Food and Nutrition Service

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WIC Nutrition Assessment and Tailoring Study: Final Report Part 2 – Appendix H

U.S. Department of Agriculture | Food and Nutrition Service | Office of Policy Support

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Submitted to

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In approving Ohio WIC's participation in this study, the Ohio Department of Health Institutional Review Board requires that publication of research findings include the following disclaimer: "This study includes data provided by the Ohio Department of Health, which should not be considered an endorsement of this study or its conclusions."

In approving Nebraska WIC's participation in this study, the Nebraska Department of Health and Human Services requires that publication of research findings include the following disclaimer: "These findings and their interpretation are the sole responsibility of the author and do not necessarily reflect the opinions or policy position of DHHS."

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Appendix H

Miscellaneous Questions and Answers

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H.1 Use of Referral Information

Research question 4: To what extent is referral information from healthcare providers used in determining nutrition risk? What type of referral information is used?

Table H-1. Use of medical information provided directly from a healthcare provider during nutrition assessment, by assessment mode

During the visit, did the WIC staff refer to any medical information provided directly from a healthcare provider?	Appointment observations			
	Remote		In-person	
	Number	Percentage	Number	Percentage
Yes	13	4.3*	37	14.3
No	290	95.7*	221	85.7
Number of observed appointments	303		258	
What kind of information was referred to? (if provided by the healthcare provider)				
Height/length and weight	8	–	18	–
Recent Hct/Hgb count	4	–	3	–
Medical history or other clinical information	2	–	13	–
Dietary/nutrition information	1	–	2	–
Family and social environment information	0	–	0	–
Other#	2	–	11	–
Number of observed appointments	13		37	

*Indicates in-person versus remote differences that are significant at p≤0.05.
Other medical information provided includes pregnancy confirmation, immunizations, and formula prescriptions.
Note: Observers checked all types of information that applied. Percentages not calculated due to small numbers.
Source: U.S. Department of Agriculture, Food and Nutrition Service, WIC Nutrition Assessment and Tailoring Study, Observation Guide. Remote observations were conducted fall 2021–spring 2022, and in-person observations were conducted summer and fall 2022. Start of the Observation, Gathering Information for Nutrition Risk Assessment, question 3. Tabulations are not weighted. See Appendix E, Table 17.

As part of the observation of both remote and in-person appointments, observers indicated if during the visit, WIC staff referred to any medical information provided directly from a healthcare provider. Referring to medical information from a healthcare provider did not happen often during either remote or in-person appointments. However, it was significantly more likely to occur in the in-person appointments observed (14.3 percent of in-person appointments versus 4.3 percent of remote appointments).

When information was provided by a healthcare provider, it was most likely to be height/length and weight information (18 cases for in-person observations and 8 cases for remote observations). Medical history or other clinic information and "other" information including pregnancy confirmation, immunizations, and formula prescriptions were also among the most common types of information received from healthcare providers.

H.2 Data Tables Related to MIS Use

Each study State agency has a WIC management information system (MIS), which is a web-based application that supports the WIC program in providing services to WIC clients. Table H-2 provides a list of the MISs each study State agency uses to collect and track participant information. WIC MIS systems were developed by a variety of vendors; some State agencies share the same MIS (i.e., 3 Sigma and Crossroads). While the functionality of the systems is generally similar regardless of developer, not all systems have all functionality. Also, local agencies may not use all functionality available to them.

Table H-2. MIS by State agency

State agency	MIS
Choctaw Nation	SPIRIT
Florida	3 Sigma
Indiana	3 Sigma
Louisiana	Louisiana WIC Information Network
North Carolina	Crossroads
Nebraska	Mt Plains
Nevada	WIC Information System for Health
Ohio	WIC Certification System v6
Vermont	Mt Plains
West Virginia	Crossroads

Note: MIS = management information system.

H.3 Available (Limited) Data on Time by Activity

Research question 23, parts 2–4: How long does it take for WIC staff to:

(2) provide tailored nutrition education and breastfeeding support,

(3) provide tailored food package prescriptions, and

(4) provide referrals?

Table H-3. Session time for taking measurements, providing nutrition education, and prescribing food packages

Type of session	Number of observations	Average time (minutes)	Median time (minutes)
Measurements (anthropometric and/or lab)	131	6.4	5
Nutrition education and counseling only	20	15.3	15
Prescribing food packages only	20	6.8	5

Note: This analysis uses in-person data only.
Source: U.S. Department of Agriculture, Food and Nutrition Service, WIC Nutrition Assessment and Tailoring Study, Observations of Nutrition Services Components of WIC Certification. Tabulations are not weighted. See Appendix E, Table 54.

Observers reported activities conducted and time data by session on the observation guide form. Most sessions contained more than one activity, although there were a substantial number of sessions in which taking measurements (anthropometric and/or lab) was the only activity conducted. Sessions in which measurements were the only activity conducted took on average 6.4 minutes to complete (n=131). The median time for these sessions was 5 minutes.

There were a small number of sessions in which nutrition education and counseling was the only activity conducted. These single-activity sessions were most often breastfeeding counseling provided by a breastfeeding expert or peer counselor, not the Competent Professional Authority (CPA) who conducted the assessment. Average time for these sessions (n=20) was 15.3 minutes. Median time was 15 minutes.

There were also a small number of sessions in which prescribing the food package was the only activity conducted. These were often completed by a clerk or support staff, suggesting that when recorded as a separate session, this activity involved issuing Electronic Benefit Transfer (EBT) cards rather than discussion/assessment related to the food package prescription. Average time for these sessions (n=20) was 6.8 minutes. Median time was 5 minutes.

There were no sessions in which only the assessment or referrals were conducted. See chapter 6 for a discussion of the most frequent combinations of activities across observations and total visit time.

H.4 Follow-Up on Nutrition and Health Goals

Research question 21a, part 1: Considering the nutrition goals set or referral services made during the initial nutrition assessment, how do staff follow up on the identified nutrition risks in follow-up appointments?

Table H-4. Situations when staff routinely follow up on nutrition and health goals

When staff routinely follow up on health goals	Remote staff follow up on goals		In-person staff follow up on goals	
	Total number of respondents	Percentage	Total number of respondents	Percentage
When the participant is high-risk	86	80.2*	80	97.5
When the visit is for nutrition education	84	59.5	80	66.3
At the next certification visit	86	52.3*	83	85.5
Other situations	84	88.1*	76	71.1

*Differences are significant at p≤0.05.
Notes: Remote data collected fall 2021–spring 2022; in-person data collected summer and fall 2022. Respondents reported all that apply.
Source: U.S. Department of Agriculture, Food and Nutrition Service, WIC Nutrition Assessment and Tailoring Study, Staff Interviews, question 24. Tabulations are not weighted. See Appendix C, Table 11.

Staff were asked when they routinely follow up on nutrition and health goals. Their responses differed somewhat in the remote versus in-person environments. Staff interviewed as part of the in-person data collection almost universally noted (97.5 percent) that they routinely follow up on nutrition and health goals when the participant is high-risk. This response was the highest across both data collections and all situations listed. In the remote environment, staff were most likely to say they would follow up on nutrition and health goals in other situations. These "other" situations included following up during other appointment types, such as mid-certification visits or visits where only height and weight data are collected, sometimes referred to as "medical update" appointments. Staff also reported following up outside of appointments with caregivers who had a breastfeeding-related goal; some clinics had a standard practice of following up within 10 days of the baby's birth for any caregiver who indicated that they wanted to breastfeed.

Staff were less likely to follow up on goals when the visit is for nutrition education or at the next certification visit. It may be that they often did not have goals to follow up on. The observation data indicated that across both data collections, CPAs helped participants to set a personal behavioral change goal during the appointment in 57 percent of all observed appointments (calculated from appendix E, Table 35).

H.5 Follow-Up on Referrals

Research question 21a, part 2: In what situations do staff routinely follow up on these goals and/or referrals?

Table H-5. Situations when staff follow up on referrals made

When staff follow up on referrals made	Remote staff follow up on referrals		In-person staff follow up on referrals	
	Total number of respondents	Percentage	Total number of respondents	Percentage
When the participant is high-risk	85	68.2*	75	86.7
When information has been received from the referral	85	44.7	73	57.5
When information has *not* been received from the referral	84	50.0	66	51.5
At re-certification	84	72.6	74	81.1
Other situations	85	52.9	68	45.6

*Differences are significant at p≤0.05.
Source: U.S. Department of Agriculture, Food and Nutrition Service, WIC Nutrition Assessment and Tailoring Study, Staff Interviews, question 25. Tabulations are not weighted. See Appendix C, Table 12.

In staff interviews, staff were asked to think about cases in which they referred a participant to services based on information from their nutrition risk assessment and then were asked if they followed up on these referrals *with the participant*. In the in-person environment, staff indicated they most often followed up on referrals when the participant is high-risk (86.7 percent). This was significantly different from the percentage of staff who gave this response in the remote environment (68.2 percent). In both environments, over 70 percent of staff were likely to follow up on referrals at recertification, maybe because referrals are noted in the participant's record.

In interviews, staff noted that they followed up on referrals for dentists or other healthcare providers, food prescriptions sent to the medical provider, immunizations, breastfeeding peer counseling, and support programs for early childhood development. They ascertain how far along the participant is in connecting to a support service and gently probe the participant accordingly. One staff member noted that they sometimes call the participant to check in on the referral process:

> *"I guess if we've recommended or referred a mom to her provider … and we have not heard anything, then we would contact mom and just ask if there's any way we can help in that process or if she's no longer interested. So, we would follow up with that, especially if mom thought the physician was going to be sending in documentation for specialty formula.... We would make a phone call and ask mom." – Clinic staff*

Another staff member in a different clinic noted that some participants may need quicker follow-up based on the severity of their risk:

> *"I mean, there's definitely been some times when I've had kiddos really low [in] iron or even like that one I was just telling you about [a] while ago with the baby stools. I would almost keep a note on these and check in with the mom in a week and be like, 'Hey, did you get to go in and see the doctor? How's everything going?' And just do an extra phone call. It doesn't happen very often, but there's definitely been times that I have called back the client in a week or two and said, 'Hey, I just want to follow up, make sure things are going okay.' – Clinic staff*