

$$RRU = \frac{C}{\left(C + R + NC + O + e(U)\right)},$$

where

- C = number of completed cases or sufficient partials;
- R = number of refused cases;
- NC = number of noncontacted sample units known to be eligible;
- O = number of eligible sample units not responding for reasons other than refusal;
- U = number of sample units of unknown eligibility, not completed; and
- E = estimated proportion of sample units of unknown eligibility that are eligible.

For the Local Agency and Site Surveys, we did not have unknown eligible cases; thus, the term e(U) drops out of the equation.

For weighted response rates, we used the sampling weights. Note for LAs and sites selected with certainty (i.e., LAs in census strata and sites selected from LAs with only one site), the sampling weights all equaled 1.

The weighted response rate formula is

$$RRW = \frac{\sum wiCi}{\sum wi\left(Ci + Ri + NCi + Oi + e(Ui)\right)},$$

where

- C_i = 1 if the i^{th} case is completed or partially completed, zero if the i^{th} case is not completed;
- R_i = 1 if the i^{th} case is a refusal, zero if the i^{th} case is not a refusal;
- NC_i = 1 if the i^{th} case is a noncontacted sample unit known to be eligible, zero if the i^{th} case is not a noncontacted sample unit known to be eligible;
- Oi = 1 if the i^{th} case is an eligible sample unit not responding for reasons other than refusal, zero if the i^{th} case is not an eligible sample unit not responding for reasons other than refusal;

U_i = 1 if the i^{th} case is a sample unit of known eligibility, zero if the i^{th} case is not a sample unit of known eligibility;

e = estimated proportion of sample units of unknown eligibility that are eligible; and

w_i = the inverse probability of selection for the i^{th} sample unit (sampling weights).

Again, for both the Local Agency and the Site Surveys, we did not have unknown eligible cases; thus, the term e(Ui) drops out of the equation.

ATTACHMENT 2: WTADJUST MODEL

The WTADJUST model that we used to derive the nonresponse weight adjustment factor is based on a *generalized exponential model* discussed in Folsom and Singh (2000), which in turn draws on work originally proposed by Folsom (1991), Deville and Särndal (1992), and Folsom and Witt (1994). Weight adjustments under the model have the following form:

$$\theta_k = \gamma_k \alpha_k = \gamma_k \left(\frac{l_k (u_k - c_k) + u_k (c_k - l_k) \exp(A_k \mathbf{x}_k \boldsymbol{\beta})}{(u_k - c_k) + (c_k - l_k) \exp(A_k \mathbf{x}_k \boldsymbol{\beta})} \right), \quad (2.1)$$

where

k = an index corresponding to each record on the input data file.

θ_k = the final weight adjustment for each record *k*.

γ_k = a weight-trimming factor that will be computed before the $\boldsymbol{\beta}$ -parameters of the exponential model (i.e., parameters of α_k) are estimated. These parameters will be computed using the WTMIN and WTMAX computational statements in WTADJUST.

α_k = the nonresponse or post-stratification weight adjustment computed. When compensating for nonresponse, it will estimate the *inverse* of the unit's probability of response. When compensating for frame errors, it will estimate the *inverse* of the expected number of times the unit appears on the frame.

l_k = lower bound imposed on the adjustment α_k . This bound can be set using the optional LOWERBD statement in WTADJUST. Note from Equation B.1 that as $\mathbf{x}_k \boldsymbol{\beta} \to -\infty$, then $\alpha_k \to l_k$. In other words, the weight adjustment produced from this procedure, α_k , will always equal some number greater than or equal to l_k , regardless of the value of the explanatory variables or the associated model parameters in $\boldsymbol{\beta}$.

u_k = upper bound imposed on the adjustment α_k . This bound can be set using the optional UPPERBD statement in WTADJUST. Note from Equation B.1 that as $\mathbf{x}_k \boldsymbol{\beta} \to +\infty$, then $\alpha_k \to u_k$. In other words, the weight adjustment produced from this procedure, α_k , will always equal some number less than or equal to u_k , regardless of the value of the explanatory variables or the associated model parameters in $\boldsymbol{\beta}$.

So both l_k and u_k are predetermined constants that bound the resultant adjustment, α_k .

c_k = centering constant for the model. It must be true that $l_k < c_k < u_k$. This constant can be set using the optional CENTER statement in WTADJUST.

A_k = $\frac{(u_k - l_k)}{(u_k - c_k)(c_k - l_k)}$. This is a constant in the model that will be used to control the behavior of θ_k as the upper and lower bounds get closer to the centering constant.

$\mathbf{x}_k$ = row vector of model explanatory variables.

$\boldsymbol{\beta}$ = column vector of model parameters that will be estimated within this procedure.

Also, suppose

w_k = input weight for record *k*. This weight corresponds to whatever is on the WEIGHT statement.

r_k = response indicator.

For nonresponse adjustments, this variable should be set

- to 1 for records corresponding to eligible respondents,
- to zero for records corresponding to eligible nonrespondents, and
- to missing for records corresponding to ineligible cases.

This is used as the dependent variable on the MODEL statement in WTADJUST.

SUDAAN computes the weight adjustment factors, α_k, by estimating the $\beta's$ in Equation 2.1 using an iterative procedure that mirrors the procedure used to estimate the $\beta's$ in SUDAAN's LOGISTIC model. In summary, suppose

$$\mathbf{s}_x = \sum_k \mathbf{x}_k w_k y_k \gamma_k \alpha_k - \mathbf{t}_x ,$$

where $\mathbf{t}_x$ is a row vector of control totals to which the user seeks to adjust the weights. $\mathbf{t}_x$ is of the same dimension as $\mathbf{x}_k$ for all *k*. For nonresponse adjustments, $\mathbf{t}_x = \sum_k \mathbf{x}_k w_k$. For post-stratification adjustments, $\mathbf{t}_x$ will be provided to WTADJUST using the POSTWGT statement.

$\mathbf{s}_x$ is a row vector that is the same dimension as the row vector $\mathbf{x}_k$ and represents the difference between the sum of the products of the adjusted sample weights times $\mathbf{x}_k$ and the control totals we would like the adjusted weights to sum to $\mathbf{s}_x$ are the *calibration equations*.

Then we will seek to minimize the distance:

$$Min\{\mathbf{s}_x \cdot \mathbf{s}_x'\} .$$

We will obtain an absolute minimum with $\mathbf{s}_x$ equaling zero, so WTADJUST will seek the value of $\boldsymbol{\beta}$ that satisfies the calibration equations:

$$\mathbf{s}_x = \sum_k \mathbf{x}_k w_k y_k \gamma_k \alpha_k - \mathbf{t}_x = 0 . \tag{2.2}$$

$\boldsymbol{\beta}$ can be found in Equation 2.2 using a Newton-Raphson iterative algorithm.

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APPENDIX G
RESPONDENT CHARACTERISTICS FOR THE LOCAL AGENCY AND SITE SURVEYS

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Table G-1. Characteristics of Respondents to the Local Agency Survey

	Number of Respondents	Weighted % of LAs (95% CI)
Job Titles/Roles Held[a]		
WIC director/coordinator	680	76.7 (73.8, 79.6)
Site/clinic supervisor	207	26.8 (23.7, 29.9)
Registered dietitian (RD)	403	41.1 (38.1, 44.2)
Degreed nutritionist, not RD	141	16.5 (14.2, 18.8)
Trained nutrition paraprofessional	40	5.4 (3.8, 7.0)
Nurse	121	20.2 (17.0, 23.5)
Nutrition education coordinator	199	23.8 (21.0, 26.7)
Administrative/clerical/support staff	58	7.9 (6.0, 9.8)
Lactation consultant/WIC-designated breastfeeding expert	174	23.1 (20.3, 25.9)
Breastfeeding coordinator	207	30.7 (27.4, 33.9)
Breastfeeding peer counselor	23	2.4 (1.5, 3.3)
Other[b]	50	5.1 (3.7, 6.4)
Number of respondents	876	
Number of nonrespondents	17	
Primary Job Title/Role		
WIC director/coordinator	602	69.3 (66.0, 72.6)
Site/clinic supervisor	53	7.4 (5.3, 9.6)
Registered dietitian (RD)	58	8.1 (6.2, 10.1)
Degreed nutritionist, not RD	29	4.8 (3.2, 6.4)
Trained nutrition paraprofessional (e.g., nutrition assistant, nutrition aid, competent paraprofessional authority, diet technician, social services technician)	6	0.8 (0.3, 1.3)
Nurse	23	4.4 (2.6, 6.3)
Nutrition education coordinator	30	2.2 (1.7, 2.6)
Administrative/clerical/support staff	5	0.8 (0.2, 1.4)
Lactation consultant/WIC-designated breastfeeding expert	3	0.4 (0.0, 0.8)
Breastfeeding coordinator	3	0.2 (0.1, 0.3)
Breastfeeding peer counselor	0	—(n/a)[c]
Other[b]	19	1.6 (1.0, 2.1)
Number of respondents	831	
Number of nonrespondents	62	

(continued)

Table G-1. Characteristics of Respondents to the Local Agency Survey (continued)

	Number of Respondents	Weighted % of LAs (95% CI)
Highest Degree Obtained		
High school diploma or GED	35	5.1 (3.3, 6.9)
Associate's degree	74	12.0 (9.4, 14.6)
Bachelor's degree	441	52.4 (49.1, 55.6)
Graduate degree	321	30.5 (27.8, 33.2)
Number of respondents	871	
Number of nonrespondents	22	
Credentials Held[a]		
Registered Dietitian (RD)	451	44.9 (41.7, 48.0)
Licensed Dietitian/Nutritionist (LD/LN)	306	30.9 (28.1, 33.7)
Dietetic Technician, Registered (DTR)	6	0.8 (0.2, 1.3)
Registered Nurse (RN)	115	20.5 (17.2, 23.8)
Licensed Practical Nurse (LPN)	14	1.3 (0.8, 1.8)
International Board Certified Lactation Consultant (IBCLC)	55	6.3 (4.8, 7.7)
Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)	282	33.1 (30.1, 36.2)
Certified Medical Assistant (CMA)	2	0.2 (0.0, 0.5)
Other[b]	41	4.6 (3.2, 5.9)
No credentials	112	13.2 (11.0, 15.4)
Number of respondents	867	
Number of nonrespondents	26	
Years of Experience in WIC Program		
Less than 1 year	28	3.5 (2.3, 4.7)
1–3 years	66	9.0 (7.0, 11.1)
4–6 years	78	8.2 (6.6, 9.8)
7–10 years	127	17.0 (14.4, 19.7)
11–20 years	268	30.2 (27.3, 33.2)
More than 20 years	302	32.1 (29.1, 35.0)
Number of respondents	869	
Number of nonrespondents	24	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI=confidence interval.

[a] Respondents could select multiple responses.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[c] An estimate is not provided because no respondents selected this response.

Table G-2. Characteristics of Respondents to the Site Survey

	Version 1		Version 2		All Sites	
	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)
Respondent to the LA Survey Completed the Site Survey[a]						
Yes	515	76.4 (71.4, 81.4)	533	76.1 (69.9, 82.3)	1,048	76.4 (72.6, 80.1)
No	172	23.6 (18.6, 28.6)	165	23.9 (17.7, 30.1)	337	23.6 (19.9, 27.4)
Number of respondents	687		698		1,385	
Number of nonrespondents	9		7		16	
Job Titles/Roles Held[b]						
WIC director/coordinator	411	58.2 (51.2, 65.1)	429	60.2 (53.1, 67.2)	840	59.7 (54.7, 64.6)
Site/clinic supervisor	205	28.7 (22.8, 34.6)	213	25.4 (20.5, 30.4)	418	27.0 (23.1, 30.9)
Registered dietitian (RD)	337	46.9 (40.0, 53.8)	337	44.0 (37.4, 50.7)	674	45.6 (40.8, 50.4)
Degreed nutritionist, not RD	122	17.7 (12.4, 22.9)	140	20.4 (15.1, 25.7)	262	18.6 (15.1, 22.2)
Trained nutrition paraprofessional	35	6.4 (3.1, 9.7)	27	3.8 (1.6, 6.0)	62	5.0 (3.1, 7.0)
Nurse	81	11.5 (7.2, 15.8)	74	12.3 (6.6, 18.1)	155	11.8 (8.5, 15.1)
Nutrition education coordinator	125	17.4 (12.6, 22.2)	167	22.2 (17.1, 27.2)	292	19.5 (15.9, 23.2)
Administrative/clerical/support staff	42	7.6 (3.2, 12.1)	45	6.4 (3.7, 9.2)	87	7.2 (4.4, 10.0)
Lactation consultant/WIC-designated breastfeeding expert	125	16.2 (12.0, 20.3)	136	21.1 (15.1, 27.0)	261	18.6 (15.1, 22.2)
Breastfeeding coordinator	125	19.4 (14.6, 24.3)	141	20.4 (15.4, 25.4)	266	19.7 (16.3, 23.1)
Breastfeeding peer counselor	11	1.5 (0.1, 2.9)†	18	3.1 (0.0, 6.1)†	29	2.2 (0.8, 3.6)
Other[c]	51	8.4 (2.9, 13.9)†	48	7.5 (4.0, 11.0)	99	7.9 (4.7, 11.2)
Number of respondents	688		691		1,379	
Number of nonrespondents	8		14		22	

(continued)

Table G-2. Characteristics of Respondents to the Site Survey (continued)

	Version 1		Version 2		All Sites	
	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)
Primary Job Title/Role						
WIC director/coordinator	367	52.8 (45.6, 59.9)	378	53.2 (45.9, 60.5)	745	53.5 (48.4, 58.6)
Site/clinic supervisor	76	11.9 (6.9, 16.8)	79	10.3 (7.0, 13.6)	155	11.3 (8.2, 14.4)
Registered dietitian (RD)	77	13.0 (8.7, 17.2)	63	9.2 (5.7, 12.7)	140	10.9 (8.3, 13.6)
Degreed nutritionist, not RD	37	5.3 (2.5, 8.1)	42	9.1 (4.5, 13.7)	79	7.0 (4.5, 9.5)
Trained nutrition paraprofessional	12	1.7 (0.4, 3.1)†	3	0.5 (0.0, 1.0)†	15	1.1 (0.4, 1.9)
Nurse	23	2.4 (1.0, 3.8)	16	5.8 (0.2, 11.4)†	39	3.7 (1.4, 6.1)
Nutrition education coordinator	24	4.7 (1.3, 8.0)	35	5.8 (2.6, 9.0)	59	5.3 (2.4, 8.1)
Administrative/clerical/support staff	7	1.7 (0.0, 3.7)†	2	0.6 (0.0, 1.8) †	9	1.3 (0.0, 2.6)
Lactation consultant/WIC-designated breastfeeding expert	1	0.2 (0.0, 0.4)†	2	0.2 (0.0, 0.4)†	3	0.2 (0.0, 0.4)
Breastfeeding coordinator	6	0.6 (0.1, 1.2)†	3	0.5 (0.0, 1.3)†	9	0.6 (0.1, 1.0)
Breastfeeding peer counselor	0	—(n/a)[d]	0	—(n/a)[d]	0	—(n/a)[d]
Other[c]	22	5.8 (0.3, 11.3)†	25	4.8 (1.7, 7.9)†	47	5.2 (2.0, 8.4)
Number of respondents	652		648		1,300	
Number of nonrespondents	44		57		101	
Highest Degree Completed						
High school diploma or GED	27	2.9 (1.5, 4.3)	18	3.7 (1.4, 6.0)†	45	3.2 (1.9, 4.5)
Associate's degree	61	7.4 (4.3, 10.4)	41	7.8 (3.4, 12.1)	102	7.3 (4.9, 9.7)
Bachelor's degree	367	57.0 (50.2, 63.8)	398	56.9 (49.9 63.8)	765	57.6 (52.8, 62.5)
Graduate degree	224	32.7 (26.2, 39.2)	237	31.7 (25.3, 38.1)	461	31.9 (27.3, 36.5)
Number of respondents	679		694		1,373	
Number of nonrespondents	17		11		28	

(continued)

Table G-2. Characteristics of Respondents to the Site Survey (continued)

	Version 1		Version 2		All Sites	
	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)
Credentials Held[b]						
Registered Dietitian (RD)	371	54.8 (47.8, 61.9)	379	50.3 (43.4, 57.2)	750	52.9 (47.9, 57.8)
Licensed Dietitian/Nutritionist (LD/LN)	237	34.1 (27.2, 41.0)	248	33.7 (27.4, 40.0)	485	33.9 (29.1, 38.6)
Dietetic Technician, Registered (DTR)	7	1.1 (0.0, 2.4)†	6	0.7 (0.1, 1.2)†	13	0.9 (0.2, 1.6)
Registered Nurse (RN)	75	11.3 (7.1, 15.6)	71	14.1 (7.5, 20.7)	146	12.3 (8.8, 15.8)
Licensed Practical Nurse (LPN)	15	1.3 (0.3, 2.3)†	9	0.9 (0.1, 1.6) †	24	1.1 (0.5, 1.8)
International Board Certified Lactation Consultant (IBCLC)	46	6.5 (3.4, 9.6)	52	7.5 (3.3, 11.6)	98	7.1 (4.5, 9.8)
Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor (CLC/CLE/CLEC)	225	30.4 (24.7, 36.2)	212	28.7 (22.8, 34.7)	437	29.1 (25.1, 33.1)
Certified Medical Assistant (CMA)	3	0.5 (0.0, 1.1)†	0	—(n/a)[d]	3	0.2 (0.0, 0.5)
No credentials	25	7.7 (1.3, 14.0)†	34	5.0 (2.0, 8.0)†	59	6.5 (2.7, 10.2)
Other[c]	88	15.9 (9.8, 22.1)	110	16.9 (12.1, 21.6)	198	16.5 (12.6, 20.4)
Number of respondents	663		685		1,348	
Number of nonrespondents	33		20		53	

(continued)

Table G-2. Characteristics of Respondents to the Site Survey (continued)

	Version 1		Version 2		All Sites	
	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)
Years of WIC Experience						
Less than 1 year	30	5.7 (2.6, 8.8)	13	2.7 (0.5, 4.8)†	43	4.5 (2.4, 6.6)
1–3 years	33	5.4 (2.4, 8.4)	37	5.4 (3.0, 7.8)	70	5.3 (3.5, 7.2)
4–6 years	76	10.7 (6.5, 14.9)	73	13.2 (6.6, 19.7)	149	11.5 (7.7, 15.3)
7–10 years	106	13.3 (9.2, 17.3)	80	11.8 (8.1, 15.5)	186	12.4 (9.8, 15.1)
11–20 years	204	28.1 (22.2, 33.9)	229	32.7 (26.4, 39.0)	433	30.9 (26.5, 35.2)
More than 20 years	208	36.9 (29.5, 44.3)	258	34.3 (27.9, 40.7)	466	35.4 (30.5, 40.3)
Number of respondents	657		690		1,347	
Number of nonrespondents	39		15		54	
Designs or Oversees WIC Nutrition Education						
Yes	570	80.8 (75.5, 86.2)	547	75.7 (70.1, 81.3)	1,117	78.6 (74.7, 82.4)
No	120	19.2 (13.8, 24.5)	146	24.3 (18.7, 29.9)	266	21.4 (17.6, 25.3)
Number of respondents	690		693		1,383	
Number of nonrespondents	6		12		18	

(continued)

Table G-2. Characteristics of Respondents to the Site Survey (continued)

	Version 1		Version 2		All Sites	
	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)	Number of Respondents	Weighted % of Sites (95% CI)
Percentage of Time Spent Providing Nutrition Education to WIC Participants						
<25%	288	43.5 (36.5, 50.5)	271	36.5 (30.3, 42.7)	559	40.5 (35.9, 45.2)
25–49%	154	22.7 (17.8, 27.5)	141	24.4 (18.5, 30.3)	295	23.4 (19.8, 27.0)
50–74%	148	20.6 (16.1, 25.0)	143	18.3 (13.4, 23.3)	291	19.7 (16.4, 23.1)
75–100%	102	13.2 (9.9, 16.5)	137	20.8 (14.5, 27.0)	239	16.3 (13.2, 19.4)
Number of respondents	692		692		1,384	
Number of nonrespondents	4		13		17	

Sources: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the appropriate Site Survey Weights (Version 1, Version 2, or the combined Site Survey weights). CI=confidence interval.

Statistically significant differences were not found when comparing respondent characteristics for Versions 1 and 2 of the Site Survey.

[a] The Site Survey was designed so that if the respondent to the Site Survey also completed the Local Agency Survey, then the respondent did not need to answer the questions on job title/roles, highest degree, credentials held, and years of experience in WIC program again. In these cases, we used the data provided in the Local Agency Survey to conduct the analysis for Site Survey respondent characteristics. Upon further investigation it appears that for about 15% of the 76% of respondents who indicated that they completed both the Local Agency and Site Surveys may not have actually done so based on a comparison of email addresses. Thus, for these cases the demographic data reported may be inaccurate.

[b] Respondents could select multiple responses.

[c] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[d] An estimate is not provided because no respondents selected this response.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

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APPENDIX H
RESPONDENT CHARACTERISTICS FOR THE INTERVIEWS WITH SITE STAFF

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Table H-1. Respondent Characteristics for Interviews with Site Staff

	Number	Unweighted Percentage
Number of Years' Experience Working for WIC Program (n = 83)[a]		
Less than 1 year	1	1.2
1–3 years	9	10.8
4–6 years	13	15.7
7–10 years	12	14.5
11–20 years	29	34.9
More than 20 years	19	22.9
Number of Years Providing Nutrition Education (n = 83)[a]		
Less than 1 year	1	1.2
1–3 years	10	12.0
4–6 years	14	16.9
7–10 years	12	14.5
11–20 years	27	32.5
More than 20 years	19	22.9
Age (n = 82)[a]		
24 or younger	1	1.2
25-34	15	18.3
35-44	24	29.3
45-54	21	25.6
55 or older	21	25.6
Primary Role (n=80)		
WIC director/coordinator	11	13.7
Site/clinic supervisor	17	21.3
Registered Dietician	29	36.3
Degreed Nutritionist (not RD)	12	15.0
Trained nutrition paraprofessional	5	6.2
Nutrition education coordinator	5	6.2
Nurse	1	1.3

[a] We conducted 80 interviews. For three interviews, more than one person participated in the interview; thus, the number of respondents is greater than 80 for some of the questions.

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APPENDIX I:
PHASE I RESULTS—UNIVARIATE ANALYSIS

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Table I-1. Weighted Number of WIC Sites Providing Nutrition Education by FNS Region—Local Agency Survey (RQ1: LA1)

FNS Regions	Unweighted Number of LAs	Unweighted Number of WIC Sites	Weighted Number of WIC Sites (95% CI)
Mid-Atlantic	74	618	816.7 (682.7, 950.7)
Midwest	176	620	1,180.2 (1,028.1, 1,332.3)
Mountain Plains	118	506	1,529.1 (1,027.1, 2,031.1)
Northeast	94	413	803.4 (633.0, 973.8)
Southeast	188	963	1,125.6 (1,035.8, 1,215.5)
Southwest	112	862	997.5 (866.9, 1,128.1)
Western	131	854	1,298.2 (1,118.0, 1,478.4)
Number of respondents	893		
Number of nonrespondents	0		

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents were instructed to include full-time, part-time, temporary, satellite, and mobile sites.

Table I-2. Types of Facilities in Which WIC Sites That Provide Nutrition Education Are Located—Local Agency Survey (RQ1: LA2)

Types of Facilities	Number of Sites	Weighted % of Sites Using Responses to the Local Agency Survey (95% CI)
Health department (city, county, state, or U.S. territory)	1,844	49.4 (46.4, 52.3)
Government facility that does not provide public health or healthcare services	322	6.3 (4.8, 7.8)
Indian Health Service (IHS) clinic or hospital	79	1.8 (0.9, 2.7)
Federally Qualified Health Center (FQHC)	277	6.2 (4.9, 7.4)
Nonprofit health center or medical clinic	253	6.1 (4.8, 7.5)
Hospital	144	2.9 (2.2, 3.7)
Stand-alone WIC site	937	11.7 (10.3, 13.1)
Nonprofit community services agency facility	392	6.9 (5.7, 8.2)
School or Head Start facility	102	1.8 (1.3, 2.3)
Faith-based facility	279	5.3 (4.3, 6.4)
Mobile van	44	0.2 (0.2, 0.3)
Other[a]	126	1.3 (0.9, 1.8)
Number of respondents	883	
Number of nonrespondents	10	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents were instructed to count each site once in the type of facility that is the best match.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-3. Days per Month Nutrition Education is Provided—Site Survey (RQ1: SV1&2_1)

Number of Days per Month	Unweighted Number of Sites	Weighted % of Sites (95% CI)
1 to 5 days	418	35.4 (31.1, 39.6)
6 to 10 days	123	8.7 (6.4, 11.0)
11 to 15 days	86	7.0 (5.0, 9.0)
16 to 20 days	435	28.1 (24.4, 31.8)
21 to 25 days	339	20.8 (17.5, 24.2)
Number of respondents	1,401	
Number of nonrespondents	0	

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval.

Respondents were instructed to enter the number of days WIC nutrition education services were provided during the last month if the number of days varies from month to month.

Table I-4. Additional Services Available at or Near WIC Sites—Site Survey (RQ1: SV1_17)

Services	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Children's health care	323	45.0 (38.9, 51.0)
Dental services	283	38.2 (32.1, 44.3)
Environmental health/screening	213	25.9 (21.1, 30.8)
Family planning services	356	49.0 (42.4, 55.6)
Lead screening	278	37.2 (30.8, 43.7)
Maternal/prenatal health care	277	39.3 (33.0, 45.5)
Parenting support	213	30.6 (24.9, 36.4)
Prevention and screening services	421	59.6 (53.0, 66.3)
Sexually transmitted disease services	331	43.7 (37.2, 50.2)
Smoking cessation	238	36.3 (29.5, 43.2)
No other services available at site	105	16.9 (11.1, 22.6)
Other[a]	65	9.7 (6.2, 13.1)
Number of respondents	679	
Number of nonrespondents	17	

Source: 2014 Site Survey, Version 1

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-5. Facilities and Equipment for Delivering Nutrition Education—Site Survey (RQ7b and RQ8: SV1_18, 19, 20, 21)

	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Settings Used for One-on-One Counseling (n = 696, missing = 0)		
Private room	553	77.0 (71.5, 82.5)
Modular office/cubicle	114	15.5 (11.9, 19.1)
Area with movable partitions separating it from other space	40	6.2 (3.5, 8.9)
Open area with no partitions and staff at desks that are arranged for privacy	49	7.6 (4.8, 10.3)
Open area with no partitions and staff at tables	66	12.7 (7.7, 17.7)
Other[a]	5	0.8 (0.0, 1.6)
Number of respondents	696	
Number of nonrespondents	0	
Settings Used for Group Education among Sites that Provide Group Education Sessions[b]		
Designated room or space used predominantly for group education	196	52.3 (46.2, 58.5)
Multipurpose room used for group education and other meetings, but not a waiting room	136	36.2 (29.6, 42.7)
General open area	96	25.9 (19.5, 32.3)
Private room used for both one-on-one counseling and group education	84	22.6 (16.8, 28.3)
Other[a]	3	0.8 (0.0, 1.8)
Number of respondents	376	
Number of nonrespondents	8	
Rooms/Areas Available at or Near Site		
Designated room/area where breastfeeding education is provided	445	64.4 (58.8, 70.1)
Kitchen/area for cooking classes or recipe preparation demonstrations	145	22.0 (16.6, 27.3)
Room/area for nutrition education activities with children	239	36.0 (29.9, 42.0)
Room/area for providing WIC orientation to families	264	38.5 (32.2, 44.8)
Room/area for viewing nutrition education or breastfeeding videos	404	57.6 (51.7, 63.6)
None of the above	122	18.0 (13.6, 22.3)
Number of respondents	689	
Number of nonrespondents	7	

(continued)

Table I-5. Facilities and Equipment for Delivering Nutrition Education—Site Survey (RQ7b and RQ8: SV1_18, 19, 20, 21) (continued)

	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Equipment or Materials Available		
Bulletin boards for nutrition education information	551	77.8 (72.8, 82.8)
Computer, kiosk, or tablet computer for nutrition education	185	25.5 (19.8, 31.1)
Display tables with nutrition information	339	52.2 (45.6, 58.9)
DVD player and TV for showing nutrition education information	478	68.4 (62.6, 74.3)
Equipment for teaching cooking classes	120	15.9 (12.3, 19.5)
Equipment for simple food tasting	123	18.7 (13.7, 23.6)
Nutrition education curricula or materials targeted to children	249	33.1 (27.6, 38.6)
Nutrition newsletters	222	34.7 (28.3, 41.1)
Rack/table/stand with written nutrition education materials for participants to select	448	62.6 (56.6, 68.6)
Other[a]	28	3.2 (1.6, 4.8)
None of the above	13	1.6 (0.3, 2.9)
Number of respondents	690	
Number of nonrespondents	6	

Source: 2014 Site Survey, Version 1

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[b] Only sites that provide group education sessions were eligible to answer this question (n = 384).

Table I-6. Types of Staff Members Who Provide Nutrition Education: Weighted Percentage of Respondents Reporting Each Type of Staff—Local Agency Survey (RQ7a: LA17)

Job Classification/Type of Staff	Unweighted Number of LAs	Weighted % of LAs (95% CI)
WIC director/coordinator	519	62.9 (59.8, 66.0)
Site/clinic supervisor	353	30.9 (28.3, 33.5)
Registered dietitian (RD)	718	78.3 (75.5, 81.1)
Degreed nutritionist, not RD	538	51.9 (48.6, 55.1)
Trained nutrition paraprofessional	436	46.9 (43.7, 50.1)
Nurse	351	45.0 (41.7, 48.3)
Nutrition education coordinator	238	23.3 (20.8, 25.8)
Administrative/clerical/support staff	142	15.5 (13.2, 17.7)
Lactation consultant/WIC-designated breastfeeding expert	468	47.4 (44.2, 50.5)
Breastfeeding coordinator	572	63.3 (60.1, 66.5)
Breastfeeding peer counselor	457	46.5 (43.3, 49.7)
Other[a]	29	3.0 (2.1, 3.9)
Number of respondents	876	
Number of nonrespondents	17	

Source: 2014 Local Agency Survey.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-7. Types of Staff Members Who Provide Nutrition Education: Weighted Percentage of Respondents Reporting Each Type of Staff—Site Survey (RQ7a: SV1&2_9)

Job Classification/Type of Staff	Unweighted Number of Sites	Weighted % of Sites (95% CI)
WIC director/coordinator	497	36.4 (32.1, 40.6)
Site/clinic supervisor	469	31.2 (27.3, 35.1)
Registered dietitian (RD)	768	57.6 (52.8, 62.3)
Degreed nutritionist, not RD	600	44.4 (39.7, 49.0)
Trained nutrition paraprofessional	521	43.1 (38.3, 47.9)
Nurse	384	35.9 (30.8, 41.0)
Nutrition education coordinator	116	6.2 (4.6, 7.7)
Administrative/clerical/support staff	643	49.4 (44.8, 54.0)
Lactation consultant/WIC-designated breastfeeding expert	349	24.3 (20.7, 28.0)
Breastfeeding coordinator	308	20.5 (17.2, 23.8)
Breastfeeding peer counselor	593	42.1 (37.7, 46.5)
Other[a]	82	6.2 (4.2, 8.2)
Number of respondents	1,287	
Number of nonrespondents	114	

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval.

Respondents were instructed that if a staff member performs more than one role to count them only once in the job classification for their primary role.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-8. Mean Full-Time Equivalents (FTEs) per Site Who Provide Nutrition Education—Site Survey (RQ12: SV1&2_9)

Job Classification/Type of Staff	Mean Number of FTEs	
	Unweighted Number of Sites	Weighted Mean (95% CI)
WIC director/coordinator	497	0.8 (0.8, 0.9)
Site/clinic supervisor	469	0.9 (0.8, 0.9)
Registered dietitian (RD)	768	1.0 (0.9, 1.1)
Degreed nutritionist, not characteristics RD	600	1.5 (1.4, 1.6)
Trained nutrition paraprofessional	521	2.2 (1.9, 2.5)
Nurse	384	1.1 (1.0, 1.3)
Nutrition education coordinator	116	0.8 (0.7, 0.9)
Administrative/clerical/support staff	643	1.7 (1.5, 1.8)
Lactation consultant/WIC-designated breastfeeding expert	349	1.0 (0.8, 1.1)
Breastfeeding coordinator	308	0.7 (0.7, 0.8)
Breastfeeding peer counselor	593	0.7 (0.7, 0.8)
Other[a]	82	1.3 (0.9, 1.6)
Number of respondents	1,287	
Number of nonrespondents	114	

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. Sites with at least one staff person in the job classification were included in the estimation of the mean. CI = confidence interval.

Respondents were instructed that if a staff member performs more than one role to count them only once in the job classification/type for their primary role.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-9. Employment Status of WIC Site Staff Members Who Provide Nutrition Education—Site Survey (RQ7a: SV1&2_8)

Type of Employment	Unweighted Number of Sites	Weighted % of Sites (95% CI)
All of them work only for WIC	998	64.9 (60.0, 69.9)
All of them work for WIC and for other programs or services offered at the site	172	14.6 (10.7, 18.4)
Some of them work only for WIC and some work for WIC and other programs or services offered at the site	231	20.5 (16.6, 24.4)
Number of respondents	1,401	
Number of nonrespondents	0	

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval.

Table I-10. Characteristics of WIC Site Staff Members Who Deliver Nutrition Education—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14)

	Unweighted Number of Nutrition Education Staff	Weighted Percentage of Nutrition Education Staff (95% CI)
Number of Years of Experience Working for WIC Program[a]		
Less than 1 year	322	10.9 (8.4, 13.4)
1–2 years	392	12.6 (10.5, 14.7)
3–6 years	750	21.0 (18.5, 23.6)
7–10 years	533	17.2 (14.1, 20.3)
11–20 years	728	21.5 (18.9, 24.0)
More than 20 years	473	16.9 (13.7, 20.0)
Highest Degree Received[b]		
High school diploma or GED	864	21.4 (18.1, 24.7)
Associate's degree	401	13.9 (11.1, 16.8)
Bachelor's degree	1,505	50.7 (46.8, 54.6)
Graduate degree	356	9.9 (8.2, 11.5)
Unknown	134	4.1 (2.5, 5.6)
Credentials Held[c]		
Registered dietitian (RD)	776	24.2 (21.4, 27.1)
Licensed dietitian/nutritionist (LD/LN)	382	12.0 (9.3, 14.6)
Dietetic technician, registered (DTR)	55	1.6 (0.9, 2.4)
Registered nurse (RN)	412	16.5 (11.7, 21.2)
Licensed practical nurse (LPN)	78	3.0 (1.5, 4.5)
International Board Certified Lactation Consultant (IBCLC)	207	6.0 (4.5, 7.4)
Certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC)	800	23.8 (19.9, 27.6)
Certified medical assistant (CMA)	32	0.7 (0.2, 1.2)

(continued)

Table I-10. Characteristics of WIC Site Staff Members Who Deliver Nutrition Education—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14) (continued)

	Unweighted Number of Nutrition Education Staff	Weighted Percentage of Nutrition Education Staff (95% CI)
Ethnicity[d]		
Hispanic or Latino	640	17.6 (13.7, 21.5)
Not Hispanic or Latino	2,418	73.4 (68.9, 77.9)
Unknown	235	9.0 (5.5, 12.5)
Race[e]		
American Indian or Alaska Native	152	3.9 (2.4, 5.4)
Asian	132	3.5 (2.3, 4.8)
Black or African American	374	11.1 (8.4, 13.8)
Native Hawaiian or other Pacific Islander	15	0.3 (0.1, 0.6)
White	2,342	74.5 (70.1, 78.9)
Unknown	288	10.0 (6.5, 13.6)

Sources: 2014 Site Survey, Version 1

Notes: The Site Survey collected information on the number of nutrition educators in each category. This information was used to estimate the percentage of staff members in each category across all responding sites. Estimates were weighted using the Version 1 Site Survey weights. CI = confidence interval.

[a] The number of respondents = 680 and the number of nonrespondents = 16.

[b] The number of respondents = 682 and the number of nonrespondents = 14.

[c] The number of respondents = 666 and the number of nonrespondents = 30. Respondents could count staff members in more than one category.

[d] The number of respondents = 686 and the number of nonrespondents = 10.

[e] The number of respondents = 680 and the number of nonrespondents = 16. Respondents could count staff members in more than one category.

Table I-11. Approach Used by Local Agencies to Design and Oversee Nutrition Education and Characteristics of Nutrition Education Coordinators—Local Agency Survey (RQ13: LA26, 27, 28, 29, 40, 41, 42)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Approach Used by LAs to Design and Oversee Nutrition Education		
One individual designs and oversees nutrition education for all sites	126	15.4 (12.9, 17.8)
Team of two or more individuals designs and oversees nutrition education for all sites	244	25.5 (22.8, 28.1)
Each site designs and oversees its own nutrition education	40	5.8 (4.1, 7.5)
State agency designs nutrition education and local agency oversees nutrition education	342	40.2 (37.0, 43.5)
State agency designs and oversees nutrition education	76	9.5 (7.5, 11.5)
Other[a]	35	3.7 (2.5, 4.8)
Number of respondents	863	
Number of nonrespondents	30	

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Person Responsible for Designing and Overseeing the Implementation of Nutrition Education (i.e., Nutrition Education Coordinator)[b,c]		
WIC director/coordinator	581	72.5 (69.3, 75.7)
Site/clinic supervisor	239	22.4 (20.1, 24.8)
Registered dietitian (RD)	507	60.3 (56.9, 63.6)
Degreed nutritionist, not RD	236	26.7 (24.0, 29.5)
Trained nutrition paraprofessional	70	9.4 (7.2, 11.6)
Nurse	95	16.0 (12.9, 19.1)
Nutrition education coordinator	210	22.5 (19.9, 25.1)
Lactation consultant/WIC-designated breastfeeding expert	275	30.7 (27.8, 33.6)
Other[a]	21	2.8 (1.5, 4.0)
Number of respondents	798	
Number of nonrespondents	19	

(continued)

Table I-11. Approach Used by Local Agencies to Design and Oversee Nutrition Education and Characteristics of Nutrition Education Coordinators (RQ13: LA26, 27, 28, 29, 40, 41, 42)—Local Agency Survey (continued)

	Unweighted Number of LAs	Weighted % of LAs that have Nutrition Education Coordinators with this Characteristic (95% CI)
For Survey Respondents that Design and Oversee Nutrition Education: Number of Years' Experience Designing and/or Overseeing WIC Nutrition Education[d]		
Less than 1 year	30	4.2 (2.8, 5.7)
1–3 years	71	11.4 (9.0, 13.8)
4–6 years	90	10.9 (9.0, 12.8)
7–10 years	100	16.0 (13.1, 18.9)
11–20 years	227	32.9 (29.5, 36.3)
More than 20 years	183	24.6 (21.6, 27.5)
Number of respondents	701	
Number of nonrespondents	8	
For Survey Respondents that Design and Oversee Nutrition Education: Total Number of Years' Experience Working for the WIC Program[d]		
Less than 1 year	20	3.4 (2.0, 4.8)
1–3 years	50	9.1 (6.7, 11.5)
4–6 years	65	8.6 (6.8, 10.4)
7–10 years	97	16.1 (13.3, 19.0)
11–20 years	230	32.4 (29.1, 35.8)
More than 20 years	232	30.4 (27.2, 33.5)
Number of respondents	694	
Number of nonrespondents	15	
For Survey Respondents that Design and Oversee Nutrition Education: Highest Degree Received[d]		
High school diploma or GED	19	3.6 (1.8, 5.4)
Associate's degree	49	11.7 (8.6, 14.8)
Bachelor's degree	353	52.0 (48.4, 55.6)
Graduate degree	270	32.7 (29.7, 35.8)
Number of respondents	691	
Number of nonrespondents	18	

(continued)

Table I-11. Approach Used by Local Agencies to Design and Oversee Nutrition Education and Characteristics of Nutrition Educator Coordinators (RQ13: LA26, 27, 28, 29, 40, 41, 42)—Local Agency Survey (continued)

	Unweighted Number of LAs	Weighted % of LAs that have Nutrition Education Coordinators with this Characteristic
For Survey Respondents that Design and Oversee Nutrition Education: Credentials Held[c,d]		
Registered dietitian (RD)	392	50.1 (46.5, 53.7)
Licensed dietitian/nutritionist (LD/LN)	261	33.6 (30.4, 36.8)
Dietetic technician, registered (DTR)	6	1.0 (0.3, 1.7)
Registered nurse (RN)	71	15.8 (12.5, 19.2)
Licensed practical nurse (LPN)	12	1.2 (0.7, 1.8)
International Board Certified Lactation Consultant (IBCLC)	49	7.1 (5.4, 8.8)
Certified lactation consultant/certified lactation educator/certified lactation educator & counselor (CLC/CLE/CLEC)	241	35.8 (32.3, 39.2)
Certified medical assistant (CMA)	1	0.2 (0.0, 0.5)
Other[a]	31	4.5 (2.9, 6.0)
No credentials	77	11.6 (9.2, 14.0)
Number of respondents	692	
Number of nonrespondents	17	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents were instructed that design includes developing lesson plans, protocols, and materials for nutrition education and that oversee includes directing, managing, or supervising the implementation of nutrition education.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[b] Only LAs in which the State Agency is not solely responsible for designing and overseeing the implementation of nutrition education were eligible to answer this question (n = 817).

[c] Respondents could select multiple responses.

[d] Only respondents who are one of the individuals that design or oversee WIC nutrition education were included in the analysis (n = 709).

Table I-12. State Agency Policy on Prescribed Staffing Standards—State Plan Abstraction (RQ6: State Plan IVC1a)

Standards	Geographic States and District of Columbia (n = 48)		ITOs and Territories (n = 22)		All SAs (n = 70)	
	n	%	n	%	n	%
Credentials	45	93.8	10	45.5	55	78.6
Staffing levels	26	54.2	6	27.3	32	45.7
Staff-to-participant ratio standards	23	47.9	3	13.6	26	37.1
Paraprofessional requirements	32	66.7	7	31.8	39	55.7
Other	12	25.0	2	9.1	14	20.0
Not applicable	1	2.1	10	45.5	11	15.7

Source: Abstraction of 2014 State Plans, n = 70. Data were not available for 20 SAs that were mainly ITOs. Multiple responses allowed.

Table I-13. State Agency Policy on Staff Members Permitted to Provide Nutrition Education—State Plan Abstraction (RQ6: State Plan IIA3g)

	Geographic States and District of Columbia (n = 51)		ITOs and Territories (n = 24)		All SAs (n = 75)	
	n	%	n	%	n	%
Not-High-Risk Contacts						
Paraprofessionals[a]	39	76.5	21	87.5	60	80.0
Licensed practical nurses	34	66.7	9	37.5	43	57.3
Registered nurses	46	90.2	9	37.5	55	73.3
BS in home economics	43	84.3	9	37.5	52	69.3
BS in the field of human nutrition	48	94.1	16	66.7	64	85.3
Registered dietitian or MS in nutrition (or related field)	45	88.2	20	83.3	65	86.7
Dietetic technician (2-year program completed)	37	72.6	9	37.5	46	61.3
Other	21	41.2	7	29.2	28	37.4
High-Risk Contacts						
Paraprofessionals[a]	2	3.9	3	12.5	5	6.7
Licensed practical nurses	7	13.7	4	16.7	11	14.7
Registered nurses	27	52.9	4	16.7	31	41.3
BS in home economics	18	35.3	2	8.3	20	26.7
BS in the field of human nutrition	31	60.8	12	50.0	43	57.3
Registered dietitian or MS in nutrition (or related field)	48	94.1	23	95.8	71	94.7
Dietetic technician (2-year program completed)	9	17.7	5	20.8	14	18.7
Other	19	37.3	10	41.7	29	38.7

Source: Abstraction of 2014 State Plans, n = 75. Data were not available for 15 SAs that were all ITOs. Multiple responses allowed.

[a] Paraprofessionals are individuals without a BS degree with formal WIC training by the SA or LA.

Table I-14. How Policies Are Set for the Minimum Educational and/or Credential Requirements for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA18)

Method	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Educational/credential requirements are set by State agency	669	78.4 (75.9, 80.9)
Education/credential requirements are set by local agency	17	2.2 (1.3, 3.1)
Some requirements are set by State agency and some by local agency	180	18.7 (16.3, 21.0)
There are no minimum educational/credential requirements	5	0.4 (0.2, 0.5)
Don't know	3	0.4 (0.0, 0.9)
Number of respondents	874	
Number of nonrespondents	19	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Table I-15. Local Agency Policy for the Minimum Educational Requirements for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA19)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Degree Required								No Minimum Requirement	
		High School Diploma/GED		Associate's Degree		Bachelor's Degree		Graduate Degree			
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
WIC director/ coordinator	504	24	6.2 (3.6, 8.7)	47	10.1 (7.4, 12.9)	359	70.3 (66.2, 74.3)	68	11.2 (8.8, 13.7)	6	2.2 (0.4, 3.9)
Site/clinic supervisor	338	47	15.2 (11.7, 18.7)	35	15.7 (10.8, 20.7)	226	60.5 (55.4, 65.5)	17	4.3 (2.9, 5.8)	13	4.3 (2.1, 6.4)
Registered dietitian (RD)	691	3	0.5 (0.0, 1.0)	7	1.3 (0.2, 2.4)	630	90.6 (88.3, 92.9)	46	7.1 (5.1, 9.2)	5	0.4 (0.3, 0.6)
Degreed nutritionist, not RD	524	4	0.7 (0.2, 1.2)	15	4.5 (2.6, 6.5)	495	92.6 (90.2, 95.0)	7	1.1 (0.5, 1.6)	3	1.1 (0.0, 2.4)
Trained nutrition paraprofessional	412	276	64.1 (59.7, 68.6)	74	20.3 (16.4, 24.1)	41	10.2 (7.5, 12.9)	1	0.8 (0.0, 2.1)	20	4.6 (2.9, 6.3)
Nurse	343	10	1.8 (1.0, 2.6)	175	47.9 (42.5, 53.3)	140	44.3 (38.8, 49.7)	6	2.3 (0.1, 4.6)	12	3.7 (1.6, 5.9)
Nutrition education coordinator	230	24	13.8 (8.9, 18.7)	9	7.1 (2.4, 11.7)	179	73.5 (67.4, 79.6)	10	2.8 (2.1, 3.5)	8	2.9 (1.3, 4.5)
Administrative/ clerical/support staff	141	128	86.3 (79.7, 92.8)	5	5.3 (1.1, 9.5)	0	—(n/a)[a]	0	—(n/a)[a]	8	8.4 (2.9, 13.9)

(continued)

Table I-15. Local Agency Policy for the Minimum Educational Requirements for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA19) (continued)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Degree Required									
		High School Diploma/GED		Associate's Degree		Bachelor's Degree		Graduate Degree		No Minimum Requirement	
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Lactation consultant/ WIC-designated breastfeeding expert	451	146	32.1 (28.3, 36.0)	57	14.0 (10.9, 17.0)	204	42.8 (38.8, 46.9)	8	1.6 (0.7, 2.5)	36	9.4 (6.7, 12.2)
Breastfeeding coordinator	557	96	19.2 (15.8, 22.5)	74	17.2 (13.8, 20.6)	350	55.1 (51.0, 59.2)	14	2.7 (1.0, 4.4)	23	5.8 (3.5, 8.2)
Breastfeeding peer counselor	446	366	80.8 (77.2, 84.4)	6	1.2 (0.4, 1.9)	9	2.1 (0.9, 3.3)	1	0.1 (0.1, 0.2)	64	15.8 (12.3, 19.2)
Other[b]	28	7	17.3 (9.1, 25.6)	2	4.3 (1.7, 6.9)	12	48.8 (33.0, 64.6)	2	4.5 (1.4, 7.7)	5	25.0 (9.5, 40.6)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents for each job type is provided in the table. The overall number of respondents for this question = 862 and the overall number of nonrespondents = 14. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondent selected this response.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-16. Local Agency Policy for Required Credentials for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA20)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Credentials Required									
		RD		LD/LN		DTR		RN		LPN	
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
WIC director/ coordinator	501	252	46.2 (42.1, 50.3)	132	22.3 (19.2, 25.4)	8	2.5 (1.0, 4.0)	95	22.4 (18.6, 26.1)	9	1.4 (0.7, 2.1)
Site/clinic supervisor	332	121	35.2 (30.9, 39.6)	64	16.0 (13.5, 18.6)	5	2.5 (0.3, 4.7)	50	18.1 (14.0, 22.1)	7	2.3 (0.6, 4.0)
Registered dietitian (RD)	692	657	95.4 (94.1, 96.8)	209	28.4 (25.2, 31.6)	3	0.6 (0.0, 1.2)	2	0.3 (0.0, 0.5)	1	0.1 (0.0, 0.1)
Degreed nutritionist, not RD	496	12	2.5 (1.3, 3.7)	73	16.7 (13.6, 19.8)	22	5.9 (3.7, 8.1)	5	2.0 (0.5, 3.5)	1	0.1 (0.0, 0.2)
Trained nutrition paraprofessional	403	6	1.6 (0.5, 2.6)	8	2.3 (1.0, 3.7)	38	9.8 (7.3, 12.4)	7	3.8 (1.3, 6.3)	5	1.1 (0.3, 1.9)
Nurse	343	1	0.1 (0.0, 0.2)	3	0.5 (0.1, 0.9)	0	—(n/a)[a]	293	90.7 (88.4, 93.1)	65	12.8 (10.2, 15.5)
Nutrition education coordinator	226	114	47.6 (41.5, 53.6)	44	15.9 (12.4, 19.4)	0	—(n/a)[a]	16	7.7 (4.4, 11.1)	7	2.0 (1.4, 2.6)
Administrative/ clerical/support staff	139	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]	1	1.3 (0.0, 3.3)
Lactation consultant/ WIC-designated breastfeeding expert	446	37	8.8 (6.4, 11.2)	15	3.1 (1.8, 4.4)	4	1.0 (0.2, 1.9)	47	13.5 (10.1, 16.8)	8	2.0 (0.8, 3.1)

(continued)

Table I-16. Local Agency Policy for Required Credentials for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA20) (continued)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Credentials Required									
		RD		LD/LN		DTR		RN		LPN	
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Breastfeeding coordinator	554	127	21.7 (18.6, 24.8)	46	7.7 (5.8, 9.6)	7	1.3 (0.5, 2.1)	85	19.7 (16.1, 23.3)	9	1.4 (0.5, 2.3)
Breastfeeding peer counselor	440	4	0.9 (0.2, 1.6)	1	0.5 (0.0, 1.2)	0	—(n/a)[a]	2	0.3 (0.1, 0.4)	1	0.2 (0.0, 0.6)
Other[b]	27	2	4.6 (2.1, 7.1)	1	2.5 (0.7, 4.4)	2	4.8 (2.1, 7.5)	1	2.5 (0.7, 4.4)	2	5.2 (1.9, 8.5)

(continued)

Table I-16. Local Agency Policy for Required Credentials for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ6: LA20) (continued)

Job Classification/ Type of Staff	Credentials Required						No Credential Requirements	
	IBCLC		CLC/CLE/CLEC		CMA			
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
WIC director/coordinator	8	1.5 (0.6, 2.3)	40	9.2 (6.7, 11.6)	0	—(n/a)[a]	141	29.2 (25.3, 33.1)
Site/clinic supervisor	2	0.4 (0.2, 0.6)	18	4.8 (3.3, 6.4)	0	—(n/a)[a]	137	41.9 (37.1, 46.8)
Registered dietitian (RD)	5	0.7 (0.2, 1.2)	29	5.3 (3.5, 7.1)	0	—(n/a)[a]	18	2.6 (1.5, 3.7)
Degreed nutritionist, not RD	2	0.4 (0.0, 0.7)	31	6.9 (4.9, 8.8)	0	—(n/a)[a]	374	71.9 (68.2, 75.6)
Trained nutrition paraprofessional	0	—(n/a)[a]	21	6.4 (3.9, 8.8)	1	0.2 (0.1, 0.3)	324	77.1 (73.0, 81.1)
Nurse	2	0.6 (0.0, 1.2)	17	5.3 (3.1, 7.5)	0	—(n/a)[a]	13	3.3 (1.4, 5.3)
Nutrition education coordinator	3	1.2 (0.1, 2.2)	7	3.7 (1.4, 5.9)	1	0.3 (0.0, 0.5)	79	37.9 (31.7, 44.1)
Administrative/clerical/ support staff	0	—(n/a)[a]	3	2.1 (0.1, 4.0)	0	—(n/a)[a]	135	96.6 (93.8, 99.4)
Lactation consultant/WIC-designated breastfeeding expert	208	42.7 (38.6, 46.7)	195	43.8 (39.6, 47.9)	6	1.4 (0.3, 2.4)	61	15.9 (12.6, 19.3)
Breastfeeding coordinator	122	17.6 (15.1, 20.1)	207	37.1 (33.3, 40.9)	7	1.1 (0.3, 1.9)	136	26.0 (22.5, 29.6)
Breastfeeding peer counselor	1	0.1 (0.0, 0.2)	84	18.0 (14.9, 21.0)	3	0.4 (0.3, 0.6)	349	80.6 (77.5, 83.8)
Other[b]	1	2.5 (0.7, 4.4)	3	7.1 (3.7, 10.5)	0	—(n/a)[a]	21	85.9 (80.3, 91.6)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents for each job type is provided in the table. The overall number of respondents for this question = 860 and the overall number of nonrespondents = 16. CI = confidence interval, n/a = not applicable.

RD = Registered Dietitian; LD/LN = Licensed Dietitian/Licensed Nutritionist; DTR = Dietetic Technician, Registered; RN = Registered Nurse; LPN = Licensed Practical Nurse; IBCLC = International Board Certified Lactation Consultant; CLC/CLE/CLEC = Certified Lactation Consultant/Certified Lactation Educator/Certified Lactation Educator & Counselor; CMA = Certified Medical Assistant.

Respondents could select multiple responses.

[a] An estimate is not provided because no respondents selected this response.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-17. Local Agency Policy for Required Training for New Employees Who Provide Nutrition Education—Local Agency Survey (RQ6_LA21)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Required Training										No Training Requirements	
		Competency-Based[a] or Certification Program		State-Administered Training Program		Self-Paced Training Modules		On-the-Job with Observation		Other			
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
WIC director/ coordinator	508	164	32.7 (28.8, 36.6)	335	70.3 (66.8, 73.9)	296	59.0 (54.9, 63.1)	374	68.2 (64.0, 72.4)	29	4.2 (3.0, 5.4)	5	1.6 (0.3, 2.8)
Site/clinic supervisor	340	133	36.2 (32.0, 40.3)	175	52.8 (48.1, 57.5)	216	60.3 (55.6, 65.0)	274	75.6 (70.6, 80.6)	23	5.8 (4.2, 7.4)	8	4.9 (1.1, 8.7)
Registered dietitian (RD)	697	271	39.4 (35.7, 43.0)	406	64.1 (60.8, 67.3)	439	62.2 (58.7, 65.7)	567	76.2 (72.7, 79.6)	26	3.4 (2.1, 4.7)	5	0.7 (0.2, 1.2)
Degreed nutritionist, not RD	524	191	35.1 (31.6, 38.6)	298	61.4 (58.0, 64.9)	338	62.0 (58.3, 65.7)	445	83.3 (80.2, 86.4)	21	3.2 (2.3, 4.1)	3	1.2 (0.0, 2.6)
Trained nutrition paraprofessional	418	170	37.7 (33.4, 42.0)	255	66.2 (62.1, 70.2)	281	64.3 (59.7, 68.8)	344	79.3 (75.0, 83.6)	22	4.2 (2.9, 5.5)	1	0.3 (0.0, 0.5)
Nurse	341	101	31.0 (25.7, 36.2)	216	68.1 (63.3, 72.9)	226	62.7 (57.3, 68.0)	284	76.5 (71.2, 81.8)	10	3.2 (1.0, 5.3)	2	1.5 (0.0, 3.3)
Nutrition education coordinator	231	83	35.5 (29.7, 41.3)	134	62.2 (56.3, 68.0)	152	64.4 (58.5, 70.3)	179	73.5 (67.5, 79.5)	11	3.6 (2.2, 5.1)	4	1.7 (0.4, 3.1)
Administrative/ clerical/support staff	142	25	12.4 (8.8, 16.0)	65	50.5 (42.7, 58.3)	94	55.3 (47.3, 63.3)	120	81.8 (75.1, 88.5)	7	3.8 (1.7, 5.9)	2	3.1 (0.0, 7.4)

(continued)

Table I-17. Local Agency Policy for Required Training for New Employees Who Provide Nutrition Education—Local Agency Survey (RQ6_LA21) (continued)

Job Classification/ Type of Staff	Unweighted Number of LAs for Job Classification	Required Training											
		Competency-Based[a] or Certification Program		State-Administered Training Program		Self-Paced Training Modules		On-the-Job with Observation		Other		No Training Requirements	
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Lactation consultant/WIC-designated breastfeeding expert	456	247	56.2 (52.2, 60.2)	255	57.3 (53.2, 61.4)	266	55.5 (51.3, 59.6)	338	70.0 (65.9, 74.0)	34	6.7 (4.9, 8.5)	5	1.3 (0.3, 2.2)
Breastfeeding coordinator	564	238	40.4 (36.6, 44.2)	349	65.0 (61.3, 68.6)	336	55.8 (51.9, 59.8)	416	68.1 (64.0, 72.1)	37	5.2 (3.9, 6.5)	6	1.3 (0.2, 2.5)
Breastfeeding peer counselor	452	131	27.0 (23.4, 30.6)	294	63.7 (59.3, 68.0)	266	53.7 (49.3, 58.1)	345	73.7 (69.5, 77.9)	29	6.8 (3.8, 9.9)	4	0.9 (0.2, 1.6)
Other[b]	26	4	13.1 (3.2, 23.1)	12	46.6 (30.2, 63.0)	7	22.4 (9.8, 35.0)	18	59.5 (42.6, 76.4)	3	7.3 (3.3, 11.2)	2	13.6 (0.0, 27.5)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents for each job type is provided in the table. The overall number of respondents for this question = 867 and the overall number of nonrespondents = 9. CI = confidence interval.

Respondents could select multiple responses.

[a] Competency based was defined in the survey as an educational approach based on a predetermined set of knowledge, skills, and abilities that the student is expected to accomplish.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-18. Types of Training Provided or Sponsored by State Agency for Staff Providing Nutrition Education—State Plan Abstraction (RQ10: State Plan IIA3c)

Types of Training	Geographic States and District of Columbia (n =50)		ITOs and Territories (n = 24)		All SAs (n = 74)	
	n	%	n	%	n	%
Professional Staff						
Training Provided on a Regular Basis						
General nutrition education methodology	32	64.0	9	37.5	41	55.4
Nutrition counseling techniques	39	78.0	8	33.3	47	63.5
Breastfeeding promotion/support	48	96.0	15	62.5	63	85.1
Cultural competencies	28	56.0	5	20.8	33	44.6
Customer service	32	64.0	10	41.7	42	56.8
VENA staff competency training	38	76.0	7	29.2	45	60.8
Other	16	32.0	3	12.5	19	25.7
Training Provided on an As-Needed Basis						
General nutrition education methodology	25	50.0	13	54.2	38	51.4
Nutrition counseling techniques	17	34.0	15	62.5	32	43.2
Breastfeeding promotion/support	11	22.0	8	33.3	19	25.7
Cultural competencies	26	52.0	16	66.7	42	56.8
Customer service	21	42.0	10	41.7	31	41.9
VENA staff competency training	18	36.0	15	62.5	33	44.6
Other	5	10.0	1	4.2	6	8.1

(continued)

Table I-18. Types of Training Provided or Sponsored by State Agency for Staff Providing Nutrition Education—State Plan Abstraction (RQ10: State Plan IIA3c) (continued)

Types of Training	Geographic States and District of Columbia (n =50)		ITOs and Territories (n = 24)		All SAs (n = 74)	
	n	%	n	%	n	%
Paraprofessional Staff						
Training provided on a regular basis						
General nutrition education methodology	23	46.0	13	54.2	36	48.7
Nutrition counseling techniques	23	46.0	9	37.5	32	43.2
Breastfeeding promotion/support	36	72.0	17	70.8	53	71.6
Cultural competencies	21	42.0	6	25.0	27	36.5
Customer service	26	52.0	12	50.0	38	51.4
VENA staff competency training	26	52.0	10	41.7	36	48.7
Other	13	26.0	3	12.5	16	21.6
Training provided on an as-needed basis						
General nutrition education methodology	14	28.0	9	37.5	23	31.1
Nutrition counseling techniques	9	18.0	10	41.7	19	25.7
Breastfeeding promotion/support	7	14.0	8	33.3	15	20.3
Cultural competencies	19	38.0	14	58.3	33	44.6
Customer service	14	28.0	7	29.2	21	28.4
VENA staff competency training	8	16.0	12	50.0	20	27.0
Other	4	8.0	1	4.2	5	6.8

Source: Abstraction of 2014 State Plans, n = 74. Data were not available for 16 SAs that were mainly ITOs.

Multiple responses allowed.

Table I-19. Local Agency Policy and Procedures for Ongoing Training for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ17: LA22, LA23, LA24)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
LA policy for ongoing training[a]		
Local agency requires specific number of hours per month	23	2.6 (1.5, 3.7)
Local agency requires specific number of hours per year	115	13.3 (11.0, 15.5)
Local agency implements State agency requirements for ongoing training	559	65.0 (62.0, 68.0)
No policy	258	28.3 (25.5, 31.2)
Number of respondents	874	
Number of nonrespondents	19	
How ongoing training is usually provided[b]		
National/State/regional conferences or workshops	661	79.7 (77.2, 82.1)
Training sessions/courses at State training center	427	51.1 (47.8, 54.4)
In-person training session provided by the local agency	488	51.6 (48.3, 54.9)
In-person training sessions provided by other local agencies or programs	382	41.8 (38.6, 45.0)
State or local agency webinars	704	82.7 (80.3, 85.1)
Self-study training modules or courses	647	76.1 (73.5, 78.8)
Training provided during local agency or site staff meetings	687	73.9 (70.8, 77.0)
Individual staff mentoring/coaching	489	50.5 (47.2, 53.8)
Other[c]	11	1.0 (0.5, 1.4)
Number of respondents	866	
Number of nonrespondents	27	

(continued)

Table I-19. Local Agency Policy and Procedures for Ongoing Training for Staff Members Who Provide Nutrition Education—Local Agency Survey (RQ17: LA22, LA23, LA24) (continued)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Number of hours of nutrition education training provided annually to each staff member who provides nutrition education		
None	42	6.8 (4.8, 8.7)
1–6 hours	237	26.2 (23.5, 29.0)
7–12 hours	235	28.3 (25.4, 31.3)
13–18 hours	151	16.7 (14.3, 19.1)
19–24 hours	86	9.2 (7.5, 10.9)
25 or more hours	101	12.8 (10.3, 15.3)
Number of respondents	852	
Number of nonrespondents	41	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

[a] Respondents could select multiple responses. Respondents were instructed to not include continuing education required to maintain a credential.

[b] Respondents could select multiple responses.

[c] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-20. Percentage of Nutrition Educators that Received Training on Specific Topics During the Past 24 Months—Local Agency Survey (RQ17: LA25)

Topics	Unweighted Number of LAs for the Topic	None		1–25%		26–50%		51–75%		76–100%		Don't Know	
		Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
3-step counseling	789	315	36.5 (33.3, 39.6)	99	11.1 (9.2, 13.1)	41	4.9 (3.7, 6.2)	37	4.2 (3.1, 5.4)	166	23.5 (20.5, 26.6)	131	19.7 (16.5, 22.9)
Facilitated group discussion	807	276	35.6 (32.4, 38.8)	132	14.6 (12.4, 16.8)	63	7.3 (5.7, 8.9)	53	5.7 (4.4, 7.0)	231	27.6 (24.5, 30.7)	52	9.2 (6.8, 11.6)
Motivational interviewing	820	109	11.3 (9.5, 13.0)	124	13.1 (11.0, 15.3)	83	10.4 (8.4, 12.4)	69	6.4 (5.2, 7.6)	401	52.4 (49.0, 55.7)	34	6.5 (4.3, 8.6)
Communication skills	822	83	8.8 (7.1, 10.5)	113	12.7 (10.5, 14.9)	78	9.3 (7.5, 11.1)	72	7.4 (5.9, 8.8)	443	55.3 (52.0, 58.7)	33	6.6 (4.4, 8.7)
Goal setting	826	108	12.8 (10.6, 15.0)	109	11.6 (9.7, 13.5)	81	9.0 (7.4, 10.7)	76	7.9 (6.3, 9.5)	419	52.3 (49.0, 55.6)	33	6.4 (4.3, 8.4)
Emotion-based counseling	807	263	33.3 (30.1, 36.6)	91	9.4 (7.7, 11.1)	61	7.5 (5.7, 9.3)	62	6.7 (5.3, 8.1)	234	30.2 (27.0, 33.3)	96	12.9 (10.5, 15.4)
Skills related to VENA and/or participant/learner-centered education	843	64	8.3 (6.4, 10.2)	97	10.4 (8.5, 12.2)	80	8.2 (6.6, 9.8)	78	8.2 (6.6, 9.7)	501	60.5 (57.3, 63.7)	23	4.5 (2.7, 6.3)
Foreign language	791	574	76.5 (73.8, 79.1)	113	10.6 (9.0, 12.2)	20	2.8 (1.6, 4.0)	10	1.1 (0.5, 1.6)	31	2.9 (2.0, 3.8)	43	6.2 (4.4, 8.0)
Other[a]	99	0	—(n/a)[b]	17	14.1 (9.2, 18.9)	8	7.3 (3.7, 10.8)	8	8.5 (4.0, 13.0)	59	63.3 (55.4, 71.2)	7	6.9 (2.8, 11.0)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents who provided a response for at least one topic = 856. The overall number of nonrespondents for this question = 37. The number of respondents for each training topic is provided in the table. CI = confidence interval, n/a = not applicable.

Respondents were instructed to include training that was provided by the LA, SA, and any outside training, and to estimate this information if it was not readily available.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[b] An estimate is not provided because no respondents selected this response.

Table I-21. Types and Number of Hours of Training Provided to WIC Site Nutrition Educators During the Past 12 Months—Site Survey (RQ17: SV2_17)

Topics	% of Sites that Provided Training on the Topic During Past 12 Months		If Training Provided, Estimated Number of Training Hours per Staff Member in Past 12 Months	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Mean Hours (95% CI)
Breastfeeding	670	96.7 (95.1, 98.4)	640	13.1 (10.9, 15.3)
Prenatal nutrition	445	68.6 (62.4, 74.8)	430	5.5 (3.9, 7.1)
Infant nutrition	510	80.1 (75.6, 84.5)	493	6.0 (4.5, 7.6)
Child nutrition	499	76.3 (70.8, 81.8)	479	5.3 (3.8, 6.7)
VENA skills	408	62.3 (55.5, 69.0)	395	5.1 (3.5, 6.7)
Participant or learner-centered education	393	67.0 (61.1, 72.9)	380	5.8 (4.2, 7.4)
Motivational interviewing	377	61.2 (54.6, 67.7)	363	5.5 (3.9, 7.1)
Emotion-based counseling	201	29.6 (23.5, 35.6)	188	5.1 (1.8, 8.3)
Group facilitation skills	226	32.1 (25.7, 38.5)	215	6.9 (3.5, 10.3)
Weight and growth issues	410	65.2 (58.9, 71.5)	397	4.8 (3.0, 6.5)
Other nutrition topics[a]	366	64.9 (58.1, 71.7)	344	7.2 (5.5, 8.9)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. The number of respondents who provided a response for at least one topic = 700. The overall number of nonrespondents for this question = 5. CI = confidence interval.

Respondents were instructed to include all types of training (e.g., workshops, conferences, presentations at staff meetings).

Respondents could select multiple responses.

[a] An “other, specify” option was not provided for this question.

Table I-22. Information on Languages Spoken by WIC Participants—Local Agency Survey and Site Survey (RQ5: LA3, LA4, SV1_22, SV1_23)

	Local Agency Survey		Site Survey	
	Unweighted Number of LAs	**Weighted % of LAs (95% CI)**	**Unweighted Number of Sites**	**Weighted % of Sites (95% CI)**
Percentage of WIC Participants Who Speak Language Other than English as their Primary Language				
None (Primary language is English)	51	11.3 (8.5, 14.1)	99	16.4 (11.3, 21.5)
1–5%	276	36.3 (33.1, 39.5)	232	30.6 (25.6, 35.6)
6–10%	98	10.3 (8.5, 12.1)	77	10.4 (6.6, 14.2)
11–30%	217	20.5 (18.2, 22.8)	107	16.7 (12.6, 20.9)
31–50%	135	11.6 (9.9, 13.2)	68	8.7 (6.1, 11.2)
51–70%	64	5.3 (4.3, 6.3)	57	8.8 (5.9, 11.8)
71–90%	40	3.7 (2.7, 4.6)	42	5.7 (3.4, 8.0)
91–100%	10	1.1 (0.5, 1.6)	14	2.7 (0.0, 5.3)
Number of respondents	891		696	
Number of nonrespondents	2		0	
Languages Spoken[a]				
Spanish	802	97.6 (96.7, 98.5)	562	95.3 (92.3, 98.3)
Arabic	314	32.0 (29.3, 34.7)	146	22.3 (17.2, 27.3)
American Sign Language	297	29.4 (26.8, 32.0)	109	19.8 (15.0, 24.5)
Cambodian/Khmer	80	8.0 (6.6, 9.5)	27	4.4 (2.5, 6.3)
Cantonese/Mandarin	217	23.2 (20.8, 25.6)	101	17.2 (12.5, 21.9)
Farsi	100	8.8 (7.5, 10.0)	38	5.7 (3.5, 8.0)
French/Creole	191	18.8 (16.7, 20.9)	92	12.7 (9.3, 16.1)
Fulani	11	0.9 (0.5, 1.3)	1	0.2 (0.0, 0.6)
Hindi	112	10.3 (8.8, 11.8)	48	6.5 (4.2, 8.8)
Hmong	80	8.6 (7.0, 10.2)	27	4.8 (2.5, 7.0)
Korean	136	13.5 (11.7, 15.4)	62	8.9 (6.2, 11.7)
Laotian	73	7.3 (6.0, 8.6)	19	3.6 (1.3, 5.9)
Portuguese	76	7.2 (5.9, 8.4)	39	5.0 (2.9, 7.0)
Punjabi	59	5.4 (4.3, 6.4)	20	3.3 (1.5, 5.1)

(continued)

Table I-22. Information on Languages Spoken by WIC Participants—Local Agency Survey and Site Survey (RQ5: LA3, LA4, SV1_22, SV1_23) (continued)

	Local Agency Survey		Site Survey	
	Unweighted Number of LAs	**Weighted % of LAs (95% CI)**	**Unweighted Number of Sites**	**Weighted % of Sites (95% CI)**
Russian	179	18.0 (15.9, 20.1)	82	15.0 (10.2, 19.7)
Somali	123	13.8 (11.7, 15.9)	61	10.4 (6.7, 14.2)
Swahili	79	7.5 (6.2, 8.9)	29	5.4 (2.2, 8.6)
Tamil	16	1.4 (0.9, 1.9)	5	0.5 (0.0, 1.0)
Tagalog	77	7.6 (6.2, 8.9)	33	4.7 (2.8, 6.7)
Urdu	54	4.9 (3.9, 5.8)	16	2.5 (1.0, 4.0)
Vietnamese	290	28.7 (26.1, 31.2)	112	19.6 (14.9, 24.3)
Burmese (write-in response)	44	4.0 (3.1, 4.8)	19	2.9 (1.5, 4.2)
Nepalese (write-in response)	30	2.7 (2.0, 3.4)	9	1.9 (0.4, 3.3)
Other[b]	164	17.2 (15.1, 19.4)	56	13.4 (8.7, 18.1)
Number of respondents	821		584	
Number of nonrespondents	21		13	

Sources: 2014 Local Agency Survey and 2014 Site Survey, Version 1

Notes: Estimates in Column 1 were weighted to represent the population of LAs using the Local Agency Survey weights. Estimates in Column 2 were weighted to represent the population of sites using the Version 1 Site Survey weights. CI = confidence interval.

[a] Only LAs/sites that serve non-English-speaking participants were eligible to answer this question (n = 842 for Local Agency Survey and n = 597 for Site Survey, Version 1). Respondents could select multiple responses.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response. Other write-in responses that were not recoded included Bengali, Navajo, and Oromo.

Table I-23. Information on Languages Spoken by WIC Site Staff Members Who Provide Nutrition Education—Site Survey (RQ4: SV1_15, SV1_16)

	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Percentage of WIC Site Staff Members Who Provide Nutrition Education in Language Other than English		
None	273	48.4 (41.8, 55.0)
1–5%	0	—(n/a)[a]
6–10%	4	0.5 (0.0, 1.0)
11–30%	71	16.0 (11.0, 20.9)
31–50%	81	12.8 (9.5, 16.1)
51–70%	35	6.9 (3.1, 10.6)
71–90%	22	3.0 (1.6, 4.4)
91–100%	80	12.5 (8.7, 16.3)
Number of respondents[b]	566	
Number of nonrespondents	126	
Languages Spoken[c]		
Spanish	271	91.2 (87.4, 95.0)
Arabic	5	1.4 (0.1, 2.6)
American Sign Language	11	2.9 (1.1, 4.8)
Cambodian/Khmer	2	0.6 (0.0, 1.4)
Cantonese/Mandarin	17	5.2 (2.1, 8.4)
Farsi	3	1.0 (0.0, 2.2)
French/Creole	27	7.0 (3.3, 10.8)
Fulani	0	—(n/a)[a]
Hindi	19	4.2 (1.9, 6.5)
Hmong	4	1.3 (0.0, 2.9)
Korean	9	2.6 (0.7, 4.4)
Laotian	0	—(n/a)[a]
Portuguese	8	2.4 (0.2, 4.5)
Punjabi	9	2.6 (0.5, 4.6)
Russian	10	3.8 (1.0, 6.7)
Somali	3	0.8 (0.0, 1.8)
Swahili	1	0.3 (0.0, 0.9)
Tamil	2	0.6 (0.0, 1.5)
Tagalog	19	5.4 (2.6, 8.3)

(continued)

Table I-23. Information on Languages Spoken by WIC Site Staff Members Who Provide Nutrition Education (RQ4: SV1_15, SV1_16) (continued)

	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Urdu	9	2.5 (0.6, 4.4)
Vietnamese	7	2.7 (0.2, 5.2)
Other[d]	24	8.2 (4.4, 12.1)
Number of respondents	301	
Number of nonrespondents	0	

Source: 2014 Site Survey, Version 1

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Four respondents were excluded because of invalid data.

[c] Only sites that provide nutrition education in languages other than English were eligible to answer this question (n = 301). Respondents could select multiple responses.

[d] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response. Other write-in responses that were not recoded included Hebrew, Navajo, and Polish.

Table I-24. Alignment of Characteristics of Nutrition Education Staff Members with Local WIC Participant Characteristics[a]—Site Survey and Census Data (RQ16a, Multiple Sources)

Characteristic	Low Alignment		Medium Alignment		High Alignment	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Ethnicity (n = 624)						
Hispanic or Latino	126	18.8 (14.6, 23.1)	238	37.6 (32.1, 43.1)	260	43.6 (38.0, 49.2)
Primary Language (n = 567)						
Primary language is not English	226	39.7 (33.6, 45.8)	231	37.5 (31.9, 43.1)	110	22.8 (17.5, 28.1)

Source: 2014 Site Survey, Version 1 and Census data on ethnicity/race.

Notes: Analyses were conducted using the Version 1 Site Survey weights. The number of respondents for the analysis is provided in the table. CI = confidence interval.

[a] See Section 3.3.4 of the report for a description of the analysis conducted to assess alignment of the characteristics of nutrition education staff members with the local population of WIC participants. Low alignment = the percentage category for staff is two or more categories lower or higher than all other percentage categories for participants; Medium alignment = the percentage category for staff is one category lower or higher than the percentage category for participants; High alignment = the percentage category for staff is the same as the percentage category for participants.

Table I-25. Methods Used by Sites to Provide Nutrition Education to Non-English-Speaking Participants—Site Survey (RQ16b: SV2_16)

Methods	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Site has bilingual WIC staff members who provide nutrition education	391	51.3 (44.4, 58.2)
Site has interpreters or translators available	296	40.2 (34.1, 46.4)
Site staff members use language line/phone interpreter service	484	72.5 (66.6, 78.4)
Site staff members use translation program on the computer	64	8.9 (4.8, 13.0)
Participants bring family member or friend to interpret	349	50.1 (42.8, 57.4)
Participants use translated self-study or Internet modules	77	8.9 (6.1, 11.6)
Other	1	0.1 (0.0, 0.4)
Number of respondents	659	
Number of nonrespondents	0	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education to non-English-speaking participants were included in the analysis (n = 659). CI = confidence interval.

Respondents could select multiple responses.

Table I-26. State Agency Policy on Allowable Methods of Nutrition Education—State Plan Abstraction (RQ10: State Plan IIA3c)

	Geographic States and District of Columbia (n = 51)		ITOs and Territories (n = 25)		All SAs (n = 76)	
Methods	**n**	**%**	**n**	**%**	**n**	**%**
Face-to-face, individually or group	51	100.0	25	100.0	76	100.0
Online/Internet	33	64.7	2	8.0	35	46.1
Telephone	36	70.6	14	56.0	50	65.8
Food demonstration	42	82.4	16	64.0	58	76.3
Delivery method performed by other agencies, that is, EFNEP	36	70.6	9	36.0	45	59.2
Other	26	51.0	5	20.0	31	40.8

Source: Abstraction of 2014 State Plans, n = 76. Data were not available for 14 SAs that were all ITOs.

Table I-27. Modes Used to Provide Nutrition Education (Includes All Types of Visits)—Local Agency Survey (LA11)

Modes	Unweighted Number of LAs	Weighted % of LAs (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	893	100.0 (n/a)
One-on-one counseling: Telephone	307	36.4 (33.2, 39.6)
One-on-one counseling: Video conferencing	32	3.7 (2.4, 4.9)
Group education sessions	587	57.9 (54.6, 61.2)
Onsite technology based	216	21.4 (19.0, 23.8)
Offsite technology based	437	47.5 (44.3, 50.7)
Other nutrition education activities[a]	413	46.6 (43.4, 49.8)
Number of respondents	893	
Number of nonrespondents	0	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

[a] Other nutrition education activities were defined in the survey as “includes monthly topics, worksheets, videos, and self-study modules.” An “other, specify” option was not provided for this question.

Table I-28. Modes Used to Provide Nutrition Education (Includes All Types of Visits)—Site Survey (SV1&2_6)

Modes	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	1,400	99.9 (99.8, 100.0)
One-on-one counseling: Telephone	529	41.7 (37.1, 46.3)
One-on-one counseling: Video conferencing	42	4.6 (2.1, 7.2)
Group education sessions	768	48.9 (44.4, 53.5)
Onsite technology based	281	19.3 (15.7, 22.9)
Offsite technology based	654	47.9 (43.2, 52.6)
Other nutrition education activities[a]	660	48.5 (43.9, 53.2)
Number of respondents	1,401	
Number of nonrespondents	0	

Source: 2014 Site Survey, Versions 1 and 2.

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Table I-29. Modes Used to Deliver Nutrition Education by Type of Visit as Reported by Local Agencies—Local Agency Survey (RQ10: LA11)

Modes	Enrollment Certification (n = 875)		Recertification (n = 875)		Mid-Certification (n = 847)		Secondary Education Follow-Up (n = 865)		High-Risk Follow-Up (n = 850)		Other (n = 97)	
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	874	99.9 (99.7, 100.0)	872	99.7 (99.5, 100.0)	836	98.8 (98.1, 99.4)	794	92.7 (91.0, 94.4)	847	99.7 (99.3, 100.0)	72	76.5 (68.8, 84.1)
One-on-one counseling: Telephone	87	11.8 (9.3, 14.3)	39	5.5 (3.6, 7.4)	58	7.5 (5.4, 9.5)	175	23.3 (20.3, 26.3)	196	23.0 (20.2, 25.8)	36	49.9 (40.1, 59.7)
One-on-one counseling: Video conferencing	11	1.5 (0.6, 2.4)	12	1.6 (0.7, 2.5)	9	1.1 (0.3, 1.9)	18	1.7 (0.9, 2.4)	18	2.2 (1.2, 3.3)	1	0.6 (0.2, 1.1)
Group education sessions	177	18.5 (16.0, 21.0)	60	5.5 (4.0, 7.1)	110	12.5 (10.3, 14.8)	519	51.5 (48.2, 54.8)	85	8.8 (6.9, 10.7)	36	37.2 (27.7, 46.8)
Onsite technology based	61	6.5 (5.0, 8.1)	23	2.0 (1.3, 2.7)	51	6.5 (4.9, 8.0)	186	17.9 (15.7, 20.2)	25	2.5 (1.6, 3.4)	9	11.3 (3.5, 19.0)
Offsite technology based	103	13.3 (10.8, 15.9)	40	4.8 (3.1, 6.5)	72	10.7 (8.3, 13.1)	382	42.4 (39.1, 45.6)	48	6.3 (4.4, 8.2)	19	21.1 (12.2, 29.9)

(continued)

Table I-29. Modes Used to Deliver Nutrition Education by Type of Visit as Reported by Local Agencies—Local Agency Survey (RQ10: LA11) (continued)

Modes	Enrollment Certification (n = 875)		Recertification (n = 875)		Mid-Certification (n = 847)		Secondary Education Follow-Up (n = 865)		High-Risk Follow-Up (n = 850)		Other (n = 97)	
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Other nutrition education activities[a]	161	21.3 (18.4, 24.3)	105	14.6 (12.0, 17.3)	130	19.3 (16.4, 22.2)	348	41.0 (37.7, 44.3)	96	14.5 (11.9, 17.2)	31	36.3 (26.4, 46.3)
Don't know	0	—(n/a)[b]	1	0.1 (0.0, 0.4)	5	0.4 (0.2, 0.5)	5	0.5 (0.1, 1.0)	1	0.1 (0.0, 0.1)	8	7.3 (3.2, 11.3)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The unweighted number of LAs that provides each type of visit is shown in the column header. The overall number of nonrespondents for this question = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

[a] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

[b] An estimate is not provided because no respondents selected this response.

Table I-30. Modes Used to Deliver Nutrition Education by Type of Visit as Reported by WIC Sites—Site Survey (RQ10: SV1& 2_5, SV1&2_6)

Modes	Enrollment Certification (n = 1,381)		Recertification (n = 1,381)		Mid-Certification (n = 1,319)		Secondary Education Follow-Up (n = 1,354)		High-Risk Follow-Up (n = 1,309)		Other Type of Visit (n = 47)	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	1,379	99.9 (99.9, 100.0)	1,375	99.6 (99.2, 99.9)	1,311	99.5 (99.1, 99.8)	1,228	92.6 (90.8, 94.3)	1,298	99.5 (99.1, 99.8)	37	72.9 (57.7, 88.1)
One-on-one counseling: Telephone	162	14.1 (10.5, 17.6)	90	10.0 (6.5, 13.4)	127	13.7 (9.9, 17.5)	321	27.8 (23.5, 32.2)	367	32.3 (27.6, 37.0)	15	28.9 (14.7, 43.0)
One-on-one counseling: Video conferencing	15	1.9 (0.0, 3.9)	12	2.2 (0.1, 4.3)	10	1.2 (0.2, 2.2)	25	2.3 (1.0, 3.6)	25	3.7 (1.1, 6.3)	2	4.2 (0.0, 10.1)
Group education sessions	254	18.7 (15.5, 21.9)	88	7.5 (5.0, 10.1)	147	11.5 (8.6, 14.3)	691	44.3 (39.9, 48.7)	126	9.5 (6.7, 12.3)	17	32.0 (17.4, 46.5)
Onsite technology based	82	7.6 (4.6, 10.6)	39	4.5 (1.7, 7.4)	81	7.8 (4.6, 10.9)	242	17.5 (13.9, 21.1)	44	4.8 (1.8, 7.8)	1	0.7 (0.0, 2.0)
Offsite technology based	161	14.4 (10.9, 17.9)	68	7.8 (4.5, 11.0)	119	11.8 (8.2, 15.4)	587	44.2 (39.6, 48.9)	86	7.1 (4.5, 9.7)	8	20.7 (6.3, 35.0)

(continued)

Table I-30. Modes Used to Deliver Nutrition Education by Type of Visit as Reported by WIC Sites—Site Survey (RQ10: SV1& 2_5, SV1&2_6) (continued)

Modes	Enrollment Certification (n = 1,381)		Recertification (n = 1,381)		Mid-Certification (n = 1,319)		Secondary Education Follow-Up (n = 1,354)		High-Risk Follow-Up (n = 1,309)		Other Type of Visit (n = 47)	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[a]	269	24.9 (20.3, 29.6)	195	19.3 (14.7, 23.8)	219	22.5 (17.9, 27.2)	574	43.5 (38.9, 48.0)	195	20.2 (15.4, 25.0)	11	19.8 (7.6, 32.0)
Don't know	0	—(n/a)[b]	4	0.2 (0.0, 0.5)	3	0.1 (0.0, 0.2)	15	1.0 (0.3, 1.8)	2	0.1 (0.0, 0.3)	2	2.3 (0.0, 6.5)

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The unweighted number of sites that provides each type of visit is shown in the column header. The overall number of nonrespondents for this question = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

[a] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

[b] An estimate is not provided because no respondents selected this response.

Table I-31. Frequency of Modes Used to Provide Nutrition Education for Certification Visits—Site Survey (RQ23a: SV2_10)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	684	0	—(n/a)[a]	0	—(n/a)[a]	4	0.5 (0.0, 1.0)	2	0.2 (0.0, 0.4)	21	7.4 (1.0, 13.7)	657	92.0 (85.6, 98.3)
One-on-one counseling: Telephone	644	447	62.7 (55.8, 69.5)	140	24.1 (18.8, 29.3)	35	5.4 (3.1, 7.6)	15	6.8 (0.1, 13.6)	4	0.9 (0.0, 1.9)	3	0.2 (0.0, 0.4)
One-on-one counseling: Video conferencing	639	618	95.1 (90.7, 99.4)	12	2.2 (0.0, 4.4)	4	2.3 (0.0, 6.1)	2	0.2 (0.0, 0.4)	2	0.2 (0.0, 0.6)	1	0.1 (0.0, 0.2)
Group education sessions	648	517	78.6 (73.2, 84.0)	43	6.2 (3.7, 8.7)	26	4.1 (2.2, 6.0)	16	3.5 (1.3, 5.7)	23	2.3 (1.2, 3.5)	23	5.2 (1.3, 9.2)
Onsite technology based	643	588	85.8 (79.1, 92.6)	30	6.9 (3.1, 10.7)	12	5.2 (0.0, 11.0)	6	1.0 (0.1, 2.0)	1	0.1 (0.0, 0.3)	6	0.9 (0.0, 2.0)
Offsite technology based	639	537	79.1 (72.6, 85.6)	35	8.5 (4.5, 12.6)	34	7.6 (1.8, 13.5)	14	2.1 (0.7, 3.5)	15	2.2 (0.9, 3.6)	4	0.4 (0.0, 0.8)

(continued)

Table I-31. Frequency of Modes Used to Provide Nutrition Education for Certification Visits—Site Survey (RQ23a: SV2_10) (continued)

Modes	Unweighted Number of Sites for Type of Method	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[b]	648	493	69.8 (62.7, 77.0)	37	7.1 (3.9, 10.4)	31	3.9 (2.1, 5.7)	20	3.9 (0.0, 7.8)	27	6.8 (1.0, 12.6)	40	8.4 (4.0, 12.9)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at certification visits were eligible to answer this question (n = 695). The overall number of nonrespondents for this question = 10. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Table I-32. Frequency of Modes Used to Provide Nutrition Education for Mid-Certification Visits—Site Survey (RQ23a: SV2_11)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	653	1	0.4 (0.0, 1.1)	1	0.1 (0.0, 0.3)	12	1.6 (0.6, 2.6)	9	1.2 (0.3, 2.2)	29	8.5 (1.9, 15.1)	601	88.2 (81.6, 94.8)
One-on-one counseling: Telephone	623	447	66.6 (59.3, 73.8)	138	21.4 (16.4, 26.5)	17	6.6 (0.4, 12.8)	12	3.9 (0.0, 8.0)	4	0.9 (0.0, 2.0)	5	0.6 (0.0, 1.3)
One-on-one counseling: Video conferencing	614	598	95.0 (90.4, 99.5)	14	4.6 (0.1, 9.1)	1	0.4 (0.0, 1.0)	1	0.1 (0.0, 0.3)	0	—(n/a)[a]	0	—(n/a)[a]
Group education sessions	619	517	83.0 (77.8, 88.2)	36	5.4 (2.8, 8.0)	19	2.6 (1.1, 4.0)	16	3.2 (1.1, 5.2)	16	1.6 (0.7, 2.6)	15	4.2 (0.4, 8.0)
Onsite technology based	613	567	87.7 (80.8, 94.6)	21	8.1 (1.3, 14.8)	11	1.1 (0.4, 1.9)	8	1.8 (0.3, 3.3)	1	0.1 (0.0, 0.3)	5	1.2 (0.0, 3.1)
Offsite technology based	621	536	80.8 (73.8, 87.8)	33	11.2 (4.3, 18.1)	21	3.0 (1.3, 4.7)	14	1.9 (0.7, 3.1)	10	1.8 (0.5, 3.1)	7	1.4 (0.0, 3.3)

(continued)

Table I-32. Frequency of Modes Used to Provide Nutrition Education for Mid-Certification Visits—Site Survey (RQ23a: SV2_11) (continued)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[b]	621	488	73.0 (65.5, 80.5)	35	5.2 (3.0, 7.5)	25	6.6 (0.5, 12.6)	22	5.7 (1.3, 10.1)	13	1.6 (0.6, 2.6)	38	7.9 (3.6, 12.2)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at mid-certification visits were eligible to answer this question (n = 666). The overall number of nonrespondents for this question = 11. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Other nutrition education activities were defined in the survey as “includes monthly topics, worksheets, videos, and self-study modules.” An “other, specify” option was not provided for this question.

Table I-33. Frequency of Modes Used to Provide Nutrition Education for Secondary Education Follow-Up Visits—Site Survey (RQ23a: SV2_12)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	670	8	0.9 (0.2, 1.5)	62	7.6 (3.9, 11.3)	99	10.2 (7.3, 13.0)	93	12.8 (8.3, 17.3)	98	16.4 (10.5, 22.3)	310	52.2 (45.3, 59.2)
One-on-one counseling: Telephone	636	367	55.1 (48.3, 61.9)	185	28.7 (23.2, 34.2)	47	9.7 (3.8, 15.6)	23	4.6 (0.7, 8.5)	9	1.5 (0.3, 2.6)	5	0.4 (0.0, 0.8)
One-on-one counseling: Video conferencing	627	621	99.1 (98.1, 100.0)	5	0.8 (0.0, 1.8)	1	0.1 (0.0, 0.2)	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]
Group education sessions	645	277	46.9 (39.6, 54.3)	79	13.1 (9.0, 17.1)	82	11.8 (7.3, 16.3)	61	10.4 (6.7, 14.1)	71	7.3 (4.9, 9.7)	75	10.5 (6.3, 14.7)
Onsite technology based	633	498	75.9 (69.0, 82.7)	53	12.3 (6.1, 18.5)	36	5.2 (2.7, 7.6)	24	3.2 (1.5, 4.8)	13	2.1 (0.4, 3.7)	9	1.4 (0.0, 3.3)
Offsite technology based	648	316	47.9 (41.1, 54.7)	95	18.9 (12.4, 25.5)	102	16.6 (11.6, 21.5)	56	6.1 (4.0, 8.2)	47	6.3 (3.8, 8.9)	32	4.2 (1.7, 6.7)

(continued)

Table I-33. Frequency of Modes Used to Provide Nutrition Education for Secondary Education Follow-Up Visits—Site Survey (RQ23a: SV2_12) (continued)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[b]	648	299	45.8 (39.4, 52.2)	77	15.2 (8.9, 21.4)	72	12.8 (7.9, 17.7)	54	7.6 (5.0, 10.3)	71	8.4 (5.9, 11.0)	75	10.1 (5.9, 14.4)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at secondary education follow-up visits were eligible to answer this question (n = 685). The overall number of nonrespondents for this question = 11. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Other nutrition education activities were defined in the survey as “includes monthly topics, worksheets, videos, and self-study modules.” An “other, specify” option was not provided for this question.

Table I-34. Frequency of Modes Used to Provide Nutrition Education for High-Risk Follow-Up Visits—Site Survey (RQ23a: SV2_13)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	658	6	0.6 (0.1, 1.1)	2	0.3 (0.0, 0.7)	4	2.3 (0.0, 6.0)	11	1.0 (0.2, 1.9)	38	5.1 (2.9, 7.3)	597	90.6 (86.4, 94.9)
One-on-one counseling: Telephone	636	339	49.5 (42.6, 56.3)	194	29.2 (23.5, 35.0)	59	12.1 (5.9, 18.2)	26	4.9 (2.8, 7.0)	8	3.2 (0.0, 7.1)	10	1.1 (0.3, 2.0)
One-on-one counseling: Video conferencing	624	612	95.9 (91.6, 100.0)	7	1.7 (0.0, 3.8)	1	2.0 (0.0, 5.8)	0	—(n/a)[a]	2	0.1 (0.0, 0.3)	2	0.3 (0.0, 0.8)
Group education sessions	629	541	87.3 (82.7, 92.0)	50	5.9 (3.4, 8.4)	18	2.3 (1.1, 3.5)	10	1.9 (0.0, 4.2)	3	0.3 (0.0, 0.6)	7	2.3 (0.0, 5.4)
Onsite technology based	627	590	90.4 (84.1, 96.7)	20	5.8 (0.0, 11.7)	8	1.8 (0.1, 3.6)	2	0.4 (0.0, 1.1)	4	0.7 (0.0, 1.4)	3	1.0 (0.0, 2.8)
Offsite technology based	630	551	83.6 (76.7, 90.4)	44	10.2 (3.6, 16.8)	19	3.6 (1.3, 5.8)	7	0.7 (0.1, 1.4)	6	1.0 (0.0, 2.1)	3	1.0 (0.0, 2.8)

(continued)

Table I-34. Frequency of Modes Used to Provide Nutrition Education for High-Risk Follow-Up Visits—Site Survey (RQ23a: SV2_13) (continued)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[b]	634	484	71.6 (64.2, 79.0)	50	10.3 (4.1, 16.4)	43	8.0 (3.4, 12.5)	10	1.6 (0.0, 3.4)	19	2.1 (0.9, 3.3)	28	6.5 (2.5, 10.5)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at high-risk follow-up visits were eligible to answer this question (n = 669). The overall number of nonrespondents for this question = 8. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Other nutrition education activities were defined in the survey as “includes monthly topics, worksheets, videos, and self-study modules.” An “other, specify” option was not provided for this question.

Table I-35. Frequency of Modes Used to Provide Nutrition Education for Respondents Who Indicated Visits Other than Certification and Follow-Ups—Site Survey (RQ23a: SV2_14)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	25	1	7.0 (0.0, 20.1)	1	5.6 (0.0, 16.0)	1	2.0 (0.0, 5.8)	2	4.5 (0.0, 10.4)	3	7.1 (0.0, 15.0)	17	73.8 (55.1, 92.5)
One-on-one counseling: Telephone	25	13	49.9 (26.3, 73.4)	5	23.0 (3.3, 42.6)	5	23.3 (3.1, 43.5)	1	1.8 (0.0, 5.3)	1	2.1 (0.0, 6.0)	0	—(n/a)[a]
One-on-one counseling: Video conferencing	24	24	100.0 (n/a)	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]
Group education sessions	24	18	74.7 (52.7, 96.8)	1	7.6 (0.0, 21.6)	2	10.3 (0.0, 28.7)	0	—(n/a)[a]	3	7.3 (0.0, 16.9)	0	—(n/a)[a]
Onsite technology based	23	21	95.1 (88.0, 100.0)	1	3.4 (0.0, 9.9)	1	1.5 (0.0, 4.4)	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]
Offsite technology based	24	21	92.0 (83.1, 100.0)	1	3.3 (0.0, 9.4)	2	4.8 (0.0, 11.2)	0	—(n/a)[a]	0	—(n/a)[a]	0	—(n/a)[a]

(continued)

Table I-35. Frequency of Modes Used to Provide Nutrition Education for Respondents Who Indicated Visits Other than Certification and Follow-Ups—Site Survey (RQ23a: SV2_14) (continued)

Modes	Unweighted Number of Sites for Type of Mode	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other nutrition education activities[b]	24	17	84.0 (71.1, 96.8)	2	5.6 (0.0, 13.3)	3	6.3 (0.0, 13.3)	0	—(n/a)[a]	1	2.1 (0.0, 6.2)	1	2.0 (0.0, 5.7)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide nutrition education at visits other than certification and follow-up visits were eligible to answer this question (n = 26). The number of nonrespondents for this question = 1. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

[b] Other nutrition education activities were defined in the survey as "includes monthly topics, worksheets, videos, and self-study modules." An "other, specify" option was not provided for this question.

Table I-36. Methods Used to Determine Discussion Topics for Most One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_18)

Methods	Unweighted Number of Sites for Method	Ranked as Number 1—Used Most Often		Ranked as Number 2—Used Next Most Often		Ranked as Number 3—Used Least Often	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Staff member chooses the most appropriate topic(s)	571	119	17.0 (12.6, 21.4)	99	16.2 (12.0, 20.3)	353	66.8 (60.5, 73.1)
Participant chooses the topic(s) she wants to talk about	577	272	52.4 (44.9, 59.9)	179	28.3 (22.0, 34.7)	126	19.2 (14.6, 23.9)
Participant and staff member choose the topic(s) together	574	191	31.0 (24.6, 37.4)	298	55.7 (48.5, 62.9)	85	13.3 (9.5, 17.1)
Other	3	2	89.6 (66.4, 100.0)	0	—(n/a)[a]	1	10.4 (0.0, 33.6)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. The unweighted number of sites for each method is provided in the table. The overall number of respondents for this question = 584 and the number of nonrespondents = 121. CI = confidence interval, n/a = not applicable.

Respondents were not required to rank the methods as "1", "2," and "3"; for example, a respondent could rank all three methods as "1" or only rank two of the methods.

[a] An estimate is not provided because no respondents selected this response.

Table I-37. Frequency that Circle Charts or Other Visual Aids Are Used to Help Participants Choose Discussion Topics—Site Survey (RQ23a: SV2_19)

Frequency of Use	Number of Responding Sites	Weighted % of Sites (95% CI)
Circle charts or other visuals are not used	247	31.4 (25.7, 37.1)
Rarely	164	24.7 (18.8, 30.6)
Occasionally	119	21.9 (14.8, 28.9)
Sometimes	91	10.9 (7.8, 14.1)
Often	56	7.7 (4.5, 11.0)
Almost always	19	3.3 (0.3, 6.4)
Number of respondents	696	
Number of nonrespondents	9	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval.

Respondents were provided the following definition of circle charts: "Circle charts display pictures of possible topics relevant to the participant with each circle representing a topic. The nutrition educator asks the participant to choose one topic as the focus of their discussion."

Table I-38. Topics Most Often Discussed with Pregnant Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Breastfeeding	638	98.9 (98.1, 99.7)
Weight gain during pregnancy	512	76.0 (69.1, 83.0)
Prenatal nutrition/diet	486	75.3 (70.1, 80.4)
Nausea, vomiting, or constipation	382	59.6 (53.1, 66.1)
Vitamin and mineral supplements	331	49.9 (43.0, 56.8)
Iron/anemia	299	48.7 (41.7, 55.8)
Food safety/foods to avoid	280	42.6 (36.0, 49.3)
Folic acid	240	39.6 (32.7, 46.6)
Fruit and vegetables	197	29.9 (23.8, 36.0)
Healthy snacking	155	22.7 (17.8, 27.6)
Preparing for a healthy pregnancy	137	20.2 (15.3, 25.1)
Dental care	101	18.4 (12.8, 24.0)
Physical activity	135	18.3 (14.1, 22.4)
Calcium intake	115	17.4 (12.7, 22.1)
Infant feeding	105	16.8 (10.8, 22.9)
Milk (lower fat choices/consumption)	80	14.0 (8.3, 19.7)
Water consumption	71	11.6 (5.8, 17.4)
Having enough to eat	47	7.0 (4.0, 9.9)
Sugar-sweetened beverages	45	5.9 (3.6, 8.3)
Diabetes	26	4.1 (1.6, 6.7)
Shopping for and preparing healthy foods	21	3.4 (1.4, 5.4)
Pica (eating nonfood items)	18	3.2 (0.7, 5.6)
Cooking/meal preparation	29	3.1 (1.7, 4.5)
Whole grains	12	2.9 (0.4, 5.4)
High blood pressure/hypertension	19	2.6 (1.1, 4.0)
Protein intake	18	2.5 (0.8, 4.1)
Postpartum depression/self-care	9	1.9 (0.6, 3.3)
Postpartum weight loss	4	0.4 (0.0, 0.8)

(continued)

Table I-38. Topics Most Often Discussed with Pregnant Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20) (continued)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other[a]	12	3.4 (0.0, 7.2)
Respondents	647	
Nonrespondents	9	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval, n/a = not applicable.

Respondents were instructed to choose up to seven responses. The Web-based survey would accept more than 7 responses; 49 respondents selected more than 10 responses and were excluded from the analysis. Topics are ranked in order of highest to lowest frequency.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-39. Topics Most Often Discussed with Postpartum Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Infant feeding	485	71.2 (65.9, 76.4)
Postpartum weight loss	474	68.2 (61.1, 75.2)
Physical activity	413	61.8 (55.1, 68.4)
Iron/anemia	378	58.5 (52.0, 65.0)
Vitamin and mineral supplements	306	45.9 (39.5, 52.4)
Fruit and vegetables	304	44.9 (37.9, 51.8)
Postpartum depression/self-care	306	44.8 (38.2, 51.4)
Healthy snacking	250	38.9 (32.4, 45.3)
Breastfeeding	231	38.1 (31.3, 45.0)
Folic acid	250	36.9 (29.8, 44.0)
Milk (lower fat choices/consumption)	139	20.4 (15.1, 25.7)
Water consumption	110	18.5 (12.4, 24.7)
Cooking/meal preparation	94	14.6 (10.5, 18.8)
Sugar-sweetened beverages	105	14.5 (10.1, 18.9)
Shopping for and preparing healthy foods	86	12.3 (8.1, 16.5)
Dental care	61	11.0 (5.9, 16.1)
Calcium intake	68	8.9 (5.5, 12.2)
Having enough to eat	68	8.8 (6.2, 11.5)
Whole grains	51	8.3 (4.5, 12.1)
Food safety/foods to avoid	32	5.8 (2.4, 9.3)
Prenatal nutrition/diet	11	5.5 (0.0, 11.2)
Weight gain during pregnancy	20	3.3 (1.5, 5.0)
High blood pressure/hypertension	12	1.8 (0.7, 3.0)
Preparing for a healthy pregnancy	14	1.8 (0.4, 3.2)
Pica (eating nonfood items)	7	1.2 (0.0, 2.7)
Diabetes	11	1.1 (0.2, 1.9)
Protein intake	6	1.1 (0.0, 2.4)

(continued)

Table I-39. Topics Most Often Discussed with Postpartum Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20) (continued)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Nausea, vomiting, or constipation	4	0.6 (0.0, 1.4)
Other[a]	12	3.3 (0.0, 7.0)
Respondents	663	
Nonrespondents	9	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval, n/a = not applicable.

Respondents were instructed to choose up to seven responses. The Web-based survey would accept more than 7 responses; 33 respondents selected more than 10 responses and were excluded from the analysis. Topics are ranked in order of highest to lowest frequency.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-40. Topics Most Often Discussed with Breastfeeding Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Breastfeeding	640	96.7 (95.1, 98.3)
Infant feeding	474	70.3 (65.1, 75.5)
Vitamin and mineral supplements	382	60.1 (54.1, 66.0)
Postpartum weight loss	325	45.6 (39.4, 51.8)
Water consumption	268	42.3 (35.3, 49.2)
Physical activity	277	42.1 (35.7, 48.4)
Healthy snacking	268	41.8 (35.4, 48.3)
Iron/anemia	267	38.4 (31.8, 45.1)
Fruit and vegetables	256	37.0 (30.3, 43.7)
Postpartum depression/self-care	220	32.7 (27.0, 38.5)
Folic acid	170	25.5 (19.0, 32.1)
Having enough to eat	139	17.9 (13.7, 22.0)
Milk (lower fat choices/consumption)	111	17.6 (12.3, 23.0)
Calcium intake	111	16.8 (11.8, 21.8)
Food safety/foods to avoid	78	10.7 (7.4, 14.0)
Shopping for and preparing healthy foods	64	10.3 (5.9, 14.8)
Cooking/meal preparation	61	9.1 (5.6, 12.7)
Sugar-sweetened beverages	53	8.7 (4.9, 12.5)
Whole grains	45	8.1 (4.2, 12.0)
Dental care	39	7.8 (3.1, 12.5)
Prenatal nutrition/diet	12	6.0 (0.2, 11.7)
Protein intake	34	5.1 (2.9, 7.4)
Weight gain during pregnancy	15	2.4 (0.9, 3.9)
High blood pressure/hypertension	7	1.2 (0.2, 2.2)
Pica (eating nonfood items)	4	1.0 (0.0, 2.4)
Nausea, vomiting, or constipation	5	0.7 (0.0, 1.5)
Preparing for a healthy pregnancy	6	0.7 (0.1, 1.4)
Diabetes	5	0.4 (0.0, 0.9)

Table I-40. Topics Most Often Discussed with Breastfeeding Women in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_20) (continued)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Other[a]	12	3.3 (0.0, 7.0)
Number of respondents	663	
Number of nonrespondents	9	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval.

Respondents were instructed to choose up to seven responses. The Web-based survey would accept more than 7 responses; 33 respondents selected more than 10 responses and were excluded from the analysis. Topics are ranked in order of highest to lowest frequency.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-41. Topics Most Often Discussed with Parents or Caregivers of Infants in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_21)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Breastfeeding	600	87.1 (83.0, 91.1)
Introduction of solid foods	585	82.7 (78.3, 87.1)
Formula preparation/feeding	553	75.1 (69.4, 80.8)
Infant growth and development	453	67.9 (62.6, 73.1)
Weaning from the bottle	414	57.4 (50.8, 64.0)
Constipation, diarrhea, or vomiting	299	40.3 (34.4, 46.1)
Overfeeding	259	37.1 (31.3, 42.8)
Inappropriate foods	189	30.9 (24.5, 37.2)
Propping the bottle	194	26.0 (20.9, 31.1)
Introduction of cow's milk	137	20.9 (15.1, 26.6)
Food intolerances/allergies	143	18.9 (13.9, 23.9)
Sugar-sweetened beverages	94	16.0 (11.2, 20.8)
Iron/anemia	74	15.8 (9.4, 22.2)
Colic	86	11.8 (7.3, 16.3)
Water consumption	52	7.5 (4.5, 10.5)
Parenting	41	5.6 (3.5, 7.6)
Physical activity	43	5.1 (3.2, 7.0)
Infant feeding practices	1	0.2 (0.0, 0.5)
Other[a]	8	0.5 (0.1, 1.0)
Number of respondents	695	
Number of nonrespondents	10	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval.

Respondents were instructed to choose up to seven responses; the Web-based survey would not accept more than seven responses. Topics are ranked in order of highest to lowest frequency.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-42. Topics Most Often Discussed with Parents or Caregivers of Children in One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_22)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Child feeding practices	461	68.3 (63.2, 73.4)
Child growth and development	461	65.1 (58.8, 71.3)
Picky eaters	407	59.9 (53.4, 66.3)
Healthy weight for child	391	55.2 (48.8, 61.7)
Fruit and vegetables	349	52.4 (46.4, 58.4)
Sugar-sweetened beverages	324	45.3 (39.0, 51.7)
Healthy snacks	313	43.0 (37.0, 49.1)
Milk	271	42.4 (35.8, 49.0)
Iron/anemia	258	42.1 (35.0, 49.3)
Dental health	275	40.9 (34.7, 47.2)
Physical activity	314	39.1 (33.4, 44.8)
Weaning from the bottle	264	36.2 (29.8, 42.6)
Portion sizes	218	27.1 (22.0, 32.2)
Family meals	127	19.9 (14.8, 25.0)
Inappropriate/sometimes foods	126	15.7 (11.5, 20.0)
Water consumption	75	12.1 (6.4, 17.9)
Screen time	69	10.5 (6.1, 14.9)
Cooking/meal preparation	40	4.9 (2.9, 7.0)
Whole grains	15	4.8 (1.8, 7.9)
Parenting	32	4.3 (2.4, 6.1)
Shopping for and preparing healthy foods	23	3.1 (1.4, 4.8)
Constipation, diarrhea, or vomiting	18	2.8 (0.5, 5.2)
Pica	0	—(n/a)[a]
Other[b]	2	0.5 (0.0, 1.6)
Number of respondents	695	
Number of nonrespondents	10	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval, n/a = not applicable.

Respondents were instructed to choose up to seven responses; the Web-based survey would not accept more than seven responses. Topics are ranked in order of highest to lowest frequency.

[a] An estimate is not provided because no respondents selected this response.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-43. Frequency that Participant Behavioral Goals Are Set During One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_23)

Frequency	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Goal setting is not part of one-on-one counseling sessions	15	2.4 (0.7, 4.2)
Rarely	12	1.7 (0.4, 2.9)
Occasionally	36	4.6 (2.6, 6.6)
Sometimes	72	11.8 (8.3, 15.3)
Often	172	25.6 (19.4, 31.7)
Almost always	398	53.9 (47.3, 60.5)
Number of respondents	705	
Number of nonrespondents	0	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval.

Table I-44. Methods Used to Select Participant Goals for Most One-on-One Counseling Sessions—Site Survey (RQ23a: SV2_24)

Methods	Unweighted Number of Sites for Method	Ranked as Number 1—Used Most Often		Ranked as Number 2—Used Next Most Often		Ranked as Number 3—Used Least Often	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Participant usually identifies the goal(s)	572	253	49.1 (41.3, 56.8)	145	24.8 (18.7, 30.9)	174	26.2 (20.8, 31.6)
Staff member usually suggest the goal(s)	561	98	13.3 (9.4, 17.2)	129	21.7 (16.6, 26.9)	334	65.0 (58.6, 71.4)
Participant and staff member usually select the goal(s) together	566	226	38.4 (31.3, 45.5)	293	53.7 (46.1, 61.2)	47	7.9 (4.7, 11.1)
Other	2	0	—(n/a)[a]	2	100.0 (n/a)	0	—(n/a)[a]

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. The number of respondents for each method is provided in the table. The overall number of respondents for this question = 592 and the overall number of nonrespondents = 113. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

Table I-45. Methods Used to Follow Up with Participants about Goals or Concerns Discussed During Nutrition Contacts—Local Agency Survey (RQ11: LA13)

Methods	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Follow-up occurs at subsequent WIC visits	876	99.7 (99.4, 99.9)
Telephone calls	402	46.8 (43.5, 50.0)
Emails	34	4.7 (2.9, 6.5)
Text messages	72	8.4 (6.5, 10.2)
Video conferencing	7	0.6 (0.2, 0.9)
Other[a]	24	3.0 (1.8, 4.1)
Number of respondents	880	
Number of nonrespondents	13	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-46. Methods Used to Follow Up with Participants about Goals or Concerns Discussed During Nutrition Contacts—Site Survey (RQ11: SV2_15)

Methods	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Follow-up occurs at subsequent WIC visits	696	99.2 (98.4, 100.0)
Telephone calls	308	47.7 (41.4, 54.0)
Emails	26	5.5 (0.2, 10.8)
Text messages	47	9.6 (3.9, 15.3)
Video conferencing	1	0.1 (0.0, 0.2)
Other[a]	12	3.5 (0.0, 7.1)
Number of respondents	700	
Number of nonrespondents	5	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-47. Percentage of Participants Served at All Sites Operated by the Local Agency that Receive Nutrition Education Through Group Education Sessions—Local Agency Survey (RQ23a: LA12a)

Percentage of Participants	Unweighted Number of LAs	Weighted % of LAs (95% CI)
1–10%	187	38.1 (34.0, 42.1)
11–39%	148	24.8 (21.5, 28.1)
40–59%	78	11.0 (9.2, 12.8)
60–89%	91	14.8 (12.3, 17.4)
90% or more	58	10.0 (7.9, 12.0)
Don't know	8	1.4 (0.6, 2.1)
Number of respondents	570	
Number of nonrespondents	11	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Only respondents that provide group education sessions were included in the analysis for this question (n = 581). CI = confidence interval.

Respondents were instructed to estimate if numbers were not readily available.

Table I-48. Frequency of Activities or Resources Used During Group Nutrition Education Sessions—Site Survey (RQ23b: SV2_25)

Activities/ Resources	Unweighted Number of Sites for Activity/ Resource	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Icebreakers/warm-up activities	374	38	9.6 (5.7, 13.4)	60	12.2 (8.0, 16.4)	28	10.9 (4.6, 17.3)	46	12.2 (7.0, 17.3)	82	19.9 (14.7, 25.1)	120	35.2 (26.0, 44.5)
Discussions between pairs of WIC participants	370	59	15.9 (10.5, 21.3)	68	23.4 (14.9, 31.9)	59	17.6 (11.5, 23.7)	71	18.9 (12.9, 24.9)	67	14.4 (9.7, 19.1)	46	9.8 (5.4, 14.2)
Educational props	376	13	5.7 (1.3, 10.1)	23	7.4 (3.0, 11.7)	52	11.2 (7.3, 15.2)	60	20.2 (11.7, 28.6)	122	28.0 (20.9, 35.2)	106	27.5 (19.6, 35.4)
Informational charts or displays	375	22	5.8 (2.6, 9.0)	33	7.9 (4.1, 11.7)	59	16.3 (9.1, 23.6)	83	26.5 (18.4, 34.7)	106	24.3 (17.9, 30.7)	72	19.2 (13.0, 25.3)
Food sampling/ demonstrations	373	128	33.4 (25.9, 41.0)	93	25.5 (17.5, 33.6)	61	16.5 (9.9, 23.1)	53	14.5 (9.3, 19.7)	25	4.8 (2.6, 7.1)	13	5.2 (0.2, 10.2)
Hands-on activity or game	369	68	21.0 (13.5, 28.4)	77	26.0 (17.5, 34.6)	85	19.4 (14.3, 24.5)	62	14.4 (9.9, 19.0)	54	11.8 (7.9, 15.6)	23	7.4 (1.3, 13.5)
Physical activity	368	147	37.5 (29.2, 45.8)	114	36.6 (27.6, 45.5)	64	16.4 (10.9, 22.0)	30	6.8 (3.6, 10.0)	13	2.7 (0.7, 4.8)	0	—(n/a)[a]

(continued)

Table I-48. Frequency of Activities or Resources Used During Group Nutrition Education Sessions (RQ23b: SV2_25)—Site Survey (continued)

Activities/ Resources	Unweighted Number of Sites for Activity/ Resource	Never		Rarely (<10%)		Occasionally (11–39%)		Sometimes (40–59%)		Often (60–89%)		Almost Always (≥90%)	
		Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
PowerPoint presentation	368	194	53.5 (44.8, 62.3)	61	15.1 (9.5, 20.6)	31	7.4 (3.8, 11.0)	25	9.0 (2.5, 15.4)	27	5.3 (2.7, 8.0)	30	9.7 (3.7, 15.6)
Video/DVD	366	71	18.6 (12.3, 25.0)	59	16.1 (9.9, 22.2)	70	20.3 (12.6, 28.1)	76	21.5 (14.3, 28.7)	56	17.7 (10.1, 25.3)	34	5.7 (3.2, 8.3)

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. The number of respondents for each activity/resource is provided in the table. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). The overall number of nonrespondents to this question = 6. CI = confidence interval, n/a = not applicable.

[a] An estimate is not provided because no respondents selected this response.

Table I-49. Methods Used to Determine Topics for Group Nutrition Education Sessions—Site Survey (RQ11: SV2_26)

Methods	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Each day, week, month, or quarter has a specific topic	199	53.5 (44.5, 62.4)
There are specific topics for participant categories (e.g., breastfeeding class, infant class)	289	80.1 (73.2, 87.0)
Participants select from a menu of topics when they schedule their appointments	31	8.3 (4.6, 12.0)
Topics are determined based on participants' interest during each group session	78	20.7 (13.1, 28.3)
Other[a]	7	2.1 (0.1, 4.1)
Number of respondents	370	
Number of nonrespondents	14	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). CI = confidence interval.

Respondents could select more than one response.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-50. Topics Most Often Discussed During Group Nutrition Education Sessions During Past 6 Months—Site Survey (RQ11: SV2_27)

Topics	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Breastfeeding	315	81.5 (75.0, 88.0)
Infant feeding practices	177	44.7 (36.2, 53.1)
Fruit and vegetables	132	40.7 (32.0, 49.3)
Milk	138	39.0 (31.0, 47.1)
Child feeding practices	134	37.8 (29.1, 46.5)
Healthy snacks	112	32.0 (24.3, 39.6)
Physical activity	111	28.0 (20.8, 35.1)
Introduction of solid foods	100	26.8 (19.7, 33.9)
Portion sizes	93	24.8 (17.4, 32.3)
Shopping for and preparing healthy foods	74	24.8 (16.1, 33.4)
Prenatal nutrition/diet	70	24.1 (15.2, 32.9)
Healthy weight for child	67	23.5 (14.7, 32.3)
Sugar-sweetened beverages	85	22.0 (14.6, 29.5)
Cooking/meal preparation	84	20.7 (14.3, 27.2)
Dental health	63	17.2 (10.9, 23.5)
Picky eaters	74	16.1 (11.2, 21.0)
Infant/child growth and development	43	14.0 (6.7, 21.4)
Iron/anemia	44	12.1 (6.0, 18.1)
Whole grains	37	10.6 (5.5, 15.7)
Inappropriate/sometimes foods	45	10.4 (4.5, 16.3)
Weaning from the bottle	39	8.6 (4.6, 12.7)
Water consumption	20	7.4 (1.9, 12.9)
Other[a]	20	7.1 (1.3, 13.0)
Healthy weight for mother	17	4.9 (2.0, 7.7)
Parenting	11	2.9 (0.8, 5.1)
Number of respondents	376	
Number of nonrespondents	8	

Source: 2014 Site Survey, Version 2

Notes: Estimates were weighted to represent the population of sites using the Version 2 Site Survey weights. Only sites that provide group nutrition education sessions were eligible to answer this question (n = 384). CI = confidence interval.

Respondents were instructed to choose up to seven responses; the Web-based survey would not accept more than seven responses. Topics are ranked in order of highest to lowest frequency.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-51. Percentage of Participants Served by All Sites Operated by the Local Agency that Receive Offsite Technology-Based Nutrition Education—Local Agency Survey (RQ11: LA12b)

Percentage of Participants	Unweighted Number of LAs	Weighted % of LAs (95% CI)
1–10%	183	54.1 (49.6, 58.6)
11–39%	120	24.6 (21.1, 28.2)
40–59%	53	8.7 (6.9, 10.5)
60–89%	45	8.6 (6.5, 10.7)
90% or more	9	1.2 (0.9, 1.5)
Don't know	11	2.8 (1.4, 4.1)
Number of respondents	421	
Number of nonrespondents	11	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Only respondents that provide offsite technology-based education were included in the analysis (n = 432). CI = confidence interval.

Respondents were instructed to estimate if numbers were not readily available.

Table I-52. Use of Onsite Reinforcement Methods—Local Agency Survey (RQ11: LA14)

Methods	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Brochures or written materials	874	99.6 (99.2, 99.9)
Bulletin boards with nutrition information	793	88.6 (86.4, 90.8)
Computer, kiosk, or tablet computer at site	165	16.0 (13.9, 18.0)
Cooking demonstrations	238	22.1 (19.8, 24.4)
Display tables with nutrition information	410	47.6 (44.4, 50.9)
Educational props	696	77.5 (74.7, 80.3)
Food tasting	255	26.2 (23.6, 28.9)
Nutrition education DVDs/videos viewed at site	511	52.3 (49.1, 55.6)
Support groups	425	43.2 (40.1, 46.3)
None	1	0.1 (0.0, 0.1)
Other[a]	10	1.5 (0.4, 2.5)
Number of respondents	878	
Number of nonrespondents	15	
One onsite method used[b]	20	2.8 (1.7, 4.0)
Two to three onsite methods used	166	23.7 (20.7, 26.7)
Four or more onsite methods used	692	73.4 (70.3, 76.5)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[b] Includes the one respondent who responded "none."

Table I-53. Use of Offsite Reinforcement Methods—Local Agency Survey (RQ11: LA14)

Methods	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Email messages with nutrition education content	17	2.3 (1.2, 3.3)
Grocery store tours	73	7.3 (5.9, 8.8)
Monthly or quarterly nutrition newsletter sent home	102	15.1 (12.3, 17.9)
Nutrition education DVDs/videos sent home	202	23.1 (20.4, 25.8)
Social media	205	24.5 (21.5, 27.4)
Technology-based education used outside of site	333	38.9 (35.6, 42.1)
Telephone calls with nutrition education content	153	20.6 (17.7, 23.6)
Text messages with nutrition education content	57	6.8 (5.2, 8.5)
None	235	28.2 (25.3, 31.1)
Other[a]	31	3.5 (2.3, 4.6)
Number of respondents	842	
Number of nonrespondents	51	
No offsite methods used	235	28.2 (25.3, 31.1)
One offsite method used	260	30.7 (27.6, 33.7)
Two to three offsite methods used	296	32.9 (29.9, 36.0)
Four or more offsite methods used	51	8.2 (5.9, 10.5)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-54. State Agency Policy on Requirements for Minimum Nutrition Education Standards—State Plan Abstraction (RQ21: State Plan IIA3b)

	Geographic States and District of Columbia (n = 50)		ITOs and Territories (n = 25)		All SAs (n = 75)	
	n	%	n	%	n	%
Participant Categories for Which Standards Are Specified						
Breastfeeding women	49	98.0	25	100.0	73	97.3
Postpartum women	48	96.0	24	96.0	74	98.7
Children	48	96.0	24	96.0	72	96.0
Infants	49	98.0	24	96.0	73	97.3
High-risk participants	49	98.0	23	92.0	72	96.0
Areas Addressed by the Standards						
Number of contacts	49	98.0	22	88.0	71	94.7
Content (WIC appropriate topics)	46	92.0	21	84.0	67	89.3
Nutrition topics relevant to participant assessment	48	96.0	20	80.0	68	90.7
Appropriate use of educational reinforcements	39	78.0	20	80.0	59	78.7

Source: Abstraction of 2014 State Plans, n = 75. Data were not available for 15 SAs that were mainly ITOs. Multiple responses allowed.

Table I-55. Policies and/or Protocols in Place for Providing Nutrition Education to Participants that are Identified as High Risk—Local Agency Survey and Site Survey (RQ21: LA 5, 6, 7; SV1&2_2, SV1&2_3)

	Local Agency Survey		Site Survey	
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
State agency has nutrition education policies and/or protocols for participants that are identified as high risk				
Yes, has policies/protocols	874	98.8 (98.2, 99.3)	NA	NA
No, does not have policies/protocols	13	1.2 (0.7, 1.8)	NA	NA
Number of respondents	887			
Number of nonrespondents	6			
Local Agency/site classifies participants into nutrition risk levels (e.g., high risk, not high risk)				
Yes, classifies	845	95.2 (93.9, 96.5)	1,285	93.0 (91.2, 94.8)
No, does not classify	43	4.8 (3.5, 6.1)	112	7.0 (5.2, 8.8)
Number of respondents	888		1,397	
Number of nonrespondents	5		4	
Modifications made based on participant's risk levels or nutrition risks[a]				
No modifications	14	1.2 (0.7, 1.8)	27	1.1 (0.6, 1.6)
More nutrition education contacts	424	49.3 (46.0, 52.5)	702	47.9 (43.2, 52.6)
Nutrition education from a dietitian, nutritionist, or other health professional	788	88.2 (85.9, 90.4)	1,195	89.4 (87.4, 91.5)
Longer appointment times	265	29.5 (26.6, 32.5)	498	35.2 (31.1, 39.3)
One-on-one counseling instead of group sessions or other types of education	589	65.3 (62.2, 68.4)	934	65.1 (61.1, 69.2)
More detailed and individualized care plans	598	65.8 (62.7, 68.9)	984	70.7 (66.5, 74.9)
More follow-up on referrals	466	51.0 (47.8, 54.3)	733	55.1 (50.8, 59.4)
Other[b]	0	—(n/a)[c]	15	0.7 (0.3, 1.2)
Number of respondents	880		1,381	
Number of nonrespondents	13		20	

Sources: 2014 Local Agency Survey; 2014 Site Survey, Versions 1 and 2

Notes: Estimates in Column 1 were weighted to represent the population of LAs using the Local Agency Survey weights. Estimates in Column 2 were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval, n/a = not applicable, NA = not asked.

[a] Respondents could select multiple responses.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[c] An estimate is not provided because no respondents selected this response.

Table I-56. Number of Nutrition Education Contacts Planned by Local Agencies for Participants Who Are Not High Risk for Each Participant Category and Time Period—Local Agency Survey (RQ21: LA8a)

Participant Category and Time Periods	Unweighted Number of LAs	Weighted Mean (95% CI)	Weighted % of LAs (95% CI) Number of Contacts Planned			
			1 to 3	4	5 to 6	>6
Prenatal woman, enrolling in 1st trimester	851	3.2 (3.1, 3.3)	65.5 (62.3, 68.7)	24.2 (21.2, 27.1)	7.3 (5.6, 9.0)	3.0 (1.6, 4.3)
Prenatal woman, enrolling in 2nd trimester	852	2.5 (2.4, 2.6)	88.8 (86.7, 91.0)	6.8 (5.2, 8.5)	3.1 (1.9, 4.3)	1.2 (0.4, 2.1)
Prenatal woman, enrolling in 3rd trimester	846	1.8 (1.7, 1.8)	96.8 (95.5, 98.2)	2.7 (1.4, 4.0)	— (n/a)[a]	0.4 (0.1, 0.8)
Breastfeeding woman, 6-month certification	654	2.4 (2.4, 2.5)	91.0 (88.7, 93.2)	5.2 (3.4, 6.9)	3.3 (1.9, 4.7)	0.6 (0.2, 1.0)
Breastfeeding woman, 12-month certification	793	4.0 (3.9, 4.1)	23.5 (20.5, 26.4)	52.8 (49.4, 56.3)	20.2 (17.3, 23.0)	3.5 (2.2, 4.9)
Postpartum woman, not breastfeeding, 6-month certification	849	2.1 (2.1, 2.2)	95.8 (94.6, 97.1)	3.1 (2.0, 4.2)	0.7 (0.2, 1.1)	0.4 (0.0, 0.7)
Infant, 6-month certification	580	2.5 (2.4, 2.5)	90.7 (88.3, 93.1)	6.3 (4.2, 8.3)	2.3 (1.1, 3.5)	0.8 (0.2, 1.3)
Infant, 12-month certification	813	4.1 (4.0, 4.2)	19.8 (17.0, 22.6)	57.5 (54.1, 60.9)	19.5 (16.7, 22.2)	3.3 (2.0, 4.5)
Child, 6-month certification	627	2.2 (2.1, 2.2)	97.1 (95.6, 98.5)	2.0 (0.6, 3.5)	0.1 (0.0, 0.2)	0.8 (0.3, 1.3)
Child, 12-month certification	738	3.7 (3.7, 3.8)	25.3 (22.1, 28.6)	64.1 (60.6, 67.6)	9.8 (7.6, 12.0)	0.8 (0.3, 1.3)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The overall number of nonrespondents for this question = 34. CI = confidence interval, n/a = not applicable.

Respondents were instructed to provide the number that is planned for the majority of participants, although the number of contacts may vary based on individual needs.

[a] An estimate is not provided because no respondents selected this response.

Table I-57. Number of Nutrition Education Contacts Planned by Local Agencies for Participants Identified as High Risk for Each Participant Category and Time Period—Local Agency Survey (RQ21: LA8)

Participant Category and Time Periods	Unweighted Number of LAs	Weighted Mean (95% CI)	Weighted % of LAs (95% CI) Number of Contacts Planned			
			1 to 3	4	5 to 6	>6
Prenatal woman, enrolling in 1st trimester	807	3.8 (3.7, 4.0)	48.9 (45.5, 52.3)	25.7 (22.7, 28.7)	18.2 (15.6, 20.7)	7.2 (5.2, 9.2)
Prenatal woman, enrolling in 2nd trimester	806	3.0 (2.9, 3.1)	72.6 (69.5, 75.7)	15.2 (12.7, 17.6)	11.0 (8.7, 13.2)	1.3 (0.3, 2.3)
Prenatal woman, enrolling in 3rd trimester	803	2.1 (2.1, 2.2)	93.8 (92.1, 95.5)	4.4 (3.0, 5.8)	1.5 (0.6, 2.5)	0.3 (0.0, 0.7)
Breastfeeding woman, 6-month certification	625	2.8 (2.7, 2.9)	82.8 (79.7, 85.8)	9.0 (6.7, 11.2)	7.3 (5.1, 9.6)	0.9 (0.3, 1.6)
Breastfeeding woman, 12-month certification	750	4.6 (4.4, 4.7)	19.8 (17.0, 22.6)	41.7 (38.2, 45.2)	30.7 (27.4, 33.9)	7.9 (5.7, 10.0)
Postpartum woman, not breastfeeding, 6-month certification	797	2.4 (2.4, 2.5)	88.7 (86.4, 91.0)	7.5 (5.6, 9.3)	3.7 (2.1, 5.3)	0.1 (0.1, 0.2)
Infant, 6-month certification	556	3.0 (2.9, 3.1)	74.1 (70.4, 77.9)	14.3 (11.4, 17.3)	11.0 (8.2, 13.8)	0.5 (0.1, 0.9)
Infant, 12-month certification	760	4.8 (4.6, 4.9)	17.1 (14.3, 19.9)	38.6 (35.2, 42.0)	33.9 (30.6, 37.2)	10.4 (8.1, 12.7)
Child, 6-month certification	594	2.7 (2.6, 2.8)	86.3 (83.4, 89.3)	8.0 (5.7, 10.3)	5.5 (3.4, 7.6)	0.2 (0.1, 0.2)
Child, 12-month certification	691	4.5 (4.3, 4.6)	18.4 (15.3, 21.4)	45.9 (42.2, 49.5)	31.1 (27.7, 34.5)	4.7 (3.0, 6.4)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Only LAs that classify participants into nutrition risk levels were eligible to answer this question (n = 850). The overall number of nonrespondents for this question = 40. CI = confidence interval.

Respondents were instructed to provide the number that is planned for the majority of participants, although the number of contacts may vary based on individual needs.

Table I-58. Number of Nutrition Education Contacts Offered by WIC Sites for Participants Who Are Not High Risk and the Estimated Percentage of Participants Who Received this Number of Contacts for Each Participant Category and Time Period—Site Survey (RQ21 & RQ22: SV1&2_4a)

Participant Category and Time Periods	Mean Number of Nutrition Education Contacts Offered by WIC Sites		Weighted % of Sites (95% CI) Number of Contacts Offered				Estimated Percentage of Participants Who Received the Number of Contacts Offered	
	Unweighted Number of Sites	Weighted Mean (95% CI)	1 to 3	4	5 to 6	>6	Unweighted Number of Sites	Weighted Mean (95% CI)
Prenatal woman, enrolling in 1st trimester	1,345	3.5 (3.4, 3.7)	62.7 (58.1, 67.3)	22.5 (18.8, 26.1)	10.0 (6.8, 13.2)	4.8 (1.9, 7.7)	1,258	74.9 (72.3, 77.4)
Prenatal woman, enrolling in 2nd trimester	1,342	2.7 (2.5, 2.8)	84.9 (80.9, 88.9)	8.6 (5.7, 11.6)	5.6 (2.7, 8.6)	0.8 (0.0, 1.7)	1,257	74.6 (72.0, 77.3)
Prenatal woman, enrolling in 3rd trimester	1,331	1.8 (1.7, 1.9)	95.5 (92.6, 98.4)	3.8 (1.0, 6.7)	0.4 (0.0, 0.9)	0.3 (0.0, 0.7)	1,251	75.0 (72.2, 77.8)
Breastfeeding woman, 6-month certification	952	2.5 (2.3, 2.7)	88.8 (84.4, 93.1)	6.1 (3.0, 9.2)	4.2 (1.0, 7.4)	0.9 (0.1, 1.7)	884	78.4 (75.7, 81.1)
Breastfeeding woman, 12-month certification	1,260	4.3 (4.0, 4.5)	20.6 (16.6, 24.6)	54.1 (49.4, 58.9)	19.9 (15.9, 23.9)	5.3 (2.2, 8.5)	1,175	74.2 (71.4, 77.0)
Postpartum woman, not breastfeeding, 6-month certification	1,347	2.2 (2.1, 2.3)	94.5 (91.6, 97.3)	3.0 (0.9, 5.0)	2.3 (0.4, 4.2)	0.3 (0.0, 0.6)	1,256	77.4 (74.8, 80.0)
Infant, 6-month certification	865	2.4 (2.3, 2.6)	90.3 (85.5, 95.0)	6.1 (2.7, 9.5)	3.5 (0.3, 6.8)	0.2 (0.0, 0.4)	798	82.5 (79.5, 85.5)
Infant, 12-month certification	1,290	4.3 (4.1, 4.4)	16.7 (13.2, 20.2)	57.8 (52.9, 62.6)	21.0 (16.9, 25.1)	4.5 (1.6, 7.5)	1,206	80.0 (77.4, 82.5)
Child, 6-month certification	938	2.1 (2.0, 2.2)	96.6 (93.5, 99.6)	2.8 (0.0, 5.8)	0.5 (0.0, 1.1)	0.1 (0.0, 0.4)	867	79.3 (76.5, 82.0)
Child, 12-month certification	1,163	4.0 (3.8, 4.2)	20.9 (17.1, 24.8)	64.4 (59.2, 69.5)	12.9 (8.9, 16.9)	1.8 (0.0, 3.9)	1,086	77.2 (74.4, 80.0)

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The overall number of nonrespondents for this question = 38. CI = confidence interval.

Respondents were instructed to provide the number that is planned for the majority of participants, although the number of contacts may vary based on individual needs. Respondents were instructed to provide estimates based on their experience and that it was not necessary to run a report or review participant records to answer the question.

Table I-59. Number of Nutrition Education Contacts Offered to Participants Identified as High Risk by WIC Sites and the Estimated Percentage of Participants Who Received this Number of Contacts for Each Participant Category and Time Period—Site Survey (RQ21 & RQ22: SV1&2_4b)

Participant Category and Time Periods	Number of Nutrition Education Contacts Offered by WIC Sites		Weighted % of Sites (95% CI) Number of Contacts Offered				Estimated Percentage of Participants Who Received the Number of Contacts Offered	
	Unweighted Number of Sites	Weighted Mean (95% CI)	1 to 3	4	5 to 6	>6	Unweighted Number of Sites[a]	Weighted Mean (95% CI)
Prenatal woman, enrolling in 1st trimester	1,219	4.1 (3.9, 4.3)	44.6 (39.7, 49.5)	26.8 (22.5, 31.1)	18.3 (14.4, 22.2)	10.3 (6.5, 14.1)	1,132	72.3 (69.4, 75.3)
Prenatal woman, enrolling in 2nd trimester	1,218	3.1 (2.9, 3.3)	70.3 (65.4, 75.2)	14.8 (11.4, 18.1)	12.7 (8.9, 16.5)	2.3 (0.0, 4.7)	1,131	72.8 (69.9, 75.6)
Prenatal woman, enrolling in 3rd trimester	1,213	2.1 (2.0, 2.3)	91.3 (87.5, 95.1)	6.5 (3.4, 9.6)	0.9 (0.1, 1.7)	1.3 (0.0, 3.6)	1,127	73.0 (69.9, 76.2)
Breastfeeding woman, 6-month certification	851	2.8 (2.6, 3.0)	77.8 (72.2, 83.4)	12.2 (8.2, 16.1)	9.2 (4.5, 13.9)	0.8 (0.0, 1.5)	782	75.9 (72.7, 79.1)
Breastfeeding woman, 12-month certification	1,134	4.6 (4.3, 4.9)	20.6 (16.4, 24.8)	43.3 (38.6, 48.1)	24.7 (20.7, 28.6)	11.4 (7.0, 15.7)	1,055	72.4 (69.3, 75.5)
Postpartum woman, not breastfeeding, 6-month certification	1,203	2.5 (2.3, 2.6)	89.2 (85.8, 92.7)	4.7 (2.9, 6.4)	6.0 (2.9, 9.1)	0.1 (0.0, 0.3)	1,111	74.1 (71.0, 77.2)
Infant, 6-month certification	789	2.9 (2.7, 3.0)	75.8 (69.6, 81.9)	13.5 (9.1, 17.9)	10.6 (5.7, 15.4)	0.2 (0.0, 0.4)	720	79.0 (75.7, 82.3)
Infant, 12-month certification	1,161	4.8 (4.6, 5.1)	14.4 (11.5, 17.3)	42.6 (37.8, 47.5)	29.2 (25.0, 33.4)	13.8 (9.4, 18.1)	1,078	76.6 (73.6, 79.5)
Child, 6-month certification	852	2.6 (2.4, 2.8)	84.1 (78.5, 89.8)	8.9 (4.9, 13.0)	6.8 (2.3, 11.2)	0.2 (0.0, 0.4)	782	75.8 (72.6, 79.1)
Child, 12-month certification	1,053	4.7 (4.4, 5.0)	17.2 (13.3, 21.1)	46.4 (41.3, 51.5)	26.8 (22.4, 31.2)	9.6 (5.3, 14.0)	979	73.2 (70.0, 76.5)

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. Only sites that classify participants into nutrition risk levels were eligible to answer this question (n = 1,289). The overall number of nonrespondents for this question = 57. CI = confidence interval.

Respondents were instructed to provide the number that is planned for the majority of participants, although the number of contacts may vary based on individual needs. Respondents were instructed to provide estimates based on their experience and that it was not necessary to run a report or review participant records to answer the question.

Table I-60. Amount of Time Planned by Local Agencies for Providing Nutrition Education by Type of Certification Visit—Local Agency Survey (RQ21: LA9, LA10)

Amount of Time	Enrollment Certification		Recertification, Not High Risk, 1 Person		Recertification, High Risk, 1 Person		Recertification, 2 or More Family Members	
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Less than 5 minutes	13	1.8 (0.8, 2.9)	24	2.6 (1.6, 3.6)	2	0.3 (0.0, 0.6)	3	0.4 (0.0, 0.9)
5–10 minutes	128	14.8 (12.5, 17.2)	222	25.2 (22.4, 28.0)	92	10.9 (8.8, 13.0)	47	6.1 (4.4, 7.8)
11–20 minutes	323	34.8 (31.8, 37.8)	371	41.5 (38.3, 44.8)	344	39.0 (35.8, 42.2)	197	21.6 (19.1, 24.2)
21–30 minutes	201	22.5 (19.9, 25.2)	191	23.6 (20.7, 26.5)	268	32.4 (29.2, 35.5)	270	29.8 (26.8, 32.7)
31–45 minutes	93	12.6 (10.2, 15.1)	41	5.1 (3.6, 6.6)	111	11.9 (10.0, 13.9)	189	22.3 (19.6, 25.0)
46–60 minutes	89	10.6 (8.7, 12.5)	15	1.4 (0.8, 2.1)	38	4.6 (3.2, 5.9)	131	16.0 (13.5, 18.6)
More than 60 minutes	22	2.4 (1.5, 3.2)	2	0.2 (0.0, 0.4)	6	0.4 (0.2, 0.7)	27	3.3 (2.1, 4.6)
Don't know	3	0.4 (0.0, 0.7)	3	0.4 (0.0, 0.7)	5	0.5 (0.1, 0.9)	3	0.4 (0.0, 0.7)
Number of respondents	872		869		866		867	
Number of nonrespondents	0		0		1		0	
Estimated mean minutes[a] (95% CI)	869	24.2 (23.3, 25.2)	866	17.3 (16.7, 17.9)	861	22.5 (21.7, 23.2)	864	30.5 (29.5, 31.5)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

[a] An estimate of mean minutes is provided to facilitate comparison across visit types. The mean was estimated by converting the categorical variable to a continuous variable using the midpoint of the range (e.g., for the response category "11–20 minutes," a value of 5.5 was used). For the first and last response categories, an assumption was made to allow the estimation of a mean. For the "less than 5 minutes" category, a value of 3 was used, and for the "more than 60 minutes" category, a value of 60 was used. "Don't know" responses were excluded from the mean.

Table I-61. Amount of Time Planned by Local Agencies for Providing Nutrition Education by Type of Follow-Up Visit—Local Agency Survey (RQ21: LA9, LA10)

	Mid-Certification		Secondary Education Follow-Up, Individual		Secondary Education Follow-Up, Group		High-Risk Follow-Up		Other[a]	
Amount of Time	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Less than 5 minutes	21	1.9 (1.2, 2.6)	36	5.6 (3.8, 7.4)	12	1.8 (1.0, 2.6)	2	0.3 (0.0, 0.8)	3	2.3 (0.8, 3.8)
5–10 minutes	228	26.5 (23.6, 29.4)	297	34.8 (31.7, 37.9)	82	12.5 (10.1, 14.9)	95	10.6 (8.7, 12.5)	20	25.3 (16.3, 34.3)
11–20 minutes	376	43.8 (40.5, 47.1)	421	49.2 (45.9, 52.5)	218	35.5 (31.8, 39.2)	385	47.7 (44.4, 51.0)	21	31.1 (20.3, 41.8)
21–30 minutes	169	22.1 (19.1, 25.1)	76	7.7 (6.1, 9.4)	200	30.0 (26.7, 33.3)	263	31.6 (28.4, 34.7)	13	9.9 (7.0, 12.8)
31–45 minutes	31	4.5 (3.0, 6.0)	13	1.6 (0.7, 2.4)	74	10.0 (8.1, 12.0)	72	7.6 (5.9, 9.3)	2	4.0 (0.0, 9.2)
46–60 minutes	8	0.7 (0.3, 1.1)	5	0.3 (0.2, 0.4)	46	6.6 (5.0, 8.1)	20	1.5 (1.1, 2.0)	7	10.8 (2.5, 19.1)
More than 60 minutes	0	—(n/a)[a]			7	1.3 (0.4, 2.1)	0	—(n/a)[b]	4	2.9 (1.8, 4.1)
Don't know	3	0.4 (0.0, 0.8)	4	0.8 (0.1, 1.4)	14	2.4 (1.3, 3.5)	8	0.7 (0.3, 1.1)	9	13.6 (5.7, 21.6)
Number of respondents	836		852		653		845		79	
Number of nonrespondents	0		0		1		0		0	

(continued)

Table I-61. Amount of Time Planned by Local Agencies for Providing Nutrition Education by Type of Follow-Up Visit—Local Agency Survey (RQ21: LA9, LA10) (continued)

	Mid-Certification		Secondary Education Follow-Up, Individual		Secondary Education Follow-Up, Group		High-Risk Follow-Up		Other[a]	
Amount of Time	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Estimated mean minutes[c] (95% CI)	833	16.6 (16.1, 17.2)	848	13.3 (12.8, 13.7)	639	22.7 (21.9, 23.6)	837	20.1 (19.6, 20.6)	70	21.2 (17.2, 25.3)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval, n/a = not applicable.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response. Write-in responses for other types of visits that were not recoded included breastfeeding, weight checks, and online education.

[b] An estimate is not provided because no respondents selected this response.

[c] An estimate of mean minutes was provided to facilitate comparison across visit types. The mean was estimated by converting the categorical variable to a continuous variable using the midpoint of the range (e.g., for the response category "11–20 minutes," a value of 5.5 was used). For the first and last response categories, an assumption was made to allow the estimation of a mean. For the "less than 5 minutes" category, a value of 3 was used, and for the "more than 60 minutes" category, a value of 60 was used. "Don't know" responses were excluded from the mean.

Table I-62. Amount of Time WIC Sites Provide Nutrition Education by Type of Certification Visit—Site Survey (RQ22: SV1&2_7)

Amount of Time	Enrollment Certification		Recertification, Not High Risk, 1 Person		Recertification, High Risk, 1 Person		Recertification, 2 or More Family Members	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Less than 5 minutes	14	0.7 (0.3, 1.1)	47	4.0 (2.2, 5.7)	6	0.3 (0.0, 0.6)	4	0.1 (0.0, 0.3)
5–10 minutes	320	25.4 (21.4, 29.5)	553	40.9 (36.6, 45.2)	206	15.9 (12.2, 19.6)	95	6.5 (4.7, 8.3)
11–20 minutes	568	41.1 (36.7, 45.5)	535	39.1 (34.7, 43.4)	616	46.6 (42.1, 51.1)	483	35.0 (31.0, 39.1)
21–30 minutes	276	19.2 (15.6, 22.9)	188	12.7 (10.3, 15.2)	396	28.0 (23.8, 32.2)	418	31.2 (27.1, 35.3)
31–45 minutes	122	8.3 (6.3, 10.2)	37	2.5 (0.7, 4.3)	116	7.5 (5.2, 9.8)	231	17.5 (14.1, 20.8)
46–60 minutes	67	4.5 (2.5, 6.6)	12	0.6 (0.1, 1.2)	26	1.5 (0.7, 2.2)	126	8.8 (6.2, 11.3)
More than 60 minutes	11	0.7 (0.2, 1.1)	1	0.1 (0.0, 0.4)	2	0.2 (0.0, 0.5)	18	0.8 (0.4, 1.2)
Don't know	0	—(n/a)[a]	1	0.1 (0.0, 0.2)	0	—(n/a)[a]	0	—(n/a)[a]
Number of respondents	1,378		1,374		1,368		1,375	
Number of nonrespondents	0		0		0		0	
Mean minutes[b] (95% CI)	1,378	19.2 (18.1, 20.3)	1,373	13.9 (13.1, 14.6)	1,368	19.3 (18.5, 20.2)	1,375	25.7 (24.6, 26.8)

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval, n/a = not applicable.

Respondents were instructed to not include time spent on determining eligibility or conducting assessments.

[a] An estimate is not provided because no respondents selected this response.

[b] An estimate of mean minutes was provided to facilitate comparison across visit types. The mean was estimated by converting the categorical variable to a continuous variable using the midpoint of the range (e.g., for the response category "11–20 minutes," a value of 5.5 was used). For the first and last response categories, an assumption was made to allow the estimation of a mean. For the "less than 5 minutes" category, a value of 3 was used, and for the "more than 60 minutes" category, a value of 60 was used. "Don't know" responses were excluded from the mean.

Table I-63. Amount of Time WIC Sites Provide Nutrition Education by Type of Follow-Up Visit—Site Survey (RQ22: SV1&2_7)

Amount of Time	Mid-Certification		Secondary Education Follow-Up, Individual		Secondary Education Follow-Up, Group		High-Risk Follow-Up		Other[a]	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Less than 5 minutes	68	4.2 (3.0, 5.4)	137	9.7 (7.2, 12.2)	36	3.4 (2.1, 4.8)	16	0.9 (0.3, 1.4)	1	2.7 (0.0, 7.6)
5–10 minutes	489	36.7 (32.4, 41.0)	634	47.2 (42.7, 51.7)	160	18.4 (14.6, 22.2)	246	17.7 (14.5, 20.8)	13	26.9 (12.8, 41.1)
11–20 minutes	568	46.0 (41.5, 50.4)	453	35.0 (30.8, 39.3)	334	35.7 (31.0, 40.5)	592	48.3 (43.7, 53.0)	13	43.4 (24.6, 62.3)
21–30 minutes	136	9.6 (7.4, 11.9)	83	5.4 (3.3, 7.5)	239	21.9 (18.4, 25.3)	340	25.7 (22.0, 29.5)	2	2.3 (0.0, 5.4)
31–45 minutes	26	1.5 (0.8, 2.3)	10	0.6 (0.1, 1.1)	106	10.3 (7.5, 13.1)	83	5.4 (3.5, 7.3)	3	4.2 (0.0, 9.2)
46–60 minutes	13	1.6 (0.0, 3.5)	8	1.3 (0.0, 3.1)	45	4.9 (1.8, 8.0)	20	2.0 (0.1, 3.9)	0	—(n/a)[b]
More than 60 minutes	1	0.0 (0.0, 0.1)	1	0.1 (0.0, 0.2)	12	1.0 (0.2, 1.9)	0	—(n/a)[b]	0	—(n/a)[b]
Don't know	3	0.3 (0.0, 0.6)	10	0.6 (0.1, 1.1)	29	4.4 (2.2, 6.5)	1	0.0 (0.0, 0.1)	7	20.4 (5.6, 35.3)
Number of respondents	1,304		1,336		961		1,298		39	
Number of nonrespondents	0		3		3		0		0	

(continued)

Table I-63. Amount of Time WIC Sites Provide Nutrition Education by Type of Follow-Up Visit—Site Survey (RQ22: SV1&2_7) (continued)

	Mid-Certification		Secondary Education Follow-Up, Individual		Secondary Education Follow-Up, Group		High-Risk Follow-Up		Other [a]	
Amount of Time	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
Mean minutes[c] (95% CI)	1,301	14.0 (13.0, 14.9)	1,326	11.7 (10.8, 12.6)	932	20.6 (19.2, 22.1)	1,297	18.5 (17.5, 19.5)	32	13.8 (11.8, 15.9)

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. CI = confidence interval, n/a = not applicable.

Respondents were instructed to not include time spent on determining eligibility or conducting assessments.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response. Write-in responses for other types of visits that were not recoded included breastfeeding, weight checks, and online education.

[b] An estimate is not provided because no respondents selected this response.

[c] An estimate of mean minutes was provided to facilitate comparison across visit types. The mean was estimated by converting the categorical variable to a continuous variable using the midpoint of the range (e.g., for the response category "11–20 minutes," a value of 5.5 was used). For the first and last response categories, an assumption was made to allow the estimation of a mean. For the "less than 5 minutes" category, a value of 3 was used, and for the "more than 60 minutes" category, a value of 60 was used. "Don't know" responses were excluded from the mean.

Table I-64. Topics for Which the State Agency Recommends and/or Makes Available Nutrition Education Materials by Language—State Plan Abstraction (RQ9: State Plan IIA4a)

	Geographic States and District of Columbia (n = 50)		ITOs and Territories (n = 22)		All SAs (n = 72)	
Topics	**n**	**%**	**n**	**%**	**n**	**%**
English						
General nutrition	48	96.0	21	95.5	69	95.8
Specific nutrition-related disorders	40	80.0	17	77.3	57	79.2
Maternal nutrition	49	98.0	22	100.0	71	98.6
Infant nutrition	49	98.0	22	100.0	71	98.6
Child nutrition	49	98.0	22	100.0	71	98.6
Nutritional needs of homeless	12	24.0	9	40.9	21	29.2
Nutritional needs of migrant farmworkers and their families	10	20.0	6	27.3	16	22.2
Nutritional needs of Native Americans	12	24.0	15	68.2	27	37.5
Nutritional needs of teenage prenatal women	26	52.0	16	72.7	42	58.3
Breastfeeding promotion and support	49	98.0	22	100.0	71	98.6
Danger of harmful substances/secondhand smoke during pregnancy	47	94.0	20	90.9	67	93.1
Food safety	43	86.0	18	81.8	61	84.7
Physical activity	45	90.0	19	86.4	64	88.9
Spanish						
General nutrition	46	92.0	11	50.0	57	79.2
Specific nutrition-related disorders	34	68.0	7	31.8	41	56.9
Maternal nutrition	45	90.0	10	45.5	55	76.4
Infant nutrition	44	88.0	10	45.5	54	75.0
Child nutrition	44	88.0	10	45.5	54	75.0

(continued)

Table I-64. Topics for Which the State Agency Recommends and/or Makes Available Nutrition Education Materials by Language—State Plan Abstraction (RQ9: State Plan IIA4a) (continued)

	Geographic States and District of Columbia (n = 50)		ITOs and Territories (n = 22)		All SAs (n = 72)	
Topics	**n**	**%**	**n**	**%**	**n**	**%**
Nutritional needs of homeless	5	10.0	2	9.1	7	9.7
Nutritional needs of migrant farmworkers and their families	9	18.0	1	4.6	10	13.9
Nutritional needs of Native Americans	4	8.0	2	9.1	6	8.3
Nutritional needs of teenage prenatal women	25	50.0	7	31.8	32	44.4
Breastfeeding promotion and support	46	92.0	11	50.0	57	79.2
Danger of harmful substances/secondhand smoke during pregnancy	43	86.0	9	40.9	52	72.2
Food safety	35	70.0	7	31.8	42	58.3
Physical activity	38	76.0	8	36.4	46	63.9

Source: Abstraction of 2014 State Plans, n = 72. Data were not available for 18 SAs that were mainly ITOs. Multiple responses allowed.

Table I-65. Sources of Nutrition Education Materials Reported by Local Agencies—Local Agency Survey (RQ9: LA15, LA16)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Sources for Nontechnology-Based Materials (e.g., lesson plans, pamphlets, videos)		
State agency	849	96.8 (95.8, 97.9)
Local agency	525	55.7 (52.4, 59.0)
Individual WIC sites	178	20.0 (17.4, 22.5)
National WIC Works Resource system	489	54.5 (51.3, 57.7)
USDA, FNS	577	66.7 (63.7, 69.6)
Non-WIC sources	381	42.2 (39.1, 45.4)
Other[a]	12	1.4 (0.5, 2.2)
Number of respondents	879	
Number of nonrespondents	14	
Sources for Technology-Based Nutrition Education Materials among LAs that Use Technology to Deliver Nutrition Education[b]		
Developed or provided by State agency	337	68.2 (63.6, 72.8)
Developed by local agency	44	8.0 (5.8, 10.2)
Developed by individual WIC sites	20	5.1 (2.9, 7.4)
Downloaded or obtained from national WIC Works Resource system	80	19.9 (16.1, 23.7)
Developed by USDA, FNS	81	20.5 (16.7, 24.2)
Developed by non-WIC sources	60	11.3 (8.9, 13.7)
wichealth.org (write-in response)	39	8.3 (6.0, 10.6)
Other[a]	12	4.0 (1.2, 6.8)
Don't know	10	2.9 (1.2, 4.6)
Number of respondents	462	
Number of nonrespondents	10	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[b] Only respondents that use technology-based nutrition education were eligible to answer this question (n = 472).

Table I-66. Whether Local Agency Receives Funding, Materials, or "In-Kind" Support from Sources Other Than the Federal or State WIC Program—Local Agency Survey (RQ9: LA30)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Yes	277	33.9 (30.7, 37.0)
No	577	60.2 (56.9, 63.5)
Don't know	37	5.9 (3.9, 8.0)
Number of respondents	891	
Number of nonrespondents	2	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Table I-67. Sources and Types of Non-WIC Support Received by Local Agencies for the Delivery of Nutrition Education—Local Agency Survey (RQ9: LA31)

Types of Support Received by LAs	Type of Support Not Applicable		Source of Support: State Government		Source of Support: Local Government or Agency		Source of Support: Other Local Sources	
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Nutrition education funding	126	45.3 (39.3, 51.4)	24	9.1 (5.8, 12.3)	43	20.0 (14.5, 25.5)	24	6.8 (4.5, 9.1)
Breastfeeding funding	119	42.2 (36.2, 48.1)	29	10.0 (6.6, 13.3)	37	15.1 (10.5, 19.6)	32	11.9 (8.2, 15.5)
Nutrition education staff	114	42.0 (36.0, 48.0)	29	11.8 (7.8, 15.9)	55	19.8 (14.9, 24.7)	25	9.3 (6.0, 12.5)
Breastfeeding staff	117	41.4 (35.5, 47.3)	27	8.7 (5.7, 11.6)	39	15.0 (10.3, 19.7)	33	13.8 (9.5, 18.0)
Nutrition education materials/supplies	84	31.0 (25.5, 36.4)	39	15.1 (10.8, 19.3)	64	23.4 (18.1, 28.7)	60	21.5 (16.4, 26.7)
Breastfeeding education materials/supplies	100	35.2 (29.6, 40.8)	34	12.4 (8.5, 16.4)	46	17.6 (12.6, 22.5)	56	21.8 (16.5, 27.0)
Space/facilities	57	21.9 (16.5, 27.4)	14	4.2 (2.3, 6.1)	108	38.2 (32.5, 43.8)	79	30.2 (24.7, 35.8)
Other[a]	63	24.1 (18.7, 29.5)	1	0.2 (0.0, 0.4)	14	3.8 (2.2, 5.5)	10	4.1 (1.8, 6.5)

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Only LAs that receive funding, materials, or "in-kind" support from sources other than the federal or state WIC Program were eligible to answer this question (n = 277). The overall number of respondents for this question = 268 and the nonrespondents = 9. CI = confidence interval.

Respondents could select multiple responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-68. Coordination with Other Programs or Services for the Delivery of Nutrition Education—Local Agency Survey (RQ20: LA32, 33)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Programs or Services LAs Work with to Coordinate Nutrition Education Activities[a]		
Do not coordinate nutrition education with other programs or services	240	24.5 (21.9, 27.0)
Breastfeeding coalition or task force	392	41.7 (38.6, 44.8)
Child and Adult Care Food Program (CACFP)	35	3.5 (2.6, 4.5)
Community Transformation Grant (CTG), REACH, or other CDC program	41	5.9 (3.9, 7.9)
Cooperative Extension	359	42.2 (39.0, 45.5)
Food bank, food security, or hunger coalition	168	18.3 (15.9, 20.7)
Head Start	332	38.3 (35.1, 41.4)
Obesity prevention coalition or task force	149	15.3 (13.1, 17.4)
Supplemental Nutrition Assistance Program (SNAP) Education	208	25.5 (22.5, 28.4)
Other program or service[b]	128	14.7 (12.4, 16.9)
Number of respondents	879	
Number of nonrespondents	14	
Methods Used to Coordinate Nutrition Education with Other Programs or Services[c]		
LA works with other program or service to develop nutrition education materials or campaigns	174	25.8 (22.6, 29.0)
Another program or service provides nutrition education at WIC sites	278	39.6 (36.0, 43.2)
WIC provides nutrition education at other program or service sites	250	33.4 (30.0, 36.8)
WIC refers participants for other nutrition education programs or services	434	68.6 (65.0, 72.3)
LA collaborates with other program or service on nutrition education goals and action plans	200	31.9 (28.3, 35.5)
LA holds joint staff training sessions with other program or service	79	11.4 (9.2, 13.7)
LA meets routinely with other program or service to share information and discuss opportunities to coordinate services	314	45.0 (41.3, 48.8)

(continued)

Table I-68. Coordination with Other Programs or Services for the Delivery of Nutrition Education—Local Agency Survey (RQ20: LA32, 33) (continued)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Other[b]	19	4.2 (2.2, 6.1)
Number of respondents	628	
Number of nonrespondents	25	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents could select multiple responses.

[a] Respondents were instructed to not include coordination for outreach or referral purposes.

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

[c] Only LAs that coordinate nutrition education with other programs or services were eligible to answer this question (n = 653).

Table I-69. Frequency and Methods Used by Local Agencies for Collecting Feedback from Participants About the Nutrition Education Received—Local Agency Survey (RQ19: LA34, LA35)

	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Frequency		
Do not collect participant feedback	164	20.9 (18.2, 23.7)
At every WIC visit	84	8.9 (7.3, 10.6)
Quarterly	80	8.8 (6.8, 10.7)
Twice a year	75	7.2 (5.8, 8.5)
Once a year	358	40.4 (37.2, 43.6)
Once every other year	61	7.0 (5.5, 8.6)
Once every 3 to 5 years	45	6.7 (4.9, 8.6)
Number of respondents	867	
Number of nonrespondents	26	
Methods Used to Collect Participant Feedback[a]		
Paper survey completed during WIC visit	604	82.9 (80.1, 85.7)
Phone survey conducted by LA	39	4.8 (3.2, 6.3)
Mail survey conducted by LA	22	3.2 (1.7, 4.7)
Phone or mail survey conducted by a company hired by LA	5	0.5 (0.2, 0.8)
Electronic feedback system located at site	62	8.7 (6.9, 10.6)
Focus groups or one-on-one interviews with participants	97	14.5 (11.7, 17.3)
Online survey (write-in response)	24	2.8 (1.9, 3.7)
Other[b]	22	3.5 (2.1, 4.8)
Number of respondents	711	
Number of nonrespondents	18	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. The number of respondents for each question is provided in the table. CI = confidence interval.

[a] Only LAs that collect participant feedback were eligible to answer this question (n = 729). Respondents could select multiple responses

[b] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

Table I-70. Recommendations for Behavioral Outcomes to Include in an Impact Evaluation of WIC Nutrition Education—Local Agency Survey (No RQ: LA36)

Outcomes	Unweighted Number of LAs	Weighted % of LAs (95% CI)
Anemia rates	262	28.0 (25.2, 30.7)
Body mass index (BMI) of children	485	52.7 (49.4, 56.0)
Breastfeeding rates	734	84.1 (81.7, 86.6)
Confidence in skills in preparing healthy meals for children	208	24.3 (21.4, 27.1)
Consumption of fruit and vegetables	382	45.0 (41.7, 48.2)
Consumption of lower fat milk and dairy products	198	22.9 (20.1, 25.6)
Consumption of fruit juice (100% juice)	77	10.8 (8.4, 13.2)
Consumption of sugar-sweetened beverages	296	36.0 (32.8, 39.2)
Consumption of whole grains	48	5.1 (3.8, 6.5)
Infant feeding practices	499	57.4 (54.1, 60.6)
Knowledge about healthy eating	326	39.5 (36.2, 42.8)
Physical activity levels	337	35.9 (32.8, 39.0)
Readiness for change in nutrition behaviors	282	31.5 (28.5, 34.6)
Other[a]	13	1.4 (0.7, 2.2)
Number of respondents	869	
Number of nonrespondents	24	

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. CI = confidence interval.

Respondents were instructed to choose up to five responses. The Web-based software would only accept five responses.

[a] "Other" responses were not recoded into new response options because no write-in responses had more than 3% of respondents with the same response.

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APPENDIX J:
PHASE I RESULTS—BIVARIATE ANALYSIS

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Table J-1. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Site Caseload Size—Site Survey (RQ12: SV1&2_9)

		Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of Sites with Job Classification	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	*p*-value
WIC director/coordinator	497	104	0.66 (0.56, 0.75)	121	0.88 (0.81, 0.94)	149	0.90 (0.85, 0.94)	123	0.99 (0.96, 1.02)	<.0001****
Site/clinic supervisor	469	55	0.59 (0.48, 0.70)	85	0.83 (0.76, 0.91)	140	0.87 (0.73, 1.01)	189	1.06 (1.02, 1.10)	<.0001****
Registered dietitian (RD)	768	159	0.66 (0.49, 0.83)	171	0.72 (0.62, 0.81)	211	1.05 (0.91, 1.19)	227	1.81 (1.60, 2.03)	<.0001****
Degreed nutritionist, not RD	600	111	1.02 (0.79, 1.25)	114	0.99 (0.86, 1.11)	173	1.49 (1.30, 1.68)	202	2.36 (2.04, 2.67)	<.0001****
Trained nutrition paraprofessional	521	122	0.94 (0.82, 1.06)	116	1.31 (1.12, 1.51)	143	2.06 (1.69, 2.43)	140	4.61 (3.87, 5.35)	<.0001****
Nurse	384	121	0.92 (0.72, 1.11)	132	1.13 (0.90, 1.37)	79	1.22 (0.93, 1.50)	52	2.16 (1.58, 2.74)	.0008***
Nutrition education coordinator	116	23	0.49 (0.36, 0.63)	27	0.90 (0.77, 1.03)	28	0.83 (0.70, 0.96)	38	0.90 (0.83, 0.97)	<.0001****
Administrative/clerical/ support staff	643	132	0.78 (0.64, 0.92)	156	1.21 (1.09, 1.33)	176	1.83 (1.56, 2.09)	179	3.42 (3.00, 3.84)	<.0001****

(continued)

Table J-1. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Site Caseload Size—Site Survey (RQ12: SV1&2_9) (continued)

		Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of Sites with Job Classification	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	*p*-value
Lactation consultant/ WIC-designated breastfeeding expert	349	57	0.72 (0.45, 1.00)	83	0.77 (0.67, 0.88)	89	0.96 (0.83, 1.09)	120	1.44 (1.12, 1.77)	.0003***
Breastfeeding coordinator	308	50	0.48 (0.38, 0.57)	61	0.72 (0.60, 0.85)	93	0.83 (0.76, 0.90)	104	0.88 (0.83, 0.93)	<.0001****
Breastfeeding peer counselor	593	86	0.51 (0.42, 0.59)	128	0.53 (0.47, 0.59)	180	0.74 (0.63, 0.85)	199	1.13 (1.02, 1.24)	<.0001****
Other	82	14	0.65 (0.45, 0.85)	12	0.76 (0.64, 0.88)	24	1.60 (1.02, 2.17)	32	1.81 (1.10, 2.53)	.0005***

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The number of responding sites with the job classification is provided in the table. The overall number of respondents for this question = 1,287 and the overall number of nonrespondents = 114. CI = confidence interval.

The Wald's F test was used to test the hypothesis of equal means. The variance was estimated using the Taylor series linearization. This test appropriately adjusts for the sample design.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-2. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Facility Type—Site Survey (RQ12: SV1&2_9)

		Health Department		Other Government Facility		IHS Clinic / Hospital	
	Unweighted Number of Sites with Job Classification	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)
WIC director/coordinator	497	248	0.86 (0.81, 0.90)	14	0.65 (0.40, 0.90)	7	0.61 (0.53, 0.70)
Site/clinic supervisor	469	214	0.82 (0.72, 0.92)	17	0.74 (0.48, 1.00)	4	0.42 (0.19, 0.65)
Registered dietitian (RD)	768	353	1.00 (0.88, 1.13)	25	0.59 (0.32, 0.87)	10	0.34 (0.26, 0.41)
Degreed nutritionist, not RD	600	227	1.46 (1.29, 1.63)	15	2.35 (0.57, 4.13)†	2	1.00 (1.00, 1.00)
Trained nutrition paraprofessional	521	179	2.10 (1.72, 2.48)	16	1.05 (0.76, 1.35)	10	1.36 (0.82, 1.90)
Nurse	384	247	1.23 (1.07, 1.40)	13	0.68 (0.53, 0.82)	0	—(n/a)[a]
Nutrition education coordinator	116	58	0.74 (0.62, 0.87)	5	0.48 (0.22, 0.74)	0	—(n/a)[a]
Administrative/clerical/support staff	643	327	1.88 (1.65, 2.11)	22	0.77 (0.33, 1.21)	0	—(n/a)[a]
Lactation consultant/WIC-designated breastfeeding expert	349	156	0.91 (0.77, 1.06)	8	0.42 (0.19, 0.65)	1	0.65 (0.65, 0.65)
Breastfeeding coordinator	308	152	0.70 (0.61, 0.78)	9	0.50 (0.27, 0.73)	0	—(n/a)[a]
Breastfeeding peer counselor	593	261	0.67 (0.59, 0.75)	20	0.48 (0.35, 0.61)	1	0.30 (0.30, 0.30)
Other	82	39	1.30 (0.80, 1.81)	7	1.71 (0.67, 2.75)†	1	1.00 (1.00, 1.00)

(continued)

Table J-2. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Facility Type—Site Survey (RQ12: SV1&2_9) (continued)

	FQHC		Nonprofit Health Center / Medical Clinic		Hospital		Stand-Alone	
	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)
WIC director/coordinator	33	0.85 (0.72, 0.97)	36	0.94 (0.85, 1.03)	16	0.88 (0.70, 1.06)	54	0.93 (0.84, 1.02)
Site/clinic supervisor	26	0.95 (0.86, 1.05)	26	0.94 (0.84, 1.05)	16	0.87 (0.66, 1.08)	99	1.01 (0.95, 1.06)
Registered dietitian (RD)	56	1.16 (0.93, 1.40)	50	0.93 (0.76, 1.10)	25	1.30 (0.98, 1.62)	116	1.17 (1.05, 1.29)
Degreed nutritionist, not RD	45	1.43 (1.11, 1.76)	38	1.42 (1.02, 1.82)	19	2.05 (0.98, 3.11)	115	1.59 (1.32, 1.86)
Trained nutrition paraprofessional	41	2.11 (1.48, 2.75)	37	1.60 (0.93, 2.26)	13	1.84 (1.05, 2.63)	111	3.76 (2.93, 4.59)
Nurse	14	1.05 (0.32, 1.78)†	7	1.28 (0.59, 1.97)	3	1.02 (0.81, 1.24)	35	1.03 (0.89, 1.17)
Nutrition education coordinator	9	0.83 (0.69, 0.96)	6	0.83 (0.67, 0.99)	1	0.30 (0.30, 0.30)	19	0.89 (0.72, 1.06)
Administrative/clerical/support staff	41	1.72 (1.14, 2.30)	33	2.01 (1.49, 2.53)	16	1.51 (1.02, 1.99)	99	1.90 (1.55, 2.25)
Lactation consultant/WIC-designated breastfeeding expert	27	1.00 (0.68, 1.32)	16	0.94 (0.69, 1.19)	12	1.46 (0.55, 2.38)†	72	1.17 (0.79, 1.55)
Breastfeeding coordinator	25	0.79 (0.65, 0.94)	15	0.92 (0.74, 1.10)	15	0.92 (0.83, 1.02)	42	0.81 (0.66, 0.97)
Breastfeeding peer counselor	46	0.80 (0.65, 0.95)	29	0.82 (0.57, 1.07)	20	1.34 (0.81, 1.88)	113	0.93 (0.79, 1.06)
Other	4	2.51 (0.73, 4.28)†	5	0.88 (0.17, 1.59)†	2	1.00 (1.00, 1.00)	12	1.08 (0.78, 1.39)

(continued)

Table J-2. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Facility Type—Site Survey (RQ12: SV1&2_9) (continued)

	Nonprofit Agency Facility		School or Head Start Facility		Faith-Based Facility		Mobile Van or Other		
	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	*p*-value
WIC director/coordinator	49	0.81 (0.66, 0.96)	7	0.89 (0.69, 1.09)	19	0.65 (0.43, 0.87)	14	0.79 (0.62, 0.97)	<.0001****
Site/clinic supervisor	37	0.89 (0.70, 1.08)	10	1.00 (1.00, 1.00)	8	0.64 (0.35, 0.93)	12	1.00 (1.00, 1.00)	<.0001****
Registered dietitian (RD)	64	1.28 (0.85, 1.72)	18	1.46 (0.31, 2.61)†	34	0.93 (0.71, 1.16)	16	0.94 (0.29, 1.58)†	<.0001****
Degreed nutritionist, not RD	60	1.84 (1.42, 2.26)	11	2.04 (0.15, 3.92)†	39	1.15 (0.61, 1.69)	28	1.18 (0.93, 1.43)	<.0001****
Trained nutrition paraprofessional	49	1.95 (1.38, 2.53)	17	1.35 (0.89, 1.82)	25	0.94 (0.77, 1.11)	22	1.42 (1.22, 1.63)	<.0001****
Nurse	29	1.36 (0.85, 1.87)	6	1.20 (0.60, 1.81)	18	0.78 (0.26, 1.29)†	12	0.88 (0.57, 1.18)	.0001****
Nutrition education coordinator	8	0.67 (0.38, 0.97)	3	0.75 (0.39, 1.12)	1	1.00 (1.00, 1.00)	6	1.18 (0.86, 1.50)	<.0001****
Administrative/clerical/ support staff	46	1.33 (0.98, 1.69)	12	2.33 (1.64, 3.03)	29	0.80 (0.42, 1.18)	18	1.47 (1.04, 1.90)	<.0001****
Lactation consultant/WIC-designated breastfeeding expert	28	1.17 (0.66, 1.69)	9	0.73 (0.40, 1.07)	11	0.97 (0.49, 1.45)	9	1.05 (0.62, 1.48)	<.0001****
Breastfeeding coordinator	27	0.70 (0.55, 0.85)	4	0.76 (0.39, 1.14)	8	0.52 (0.29, 0.75)	11	0.77 (0.55, 0.99)	.0017**

(continued)

Table J-2. Differences in Mean Number of FTEs for Job Classifications / Type of Staff by Facility Type—Site Survey (RQ12: SV1&2_9) (continued)

	Nonprofit Agency Facility		School or Head Start Facility		Faith-Based Facility		Mobile Van or Other		
	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	Unweighted Number of Sites	Weighted Mean Number of FTEs (95% CI)	*p*-value
Breastfeeding peer counselor	52	0.90 (0.67, 1.12)	11	0.40 (0.25, 0.55)	20	0.57 (0.42, 0.73)	19	0.55 (0.39, 0.71)	<.0001****
Other	7	1.06 (0.51, 1.60)	1	2.00 (2.00, 2.00)	3	0.49 (0.17, 0.82)†	1	0.95 (0.95, 0.95)	.0255*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The number of responding sites with the job classification is provided in the table. The overall number of respondents for this question = 1,287 and the overall number of nonrespondents = 114. CI = confidence interval, n/a = not applicable.

The Wald's F test was used to test the hypothesis of equal means. The variance was estimated using the Taylor series linearization. This test appropriately adjusts for the sample design.

[a] An estimate is not provided because no respondents selected this response.

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (relative standard error) [RSE] > 30); thus, the results should be interpreted with caution.

Table J-3. Differences in Characteristics of WIC Site Staff Members Who Deliver Nutrition Education by Site Caseload Size—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14)

	Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	*p*-value
Number of Years' Experience Working for WIC Program[a]									
Less than 1 year	58	10.1 (5.3, 14.8)	52	11.6 (5.6, 17.6)	86	11.3 (7.1, 15.5)	126	10.6 (8.0, 13.2)	.9727
1–2 years	80	14.2 (10.0, 18.4)	57	11.4 (7.6, 15.2)	91	10.4 (7.4, 13.5)	164	14.1 (9.7, 18.5)	.4247
3–6 years	117	20.4 (15.9, 24.8)	141	22.2 (16.9, 27.5)	182	19.2 (14.3, 24.1)	310	22.7 (18.9, 26.5)	.6214
7–10 years	85	17.9 (10.3, 25.5)	91	15.1 (10.4, 19.9)	120	18.5 (13.9, 23.1)	237	17.5 (14.5, 20.4)	.7666
11–20 years	148	20.6 (15.0, 26.1)	132	21.7 (17.2, 26.1)	194	22.5 (18.1, 26.9)	254	21.5 (17.9, 25.1)	.9602
More than 20 years	94	17.0 (11.7, 22.2)	94	18.0 (10.6, 25.5)	130	18.1 (11.8, 24.4)	155	13.6 (10.8, 16.4)	.3961
Highest Degree Received[b]									
High school diploma or GED	120	15.1 (10.8, 19.4)	148	19.4 (14.3, 24.5)	225	28.3 (20.7, 35.9)	371	26.9 (21.4, 32.5)	.0007***
Associate's degree	100	16.2 (10.4, 21.9)	102	16.3 (11.3, 21.4)	121	14.2 (8.4, 20.0)	78	6.2 (3.8, 8.7)	.0002***
Bachelor's degree	308	59.8 (53.1, 66.4)	240	45.7 (39.7, 51.6)	356	44.4 (35.0, 53.8)	601	50.1 (44.5, 55.6)	.0074**
Graduate degree	55	5.9 (3.8, 8.1)	60	12.1 (7.8, 16.4)	94	10.9 (7.4, 14.3)	147	12.1 (9.3, 14.9)	.0011**
Unknown	19	3.0 (0.5, 5.6)†	26	6.5 (2.5, 10.5)†	26	2.2 (0.8, 3.6)†	63	4.6 (2.3, 7.0)	.1017

(continued)

Table J-3. Differences in Characteristics of WIC Site Staff Members Who Deliver Nutrition Education by Site Caseload Size—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14) (continued)

	Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	*p*-value
Credentials Held[c]									
Registered dietitian (RD)	164	27.5 (21.4, 33.6)	124	23.4 (18.1, 28.6)	202	22.2 (17.1, 27.2)	286	22.3 (18.2, 26.4)	.5254
Licensed dietitian/nutritionist (LD/LN)	76	13.4 (8.0, 18.7)	55	9.7 (6.4, 13.1)	105	13.3 (7.3, 19.4)	146	11.3 (8.3, 14.3)	.5856
Dietetic technician, registered (DTR)	10	1.1 (0.1, 2.2)†	11	1.7 (0.3, 3.1)†	21	2.4 (0.5, 4.3)†	13	1.5 (0.5, 2.5)†	.7030
Registered nurse (RN)	108	20.8 (11.9, 29.7)	125	22.8 (12.1, 33.6)	108	12.2 (5.8, 18.6)	71	4.8 (2.0, 7.7)†	.0001****
Licensed practical nurse (LPN)	27	5.2 (1.2, 9.2)†	19	2.7 (1.2, 4.1)	19	1.8 (0.3, 3.3)†	13	1.1 (0.2, 2.0)†	.0967
International Board Certified Lactation Consultant (IBCLC)	37	5.8 (2.8, 8.7)	30	6.1 (3.2, 9.0)	58	5.5 (3.2, 7.8)	82	6.7 (4.8, 8.6)	.8638
Certified lactation consultant/certified lactation educator/certified lactation educator and counselor (CLC/CLE/CLEC)	112	21.0 (14.3, 27.7)	143	24.7 (16.5, 33.0)	209	25.9 (18.1, 33.7)	336	24.5 (18.2, 30.8)	.7794
Certified medical assistant (CMA)	6	0.7 (-0.1, 1.4)†	3	0.8 (-0.5, 2.0)†	6	0.6 (-0.0, 1.1)†	17	0.9 (0.2, 1.6)†	.9335

(continued)

Table J-3. Differences in Characteristics of WIC Site Staff Members Who Deliver Nutrition Education by Site Caseload Size—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14) (continued)

	Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	*p*-value
Ethnicity[d]									
Hispanic or Latino	57	8.9 (4.9, 12.9)	89	15.0 (10.4, 19.5)	164	26.7 (14.7, 38.6)	330	25.7 (19.5, 31.9)	<.0001***
Not Hispanic or Latino	479	79.7 (71.7, 87.8)	450	77.8 (71.2, 84.5)	610	62.7 (52.7, 72.7)	879	68.4 (61.3, 75.5)	.0143*
Unknown	59	11.4 (3.4, 19.4)†	53	7.2 (2.4, 12.0)†	55	10.6 (4.0, 17.3)†	68	5.9 (2.1, 9.6)†	.3692
Race[e]									
American Indian or Alaska Native	22	2.6 (0.7, 4.5)†	36	5.8 (2.0, 9.6)†	15	2.6 (0.3, 4.9)†	79	5.2 (1.7, 8.7)†	.3764
Asian	20	2.1 (0.7, 3.5)†	22	4.9 (1.7, 8.1)†	27	2.9 (0.7, 5.1)†	63	4.7 (2.8, 6.6)	.1220
Black or African American	48	6.8 (3.4, 10.3)	40	8.0 (4.6, 11.4)	81	13.6 (7.7, 19.4)	205	20.1 (13.2, 26.9)	.0017**
Native Hawaiian or other Pacific Islander	4	0.4 (-0.1, 0.8)†	2	0.2 (-0.1, 0.4)†	1	0.1 (-0.1, 0.3)†	8	0.8 (0.1, 1.4)†	.2117

(continued)

Table J-3. Differences in Characteristics of WIC Site Staff Members Who Deliver Nutrition Education by Site Caseload Size—Site Survey (RQ3 & RQ14: SV1_10, 11, 12, 13, 14) (continued)

	Very Small: 300 or Fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or More		
	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of NE Staff	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of Sites	Weighted % of WIC NE Staff (95% CI)	Unweighted Number of Sites	Weighted % of WIC NE Staff (95% CI)	*p*-value
White	470	79.6 (70.7, 88.4)	454	79.3 (71.4, 87.2)	634	73.2 (65.9, 80.4)	784	60.5 (53.7, 67.3)	.0004***
Unknown	37	11.6 (3.0, 20.2)†	44	6.1 (2.4, 9.8)†	72	11.0 (4.5, 17.5)†	135	11.8 (7.3, 16.4)	.2394

Source: 2014 Site Survey, Versions 1 and 2

Notes: The Site Survey collected information on the number of nutrition educators in each category. This information was used to estimate the percentage of staff members in each category across all responding sites. Estimates were weighted using the Version 1 Site Survey weights. CI = confidence interval.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] The number of respondents = 680 and the number of nonrespondents = 16.

[b] The number of respondents = 682 and the number of nonrespondents = 14.

[c] The number of respondents = 666 and the number of nonrespondents = 30. Respondents could count staff members in more than one category.

[d] The number of respondents = 686 and the number of nonrespondents = 10.

[e] The number of respondents = 680 and the number of nonrespondents = 16. Respondents could count staff members in more than one category.

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-4. Differences in Site Participant-to-FTE Educator Ratio by Type of Facility—Site Survey (RQ2: SV1&2_9)

	Unweighted Number of Sites	Number of Staff Providing Nutrition Education Per Site Weighted Mean (95% CI)	FTEs of Staff Providing Nutrition Education Weighted Mean (95% CI)	Caseload Per Site Weighted Mean (95% CI)	Participant-to-FTE Educator Ratio Weighted Mean (95% CI)
All Responding Sites	1,287	6.3 (6.0, 6.6)	4.8 (4.6, 5.1)	1,325.0 (1,187.5, 1,462.5)	250.5 (231.3, 269.6)
Health department	554	7.1 (6.6, 7.5)	5.2 (4.8, 5.6)	1,340.1 (1,184.8, 1,495.3)	258.9 (234.2, 283.7)
Other government facility	49	4.9 (3.5, 6.4)	2.9 (2.0, 3.8)	639.4 (268.1, 1,010.6)	186.5 (93.8, 279.2)
IHS clinic or hospital	17	3.5 (2.9, 4.1)	2.3 (1.9, 2.8)	614.9 (363.1, 866.7)	245.5 (157.8, 333.1)
FQHC	85	7.0 (6.0, 8.0)	5.6 (4.7, 6.6)	1,576.5 (1,168.8, 1,984.3)	277.8 (221.8, 333.9)
Nonprofit center or clinic	73	5.6 (4.6, 6.5)	4.5 (3.7, 5.3)	1,128.9 (829.7, 1,428.1)	242.0 (190.2, 293.8)
Hospital	35	6.5 (4.7, 8.2)	5.4 (3.9, 7.0)	1,794.7 (1,117.2, 2,472.3)	288.1 (224.4, 351.7)
Stand-alone WIC site	207	7.1 (6.2, 8.0)	6.4 (5.5, 7.2)	2,310.9 (1,755.5, 2,866.3)	340.6 (284.7, 396.5)
Nonprofit community facility	115	6.0 (5.1, 6.9)	4.7 (3.8, 5.5)	1,016.4 (745.7, 1,287.0)	212.2 (169.5, 255.0)
School or Head Start facility	32	5.1 (3.9, 6.4)	4.2 (2.9, 5.5)	1,214.8 (425.0, 2,004.6)†	186.1 (111.8, 260.5)
Faith-based facility	70	3.9 (3.4, 4.5)	2.6 (1.9, 3.3)	192.9 (109.7, 276.0)	80.4 (50.7, 110.1)
Mobile van and other	49	4.5 (3.9, 5.1)	3.6 (3.1, 4.1)	1,057.7 (476.0, 1,639.4)	263.1 (121.0, 405.2)
p-value		<.0001****	<.0001****	<.0001****	<.0001****

Sources: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The number of respondents for each type of site is provided in the table. The overall number of nonrespondents for this question = 114. CI = confidence interval.

The Wald's F test was used to test the hypothesis of equal means. The variance was estimated using the Taylor series linearization. This test appropriately adjusts for the sample design.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-5. Differences in Site Participant-to-FTE Educator Ratio by Site Caseload Size—Site Survey (RQ2: SV1&2_9)

	Unweighted Number of Sites	Number of Staff Providing Nutrition Education Per Site Weighted Mean (95% CI)	FTEs of Staff Providing Nutrition Education Weighted Mean (95% CI)	Caseload Per Site Weighted Mean (95% CI)	Participant-to-FTE Educator Ratio Weighted Mean (95% CI)
All Responding Sites	1,287	6.3 (6.0, 6.6)	4.8 (4.6, 5.1)	1,325.0 (1,187.5, 1,462.5)	250.5 (231.3, 269.6)
Very small: 300 or fewer	333	4.2 (3.8, 4.6)	2.5 (2.2, 2.8)	123.2 (110.4, 136.0)	65.4 (57.5, 73.3)
Small: 301–900	323	4.7 (4.4, 5.1)	3.4 (3.1, 3.7)	577.6 (545.7, 609.4)	228.9 (209.4, 248.5)
Medium: 901–2499	330	7.0 (6.6, 7.5)	5.6 (5.1, 6.0)	1,514.8 (1,453.1, 1,576.6)	345.6 (320.1, 371.2)
Large: 2,500 or more	301	11.6 (10.7, 12.5)	10.3 (9.6, 11.1)	4,390.3 (4,107.3, 4,673.4)	494.3 (455.5, 533.2)
p-value		<.0001****	<.0001****	<.0001****	<.0001****

Sources: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights. The number of respondents for each type of site is provided in the table. The overall number of nonrespondents for this question = 114. CI = confidence interval.

The Wald's F test was used to test the hypothesis of equal means. The variance was estimated using the Taylor series linearization. This test appropriately adjusts for the sample design.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-6a. Differences in Nutrition Education Delivery by FNS Region: Types of Modes Used—Local Agency Survey (RQ24: LA11)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	131	100.0 (n/a)	112	100.0 (n/a)	188	100.0 (n/a)	94	100.0 (n/a)	176	100.0 (n/a)	118	100.0 (n/a)	74	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	59	49.0 (40.7, 57.3)	60	40.7 (33.1, 48.3)	30	16.7 (12.5, 21.0)	25	28.4 (20.1, 36.7)	63	41.3 (34.2, 48.4)	42	36.6 (27.5, 45.7)	28	37.1 (29.0, 45.2)	.0011***
One-on-one counseling: Video conferencing	8	7.7 (3.1, 12.2)†	5	4.6 (0.9, 8.3)†	11	4.5 (3.6, 5.4)	0	— (n/a)[b]	1	0.6 (0.0, 1.5)†	4	5.2 (0.8, 9.6)†	3	3.4 (2.0, 4.8)	.7864
Group education sessions	105	69.3 (60.8, 77.9)	89	73.7 (64.9, 82.5)	91	43.5 (38.2, 48.7)	78	81.5 (74.5, 88.5)	113	52.3 (45.3, 59.4)	60	43.6 (34.6, 52.7)	51	65.3 (56.6, 74.1)	<.0001****
Onsite technology based	16	6.6 (5.2, 8.0)	34	26.5 (19.8, 33.2)	47	26.1 (20.6, 31.6)	3	4.1 (0.2, 8.1)†	64	30.5 (24.5, 36.5)	23	20.1 (13.0, 27.2)	29	37.2 (29.3, 45.1)	<.0001****

(continued)

Table J-6a. Differences in Nutrition Education Delivery by FNS Region: Types of Modes Used—Local Agency Survey (RQ24: LA11) (continued)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Offsite technology based	60	34.6 (27.5, 41.7)	88	76.3 (68.8, 83.8)	55	28.3 (23.2, 33.3)	5	7.3 (2.0, 12.6)†	126	60.8 (53.6, 68.0)	66	62.4 (53.9, 70.8)	37	43.9 (36.1, 51.7)	<.0001****
Other nutrition education activities	52	39.5 (31.4, 47.7)	80	73.3 (66.1, 80.5)	59	31.7 (26.6, 36.7)	25	30.7 (20.6, 40.8)	121	62.2 (55.2, 69.2)	53	43.9 (34.8, 53.0)	23	30.6 (22.8, 38.3)	<.0001****

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 893; number of nonrespondents = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

[b] An estimate is not provided because no respondents selected this response.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-6b. Differences in Nutrition Education Delivery by FNS Region: Types of Follow-Ups Used—Local Agency Survey (RQ24: LA13)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Follow-up occurs at subsequent WIC visits	127	100.0 (n/a)	110	99.4 (98.9, 99.8)	185	98.5 (96.9, 100.0)	94	100.0 (n/a)	172	99.7 (99.6, 99.9)	118	100.0 (n/a)	70	100.0 (n/a)	(n/a)[a]
Telephone calls	52	43.9 (35.5, 52.3)	54	46.7 (38.1, 55.4)	59	31.5 (26.3, 36.8)	56	63.3 (54.7, 71.9)	100	54.7 (47.6, 61.7)	47	41.7 (32.6, 50.8)	34	48.2 (39.6, 56.8)	.0065**
Emails	5	6.1 (0.7, 11.4)†	2	1.1 (0.5, 1.8)	1	0.4 (0.2, 0.6)†	7	6.2 (2.5, 10.0)†	11	5.3 (2.6, 8.0)	4	7.2 (0.3, 14.0)†	4	5.0 (2.3, 7.6)	.3365
Text messages	10	6.1 (2.8, 9.4)	6	3.7 (2.3, 5.0)	5	2.1 (1.2, 3.0)	14	11.6 (6.8, 16.3)	25	16.0 (10.6, 21.4)	7	6.8 (1.8, 11.8)†	5	7.4 (2.6, 12.2)†	.0014***
Video conferencing	1	1.1 (0.0, 2.7)†	2	1.1 (0.6, 1.7)	3	1.2 (0.8, 1.6)	0	—(n/a)[b]	0	—(n/a)[b]	1	0.7 (0.0, 1.8)†	0	—(n/a)[b]	(n/a)[c]

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 880; number of nonrespondents = 13. Results for "other" (n = 24) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

[b] An estimate is not provided because no respondents selected this response.

[c] Unable to conduct bivariate analysis because of the small number of respondents.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-6c. Differences in Nutrition Education Delivery by FNS Region: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA11, LA13, LA14)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	130	100.0 (n/a)	107	96.5 (93.3, 99.8)	186	99.6 (99.3, 99.9)	92	100.0 (n/a)	171	100.0 (n/a)	117	100.0 (n/a)	71	100.0 (n/a)	(n/a)[a]
Bulletin boards with nutrition information	109	83.0 (76.8, 89.2)	106	97.6 (96.7, 98.5)	170	86.3 (81.0, 91.7)	89	97.9 (96.5, 99.3)	148	83.7 (78.1, 89.2)	105	89.3 (83.9, 94.7)	66	94.1 (91.5, 96.8)	.0018**
Computer, kiosk, or tablet computers	13	6.4 (4.0, 8.8)	15	10.1 (6.8, 13.4)	31	14.5 (11.3, 17.8)	8	7.8 (3.5, 12.1)	55	27.4 (21.6, 33.3)	17	12.4 (7.0, 17.9)	26	34.6 (26.8, 42.4)	<.0001****
Cooking demonstrations	40	24.1 (18.1, 30.0)	49	37.8 (30.1, 45.6)	31	14.1 (11.3, 17.0)	41	40.9 (31.8, 50.0)	36	16.4 (11.9, 20.9)	19	12.9 (7.5, 18.4)	22	31.0 (23.0, 39.1)	<.0001****
Display tables with nutrition information	47	37.5 (29.3, 45.7)	56	56.6 (48.2, 65.1)	77	36.6 (31.8, 41.4)	58	66.6 (58.3, 74.9)	88	52.7 (45.6, 59.8)	50	43.4 (34.1, 52.6)	34	48.2 (39.7, 56.8)	.0036**
Educational props	106	79.3 (72.8, 85.9)	89	75.7 (67.1, 84.3)	138	68.7 (62.9, 74.5)	77	83.6 (77.0, 90.1)	134	77.3 (71.0, 83.7)	93	77.9 (70.0, 85.8)	59	85.4 (81.1, 89.7)	.4369

(continued)

Table J-6c. Differences in Nutrition Education Delivery by FNS Region: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA11, LA13, LA14) (continued)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Food tasting	43	29.3 (22.1, 36.6)	42	37.8 (29.4, 46.2)	30	15.1 (11.6, 18.7)	44	44.6 (35.2, 54.0)	45	23.5 (18.0, 29.1)	28	18.2 (11.9, 24.6)	23	31.7 (23.9, 39.5)	.0002***
Nutrition education DVDs/videos at site	82	53.0 (44.6, 61.4)	88	79.1 (71.1, 87.2)	92	47.2 (41.7, 52.7)	55	58.9 (49.6, 68.2)	83	43.6 (36.7, 50.6)	64	45.2 (36.1, 54.2)	47	63.9 (55.2, 72.5)	.0004***
Support groups	66	41.4 (33.6, 49.2)	36	28.8 (21.7, 35.8)	79	38.8 (33.6, 43.9)	66	68.8 (58.7, 78.9)	84	43.3 (36.3, 50.2)	55	39.2 (30.7, 47.8)	39	53.1 (44.4, 61.7)	.0011***

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 878; number of nonrespondents = 15. Results for "other" (n = 10) and "none" (n = 1) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-6d. Differences in Nutrition Education Delivery by FNS Region: Types of Reinforcers Used Offsite—Local Agency Survey (RQ24: LA11, LA13, LA14)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Monthly or quarterly nutrition newsletter sent home	8	10.1 (3.3, 16.8)†	7	4.4 (2.9, 5.8)	16	7.7 (5.7, 9.7)	15	26.6 (15.4, 37.7)	24	17.0 (11.7, 22.3)	24	22.5 (13.8, 31.3)	8	11.6 (5.9, 17.3)	.0059**
Nutrition education DVDs/videos sent home	26	19.8 (13.4, 26.3)	68	65.5 (57.7, 73.4)	23	17.1 (11.5, 22.7)	11	12.7 (6.7, 18.8)	36	22.0 (16.0, 28.0)	21	15.5 (9.6, 21.3)	17	22.4 (16.1, 28.7)	<.0001****
Social media	23	15.5 (10.2, 20.8)	17	11.7 (8.5, 15.0)	33	17.3 (13.6, 21.0)	19	29.2 (18.1, 40.2)	53	27.5 (21.6, 33.5)	39	35.4 (26.2, 44.6)	21	27.1 (20.4, 33.9)	.0021**
Offsite technology based	42	24.4 (18.8, 30.1)	63	58.1 (49.5, 66.7)	42	22.4 (17.5, 27.3)	4	7.4 (1.6, 13.1)†	100	51.0 (43.8, 58.1)	53	53.2 (44.1, 62.3)	29	35.0 (28.2, 41.7)	<.0001****
Telephone calls with nutrition education content	23	24.6 (16.0, 33.2)	18	18.4 (11.3, 25.5)	15	9.7 (5.8, 13.5)	23	27.9 (19.3, 36.5)	35	17.8 (12.9, 22.8)	19	23.9 (14.7, 33.1)	20	28.6 (20.8, 36.5)	.1522
Email or text messages with nutrition education content	8	5.9 (1.8, 10.1)†	13	12.5 (7.1, 17.8)	6	2.8 (1.7, 3.9)	8	8.1 (3.5, 12.8)	16	9.7 (5.3, 14.0)	10	7.8 (3.4, 12.3)	5	6.3 (2.7, 9.9)	.3777

(continued)

Table J-6d. Differences in Nutrition Education Delivery by FNS Region—Local Agency Survey (RQ24: LA11, LA13, LA14) (continued)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Grocery store tours and other responses	8	7.4 (3.0, 11.8)†	10	7.1 (4.4, 9.7)	13	6.4 (4.3, 8.5)	20	22.1 (14.4, 29.7)	22	11.3 (6.9, 15.7)	12	7.1 (3.7, 10.6)	14	18.6 (12.8, 24.4)	.0036**
None	42	38.2 (29.6, 46.8)	10	10.9 (4.7, 17.0)	80	43.6 (38.1, 49.2)	27	26.6 (18.9, 34.2)	28	22.2 (15.8, 28.7)	34	27.0 (19.4, 34.6)	14	26.0 (16.9, 35.2)	.0013***

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 842; number of nonrespondents = 51. Responses for email messages (n = 17) and text messages (n = 57) were combined because of the small number of respondents. Responses for grocery store tours (n = 73) and other (n = 31) were combined because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-7a. Differences in Nutrition Education Delivery by Urbanicity of Local Agency Location: Types of Modes Used—Local Agency Survey (RQ24: LA11)

	Rural		Urban		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	146	100.0 (n/a)	744	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	46	35.7 (27.1, 44.3)	259	36.5 (33.2, 39.8)	.9025
One-on-one counseling: Video conferencing	6	4.8 (1.0, 8.6)†	26	3.4 (2.2, 4.5)	.5738
Group education sessions	64	44.2 (35.5, 52.9)	520	61.8 (58.4, 65.2)	.0096**
Onsite technology based	24	17.7 (11.1, 24.3)	191	22.5 (20.0, 25.0)	.3806
Offsite technology based	49	42.3 (33.5, 51.2)	388	49.2 (45.9, 52.4)	.3205

Source: 2014 Local Agency Survey

Notes: Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area (SSMA) in which the LA is located; the LA was then classified as rural or urban based on the Census definitions of population size for urbanicity. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Three respondents were excluded from the analysis because information on urbanicity was not available. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 890; number of nonrespondents = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-7b. Differences in Nutrition Education Delivery by Urbanicity of Local Agency Location: Types of Follow-Ups Used—Local Agency Survey (RQ24: LA13)

	Rural		Urban		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Follow-up occurs at subsequent WIC visits	144	100.0 (n/a)	729	99.6 (99.2, 99.9)	(n/a)[a]
Telephone calls	65	47.2 (38.5, 56.0)	336	46.7 (43.3, 50.0)	.9345
Emails	3	4.9 (0.0, 10.8)†	31	4.7 (3.1, 6.3)	.9583
Text messages	9	7.3 (2.7, 12.0)†	62	8.6 (6.7, 10.6)	.7245
Video conferencing	1	0.3 (0.1, 0.4)†	6	0.7 (0.2, 1.1)†	.1091

Source: 2014 Local Agency Survey

Notes: Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area (SSMA) in which the LA is located; the LA was then classified as rural or urban based on the Census definitions of population size for urbanicity. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Three respondents were excluded from the analysis because information on urbanicity was not available. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 877; number of nonrespondents = 13. Results for "other" (n = 24) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-7c. Differences in Nutrition Education Delivery by Urbanicity of Local Agency Location: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA14)

	Rural		Urban		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	142	99.3 (98.2, 100.0)	729	99.7 (99.3, 100.0)	.5896
Bulletin boards with nutrition information	120	86.4 (81.3, 91.5)	670	89.2 (86.8, 91.6)	.4609
Computer, kiosk, or tablet computers	18	9.9 (5.3, 14.6)	146	17.7 (15.4, 19.9)	.0795*
Cooking demonstrations	23	11.5 (6.9, 16.1)	213	25.1 (22.5, 27.7)	.0037**
Display tables with nutrition information	66	48.9 (40.1, 57.7)	342	47.2 (43.9, 50.6)	.8043
Educational props	94	66.1 (58.0, 74.3)	600	80.8 (78.1, 83.5)	.0073**
Food tasting	29	19.0 (12.5, 25.5)	224	28.2 (25.4, 31.0)	.1020
Nutrition education DVDs/videos at site	61	38.3 (29.8, 46.9)	447	56.3 (52.9, 59.7)	.0082**
Support groups	46	28.9 (21.5, 36.4)	377	47.3 (44.0, 50.5)	.0036**

Source: 2014 Local Agency Survey

Notes: Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area (SSMA) in which the LA is located; the LA was then classified as rural or urban based on the Census definitions of population size for urbanicity. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Three respondents were excluded from the analysis because information on urbanicity was not available. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 875; number of nonrespondents = 15. Results for "other" (n = 10) and "none" (n = 1) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

Table J-7d. Differences in Nutrition Education Delivery by Urbanicity of Local Agency Location: Types of Reinforcers Used Offsite—Local Agency Survey (RQ24: LA14)

	Rural		Urban		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	16	16.6 (8.2, 25.1)	85	14.6 (12.0, 17.3)	.7385
Nutrition education DVDs/videos sent home	24	17.8 (11.4, 24.1)	178	24.8 (21.8, 27.7)	.1986
Social media	32	28.2 (19.2, 37.1)	173	23.4 (20.7, 26.2)	.4568
Offsite technology based	40	38.2 (29.0, 47.4)	293	39.2 (35.9, 42.4)	.8910
Telephone calls with nutrition education content	26	24.1 (15.6, 32.7)	126	19.5 (16.7, 22.4)	.4480
Email or text messages with nutrition education content	6	3.7 (0.8, 6.6)†	60	8.9 (6.8, 10.9)	.1153
Grocery store tours and other responses	10	4.1 (1.9, 6.3)	88	12.0 (9.9, 14.1)	.0032**
None	54	31.9 (24.5, 39.4)	180	27.0 (23.9, 30.2)	.3862

Source: 2014 Local Agency Survey

Notes: Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area (SSMA) in which the LA is located; the LA was then classified as rural or urban based on the Census definitions of population size for urbanicity. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Three respondents were excluded from the analysis because information on urbanicity was not available. Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 839; number of nonrespondents = 51. Responses for email messages (n = 17) and text messages (n = 57) were combined because of the small number of respondents. Responses for grocery store tours (n = 73) and other (n = 31) were combined because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

** Indicates statistical significance if the *p*-value is ≤ .01.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-8a. Differences in Nutrition Education Delivery by Local Agency Caseload Size: Types of Modes Used—Local Agency Survey (RQ24: LA11)

	Small: Fewer than 750		Medium: 750 to 1,999		Large: 2,000 to 4,499		Very Large: 4,500+		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	102	100.0 (n/a)	196	100.0 (n/a)	211	100.0 (n/a)	384	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	42	44.2 (34.7, 53.7)	63	34.1 (28.2, 40.0)	74	33.8 (28.7, 38.9)	128	33.7 (30.9, 36.6)	.2605
One-on-one counseling: Video conferencing	5	5.3 (1.2, 9.3)†	7	3.7 (1.4, 6.1)†	4	1.6 (0.5, 2.6)†	16	3.8 (2.8, 4.9)	.4667
Group education sessions	40	37.9 (28.6, 47.3)	101	50.6 (44.5, 56.8)	132	61.3 (55.9, 66.6)	314	81.7 (79.2, 84.1)	<.0001****
Onsite technology based	13	12.8 (6.6, 19.1)	40	22.0 (16.9, 27.2)	42	19.2 (15.0, 23.3)	121	30.7 (28.0, 33.5)	.0094**
Offsite technology based	36	46.5 (36.9, 56.0)	77	41.1 (35.0, 47.1)	104	46.4 (41.0, 51.8)	220	56.4 (53.4, 59.5)	.1018

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 893; number of nonrespondents = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-8b. Differences in Nutrition Education Delivery by Local Agency Caseload Size: Types of Follow-Ups Used—Local Agency Survey (RQ24: LA13)

	Small: Fewer than 750		Medium: 750 to 1,999		Large: 2,000 to 4,499		Very Large: 4,500+		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Follow-up occurs at subsequent WIC visits	102	100.0 (n/a)	193	99.8 (99.6, 99.9)	203	98.7 (97.6, 99.9)	378	100.0 (n/a)	(n/a)[a]
Telephone calls	51	49.1 (39.6, 58.6)	95	49.8 (43.7, 56.0)	104	47.9 (42.4, 53.4)	152	40.4 (37.4, 43.4)	.4245
Emails	3	6.7 (0.5, 13.0)†	4	3.0 (0.6, 5.4)†	12	5.8 (3.3, 8.4)	15	3.9 (2.8, 5.1)	.6340
Text messages	9	9.7 (4.1, 15.3)	12	6.7 (3.5, 9.9)	17	8.7 (5.5, 11.9)	34	8.8 (7.1, 10.5)	.8559
Video conferencing	0	— (n/a)[b]	2	1.1 (0.0, 2.3)†	0	— (n/a)[b]	5	1.1 (0.8, 1.4)	(n/a)[c]

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 880; number of nonrespondents = 13. Results for "other" (n = 24) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

[b] An estimate is not provided because no respondents selected this response.

[c] Unable to conduct bivariate analysis because of the small number of respondents.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-8c. Differences in Nutrition Education Delivery by Local Agency Caseload Size: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA14)

	Small: Fewer than 750		Medium: 750 to 1,999		Large: 2,000 to 4,499		Very Large: 4,500+		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	100	100.0 (n/a)	191	99.2 (98.3, 100.0)	206	99.3 (98.3, 100.0)	377	99.8 (99.6, 99.9)	(n/a)[a]
Bulletin boards with nutrition information	86	86.3 (80.1, 92.5)	163	83.8 (79.1, 88.5)	189	90.7 (87.4, 94.0)	355	94.1 (92.8, 95.4)	.0388*
Computer, kiosk, or tablet computers	8	5.6 (1.6, 9.7)†	30	17.2 (12.5, 21.9)	38	17.3 (13.3, 21.3)	89	23.1 (20.6, 25.7)	.0024**
Cooking demonstrations	16	10.6 (5.6, 15.6)	32	16.2 (11.7, 20.7)	57	26.8 (22.0, 31.6)	133	35.5 (32.5, 38.5)	<.0001****
Display tables with nutrition information	52	50.7 (41.2, 60.3)	90	48.6 (42.4, 54.8)	90	44.2 (38.7, 49.7)	178	46.5 (43.4, 49.6)	.7952
Educational props	73	76.1 (67.9, 84.2)	139	72.4 (66.9, 78.0)	161	76.0 (71.2, 80.9)	323	85.3 (83.1, 87.5)	.0909
Food tasting	21	18.1 (11.2, 24.9)	42	22.1 (17.0, 27.2)	56	28.1 (23.1, 33.1)	136	36.8 (33.7, 39.8)	.0052**

(continued)

Table J-8c. Differences in Nutrition Education Delivery by Local Agency Caseload Size: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA14) (continued)

	Small: Fewer than 750		Medium: 750 to 1,999		Large: 2,000 to 4,499		Very Large: 4,500+		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Nutrition education DVDs/videos at site	33	34.7 (25.3, 44.0)	94	48.9 (42.7, 55.1)	122	57.6 (52.1, 63.1)	262	68.3 (65.2, 71.3)	<.0001****
Support groups	26	25.9 (17.8, 34.0)	74	40.2 (34.1, 46.3)	100	47.0 (41.5, 52.5)	225	59.6 (56.5, 62.6)	<.0001****

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 878; number of nonrespondents = 15. Results for "other" (n = 10) and "none" (n = 1) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-8d. Differences in Nutrition Education Delivery by Local Agency Caseload Size: Types of Reinforcers Used Offsite—Local Agency Survey (RQ24: LA14)

	Small: Fewer than 750		Medium: 750 to 1,999		Large: 2,000 to 4,499		Very Large: 4,500+		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Monthly or quarterly nutrition newsletter sent home	16	21.6 (12.5, 30.7)	26	15.0 (10.5, 19.6)	27	15.0 (10.8, 19.2)	33	9.2 (7.3, 11.1)	.1020
Nutrition education DVDs/videos sent home	18	19.1 (11.7, 26.6)	48	27.0 (21.4, 32.6)	42	19.5 (15.3, 23.8)	94	25.5 (22.8, 28.1)	.3573
Social media	19	23.9 (14.7, 33.0)	41	22.3 (17.1, 27.6)	51	25.2 (20.4, 30.0)	94	26.6 (23.7, 29.5)	.9022
Offsite technology based	29	41.6 (31.7, 51.5)	58	32.7 (26.7, 38.6)	79	37.0 (31.8, 42.3)	167	44.5 (41.4, 47.5)	.2640
Telephone calls with nutrition education content	21	25.9 (16.7, 35.1)	34	21.0 (15.7, 26.3)	38	19.5 (15.0, 23.9)	60	16.3 (14.1, 18.5)	.3786
Email or text messages with nutrition education content	8	8.2 (3.1, 13.3)†	12	7.1 (3.8, 10.4)	17	8.1 (5.1, 11.1)	29	7.4 (6.0, 8.7)	.9836
Grocery store tours and other responses	8	6.4 (2.2, 10.6)†	15	7.9 (4.6, 11.2)	27	13.6 (9.8, 17.4)	49	13.6 (11.4, 15.9)	.1298
None	34	28.5 (20.3, 36.8)	61	31.5 (25.7, 37.4)	54	29.0 (23.8, 34.2)	86	23.6 (20.9, 26.3)	.5555

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 842; number of nonrespondents = 51. Responses for email messages (n = 17) and text messages (n = 57) were combined because of the small number of respondents. Responses for grocery store tours (n = 73) and other (n = 31) were combined because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-9a. Differences in Nutrition Education Delivery by Stratum: Types of Modes Used—Local Agency Survey (RQ24: LA11)

	ITOs and U.S. Territories		EBT States		LAs With Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	40	100.0 (n/a)	258	100.0 (n/a)	150	100.0 (n/a)	445	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	19	46.2 (38.8, 53.7)	91	35.3 (33.2, 37.3)	48	32.9 (30.5, 35.2)	149	36.7 (32.3, 41.1)	.2782
One-on-one counseling: Video conferencing	1	2.4 (0.2, 4.6)†	7	2.8 (2.0, 3.5)	11	6.9 (5.7, 8.2)	13	3.5 (1.8, 5.2)	.0880
Group education sessions	23	57.6 (50.1, 65.0)	165	64.2 (62.2, 66.3)	131	87.1 (85.5, 88.8)	268	52.8 (48.3, 57.2)	<.0001****
Onsite technology based	7	15.6 (10.4, 20.7)	54	21.0 (19.2, 22.7)	59	38.5 (36.1, 40.9)	96	19.6 (16.3, 22.9)	<.0001****
Offsite technology based	4	8.8 (4.8, 12.7)	135	52.7 (50.5, 54.8)	94	62.2 (59.7, 64.6)	204	46.0 (41.6, 50.4)	<.0001****

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 893; number of nonrespondents = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-9b. Differences in Nutrition Education Delivery by Stratum: Types of Follow-Ups Used—Local Agency Survey (RQ24: LA13)

	ITOs and U.S. Territories		EBT States		LAs with Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Follow-up occurs at subsequent WIC visits	40	100.0 (n/a)	251	98.8 (98.4, 99.3)	147	100.0 (n/a)	438	99.8 (99.5, 100.0)	(n/a)[a]
Telephone calls	19	48.1 (40.6, 55.6)	123	48.7 (46.6, 50.9)	59	40.2 (37.8, 42.7)	201	47.1 (42.6, 51.5)	.2589
Emails	1	2.0 (0.2, 3.8)†	7	2.9 (2.2, 3.7)	6	4.0 (3.0, 4.9)	20	5.4 (2.9, 7.8)	.1540
Text messages	5	11.9 (7.2, 16.6)	10	4.1 (3.2, 5.0)	18	12.1 (10.4, 13.7)	39	8.7 (6.2, 11.3)	.0029**
Video conferencing	0	—(n/a)[b]	2	0.7 (0.4, 1.1)	3	1.9 (1.2, 2.6)	2	0.4 (0.0, 0.9)†	(n/a)[c]

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 880; number of nonrespondents = 13. Results for "other" (n = 24) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

[b] An estimate is not provided because no respondents selected this response.

[c] Unable to conduct bivariate analysis because of the small number of respondents.

** Indicates statistical significance if the *p*-value is ≤ .01.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-9c. Differences in Nutrition Education Delivery by Stratum: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA14)

	ITOs and U.S. Territories		EBT States		LAs with Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	40	100.0 (n/a)	253	99.3 (98.9, 99.6)	148	100.0 (n/a)	433	99.6 (99.1, 100.0)	(n/a)[a]
Bulletin boards with nutrition information	35	87.5 (82.7, 92.4)	230	89.9 (88.6, 91.2)	137	92.6 (91.3, 93.9)	391	87.8 (84.8, 90.8)	.1576
Computer, kiosk, or tablet computers	7	15.6 (10.5, 20.8)	38	15.2 (13.6, 16.7)	44	29.2 (26.9, 31.5)	76	14.4 (11.7, 17.2)	<.0001****
Cooking demonstrations	16	44.0 (36.5, 51.6)	61	23.4 (21.6, 25.3)	51	34.6 (32.3, 37.0)	110	19.3 (16.2, 22.4)	<.0001****
Display tables with nutrition information	23	60.2 (52.9, 67.4)	112	44.0 (41.8, 46.1)	68	45.3 (42.8, 47.8)	207	48.3 (43.8, 52.7)	.0909
Educational props	35	85.9 (80.4, 91.5)	194	75.8 (73.9, 77.6)	127	85.9 (84.2, 87.7)	340	76.4 (72.5, 80.3)	.0069**
Food tasting	17	43.3 (35.9, 50.8)	53	20.5 (18.7, 22.2)	51	34.5 (32.1, 36.9)	134	25.8 (22.2, 29.4)	<.0001****
Nutrition education DVDs/videos at site	28	66.6 (59.2, 73.9)	144	56.4 (54.2, 58.5)	108	73.1 (70.8, 75.3)	231	48.2 (43.7, 52.7)	<.0001****

(continued)

Table J-9c. Differences in Nutrition Education Delivery by Stratum: Types of Reinforcers Used Onsite—Local Agency Survey (RQ24: LA14) (continued)

	ITOs and U.S. Territories		EBT States		LAs with Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Support groups	17	44.5 (37.0, 52.0)	111	43.8 (41.6, 45.9)	98	66.4 (64.1, 68.8)	199	40.0 (35.8, 44.3)	<.0001****

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 878; number of nonrespondents = 15. Results for "other" (n = 10) and "none" (n = 1) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-9d. Differences in Nutrition Education Delivery by Stratum: Types of Reinforcers Used Offsite—Local Agency Survey (RQ24: LA14)

	ITOs and U.S. Territories		EBT States		LAs with Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Monthly or quarterly nutrition newsletter sent home	8	18.9 (13.2, 24.5)	21	8.6 (7.3, 9.8)	9	6.3 (5.1, 7.5)	64	17.6 (13.7, 21.5)	<.0001****
Nutrition education DVDs/videos sent home	8	19.6 (13.7, 25.4)	73	29.3 (27.3, 31.3)	26	18.6 (16.6, 20.6)	95	22.4 (18.7, 26.1)	.0141**
Social media	5	12.6 (7.7, 17.5)	58	23.8 (21.9, 25.7)	34	24.4 (22.2, 26.7)	108	25.1 (21.0, 29.2)	.1736
Offsite technology based	5	11.0 (6.6, 15.4)	104	42.5 (40.3, 44.7)	76	54.0 (51.4, 56.6)	148	37.3 (32.7, 41.8)	<.0001****
Telephone calls with nutrition education content	5	12.6 (7.7, 17.6)	43	17.8 (16.1, 19.5)	25	18.4 (16.4, 20.4)	80	21.9 (17.8, 26.0)	.1113
Email or text messages with nutrition education content	6	13.5 (8.7, 18.4)	13	5.3 (4.3, 6.3)	17	12.0 (10.4, 13.7)	30	7.4 (5.0, 9.8)	.0131**

(continued)

Table J-9d. Differences in Nutrition Education Delivery by Stratum: Types of Reinforcers Used Offsite—Local Agency Survey (RQ24: LA14) (continued)

	ITOs and U.S. Territories		EBT States		LAs with Caseloads > 10,000		All Other LAs		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Grocery store tours and other responses	7	17.4 (11.7, 23.0)	21	8.5 (7.3, 9.8)	21	15.0 (13.1, 16.8)	50	9.7 (7.4, 12.1)	.0148*
None	14	38.9 (31.3, 46.4)	71	28.8 (26.8, 30.7)	35	24.9 (22.7, 27.2)	115	28.0 (24.0, 32.1)	.2138

Source: 2014 Local Agency Survey

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Number of respondents = 842; number of nonrespondents = 51. Responses for email messages (n = 17) and text messages (n = 57) were combined because of the small number of respondents. Responses for grocery store tours (n = 73) and other (n = 31) were combined because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

* Indicates statistical significance if the *p*-value is ≤ .05.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-10. Differences in Modes of Nutrition Education by Type of Facility—Site Survey (RQ25a: SV1&2_6, information on site type from end of Local Agency Survey)

	Health Department		Other Government Agency		IHS Clinic/Hospital		FQHC		Nonprofit Health Center/Medical Clinic		Hospital	
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)
One-on-one counseling: Face-to-face (in WIC site)	614	100.0 (n/a)	54	100.0 (n/a)	18	100.0 (n/a)	91	100.0 (n/a)	73	98.1 (94.4, 100.0)	39	100.0 (n/a)
One-on-one counseling: Telephone	202	39.3 (32.9, 45.6)	26	58.6 (35.4, 81.9)	6	66.2 (28.1, 100.0)	37	44.9 (32.1, 57.8)	22	29.8 (18.8, 40.9)	16	42.7 (26.1, 59.3)
One-on-one counseling: Video conferencing	25	6.1 (2.2, 10.0)†	3	4.9 (0.0, 11.8)†	1	53.3 (4.2, 100.0)†	2	3.0 (0.0, 6.9)†	2	2.1 (0.0, 5.0)†	2	4.3 (0.0, 10.1)†
Group education sessions	315	48.2 (41.6, 54.9)	35	40.5 (17.9, 63.1)	7	66.7 (30.1, 100.0)	58	57.9 (45.1, 70.7)	43	47.6 (34.8, 60.4)	27	62.1 (42.1, 82.1)
Onsite technology based	142	20.9 (16.0, 25.9)	13	34.2 (4.1, 64.4)†	0	—(n/a)[a]	16	15.6 (7.6, 23.6)	6	7.8 (0.0, 16.0)†	3	9.0 (0.0, 19.0)†
Offsite technology based	302	55.0 (48.5, 61.4)	22	48.5 (22.3, 74.7)	2	54.4 (6.1, 100.0)†	52	45.9 (33.0, 58.7)	29	36.2 (24.3, 48.2)	9	24.0 (8.4, 39.6)†

(continued)

Table J-10. Differences in Modes of Nutrition Education by Type of Facility—Site Survey (RQ25a: SV1&2_6, information on site type from end of Local Agency Survey) (continued)

	Stand-Alone WIC Site		Nonprofit Agency Facility		School or Head Start Facility		Faith-Based Facility		Mobile Van or Other		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	226	100.0 (n/a)	125	100.0 (n/a)	33	100.0 (n/a)	73	100.0 (n/a)	53	100.0 (n/a)	(n/a)[b]
One-on-one counseling: Telephone	110	49.4 (38.7, 60.2)	50	38.8 (27.1, 50.6)	12	54.8 (29.7, 79.8)	24	30.1 (13.9, 46.3)	23	35.5 (13.2, 57.8)†	.2366
One-on-one counseling: Video conferencing	4	1.7 (0.0, 3.3)†	2	2.1 (0.0, 5.3)†	0	—(n/a)[a]	0	—(n/a)[a]	1	1.3 (0.0, 3.8)†	(n/a)[c]
Group education sessions	152	63.1 (52.4, 73.9)	70	44.7 (32.9, 56.4)	12	43.4 (15.0, 71.7)†	28	29.3 (13.7, 44.8)	21	37.5 (25.6, 49.4)	.0341*
Onsite technology based	55	25.5 (15.2, 35.7)	20	15.2 (6.6, 23.7)	6	12.4 (0.0, 25.4)†	15	18.7 (6.7, 30.6)†	5	8.3 (0.0, 17.2)†	.1941
Offsite technology based	116	56.5 (46.1, 66.9)	59	39.6 (28.2, 50.9)	15	33.7 (12.1, 55.3)†	32	33.7 (17.1, 50.3)	16	22.0 (6.7, 37.4)†	.0157*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,400 respondents (nonrespondents = 1). CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] An estimate is not provided because no respondents selected this response.

[b] One or more of the estimates are 100%, so statistical testing is not meaningful.

[c] It was not possible to conduct bivariate analysis because of the small number of respondents in a cell.

* Indicates statistical significance if the *p*-value is ≤ .05.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-11. Differences in Modes of Nutrition Education by Site Caseload Size—Site Survey (RQ25a: SV1&2_6, information on caseload from end of Local Agency Survey)

	Very Small: 300 or fewer		Small: 301–900		Medium: 901–2,499		Large: 2,500 or more		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	363	99.7 (99.2, 100.0)	348	100.0 (n/a)	353	100.0 (n/a)	336	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	149	43.5 (34.7, 52.3)	132	44.7 (36.9, 52.5)	119	38.9 (30.1, 47.8)	129	37.8 (30.3, 45.3)	.6256
One-on-one counseling: Video conferencing	16	5.7 (1.2, 10.1)†	12	7.4 (0.4, 14.4)†	4	1.8 (0.0, 3.5)†	10	2.4 (0.8, 4.1)†	.1338
Group education sessions	124	28.3 (21.3, 35.3)	173	48.8 (39.7, 57.8)	211	55.9 (47.2, 64.6)	260	75.3 (68.4, 82.3)	<.0001****
Onsite technology based	62	17.5 (10.5, 24.4)	61	16.2 (10.6, 21.8)	83	22.1 (16.2, 27.9)	75	23.4 (14.9, 31.9)	.4266
Offsite technology based	150	37.6 (29.4, 45.8)	152	48.9 (39.7, 58.0)	170	53.8 (45.7, 62.0)	182	56.6 (48.3, 65.0)	.0096**

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,401 respondents (nonrespondents = 0). CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-12. Differences in Modes of Nutrition Education by Site Participant-to-FTE Educator Ratio for Nutrition Educators—Site Survey (RQ25a: SV1&2_6, information on participant-to-educator ratio)

	Ratio less than 100		Ratio of 101 to 225		Ratio of 226 to 400		Ratio of 401 or greater		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	321	99.7 (99.1, 100.0)	311	100.0 (n/a)	346	100.0 (n/a)	308	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	128	44.1 (34.8, 53.5)	121	43.9 (35.9, 51.9)	136	48.4 (39.5, 57.2)	105	32.5 (25.2, 39.9)	.1055
One-on-one counseling: Video conferencing	15	5.7 (0.8, 10.5)†	8	4.5 (0.5, 8.4)†	7	5.4 (0.0, 12.9)†	6	2.2 (0.3, 4.1)†	.7967
Group education sessions	131	32.1 (24.2, 39.9)	156	46.3 (38.4, 54.1)	205	55.2 (46.5, 63.9)	210	67.3 (59.5, 75.1)	<.0001****
Onsite technology based	48	16.1 (8.5, 23.6)	68	20.1 (14.2, 25.9)	55	14.1 (9.6, 18.6)	71	25.7 (16.6, 34.9)	.1333
Offsite technology based	130	40.2 (31.2, 49.1)	146	45.0 (37.1, 52.8)	154	49.1 (40.3, 57.9)	160	57.7 (49.2, 66.3)	.0494*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,287 respondents. 114 respondents were excluded because the ratio was not available. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-13. Differences in Modes of Nutrition Education by Ethnic Composition of Participants at Site—Site Survey (RQ25a: SV1&2_6, Census data on ethnicity)

	No Hispanic/Latino Participants		1–10 Percent Hispanic/Latino Participants		11–35 Percent Hispanic/Latino Participants		>36 Percent or More Hispanic/Latino Participants		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	288	100.0 (n/a)	364	99.7 (99.0, 100.0)	320	100.0 (n/a)	343	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	101	41.5 (31.8, 51.2)	130	43.3 (35.0, 51.5)	120	42.5 (35.0, 50.0)	143	41.8 (33.5, 50.0)	.9918
One-on-one counseling: Video conferencing	8	6.9 (0.0, 14.5)†	7	1.9 (0.1, 3.7)†	10	4.5 (0.8, 8.1)†	13	4.5 (0.3, 8.8)†	.4314
Group education sessions	112	34.6 (25.9, 43.4)	185	44.3 (36.4, 52.1)	177	51.5 (43.2, 59.7)	256	71.5 (63.7, 79.3)	<.0001****
Onsite technology based	67	20.6 (14.2, 27.1)	73	20.8 (13.1, 28.5)	63	16.8 (11.7, 21.9)	60	18.4 (10.5, 26.2)	.8381
Offsite technology based	127	47.5 (38.2, 56.8)	170	47.2 (38.9, 55.4)	151	48.0 (39.6, 56.5)	175	55.6 (47.2, 64.0)	.5201

Sources: 2014 Site Survey, Versions 1 and 2 and Census data. Census Bureau. (5 November 2014). American Community Survey, 2011 American Community Survey 5-Year Estimates, Table B01001; generated by K. Everett; using American FactFinder. Retrieved from http://factfinder2.census.gov

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,316 respondents. 85 respondents were excluded from the analysis because information on ethnicity was not available. The analysis categories were based on the quartile distribution for the Hispanic/Latino variable. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-14. Differences in Modes of Nutrition Education by Racial Composition of Participants at Site—Site Survey (RQ25a: SV1&2_6, Census data on ethnicity)

	<10 Percent Non-White Participants		11–30 Percent Non-White Participants		31–55 Percent Non-White Participants		>56 Percent Non-White Participants		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face	345	100.0 (n/a)	359	100.0 (n/a)	297	100.0 (n/a)	314	99.6 (98.8, 100.0)	(n/a)[a]
One-on-one counseling: Telephone	140	45.9 (38.0, 53.8)	128	42.8 (34.4, 51.2)	119	40.4 (31.1, 49.7)	107	38.4 (29.9, 46.8)	.6488
One-on-one counseling: Video conferencing	8	3.2 (0.5, 5.9)†	13	3.6 (0.7, 6.4)†	3	1.2 (0.0, 3.1)†	14	10.2 (1.1, 19.3)†	.0160*
Group education sessions	142	34.9 (27.8, 42.0)	191	46.5 (38.6, 54.5)	193	57.8 (47.9, 67.6)	204	66.2 (58.5, 73.9)	<.0001****
Onsite technology based	61	15.6 (10.7, 20.5)	74	17.6 (12.6, 22.7)	62	23.1 (13.5, 32.7)	66	22.7 (15.0, 30.5)	.3103
Offsite technology based	142	39.7 (32.5, 47.0)	184	52.4 (44.4, 60.3)	155	56.9 (47.9, 65.9)	142	51.8 (42.8, 60.9)	.0217*

Source: 2014 Site Survey, Versions 1 and 2 and Census data. Data on the race composition of participants were obtained using geocoding and represent the 2011 estimated census counts by ZIP Code Tabulation Areas (ZCTA) for women 18 to 44, with incomes less than the poverty level. The counts are from the 2007–2011 American Community Survey. Census Bureau. (5 November 2014). American Community Survey, 2011 American Community Survey 5-Year Estimates, Table B01001; generated by K. Everett; using American FactFinder. Retrieved from http://factfinder2.census.gov

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,316 respondents. 85 respondents were excluded from the analysis because information on race was not available. Non-White includes all races other than Caucasian including multiple races. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-15. Differences in Modes of Nutrition Education by Percentage of Participants at Site that Are Non-English Speaking—Site Survey (RQ25a: SV1&2_6, information on language)

	None		1–5% of Participants		6–10% of Participants		11–30% of Participants		31–50% of Participants		51% or More of Participants		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	98	99.2 (97.6, 100.0)	232	100.0 (n/a)	77	100.0 (n/a)	107	100.0 (n/a)	68	100.0 (n/a)	113	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	35	47.9 (30.6, 65.2)	85	42.5 (32.8, 52.1)	26	35.9 (24.6, 47.2)	46	48.4 (34.4, 62.4)	26	36.2 (21.6, 50.9)	41	34.8 (21.8, 47.8)	.5612
One-on-one counseling: Video conferencing	5	9.6 (0.0, 21.2)†	11	5.3 (1.2, 9.3)†	2	1.8 (0.0, 4.2)†	5	4.9 (0.7, 9.2)†	2	2.4 (0.0, 6.2)†	3	2.3 (0.0, 5.0)†	.2667
Group education sessions	34	26.4 (13.7, 39.1)	112	41.1 (31.9, 50.3)	45	63.8 (47.1, 80.6)	68	58.1 (44.0, 72.3)	48	65.7 (50.8, 80.6)	77	59.6 (45.0, 74.1)	.0002***
Onsite technology based	13	7.9 (2.8, 13.0)†	49	21.3 (13.2, 29.5)	19	16.9 (6.8, 27.0)†	24	18.1 (9.6, 26.6)	16	19.7 (7.9, 31.5)†	19	13.5 (6.2, 20.8)	.1591
Offsite technology based	38	42.4 (23.9, 61.0)	114	46.7 (36.7, 56.6)	33	52.2 (32.2, 72.2)	45	50.1 (36.2, 64.0)	42	67.2 (54.2, 80.2)	52	45.0 (31.1, 58.9)	.4659

Source: 2014 Site Survey, Version 1

Notes: Estimates were weighted to represent the population of sites using the Version 1 Site Survey weights and based on 696 respondents (nonrespondents = 0). Analysis categories were based on survey response options. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

*** Indicates statistical significance if the *p*-value is ≤ .001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-16. Differences in Modes of Nutrition Education by Availability of a Nutrition Education Coordinator—Site Survey (RQ25a: SV1&2_6, info on NE coordinator)

	Have Nutrition Education Coordinator		Do Not Have Nutrition Education Coordinator		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	116	100.0 (n/a)	1,170	99.9 (99.7, 100.0)	(n/a)[a]
One-on-one counseling: Telephone	62	57.6 (45.6, 69.5)	428	42.0 (36.8, 47.1)	.0256*
One-on-one counseling: Video conferencing	4	2.3 (0.0, 5.1)†	32	4.8 (1.9, 7.7)†	.2994
Group education sessions	68	57.9 (46.1, 69.8)	634	47.7 (42.9, 52.5)	.1352
Onsite technology based	32	25.1 (15.3, 34.9)	210	18.0 (14.1, 21.8)	.1657
Offsite technology based	64	57.7 (45.1, 70.4)	526	46.3 (41.3, 51.4)	.1221

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,287 respondents. 114 respondents were excluded from the analysis because information was not available on availability of a nutrition education coordinator. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-17. Differences in Modes of Nutrition Education by FNS Region—Site Survey (RQ25a: SV1&2_6, Region)

	Western		Southwest		Southeast		Northeast		Mountain Plains		Midwest		Mid-Atlantic		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	221	100.0 (n/a)	176	100.0 (n/a)	304	100.0 (n/a)	148	100.0 (n/a)	250	100.0 (n/a)	168	99.6 (98.8, 100.0)	133	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	127	55.3 (44.2, 66.3)	96	49.1 (35.7, 62.5)	64	22.8 (15.6, 30.0)	35	34.4 (21.2, 47.7)	92	43.7 (34.3, 53.1)	56	43.0 (29.4, 56.5)	59	39.2 (24.7, 53.6)	.0117**
One-on-one counseling: Video conferencing	7	8.4 (0.0, 18.9)†	9	5.3 (0.0, 12.1)†	12	7.1 (0.9, 13.4)†	1	0.4 (0.0, 1.2)†	2	0.9 (0.0, 2.1)†	6	4.9 (0.0, 11.0)†	5	3.7 (0.0, 7.9)†	.3815
Group education sessions	154	66.6 (56.7, 76.5)	124	75.6 (65.8, 85.4)	112	42.5 (34.6, 50.3)	114	72.2 (60.5, 83.9)	150	46.0 (36.9, 55.1)	45	15.3 (9.2, 21.3)	69	41.7 (30.5, 53.0)	<.0001****
Onsite technology based	28	13.7 (3.9, 23.4)†	36	13.0 (7.1, 18.9)	78	34.4 (25.5, 43.3)	2	2.2 (0.0, 5.2)†	67	25.6 (17.3, 33.8)	32	17.7 (7.2, 28.1)†	38	25.9 (13.5, 38.3)	.0005***
Offsite technology based	112	51.0 (39.7, 62.4)	124	77.5 (68.5, 86.6)	99	43.4 (35.3, 51.4)	7	6.1 (0.0, 12.9)†	165	59.2 (49.2, 69.2)	82	48.7 (35.6, 61.8)	65	36.3 (22.0, 50.6)	<.0001****

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,401 respondents (nonrespondents = 0). CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-18. Differences in Modes of Nutrition Education by Urbanicity of Site Location—Site Survey (RQ25a: SV1&2_6, Urban/Rural)

	Rural		Urban		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	352	100.0 (n/a)	1,037	99.9 (99.6, 100.0)	(n/a)[a]
One-on-one counseling: Telephone	132	41.5 (33.1, 50.0)	393	42.1 (37.1, 47.2)	.9057
One-on-one counseling: Video conferencing	15	6.7 (1.9, 11.5)†	25	3.7 (0.8, 6.5)†	.2522
Group education sessions	132	34.8 (27.4, 42.2)	629	54.4 (49.2, 59.7)	<.0001****
Onsite technology based	66	19.6 (12.1, 27.0)	215	19.5 (15.5, 23.5)	.9847
Offsite technology based	140	40.4 (32.0, 48.8)	511	51.7 (46.4, 56.9)	.0283*

Source: 2014 Site Survey, Versions 1 and 2

Notes: Information on ZIP code was used to determine population size for the Standard Statistical Metropolitan Area (SSMA) in which the LA is located; the LA was then classified as rural or urban based on the Census definitions of population size for urbanicity. Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,390 respondents. 11 respondents were excluded from the analysis because information on urbanicity was not available. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

* Indicates statistical significance if the *p*-value is ≤ .05.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-19. Differences in Modes of Nutrition Education by Stratum—Site Survey (RQ25a: SV1&2_6, Stratum)

	ITOs and U.S. Territories		EBT States		Sites in LAs With Caseloads > 10,000		Sites in All Other LAs		
	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	Unweighted Number of Sites	Weighted % of Sites (95% CI)	*p*-value
One-on-one counseling: Face-to-face	52	100.0 (n/a)	411	100.0 (n/a)	325	100.0 (n/a)	612	99.8 (99.6, 100.0)	(n/a)[a]
One-on-one counseling: Telephone	22	28.0 (7.7, 48.3)†	156	44.6 (35.7, 53.5)	126	33.8 (26.1, 41.4)	225	45.2 (38.5, 52.0)	.1038
One-on-one counseling: Video conferencing	1	2.4 (0.0, 7.0)†	14	5.8 (0.4, 11.3)†	12	4.8 (0.7, 8.9)†	15	4.4 (0.4, 8.4)†	.9343
Group education sessions	17	36.5 (23.3, 49.8)	230	63.2 (56.1, 70.3)	226	67.4 (58.5, 76.3)	295	37.5 (31.4, 43.5)	<.0001****
Onsite technology based	5	5.6 (0.0, 12.1)†	73	17.6 (12.8, 22.4)	103	33.2 (23.4, 43.0)	100	14.9 (10.2, 19.6)	<.0001****
Offsite technology based	6	7.2 (0.0, 15.3)†	208	59.8 (52.2, 67.3)	196	62.2 (53.0, 71.5)	244	41.1 (34.5, 47.7)	<.0001****

Source: 2014 Site Survey, Versions 1 and 2

Notes: Estimates were weighted to represent the population of sites using the combined Site Survey weights and based on 1,401 respondents (nonrespondents = 0). CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test adjusts appropriately for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-20a. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Modes Used—Local Agency Survey (RQ25b: LA11, information on NSA cost)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
One-on-one counseling: Face-to-face (in WIC site)	234	100.0 (n/a)	202	100.0 (n/a)	237	100.0 (n/a)	218	100.0 (n/a)	(n/a)[a]
One-on-one counseling: Telephone	56	23.1 (17.9, 28.3)	95	45.9 (39.9, 52.0)	85	37.5 (31.6, 43.5)	70	43.1 (36.1, 50.2)	.0007***
One-on-one counseling: Video conferencing	5	3.9 (0.8, 7.0)†	7	3.9 (1.3, 6.6)†	15	4.1 (2.8, 5.3)	5	2.9 (0.7, 5.1)†	.9553
Group education sessions	153	55.2 (48.8, 61.6)	161	75.1 (69.4, 80.7)	152	50.4 (44.4, 56.3)	121	56.2 (49.5, 62.9)	.0025**
Onsite technology based	53	21.8 (16.7, 26.8)	58	30.4 (24.8, 36.1)	73	23.4 (19.3, 27.6)	31	13.0 (8.7, 17.3)	.0086**
Offsite technology based	110	53.6 (47.4, 59.8)	116	50.4 (44.3, 56.5)	134	42.3 (36.8, 47.7)	76	43.8 (36.9, 50.7)	.1948

Source: 2014 Local Agency Survey. NSA local-level expenditure data used to estimate the NSA cost per participant per month were from FNS 798-A reporting form for FY13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Two respondents were excluded from the analysis because information on NSA cost per participant per month was not available. Analysis categories were based on quartile distribution for the NSA cost per participant per month variable. Number of respondents = 891; number of nonrespondents = 0. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

*** Indicates statistical significance if the *p*-value is ≤ .001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-20b. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Follow-Ups Used—Local Agency Survey (RQ25b: LA13 information on NSA Cost)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Follow-up occurs at subsequent WIC visits	232	100.0 (n/a)	200	99.7 (99.4, 99.9)	227	99.1 (98.1, 100.0)	215	99.8 (99.6, 99.9)	(n/a)[a]
Telephone calls	91	38.5 (32.5, 44.6)	117	60.1 (54.2, 66.0)	84	34.3 (28.6, 40.1)	109	57.5 (51.0, 64.0)	<.0001****
Emails	6	1.8 (0.7, 2.9)†	11	4.9 (2.8, 7.1)	5	1.3 (0.9, 1.7)	11	10.8 (4.7, 16.8)	<.0001****
Text messages	19	10.2 (5.8, 14.7)	22	11.4 (7.4, 15.4)	12	3.5 (2.3, 4.8)	18	8.4 (4.8, 11.9)	.0994
Video conferencing	1	0.5 (0.0, 1.2)†	3	1.5 (0.1, 2.9)†	3	0.7 (0.5, 1.0)	0	—(n/a)[c]	(n/a)[b]

Source: 2014 Local Agency Survey. NSA local-level expenditure data used to estimate the NSA cost per participant per month were from FNS 798-A reporting form for FY13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Two respondents were excluded from the analysis because information on NSA cost per participant per month was not available. Analysis categories were based on quartile distribution for the NSA cost per participant per month variable. Number of respondents = 878; number of nonrespondents = 13. Results for "other" (n = 24) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

[b] Unable to conduct bivariate analysis because of the small number of respondents.

[c] An estimate is not provided because no respondents selected this response.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

† Indicates that the estimate does not meet the criteria for statistical reliability (RSE > 30); thus, the results should be interpreted with caution.

Table J-20c. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Reinforcers Used Onsite—Local Agency Survey (RQ25b: LA14 information on NSA cost data)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Brochures or written materials	228	100.0 (n/a)	198	99.7 (99.5, 99.9)	234	100.0 (n/a)	212	98.7 (97.4, 99.9)	(n/a)[a]
Bulletin boards with nutrition information	207	89.8 (85.7, 93.8)	183	89.7 (85.4, 94.1)	203	83.5 (78.7, 88.2)	198	91.1 (87.2, 95.1)	.2908
Computer, kiosk, or tablet computers	38	13.9 (9.9, 17.8)	49	27.8 (22.2, 33.5)	55	18.3 (14.6, 21.9)	22	7.9 (4.9, 10.9)	<.0001****
Cooking demonstrations	54	19.7 (15.1, 24.3)	84	37.9 (32.3, 43.6)	49	17.9 (13.9, 22.0)	51	17.9 (13.8, 22.0)	.0001****
Display tables with nutrition information	86	37.8 (31.6, 44.0)	102	52.4 (46.2, 58.5)	104	45.0 (39.0, 51.1)	117	57.2 (50.6, 63.9)	.0085**
Educational props	180	75.2 (69.2, 81.3)	166	81.9 (77.1, 86.6)	183	74.1 (68.3, 79.8)	166	80.1 (75.2, 85.0)	.4435
Food tasting	53	20.9 (15.9, 25.8)	83	40.6 (34.7, 46.5)	59	24.2 (19.2, 29.3)	60	24.1 (19.0, 29.3)	.0032**
Nutrition education DVDs/videos at site	129	45.9 (39.7, 52.1)	127	59.5 (53.3, 65.6)	143	54.2 (48.1, 60.3)	111	52.8 (46.0, 59.6)	.2224

(continued)

Table J-20c. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Reinforcers Used Onsite—Local Agency Survey (RQ25b: LA14 information on NSA cost data) (continued)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Support groups	122	48.1 (41.8, 54.4)	102	52.1 (45.9, 58.3)	115	41.3 (35.6, 46.9)	86	34.1 (28.1, 40.0)	.0213

Source: 2014 Local Agency Survey. NSA local-level expenditure data used to estimate the NSA cost per participant per month were from FNS 798-A reporting form for FY13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Two respondents were excluded from the analysis because information on NSA cost per participant per month was not available. Analysis categories were based on quartile distribution for the NSA cost per participant per month variable. Number of respondents = 876; number of nonrespondents = 15. Results for "other" (n = 10) and "none" (n = 1) not shown because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

[a] One or more of the estimates are 100%, so statistical testing is not meaningful.

** Indicates statistical significance if the *p*-value is ≤ .01.

**** Indicates statistical significance if the *p*-value is ≤ .0001.

Table J-20d. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Reinforcers Used Offsite—Local Agency Survey (RQ25b: LA14 information on NSA Cost Study)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Monthly or quarterly nutrition newsletter sent home	20	8.0 (4.4, 11.5)	24	18.5 (12.0, 25.0)	24	10.9 (7.3, 14.4)	34	24.1 (16.9, 31.3)	.0043**
Nutrition education DVDs/videos sent home	40	19.1 (14.2, 24.0)	58	23.0 (19.0, 27.1)	59	26.9 (21.4, 32.4)	44	23.8 (17.9, 29.8)	.4877
Social media	42	23.5 (17.7, 29.4)	50	32.1 (25.3, 38.8)	64	20.1 (16.7, 23.6)	49	24.0 (17.5, 30.6)	.2740
Offsite technology based	78	43.1 (36.4, 49.7)	84	38.9 (33.2, 44.6)	106	33.0 (28.4, 37.7)	64	39.7 (32.4, 47.0)	.4138
Telephone calls with nutrition education content	35	16.8 (11.8, 21.9)	38	19.8 (15.0, 24.5)	43	19.4 (14.4, 24.3)	37	26.5 (19.3, 33.8)	.3009
Email or text messages with nutrition education content	13	8.0 (4.1, 11.9)	16	7.0 (4.4, 9.6)	17	4.9 (3.6, 6.2)	19	10.0 (5.9, 14.1)	.3996

(continued)

Table J-20d. Differences in Nutrition Education Delivery by NSA Cost per Participant: Types of Reinforcers Used Offsite—Local Agency Survey (RQ25b: LA14 information on NSA Cost Study) (continued)

	Cost is $8.60–$11.96		Cost is $11.97–$13.00		Cost is $13.01–$14.66		Cost is $14.67 or Greater		
	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	Unweighted Number of LAs	Weighted % of LAs (95% CI)	*p*-value
Grocery store tours and other responses	27	9.8 (6.4, 13.1)	21	10.8 (7.0, 14.6)	28	9.8 (7.1, 12.4)	23	10.9 (7.0, 14.8)	.9773
None	74	29.6 (24.0, 35.2)	43	22.3 (17.3, 27.3)	50	29.9 (23.8, 36.0)	67	29.0 (23.1, 35.0)	.5778

Source: 2014 Local Agency Survey. NSA local-level expenditure data used to estimate the local NSA cost per participant per month for each SA were from FNS 798-A reporting form for FY13.

Notes: Estimates were weighted to represent the population of LAs using the Local Agency Survey weights. Two respondents were excluded from the analysis because information on NSA cost per participant per month was not available. Analysis categories were based on quartile distribution for the NSA cost per participant per month variable. Number of respondents = 840; number of nonrespondents = 51. Responses for email messages (n = 17) and text messages (n = 57) were combined because of the small number of respondents. Responses for grocery store tours (n = 73) and other (n = 31) were combined because of the small number of respondents. CI = confidence interval, n/a = not applicable.

Respondents could select multiple responses.

The Rao-Scott design-adjusted chi-square goodness-of-fit test for a one-way table was used to test the null hypothesis of equal proportions. This test appropriately adjusts for the sample design.

** Indicates statistical significance if the *p*-value is ≤ .01.

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APPENDIX K:
ADDITIONAL INFORMATION FOR CONTINUOUS VARIABLES USED IN THE ANALYSIS

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Table K-1. Additional Information for Continuous Variables Used in the Analysis

	n	Mean	Median	Mode	Minimum	Maximum	Range
LA caseload	893	5,370.9	1,862.7	545.0	52.0	326,579.0	326,527.0
Site caseload	1,401	1,401.7	693.3	500.0	3.0	16,500.0	16,497.0
Site FTEs	1,287	4.8	3.6	2.0	0.3	34.0	33.7
Site participant-to-FTE educator ratio	1,287	250.5	199.9	250.0	1.7	3,597.0	3,595.3

FTE = full-time equivalent