
Vermont Department of Health



We nourish families.

VERMONT DEPARTMENT OF HEALTH

Vermont WIC MIS/EBT Project

Vermont WIC Functional Requirements

Version 4.0

Vermont WIC MIS/EBT Project	Version: 4.0
Vermont WIC Functional Requirements	Date:07/23/2012
http://isa2004/Intranet/ITSI/ITSIntranet/default.aspx?Page=Projects/WICSystem	

Revision History

Date	Version	Description	Author
December 6, 2010	1.0	Draft created	Nancy Rowell
December 17, 2010	1.1	EBT Functionality Added	Nancy Rowell
December 21, 2010	1.2	Identified Vermont Specific Functionality	Nancy Rowell
Dec. 22 – Jan. 18, 2011	1.3	Stakeholder Edits to Business Process	Nancy Rowell
January 19, 2011	1.4	Refined Business Processes	Nancy Rowell
January 28, 2011	1.5	Edits for wording, grammar, etc.	Nancy Rowell
February 9, 2011	1.6	Final Stakeholder edits	Nancy Rowell
February 11, 2011	1.7	Final writer review	Nancy Rowell
February 14, 2011	1.8	Format edits – logo added	Nancy Rowell
February 15, 2011	2.0	Final Copy	Nancy Rowell
March 8, 2011	3.0	Corrected Heading formatting, added Appendix 8, updated Appendix 1	Nancy Rowell
July 23, 2012	4.0	Updated for currency after MIS&EBT IAPD approval	Donna Bister Nancy Rowell Jeanne Keller

Vermont WIC MIS/EBT Project	Version: 4.0
Vermont WIC Functional Requirements	Date:07/23/2012
http://isa2004/Intranet/ITSI/ITSIntranet/default.aspx?Page=Projects/WICSystem	

Table of Contents

1. Introduction to Vermont WIC	2
1.1 Vermont WIC MIS	2
1.2 Vermont WIC EBT	3
2. Project Overview	3
3. Project Stakeholders	7
3.1 Vermont WIC MIS Stakeholders	8
3.2 Vermont WIC EBT Stakeholders	10
4. System Wide Requirements	12
4.1 MIS Design Flexibility	13
4.2 EBT Design Flexibility	13
4.3 MIS User Interface	14
4.4 EBT – MIS interface	16
4.5 EBT User Interface	16
4.6 EBT - Retail POS System Interface	18
4.7 MIS Other Features	18
4.8 EBT Other Features	18
4.9 Communications	19
4.10 MIS Security	19
4.11 EBT Security	20
4.12 MIS – SOV Interface Requirements	22
4.13 MIS Privacy Requirements	26
4.14 EBT Privacy Requirements	27
4.15 MIS/EBT System Performance	27
4.16 MIS/EBT System Availability	27
4.17 MIS System Capacity	28
4.18 EBT System Capacity	28
4.19 MIS Edits	28
4.20 EBT Edits	29
4.21 MIS Reports	29
4.22 EBT Reports	29
4.23 System Environments	30

Vermont WIC MIS/EBT Project	Version: 4.0
Vermont WIC Functional Requirements	Date:07/23/2012
http://isa2004/Intranet/ITSI/ITSIntranet/default.aspx?Page=Projects/WICSystem	

4.24	Database.....	30
4.25	Networking	31
4.26	Messaging	31
4.27	Accountability	31
5.	<i>Certification.....</i>	<i>32</i>
5.1	Manage Application Process	33
5.2	Determine Nutrition Risk of Applicant	41
5.3	Prescribe Food Package	52
5.4	Process Participant Changes and Transfers	54
5.5	Establish EBT Account	57
5.6	Conduct Certification Reporting	57
6.	<i>Nutrition Education, Health Surveillance and Referrals.....</i>	<i>60</i>
6.1	Maintain Nutrition Education Data.....	60
6.2	Evaluate Nutrition Assessments	67
6.3	Perform Participant Referrals	68
6.4	Provide Voter Registration Information	69
6.5	Provide WIC Data	69
6.6	Determine Immunization Status	71
6.7	Conduct Nutrition Education, Health Surveillance and Referrals Reporting.....	72
7.	<i>Breastfeeding Education, Health Surveillance and Referrals</i>	<i>74</i>
7.1	Maintain Breastfeeding Data.....	75
7.2	Evaluate Participant Nutrition and Breastfeeding Assessment and Counseling.....	81
7.3	Perform Participant Breastfeeding Referrals	86
7.4	Provide Data Sets to External Entities	87
7.5	Conduct Breastfeeding Education, Health Surveillance, and Referrals Reporting	89
8.	<i>Food Management</i>	<i>91</i>
8.1	Maintain Food Package Data	92
8.2	Issue Electronic Benefit (EBT Systems)	99
8.3	Conduct Food Benefit Issuance Reporting.....	107
9.	<i>Food Benefit Redemption, Settlement and Reconciliation.....</i>	<i>109</i>
9.1	Pay Vendor for Food Benefits Redeemed (EBT System).....	110
9.2	Maintain Food Transaction Data (EBT Systems)	114
9.3	Conduct Food Benefit Payment, Settlement and Reconciliation Reporting	117

Vermont WIC MIS/EBT Project	Version: 4.0
Vermont WIC Functional Requirements	Date:07/23/2012
http://isa2004/Intranet/ITSI/ITSIntranet/default.aspx?Page=Projects/WICSystem	

10. MIS Financial Management	119
10.1 Manage Grants and Budgets	119
10.2 Monitor Program Expenditures	123
10.3 Process Manufacturer Rebates.....	129
10.4 Conduct Financial Management Reporting	131
11. MIS Caseload Management	133
11.1 Capture and Maintain Caseload Data	133
11.2 Allocate Caseload.....	135
11.3 Monitor Caseload.....	137
11.4 Conduct Caseload Management Reporting.....	138
12. Operations Management.....	139
12.1 Monitor Administrative Operations	140
12.2 Manage Participant Outreach	141
12.3 Monitor Customer Service for Participants, Vendors and Providers.....	143
12.4 Provide Survey Capability	144
12.5 Perform Study	145
12.6 Maintain Inventory.....	146
12.7 Monitor Program Integrity	147
12.8 Conduct Operations Management Reporting	150
13. Vendor Management.....	153
13.1 Maintain Vendor.....	154
13.2 Monitor Vendor Training	160
13.3 Support Vendor Communications.....	161
13.4 Perform Confidential High-risk Vendor Analysis	162
13.5 Track Compliance Investigations and Routine Monitoring	165
13.6 Monitor Sanctions and Appeals.....	170
13.7 Coordinate with SNAP – 3 Squares VT	173
13.8 Conduct Vendor Management Reporting	175
14. Appointment Scheduling.....	178
14.1 MIS Master Calendar.....	178
14.2 Manage Appointments	179
14.3 Generate Appointment Notices.....	181
14.4 Track Non-Scheduled Contacts and Clinic Activity	182

Vermont WIC MIS/EBT Project	Version: 4.0
Vermont WIC Functional Requirements	Date:07/23/2012
http://isa2004/Intranet/ITSI/ITSIntranet/default.aspx?Page=Projects/WICSystem	

14.5	Conduct Scheduling Reporting.....	183
15.	<i>System Administration</i>	185
15.1	Maintain System Data Tables	185
15.2	Administer System Security	186
15.3	Manage System	189
15.4	Archive System Data	194
15.5	Conduct System Administration Reporting	196
15.6	Maintain Data Warehouse	197
16.	<i>EBT Security</i>	198
16.1	Maintain User for Single Sign On (SSO)	198
17.	<i>EBT Message Based Access</i>	200
17.1	Account Maintenance	201
17.2	Benefit Maintenance	204
17.3	Local Agency Maintenance	206
17.4	Retailer Maintenance	207
17.5	Category/Subcategory Maintenance	209
17.6	Cardholder/Card Maintenance	210
17.7	EBT Reporting	213
18.	<i>EBT – Batch Files Interfaces</i>	214
18.1	General File Structure.....	214
19.	<i>Appendix 1 – FNS FReD High Level Functional Decomposition Mapped</i>	218
20.	<i>Appendix 2 – FNS FReD EBT Appendix E mapped to VT FReD</i>	219
21.	<i>Appendix 3 – MIS Nutrition Data sets</i>	220
22.	<i>Appendix 4 – MIS Breastfeeding Data sets</i>	222
23.	<i>Appendix 5 – Glossary of Terms</i>	224
24.	<i>Appendix 6 – Acronyms</i>	234
25.	<i>Appendix 7 – References</i>	240
26.	<i>Appendix 8 – USDA FNS/Vermont FReD Traceability Matrix</i>	241

Vermont WIC Functional Requirements

1. Introduction to Vermont WIC

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides specific nutritious foods, nutrition and breastfeeding education, and referrals to pregnant, breastfeeding and postpartum women, infants and children up to five years of age who are determined to be at nutritional risk and meet income guidelines. Vermont serves approximately 17,000 participants monthly. The WIC Program is funded by the United States Department of Agriculture (USDA), governed by Federal Regulations contained in the Federal Register 7 CFR Part 246.

Vermont WIC benefits are authorized through Vermont Health Department WIC Local Agency clinics and benefits are home delivered to certified WIC participants, which allows only specific food items to be redeemed within a specific timeframe. The WIC Program contracts with retailers across the state to provide food products to WIC participants.

The program consists of 12 Local Agencies and 50 clinic sites (all but the 12 that are actually in Local Agencies, are temporary sites in churches and other community locations, generally open 1 day per month or one day every other month, with no permanent infrastructure) serving in excess of 16,500 (monthly, annual unduplicated is about 24,000) participants. The Vermont WIC program has 121 certified retailers who are projected to redeem over \$490,000 a year in WIC fruit and veggie cash value Electronic Benefit Transfer (EBT) benefits. Vermont WIC also has nine home delivery vendors who deliver WIC foods worth about 9 million dollars annually.

1.1 Vermont WIC MIS

While the business purpose of the *WIC MIS* is to certify participants and issue benefits, the *WIC EBT* system will process *WIC EBT* purchases and generate retailer settlements. The Vermont Functional Requirements Document with EBT functionality (VT FReD) presents a description of the functional requirements for the proposed systems by the Vermont WIC Program. This is a non-technical description of the required functionality of the envisioned systems.

At the Vermont local service delivery level, certain features are considered critical in a current generation WIC system. A current generation system is characterized by the use of relational databases and .Net, a graphical user interface (GUI), such as Windows, and expanded functionality. The other features of these systems include:

- Establishment, maintenance, and access to participant records at each service delivery site
- Data capture and editing participant data locally
- Decision support and error correction tools
- On-demand production of WIC EBT cards at Local Agencies and clinic sites with the capacity to issue up to three months worth of food benefits to a participant at one visit
- Electronic transmission of local site data to a central database
- Access to current information about the number of participants applying, enrolled, certified, and issued EBT benefits
- Support for case management functions, including: appointment scheduling; monitoring participant health, behavioral and dietary status; detecting potential dual participation;

transferring participant records between Local Agencies; and generating correspondence and reminders to participants. Improved Ad hoc reporting with local report generation capability

- At the State level, other features are considered critical for Program administration. These include: Improved central control over the system
- Provision of timely and accurate statewide data on participation, food obligations, and food expenditures
- Routine and Ad hoc inquiry into central databases
- Improved caseload management tools
- Improved vendor management tools
- Improved financial management tools
- Improved nutrition and health surveillance information and management tools
- EBT Functionality

1.2 Vermont WIC EBT

Currently, Vermont WIC uses a dated paper based system of home delivery retail vendors. The aged system contains the following increasing risks:

- Inadequate procurement of vehicles suitable for delivery
- An aged workforce of delivery vendors with no replacement force planned
- A paper based – home delivery process which is labor intensive
- Incompatibility with a new WIC MIS and WIC EBT

Vermont needs to phase out the current home delivery system for food distribution and move to an EBT model, in alignment with the Food and Nutrition Service of the USDA (FNS) strategic plan for EBT. The selected system must address Vermont's business needs as well as the specifications identified in the federal Functional Requirements Document for a Model WIC System (FReD). Thus, the overall goal for this project is to obtain a cost effective food benefit delivery system that meets the following requirements, at a minimum:

- Is scalable so future enhancements can be easily added to the system
- Provides flexibility in software changes
- Captures and maintains all standard WIC EBT data elements, and allows easy implementation of changes such as food items changes
- Is compliant with current federal policies and regulations and can respond to federal and state reporting requirements
- Enhances fiscal accountability and program integrity
- Supports and improves delivery of WIC benefits to eligible individuals and families
- Improves service delivery to participants
- Allows POS purchases and account debits/credits
- Improves staff satisfaction through ease of use, a minimal learning curve, and automation of tasks
- Supports integration and data exchanges

2. Project Overview

The current Vermont WIC management information system was developed in 1977. It operates

on a current model IBM mainframe and utilizes CICS for transaction processing; VSAM for database management; and COBOL and Gener/OL as the programming languages. The mainframe has the ability to host SQL and Web servers and the CSIS interface is being updated to be web-enabled during 2010. Although the WIC system has been successfully modified to meet federally mandated requirements, only 11 of the 24 current core functions are automated.

Existing systems were evaluated on the following characteristics at a minimum: system architecture, technical infrastructure and communications environment, ability to perform WIC functions, WIC EBT functions, WIC system interface with other Agency of Human Services, VDH and health programs, user friendliness, security and automated backup and recovery functions. This project may lead to an increased web presence

Vermont WIC currently has about 24,000 active records, with an additional 85,000-100,000 in the history file. The legacy system has approximately 120 fields (99 on the data entry form, but there are additional system-generated fields in the data set.) Any individual record is updated at least monthly, with some having more frequent activity.

Creating a paperless system is a major goal of the WIC program. Currently over 23,000 participants are served by WIC annually in Vermont and the current 6-month participant cycle will become 3 months under a new system. The hosting location of the new system is unknown and any solution will require the close cooperation of the WIC program, the USDA FNS, DII, AHS and VDH IT. AHS IT is to implement a new Agency architecture and a new WIC MIS must be compliant with the Agency's new Core Components. The current number of WIC system users is relatively small (about 40), spread among the 12 Local Agencies, WIC central office and DII in Montpelier (for the legacy DII system). There are a few additional users in Health Surveillance (history file only). Once a new system is in place, Vermont WIC would expect the number of users to rise to about 160, and Vermont WIC will need to provide some sort of system access in another 50 temporary locations around the state to support WIC clinics.

On a national level, the CDC has need of WIC data sets and a WIC MIS must be able to capture CDC data sets and transmit them to the CDC. The Pediatric Nutrition Surveillance System (PedNSS) and the Pregnancy Surveillance System (PNSS) are program-based surveillance systems that monitor the nutritional status of low-income infants, children, and women in federally funded maternal and child health programs. PedNSS data represent nearly 9 million children from birth to age five. The majority of PedNSS records (85.8%) are from the WIC Program. PNSS data represent approximately 1.3 million pregnant and postpartum women. These surveillance systems provide data that describe prevalence and trends of nutrition, health, and behavioral indicators for mothers and children. CDC requires a transaction file from the contributor that is a flat ASCII data file containing either PedNSS or PNSS transaction records.

The Vermont MIS/EBT project will bring WIC management information systems up to date and allow shifting of staff time from managing paper based systems and data entry to nutrition services – the key to helping families make the behavior changes needed to improve health outcomes. Improving health status is the primary aim of WIC. The current system limits staff ability to affect the health outcomes of the WIC participants, as the Vermont WIC staff must spend time on inefficient, duplicative systems that could be better spent on helping individuals and families achieve better health.

Improved reporting capabilities will improve the ability to provide information to partners on a timely basis. Ideally Vermont WIC will eliminate paper records altogether, which will improve both efficiency by reducing duplication of data collection and elimination of paper handling and improve effectiveness by shifting staff time from administrative duties to education and

counseling.

Implementation of national risk codes and racial ethnic coding will allow Vermont WIC compare outcomes to national data with more detail and accuracy. Eliminating multiple databases will increase the ability to tie WIC benefits to health outcomes. For example, Vermont WIC cannot currently tie breast pump issuance to breastfeeding duration without manually matching three different datasets.

Improved reporting capabilities will improve the ability to provide information to partners on a timely basis. Ideally Vermont WIC will eliminate paper records altogether, which will improve both efficiency by reducing duplication of data collection and elimination of paper handling and improve effectiveness by shifting staff time from administrative duties to education and counseling. Even if total paper elimination is not possible, using a single unified management information system to replace multiple stand-alone systems will improve efficiency.

Any new system will include direct staff access to standard reports – currently central office staff has to run reports and distribute them to districts. Some simple Ad hoc report templates will also be available to district staff. At the central office level, having health status, benefits received, and demographic information (both current and historical) in a single system will greatly reduce the amount of time it takes to report and analyze information.

The WIC MIS inherently must be WIC EBT ready per USDA MIS specifications. The interface for a Vermont WIC EBT will be developed under the Vermont WIC MIS project to allow the EBT system to interface with the MPSC system. Remaining functionality to interact with vendors is included in the Vermont WIC EBT system. The remaining components are:

- EBT Host System
- Retail Systems
- Payment Processing Systems
- Financial Institutions

Required of Vermont's EBT System is:

- Account management – set up and maintain EBT accounts
- Benefit management – maintain account balances
- Card maintenance (issuance, replacement, etc)
- Transaction processing
- Security
- Access channels or networks (i.e. POS, web portals, IVRs)
- Customer service
- Training (state, local agency/clinic, participant, retailers)
- Settlement and reconciliation
- Information management and reporting
- UPC and "Not To Exceed" Management
- Reporting
- Audit and control

WIC EBT will transform the current WIC benefit process and home delivery to an EBT system. In a WIC EBT system, food packages are reduced to individual food items and defined using national standards for food category, sub category and unit of measure.

Benefit Issuance Example – 5 Gallons Whole Milk:

Category 01 = milk
Subcategory 001 = whole milk
Unit of measure is quart; quantity is 20 quarts
Prescription might contain a line item such as 01-001-020

UPCs (Universal Product Code) and PLUs (Price Look Up) are used to identify WIC-approved items in the store for a particular state agency. A UPC is typically represented by a bar code, which can be scanned. A PLU is a four to five digit code used mainly with fresh produce and bulk items (i.e., bananas = 4011). Benefits for participants within a household are aggregated (combined) into a household account. This allows one card to be used to access the benefits of all participants in the household versus one card per participant and provides for better management of benefits within a household.

The new system will benefit both the retailer and the participant by delivering a seamless WIC transaction at the cash register, making the transaction appear no different from any other card transaction by any other shopper. Not only will this remove the stigma associated with the WIC transaction, it will give WIC participants the flexibility to shop as frequently as they wish, receiving only the approved foods in the correct quantity. WIC EBT will give the retailer confidence that the shopper purchased the items contained in their prescription, as well as other items on their shopping list. It will enable smoother, faster in-lane transactions and expedite payments to retailers.

WIC EBT Transaction Overview

- Card is swiped, inserted or number key entered and cardholder enters their PIN
- System validates the card, PIN and the retailer
- Each food item scanned
- Compared to APL to determine if it is an e-WIC Item
- Compared to cardholder balance to determine if there is sufficient balance to purchase
- Store price captured for each food item
- Discounts such as coupons, loyalty cards or other specials are captured
- The system approves/denies the transaction, if approved:
- The household's account balance is reduced by the amounts of each item being purchased, and
- For items exceeding the NTE, paid amount for that item is reduced
- Paid amount for the transaction calculated
- A receipt showing details of transaction and updated account balance is printed

For the WIC Participant, WIC EBT will:

- Remove the stigma associated with paper WIC transactions.
- Ensure that a participant is able to purchase his full, prescribed WIC food package at his discretion within the valid period of issuance.
- Ensure that the WIC food transaction affords the participant dignity and convenience.
- Ensure the purchase of WIC-authorized food items.

For the retailer, WIC EBT will:

- Encourage retail system integration.
- Enable smoother in-lane transactions at retail locations.
- Reduce paper handling and processing at the retailer and the WIC host.
- Expedite payments.
- Provide real-time max pricing adjustments.

For the Vermont WIC Program WIC EBT will:

- Ensure that participant receives prescribed foods
- Provide data on type and amount of foods purchased
- Allow for accurate rebate billing on infant formula purchased
- Ensure that retailer claims are no more than shelf price
- Enable a secure transaction
- Enable timely and accurate claims
- Reduce the amount of time and effort spent on retailer compliance activities
- Reduce the amount of time and effort in monitoring and reconciling retailer overcharges
- Reduce forgery and fraud opportunities
- Increase accountability
- Reduce paperwork
- Enable numerous reports on EBT activity to improve administrative efficiencies
- Streamline clinic operations; increases time for nutrition education

Additionally, WIC EBT is 7th out of 18 items slated for Tier One of the Vermont Agency of Human Services' IT Modernization/HIE Integration Opportunities as reported in the *Vermont Health Information Technology Plan*, dated July 23, 2010.

Existing EBT systems will be evaluated on the following characteristics at a minimum: system architecture, technical infrastructure and communications environment, ability to perform WIC functions, security and automated backup and recovery functions.

The result of successful deployment will

- Replace the aging WIC system
- Create Functionality and service improvements with newer technologies
- Optimize operational and support technologies
- Streamline business practices and processes
- Improve access to data
- Improve ability and flexibility to make changes to the WIC system
- Improve reporting capabilities for local staff
- Improve customer service
- Reduce staff, system and processing errors
- Reduce user training with increased user-friendly processes
- Reduce amount of paper used and produced
- Minimize potential for fraud and abuse
- Increase budget and caseload capabilities
- Be in full compliance with Federal rules and regulations
- Have full Implementation of EBT functionality in the MIS and EBT systems

3. Project Stakeholders

3.1 Vermont WIC MIS Stakeholders

This section describes the stakeholders and users of the current WIC systems of the project's solution. The stakeholders include key representatives from the Vermont Women Infant and Children's program, USDA FNS WIC staff, CDC staff, Vermont's physician community representatives, Vermont Information Technology leaders (VITL), Vermont Department of Information and Innovation (DII), the Vermont Department of Health Information Technology (VDH IT) , the Vermont Department of Health – Health Surveillance staff, Vermont's AHS IT Operations staff, AHS participant programs.

3.1.1 WIC MIS Stakeholder Demographics

The Vermont WIC program is comprised of direct services provided by Vermont Department of Health (VDH) supervisory and management staff at local level. The resulting acquired data is utilized by Center for Disease Control (CDC) Nutrition Surveillance staff, VDH Health surveillance staff, VDH WIC state level staff and USDA WIC staff with regional program IT and national IT.

The approximately 160 Vermont Department of Health state users and the user environments are diverse in nature. The user community ranges from Public Health Nutritionists at remote Clinic locations to the super users within VDH who must report to a federal level to participants at the service level in a corporate retail or a small business environment. The typical VDH Central staff user has a reliable network to utilize and access to a variety of MS tools. The VDH Public Health Nutritionists work environment is variable but does include access to the Local Agency environment. Currently data entry activity occurs subsequent to clinics and is accomplished using paper forms.

There exist a range of users who will need access to the system to input data and create reports. Each user group has unique needs and requirements. A summary of each group's role and location is listed below.

Name	Represents	Location
VDH supervisory and management staff at local level	Admin System User	VDH – 12 LA
VDH direct service staff at local level	System User	VDH – 12 LA
VDH WIC state level staff	Admin System User, managers	VDH/Burlington
VDH Health surveillance staff	Data user	VDH/Burlington
State of Vermont Department (SOV) of Information and Innovation (DII) System analysts	Current system development, maintenance, management and data migration, helpdesk services and Project Management Office	DII/Montpelier
VDH IT development staff	System feasibility, appropriateness, integration, enhancement and maintenance	VDH/Burlington
SOV AHS IT Operations staff	IT oversight and compliance, integration with AHS enterprise	AHS/Montpelier

	architecture	
USDA WIC staff (regional program and IT, national IT)	Funding entity, program oversight, standards documentation	External/Out of State
Other VDH and AHS program managers	System integration, data exchange	Burlington/Montpelier
Vermont WIC participants (24,000 individuals)	Recipient of services and benefits	Vermont/Entire state
CDC Nutrition Surveillance staff	Data recipient	Atlanta, Ga.
Vermont Physicians	Data recipient, Data Originator	Vermont/Entire state
Vermont Information Technology Leaders (VITL)	Vermont Medical Technology needs for data exchange and Electronic Health records	Burlington

3.1.2 WIC MIS Stakeholder Profiles

The Project Representatives are major contributors of project information and act to review and approve project documents relating to the WIC MIS. They were chosen for their individual expertise with current program procedures, with SOV, DII, AHS and VDH systems and with the effects that a new system would have upon their particular workflow. The selected and interviewed stakeholders were recommended by their colleagues as experts in their fields.

Expertise	Role
AHS IT Manager	AHS Network Operations
AHS Enterprise Architect	AHS IT
DAIL System Developer	AHS Portal Team Lead
AHS Fiscal Operations Director	WIC outlays
AHS Accountant C	WIC outlays
DCF System Developer	DCF CIS System Lead
DII Data Center and Mainframe Operations	DII IT Support
DII Data Center and Mainframe Operations Chief	DII IT Support
VDH – MCH Administrator	VDH Children w/Special Needs
VDH Admin Asst A	Local Agency Personnel Admin
VDH Division of Health Surveillance	Chronic Disease Epidemiology Chief
VDH Environmental Health	VDH Lead Program
VDH HDOC	Local Agency Personnel Admin
VDH Health Services Field Operations Chief	VDH PH Field Operations
VDH HOS II	Vermont WIC Clinic Personnel

VDH IMR	Immunization Registry Manager
VDH Information Technology	VDH IT Chief
VDH Information Technology	VDH IT Database Admin
VDH Information Technology	VDH Data messaging specialist
VDH Information Technology	Project Management Team Lead
VDH PH Supervisor	Vermont WIC Clinic Admin
VDH PHN I	Vermont WIC Clinic Personnel
VDH PHN III Supervisor	Vermont WIC Clinic Admin
VDH Public Health Statistics Chief	VDH Data User
VDH WIC	Program Administrator
VDH WIC	VDH WIC Data Analyst
VDH WIC	VDH WIC Nutritionist
VDH WIC Admin	VDH Child Public Health Administrator
VDH WIC Nutritionist	VDH WIC Clinic Personnel
VDH-Research and Statistics	VDH Data User
Vermont Corrections Dept. IT Manager	Requirements Expertise Corrections IT representative.
Vermont Grocer's Association	Vermont Grocer's Representative

3.2 Vermont WIC EBT Stakeholders

Stakeholders of any e-WIC System are:

- Cardholders: WIC Participants
- Local WIC Staff
- State WIC Staff
- WIC Authorized Vendors (Retailers)
- USDA, Food and Nutrition Service

This section describes the stakeholders and users of an EBT WIC system and the probable users of the project's solution. Vermont's stakeholders include key representatives from the Vermont Women Infant and Children's program, USDA FNS WIC staff, Vermont Department of Information and Innovation, the Vermont Department of Health Information Technology and Services, Vermont's AHS IT Operations staff and the Vermont Vendor community

Name	Represents	Role
VDH direct service, supervisory and management staff at local level	User	Admin user
WIC state level staff	User, managers	Staff user
DII System analysts	System development, maintenance and management	Admin support
VDH IT development staff	System feasibility, appropriateness,	Admin support

	integration, system management	
State /AHS IT Operations staff	System feasibility, appropriateness, integration, system management	Admin support
WIC Authorized Vendors (Retailers)	Benefit vendor	Retail user
USDA WIC staff (regional program and IT, national IT)	Grant Funding entity, program oversight	Oversight
Other VDH and AHS program managers	System integration, data interchange	Data Sharing
WIC participants (24,000 individuals)	Recipient of services and benefits	Participant User
CDC Nutrition Surveillance staff	Data recipient	Data Sharing

3.2.1 WIC EBT Stakeholder Demographics

The Vermont WIC program is comprised of direct services provided by VDH supervisory and management staff at local level. The resulting acquired data is utilized by CDC Nutrition Surveillance staff, VDH Health surveillance staff, VDH WIC state level staff and USDA WIC staff for the regional program, IT and national IT.

The Vermont WIC retail environment is comprised corporations with multi- state locations, Vermont based chains with several locations, and single location Vermont based full service retail grocers, small independent Vermont grocers who have a varied inventory of WIC products and network capabilities.

The Vermont retail environment varies greatly with a small portion of retail operations currently without Point of Sale systems. Of the current retail Point of Sale systems, a portion are integrated systems which already have WIC eligible foods identified in their database, a portion are integrated without WIC identified foods, some are maintained by corporate IT units, some by the owner/retailer. Some stores utilize reliable high-speed networks, some are must make use of dial up connections. The point of sale retail worker ranges in age and experience, from the skilled retired worker, to the teenage worker in their first job. The number of stores and workers to be added are unknown at this point.

A range of users will need access to the system, to input data and create reports. Each user group has unique needs and requirements.

3.2.2 WIC EBT Stakeholder Profiles

The Project Representatives are major contributors of project information and act to review and approve project documents relating to the WIC MIS. They were chosen for their individual expertise with current program interactions with VDH systems and due to the effects that a new system would have upon their particular workflow. The selected and interviewed stakeholders were recommended by their colleagues as experts in their fields.

Expertise	Role
AHS IT Manager	AHS Network Operations
AHS Enterprise Architect	AHS IT
AHS Fiscal Operations Director	WIC outlays
AHS Accountant C	WIC outlays

DAIL System Developer	AHS Portal Team Lead
DII Data Center and Mainframe Operations	DII IT Support
DII Data Center and Mainframe Operations Chief	DII IT Support
VDH Admin Asst A	Local Agency Personnel Admin
VDH Division of Health Surveillance	Chronic Disease Epidemiology Chief
VDH HDOC	Local Agency Personnel Admin
VDH Health Services Field Operations Chief	VDH PH Field Operations
VDH HOS II	Vermont WIC Clinic Personnel
VDH Information Technology	VDH IT Chief
VDH Information Technology	VDH IT Database Admin
VDH Information Technology	VDH Data messaging specialist
VDH Information Technology	Project Management Team Lead
VDH PH Supervisor	Vermont WIC Clinic Admin
VDH PHN I	Vermont WIC Clinic Personnel
VDH PHN III Supervisor	Vermont WIC Clinic Admin
VDH WIC	Program Administrator
VDH WIC	VDH WIC Data Analyst
VDH WIC	VDH WIC Nutritionist
VDH WIC Admin	VDH Child Public Health Administrator
VDH WIC Nutritionist	VDH WIC Clinic Personnel
VDH-Research and Statistics	VDH Data User
Vermont Corrections Dept. IT Manager	Requirements Expertise Corrections IT representative
Vermont Grocer's Association	Vermont Grocer's Representative

4. System Wide Requirements

The next sections specify the technical and functional requirements to support the ongoing operations of a WIC MIS and EBT system that is in conformance with Federal regulations, national standards and specified Vermont standards. The system deployed to support WIC EBT services must be an industry standard application primarily relying on the commercial networks and available commercial POS terminals.

The WIC EBT system must be in compliance with FNS's most current WIC- EBT policy memoranda and the WIC MIS must be in compliance with the Functional Requirements Document for a Model WIC Information System with EBT (FReD), Version 2008 2.0, September 2008 or the most current version of this document. Both must adhere to the specifications in the VT FReD

The system requirements for this project will ultimately be determined reciprocally by the solution chosen and the capabilities of current VDH, AHS and DII systems. The Vermont WIC program desires a paperless system, from data creation to data storage, with the capability to exchange data with other AHS programs, Vermont State systems, the CDC and FNS. Since VDH is a Microsoft shop, the desired system must be a Windows based system, which will operate in both the terminal server environment and in remote locations without network connections, if the new AHS SOAP architecture is not in place shortly.

The WIC system must be compliant with the AHS Service Oriented Architecture and therefore utilize the AHS Rules Engine, the data management system, AHS security services, the AHS Enterprise Master Person Index (eMPI), the AHS Workflow and Identity Management system if these components are in operations at the time of implementation. The system will have the ability to receive and store unique ID's from the AHS EMPI.

4.1 MIS Design Flexibility

4.1.1 Open Architecture

The system must employ open system architecture standards.

4.1.2 Ease of maintenance

The system must be designed for ease of maintenance and readily allow future functional enhancements.

4.1.3 Flexibility

The system must be adequately flexible to keep up with ever changing technology and WIC regulations.

4.1.4 System Changes Performed Centrally

All system updates must be completed centrally and downloaded to all clinic sites (i.e., local servers).

4.1.5 The system will be modular and scalable

The system will contain modular components that can be incorporated over time.

4.1.6 Data Migration

WIC program selected data in the existing WIC system must be migrated to the new system to prevent having to re-enter all data for initial parallel operations. Selected data from existing VDH and AHS applications may be migrated prior to initial production to reduce initial data entry. Historical records will not be migrated to the new MIS system.

4.2 EBT Design Flexibility

4.2.1 *Open Architecture*

The system must employ open system architecture standards.

4.2.2 *Ease of maintenance*

The system must be designed for ease of maintenance and readily allow future functional enhancements.

4.2.3 *Flexibility*

The system must be adequately flexible to keep up with ever changing technology and WIC regulations.

4.2.4 *System Changes Performed Centrally*

All system updates must be completed centrally and downloaded to all clinic sites (i.e., local servers).

4.2.5 *Data Migration*

WIC program selected data in the existing WIC system must be migrated to the new MIS system to prevent having to re-enter all data for initial parallel operations. Prior to initial production an import file may be made available to the new EBT system for initial participant benefit loading. Historical records will not be migrated to the new EBT system.

4.3 **MIS User Interface**

The MIS User Interface will be developed using current usability standards, which encourage ease of use, a minimal learning curve, automation of tasks, use of tabs, limit pop-ups, and a design for full screen without scrolling.

4.3.1 *Bandwidth*

The system must be a centralized application for all installations (State Agency, Local Agencies/clinics) with sufficient bandwidth to support adequate system operations. For satellite sites with inadequate telecommunications capacity, the system must be a distributed database, participant/server application that performs regular synchronization with the central database via available bandwidth. Telecommunications and architecture employed in each of these instances will not adversely affect or cause significant variance in system operation, appearance, or navigation.

4.3.2 *GUI*

A graphical user interface (GUI) is required.

4.3.3 *Menus*

Drop-down menus and context sensitive help are required. The system will supply on-line context sensitive help for all screens and processes. Pop-up displays will be triggered by the user's choice to activate or the help aid.

4.3.4 *Pop-up Code Values*

To facilitate data entry, the system will contain pop-up list boxes for all code fields in all processing windows, which Vermont WIC can choose to activate or inactivate. Code values will utilize WIC, VDH and AHS standards when possible.

4.3.5 *Point and Click*

The system must accommodate point and click selection

4.3.6 *Field level on-screen edits*

Field level on-screen edits (e.g., valid ethnic, migrant and other codes) with limited

(versus no) User override (e.g., weight is above parameters, or something is out of the ordinary).

4.3.7 *Field Visibility*

The system must provide the ability to make fields visible or invisible depending on parameters. Fields not accessible to a given user based on access rights will be invisible. In addition, fields not in use in Vermont will also be invisible.

4.3.8 *Data Entry*

The system must provide a user interface that is consistent, easy to navigate, intuitive and reflects the WIC business workflow. The following will be included:

- The system must allow the user to choose the type of participant appointment and the appropriate screens for the appointment displayed.
- The system will provide the ability to go back into the financial screen if participant does not have all information at the time it is initially entered.
- The system will provide spell checking.
- Fields named "Other" will open a text field for entry of further details.
- The system design will support clinic business flow by utilization of reminders and interface messages.
- Presentation of Messages will use language that is simple and guides the user to a solution.

4.3.9 *"Cut and Paste"*

"Cut and Paste" option must be available to and from the system interface.

4.3.10 *Hot Keys*

The system must provide hot keys supporting system navigation.

4.3.11 *Field Navigation*

The system must provide the ability to navigate "free form" from field to field or screen to screen if desired rather than having to follow a prescribed order. Inactive fields are grayed until required fields are filled in and fields calculate when necessary.

4.3.12 *Cursor Advance*

The cursor will automatically advance to the next logical input field when the maximum allowed numbers of characters have been entered for the keyed field. Selections from drop down boxes must automatically take you to the next field. If the user types in data, the user tabs or hits enter to the next field.

4.3.13 *Print Function*

All printed documentation produced by the WIC system will be available for reprinting at the user's discretion.

4.3.14 *Save and Submit*

Save and Submit functions present on every screen. Auto-save functionality will be employed if the functionality does not counter specific transaction time specifications. The save status is used to temporarily save data for completion later. The submit status writes the entered data into the MIS database.

4.3.15 *Search Function*

The function of searching for a record will not function as a stand-alone feature within the MIS; yet will always be called upon by another function, the calling function, and is generalized to accommodate its inclusion in any function that requires its functionality.

Input

First Name
Last Name
Date of Birth
Participant ID
Household ID

Process

The user selects the option to search

The user enters the search criteria and signals the system that all data has been entered and the search can be executed.

The system will retrieve potential matching records from the database.

If the user enters the Participant ID or the Household ID, the system will use a GET function to retrieve the record from the database.

Output

The system will display a results list, which will include exact matches as well as variations on the names or display the retrieved record for a GET function.

4.4 EBT – MIS interface**4.4.1 Accessibility**

Authorized users in the MIS system that are setup in the EBT System shall be able to access screens in the EBT System via direct links from the MIS without having to go through an additional log on process in the EBT System.

4.4.2 User Experience

The EBT and MIS system users will experience a seamless flow between the EBT and MIS systems.

4.5 EBT User Interface

The EBT User Interface will be developed using current usability standards, which encourage ease of use, a minimal learning curve, automation of tasks, use of tabs, limit pop-ups, and a design for full screen without scrolling.

4.5.1 Bandwidth

The system must be a centralized, web-based application for all installations (State Agency, Local Agencies/clinics) with sufficient bandwidth to support adequate system operations. For satellite sites with inadequate telecommunications capacity, the system must be a distributed database, participant/server application that performs regular synchronization with the central database via available bandwidth. Telecommunications and architecture employed in each of these instances will not adversely affect or cause significant variance in system operation, appearance, or navigation. When suitable bandwidth becomes available, distributed sites will transition to web-based operations.

4.5.2 GUI

A graphical user interface (GUI) is required.

4.5.3 Menus

Drop-down selections and context sensitive help are required. The system will supply on-line context sensitive help for all screens and processes.

4.5.4 *Pop-up Code Values*

To facilitate data entry, the system will contain pop-up list boxes for all code fields in all processing windows.

4.5.5 *Point and Click*

The system must accommodate point and click selection

4.5.6 *Field level on-screen edits*

Field level on-screen edits with limited (versus no) User override (e.g., weight is above parameters, or something is out of the ordinary).

4.5.7 *Field Visibility*

The system must provide the ability to make fields visible or invisible depending on parameters. Fields not accessible to a given user based on access rights will be invisible. In addition, fields not in use in Vermont will also be invisible.

4.5.8 *Hot Keys*

The system must provide hot keys supporting system navigation.

4.5.9 *Field Navigation*

The system must provide the ability to navigate "free form" from field to field or screen to screen if desired rather than having to follow a prescribed order. Inactive fields are grayed until required fields are filled in and fields calculate when necessary.

4.5.10 *Cursor Advance*

The cursor will automatically advance to the next logical input field when the maximum allowed numbers of characters have been entered for the keyed field. Selections from drop down boxes must automatically take you to the next field. If the user types in data, the user tabs or hits enter to the next field.

4.5.11 *Save and Submit*

Save and Submit functions present on every screen. Auto-save functionality will be employed if the functionality does not counter specific transaction time specifications. The save status is used to temporarily save data for completion later. The submit status writes the entered data into the MIS database.

4.5.12 *Search Function*

The function of searching for a record will not function as a stand-alone feature within the EBT System; yet will always be called upon by another function, the calling function, and is generalized to accommodate its inclusion in any function that requires its functionality.

Input

EBT number

Head of Household (HOH) or Participant First Name

Head of Household (HOH) or Participant Last Name

Participant ID

Process

The user selects the option to search

The user enters the search criteria and signals the system that all data has been entered and the search can be executed.

The system will retrieve potential matching records from the database.

If the user enters the Participant ID or the Household ID, the system will use a GET function to retrieve the record from the database.

Output

The system will display a results list, which will include exact matches as well as variations on the names or display the retrieved record for a GET function.

4.6 EBT - Retail POS System Interface

The EBT host system interface with the Vermont Retailers' Point of Sale (POS) systems and with the stand beside retail, scanner system will follow USDA FNS standards and specifications.

4.7 MIS Other Features

4.7.1 System Access

The system will be accessed using multi-level system access security

4.7.2 Portability

The system must be Potable with availability for all clinic sites, with a sufficient electronic backup system (portable power source) in case of power failures.

4.7.3 E-Signature

The system must provide for and capture an electronic signature and store the signature in the proper record for all transactions and activities requiring a signature (e.g., Rights and Responsibilities, Food Benefit Issuance, privacy release, Certifier for certification, income verification). The system would need to comply with electronic signature standards such as International Telecommunications Union (ITU) X.509 (Public-Private Key Certificates). This information will be stored in the participant file.

4.7.4 Measurements

The system must automatically convert user entries in English or metric to their respective equivalent and display both values.

4.7.5 Code Field Pop-up Expanded Definitions

To facilitate data entry, the system will contain pop-up expanded definition boxes for all WIC Program code fields in all processing windows.

4.8 EBT Other Features

4.8.1 System Access

The system will be accessed using multi-level system access security.

4.8.2 Portability

The system will be potable with availability for all sites, with a sufficient electronic backup system (portable power source) in case of power failures.

4.8.3 E-Signature

The system must provide electronic signature capacity and store the signature in the proper record for all transactions and activities requiring a signature (e.g. Food Benefit Issuance). The system would need to comply with electronic signature standards such as

International Telecommunications Union (ITU) X.509 (Public-Private Key Certificates). This information will be stored in the participant file.

4.8.4 *Code Field Pop-up Expanded Definitions*

To facilitate data entry, the system will contain pop-up expanded definition boxes for all WIC Program code fields in all processing windows.

4.9 Communications

4.9.1 *Wireless Local Area Network*

The portable system network, available for "satellite" sites, will be configured as wireless LANs.

4.9.2 *Remote Locations*

Recipient services must be provided at remote locations using portable equipment. All of the functional capabilities, which reside at permanent clinics, must also be available at these temporary locations.

4.9.3 *Access points*

The system must accommodate access and electronic transfer of data between the clinic sites, the Local Agencies and the VDH WIC Central Office.

4.9.4 *Communications Interface*

Communications interface with word processing software for individual form letters printing and group mail merge process.

4.9.5 *E-mail*

The system needs automated e-mail communications to support participant communications, physician notifications and system functions. The system must send e-mail with SMTP and must be capable of utilizing the SOV's Exchange server.

4.9.6 *User Alerts*

The system must utilize triggers to automate alerts to predefined users of potential system integrity problems.

4.10 MIS Security

4.10.1 *Access Levels*

The system is required to have multi-level system access security and functional level security.

4.10.1.1 *Role based user*

The system must employ a role-based security that allows user access to functional areas based on user security level. Roles will include but not be limited to public (For applications, etc), Clinician, LA admin. State Admin.

The system will allow users to have more than one role.

The system administrator will be able to add and edit permissions for system access.

4.10.1.2 *User Level*

The system will have the ability to support various levels of access by authorized users.

4.10.1.3 Record Level

The system will have the ability to support file, record and field level security. The system will enable users to check out and check in participant records. Users with permissions can view the name of the person who checked out a record. Checked out records will allow all other users with permissions to view the record while checked out.

4.10.1.4 Consistency

Security is available to all modules and integrates with network operating security (i.e., Active Directory for State Employees and external directories).

4.10.2 *Disaster Plan*

The system must include a disaster plan and provide contingency plans for Clinic operations and the production and distribution of Benefits in the event of a disaster.

4.10.2.1 Mirror Site

The hosting entity will mirror all data to another site, which will be utilized in case of lost connectivity.

4.10.3 *Encryption*

System communications must be protected by at least 128-bit encryption, with 256-bit encryption being preferred.

4.10.4 *Key*

Web communications must be supported by public key/private key encryption SSL (Secure Socket Layer) Certificates

4.10.5 *Local Agency Permissions*

Each Local Agency will only have read access to data pertaining to other Local Agency participant records. Each Local Agency will have read/write access to their own participant data within the state's central database at state defined levels of access based on user security privileges.

4.10.6 *Back-ups*

The system will save a backup of production data hourly and make the data available locally for immediate restoration for 30 days after the date-time of each back-up. The backups will be stored on media for off site storage after 30 days.

4.11 **EBT Security**

4.11.1 *EBT Security Authority*

EBT security must be designed to protect the systems and their resources from unauthorized modification, disclosure, and destruction. State agencies are required to incorporate the security provisions into their EBT systems, in addition to the security provisions required under 7 CFR 277.18(p) (http://edocket.access.gpo.gov/cfr_2006/janqtr/pdf/7cfr277.18.pdf). The areas of additional security measures are storage and control measures, communications access controls, message validation, administrative and operational procedures. Establishment of a security plan and, as appropriate, policies and procedures to address the following areas

- Physical security of resources
- Equipment security to protect equipment from theft and unauthorized use
- Software and data security
- Telecommunications security
- Personnel security
- Contingency plans to meet critical processing needs in the event of short- or long-term interruption of service
- Emergency preparedness

4.11.2 *Communication Controls*

- Computer hardware controls that ensure acceptance of data from only authorized retail terminals. These controls shall include the use of mechanisms, such as retailer identification codes, terminal identifiers and user identification codes, and/or other mechanisms and procedures recognized by the industry.
- Software controls, placed at either the terminal or central computer or both, that establish separate control files containing lists of authorized retailers, terminal identifying codes, and user access and identification codes. EBT system software controls shall include separate checks against the control files in order to validate each transaction prior to authorization and limiting the number of unsuccessful PIN attempts that can be made utilizing standard industry practices before the card is deactivated.
- At a minimum, communications network security shall encrypt the PIN during EBT transactions from the point of entry. Other security may include authentication codes and check-sum digits to ensure data security during transmission and processing of EBT transactions. Any of the network security measures may be utilized together or separately and may be applied at the terminal or central computer as indicated in the approved system design to ensure communications control. The response shall specify the encryption approach and other security measures used to secure EBT transactions.
- Manual transaction procedures that provide for secure access to the system with minimal risk to household or retailer accounts. Manual transaction procedures may include the utilization of manager identification codes in obtaining telephone authorization from the central computer system; requirements for separate entry with audio response unit verification and authorization number; and/or the utilization of 24-hour Hotline telephone numbers to authorize transactions. These procedures shall ensure that only authorized retailers utilize the manual procedures during system downtime.

4.11.3 *Access Levels*

The system is required to have multi-level system access security and functional level security.

4.11.3.1 *Role based user*

The system must employ a role-based security that allows user access to functional areas based on user security level. Roles will include but not be limited to public (For applications, etc), Clinician, LA admin. State Admin.

The system will allow users to have more than one role.

The system administrator will be able to add and edit permissions for system access.

4.11.3.2 User Level

The system will have the ability to support various levels of access by authorized users.

4.11.3.3 Record Level

The system will have the ability to support file, record and field level security.

4.11.3.4 Consistency

Security is available to all modules and integrates with AHS network operating security (i.e., Active Directory for State Employees and external directories).

4.11.4 *Disaster Plan*

The system must include a disaster plan and provide contingency plans for Clinic EBT operations and the production and distribution of Benefits in the event of a disaster.

4.11.5 *Virus Control*

Anti-Virus Safeguard must be in place for the EBT processing system. The virus control program will have safeguards that require periodic anti-viral software checks of the system to preclude infections by infectious software. In addition, this software will be periodically upgraded to maintain maximum effectiveness against new strains of software viruses.

4.11.6 *Encryption*

System communications must be protected by at least 128-bit encryption, with 256-bit encryption being preferred.

4.11.7 *Key*

Web communications must be supported by public key/private key encryption SSL (Secure Socket Layer) Certificates

4.11.8 *Local Agency Permissions*

Each Local Agency will only have read access to data pertaining to other Local Agency participant records. Each Local Agency will have read/write access to their own participant data within the state's central database at state defined levels of access based on user security privileges.

4.11.9 *Back-ups*

The system will save a backup of production data hourly and make the data available locally for immediate restoration for 30 days after the date-time of each back-up. The backups will be stored on media for off site storage after 30 days. The daytime and nightly backups and batch processing will not significantly influence system performance.

4.12 MIS – SOV Interface Requirements

The system will support integration and data exchanges with other health and social service programs, including geographic information systems, immunization registries, Medicaid eligibility systems and exports to CSME. The system will have the ability to export and import data in a compatible format. The following lists programs and systems with which Vermont WIC must exchange data. **Note** – certain Agency level legacy systems may be replaced, or retired prior to the production of this application and systems integration and certain data exchanges may subject to change control as enhancements to the installed systems.

4.12.1 CDCP Surveillance

At the WIC Program level, the WIC system must produce for electronic export to the Center for Disease Control and Prevention (CDCP), the required and optional data elements in the form needed to participate in both the prenatal and pediatric nutrition surveillance programs.

4.12.2 USDA Data requirements

The WIC system must produce the USDA's minimum data for electronic export set, a biennial requirement. The system must provide USDA with the required and optional data elements, as required at the time of system design or procurement, in the required format.

4.12.3 TIP

The WIC system must produce the USDA's requirements for annual reporting of vendor management results for electronic export, a.k.a. The Integrity Profile (TIP).

4.12.4 Business Office

At the central office level, the WIC system must interface with the financial institution that has responsibility for making payments to authorized vendors. The requirement includes the functional ability for issuing payment records to a bank and receipt of payment records from the bank in electronic form compatible with UCC and ISO standards.

4.12.5 Vision System

The new WIC/EBT system must include the capability of sharing data with the Vermont State Vision financial system for food cost reporting. The system will capture data from the Vermont state financial system, for population of WIC administrative fields. The purpose of this function is to have the data necessary for reconciliation of the WIC Budget and WIC accounts available in the new WIC system. Currently this data is requested of the Vision system and reports are compiled and delivered to WIC.

4.12.6 Dual Participants

The system must provide an output file for sharing with partnered programs to detect potential dual participants.

4.12.7 Vermont Medicaid Enterprise System (VMES)

HP Enterprise Services (HP) is Vermont's provider services agent. Responsible for Vermont's Medicaid Management Information System (MMIS), HP processes all claims other than pharmacy and handles provider payments of all types. The system must provide a method of providing and checking Medicaid information.

4.12.8 Vermont Integrated Eligibility Workflow System (VIEWS)

VIEWS is a project to continue the initiative to build a new health care eligibility and enrollment system to begin replacement of an antiquated system implemented in 1983. VIEWS is aligned with the goals of providing easier access and online services to beneficiaries, to support improved operations and administration and to allow faster program implementations. VIEWS is part of the redesign of the systems that support the Medicaid enterprise. The vision for the Vermont Integrated Eligibility Workflow System (VIEWS) is described as a real time, web-based system for use by state employees and other customers that is easy to navigate and can automate the Medicaid and other healthcare program eligibility determination process to the full extent possible. If the VIEWS system is in production at the time of WIC MIS/EBT development, the system must provide a method of checking eligibility information.

4.12.9 Vermont Health Information Network (VHIEN)

The “Vermont Health Information Exchange Network” (“VHIEN”) is the health information exchange network operated by Vermont Information Technology Leaders (VITL). WIC’s use of the VHIEN is necessary for participant Hemoglobin levels, weight and heights records to be exported to the participant’s electronic health record for physician use in the care of the participant.

4.12.10 Identity Administration and Management – (IAM)

AHS Identity management is an administrative area that deals with identifying individuals in a system and controlling their access to resources within that system by associating user rights and restrictions with the established identity. This AHS system may be used for WIC prescreening of applications for identity management.

4.12.11 Transformation hub or Rules Engine – (TH) – (RE)

The AHS Rules Engine is a tool to be used by business or financial related professionals for converting plain-language policy into machine readable, business rules, associated specifically with benefits/entitlements and other rules related operations. AHS is seeking a tool that can be configured to extract data from other systems, manipulate that data based on customized rules and will ultimately have the ability to send output data to other systems.

4.12.12 Enterprise Service BUS – (ESB)

The AHS Enterprise Service Bus (ESB) is a centralized infrastructure component that makes a set of reusable set of services widely available and able to communicate with each other. These core functions are:

- Connectivity and Protocol support – Connects and talks to a wide range of services or data sources
- Data transformation – Can translate data from one format to another on the fly (e.g. XML to HL7v3)
- Combined services (Orchestration) – Allows the combination of existing services to create a new service
- Security – Can use existing security infrastructure to govern use of services

4.12.13 Workflow component – (WC)

The AHS Workflow Component is self-contained, reusable software modules that allow a one-to-one mapping between business tasks and the exact IT components needed to execute the task.

Services can be shared, and can be combined, to form complete business solutions.

- Dispatch work and send notifications based on the pre-defined process.
- Manage the program/business process based on the organizational model –support for approval authority, delegation, and substitution.
- Manage deadlines and priorities.
- Support the reporting on workflow status.

4.12.14 Children’s Integrated Services – (CIS) and Adult Integrated Services – (AIS)

Children’s Integrated Services (CIS) is seeking a new Integrated Clinical and Fiscal Management System. The system will also serve Adult Integrated Services. Vermont seeks to have a unified data management system that improves CIS participant management for clinical and support service delivery billing and payment, and reporting capabilities. A method for referrals to and from the CIS must be provided.

4.12.15 *Enterprise Master Person Index – (eMPI)*

The AHS enterprise master person/patient index (eMPI) is a software application that identifies persons in an integrated delivery network (IDN) across disparate registration, scheduling, financial, and clinical systems. Due to the shift to a more customer-centric focus in healthcare operations, consolidation of healthcare organizations, implementation of electronic health records and a need to define the population being served, an eMPI is essential to managing identity within AHS program records. If feasible, WIC participants will utilize the availability of eMPI Identification numbers.

4.12.16 *Healthy Housing and Lead Poisoning Surveillance System HHLPSS*

The Healthy Housing Lead Poisoning Surveillance System (HHLPSS) builds upon previous efforts by the National Blood Lead Surveillance System (NBLSS) to characterize the home environment in terms of not only lead poisoning risk factors, but also other home-based risk factors. While the earlier NBLSS was focused on homes of children less than 6 years old, the new HHLPSS will enable flexibility to evaluate all homes, regardless of the presence of children < age 6 years. When HHLPSS is in production, an export of Lead results to WIC is desired. 1032 Lead – Lead Testing Results are currently housed in the aged 1032 system. The Healthy Housing and Lead Poisoning Surveillance System (HHLPSS) is a VDH IT project to replace the system. The use of SPHINX person ID numbers may be needed for deduplication of WIC and SPHINX entities for LEAD.

4.12.17 *AHS Web Gateway (Portal)*

The AHS web portal is a term, often used interchangeably with gateway, for a World Wide Web site whose purpose is to be a major starting point for users. The AHS web portal presents information from diverse sources in a unified way.

Phase1 will enable the creation of the AHS Web Portal with limited online functionality to begin familiarizing Vermonters with the participant-centered approach for AHS Benefits and Services by bringing them to a single point of entry. Later phases will enhance interaction through the Web Portal with the eMPI, Rules Engine, Work Flow, Enterprise Bus, and Call Center will bring enhancements to enable Vermonters to perform additional self-driven functionalities. This will benefit AHS Program staff as Vermonters will perform additional tasks prior to AHS Staff involvement and our Community Partners will be able to assist Vermonters through the Portal and obtain necessary approved information.

- Enhanced Self-Driven Screening for Benefits and Services Eligibility
- Create and Manage Personal Accounts
- Create Personal “My Benefits Page”(All Benefits/Services Programs individual is enrolled in will have a link on their My Benefits Page)
- Enhanced Benefits and Service Enrollment Features
- More Applications Online
- Completion of One Common Application where possible
- Ability to Check on Enrollment Status
- Electronic Notification to AHS Benefits and Services Programs of Personal Life Changes
- Receive notifications about Benefits/Services Changes based on Personal Life Changes
- Ability for System to notify all Benefits/Services Programs of Consumer Personal Change Information and after approved by program staff, databases are updated. This will eliminate an individual from having to report changes to multiple Programs.

- Ability to perform many of the self-driven functionalities at any time of day.
- Web Chat with Call Center (Web Chat will be available only to our Community Partners. It could be opened to the public when the Call Center is sufficiently staffed.)

Vermont WIC will participate in the presentation of data via the AHS Gateway, which will require the e- presentation of WIC applications, possible presentation of WIC – EBT data, etc.

4.12.18 CSME – Data Warehouse (AHS Central Source for Measurement and Evaluation)

DCF IT and AHS IT are currently designing the handshake between BFIS and CSME, and are gathering the data requirements. The current goal is to pull BFIS data into CSME using existing extracts. WIC Specific: there is a need to design a data extract for CSME.

4.12.19 BFIS – Building Bright Futures Information System

This system is integral to childcare processes. WIC may need to share limited information with the BFIS system.

4.12.20 The AHS Integration Server

This is the current central hub of BFIS. Interfaces with FSD (DCF/Household Services Division-Child Welfare-SSMIS), ESD (DCF-Economic Services Division-TANF, Food Stamps-3Squares, Medicaid, etc-ACCESS).

4.12.21 SPHINX IMR

VDH Immunization Registry system receives batch immunization data and host-to-host data entry from providers, and is now participating in a pilot to exchange HL7 messaged immunization data from providers' Electronic Health Records via the Vermont Health Information Network. The use of SPHINX person ID numbers may be needed for deduplication of WIC and SPHINX entities for IMR.

4.12.22 Children with Special Health Needs (CSHN)

The CSHN program is currently in the last year of a three-year grant to redesign its business process. The intent is to migrate to a new clinic flow and possibly use the new DCF CIS system for their information system. Their requirement for WIC is to be able to exchange referrals; data repopulation of referral forms or electronic forms, available in the clinic setting are both acceptable methods of referral exchanges. The use of SPHINX person ID numbers may be needed for deduplication of WIC and SPHINX entities for CSHN.

4.12.23 EBT Interface

The system must provide for all necessary interfaces with the EBT processor for data sharing as required, inclusive of reporting capabilities.

4.12.24 Communications interface

The system must provide communications interface with word processing software for individual form letters printing and group mail merge process.

4.13 MIS Privacy Requirements

4.13.1 Participant Privacy

The WIC system will maintain the privacy and WIC Program consent requirements of the WIC participants.

4.13.2 *Participant Level demographic data*

The system will allow protection of demographic data for participants and users based upon privacy and safety needs of those in domestic abuse situations.

4.13.3 *Health Information*

The system must implement standards to protect and guard against the misuse of individually identifiable health information held or transmitted in any form or media, whether electronic or paper and must be in compliance with federally mandated Health Insurance Portability and Accounting Act of 1996 (HIPAA). Measures must include:

- Using Authentication controls (user ID and Password)
- Encrypting protected Health information (PHI) on the database and during transmission
- Having in place a comprehensive disaster plan
- Restrict access to PHI to staff who need it in order to perform job duties
- Intrusion detection capability
- Administrator defined timing out of workstations to prevent unauthorized viewing of PHI

4.14 EBT Privacy Requirements

4.14.1 *Participant Privacy*

The WIC system will maintain the privacy and WIC Program consent requirements of the WIC participants.

4.15 MIS/EBT System Performance

The new WIC MIS system is expected to provide quick response to all system queries and actions under most normal operational situations. VDH WIC understands that specific response times in a web-based system are in large part dependent upon the bandwidth of the Internet connection. VDH WIC expects that the contractor will work with VDH WIC to derive mutually agreed upon specifications for system response times for each type of telecommunications capability (e.g., dial-up, cable modem, T1, etc.). The information below establishes general expectations for the system in terms of response, capacity, etc.

4.15.1 *Transaction Performance*

The system will execute each user command in 2.5 seconds or less for 80% of the transactions submitted and 5 seconds or less for 100% of the transactions. Response time is defined as the time elapsed after depressing an ENTER key (or clicking on a button that submits the screen for processing) until a response is received back on the same screen.

4.16 MIS/EBT System Availability

4.16.1 *EBT 24 x 7 per year*

The EBT system will be available for use 24 hours a day, 7 days a week, and 52 weeks a year. The EBT system must be available for WIC retail redemptions and WIC participant balance inquiries during a store's normal operating hours.

4.16.2 *MIS Weekly*

The MIS system will be used Monday – Sunday during "after hours;" as well as during normal working hours of the clinics.

4.16.3 *Backup*

The system will perform end of day processing and replication after the normal working hours of the clinics. The system will also perform automated back-up processes so that no operator intervention is necessary.

4.16.4 *System admin authority*

When central system processing is required that precludes user access, the system administrator must be able to set up a kill signal to indicate the user has so many seconds to save and log off the system. At that point, the system will automatically log off all users and run the process.

4.17 MIS System Capacity

4.17.1 *Caseload Capacity*

The system and its databases will be able to support existing Vermont WIC caseloads (active participants) and future caseload increases as needed. The system must also accommodate eligible but not participating participants and EBT functionality.

4.17.2 *Remote Capacity*

Satellite clinics may have inadequate or no Internet access at the time of system implementation, all clinic operations must be capable of running on a single (laptop) workstation.

4.18 EBT System Capacity

4.18.1 *Caseload Capacity*

The system and its databases will be able to support existing Vermont WIC caseloads (active participants) and future caseload increases as needed.

4.18.2 *Remote Capacity*

Satellite clinics may have inadequate or no Internet access at the time of system implementation, all clinic EBT operations must be capable of running on a single (laptop) workstation.

4.19 MIS Edits

4.19.1 *Validation Check*

Validation checks on edits will include relational or cross-field edits such as participant number and participant name. Table validations such as ethnicity codes must also be included.

4.19.2 *Front-end Edits*

Where edits exist as defined by the Vermont WIC program, the edits must be done on the front-end, invalid entries must be immediately identified to the user rather than being posted to the database.

4.19.3 *Calculations*

All calculated data must be accurate and all formulas must be specified in detail in the system documentation.

4.19.4 *Number Adjustments*

Rounding of numbers or similar adjustments must be explicitly stated.

4.20 EBT Edits

4.20.1 Validation Check

Validation checks on edits will include relational or cross-field edits such as participant number and participant name.

4.20.2 Front-end Edits

Where edits exist as defined by the Vermont WIC program, the edits must be done on the front-end, invalid entries must be immediately identified to the user rather than being posted to the database.

4.20.3 Calculations

All calculated data must be accurate and all formulas must be specified in detail in the system documentation.

4.20.4 Number Adjustments

Rounding of numbers or similar adjustments must be explicitly stated. All EBT reconcile adjustments for system errors, reversals, etc, must be relayed to the MIS.

4.21 MIS Reports

4.21.1 Report Format

View/Print/Save, all users will have the ability to reproduce all outputs to view on screen and/or save to a file as well as print capability.

4.21.2 Custom Reports

The system must provide the Admin WIC user the ability to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user.

4.21.3 Ad hoc Reports

Ad hoc Reporting will be accomplished using Data Warehouse queries. The data warehouse will be designed in such a way that it facilitates Vermont WIC's ability to derive reports and perform analysis of data derived from MIS operations.

4.22 EBT Reports

4.22.1 Report Format

View/Print/Save, all users will have the ability to reproduce all outputs to view on screen and/or save to a file as well as print capability.

4.22.2 Custom Reports

The system must provide the Admin WIC user the ability to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. A comprehensive set of daily and monthly activity files will be available to Vermont WIC, reflecting all transactions or account actions that affect EBT account balances or account status.

4.22.3 Ad hoc Reports

Ad hoc Reporting will be accomplished using Data Warehouse queries and queries will be saved if desired by the user. The EBT data warehouse will contain all transactional data relating to Vermont's WIC EBT accounts. The data warehouse will be designed in such a way that it facilitates Vermont WIC's ability to derive reports and perform analysis of data derived from EBT operations.

4.23 System Environments

4.23.1 Development, Test, and Production Environments

Separate development, test and production environments must exist to assure Quality Control.

4.23.2 Server environment

The server environment must be Microsoft SQL based if VDH hosts the systems. The DII environment can host Oracle in addition to being able to host SQL and web servers on the mainframe.

4.23.3 Web Service Architecture

Where it is appropriate and opportune, the system will utilize Web Services Architecture. Possible interfaces include but are not limited to:

- AHS Access System
 - TANF – interface with the TANF system to view, import and export data as appropriate.
 - SNAP – interface with the Vermont Supplemental Nutrition Assistance Program (SNAP) system to view, import and export data as appropriate.
- Medicaid – interface with the Medicaid system to view, import and export data as appropriate.
- Financial Institutions – At the state office level, interface, i.e., provide files, with the financial institution that has responsibility for making payments to authorized vendors based on food benefit redemption in the state. In addition, the system must include the functional ability for submitting issuance records to a bank and receiving receipt of payment records from the bank in electronic form compatible with UCC and ISO standards.
- Word Processing – provide a communications interface with word processing software for individual form letters printing and group mail merge process.
- GIS – interface with VDH's GIS system to view, import and export data as appropriate.
- Auto-Dialer – interface with an auto-dialer system as appropriate.
- Immunizations – interface with Vermont's immunization registry system as appropriate.
- Federal Program Reporting System (FPRS) – interface with the USDA (FNS) reporting system.
- EBT Processor – interface with the EBT processor for payment and reconciliation.
- EBT Host – interface with the EBT host to track card set up, card blocks, card locks, hot cards, issuance data and voids as well as other EBT functionality.
- National UPC Database – interface with the National UPC database to compare items and capture any new food items approved for national usage by FNS.
- Lab systems – interface with lab systems to obtain Hemoglobin, Hematocrit and lead levels found in blood.

4.24 Database

4.24.1 Database must be MS SQL

The database must be MS SQL if AHS core components are not in place and not able to facilitate data exchange between MSSQL and Oracle.

4.24.2 Data Elements and Codes

Data Elements and codes used will utilize standard Data Elements used in VDH and

AHS applications when possible. Example, location codes, city, state, HCP physician and hospital data elements, etc. The system will capture and maintain all standard WIC data elements, and allow easy implementation of changes such as risk code updates and food item changes

4.24.3 Database architecture

The database must be constructed utilizing relational database architecture and normalized to the Third Normal Form (3NF).

4.25 Networking

4.25.1 SOV Policy

All new extranet connectivity will go through a security review with the DII Office of the CIO.

The State will set connectivity standards. Use of various technologies and solutions may change over time. Third party network connections may be required to change connectivity solutions based on new standards established by the State. Generally, third parties are not allowed to connect directly to GOVnet at State locations with non-State equipment. Connections may be authorized for special VLANS that are established specifically for third party activity and those that provide internet-only access.

All new connection requests between third parties and Agencies or Departments require that the third party and State representatives agree to an agreement to be signed by the secretary/commissioner/designated authority of the sponsoring department as well as a representative from the third party who is legally empowered to sign on behalf of the third part. The signed document is to be kept on file with the relevant Department. Documents pertaining to the connections into GOVnet are to be kept on file with the Office of the CIO.

4.26 Messaging

4.26.1 Authorization of cardholder

Messaging formats must comply with ANSI X9.93-2008, Specifications for WIC. The EBT System shall comply with all updates to ANSI X9.93-2008 specifications for WIC.

Interchange specifications must be approved by FNS prior to use.

4.27 Accountability

4.27.1 Standards

The system must comply with security controls for moderate impact information systems as put forth in NIST Special Publication 800-53, Revision 3, as updated May 1, 2010

A WIC MIS/EBT solution will follow all established policies, procedures, and guidelines, whether they have been invoked by the USDA FNS, VDH IT, VDH, AHS, DII or State of Vermont policy.

4.27.2 Reports

The system will have the ability to provide document and report based security.

- The system will have the ability to print audit reports, including but not limited to module access, field access and role permissions/grants.
- The system will allow authorized users to have access to a log of security activity for system sign in and off and unsuccessful sign in attempts.

4.27.3 Audit

The system will have the ability to allow audit trail to record the user ID, IP address, user agent string, and date and time associated with each incident/unit history.

- The system will provide access to audit trails for only users with proper security.
- The system will allow secure users to print audit trail information.
- The system will provide an audit trail for changes to security policy.
- The system will provide standard audit reports.

5. Certification

The Certification functional area is intended to support application processing and certification of WIC participants. To be certified as eligible to receive Program benefits, applicants must meet categorical, income, residence, and nutrition risk requirements. WIC certification involves capturing relevant demographic, income, health-related, and reference data on applicants to and participants in the WIC Program. In this area, eligible applicants are certified to receive nutrition education, breastfeeding support, referral to health and social service programs, and food benefits. Upon certification, WIC recipients are prescribed and issued a monthly food package. Certification functionality also includes the ability to process participant data changes and transfers.

In an electronic services environment, certification also includes the account setup and benefit authorization for electronic benefits transfer (EBT). The EBT card may be issued at this point or during the food benefit issuance process.

Certification is composed of the following functions:

- *Manage Application Process*
 - Schedule Certification Appointment
 - Maintain Waiting List
 - Maintain Basic Information on Applicant
 - Screen Applicant for Prior Enrollment
 - Determine Adjunct or Automatic Income Eligibility
 - Determine Documented Income Eligibility
 - Maintain Eligibility Documentation and Status
- *Determine Nutrition Risk of Applicant*
 - Maintain Applicant Nutrition and Health Characteristics
 - Perform Dietary Assessment
 - Perform Measurements and Calculate Body Mass Index
 - Conduct ongoing assessment of growth in children and weight gain in pregnant women
 - Capture and Document Blood Test Results
 - Determine Nutrition Risk and Certify Applicant
 - Eligibility Requirements
 - Conduct On-going Assessment of Bloodwork Needed
 - Maintain Participant Data
 - Issue Identification Card
- *Prescribe Food Package*
 - Select Food Prescription
 - Tailor/Change Food Prescription
 - Schedule Appointment for Food Benefit Pick-up
- *Process Participant Data Changes and Transfers*
 - Change Household Grouping
 - Change Participation Status

- Process In-State Transfers
- Process Transfers to Other States or Overseas
- *Establish EBT Account and Authorize Benefits*
 - Establish EBT Account
 - Authorize Benefits
 - Load Data into EBT Account
- *Conduct Certification Reporting*
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse

5.1 Manage Application Process

The WIC Program collects and maintains information on individuals applying for participation in the WIC Program. Individuals provide this data to the WIC program when they telephone or visit the Local agency. If an applicant does not meet the basic requirements for category, residence and income, the applicant will not continue with nutrition risk eligibility interviews and will not become a participant in the WIC Program at that time. The system must be flexible in terms of the way in which this application process is completed.

5.1.1 Schedule Certification Appointment

The appointment scheduler must allow for the scheduling of certification appointments. The system must accommodate a flexible scheduler to accommodate variations in scheduling practices. This includes but is not limited to searching for a particular time and date or staff person. Any outputs generated by the system for the participant will print in Vermont WIC specified languages by command.

The system must track participant sanctions and abuses and provide a prompt to staff so that specific issues can be addressed, the user must be able to edit and read these sanctions at the state and local level.

The system must provide a message or prompt for staff so that records can be flagged to resolve issues. An option must be provided to lock the record until the message is acknowledged and the system must maintain a record of who acknowledged the message. In addition, the user must be able to prioritize the messages.

Input:

Clinic Identification Number (linked to Local Agency)
 Event Preferred Location
 Event Preference Preferred Day
 Event Preference Preferred Language Code
 Event Preference Preferred Time (specific times as well as am/pm)
 Event Slot Date
 Event Slot Description (can change on the fly)
 Event Slot Duration (able to set defaults, but must be able to adapt easily)
 Event Slot Language Code
 Event Slot Maximum Number of Slots
 Event Slot Required Resource Type Code
 Event Slot Time
 Event Slot Type Code
 Local Agency Identification Number
 Master Calendar Identification Number
 Participant Household Identification Number
 Participant Identification Number
 Resource Identification Number

Process:

- 5.1.1.1 Add an appointment even when all schedule slots appear to be full (i.e., allow overbooking to compensate for expected no shows)
- 5.1.1.2 Record appointment information and produce a schedule of appointments to allow staff to adjust workload and retrieve records in advance of the appointments
- 5.1.1.3 Accept applicant preferences for an appointment time, including such parameters as time of day, day of week, language, preferred location and linkage with other Household members. Once the preferences are entered, the appointment scheduler will suggest available appointments that match the preference criteria
- 5.1.1.4 Collect and store daily appointment schedule data and applicant appointment data in the Event Preference and Event Slot data stores
- 5.1.1.5 Adjust the Event Slot Maximum Number of Slots (the maximum number of slots available for a particular day and time) each time a new appointment is made
- 5.1.1.6 Provide Appointment Notice to applicant (must be an optional function with optional electronic and paper reminder e.g., text message/e-mail, auto dialer)

Output:

- 5.1.1.7 Screen display of appointment schedule availability
- 5.1.1.8 Screen display of applicant's appointment schedule
- 5.1.1.9 Printed report of Daily schedule of events

5.1.2 Maintain Waiting List

The system will maintain a waiting list of the applicants who desire to enroll in the WIC Program when caseload is full for each Local Agency. As caseload slots become available, the system will look to the waiting list for additional applicants. The system must select those applicants by expected or determined priority level so the higher risk applicants are certified before the lower risk applicants.

Input:

- Clinic Identification Number
- Local Agency Identification Number
- Participant Health Nutrition Risk Criteria Code (optional)
- Participant Identification Number
- Participant Priority Level Code (optional)
- Participant Status Code

Process:

- 5.1.2.1 Accept Certifier identity and post it to applicable certification sessions
- 5.1.2.2 Update applicant status with Participant Status Code for Waiting List
- 5.1.2.3 Calculate Waiting List Priority
- 5.1.2.4 Retrieve participant records with Waiting List Active Status

5.1.2.5 Sort records by Waiting List Priority Date

5.1.2.6 Display Waiting List in priority order

5.1.2.7 Update Participant Status

Output:

5.1.2.8 Printed report and screen display of waiting list and basic data on each applicant

5.1.2.9 Notification of waiting list status

5.1.3 Maintain Basic Applicant Data

The system must allow for the collection and maintenance of basic data about each applicant. Applicant data may be received through various means and at different times, and the system must accommodate for each of these times. Therefore, the system must allow users to add, change, and delete data on demand by accessing records through the unique applicant or participant identification number.

Input:

Clinic Identification Number

Local Agency Identification Number

Participant Residence Address- 1

Participant Residence Address- 2

Participant Residence Address- City

Participant Residence Address- Zip Code

Participant Mailing Address- 1

Participant Mailing Address- 2

Participant Mailing Address- City

Participant Mailing Address- Zip Code

Participant Alias First Name

Participant Alias Last Name

Participant Alias Middle Name

Participant Alias Name Suffix

Participant Biological Mother's First Name (for infants and children)

Participant Biological Mother's Middle Name (for infants and children)

Participant Biological Mother's Last Name (for infants and children)

Participant Application Date

Participant Application Identification Number

Participant Category Code

Participant Certification End Date

Participant Data Sharing Consent

Participant Data Sharing Entity

Participant Date of Birth

Participant Date of First Certification

Participant Date of Initial Contact

Participant Education Level Code

Participant Employment Status Code

Participant Expected Date of Delivery

Participant Household Identification Number

Participant Household Size

Participant Health Source of Prenatal Care
Participant Identity Documentation Code
Income Documentation Code
Participant (Foster) Income per Period
Household Income per Period
Income Period
Participant Language Spoken Code
Participant Marital Status Code
Participant Name- First
Participant Name- Last
Participant Name- Middle
Participant Name- Suffix
Participant Physical Presence Exception Code
Participant Physical Presence Indicator (Y/N)
Participant Racial/Ethnic Code
Participant Residency Documentation Code
Participant Self-Declared Income Eligibility Code
Participant Sex
Participant Source of Information about WIC Code
Participant Status Code
Participant Telephone Number 1
Participant Telephone Number 1 Type (home, cell, relative, *etc.*)
Participant Telephone Number 2
Participant Telephone Number 2 Type (home, cell, relative, *etc.*)
Participant Telephone Number 3
Participant Telephone Number 3 Type (home, cell, relative, *etc.*)
Transfer Date
Transfer From
Transfer To

Process:

- 5.1.3.1 Accept Certifier identity and post it to applicable certification sessions
- 5.1.3.2 Assign application identification number and create a new participant record or accept user input of participant identification number/application identification number (or other identification data) to access existing data
- 5.1.3.3 Add new applicants to or update existing records in the Participant data store
- 5.1.3.4 Generate or accept user input of Household identification number and associate it to the applicant
- 5.1.3.5 Associate all other Household members to the Participant Household Identification Number
- 5.1.3.6 Capture demographic and eligibility information (such as name, address and category – pregnant woman, *etc.*)
- 5.1.3.7 Allow default values to certain fields such as city, state, area code, *etc.*, so fields do not have to be manually data entered.
- 5.1.3.8 Make changes to basic applicant data to all records associated with the Household identification number by linking the common Household ID

5.1.3.9 Generate screen display of linked participant Household

Output:

5.1.3.10 Screen display of applicant data

5.1.4 Screen Applicant for Prior Enrollment

Upon input of applicant data (and at benefit issuance during a certification), the system will check to ensure that the applicant is not already enrolled at the Local Agency or clinic. If a match is found, the system will instantly inform the user of the possibility of dual enrollment. The system will also support dual participant checking at the statewide level.

The system will maintain a centralized database to allow for dual participation matching between programs within the Vermont Agency of Human Services. The system will produce an electronic file for exchange.

Input:

Participant Residence Address- 1
Participant Residence Address- 2
Participant Residence Address- City
Participant Residence Address- Zip Code
Participant Mailing Address- 1
Participant Mailing Address- 2
Participant Mailing Address- City
Participant Mailing Address- Zip Code
Participant Alias Name- First
Participant Alias Name- Last
Participant Alias Name- Middle
Participant Application Identification Number
Participant Category Code
Participant Date of Birth
Participant Household Identification Number
Participant Name- First
Participant Name- Last
Participant Name- MI
Participant Name – Suffix
Participant Racial/Ethnic Code
Participant Sex
Medicaid Number

Process:

- 5.1.4.1 Accept Certifier identity and post it to applicable certification sessions
- 5.1.4.2 Maintain statewide centralized database for dual participation/dual enrollment matching
- 5.1.4.3 Match newly entered applicant data with data in participant data store
- 5.1.4.4 Display potential matches in Dual Participation Potential Match data fields (Dual Participation Potential Match Applicant CSFP (Vt. Food Bank), Applicant Other States Agency, Applicant WIC, Certified CSFP, Certified Other State Agency, Certified WIC)
- 5.1.4.5 Accept user input to potential matches (with ability to resolve false duals)

- 5.1.4.6 Track the generation of Participant Abuse Forms by participant
- 5.1.4.7 Notify the user of the number of participant abuse offenses per participant

Output:

- 5.1.4.8 Screen display of prior enrollment
- 5.1.4.9 Notice of dual enrollment to applicant
- 5.1.4.10 Notice of Participant Abuse
- 5.1.4.11 Tape or electronic file of participant data

5.1.5 Determine Adjunct or Automatic Income Eligibility

The system will enable the user to indicate whether an applicant, or one or more of the applicant's Household members, is income eligible for WIC as a result of their eligibility for or enrollment in other benefit programs.

For Minimum Data Set (MDS) reporting, the system will enable the user to enter all the adjunct programs in which the applicant is currently eligible. If the applicant is adjunctively income eligible, the system must permit the user to enter an income amount or an income range that exceeds the maximum allowed for WIC (based on the established Income Eligibility Guidelines) if the maximum income limit in the adjunct Program is greater than the maximum income limit for WIC.

Inputs:

- Participant Adjunct or Automatic Income Eligibility Code(s)
- Participant Application Identification Number/ Participant Identification
- Participant Household Identification Number
- Income Documentation Date
- Income Period
- Income Range per Period
- Participant Participation in SNAP
- Participant Participation in Medicaid
- Participant Participation in Other Future Programs
- Participant Participation in TANF
- Participant Self-Declared Income Eligibility Code

Process:

- 5.1.5.1 Accept Certifier identity and post it to applicable certification sessions
- 5.1.5.2 Accept user input of participation in adjunctive or automatic eligibility program, self-declared income, and income information
- 5.1.5.3 Update participant data store for all members of the Household
- 5.1.5.4 Retrieve data through interface with other health and/or social service systems (i.e., SNAP Program, TANF, Medicaid, or other AHS programs) if applicable

Outputs:

- 5.1.5.5 Screen display of adjunct or automatic income eligibility status

5.1.6 Determine Documented Income Eligibility

If the applicant is not adjunctively or automatically income eligible, he or she must be

assessed for income eligibility through normal screening procedures. WIC income eligibility requirements are based on the number of individuals who share income and resources in the applicant's household (i.e., the economic unit) and the total gross income of that economic unit. The system must provide a flexible and robust income eligibility calculator that accommodates the many varying types, sources, and periodicity of income reported by WIC applicants. The system must be able to accept multiple sources of income with associated amounts and periodicity. The system must also accept non-regular income in varying amounts and periodicity and provide automatic averaging of these income sources. The system must then aggregate all income and provide total income by month and annually for eligibility determination, except for Foster Child income, which must be maintained separately from the household.

Inputs:

Participant Application Identification Number or Participant Identification
Participant Household Size
Income Documentation Type
Income Documentation Date
Income per Period
Income Period
Date Eligibility Determined
Income/Residence Confirmation – Electronic Signature by WIC Staff

Process:

- 5.1.6.1 Accept annual updates to income guidelines
- 5.1.6.2 Accept Certifier identity and date of income eligibility determination
- 5.1.6.3 Add, update, and delete income and Household data
- 5.1.6.4 Accept and process income in any of the following increments: weekly, bi-weekly, twice-monthly, monthly and annual, inclusive of varying amounts for averaging
- 5.1.6.5 Calculate annual and monthly Household income
- 5.1.6.6 Retrieve and compare applicant's income with Income Eligibility Guidelines
- 5.1.6.7 Allow user input of income levels that exceed maximum allowed level if the participant has provided proof of participation in TANF, SNAP, or Medicaid, or any other automatic income eligibility program
- 5.1.6.8 Determine income eligibility status and alert user to applicant's adjunctive or automatic eligibility status
- 5.1.6.9 Display status of income eligibility determination and update Participant Ineligibility Date and Participant Ineligibility Reason Code
- 5.1.6.10 Capture the income amount and date of income determination each time an applicant's income is assessed or a participant's income is reassessed
- 5.1.6.11 Store the applicant's income level in the individual's record for those individuals determined income eligible
- 5.1.6.12 Maintain income information for applicants determined ineligible, along with the reason for ineligibility

- 5.1.6.13 Generate screen display of income eligibility status
- 5.1.6.14 Compare income data entered for all members of the Household and produce a screen display of inconsistencies to assist in determining other Household members that are income ineligible because of a change in income
- 5.1.6.15 Allow user to accept or reject income data displayed as inconsistencies across Household members, as appropriate
- 5.1.6.16 Permit the applicant's income and Household size information to be saved and applied, as appropriate, to other members of the economic unit who are also applying for WIC

Outputs:

- 5.1.6.17 Screen display of individual's income eligibility status when participant is over income

5.1.7 Maintain Eligibility Documentation and Status

To receive WIC benefits, applicants must not only be eligible based on category and income, they must also meet residency requirements and have at least one nutrition risk condition. All applicants must provide documents to show proof of identity, income, and residence within 30 days of their certification visit or they must be terminated from the system and issued a notice of ineligibility.

Input:

- Participant Application Identification Number or Participant Identification Number
- Participant Certification Date
- Participant Certification End Date
- Participant Certification Status Code
- Participant Identity Documentation Code
- Income Documentation Code
- Income Documentation Date
- Participant Ineligibility Reason Code
- Participant Physical Presence Exception Code
- Participant Physical Presence Indicator (Y/N)
- Participant Residence Documentation Code

Process:

- 5.1.7.1 Accept input of source of income information (i.e., pay stub, letter from Medicaid, etc)
- 5.1.7.2 Accept input of proof of identity
- 5.1.7.3 Accept proof of residency (e.g., a current utility bill, rent or mortgage receipts)
- 5.1.7.4 Capture applicant's physical presence (system default) at certification visit or reason for exception
- 5.1.7.5 Calculate date income documents or the nutrition assessment are due, prevent provision of services if overdue
- 5.1.7.6 Provide a notification that benefits will terminate if income documentation or the nutrition assessment is not completed by a specific date (30 days from

date of temporary certification and 60 days from date of certification for women deemed presumptively eligible)

- 5.1.7.7 Automatically terminate after 30 or 60 days and prevent issuance of food benefits past 30 or 60 days from date of certification if income documents are not provided
- 5.1.7.8 Generate Notice to applicants of the specific documents needed and the date by which they must be provided
- 5.1.7.9 Provide for icons for printing participant notices without going to specific screens
- 5.1.7.10 Generate Ineligibility/Referral Notice

Output:

- 5.1.7.11 Screen display of documentation recorded
- 5.1.7.12 Notice of documents needed and date due
- 5.1.7.13 Notice of ineligibility and reason
- 5.1.7.14 Notice of certification termination

5.2 Determine Nutrition Risk of Applicant

The system will allow users to review, add, change, and delete health and nutrition data at any time. After completion of the certification process, however, changes to data for determining eligibility must be limited to a clinic system administrator to a limited number of records and for specific reason (the reason and the staff making the change will be recorded). Those data that are the basis for eligibility determinations must be maintained for audit tracking purposes.

Based on the applicant's nutrition and health characteristics entered, the system will assist WIC staff in determining the appropriate nutrition risk conditions, nutrition education messages, health care referrals and priority for the participant.

Nutrition risk factors may be added to the participant's record at any time. Nutrition risk factors added after certification must be distinguished from those that were used to determine eligibility.

The system must provide the ability to view health information from past certification periods for participants, that have been on WIC before. Examples include previous nutrition risk factors, previous pregnancy information, blood values, and anthropometric data. The system must assign as many nutrition risk factors from the input data as are possible from the data (including using previously entered data, current data, and data from other Household members who are also certified on the system).

The system must track whether the participant is up-to-date on immunizations via data from Vermont's Immunization Registry. Based on this the system must flag the record as up-to-date or not up-to-date on immunizations. This is also addressed in Nutrition Education and Health Surveillance.

The system must automatically determine the level of risk for nutrition risk factors assigned or selected (*i.e.*, high and low risk) based on Vermont State level parameters. Vermont will be able to determine which conditions are to be determined as high-risk.

The system will prepopulate the participant's Lead results when possible from VDH's "Patient Profile" records.

5.2.1 *Maintain Applicant Nutrition and Health Characteristics*

The system will allow the entry of applicant nutrition and health characteristics data to support an automated assessment of participant risk. In addition, the system will enable the data to be modified as necessary throughout the individual's application and certification period, but not after the certification period. As participant health and nutrition related information changes, the system will retain selected historical data on a summary screen (e.g., height and weight, Hemoglobin, percentiles and BMIs) in addition to capturing data that are more current. This data may then be used to track an individual participant's progress and to do an historical analysis of participants of a particular type or in a particular geographic location. Historical data needs to include the date when the measurement was taken as well as age of the participant (for infants and children) and weeks of gestation (for pregnant women) when the measurement was taken. The system must provide for biologically implausible edits on the data entered but allow for these to be overridden.

Input:

Participant Age
Participant Application Identification Number or Participant Identification Number
Participant Date of Last Checkup/Immunization- Infants and Children
Participant Date of Birth
Participant Health Anthropometric Date
Participant Health Height/Length
Participant Health Hematocrit
Participant Health Hematocrit Date
Participant Health Hemoglobin
Participant Health Hemoglobin Date
Participant Health Free Erythrocyte Protoporphyrin Test Result
Participant Health Free Erythrocyte Protoporphyrin Test Date
Participant Health Infant Birth Length
Participant Health Infant Birth Weight
Participant Health Pregnancy Outcome Code
Participant Health Trimester of First WIC Visit
Participant Health Weight
Participant Health Weight at Labor
Participant Health Weight Change Code
Participant Health Weight Prepregnancy
Participant Blood Lead Level
Participant Head Circumference

As Applicable to Risk Conditions:

Breastfeeding Data Collected Date
Breastfeeding Discontinued Reason Code
Breastfeeding Duration
Breastfeeding Infant Currently Breastfeeding
Breastfeeding Infant Ever Breastfeeding
Breastfeeding Status Code
Participant Infant First Supplemental Feeding Date Received
Participant Expected Date of Delivery
Participant Health Cigarette Smoking
Participant Health Cigarettes per Day

Cigarettes per Day – 3 months prior to pregnancy
 Cigarettes per Day – Prenatal Visit
 Cigarettes per Day – last 3 months of pregnancy
 Household Smoking – Prenatal Visit
 Household Smoking – Postpartum Visit
 Participant Health Dietary Supplement during Pregnancy (including type of supplement, e.g., prenatal, folate, iron, or non-prescribed supplement (herbal/OTC))
 Participant Health Dietary Supplement Pre-pregnancy (specifically folic acid)
 Participant Health Drink
 Participant Health Drink per Week- 3 Months Prepregnancy
 Participant Health Drink per Week – Last 3 Months of Pregnancy
 Participant Health Drug
 Participant Health Drug Frequency
 Participant Health Gestational Diabetes (current and history)
 Participant Health Height/Length Change Code
 Participant Health High Blood Pressure during Pregnancy (current and history)
 Participant Health Infant Gestational Age
 Participant Health LMP Date
 Participant Health Multiple Fetuses
 Participant Health Multiple Fetuses Number of Live Births
 Participant Health Pregnancy Weight Gain
 Participant Health Previous Pregnancy
 Participant Health Previous miscarriages or abortions
 Participant Health Previous Pregnancy End Date
 Participant Health Source of Prenatal Care
 Participant Health Source of Prenatal Care Begin Date
 Participant Health Trimester
 Participant Health TV/Video Viewing
 Participant Number of Live Births
 Participant Physical Presence Exception Code
 Participant Physical Presence Indicator (Y/N)
 Participant Primary Care Physician (“none”)
 Participant OBGYN (“none”)
 Participants Delivery Hospital
 Date Prenatal Care Begin

Process:

- 5.2.1.1 Accept Certifier identity and post it to applicable certification sessions
- 5.2.1.2 Accept user entered Participant, Participant Health, and Breastfeeding data
- 5.2.1.3 Update the Participant, Participant Health, and Breastfeeding data stores
- 5.2.1.4 Maintain historical encounter data chronologically in the applicant’s file
- 5.2.1.5 Associate WIC mom with WIC infant and assign appropriate Nutritional Risk Factors (breastfeeding), complete breastfeeding information for both simultaneously
- 5.2.1.6 System will calculate age of all participants and display on all screens (years for women, years and months for children, months, weeks and days for infants), display weeks gestation for pregnant women

- 5.2.1.7 Provide automatic calculation of weeks gestation from EDD or LMP (last menstrual period), the current date and date of delivery
- 5.2.1.8 Allow for an adjustment to term date for pregnant women when they deliver early, late or miscarry, or even when woman gives a new EDD, adjust termination date based on new EDD or different actual delivery date
- 5.2.1.9 Automate the WIC Release of Information

Output:

- 5.2.1.10 Screen display of participant health data.

5.2.2 *Perform Dietary Assessment*

The system will assist in the determination of nutritional risk through the collection of the participant's reported dietary intake. Upon entering the nutrition information, the system will automatically assign a score based on the foods' nutrient value.

Input:

- Nutrition Assessment Dietary Score
- Nutrition Assessment Food Consumed Date
- Nutrition Assessment Food Consumed Type
- Nutrition Assessment Food Group
- Nutrition Assessment Food Group Score
- Nutrition Assessment Date Infant First Received Complementary Foods
- Participant Application Identification Number or Participant Identification Number

Process:

- 5.2.2.1 Accept Certifier identity and post it to applicable certification sessions
- 5.2.2.2 Accept user input of Food and Amounts Consumed
- 5.2.2.3 Calculate Actual Daily Food Intake Amount
- 5.2.2.4 Compare Actual Daily Food Intake to Required Daily Food Intake (system to generate a pyramid to be used as an educational tool based on the participant intake versus their recommended intake)
- 5.2.2.5 Assign nutrition food/dietary score
- 5.2.2.6 Store data in Nutrition Assessment data store
- 5.2.2.7 Display results of Dietary Assessment
- 5.2.2.8 Provide for an inquiry screen to look up and compare previous diet histories

Output:

- 5.2.2.9 Screen display of participant dietary assessment

5.2.3 *Perform Measurements*

The system will capture the data, based on CDC standards, for anthropometric measurements and BMI and use this as the basis for assessing nutrition risk of WIC applicants. The system will graphically plot an individual's growth and provide the nutritionist with the calculated percentiles, based on inputs to the system such as height, weight, weight-for-length, BMI-for-age, and head circumference (for infants). The types

of growth charts produced will vary depending on the age, and sex of the participant. The system will be able to accept changes in growth data. Prenatal weight gain grids are required for pregnant women that capture weight gain at various weeks of pregnancy. Prenatal weight gain grids will include pregravid weight, EDD, and be able to accept modifications to the EDD when needed. Prenatal grids must also include various recommended weight gains based upon the participant's pregravid weight.

Input:

Participant Application Identification Number or Participant Identification Number
Participant Health Anthropometric Date
Participant Health Head Circumference
Participant Health Height or Length
Participant Health Weight
Participant Age at Conception
Participant Pregravid Weight
Participant Estimated Date of Delivery

Process:

- 5.2.3.1 Accept Certifier identity and post it to applicable certification sessions
- 5.2.3.2 Accept user input of anthropometric data or retrieve data from Participant Health data store
- 5.2.3.3 Flag records for any measurement that is more than 60 days prior to the certification date
- 5.2.3.4 Compare actual measurements to CDC standards or WHO standards or optional automated growth charts per specified medical conditions
- 5.2.3.5 Calculate Body Mass Index (BMI) based on height and weight entered, including pregnant woman's pregravid BMI
- 5.2.3.6 Automatically determine the percentile of BMI for age for children over 2 using age, current height, weight, sex and CDC/NCHS 2000 standard reference data
- 5.2.3.7 Assign BMI score and weight status classification
- 5.2.3.8 Generate on screen and print to report a Graphic Growth Chart or Percentile Chart with participant's data (i.e., child's growth chart, also need prenatal weight gain charts for pregnant women). NCHS Growth Charts will be used for ages 2-18 years, per the new CDC standard. WHO growth charts are to be used for ages birth to 2 years.
- 5.2.3.9 Automatically determine the percentile of weight for length using age, current height (or length), weight (current or birth weight), sex and CDC/NCHS 2000 standard reference data or the WHO standard.
- 5.2.3.10 Automatically determine the percentile of weight for age using age, current height (or length), weight (current or birth weight), length for age, sex and CDC/NCHS 2000 standard reference data or the WHO standard.
- 5.2.3.11 Display participant Hgb, Hct, EP on the growth chart printout
- 5.2.3.12 The screen where anthropometric data is entered must also show historical data. For example at the top of screen, new anthropometric data is entered

where percentiles and BMI are calculated. At the bottom of the screen in table form are all the old anthropometric values with percentiles and BMIs. Using an icon from this screen the system will provide the graphic representation of the current and historical growth.

5.2.3.13 The system will calculate head circumference graphing.

5.2.3.14 The system must calculate inadequate and excessive weight gains, underweight and overweight, and assign appropriate risk factors.

Output:

5.2.3.15 Screen display or printout of participant growth chart

5.2.3.16 Participant percentile change chart

5.2.4 Capture Blood Test Results

The system must allow for the capture of blood test results for all participants except infants younger than 7 months old. Bloodwork must be done at appropriate times in accordance with program regulations.

Note: Participants who do not have blood test results within 90 days will not be terminated by the system.

- For Pregnant Women: A blood test must be taken during pregnancy. Using the expected delivery date, the system will calculate the earliest possible date of pregnancy, and not allow entry of a date outside of this range.
- For Postpartum Women: The system will capture the date of termination of pregnancy, and calculate the date certification is due to expire. For postpartum women, this date is 6 months after the date of termination of pregnancy. The user will not be allowed to enter a blood test date that is before the date of delivery or to enter a date that is past the participant's certification end date.
Optimally, the time to collect bloodwork for the postpartum woman is 4- 6 weeks after birth. Therefore, the system will enable the user to generate a list of postpartum women who are approaching their 4th week postpartum so an appointment can be made.
- For Breastfeeding Women: Results of a hematological test is generally obtained at certification. A blood test must be taken before her infant reaches one year of age. The system will prevent the user from entering a date of bloodwork for the mother that is before her infant's date of birth or after 12 months following her infant's date of birth. If a breastfeeding woman was previously certified as postpartum, the blood test results taken following termination of pregnancy will automatically populate the breastfeeding woman's record.
Optimally, the time to collect bloodwork for the breastfeeding woman is 4-6 weeks postpartum. Therefore, the system will enable the user to generate a list of breastfeeding women who are approaching their 4th week postpartum so an appointment can be made.
- For Infants 7 Months Old or Older: For infants 7 months old or older, results of a hematological test for anemia must be obtained at certification. Infants are certified at intervals of approximately 6 months, except State agencies may allow infants less than 6 months of age to be certified up to the infant's first birthday. The system will prevent the user from entering a date of bloodwork for the infant that is before the infant's date of birth or after the infant reaches 12 months of age.

The optimal time for collection of bloodwork for infants is 9 to 12 months of age. The system will enable the user to generate a list of infants who need to have an appointment for a blood test within this time frame.

- For Children 12 to 24 Months of Age: Results of a hematological test for anemia must be obtained at certification. For children over 12 months of age but less than 13 months of age at certification, if a blood test was performed between 6 and 11 months of age, and the data is less than 6 months old, no additional blood -work is needed for the child. If the infant's bloodwork data exists in the system and it meets the requirements stated above, the data from the infant's record will automatically populate the child's record. For children over 13 months of age but less than 25 months of age at certification, a blood test must be done. CDC recommends a blood test be performed around 15 to 18 months of age (or 6 months after the first blood test taken between 9 and 12 months). For all children 1-2 years old, the system will generate a list of children who need an appointment based on the following system-generated information: The individual's date of Hematocrit or Hemoglobin or Erythrocyte Protoporphyrin plus 6 months.
- For Children 2-5 Years of Age: The system will determine at each certification, whether the child's blood test was within the normal range during the previous certification period. If so, bloodwork is not needed until 12 months from the date of the last blood test; otherwise, bloodwork is required within 6 months of the date of the last blood test. Based on the determination of a normal or abnormal blood test for anemia, the system will enable the user to generate a list of children who are approaching their 6 or 12 month time frame so that an appointment can be made. The system will provide a flag to tell the user when a child needs to have a Hemoglobin at certification. For example, if the previous Hemoglobin result were abnormal then the system would request a new Hemoglobin at this certification visit.
- Elevation of clinic (so the system can use correct CDC values to determine Hemoglobin values). Vermont's elevation may be a constant for all locations.
- The system will assign appropriate nutrition risk factors when a participant's Hematocrit or Hemoglobin or Erythrocyte Protoporphyrin value is low.

Input:

Participant Actual Date of Delivery
Participant Application Identification Number or Participant Identification Number
Participant Certification Date
Participant Date of Birth
Participant Expected Date of Delivery
Participant Health Hematocrit
Participant Health Hematocrit Date
Participant Health Hemoglobin
Participant Health Hemoglobin Date
Participant Health Free Erythrocyte Protoporphyrin Test Result
Participant Health Free Erythrocyte Protoporphyrin Test Date
Smoking Information for Normal Blood Values

Process:

- 5.2.4.1 Accept user input of bloodwork or retrieve data from Participant and Participant Health data stores
- 5.2.4.2 Prevent the entry of a blood test date that is outside the appropriate range based on the applicant's category

- 5.2.4.3 Run an algorithm to determine if bloodwork is needed in a specified time period based on participant category, participant age, date of certification, and date of last bloodwork
- 5.2.4.4 Display a reminder on screen at certification if a risk condition is needed for the participant (if an individual is eligible based on income and has at least one qualifying nutrition risk present at certification, the individual may be certified without a blood test for a period up to 90 days)
- 5.2.4.5 Determine participants requiring bloodwork
- 5.2.4.6 Generate notice when blood is less than 3% of cutoff
- 5.2.4.7 Track the number participants, by category, with missing blood test data after the 90-day period and summarize this information for Vermont WIC and by Local Agency within Vermont WIC

Output:

- 5.2.4.8 Screen display at time of certification if participants is in need of bloodwork
- 5.2.4.9 Abnormal Bloodwork Notice
- 5.2.4.10 List of Individuals who need a follow-up appointment for nutrition risk assessment

5.2.5 Certify Applicant

The system must allow for the documentation of all the participant's risk factors and capture the identity of the certifying official for audit tracking purposes. The system will incorporate the most up to date uniform set of allowed nutrition risk conditions, with corresponding code numbers, that relate to the various applicant priorities (e.g., pregnant women and infants receive priority over children) provided by FNS. The system must be flexible to allow for variation in Vermont's in the use of risk factors (for example the ability to allow or not allow the use of a particular nutrition risk factor or to change the cut off points for a nutrition risk factor). The system will assign high-risk for participants; however, the system will be flexible to allow a high-risk designation to be removed by the user.

The system will assign nutrition risk factors for growth, weight gain and blood values to be evaluated and assigned at each visit, when values are entered, instead of only at certification.

Whenever possible the system will assign any nutrition risk factors that are possible based on the data that has been entered into the computer. For example, "low birth weight" based on an infant's birth weight or "closely spaced pregnancies" based on the dates of current and previous pregnancies.

The system must calculate the participant certification period and end date based on the regulatory requirements for each category of participant. The system must provide the user the ability to extend the current certification period by one month. This is for re-certification when an appointment cannot be kept and the certification is going to expire.

Input:

- Nutrition Assessment Dietary Score
- Nutrition Assessment Infant First Supplemental Feeding
- Participant Application Identification Number or Participant Identification Number
- Participant Certification Date

Participant Certification End Date
 Participant Certification Extended End Date
 Participant Health Anthropometric Date
 Participant Health Head Circumference
 Participant Health Height/Length
 Participant Health Hematocrit
 Participant Health Hematocrit Date
 Participant Health Hemoglobin
 Participant Health Hemoglobin Date
 Participant Health Free Erythrocyte Protoporphyrin Test Result
 Participant Health Free Erythrocyte Protoporphyrin Test Date
 Participant Health Nutrition Risk Criteria Code 1
 Participant Health Nutrition Risk Criteria Code 2
 Participant Health Nutrition Risk Criteria Code 3
 Participant Health Nutrition Risk Criteria Code 4
 Participant Health Nutrition Risk Criteria Code 5
 Participant Health Nutrition Risk Criteria Code 6
 Participant Health Nutrition Risk Criteria Code 7
 Participant Health Nutrition Risk Criteria Code 8
 Participant Health Nutrition Risk Criteria Code 9
 Participant Health Nutrition Risk Criteria Code 10
 Participant Health Nutrition Risk Criteria Code 11
 Participant Health Nutrition Risk Criteria Code 12
 Participant Health Nutrition Risk Criteria Code 13
 Participant Health Nutrition Risk Criteria Code 14
 Participant Health Nutrition Risk Criteria Code 15
 Participant Health Nutrition Risk Criteria Code 16
 Participant Health Nutrition Risk Criteria Code 17
 Participant Health Nutrition Risk Criteria Code 18
 Participant Health Nutrition Risk Criteria Code 19
 Participant Health Nutrition Risk Criteria Code 20
 Participant Health Weight
 Participant Ineligibility Reason Code
 Participant Priority Level Code
 Participant Electronic Signature (rights and responsibilities)
 Certifier Electronic Signature (certification)

Process:

- 5.2.5.1 Accept Certifier identity and post it to applicable certification sessions
- 5.2.5.2 Retrieve data from Participant, Participant Health, and Nutrition Assessment data stores
- 5.2.5.3 Enable entry of a Participant Nutrition Risk Code or automatically calculate the Participant Nutrition Risk Code based on Participant's Health and Nutrition data and store in the Participant Health data store
- 5.2.5.4 Under special conditions, allow for Certifier override of the risk code(s) assigned by the system.
- 5.2.5.5 Accept additional Participant Nutrition Risks and store in the Participant Health data store

- 5.2.5.6 Provide for cross field edit check between certain risk factors and other related data (e.g., if participant is identified as homeless or migrant, cross check for use of appropriate risk factor of if infant of a WIC mom or in the case of breastfeeding mother and her infant check for consistent risk codes)
- 5.2.5.7 Ensure contradictory risk factors are not recorded.
- 5.2.5.8 Allow for the assignment of nutritional risk factors after the certification has been completed
- 5.2.5.9 Automatically assign Participant Priority based on Participant Risk Factor and Participant Category, with the opportunity to allow staff to override the value, and store in the Participant Health data store
- 5.2.5.10 Automatically update Priority based on status changes (e.g., infants reaching 1 year)
- 5.2.5.11 Accept user input of new Participant Priority Level Code and store in the Participant data store
- 5.2.5.12 Retrieve data from Participant data store
- 5.2.5.13 Update Participant Certification Status Code to Certified and assign a Participant Identification number (if not already assigned) or update ineligibility/termination information
- 5.2.5.14 Calculate the date the participant's certification is due to expire.
- 5.2.5.15 System automatically calculates the next certification date and store in the Participant data store (calculated field Participant Certification End Date) (Note: Under certain circumstances, the certification period may be shortened or extended by a period not to exceed 30 days)
- 5.2.5.16 Record that the Rights and Responsibility was read and signed by the Participant/Head of Household (electronic signature would be verification)
- 5.2.5.17 Highlight the "records" of high-risk participants by way of a flag on screen

Output:

- 5.2.5.18 Screen display of dietary/nutrition risk assessment
- 5.2.5.19 Screen display of priority level
- 5.2.5.20 Notification of next certification date
- 5.2.5.21 Notification of ineligibility, if applicable
- 5.2.5.22 Notification of Certification
- 5.2.5.23 Rights and Responsibilities Document

5.2.6 *Conduct On-going Assessment of Bloodwork Needed*

The system will flag the records of applicants/participants needing bloodwork to assist staff in reminding applicants/participants to bring in bloodwork information. Applicants with missing bloodwork data will not be terminated by the system. The system will track the number of applicants, by category, with missing blood test data after the 90- day

period has lapsed and summarize this information by Local Agency.

Input:

Clinic Identification Number
Local Agency Identification Number
Participant Certification Date
Participant Certification Status Code
Participant Health Hematocrit Date
Participant Health Hemoglobin Date
Participant Health Free Erythrocyte Protoporphyrin Test Date
Participant Identification Number

Process:

- 5.2.6.1 Retrieve bloodwork data from Participant and Participant Health data stores
- 5.2.6.2 Calculate due date of bloodwork based on certification date and last bloodwork date (provide for flexibility in calculating this date for hematocrit)
- 5.2.6.3 Flag records in which bloodwork is missing within 90 days of certification

Output:

- 5.2.6.4 Screen display or printed report of participants missing bloodwork

5.2.7 Maintain Participant Data

The system will allow for the entry of data on proxy, alternate, or authorized representatives who can pick up or redeem food benefits on the participant's behalf. (Note: This information can also be added after certification). This information will be linked to the household.

Input:

Participant Certification Status Code
Participant Household Identification Number
Participant Identification Number
Participant Proxy Authorization Date
Participant Proxy Name

Process:

- 5.2.7.1 Automatically generate the Participant Identification Number (if system generated) or input number
- 5.2.7.2 Automatically generate the Household Identification Number or input an existing number
- 5.2.7.3 Associate participant to the appropriate Household Identification Number
- 5.2.7.4 Accept user entered Proxy data
- 5.2.7.5 Store Participant ID and Proxy data in Participant data store

Output:

- 5.2.7.6 Screen display of proxy information

5.3 Prescribe Food Package

The system will capture data about the participant's assigned food packages. The system will be flexible to allow for the tailoring/modifying of an individual's food package prescription at any time. The system will remind users when there is a change in a participant's status, which then necessitates a change in the prescribed food package.

5.3.1 *Select Food Prescription*

The system will capture and store the prescribed food package for each participant consistent with the participant's categorical status and age. The system will allow for different food benefit prescriptions to be prescribed each month.

Based on user entered business rules, the system will automatically change the prescription in some cases or flag the date the change will occur. The system will automatically change formula quantities at a specific age.

In instances where a mother and infant record exists within a Household, the ability to view the mother's and infant's food packages on the same screen is required. This will facilitate when a change from breastfeeding to non-breastfeeding is made. All changes could be made on a single screen.

The system will provide a screen for reviewing/viewing all Household members and their respective food package assignments (by code) at time of issuance. The screen would allow food package assignments for any member to be changed directly from this screen. Food packages and stores may be changed on one screen for all Household members that is also the screen for issuing checks.

The system will maintain the participant's food package identification. The participant receives an electronic food prescription that contains the set of specific prescribed food items. Each prescribed food item has a food category, sub-category, amount, and unit of measure associated with it. At the time of benefit issuance, food prescriptions for individual Household members will be aggregated into a Household account. The Household account contains individual food items with quantities that have been aggregated from all Household participants' individual prescriptions. Through an interface from the certification system to the EBT system, the food package data is written to the EBT card.

Input:

Food Item
Food Package Identification Number
Participant Identification Number
Household Identification Number
Participant Exempt Formula or Medical Foods Received
Participant Exempt Formula or Medical Foods Received Reason Code

Process:

- 5.3.1.1 Accept user input of participant identification number
- 5.3.1.2 Retrieve Participant's Category from Participant data store
- 5.3.1.3 Display appropriate standard packages, in addition to recommended package based on participant's category/age
- 5.3.1.4 Select Food Benefit Package based on Participant Category Code and display Food Package with assigned food items to user
- 5.3.1.5 Alert user to inappropriate food package selection (e.g., children's package for

a woman) and flag for over-issuance

- 5.3.1.6 Allow for the assignment of prorated food packages
- 5.3.1.7 Accept user Food Package Confirmation or Food Package Change
- 5.3.1.8 Update the Food Benefit Prescription data store to assign a Food Package to the participant

Output:

- 5.3.1.9 Screen display of participant food package data
- 5.3.1.10 Printed report of food benefits prescribed

5.3.2 Tailor or Change Food Prescription

The system needs the capacity to allow for the assignment of set packages but the flexibility to allow for custom building of a package by food category and food blocks. An individual's food prescription could be tailored by substituting a new food package or allowing substitutions for specific food items within a food package. The system will allow for tailoring of food packages to reflect participant need, including waste prevention, nutrition education reinforcement, storage, refrigeration or cooking limitation, participants residing in temporary shelters/homeless, food intolerance/allergies, dietary practices, and participant requests. Food package tailoring must be within authorized limits and only for documented reasons. The system must provide for recording of the documented reason for the tailoring.

Input:

Food Package Identification Number
Prescription Identification Number
Participant Household Identification Number
Participant Identification Number

For each individual food item changed:

Food Item Category Code
Food Item Prescribed Date
Food Item Prescribed Identification Number
Food Item Prescribed Unit Quantity
Food Item Prescribed Unit Size
Food Item Subcategory Code

Process:

- 5.3.2.1 Accept user input of participant identification and food package identification
- 5.3.2.2 Retrieve and display existing Food Prescription
- 5.3.2.3 Accept new Food Package selection and update Food Benefit Prescription with new Food Package Identification Number
- 5.3.2.4 Alternatively, accept new Food Items and Quantities and update Food Item Prescribed data store and link to Food Benefit Prescription (in an EBT system)
- 5.3.2.5 Allow for the deletion of food items or reduction of amounts of food items based on prorated pick-up schedules

Output:

5.3.2.6 Screen display of participant updated food prescription data

5.3.2.7 Printed report of food benefits prescribed

5.4 Process Participant Changes and Transfers

The system will capture and process changes, as necessary, to individual participant data and files. These changes could be to demographic data, Household grouping, or participant status. The system will also accommodate transfers between Local Agencies within the State of Vermont.

This functionality includes producing verification of certification (VOC) documents for transfers. In an EBT environment, the system will accept electronic VOC information.

5.4.1 Change Household Grouping

The system will allow authorized users to change the Household grouping of individual participants and to make other changes to participant data, as necessary. For example, a child may switch Households. The system will allow the participant to be unlinked from his or her existing Household grouping and be linked to a different existing Household grouping or an entirely new Household.

Input:

Participant Household Identification Number

Participant Identification Number

Process:

5.4.1.1 Accept user input of participant identification number and Household identification number and retrieve participant's existing Household Grouping

5.4.1.2 Query on a household ID to view all members or an individual ID to identify the group with which the individual is associated

5.4.1.3 Display list of existing Household Grouping

5.4.1.4 Accept user selection of existing Household Grouping or generate new Household Grouping

5.4.1.5 Link participant to selected or newly created Household Grouping

5.4.1.6 Update Participant data store with new Participant Household Identification Number

5.4.1.7 Maintain history of a participant's Household groupings

Output:

5.4.1.8 Screen display of participant's updated Household grouping

5.4.1.9 Screen display of changes to participant records

5.4.2 Change Participation Status

The system will allow authorized users to change the participation status or category of participants as necessary. The system will automatically change the participant's

category when applicable (e.g., when an infant becomes 1 year old, when a pregnant woman delivers her baby and begins breastfeeding).

When status changes occur, the system will remind the user of other changes needed due to status change, such as food package changes or termination notifications.

Input:

Participant Category Code
Participant Identification Number
Participant Status Code
Participant Termination Start Date
Participant Re-enrollment Date
Participant Termination Reason Code

Process:

- 5.4.2.1 Accept user input of participant identification number and retrieve and display existing participant participation status or category
- 5.4.2.2 Update Participant data store with updated status or category
- 5.4.2.3 Add a record to or update an existing record in the Participant data store to show an applicant as ineligible or a participant's termination reason
- 5.4.2.4 Notify user of food package changes due to status change
- 5.4.2.5 Generate Notice of Participant Change

Output:

- 5.4.2.6 Notice of Participant Change

5.4.3 *Process In-State Transfers*

WIC participants transferring between Local Agencies within Vermont will already be included in the system. Thus, when a transfer participant visits the new Local Agency, all data on the participant will already be available through the system. The data will be immediately accessible so services and benefits are not disrupted. The staff at the participant's new location will be able to access the participant's file to find out what foods were issued at the former Local Agency and when they were last issued, as well as other information useful in providing continued health and nutrition-related services. The Local Agency will need to update demographic data on the participant (such as Participant Address and Participant Transfer To or Transfer From). The system will prompt the user to change demographics and get new participant identification and residence documentation on transfers.

Input:

Participant Household Identification Number
Participant Identification Number
Participant Documentation of Identity Code
Participant Documentation of Residence Code
Transfer Date
Transfer From
Transfer To

Process:

By the Admin:

5.4.3.1 Retrieve existing Participant or Household data

5.4.3.2 Update Authorization to Access Records (centralized database only)

At the Receiving Agency:

5.4.3.3 Update Participant or Household data store with participant information

Output:

5.4.3.4 Screen display of updated Participant record.

5.4.4 Process Transfers Out of State

The system will generate a VOC for every participant who is a member of a Household in which there is a migrant farm worker or any other participant who is likely to be relocating during the certification period. The VOC information can be issued to a participant on a paper card or standard size paper.

If feasible, the system will provide for the capability of the Vermont to exchange limited data sets (e.g., VOC data) on a regular basis to allow for instantaneous transfer of participants between states as is done within states across agencies. The system will use the same capacity to provide for dual participation checking across states.

Input:

Local Agency Name

Local Agency Identification Number

Local Agency Address- 1

Local Agency Address- 2

Local Agency Address- City

Local Agency Address- State

Local Agency Address- Zip Code

Local Agency Phone Number

Participant Certification Date

Participant Certification End Date

Participant Health Nutrition Risk Code(s)

Participant Identification Number

Income Documentation Date

Participant Name- First

Participant Name- Last

Participant Name- MI

Participant Name – Suffix

Transfer Date

User Name (User who conducted certification. This person must also sign the participant's paper VOC)

Other Data (to be determined by Vermont during design to appear on VOC)

Food Prescription Issuance Date

Participant Date of Birth

Participant Health Anthropometric Date

Participant Health Hematocrit

Participant Health Hematocrit Date

Participant Health Hemoglobin

Participant Health Hemoglobin Date

Participant Health Free Erythrocyte Protoporphyrin Test Result
Participant Health Free Erythrocyte Protoporphyrin Test Date

Process:

- 5.4.4.1 Retrieve data from Participant, Participant Health, Transfer, Local Agency, and Food Benefit data stores
- 5.4.4.2 Produce a VOC from data resident in the system
- 5.4.4.3 Flag the system for termination of a participant in the case of a transfer to another state

Output:

- 5.4.4.4 Verification of Certification (must be signed or stamped by Local Agency)

5.5 Establish EBT Account

As part of certification, the system will establish, or will provide the information to establish, EBT accounts. The system will have the capability to authorize the benefits to these accounts. See section 8.2 Issue Electronic Benefit for detailed of the functionality.

5.6 Conduct Certification Reporting

The system will accommodate certification reporting. WIC staff will generate standard reports and Ad hoc reports using certification data resident in the system.

5.6.1 *Generate Standard Reports*

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard certification reports include the following:

- Appointment Listing by Date Report – Lists appointments scheduled for a certain date for use by local staff in managing resources.
- Appointments Kept vs. Missed Summary Report – Report for use by Local Agency staff to track incidences of missed appointments.
- Clinic Calendar Report – Provides a report of the clinic calendar, showing appointments, availability, and staff commitment.
- Disqualified Participants Report – Needed for prevention of re-enrollment and sharing with other WIC agencies during sanction period.
- Dual Enrollment/Dual Participation Report – Lists matches of demographic information (*i.e.*, name, address, sex, start/end dates of certification) that could potentially show dual enrollment or dual participation.
- Migrant Participation Report – This report provides the average annual migrant participation (from July to June) for use on the FNS-798 form submitted in July.

- Missed Appointments – Report of pregnant women who miss their first certification appointment. Will include contact information so that staff can try to reschedule or make contact. Provide the capability to print labels and letters.
- Participant Local WIC Agency and State Summary Reports – Various participant summary reports at State and local levels, including but not limited to, active monthly participation by clinic, agency, and statewide.
- Participant Summary Document – Summarized case information of a participant for reference by local staff.
- Participants by County and State Summary Reports – Lists participants by geographical grouping as specified (*i.e.*, county, state, etc) including but not limited to, active monthly participation by clinic, agency, and statewide.
- Referrals from WIC to External Agencies Summary Report – Lists all referrals from a WIC agency to any external agency.
- Referrals from WIC to Outside Agencies Local Agency and State Reports – Lists referrals of WIC participants to outside agencies. Participant data to appear on referral list to include address, phone number(s) and participant/endorser's name. Individual referral reports must be available for each outside referral agency.
- System Access Log Listing Report – For security reasons, this report lists who has logged into the system during a specified period.
- Termination Report – Report of all participants terminated from the program or found ineligible.
- Waiting List Local Agency Report and State Summary Reports – Report of number of applicants on the waiting list and their priorities.
- WIC Priority Participation Report – This report provides monthly participation by priority level. Categories are pregnant women, breastfeeding women, postpartum women, infants and children. This information is part of the Minimum Data Set. The priorities are:
 - Priority I: Pregnant women, breastfeeding women and infants whose nutritional risk is attributed to a nutritionally related medical condition.
 - Priority II: Infants not eligible in Priority I who are born of women who participated in WIC during their pregnancy or who did not participate but would have been eligible as Priority I participants.
 - Priority III: Children whose nutritional risk is attributed to a nutritionally related medical condition. High-risk postpartum women may also be placed in this priority.
 - Priority IV: Pregnant women, breastfeeding women and infants who are at nutritional risk because of an inadequate dietary pattern or because of homelessness, migrancy or other predisposing risk condition.

- Priority V: Children who are at nutritional risk because of an inadequate dietary pattern or because of homelessness, migrancy, or other predisposing risk condition.
- Priority VI: Postpartum women at nutritional risk because of inadequate diet, homelessness, migrancy, or other predisposing risk condition.
- Priority VII: (State Agency option): Previously certified participants who might regress in nutritional status without continued provision of supplemental food or pregnant women, breastfeeding women and infants at nutritional risk solely because of homelessness or migrancy.
- WIC Program State Agency Participation and Expenditure Report (FNS 798) – This report provides monthly participation data sorted by category and expenditure data, sorted by food and administration.
- WIC Caseload Statistics – Maintain historical data and records for participants for the purpose of providing unduplicated caseload statistics. Adhere to federal regulations for reporting.
- Participant Percentile Change Report – A tabular display of participant growth over time
- Breastfeeding Information Reports – Data to include information of how many breastfeed infants, duration of breastfeeding, age stopped breastfeeding, breastfeeding mother's age, etc.

5.6.2 *Conduct Ad hoc Reporting*

The system will accommodate Ad hoc reporting. The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system.

Process:

5.6.2.1 Enter selection parameters and query system

5.6.2.2 Display results and generate reports

5.6.3 *Maintain Data Warehouse*

The system will transmit and store appropriate certification information to and from the certification data store to support certification reporting. Certification data from the Participant data store and the Participant Health data store will be incorporated into a WIC data warehouse. The data warehouse will be in the form of a database management system (DBMS) to allow Ad hoc reports and data analysis. The data warehouse could be used to generate multi-faceted trend analysis in the certification area including:

- Association between income status and anthropometric data
- Association between income status and risk factors
- Association between migrancy and specific risk factors

Process:

- 5.6.3.1 Transmit and store appropriate certification information in the Certification data warehouse

6. Nutrition Education, Health Surveillance and Referrals

The Nutrition Education and Health Surveillance functional area is intended to capture nutrition-related information about WIC Program participants. Data are collected through participant interviews, standardized health and nutrition education questionnaires, laboratory determination of anthropometric data, medical referral data and nutrition assessment data collection templates (Value Enhanced Nutrition Assessment – VENA) during WIC certification periods. The nutrition education, health, breastfeeding and referral data are assessed for individual participants, but may be used across populations. This information is needed for the Federal Participant Characteristics Datasets. The automated functions that support nutrition education, health surveillance and referral are as follows:

- Maintain Nutrition Education Data
 - Create Participant Care Plan
 - Schedule Nutrition Education Appointment
 - Track Nutrition Education Contacts and Topics Covered
 - Document Missed Nutrition Education Appointment
 - Track Type of Staff, Staffing Ratios and Time/Function Expenditure During Each Process of WIC Certification (Patient Flow Analysis)
- Collect, Maintain and Update all Breastfeeding Data Continually and Populate all Appropriate Computer Fields
- Assess Individual Participant Nutrition Risk Including Behavior/Patterns
 - Assess/Reassess Nutrition Risk Including Behavior/Patterns in Nutrition Risk
 - Maintain Information on Food Purchased (EBT system only)
- Perform Participant Referrals
 - Track Incoming and Outgoing Referrals
- Provide Voter Registration Information
- Provide WIC Health Statistics and Other Information to External Entities
 - Provide WIC Population Data to External Entities
 - Provide Participant Characteristics Minimum Data Sets to FNS
 - Provide WIC Participant Characteristics Data to the Centers for Disease Control and Prevention (CDC)
- Determine Immunization Status
 - Screen and Refer Participant for Immunization Services
- Conduct Nutrition Education, Health Surveillance, and Referrals Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
- Maintain a Participant Master Record or Summary Record of All Pertinent Information Including Demographics, Certifications, Existing Health Program Enrollment, Risk Assessment, Breastfeeding Status, Referrals Provided and Nutrition Education Offered

6.1 Maintain Nutrition Education Data

The system will maintain the appointment schedules for participant nutrition education. Nutrition education sessions are often scheduled concurrently with food benefit issuance to facilitate provision of nutrition education. The system will also track participant attendance at the various education classes.

6.1.1 Create Participant Care Plan

The Participant Care Plan is used to track the progress of the participant toward achieving his or her goals over time. It is also used to customize individual counseling sessions, plan nutrition education activities, and determine appropriate referrals. Based on the nutrition risk assessment data collected during the certification process, the system will have the capacity to generate an individual Participant Care Plan. The Plan will have the capacity to be updated for the participant at each clinic visit. The content of the Participant Care Plan is dependent on the category of WIC participant; the format is to allow for selection of participant category, topic and risk factors. The format will be further defined by Vermont WIC during design detailing and will include the following types of information: There will be one care plan template per category (breastfeeding, post partum, pregnant, child, and infant). There will be an option to have a Household care plan under "group head". This feature allows the goals for each Household member to be viewed on one screen and updated either in the participant file or under the group ID. The care plan format will be generic with three sections. Vermont will have the flexibility to customize the heading names of each of these three sections *i.e.*, DAR (Data Action Response), PIE (Problem Intervention Evaluation), or Subjective Objective Assessment Plan "like." There will be many on/off features that each Vermont WIC can choose to activate in each section.

The first section opens with today's date and populates objective data elements, *e.g.*, Nutrition Risk Factors, previous goal set by participant and/or Household, Hematocrit or Hemoglobin or Erythrocyte Protoporphyrin values, electric breast pump issued and number, height, and weight. One feature Vermont may elect to activate is "Previous goal met – yes/no" check off box. This section has an area for brief notes on what the participant states to the Certifier about status of previous goal achievement/pertinent life events. Note fields on each participant and enable/disable drop down fields must be provided.

The second section is the assessment and counseling section with a drop-down of counseling topics with another layer of additional counseling specifics. Vermont WIC will have the option to customize counseling topics related to category, risk, and age. In addition, there will be a drop down box of titles of nutrition education handouts provided. This section must be designed with consideration of VENA (Value Enhanced Nutrition Assessment) expert recommendations. The goal here is to eliminate forcing the Certifier to complete data fields that take time away from conversation. The VENA recommendations for each category, *e.g.*, Healthy Outcomes for Pregnant Women will automatically populate in this section. It will include conversation starter questions for the Certifier to use to facilitate meaningful dialogue with the participant.

The third and final section includes an area for the participant goal, referral and tracking nutrition/breastfeeding contacts. There is a text box to type in a specific goal, identified by the participant. This generic format also includes a drop down box of goals that may be active or inactive. For example, Vermont may use this for low-risk participants but not for high-risk participants.

The system will provide the capability to view the three sections for each participant for all visits. The drop down list will highlight the counseling topics selected at the previous visit. When a participant changes category her or his previous goal and counseling will populate his or her current care plan template. In, the low risk participant will have a goal noted in the Household Comment screen (drop down box of options to choose from) with no individual care plan. This Household goal will automatically populate all individual

care plans. There will be one area for the Certifier to enter or the system to auto-populate, all the data collected. For example, this area would contain food package, risk, and care plan.

The Plan will include:

- Nutrition and health goals for the participant and/or Household; attainment of goals
- Planned and attended nutrition education classes and individual counseling sessions
- Strategies for further follow up for high-risk nutrition counseling
- Notes and comments added by WIC staff (open comment section required)
- Results of nutrition risk assessments
- Referrals to other programs (drop down box of options)
- Enrollment in other health programs
- Results of individual health surveillance activities including ongoing anthropometric measurements, growth charts, bloodwork changes, and breastfeeding data
- Immunization status (display on visit screen/medical screen not demographics)
- Planned frequency for follow-up (integrated into the plan based on Vermont WIC preference)
- Educational pamphlets and materials provided (drop down box of options to select from/populate)

The system will have a template that will automatically provide by participant category (e.g., breastfeeding, child, pregnant, infant) possible counseling topics for category and risk. The system will provide all templates for use by the nutritionist with some being mandatory as specified by the Vermont WIC Program.

Input:

Comment Date
Comment Description
Comment Identification Number
Education Offer Class Code
Education Offer Class Description
Education Offer Date
Education Offer Materials Provided
Education Offer Status Code
Education Offer Type Code
Participant Care Plan Create Date
Participant Care Plan High-risk Indicator
Participant Care Plan Identification Number
Participant Care Plan Nutrition Goal Date
Participant Care Plan Nutrition Goal Outcome Code
Participant Care Plan Nutrition Goal Outcome Date
Participant Care Plan Nutrition Goals
Participant Care Plan Template Type Code
Participant Category Code
Participant Health Height
Participant Health Hematocrit
Participant Health Hemoglobin
Participant Health Free Erythrocyte Protoporphyrin Test Result
Participant Health Immunization Status
Participant Health Nutrition Risk Criteria Code(s)
Participant Breastfeeding Data
Participant Health Weight
Participant Identification Number

Referral to Organization Code

Process:

- 6.1.1.1 Retrieve Participant Care Plan template appropriate for participant category (Note: Risk codes will be numbered according National Standards defined by RISC (VENA Risk Initiative Selection Collaborative))
- 6.1.1.2 Retrieve relevant participant data from Participant data store and populate template (e.g., ht, wt, Nutrition Risk, participant and/or Household goal, BMI, Hgb, Hct, EP)
- 6.1.1.3 If participant is breastfeeding, populate Care Plan note in both mother's and infant's Care Plan template
- 6.1.1.4 Display populated Care Plan template and Household Care Plan, if applicable
- 6.1.1.5 Allow for comments to be recorded in text format
- 6.1.1.6 Retrieve relevant data from Comment, Education, Nutrition Assessment, Participant Health, Participant Care Plan, and Scheduled Appointment data stores
- 6.1.1.7 Accept Participant Care Plan updates; allow for multiple Care Plans to be open within the same group simultaneously (e.g., minimize capability)
- 6.1.1.8 Display Participant Care Plan protocol and/or updated Participant Care Plan
- 6.1.1.9 Update Comment, Education, Nutrition Assessment, Participant Care Plan, Participant Health, Participant Health, and Appointment data stores
- 6.1.1.10 System assignment of all nutrition risk factors as applicable

Output:

- 6.1.1.11 Screen display and output of Participant Care Plan; option to include nutrition education goals

6.1.2 *Schedule Nutrition Education*

The scheduling functionality is critical in the Nutrition Education functional area. The scheduler can be used to create a master calendar of nutrition education classes for a local clinic, to schedule individual appointments, and to track the resources available to teach the class. The system must also be flexible in the manner in which it generates an appointment notice to the participant and in the data that will be displayed on it.

Input:

Education Offer Class Code
Education Offer Type Code
Event Slot Date
Event Slot Description
Event Slot Language Code
Event Slot Maximum Number of Slots
Event Slot Type Code
Participant Household Identification Number
Participant Identification Number

Scheduled Appointment Date
Scheduled Appointment Time
Interpreter Needed Flag

Process:

- 6.1.2.1 Accept user input on customized participant preferences
- 6.1.2.2 Assign resources (e.g., instructor, training room, video equipment, or training materials) available for conducting nutrition education class by Local Agency
- 6.1.2.3 Check for appointment availability at particular time and date
- 6.1.2.4 Notify WIC staff of overload if appointment slot availability becomes full
- 6.1.2.5 Coordinate appointment scheduling with other Household members by associating two or more WIC participants from the same Household
- 6.1.2.6 Collect and store appointment data in the Education, Event Slot, and Scheduled Appointment data stores
- 6.1.2.7 Decrement the Event Slot Maximum Number of Spaces each time a new appointment is made
- 6.1.2.8 Record and flag if an interpreter is needed for the nutrition education or if any cultural issues exist

Output:

- 6.1.2.9 Screen display of Local Agency/clinic's nutrition education appointment schedule
- 6.1.2.10 Screen display of participant's nutrition education appointment schedule in the appointment scheduler, participant care plan, etc.
- 6.1.2.11 Notice to participant of nutrition education date, time, and topic. For example, from an auto dialer notice which provides a reminder call or from a printed notice.

6.1.3 Track Nutrition Education

The system will allow for the recording for at least two nutrition education contacts and the topics discussed per certification for a participant; for parents/caretakers of infants certified until their first birthday, nutrition education contacts will be quarterly.

The system will produce a report listing the number of nutrition education contacts to enable the WIC staff to know which participants need additional education contacts. The system will enable the WIC staff to update all Household members' nutrition education data by accessing the Household ID number.

Input:

Education Offer Class Code
Education Offer Class Description
Education Offer Date
Education Offer Materials Provided
Education Offer Status Code

Education Offer Type Code
Education Offer Contact (e.g., by phone, in-person, etc)
Participant Care Plan Identification Number
Participant Household Identification Number
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Outcome Code
Scheduled Appointment Time

Process:

- 6.1.3.1 Display Nutrition Education input screen
- 6.1.3.2 Suggest nutrition education topics, nutrition education materials or other materials to be provided to the participant; record providing the handouts/materials
- 6.1.3.3 Accept input of offered education and appointment outcome
- 6.1.3.4 Automatically update Education and Participant Care Plan data store with nutrition education provided
- 6.1.3.5 Maintain a history of nutrition education and breastfeeding provided throughout a participant's certification period(s)
- 6.1.3.6 Display updated Nutrition Education screen

Output:

- 6.1.3.7 Screen display and hardcopy report of nutrition education offered history
- 6.1.3.8 Screen display and hardcopy report of nutrition education scheduled and that actually provided

6.1.4 Track Missed Nutrition Education Appointments

The system will capture data about each participant's educational activity. In a group or class setting, the system will capture the educational activity, the scheduled nutrition education sessions, participants in the class, actual attendance, and the topics covered. The system will produce a periodic report listing the attendance at each of the education classes to enable the Local Agency and Vermont WIC to determine the more "popular" classes and those classes where improvement is needed.

Input:

Education Offer Class Code
Education Offer Status Code
Education Offer Type Code
Participant Household Identification Number
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Outcome Code
Scheduled Appointment Time

Process:

- 6.1.4.1 Retrieve class roster

6.1.4.2 Update class roster with Participants' Attendance Status (e.g., missed, kept)

6.1.4.3 Generate no show report or no show file for auto-dialer system and generate follow-up calls

6.1.4.4 Update Scheduled Appointment and Education data stores

Output:

6.1.4.5 Screen display or report of participants who did not participate in nutrition education or breastfeeding classes

6.1.4.6 Screen display or exportable file of nutrition education attendance (No Show Report)

6.1.5 Track Staffing Ratios

The system will allow for the entry of total number of staff and type of staff for the purpose of determining staffing ratios on a multi-level basis. For example, total staff per total participants served per day, week, month and year on a clinic, district and statewide basis will be beneficial for assessing staffing adequacy for delivering quality nutrition services for a particular number of participants. This will also be determined for Nutrition staff per total participants and/or per high-risk participants. A final option will allow for the collecting, maintenance and updating of staff competencies including education, credentialing, continuing education completed and future trainings planned.

Input:

Total Staff per Staff Type and Time Expended per Function

Total Participants

Total Low Risk Participants

Total High-risk Participants

Staff Competencies per Staff Type

Process:

6.1.5.1 Retrieve total clerical staff

6.1.5.2 Retrieve total non-Nutrition Certifier staff

6.1.5.3 Retrieve total Nutrition Certifier staff

6.1.5.4 Retrieve total low risk participants

6.1.5.5 Retrieve total high-risk participants

6.1.5.6 Retrieve total time expended per WIC function per staff type

6.1.5.7 Retrieve staff competencies per staff type

Output:

6.1.5.8 Screen display, historical screen and exportable file of total staff to total participant ratio, total staff to low risk participant ratio and total staff to high-risk participant ratio

6.1.5.9 Screen display, historical screen and exportable file of each type of staff, i.e., clerical, non-Nutrition Certifier and Nutrition Certifier staff to total participant ratio, low risk participant ratio and high-risk participant ratio

- 6.1.5.10 Screen display, historical screen and exportable file of each type of staff and total time expended per WIC function
- 6.1.5.11 Screen display, historical screen and exportable file of staff competencies per staff type

6.2 Evaluate Nutrition Assessments

The WIC Program assesses each participant's nutrition assessment, including dietary patterns and behaviors. The assessment of a participant's nutritional status is important to determine nutrition risk. This assessment is important to the WIC staff to help determine nutrition education needs. VENA guidance and recommendations will be incorporated. Final implementation requirements are contingent upon consultation with National VENA expertise. Diet assessment will not be for the purpose of eligibility determination; but will be associated with inappropriate feeding behaviors/patterns.

6.2.1 Assess/Reassess Changes in Nutrition Risk

The system will capture and maintain data on nutrition assessments as deemed necessary by WIC staff.

To evaluate nutrition assessments over time, the system will allow users to view historical data related to nutrition risk trends across certifications. This allows the WIC staff or the system to analyze the effectiveness of the nutrition education and the supplemental foods that have been provided, as well as the referrals that have been made.

Input:

Comment Date
 Comment Description
 Comment Identification Number
 Nutrition Assessment Determination/Medical and Healthy History Questionnaires
 Nutrition Assessment and Risk Factor Identification/VENA Springboard Questions
 Nutrition Assessment/Data Collection Template for Pregnant Category
 Nutrition Assessment Food/Data Collection Template for Breastfeeding Category
 Nutrition Assessment/Data Collection Template for Postpartum Category
 Nutrition Assessment /Data Collection Template for Infant Category
 Nutrition Assessment /Data Collection Template for Child Category
 Nutrition Assessment Infant/Mother Breastfeeding Dyad/Supplemental Feeding
 Participant Identification Number
 Referral Date
 Referral to Organization Code

Process:

- 6.2.1.1 Accept user input of participant's nutrition assessment and care plan information
- 6.2.1.2 Retrieve Nutrition Assessment data from the Nutrition Assessment data store and certification templates including medical/health history questionnaires
- 6.2.1.3 Accept updates to Nutrition Assessment
- 6.2.1.4 Update existing participant records in the Nutrition Assessment data stores

Output:

6.2.1.5 Screen display of participant nutrition assessment

6.3 Perform Participant Referrals

The WIC Program is required to provide WIC applicants and participants, or their designated proxies, with information on other health-related and public assistance programs (*i.e.*, Medicaid, SNAP Program, *etc.*), and when appropriate, refer them to such programs. In addition, Local Agencies are required to maintain and make available for distribution to all applicants and participants, a list of local resources for drug and other harmful substance abuse counseling and treatment. WIC staff regularly receives applicants who have been referred from other programs or external organizations.

6.3.1 Track Referrals

The system will track outgoing referrals, including breastfeeding referrals by recording instances where an applicant was referred. When a participant is referred to another health care/social service-providing agency, the Participant Care Plan (or the health data/medical/visit for low risk participants) is to be updated.

The system will track referrals and produce a report of the number of individuals referred to and from other programs. The system will be flexible in that multiple types of referral agencies or programs are available for selection.

Population of referrals will be by state and Local Agency level. The state will set major referral categories and specific referrals as needed. The Local Agencies may create specific local level referrals within these state established categories.

The system will maintain a list in each clinic area of the names and phone numbers of breastfeeding support staff (peer counselors) and information regarding breast pump availability to be provided to pregnant or breastfeeding women if appropriate.

Input:

Participant Address- Zip Code
Participant Care Plan Identification Number
Participant Household Identification Number
Participant Identification Number
Referral Date
Referral from Organization Code
Referral to Organization Code
Referral Declined

Process:

- 6.3.1.1 Accept user entered Participant Referral data
- 6.3.1.2 Accept required location and match for referral agencies in close proximity
- 6.3.1.3 Display list of agencies in close proximity and accept agency referral selection
- 6.3.1.4 Update Referral data store, including breastfeeding referrals
- 6.3.1.5 Retrieve and display Participant Care Plan
- 6.3.1.6 Accept updates to Participant Care Plan and update Participant Care Plan data store
- 6.3.1.7 Retrieve Referral Agency location information from Outreach data store, Referral data from Referral data store and Appointment data from Scheduled

Appointment data store; the system will be flexible in its retrieval of this information

- 6.3.1.8 Update Referral Additional Information and Referral Referred By fields with appropriate data

Output:

- 6.3.1.9 Referral notice which includes referral agency name, address, hours
- 6.3.1.10 Referral transaction file

6.4 Provide Voter Registration Information

6.4.1 Provide Voter Registration Information

The system will track the effort of WIC staff to provide voter registration information, forms, and the opportunity to apply to register to vote to participants and generate statistical reports of numbers of voter registration contacts made. Tracking of this information is not optional in Vermont.

Input:

Participant Identification Number
Participant Voter Registration completed
Participant Voter Registration declined
Participant Voter Registration updated

Process:

- 6.4.1.1 Accept user input of participants offered voter registration services
- 6.4.1.2 Create Voter Registration Report
- 6.4.1.3 Maintain historical data of offered voter registration services

Output:

- 6.4.1.4 Voter registration report (number Registered, number declined and number of changed Registrations)

6.5 Provide WIC Data

Under specified conditions, Vermont WIC may share statistical data about the health status of WIC Program participants with other Vermont State Agencies. In addition, the State agencies each provide an electronic dataset to FNS for the Participant Characteristics (PC) Report. The PC Report has a Minimum Dataset (MDS) that includes data elements commonly collected on all participants. The State agencies also provide the Supplemental Dataset (SDS) that has additional data elements. The datasets are extracted from Vermont WIC data system every other year and will include all participants certified as of April of the report year. Each State Agency also provides these data sets to the CDC for their Pregnancy Nutrition Surveillance System (PNSS) and Pediatric Nutrition Surveillance Systems (PedNSS). The Nutrition Surveillance is an annual extract.

[See Appendix 1](#) for a table, which lists those data elements required for submission to FNS and/or CDC and matches them against the data elements in the WIC system.

Vermont WIC reserves the ability to define further data sets.

The minimal or vital fields that must be reported in order for CDC to process PNSS records and generate state tables include State, Sub-state, Prenatal Visit Date, Postpartum Visit Date, Woman's Alphanumeric ID, and Completion Code. *At least one of the following three themes of health indicators must be reported:*

- Birth Outcome Theme: Date of Last Menstrual Period (LMP) or Expected Date of Delivery (EDD), Infant's Date of Birth, and Infant's Birth weight—English or Metric
- Anthropometry Theme: Pre-Pregnancy Weight, Woman's Height—English or Metric, and Total Weight Gain
- Hematology Theme: Hematocrit or Hemoglobin or Erythrocyte Protoporphyrin —Prenatal Visit and Hematocrit or Hemoglobin —Postpartum Visit

NOTE: For full Record Specifications see the CDC document, PNSS Users Guide to Record Specifications.

http://www.cdc.gov/pednss/additional_tools/pnss_users_guide/PNSS_Users_Guide_Record_Specs.pdf

The minimal or vital fields that must be reported in order for CDC to process PedNSS records and generate state tables include State, Sub-state, Date of Visit, Child's Alphanumeric ID, and Date of Birth. *At least one of the following three themes of health indicators must be reported:*

- Anthropometry Theme: Height—English or Metric, Weight—English or Metric
- Hematology Theme: Hematocrit or Hemoglobin
- Breastfeeding Theme: Currently Breastfed, Ever Breastfed, Length of Time Breastfed

NOTE: For full Record specifications see the CDC document, PedNSS Users Guide to Record Specifications.

http://www.cdc.gov/pednss/additional_tools/pednss_users_guide/PedNSS_Users_Guide_Record_Specs.pdf

6.5.1 *Provide WIC Population Data*

The system will produce statistics on WIC participants for other State level (and local level) health agencies (*e.g.*, Commodity Supplemental Food Program, Head Start, Blood Lead Screening, *etc.*) to determine the overall health and nutritional status of individuals, specifically low-income, high-risk women and children.

Input:

The inputs required will vary based on the data required from the external entity.

Process:

- 6.5.1.1 Retrieve specified data from data stores
- 6.5.1.2 Calculate specified health statistics using retrieved data
- 6.5.1.3 Create data set extracts

Output:

- 6.5.1.4 Various participant statistics data extracts

6.5.2 *Provide Participant Characteristics Minimum Data Sets (MDS)*

The system must provide the MDS to FNS with summary data about WIC participants for April of every other year in the format specified by FNS.

Input:

Datasets are derived from data in the Participant, Participant Health Breastfeeding, Food Benefit Prescription, and Local Agency or Clinic data stores.

Process:

- 6.5.2.1 Retrieve specified data from data stores
- 6.5.2.2 Calculate specified health statistics using retrieved data
- 6.5.2.3 Create data set file

Output:

- 6.5.2.4 Participant Characteristics Minimum and Supplemental Data Set File for transmission to FNS

6.5.3 *Provide WIC Participant Characteristics Health Data to the CDC*

The system will produce a data file in the format needed by CDC with summary data about WIC participants for the PedNSS and PNSS reports.

Input:

Data previously retrieved for the Participant Characteristics data sets.

Process:

- 6.5.3.1 Calculate specified health statistics using retrieved data
- 6.5.3.2 Create data set file

Output:

- 6.5.3.3 Centers for Disease Control and Prevention statistics data file

6.6 **Determine Immunization Status**

WIC assists in the immunization effort by ensuring that WIC infants and children are screened and referred for immunizations using a documented immunization history record.

6.6.1 *Screen and Refer Participant for Immunization Services*

When scheduling WIC certification appointments for children under the age of two, WIC staff advise parents and caretakers of infant and child WIC applicants that immunization records are requested as part of the WIC certification and health screening process. A documented record is used at initial and subsequent certifications to screen WIC participants. The WIC staff must screen for the VDH schedule of recommended immunizations for the age of the child. If the infant/child is under-immunized, WIC staff refers the participant for immunization services, ideally to the infant/child's usual source of medical care.

The WIC system will be used to document that the participant's immunizations are up to

date, that the participant was referred for immunization services, or the reason the participant was not referred. WIC staff will be able to print out, or download electronically, a list of participants for sharing with outside entities, as appropriate. The system will enable data to be sorted by Primary Care Physician, date of referral, age of infant/child, reason referral not made, zip code, *etc.*, or to select subsets of children for follow-up, if desired. In addition, if WIC can receive data from Vermont's Immunization Registry regarding immunization status of WIC participants the system must be able to accept this data and populate the Immunization Status Code field in the participant record. An Auto-dialer may be used to notify participants of immunizations due. The WIC system may be designed to provide outputs, including choice of letters, labels, phone list, report and parameters.

Input:

Participant Data Sharing Consent (electronic signature or check box)
Participant Data Sharing Entity Identifier
Participant Date of Birth
Participant Identification Number
Participant Health Immunization Status Code (Yes/No)
Participant Sex
Referral Results
Referral to Organization Code

Process:

- 6.6.1.1 Accept user input of immunization status, data sharing, and referral information and update Participant, Participant Health, and Referral data stores
- 6.6.1.2 Generate list of participants by immunization status, using sort parameters
- 6.6.1.3 Generate list of participants who have granted consent for sharing with outside entities

Output:

- 6.6.1.4 List of participants referred (with desired parameters)
- 6.6.1.5 Electronic file on appropriate media for sharing
- 6.6.1.6 Screen display of reason referral not made

6.7 Conduct Nutrition Education, Health Surveillance and Referrals Reporting

The system will provide for specific standard reports as well as an Ad hoc query capability. Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data, for example by Local Agency and date ranges. The following standard reports are needed within the Nutrition Education, Health Surveillance, and Referrals function:

- Aggregate Health and Social Service Program Referrals Report – Display of frequency of referrals made, outcomes and referrals from other programs.
- Nutrition Education Attendance Report – Report on attendance at specific class.

- Nutrition Education Report – Report on specific class, related to certification period and as a percent of caseload, by group or individual contacts. Provides detail and summary information.
- Participant Care Plan – A plan that maintains the progress toward attaining nutrition and health goals over time. It tracks various aspects of a participant’s case history including nutrition education provided and attended, and referrals to other programs.
- Participant breastfeeding reports based on USDA and CDC requirements and recommendations
- Participant breastfeeding reports of breastfeeding status and type of food package issued
- Participant issued breast pump report
- Participant Food Item Purchases Report (EBT only) – Report of a participant’s food purchases compared to the food prescribed.
- Participant Referral Report – List of participants referred and agency or program they were referred to
- Report of High-risk Participants – List of high-risk participants with ability to sort the report by Local Agency and risk factor number. Will include high-risk indicators to aid in follow up
- Report of High-risk Participants not seen for High-risk Counseling (detail and summary)
- Voter Registration Report – Report of participants assisted in voter registration.
- WIC Program Participant Characteristics Minimum and Supplemental Data sets for FNS and the Reports for Centers for Disease Control and Prevention – Data file for FNS and for CDC
- Report of Participant Dietary Behavior and Health Status – Report of changes in dietary behavior and health status for both individual participants and the clinic’s caseload as a whole

6.7.1 *Conduct Ad hoc Reporting*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

The following are a few examples of the types of Ad hoc queries that may be needed within the Nutrition Education, Health Surveillance, and Referrals function:

- Number of children under 2 years of age who are overdue on immunizations
- Which foods are purchased by a Household

Process:

6.7.1.1 Enter selection parameters and query system

6.7.1.2 Display results and generate reports

6.7.2 *Maintain a Participant Master Record*

The system must maintain a Participant Master or Summary Record to support various functions including fast inquiry of a statewide database, participant transfers, and various reporting and analyses. Specific fields to be determined by the Vermont WIC Program.

Possible Input:

Demographics
Certifications
Issuances
Existing Health Program Enrollment
Risk Assessment
Breastfeeding Status
Referrals Provided
Nutrition Education Offered

Process:

- 6.7.2.1 Create/Maintain Participant Master Record
- 6.7.2.2 Support Participant Master Record Inquiry

Output:

- 6.7.2.3 List of Participants meeting search criteria

7. Breastfeeding Education, Health Surveillance and Referrals

The Breastfeeding Education and Health Surveillance functional area is intended to capture breastfeeding-related information about WIC Program participants. Data are collected through participant interviews, standardized health and breastfeeding education questionnaires, laboratory determination of anthropometric data, medical referral data and breastfeeding assessment data collection templates (VENA) during WIC certification periods. The breastfeeding education, health, and breastfeeding referral data are assessed for individual participants, but may be used across populations. This information is needed for the Federal Participant Characteristics Datasets. This functional area also includes an interface with the Immunization Program. The automated functions that support breastfeeding education, health surveillance and referral are as follows:

- Maintain Breastfeeding Education Data
 - Create Participant Care Plan for Breastfeeding Dyads/Multiples
 - Schedule Breastfeeding Education Appointment
 - Track Breastfeeding Education Contacts and Topics Covered
 - Document Missed Breastfeeding Education Appointment
 - Track type of staff, staffing ratios and time/function expenditure related to breastfeeding during each process of WIC certification (PFA)
 - Collect, maintain and update all breastfeeding data continually and populate all appropriate computer fields
- Assess Individual Participant Breastfeeding Risk Including Behavior/Patterns
- Assess/Reassess Breastfeeding Risk Including Behavior/Patterns in Breastfeeding Risk
 - Maintain Information on Food Purchased (EBT system only) related to Breastfeeding
- Perform Participant Breastfeeding Referrals
 - Track Incoming and Outgoing Breastfeeding Referrals
- Provide WIC Health Statistics and Other Breastfeeding Information to External Entities
 - Provide WIC Population Data on Breastfeeding to External Entities
 - Provide Participant Characteristics on Breastfeeding Minimum Data Sets to FNS

- Provide WIC Participant Characteristics on Breastfeeding Data to the Centers for Disease Control and Prevention (CDC)
- Conduct Breastfeeding Education, Health Surveillance, and Referrals Reporting
 - Generate Standard Breastfeeding Reports
 - Conduct Ad hoc Breastfeeding Queries and Generate Breastfeeding Reports
- Maintain a participant Master Record or Summary Record of all pertinent information including, demographics, certifications, existing health program enrollment, risk assessment, breastfeeding status, referrals provided and breastfeeding education offered.

7.1 Maintain Breastfeeding Data

The system will maintain the appointment schedules for participant breastfeeding education. Breastfeeding education sessions are part of the nutrition education often scheduled concurrently with food benefit pick-up to facilitate provision of nutrition education. The system will also track participant attendance at the various breastfeeding classes. Prefer drop down box to select breastfeeding class title. System will have a method to automatically flag chart of new pregnant women who expresses interest of breastfeeding on questionnaire to prompt contact.

Link by priority, the breastfeeding risk factors, with an education pop up box that matches with the appropriate breastfeeding education. Priority would be based on Nutrition Risk “priority” as well as the individual risk (*i.e.*, breastfeeding complications with engorgement).

Similar formatting and options for nutrition sections will be applied or incorporated into the breastfeeding sections.

7.1.1 Create Participant Care Plan- Dyads/Multiples – Low priority

The Participant Care Plan is used to track the progress of the participant toward achieving her breastfeeding goals over time. It is also used to customize individual breastfeeding counseling sessions, plan for breastfeeding through the growth and development of the infant/child, provide anticipatory guidance and determine appropriate breastfeeding referrals.

Based on the breastfeeding risk assessment data collected during the certification process, the system will have the capacity to generate an individual Participant Care Plan. The Plan will have the capacity to be updated for the participant at each clinic visit. The content of the Participant Care Plan is dependent on the category of WIC participant; the format is to allow for selection of participant category, topic and risk factors. The format will include the following types of information: There will be one care plan template per category (breastfeeding, post partum, pregnant, child, and infant). There will be an option to have a Household care plan under “group head”. This feature allows the goals for each Household member to be viewed on one screen and updated either in the participant file or under the group ID. There may be pop-up boxes that pertain to the BF Nutrition Risk for counseling and education. The care plan format will be generic with three sections. Vermont WIC will have the flexibility to customize the heading names of each of these three sections *i.e.*, DAR (Data Action Response), PIE (Problem Intervention Evaluation), or Subjective Objective Assessment Plan (SOAP) “like.” There will be many on/off features Vermont WIC can choose to activate in each section.

The first section opens with today’s date and populates objective data elements *e.g.*, Breastfeeding Risk Factors, previous goal set by participant and/or Household, electric breast pump issued and number, height, and weight. One feature Vermont WIC may elect to activate is “Previous goal met – yes/no” check off box. This section has an area for brief notes on what the participant states to the Certifier about status of previous goal

achievement or pertinent life events. Note fields on each participant and enable/disable drop down fields must be provided.

The second section is the assessment/counseling section with a drop-down/pop-up box of counseling topics with another layer of additional counseling specifics/bullets. Vermont WIC will have the option to customize counseling topics related to category, risk, and age. In addition, there will be a drop down box of titles of nutrition education handouts provided. This section must be designed with consideration of VENA (Value Enhanced Nutrition Assessment) expert recommendations. The goal here is to eliminate forcing the Certifier to complete data fields that take time away from conversation. The VENA recommendations for each category, *e.g.*, Healthy Outcomes for Pregnant Women will automatically populate in this section. It will include conversation starter questions for the Certifier to use to facilitate meaningful dialogue with the participant.

The third and final section includes an area for the participant goal, referral and tracking breastfeeding contacts. There is a text box to type in a specific goal, identified by the participant. This generic format also includes a drop down box of goals – which Vermont WIC can choose to activate or inactivate. For example, Vermont may use this for low-risk participants but not for high-risk participants.

The system will provide the capability to scroll within the three sections for each participant for all visits. The drop down list will highlight the counseling topics selected at the previous visit. When a participant changes category, his or her previous goal and counseling will populate his or her current care plan template. There will be one area or screen for the Certifier to enter or the system to auto-populate all the data collected. For example, this screen would contain food package, risk, and care plan.

- Breastfeeding goals for the participant and/or Household; attainment of goals
- Planned and attended breastfeeding education classes and individual counseling sessions
- Strategies for further follow up for high-risk breastfeeding counseling
- Notes and comments added by WIC staff (open comment section required)
- Results of breastfeeding risk assessments
- Referrals to other lactation programs
- Enrollment in other health programs related to breastfeeding
- Results of individual health surveillance activities including ongoing anthropometric measurements, growth charts, breastfeeding data
- Planned frequency for follow-up (integrated into the plan based on Vermont WIC preference)
- Breastfeeding educational pamphlets and materials provided

The system will have a template that will automatically provide by participant category (*e.g.*, breastfeeding, child, pregnant, infant) possible counseling topics for category and risk.

Input:

Comment Date
Comment Description
Comment Identification Number
Education Offer Class Code
Education Offer Class Description
Education Offer Date
Education Offer Materials Provided
Education Offer Status Code

Education Offer Type Code
Participant Care Plan Create Date
Participant Care Plan High-risk Indicator
Participant Care Plan Identification Number
Participant Care Plan Breastfeeding Goal Date
Participant Care Plan Breastfeeding Goal Outcome Code
Participant Care Plan Breastfeeding Goal Outcome Date
Participant Care Plan Breastfeeding Goals
Participant Care Plan Template Type Code
Participant Category Code
Participant Health Height
Participant Health Breastfeeding Risk Criteria Code(s)
Participant Breastfeeding Data
Participant Health Weight
Participant Identification Number

Referral To

Selection for breastfeeding counseling (corresponding to the BF Nutrition Risks)
Selection for breastfeeding classes (corresponding to the BF Nutrition Risks)

Process:

- 7.1.1.1 Retrieve Participant Care Plan template appropriate for participant category (Note: Risk codes will be numbered according National Standards defined by RISC (VENA Risk Initiative Selection Collaborative).
- 7.1.1.2 Retrieve relevant participant data from Participant data store and populate template (e.g., ht, wt, Nutrition Risk, participant and/or Household goal, BMI, Hgb, Hct EP)
- 7.1.1.3 If participant is breastfeeding, populate Care Plan note in both mother's and infant's Care Plan template
- 7.1.1.4 Display populated Care Plan template and Household Care Plan, if applicable
- 7.1.1.5 Allow information to be recorded in text format in Vermont WIC specified fields.
- 7.1.1.6 Retrieve relevant data from Comment, Education, Breastfeeding Assessment, Participant Health, Participant Care Plan, and Scheduled Appointment data stores
- 7.1.1.7 Accept Participant Care Plan updates; allow for multiple Care Plans to be open within the same group simultaneously (e.g., minimize capability)
- 7.1.1.8 Display Participant Care Plan protocol and/or updated Participant Care Plan
- 7.1.1.9 Update Comment, Education, Breastfeeding Assessment, Participant Care Plan, Participant Health, Participant Health, and Appointment data stores

7.1.2 Assignment of all breastfeeding risk factors

Priority would be based on Nutrition Risk "priority" as well as the individual risk (i.e., breastfeeding complications with engorgement).

7.1.2.1 Display boxes for breastfeeding education class topics and risk factors counseling recommendations.

7.1.3 *Screen display and output of Participant Care Plan;*

Option to include breastfeeding education goals

7.1.3.1 Display Staff user identifier

7.1.3.2 Schedule Breastfeeding Education Appointment

The scheduling functionality is critical in the Nutrition Education functional area. The scheduler can be used to create a master calendar of breastfeeding education classes for a local clinic, to schedule individual appointments, and to track the resources available to teach the class. The system must also be flexible in the manner in which it generates an appointment notice to the participant and in the data that will be displayed on it.

Input:

Education Offer Class Code
Education Offer Type Code
Event Slot Date
Event Slot Description
Event Slot Language Code
Event Slot Maximum Number of Slots
Event Slot Type Code
Participant Household Identification Number
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Time
Interpreter Needed Flag
High-risk Indicator

Process:

- 7.1.3.2.1 Accept user input on customized participant preferences
- 7.1.3.2.2 Assign resources (e.g., instructor, training room, video equipment, or training materials) available for conducting nutrition education class by Local Agency
- 7.1.3.2.3 Check for appointment availability at particular time and date
- 7.1.3.2.4 Notify WIC staff of overload if appointment slot availability becomes full
- 7.1.3.2.5 Coordinate appointment scheduling with other Household members by associating two or more WIC participants from the same Household
- 7.1.3.2.6 Collect and store appointment data in the Education, Event Slot/Staff Slot, and Scheduled Appointment data stores
- 7.1.3.2.7 Decrement the Event Slot Maximum Number of Spaces each time a new appointment is made
- 7.1.3.2.8 Record and flag if an interpreter is needed for the breastfeeding education

- 7.1.3.2.9 Record High-risk change
- 7.1.3.2.10 Flag record if risk factor indicates a timeline protocol (referral, counseling, etc.) is warranted, appointment/referral is made to meet this protocol (link to this Nutrition Risk).

Output:

- 7.1.3.2.11 Screen display of Local Agency/clinic's breastfeeding education appointment schedule
- 7.1.3.2.12 Screen display of participant's breastfeeding education appointment schedule in the appointment scheduler, participant care plan, etc.
- 7.1.3.2.13 Notice to participant of breastfeeding education date, time, (location) and topic
- 7.1.3.2.14 Reminder of what to bring to appointment (i.e., breastfeeding baby)

7.1.4 Track Nutrition Education and Breastfeeding

The system will allow for the recording at least two nutrition education contacts and the topics discussed per certification for a participant; for parents/caretakers of infants certified until their first birthday, nutrition education contacts will be quarterly. The system will produce a report listing the number of breastfeeding education contacts both prenatal and postpartum to enable the WIC staff to know which participants need additional breastfeeding education contacts. The system will enable the WIC staff to update all Household members' nutrition education data by accessing the Household ID number.

Input:

- Education Offer Class Code
- Education Offer Class Description
- Education Offer Date
- Education Offer Materials Provided
- Education Offer Status Code
- Education Offer Type Code
- Education Offer Contact (e.g., by phone, in-person, etc)
- Participant Care Plan Identification Number
- Participant Household Identification Number
- Participant Identification Number
- Scheduled Appointment Date
- Scheduled Appointment Outcome Code
- Scheduled Appointment Time

Process:

- 7.1.4.1 Select breastfeeding nutrition education topics and materials to suggest
- 7.1.4.2 Accept input of offered Nutrition Education and appointment outcome
- 7.1.4.3 Automatically update Education and Participant Care Plan data store with breastfeeding education provided
- 7.1.4.4 Maintain a history of nutrition and breastfeeding education provided

throughout a participant's certification period(s)

Output:

- 7.1.4.5 Display updated Breastfeeding Nutrition Education screen
- 7.1.4.6 Screen display and report of nutrition education offered history, upon request, which may be retrieved, from Care Plan for high-risk, or from feedback from appointment scheduling for low risk.
- 7.1.4.7 Screen display and report of breastfeeding nutrition education scheduled and that actually provided

7.1.5 Track Missed Breastfeeding Education Appointment

The system will capture data about each participant's educational activity. In a group or class setting, the system will capture the educational activity, the scheduled nutrition and breastfeeding education sessions, participants in the class, actual attendance, and the topics covered. This will capture the functional requirement of a minimum of one BF education contact to prenatal participant and identify those that missed requirement. The system will produce a periodic report listing the attendance at each of the education classes to enable the local and State agencies to determine the breastfeeding contact was made, the more "popular" classes and those classes where improvement is needed.

Input:

- Education Offer Class Code
- Education Offer Status Code
- Education Offer Type Code
- Education Offer Contact (phone, clinic, home visit, WIC staff)
- Participant Household Identification Number
- Participant Identification Number
- Scheduled Appointment Date
- Scheduled Appointment Outcome Code
- Scheduled Appointment Time
- Category of prenatal or postpartum

Process:

- 7.1.5.1 Retrieve class roster
- 7.1.5.2 Update class roster with Participants' Attendance Status (e.g., missed, kept)
- 7.1.5.3 Generate no show report or no show file for auto-dialer system and generate follow-up calls
- 7.1.5.4 Update Scheduled Appointment and Education data stores
- 7.1.5.5 Participant category corresponds to type of class
- 7.1.5.6 Participant category corresponds to type of contact

Output:

- 7.1.5.7 Screen display or report of participants who did not participate in nutrition education, breastfeeding classes, and peer counselor contacts.

- 7.1.5.8 Screen display or exportable file of nutrition education attendance including breastfeeding classes

7.1.6 *Track Staffing ratios*

This system will allow for the entry of total number of staff and type of staff including those trained in lactation/breastfeeding for determining staffing ratios on a multi-level basis relating to breastfeeding needs of the participants and services provided at the clinic. For example, total staff per total participants served per day, week, month and year on a clinic, district and statewide basis will be beneficial for assessing staffing adequacy for delivering quality nutrition and breastfeeding services for a particular number of participants. This will also be determined for those trained in lactation/breastfeeding, Nutrition staff per total participants and/or per high-risk participants.

Input:

Total staff per Local Agency whom have Expanded Breast Feeding Credentials
Staff time expended per function
Total participants (identify breastfeeding participants)
Total low risk participants
Total high-risk participants
Identify lactation-trained staff

Process:

- 7.1.6.1 Retrieve total clerical staff
- 7.1.6.2 Retrieve total non-Nutrition Certifier staff
- 7.1.6.3 Retrieve total Nutrition Certifier staff
- 7.1.6.4 Retrieve total low risk participants
- 7.1.6.5 Retrieve total high-risk participants
- 7.1.6.6 Retrieve total time expended per WIC function per staff type
- 7.1.6.7 Retrieve total lactation trained staff

Output:

- 7.1.6.8 Screen display, historical screen and exportable file of total staff to total participant ratio, total staff to low risk participant ratio and total staff to high-risk participant ratio
- 7.1.6.9 Screen display, historical screen and exportable file of each type of staff, i.e., clerical, non-Nutrition Certifier, Lactation trained staff, Peer Counselor and Nutrition Certifier staff to total participant ratio, low risk participant ratio and high-risk participant ratio
- 7.1.6.10 Screen display, historical screen and exportable file of each type of staff and total time expended per WIC function

7.2 Evaluate Participant Nutrition and Breastfeeding Assessment and Counseling

The WIC Program assesses each participant's nutrition assessment, including dietary patterns, behaviors, and breastfeeding behaviors. The assessment of a participant's nutritional and breastfeeding status is important to determine nutrition risk. This assessment is important to the WIC staff to help determine nutrition and breastfeeding education needs. VENA guidance and recommendations will be incorporated. Breastfeeding assessment will include frequency and

duration of breastfeeding by both mother and infant(s)/child (ren).

7.2.1 *Assess/Reassess Changes in Nutrition/Breastfeeding Risk*

The system will capture and maintain data on nutrition and breastfeeding assessments as deemed necessary by the WIC staff person.

To evaluate nutrition and breastfeeding assessments over time, the system will allow users to view historical data related to nutrition risk and breastfeeding trends across certifications. This allows the WIC staff or the system to analyze the effectiveness of the nutrition and breastfeeding education and the supplemental foods, breastfeeding support equipment provided, as well as the referrals made.

Input:

Comment Date

Comment Description

Nutrition Assessment Determination/Medical and Healthy History Questionnaires

Nutrition Assessment and Risk Factor Identification/VENA Springboard Questions

Nutrition Assessment/Data Collection Template for Pregnant Category

Nutrition Assessment/Data Collection Template for Breastfeeding Category

Nutrition Assessment/Data Collection Template for Postpartum Category

Nutrition Assessment/Data Collection Template for Infant Category

Nutrition Assessment/Data Collection Template for Child Category

Nutrition Assessment Infant/Mother Breastfeeding Dyad/Supplemental Feeding

Participant Identification Number

Referral Date

Referral to Organization Code

Process:

7.2.1.1 Accept user input of participant's nutrition assessment and care plan information

7.2.1.2 Retrieve Nutrition Assessment data from the Nutrition Assessment data store and certification templates including medical/health history questionnaires

7.2.1.3 Accept updates to Nutrition Assessment

7.2.1.4 Update existing participant records in the Nutrition Assessment data stores

Output:

7.2.1.5 Screen display of participant nutrition assessment

7.2.2 *Collect on Participant Data on Breastfeeding*

This function provides for capture of Participant information on breastfeeding. The start date, the frequency, duration and cease dates are recorded.

All breastfeeding data populates from the infant/child to the mother. If the participant is breastfeeding the system always looks at the youngest child unless the youngest is not breastfeeding and the older child is. Breastfeeding may be viewable from the Mother's or the Child's Health record.

The duration field may be edited manually. The breastfeeding satisfactory field is used to identify if the participant was satisfied with previous breastfeeding by either a "yes" or "no" response. Frequency Field is used to track how often the participant is breastfeed.

Reason Ceased Field is used to track when the participant quit breastfeeding. This field is only mandatory if the participant stopped breastfeeding. The Last Response field determines when the record was last updated or any of the questions were updated or changed.

Input:

- Interested BF Field: (Mandatory field, Yes, No, Undecided) This field indicates if the participant is interested in breastfeeding.
- Pre BF Exp Field: (Mandatory field, Yes, No) This field indicates if the participant has previously had experience in breastfeeding.
- BF Sat Field: (Mandatory field), Yes, No This field is used to identify if the participant was satisfied with previous breastfeeding by either a “yes” or “no” response.
- Currently Field: (Mandatory Field, Yes, No) This field is used to track if the participant is currently breastfeeding.
- Ever Field: (Mandatory Field, Yes, No) This field is used to track if the participant has ever breastfed. Select "Yes" or "No" if the participant has ever breastfeed.
- Began Field: (Mandatory Field, Date) This field is used to track when the participant started breastfeeding.
- Ceased Field: (Mandatory Field, Date) This field is used to track when the participant stopped breastfeeding.
- Duration Field: This field is used to track the duration the participant breastfed.
- Frequency Fields – Drop Down Options will correspond to IOM and CDC guidelines. They may include: Exclusive, Almost Exclusive, Substantially, Partial, Token.
- Reason Ceased Field: (Mandatory Field) This field is used to track when the participant quit breastfeeding.
- Last Responses Field: (Mandatory Field) The system will automatically populate the field with the current date

Process:

- 7.2.2.1 Accept users input of all data fields entered, including updates
- 7.2.2.2 Retrieve participant’s breastfeeding record
- 7.2.2.3 Write input data to the participant’s breastfeeding record
- 7.2.2.4 Transfer applicable data to corresponding functions such as for food benefit issuance, update frequency will affect the participant type.
- 7.2.2.5 Transfer applicable data to corresponding functions such as for infant data updating a mother's screen. All other breastfeeding data transfers from the child over to the mother's health record.
- 7.2.2.6 Set the participant's termination date to today's date, if the participant ceases breastfeeding six or more months after the actual delivery date. If the participant ceases breastfeeding prior to this time, the participant's termination date will be set to 6 months after the actual delivery date.
- 7.2.2.7 Update the assigned food package to the participant and the participant must be provided 15 days worth of benefits if the participant notifies the clinic she is not breastfeeding and it is more than 6 months after the actual date of birth of the baby.
- 7.2.2.8 Create records for Began, Ever, Duration, and Last fields automatically, if the

currently breastfeeding field question is answered with a "Y" the system.

- 7.2.2.9 Create record for the last response date field automatically if the currently breastfeeding field question is answered "N".
- 7.2.2.10 Create record for the last response date field automatically, if the participant answers yes "Y" to the Ever Field.
- 7.2.2.11 Create record for the duration field automatically from the Start breastfeeding date and the Ceased breastfeeding date.
- 7.2.2.12 Create a record in the Last Response field with the current date.

Output:

- 7.2.2.13 Display participant's breastfeeding record including care plan.

7.2.3 *Provide breastfeeding counseling, education and support information applicable to breastfeeding risk*

The System will provide counseling guidance and information based on breastfeeding assessment. VENA categories are to be used and incorporated.

The System will provide methods of providing anticipatory guidance based on breastfeeding assessment, age of infant/child and other breastfeeding factors. Cues or prompts will be an auto function to alert Certifier or Peer Counselor for making contact or providing education.

The system will suggest counseling points and recommendations will correspond to breastfeeding risks and will appear when the risks are selected. A check off list of similar method will be used to indicate applicable information was provided. These will assist the Certifier or PC in providing information and support and will document education provided and future reference.

The Call Log is also used for the clinic to be able to log breastfeeding calls from the participant. A date and time will be recorded on the log along with who made the comments in the log.

Participant History will be available to the counselor including, breastfeeding, and food packages/risks. Data is moved to the history when a participant is recertifying except when moving from pregnant to postpartum or the participant is not on WIC.

Input:

Received Peer Counsel Field

Options may include:

- During pregnancy
- With in 1 week of delivery
- With in 2 weeks of delivery
- With in 3 weeks of delivery
- 3 weeks
- Did not

Other than Breast Milk (Wks) Field or Introduction to Supplementary Feeding

Options list may include:

- Water
- Cereal – (If selected another box will appear to check if it was given for a medical reason)
- Juice – (If selected another box will appear to check if it was given for a medical reason)

- Formula – (If selected another box will appear to check if it was given for a medical reason)
- Tea
- Other

Hospital Field (hospital of delivery)

Hospital Breastfeeding Field (By entering “Yes”, the system will display options)

Options list may include (but may not be all inclusive)

- Pediatrician or Health Care Professional recommend them to BF
- Skin to skin immediately after delivery and remain to BF
- No water/glucose water/formula given in hospital
- BF position/latch evaluated/observed in hospital
- BF infant seen by pediatrician or HC Prof by day 5
- Breastfeeding 8-12 times in 24 hours (in early weeks)

Breast Pump Tracking

Breast Pump Type

Call Log Date and Time

Call Log Staff Name

Call Log Call Subject Identifier

Problems associated with breastfeeding such as:

- Milk production
- Breastfeeding latch,
- Breastfeeding routines
- Frequency of feeding, stooling, diapers
- Assess if “enough”
- Breast problems (engorgement, mastitis, plugged ducts)
- Nipple problems (soreness, flat, thrush, biting)
- Baby’s health concerns (spitting up, diarrhea)
- Baby’s intake concerns (low weight gain),
- Express/store milk
- Nipple confusion
- Supplementation/appropriate/avoidance

Participant Hours Worked

Participant Primary Care Physician

Participant OBGYN

Process

- 7.2.3.1 Accept, save and display users input of breastfeeding assessment risk
- 7.2.3.2 Accept, save and display users input of Received Peer Counsel field
- 7.2.3.3 Accept, save and display users input of Other than Breast Milk or Introduction to Supplementary Feeding.
- 7.2.3.4 Accept, save and display users input of Hospital Breastfeeding field
- 7.2.3.5 Accept, save and display users input of pump information fields
- 7.2.3.6 Accept, save and display users input of Call Log to log breastfeeding calls from the participant.
- 7.2.3.7 Display corresponding “common problems”
- 7.2.3.8 Accept, save and display Counseling points and recommendation

- 7.2.3.9 Accept, save and display users input of actual hours worked per week.
- 7.2.3.10 Accept and save users input of hospital field
- 7.2.3.11 Accept and save users input of physician care field.
- 7.2.3.12 Display History to present historical health, breastfeeding, and food packages/risks.
- 7.2.3.13 Accept users input to document point covered with participant
- 7.2.3.14 Retrieve and display Participant Care Plan and/or Household Care Plan
- 7.2.3.15 Accept updates to Participant Care Plan
- 7.2.3.16 Update and save in the Participant Care Plan data store

Output

- 7.2.3.17 Screen display of participant information to applicable screens
- 7.2.3.18 Screen display or exportable file of information

7.3 Perform Participant Breastfeeding Referrals

The WIC Program is required to provide WIC applicants and participants, or their designated proxies, with information on breastfeeding and on other health-related and public assistance programs (*i.e.*, Medicaid, SNAP Program, *etc.*), and when appropriate, refer them to such programs. In addition, Local Agencies are required to maintain and make available for distribution to all applicants and participants, a list of local resources for drug and other harmful substance abuse counseling and treatment. WIC staff regularly receives applicants who have been referred from other programs or external organizations.

7.3.1 Track Incoming and Outgoing Breastfeeding Referrals

The system will track outgoing referrals by recording instances where an applicant was referred. When a participant is referred to lactation or another health care/social service-providing agency, the Participant Care Plan (or the health data/medical/visit for low risk participants) is to be updated.

The system will track referrals, including breastfeeding referrals and produce a report of the number of individuals referred to and from other programs. The system will be flexible in that multiple types of referral agencies or programs are available for selection. Population of referrals will be by state and Local Agency level. The state will set major referral categories and specific referrals as needed. The Local Agencies may create specific local level referrals within these state established categories.

The system will maintain a list in each clinic area of the names and phone numbers of breastfeeding support staff (peer counselors) and information regarding Breastpump availability to be provided to pregnant or breastfeeding women if appropriate. This process includes updating peer counselor names and referrals.

Input:

- Participant Address- Zip Code
- Participant Care Plan Identification Number
- Participant Household Identification Number
- Participant Identification Number
- Referral Date

Referral from Organization Code
Referral to Organization Code
Peer Counselor Identifier

Process:

- 7.3.1.1 Accept user entered Participant Referral data
- 7.3.1.2 Accept required location and match for referral agencies in close proximity
- 7.3.1.3 Display list of agencies in close proximity and accept agency referral selection
- 7.3.1.4 Update Referral data store, including breastfeeding referrals
- 7.3.1.5 Retrieve and display Participant Care Plan
- 7.3.1.6 Accept updates to Participant Care Plan and update Participant Care Plan data store
- 7.3.1.7 Retrieve Referral Agency location information from Outreach data store, Referral data from Referral data store and Appointment data from Scheduled Appointment data store; the system will be flexible in its retrieval of this information
- 7.3.1.8 Update Referral Additional Information and Referral Referred By fields with appropriate data
- 7.3.1.9 Linking of participants with peer counselor identifier

Output:

- 7.3.1.10 Referral notice which includes referral agency name, address, hours
- 7.3.1.11 Referral transaction file
- 7.3.1.12 Report generated of participants linked with peer counselor identifier.

7.4 Provide Data Sets to External Entities

Under specified conditions, the Vermont WIC State agency may share statistical data about the health status and breastfeeding status of WIC Program participants with other Vermont Agency programs. In addition, the State agencies each provide an electronic dataset to FNS for the Participant Characteristics (PC) Report. The PC Report has a Minimum Dataset (MDS) that includes data elements commonly collected on all participants. The State agencies also provide the Supplemental Dataset (SDS) that has additional data elements. The datasets are extracted from Vermont WIC data system every other year and will include all participants certified as of April of the report year. Each State agency also provides these data sets to the CDC on breastfeeding data for their Pregnancy Nutrition Surveillance System (PNSS) and Pediatric Nutrition Surveillance Systems (PedNSS). Some BF data is confidential and will not be provided to other agencies, such as individual participant names.

Data fields must include CDC PedNSS and PNSS core set, required and recommended fields. The BF data fields must be available for all categories. All categories must be collected accurately. Field will have auto functions when able (*i.e.*, BF duration rate calculated from birth date and cease BF date). BF fields will be able to either populate or transfer to the appropriate/corresponding fields of other categories within their participant group (*i.e.*, infant BF

data populating B or N category fields.). Vermont WIC reserves the option to define additional Datasets.

See [Appendix 4](#) for a table listing those Breastfeeding data elements required for submission to FNS and/or CDC and matches them against the data elements in the WIC system.

7.4.1 *Provide WIC Population on Breastfeeding Data to External Entities*

The system will produce statistics on WIC participants for other State level (AHS level) and local health agencies (Early Head Start, etc.) to determine the overall health and breastfeeding status of individuals, specifically low-income, high-risk women and children.

Input:

The inputs required will vary based on the data required from the external entity.

Process:

7.4.1.1 Summarize and calculate various health statistics from system data stores

Output:

7.4.1.2 Various participant statistical reports

7.4.2 *Provide Participant Characteristics Breastfeeding Minimum Data Sets to FNS*

The system must provide the MDS to FNS with summary data about WIC participants for April of every other year in the format specified by FNS. "Recommended" fields may also be included.

Input:

These datasets are derived from data already resident in the Participant, Participant Health Breastfeeding, Food Benefit Prescription, and Local Agency or Clinic data stores.

Process:

7.4.2.1 Summarize and calculate various health statistics from system data stores

Output:

7.4.2.2 Participant Characteristics Minimum and Supplemental Data Set File for transmission to FNS

7.4.3 *Provide WIC Participant Characteristics on Breastfeeding Health Data to the Centers for Disease Control and Prevention (CDC)*

The system will produce a data file in the format needed by CDC with summary data about WIC participants for the PedNSS and PNSS reports. (To include all required as well as best practices or recommended fields.)

Input:

Data collected for the Participant Characteristics data sets.

Process:

7.4.3.1 Summarize and calculate various health statistics from system data stores

Output:

7.4.3.2 Centers for Disease Control and Prevention statistics report or data file

7.5 Conduct Breastfeeding Education, Health Surveillance, and Referrals Reporting

The system will provide for specific standard reports as well as an Ad hoc query capability.

7.5.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. The most common customizations would be "report by Local Agency" and a "date range". The following standard reports are needed within the Breastfeeding Education, Health Surveillance, and Referrals function:

- Aggregate Health and Lactation Program Referrals Report – Display of frequency of referrals made and outcomes and referrals from other programs.
- Nutrition Education Attendance Report – Report on attendance at specific breastfeeding class.
- Nutrition Education Report – Report on specific class, related to certification period and as a percent of caseload, by group or individual contacts. Provides detail and summary information.
- Participant Care Plan – A plan that maintains the progress toward attaining breastfeeding goals over time. It tracks various aspects of a participant's case history including BF education provided and attended, and referrals to other programs.
- Participant breastfeeding reports based on USDA and CDC requirements/recommendations (i.e., month end report to include BF initiation and duration rates at CDC interval) Using the USDA criteria as compared to ethnic/racial, women by due date, number of cans of formula issued, attendance of BF class during pregnancy and lactation, employed or un employed, socio-economic level, age, electric (and manual) breast pump usage, four USDA's criteria for BF frequency (i.e., exclusively, etc.)
- Participant breastfeeding reports based on USDA and CDC requirements/recommendations (i.e., month end report to include BF initiation and duration rates at CDC interval) Using the USDA criteria as compared to ethnic/racial, women by due date, number of cans of formula issued, contacts made by Peer Counselors during pregnancy and lactation, employed or un employed, socio-economic level, age, four USDA's criteria for BF frequency (i.e., exclusively, etc.)
- Participant breastfeeding reports of breastfeeding status and type of food package issued.
- Additional breastfeeding reports such as:
 - BF Ever, 6 months, 12 months, 18 months, 24+ months (derived from infants' data, ran monthly) based on the following:
 - a. Local Agency
 - b. State
 - c. Total Numbers
 - d. Percents

- e. Trends over time
- f. frequency
- g. Age
- h. Ethnicity
- i. Marital status
- j. Education
- k. Gravida
- l. Priority
- m. Nutrition Risks

- Reason ceased data (include frequency) and correlate to age in months (monthly for first 6 months at least). "All" or specific ranges can be selected
- WIC Infant BF Tracking Report –
- WIC Summary Characteristics of BF Women Report
- WIC Due Date Follow Up With BF Interest – include previous BF experience, Peer Counselor information – if and when rcvd contact, Work or School field, *etc.*
-
- Peer Counselor Impact on Duration Report – report to identify if Peer Counselor contacts increase BF duration rates or decrease formula issuance
- BF Experience Affects Duration Report – comparison of previous BF experience affects duration rates, compares reason ceased BF responses (*i.e.*, "not enough milk" response is used less often.)
- BF Trend Reports – of selected fields or reports
- Summary and Type of Education Contacts – a way to include all nutrition education visits or contacts prenatally, and post partum
 - Summary of all BF education contacts to include BF classes, phone calls, home visits, hospitals visits, clinic, *etc.*
 - Summary of all Peer Counselor contacts made to include: the number of contacts, when contacts were made, type of contact, (average length of contact made?), tie into initiation, duration, frequency and supplementation used.

USDA Participant Characteristics must be included and reported to USDA every 2 years

- Participant Food Item Purchases Report (EBT only) – Report of a participant's food purchases compared to the food prescribed and frequency of breastfeeding.
- Participant Referral Report – List of participants referred and lactation agency or program they were referred to
- WIC Program Participant Characteristics Minimum and Supplemental Data sets for FNS and the Reports for Centers for Disease Control and Prevention – Data file for FNS and for CDC

7.5.2 Conduct Ad hoc Breastfeeding Queries and Generate Breastfeeding Reports

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be "report by Local Agency" and a "date range".

The following are a few examples of the types of Ad hoc queries that may be needed within the Breastfeeding Education, Health Surveillance, and Referrals function:

- Number of participants who have been referred to programs who actually attended appointments at the referral agency
- Which foods are redeemed by a household
- Working and BF participants Report – make sure Ad hoc system allows for this report comparison
- Pump Impact on Duration Report – report to identify if use of breast pumps increases BF duration rates, or decrease formula issuance

Process:

7.5.2.1 Enter selection parameters and query system

7.5.2.2 Display results and generate reports

8. Food Management

The Food Benefit Issuance functional area captures and maintains information about WIC approved foods and food packages; the issuance of food benefits to WIC participants and reporting participation. The functions deal with preparing and issuing the food benefits, obligating funds, and handling the replacement of benefits. Vermont will use EBT using an electronic card for the issuance of benefits. The new system will include edits by participant category/status on tailored food packages.

The functions for benefit issuance include the following:

- Maintain Food Package Data
 - Maintain Approved Foods and Food Package Data
 - Record Food Package Variations and Food Benefit Types
 - Reduce Food Quantities for Late Pick-Up by Prorating Benefits for Static Month Issuance (*i.e.*, after the 10th a 2/3rd food package equivalent and after the 20th a 1/3rd food package equivalent)
 - Estimate Redemption Value
 - Maintain UPC Database for WIC Authorized Foods
 - Maintain WIC Category/Subcategory Table
 - Maintain WIC Unit of Measure Table
 - Process Food Issuance Changes
 - Maintain a History of all Food Issuance Changes per Participant
- Establish EBT Account and Authorize Benefits
- Set up Electronic Benefit Card (EBT Systems)
 - Load Card and Print Food Prescription
 - Process Card Changes
 - Process Food Issuance changes
 - Maintain Inventory of Cards Issued to Local Agency
 - Maintain Inventory of Cards used by Local Agency
- Conduct Food Benefit Issuance Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse

8.1 Maintain Food Package Data

The WIC Program designates approved foods that participants can purchase. To facilitate the prescription of foods to participants, standard food packages are defined in WIC Program regulations. Food packages are structured for WIC participant category/status (e.g., pregnant, breastfeeding, and postpartum women, infants, and children), and the various packages developed for each type of participant vary in their food content to address different nutritional requirements as well as cost containment considerations.

The foods identified for each food package will include the food category (e.g., milk), a food unit of measure (e.g., gallon) and a food unit quantity (e.g., three units). For infants, the food benefit usually identifies the brand, type of formula, and form of formula (e.g., Similac, concentrate). For EBT, the household benefit is transferred to the EBT account when the benefit effective date is reached (today for current-month benefits issued today or the first of the month for benefits issued for future months) and can be used by the household until the benefit de-active date and time is reached (midnight on the last day of the calendar month).

When food prescriptions are issued, adjustments may be made for a variety of reasons. For example, if the participant is certified mid-month, the Vermont WIC may pro-rate the benefits initially and then adjust the prescription the following month so the participant may receive the full food package. In an EBT system, the food packages are aggregated for all participants in a household, and a list of foods is provided in the household food benefit account. When the participant shops, the quantity of foods purchased is debited from the household food benefit account.

To ensure that the participant purchases the proper food prescription at the grocery store, Vermont WIC will develop and maintain a Universal Product Code (UPC) database of approved foods. UPCs can be obtained from area retailers. Vermont WIC will provide this database file electronically to vendors, and request that they incorporate this feature in their store data systems. The UPC database would be updated and managed by the WIC State Office, and the vendor would have no write access to make modifications. This provides the baseline data to develop a capability to support the current need to screen for unauthorized food purchases to reduce the incidence of food substitution.

The UPC database would include the food item, WIC food category/subcategory (e.g., Category 001, Subcategory 001 for milk-whole), package/container size, maximum price, corresponding UPC/description, status (e.g., active or de-active), and date last changed. In the EBT system, this database is used by vendors in their store scanning systems. When a WIC purchase occurs, the scanning system automatically flags any foods that are not WIC-authorized. It also captures food purchase data by UPC.

8.1.1 Maintain Approved Foods and Food Package Data

The system will capture information about the authorized foods approved for use by Vermont WIC. The system will assign the various foods to food packages for different types of WIC participants and different nutritional requirements within categories. The system will support adding new foods and deleting foods from the list of approved foods and the corresponding changes to food packages.

System edits must be in place to ensure that food packages issued to participants by Local Agency staff are appropriate for participant's category, status, and age. During the month an infant turns one year of age, the system must allow a choice between an infant formula package and a child's milk package. If an infant is currently 10 months old and will be receiving benefits for the next three months today, the benefit package for next month will be an infant package; for the following month it can be either a formula package or a child's package, and for the third month must be a child's package.

Issuance of these packages will not be unduly cumbersome for the staff person assigning the food packages. During the month a child turns five years of age, staff must be able to issue benefits on any day of that month for the remainder of that month, even if the child has already had his or her birthday, because the child qualifies for WIC participation for the entire benefit month regardless of the date his or her birthday occurs in that month. At initial issuance of special formula or special food package, the system will allow for documentation via a drop down pick list of options with optional note field available for comments/reason. Food package changes will be easy to void, reissue and document. For food package changes of any kind the system will force documentation for the change to provide a history. For example, "Did we over-issue, and why?" "Was there a prescription change?" "Was there a problem with benefits writing to the EBT card?" There will be a drop-down list of options for standard reasons making it easy to select as well as a comment area for more complex, unusual circumstances. For subsequent changes, all previous history will be retained. This information will be easily accessible to WIC staff both at the Local Agency level and at the State Office. For example, it will be located where it is accessible and changeable by the WIC Technician for managing card problems and also by the Certifier making a prescription change for health reasons. Issuance for breastfeeding dyads, mother and infant must be controlled by the system so that both participants are counted in the active count, and so that the infant can receive a formula package only if the Mom is receiving specific breastfeeding food packages and not others. If Mom quits breastfeeding, the number of weeks the infant was breastfed will be a forced entry. If Mother quits breastfeeding at fewer than six months postpartum, she will be eligible to receive WIC benefits as a postpartum woman up to six months if she still has eligible risk factors; however, if more than six months postpartum, she will be terminated, but clinic staff must be able to issue a half food package for next month if notification of such is occurring later than the 15th of the current month.

For EBT, immediate prescription changes are preferable, but delayed prescription changes must be available to accommodate situations involving participants served by clinics who are on-site once a month or every other month. There must be a method of surveillance and reporting of all current-month delayed prescription changes for follow up by WIC staff. For EBT, current month balance must be voided by category, subcategory, and quantity of remaining card balance after purchases made and not by food package. However, if all benefits for the current month are voided, this will be done by food package and give the option to set back last date issued so that all benefits for the current month can be changed/reissued or the system can reflect by date that all benefits for the current month are voided before any purchases were made.

The system must be able to process and record issuance for active WIC participants who receive WIC benefits such as formula purchased by the WIC State Office and sent to the participant and participating fully breastfed babies too young to receive infant cereal and juice.

Vermont WIC would like the ability to do away with a paper Rx and migrate towards an electronic file.

Input:

Food Item Category/Subcategory Code
Food Item Description
Food Item Name
Food Item Standard Unit of Measure
Food Item Average Value
Food Item Maximum Value

Food Package Average Value
Food Package Status
Food Package Last Change Date
Food Package Identification Number
Food Package Type Code
Participant Status/Category Code
Participant Special Formula/Medical Foods Issued/Received
Participant Special Formula/Medical Foods Issued Reason Code
Vendor Peer Group

Process:

- 8.1.1.1 Add or update new approved foods and store in Food Item data store (State level only)
- 8.1.1.2 Add or update new approved food packages and save in Food Package data store (State level only)
- 8.1.1.3 Add or update special formula/medical foods received in Participant data store
- 8.1.1.4 Add or update WIC food category/subcategory Table (State level only)
- 8.1.1.5 Retain record with documentation of all prescription changes made by Local Agency staff

Output:

- 8.1.1.6 Screen display or report of approved food packages
- 8.1.1.7 Screen display or report of approved foods
- 8.1.1.8 Screen display or report of special formula/medical foods issued (link to risk factors)
- 8.1.1.9 Void any previously issued benefits for a given month before allowing (re)issuance for that month.
- 8.1.1.10 Produce screen display and standard report of all prescription changes made upon demand

8.1.2 Record Food Package Variations

The majority of participants receive standard, pre-defined food packages. However, sometimes the Local Agency must tailor the food package to accommodate food allergies or for other reasons. In Vermont, the Local Agency Certifiers will prescribe the specific standard or tailored food package and enter the food item number (and contents in the case of a tailored package) into the system. Issuance will then be processed by the system for "bundling" into a household aggregate issuance for the given benefit month and sent to the EBT card in the case of off-line issuance and/or to the EBT host processor in the case of on-line benefit issuance in terms of food category, subcategory and quantity. The new Vermont WIC system will allow the certifying official to select a standard food package for issuance to a participant from a table of standard, pre-defined packages. However, the certifying official will have the flexibility to alter a standard package or develop a new package from scratch by selecting food items (including formula) from tables to construct the package (both in terms of food and category/subcategory). The system will prevent the user from issuing foods that are

disallowed or quantities of food that exceed the regulatory limit based on participant category.

Vermont WIC would like any food package changes made at the State Office administrative level for standardization of the food package issuance or to accommodate changes in foods authorized for the WIC Program to be intuitive. Changes to data in one table will cause the appropriate corresponding change in all related tables.

Input:

Food Item Standard Amount Prescribed
Participant Category Code
Participant Household Identification Number
Participant Identification Number
Participant Special Formula/Medical Foods Issued
Participant Special Formula/Medical Foods Issued Reason Code (ICD 9 codes, cultural preferences, vegan, etc.)
Reason for Food Package Change
Certifier Electronic Signature (food package change)

Process:

- 8.1.2.1 Display appropriate standard, pre-defined food packages
- 8.1.2.2 Verify issued foods that are allowed and in quantities that do not exceed regulatory limits
- 8.1.2.3 Verify that issued if benefits were not previously issued for the benefit month unless previously issued benefits were voided.
- 8.1.2.4 Display customized food package
- 8.1.2.5 Verify that a half package assigned for next month is to accommodate women > 6 months postpartum who terminate breastfeeding and participants/households who are found to be over income after the 15th of this current month in order to allow for the 15 days notice/benefits required by regulations for mid-certification termination.

Output:

- 8.1.2.6 Screen display of report of food package types

8.1.3 *Reduce Food Quantities for Late Pick-Up by Prorating Benefits for Static Month Issuance*

This process is performed in various ways; in Vermont issuance is for a static month, (benefits are available from 12:01 a.m. the first day of the month through midnight the last day of the month). Despite the date current-month benefits are issued, the benefit month is recorded as being from the first through the last day of the month. Vermont currently prorates benefits. If benefits are issued for the current month after the 10th of the month, a 2/3 package is issued and after the 20th a 1/3 package is issued. The system will need to have the capability to prorate benefits in this way.

Input:

Food Package Number
Household Identification Number

Participant Identification Number
Proration Formula by Date

Process:

8.1.3.1 The MIS system will assign the correct combinations of food package types for 2/3 and 1/3 food packages based on the date of the month when benefits are being issued. This will be done automatically by the system according to standard food packages. Tailored food packages will need to be manually prorated.

Output:

8.1.3.2 Pro-rated food issuances

8.1.4 *Estimate Redemption Value*

Prior to issuance to a participant, Vermont WIC will assign an estimated redemption value to each food package. The system uses the estimated redemption value to project expenditures and as a cost containment tool to prevent a vendor from charging unreasonable prices. The system will obtain an historical redemption value for each food item. The estimated value of each UPC item will be based on the average redemption value per peer group.

The estimated value is used for determination of the expected obligation of the benefit issuance. The estimated value is also utilized to generate the maximum legitimate value for redemption. The maximum legitimate value is determined based on the redeeming vendor's peer group food price surveys or redemption experience. An adjustable 'inflation factor' is added to the estimated value for the benefit for the peer group to allow for market fluctuations. A single inflation factor may be assigned for all vendor peer groups. Alternatively, the state must be able to set varying inflation factors for each peer group.

The maximum value is calculated and maintained in the system and in the EBT system; Vermont WIC wants the ability to adjust the price prior to paying the store at settlement. In a paper food instrument system, each time a food instrument is issued, the system uses the food instrument type average value or the projected average food cost to establish a food obligation for expenditure tracking purposes. The same logic and process is applied for the determination of estimated value and maximum value for food benefits issued by EBT. However, for EBT the values are based on Items will not be rejected from payment because of price. The purchase of the food item will be allowed; the price of the item will be adjusted by Vermont WIC prior to paying the store at settlement.

Input:

Food Benefit Household Account Redemption Value
Food Item Average Composite Price
Food Item Category Code
Food Item Inflation Factor
Food Item Maximum Composite Price
Food Item Maximum Quantity
Food Item Not to Exceed Composite Price
Food Item Category/Subcategory Code
Participant Category Code

Food Item Unit of Measure

Process:

- 8.1.4.1 For the EBT system, retrieve the actual redemption value for each food UPC over a period of time and average by peer group
- 8.1.4.2 Group all UPC prices together for each food item (e.g., For cereal – all General Mills, Kellogg's, and store brand cereals) and calculate a Food Item Average Composite Price (when determining what to pay Vendors, this will be down to the UPC level only not by food category, this is addressed by this function)
- 8.1.4.3 Save the Food Item Average Composite Price in the Food Item data store
- 8.1.4.4 Calculate a Food Item Maximum Composite Price (by Peer Group) by inflating the Food Item Average Composite Price
- 8.1.4.5 Save in the Food Item Maximum Composite Price Food Item data store

Output:

- 8.1.4.6 Screen display or report of food package type average and maximum values
- 8.1.4.7 Screen display or report of food item average and maximum composite prices
- 8.1.4.8 Screen display/report of average food price by category/subcategory and UPC for all vendors or by peer group

8.1.5 *Maintain UPC Database for WIC Approved Foods*

The MIS system will maintain a UPC database and provide this database to the EBT system to provide to vendors in the form of an APL file. This will be a WIC State Admin level function. The APL file transfer to vendors will comply with the X9.93 Part 2 standard. The database will accept an interface with the National UPC database (NUPC) to update the State UPC Database with added approved food items and to upload new Vermont items to the NUPC.

Input:

Food Item Category Code
Food Item Subcategory Code
Food Item Category/Subcategory Standard Unit of Measure
Food UPC/PLU Authorization Date
Food UPC/PLU Code
Food UPC/PLU Description
Food UPC/PLU Vendor Specific by Peer Group UPC Average Price
Food UPC/PLU Vendor Specific by Peer Group UPC Maximum Price
Food UPC/PLU Vendor Specific UPC by Peer Group Not To Exceed Price
Vendor Identification Number
Food UPC/PLU Exchange Value
Vendor Chain Code (for chain-specific PLUs)
Food UPC/PLU Peer Group UPC Average Price
Food UPC/PLU Peer Group UPC Maximum Allowed Amount
Vendor Peer Group Code

Process:

- 8.1.5.1 Add, update and delete food UPCs and PLUs in the Food UPC/PLU data store

(State Agency level)

8.1.5.2 Retrieve food transaction data and vendor prices for each UPC/PLU

8.1.5.3 Create the APL file for transfer to Vendors

Output:

8.1.5.4 Screen display, report or electronic file for UPC/PLU food list, which displays the UPC/PLU, and description for each food category/subcategory

8.1.5.5 APL File

8.1.6 Maintain WIC Category/Subcategory Table

This process allows for the entry and update of food categories and subcategories in support of EBT issuance.

Input:

Food Benefit Category

Food Benefit Subcategory

Process:

8.1.6.1 Allow for the input of food benefit categories and subcategories

8.1.6.2 Allow for the update of food benefit categories and subcategories

Output:

8.1.6.3 Screen display of food benefit category/subcategory table

8.1.7 Maintain WIC Unit of Measure Table

This table provides for the entry and revision of the unit of measure codes and descriptions.

Input:

Unit of Measure Code

Unit of Measure Description

Process:

8.1.7.1 Allow for the input of unit of measure code and description

8.1.7.2 Allow for the revision of unit of measure code and description

Output:

8.1.7.3 Screen display of WIC Unit of Measure Table

8.1.8 Process Food Package Changes

This process allows for the modification of an individual food package.

Input:

Food Package ID

Food Package ID

Food Package Contents

Process:

8.1.8.1 Allow for the selection of a food package

8.1.8.2 Display food items within the package

Output:

8.1.8.3 Report of food items by Food Package

8.2 Issue Electronic Benefit (EBT Systems)

Note: The system must meet X9 standards in effect at the time of system design, development and implementation.

During the certification visit, an EBT Household account is established and card setup is done. Food benefit issuance is input and the Household's aggregated food package data are loaded onto the card or put in a batch file for transfer to the EBT host. In an off-line system, the Primary Account Number (PAN) or other numeric link is used to access the benefit account linked to the Household group record in the certification system when the card is set up. Benefits transmitted to the participant's WIC EBT account at the EBT Processor are linked to the Household group in the MIS.

Current-month benefits must be available to the participant immediately.

If Vermont chooses an offline system, the loading of the card may take place at the vendor instead of the Local Agency. This would usually be done to replenish the second month benefits and for current-month benefits, if an off-line prescription change was sent, if connectivity problems occurred delaying the availability of benefits, the State Agency was not available or operable, or the participant chooses not to load benefits at the WIC clinic. In this case, the Local Agency would complete steps similar to those discussed below, but the actual loading of the food benefits would occur when the participant uses his or her card at the vendor.

The system must process any damaged/lost/stolen cards and support replacement card setup. The Local Agency would do a card replacement setup to facilitate access to the Household's current benefit balance. In an offline system, this would occur within 10 calendar days after the participant notifies them that the card is missing. In an online system, the cardholder could receive the card 1-2 days after notification. Business practices are in place in Vermont to accommodate replacement by mail for participants who are served by outreach sites.

Vermont WIC wishes to set up a household ID number to link to the EBT host and the recipient benefit. In such scenarios at the certification system level, issuance records must transfer to the new group ID with participant records and debits and credits to accommodate such situations must be accomplished logically, accountably, and easily.

Local Agencies must safeguard cards from fraudulent use. The system must maintain an accurate card use inventory by day and by month and provide records to Vermont WIC to reconcile with the State card inventory. The system must also track cards distributed from the State to the Local Agencies.

Finally, when the participant is issued food benefits, they are considered a "participant" for Federal reporting purposes. The data are stored and later compiled for the FNS-798, WIC Financial Management and Participation Report.

8.2.1 Establish EBT Account

Once certification is complete, the system will interface with an EBT processor (the EBT processor may be a private entity, if contracted, or a state entity, if performed in-house) to transmit data and setup the EBT accounts. The system must transmit an account setup file for each participant, which includes relevant account information. The system receives daily electronic reports from the processor of accounts established and accounts setup exceptions. The Food Benefit Household Account Number will be either generated by the system or populated into the system when it is returned from the EBT Processor

The EBT account number is the PAN (personal account number) on the front of the card. Benefits for the household are sent to the card by Household ID (unique Household group ID number), which is a system-generated number.

The Participant ID number is retained by the individual participant for their entire WIC "career", regardless of transfers to other offices within the state. In addition, issuances will be easily tracked to clinic and participant ID.

For EBT in Vermont, the system will have a way to link Household benefit issuance to the card setup record. When a participant calls Customer Service or the WIC Help Desk for help with their WIC benefits, the participant issuance and card account records need to be easily accessible by a security identifier.

Both WIC ID and any relevant participant issuance records must be easily transferable from one household holding one card to another with a different card.

Input:

Food Benefit Household Account Identification Number
Participant Household Identification Number
Participant Identification Number

Process:

- 8.2.1.1 Accept user input of participant identification number and Household identification number
- 8.2.1.2 Retrieve appropriate data from Participant data store
- 8.2.1.3 Generate Food Benefit Household Account Number (or receive and enter)
- 8.2.1.4 Create Account Set-Up File
- 8.2.1.5 Transmit Account Set-Up File to EBT system

Output:

- 8.2.1.6 Account Set-Up File
- 8.2.1.7 Screen display or printed list of participant accounts

8.2.2 Authorize Benefits

Once an account is set up, the system must transmit to the EBT processor a benefit authorization file for each Household, which includes the food items prescribed for all Household participants. The system receives daily electronic reports from the EBT processor of benefit authorizations processed and benefit authorizations exceptions.

Input:

Food Benefit Household Account Identification Number
Food Benefit Prescription End Date
Food Benefit Prescription Estimated Price
Food Benefit Package Identification Number
Food Benefit Prescription Number of Months
Food Benefit Prescription Start Date

Process:

- 8.2.2.1 Retrieve individual Food Prescriptions for each participant in a household
- 8.2.2.2 Aggregate prescribed quantities for each food item
- 8.2.2.3 Compile Food Package Prescriptions for all participants in household and update the Food Benefit Household Account and the Food Household Account Balance (These data stores may reside both in the WIC system and in the EBT Processor system or just at the EBT host depending upon the implementation strategy)
- 8.2.2.4 Create Benefit Authorization File
- 8.2.2.5 Transmit Benefit Authorization File with Food Benefit Household Account Balance information that provides a Consolidated Food List to the EBT Processor

Output:

- 8.2.2.6 Benefit Authorization File (Food Benefit Household Account and Food Benefit Household Account Balance data)

8.2.3 Prepare to Load Food Benefits

The system will retrieve the participant certification record for all participants within the same household and aggregate the benefits or retrieve the household account if aggregation has occurred. The prescribed food package will include any adjustments to the food package recorded in the system to reflect Proration of the benefits and/or prescription changes.

In an offline system, each prescription loaded onto the card, with the exception of prorated benefits, including a half package for next month to accommodate participants who terminate mid-certification, is valid for one month. The valid date is a calendar month. The number of months of benefits is determined (from one to four months – the current month which must be only a partial food package.) based on the participant situation, and any adjustments to the food package made.

The system will prompt for the number of months of benefits to be issued and suggest the appropriate food package for each issued month. The system will assign the first valid date and last valid date based on the last benefit month issued. The first valid date will always be the first day of the benefit month; the last valid date will always be the last day of the benefit month. The system will default to the first month for which there is no participant issuance, including a month for which all benefits were removed for that participant – even if other household members retained their issuance for that month to

address individual issuance cases like a child removed from the home and being set up under a new Household record.

The EBT card is personalized before loading benefits. The preparation of the card allows the participant to select a confidential PIN. This ensures that only the participant/parent/caretaker/proxy can use the card to obtain benefits at the vendor.

In an online system, the EBT card is personalized and current benefits accessed online instead of being loaded on the card.

In both systems, the card must have a Primary Account Number (PAN), which the system captures from the card and the user verifies. Part of this number is used by the banking system to route transactions for payment. The cards may also have a serial number for inventory tracking purposes (the PAN may also be used for this purpose). The system will maintain a card inventory by PAN. The username of the staff person who sets up the card will be automatically recorded by the system for easy follow-up access for troubleshooting. If the Certifier authorizes/issues the benefits and the WIC Technician processes the benefits, both functions must be identified by user who did each separately.

Input:

Food Benefit Household Account End Date
Food Benefit Household Account Identification Number
Food Benefit Household Account Number of Months of Benefits
Food Benefit Household Account Start Date
Food Benefit Household Card Primary Account Number (may or may not be the link to benefit transfer from the certification system to the host account record. If so, must accommodate card replacements.)
Food Benefit Participant Account End Date
Food Benefit Participant Account Identification Number
Food Benefit Participant Account Number of Months of Benefits
Food Benefit Participant Account Start Date
Food Benefit Participant Card Primary Account Number (may or may not be the link to benefit transfer from the certification system to the host account record. If so, must accommodate card replacements.)
Food Benefit Prescription Date
Food Item Prescribed First Date to Spend (always the first day of the benefit month)
Food Item Prescribed Last Date to Spend (always the last day of the benefit month)
Participant Household Identification Number
Participant Identification Number
Vendor Identification Number (enable/disable)

FOR CHANGED FOOD ITEMS:

Food Benefit Prescription Identification Number
Food Item Category Code
Food Item Prescribed Date
Food Item Prescribed First Date to Spend
Food Item Prescribed Identification Number
Food Item Prescribed Last Date to Spend
Food Item Prescribed Unit Quantity
Food Item Prescribed Unit Size

Food Item Subcategory Code

Note: The EBT system must have a means of ascertaining the correct balance of current-month benefits not spent by the participant in order to accommodate debiting of the remainder of a current-month's issuance after shopping by category, subcategory, and quantity (not by food package). Current months debits will be possible on-line or off-line. If current-month off-line debits are done by a staff user, username must be recorded and a summary record of such transactions must be accumulated by day for viewing on screen and printed report.

Process:

- 8.2.3.1 Retrieve the Household account information including any demographic and proxy information from the Food Benefit Household Account and Participant data stores
- 8.2.3.2 Prompt the participant to choose a PIN, verify, and update the Food Benefit Household Account
- 8.2.3.3 Accept input of food changes and update the Food Benefit Prescription and Prescribed Food Item data stores
- 8.2.3.4 Recalculate the Food Benefit Household Account Balance aggregated food item prescribed amounts (i.e., subtract from food items taken away, add to food items increased, and add new food items) and update the Food Benefit Household Account Balance data store
- 8.2.3.5 Retrieve aggregated food items from the Food Benefit Household Account Balance data store (remaining balance on card).
- 8.2.3.6 Prompt for the number of months of aggregated benefits for the Household and assign the appropriate first and last date to spend to the prescribed food items
- 8.2.3.7 Update the Food Benefit Household Account data store
- 8.2.3.8 Calculate the estimated redemption value obligation for the foods in the prescription based on the prices maintained in the Food/UPC data store

Output:

- 8.2.3.9 Screen display of participant and food data to be loaded on the card

8.2.4 Load EBT Data on Card

The system will personalize the card. The participant selects a personal identification number (PIN) via a PIN pad. The card is loaded with selected EBT data, and issued to the participant at this time.

The reselection of loading sites when an on-line card setup fails due to connectivity problems at the WIC Office will not be necessary. The sites selected for the card setup prior to the dial-up attempt to set up the card record on-line will be held in memory in the Card Management Software and not have to be reselected.

If connection is established, all card setup records will take immediate effect, regardless of whether it is a new card setup or a card "replacement" setup.

From the WIC State Office administrative data is sent to update the card account records. Administrative changes to data on the card account record such as head of household name changes, Household ID changes, changes of head of household, changes of issuance sites and card replacements need to be real time.

Also from the WIC State Office, benefit issuance and prescription changes sent to benefit balances on the card must be accurate, real time, and the participant must be able to purchase as much but no more than is authorized.

Input:

Food Benefit Household Account Card Primary Account Number
Food Benefit Household Account Participant Personal Identification Number
Participant Identification Number
Participant Electronic Signature (acknowledgement of card receipt and receipt of benefits)

Process:

- 8.2.4.1 Retrieve Card Personalization data from Participant and Food Benefit Household Account data stores
- 8.2.4.2 Perform PIN Selection
- 8.2.4.3 Retrieve EBT data from Participant and Participant Health data stores
- 8.2.4.4 Verify for adequate access privileges (e.g., input of both participant and user PIN)
- 8.2.4.5 Write EBT data to card

Output:

- 8.2.4.6 Selected EBT data written to card

8.2.5 Load Food Benefits and Print Food Prescription

Once all the proper data are entered, all Household data is stored in the MIS system. Food issuance data is written to the EBT account. The participant is provided with a hard copy of the Household's food prescription list as a reference for shopping. When food benefits are actually issued to a certified applicant, the system will recognize the certified applicant as a "participant".

The system will provide a daily register of card PANs issued to Households. The participant will sign to document or the system will provide another mechanism such as electronic signature to show they have received a card(s), which will be part of the participant's electronic record.

Input:

Food Benefit Household Account Card Primary Account Number
Food Benefit Household Account Obligation Value
Food Benefit Prescription Identification Number
Participant Household Identification Number
Participant Identification Number
Participant Electronic Signature (receipt of card, if PIN is not acceptable to FNS)

Process:

- 8.2.5.1 Insert card into reader/writer
- 8.2.5.2 Prompt system to download Household account data to the EBT account or the card.
- 8.2.5.3 Update and save the new estimated redemption value obligation for the Household food benefit prescription in the Food Benefit Household Account data store
- 8.2.5.4 For all participants within the Household account, update the count of participants for the month and store in the Participation data store for later reporting and management purposes
- 8.2.5.5 The system will automatically create a register of cards and set up and differentiate whether the card was a new card setup or a card replacement.

Output:

- 8.2.5.6 Food benefits received register and printed copy of food list
- 8.2.5.7 Register of cards issued
- 8.2.5.8 Updated count of participants for the Local Agency (active or issued participants only)

8.2.6 Process Card Changes

Cards may be damaged, lost or stolen and need replacement. In such cases, the Local Agency would retrieve the Household record, void the card PAN issued to that Household, and assign a new card PAN for the Household's benefits. When cards are lost or stolen, it is possible the card will be fraudulently used. The system must notify the EBT processor of card PANs that will not be transacted. If a vendor attempts to complete a transaction with a "hot" card, the processor's system will recognize the invalid PAN and terminate the transaction. The system will associate the balance of the Household's benefits to the new card. The system will also maintain a history of card losses in the Household's record and aggregate this data into a file for the Local Agency. Note: current-month transfers of value from the old to new card will be real time.

Input:

- Food Benefit Household Account Card Primary Account Number
- Food Benefit Household Account Identification Number
- Food Benefit Household Account New Primary Account Number
- Food Benefit Household Account Old Primary Account Number
- Food Benefit Household Account Participant Personal Identification Number
- Food Benefit Household Account Start Date
- Food Benefit Household Account Void Date
- Food Benefit Household Account Void Reason Code
- Participant Electronic Signature (receipt of card and receipt of benefits)

Process:

- 8.2.6.1 Retrieve the Household record

- 8.2.6.2 Void card PAN for damaged/lost/stolen cards and update Food Benefit Household Account old PAN with the replacement card PAN for the lost/damage/stolen card
- 8.2.6.3 Assign new card PAN
- 8.2.6.4 Update the Food Benefit Household Account data store with new PAN
- 8.2.6.5 Retrieve Household account data from Food Benefit Household Account and Participant data stores or from the EBT processor
- 8.2.6.6 Retrieve remaining balance for each food item from Food Benefit Household Account Balance data store and place on new card, if off-line EBT.
- 8.2.6.7 Prompt the participant to choose PIN, verify
- 8.2.6.8 Personalize new card, load balance of benefits if off-line EBT, and set up new card
- 8.2.6.9 If a participant transfers within the state with a card, the card has already been set up and recorded in the certification system and on the EBT host. Issuance and PAN records will transfer with the participant record to the new Local Agency.

Output:

- 8.2.6.10 Screen display of void and updated information
- 8.2.6.11 Screen display or report of Household card loss history

8.2.7 *Maintain Inventory of Cards Issued to Local Agency*

The Local Agency must maintain an inventory to track receipt and disposition of all cards by serial number. The Local Agency system will record all shipments and receipts of cards and account for the cards replaced and all damaged cards, whether damaged before use or after setup and receipt by participant, and PANs returned to the State Agency to be destroyed. The system will automatically create a register of cards set up and differentiate whether the card was a new card setup or a card replacement.

Input:

- Date of Card Replacement (system generated)
- Destroyed Date
- Item Stock-Serialized Batch Beginning Serial Number/PAN
- Item Stock-Serialized Batch Ending Serial Number/PAN
- Item Stock-Serialized Card Stock Batch Number/PAN
- Item Stock-Serialized Card Stock Serial Number/PAN
- Item Stock-Serialized/PAN Date Received by Local Agency
- Item Stock-Serialized/PAN Date Received by State Agency
- Item Stock-Serialized/PAN Date Shipped to Local Agency
- Item Stock-Serialized/PAN Last Modified Date
- Item Stock-Serialized/PAN Last Modified User
- Item Stock-Serialized/PAN Replenishment Date
- Local Agency Identification Number
- Local User Identification Number

Process:

8.2.7.1 Capture and record all item stock received and update Serialized Item Stock data store

Output:

8.2.7.2 Screen display or report of Local Agency card inventory status

8.3 Conduct Food Benefit Issuance Reporting

Food benefit issuance reporting will include routine reports on authorized foods, authorized Food Packages, Food Package issues, Food items issued and estimated redemption value, and listings of voided benefits by PAN, group and participant ID.

8.3.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Benefit issuance will result in several ongoing reports that are used to describe food packages and account for benefits issued. The standard reports are:

Reports for EBT Systems

8.3.1.1 Approved Food Packages – This screen report would list and describe the food packages for each category of participant

8.3.1.2 Approved Foods – This report would list and describe all foods authorized for use in Vermont WIC's WIC Program. This will include approved formulas by size and UPC

8.3.1.3 Food Price List – This electronic report would list all approved foods and their maximum prices allowed. (State Agency level)

8.3.1.4 Participants to Date by Local Agency – This report would list all participants issued food benefits for the month to date. This report must be available upon request, not just monthly and will be available with participants listed numerically in ascending order by Group ID number or alphabetically

8.3.1.5 Rebate Report – Lists all redeemed foods that are eligible for a rebate (e.g., infant formula or infant cereal)

8.3.1.6 Special Formula/Medical Foods Issued – This report would list participants who are receiving special formula/medical foods and the reason

8.3.1.7 Estimated Redemption Value for Food Packages Issued – This report would list by month of issue, all food packages issued and their estimated redemption value. The system will array the data by Local Agency and total for Vermont WIC. The information is used to calculate obligations

8.3.1.8 UPC Database for WIC Authorized Foods – This report would list and describe all foods with their UPCs that are authorized for issuance according to the standard category/subcategories. The system will provide a hard copy and

electronic file)

- 8.3.1.9 Estimated Food Redemption Values – This report would provide data on the estimated value for each food type
- 8.3.1.10 Estimated Redemption Value for Household Food Accounts – This report would list by month of issue, all foods issued and their estimated redemption value. The system will array the data by Local Agency and total for Vermont WIC. The system must also support queries on an individual basis, not aggregate of Household
- 8.3.1.11 Actual Redemption Value for Household Food Accounts
- 8.3.1.12 Local Agency Card Inventory Status – This report would provide data on the card serial numbers assigned to each Local Agency. It would also identify the status of each card as issued, unissued or void
- 8.3.1.13 Lost and Stolen Cards by Local Agency – This screen report would provide a list of cards that are reported as lost or stolen by Local Agency. This could be printed by user in part or as a whole upon demand
- 8.3.1.14 Lost and Stolen Cards by Participant – This screen display would provide a list of cards that are reported lost or stolen by participant. This could be printed by user on demand
- 8.3.1.15 Monthly Food Obligations and Redemption Report – This report lists monthly food obligations (by food category/subcategory) versus monthly food redemptions (by food category/subcategory) by Local Agency.
- 8.3.1.16 Daily listing of current-month off-line prescription changes by PAN, Benefit identifier, Group ID, Local Agency, and User ID

8.3.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

Benefit issuance data provides a great deal of data on the types of foods available and what food benefits were actually issued. Ad hoc reporting could provide information that identifies particular patterns at Local Agencies, or overall trends for Vermont WIC such as arraying the number of months benefits issued by number of Households to assess how many participants are scheduled for monthly versus multi-month benefits or to sort foods or food package types by estimated redemption values. Ad hoc reporting must be user friendly, easy to use, logical, and accurate. Example of Ad hoc reports might include:

- Card loss rate among Local Agencies
- Number of food package types issued by participant category
- Participant category and number of months benefits issued
- Non-duplicated, active count of participation for each Local Agency in the State for all months in the current calendar year.

8.3.3 *Maintain Data Warehouse*

In the Food Benefit Issuance functional area, the data warehouse will contain appropriate approved WIC food data, food package data, food package or card issuance data, and

Household prescription data. Examples of the use of the data warehouse in the Food Benefit Issuance functional area are:

- Characteristics of participants with high food card loss rates
- Factors affecting popularity of specific food packages at different times of the year
- Impact of food prices on designation of WIC authorized foods
- Patterns of benefit issuance by times of year and locations of the State

9. Food Benefit Redemption, Settlement and Reconciliation

The Food Benefit, Settlement and Reconciliation functional area covers the redemption of food benefits at the vendor, payment to the vendor, and accounting for the disposition of food benefits issued to the participant.

To protect the integrity of the WIC Program, the following requirements apply to the transactions at the grocery store:

- The vendor can redeem only the specific foods and quantities specified in the participant's food package, and the selection of foods must meet Vermont WIC's approved food list.
- The price may not exceed a maximum value established by Vermont WIC for valid redemption.
- Only a WIC authorized vendor can redeem food benefits.
- If a food for a participant's benefit is not in stock, the vendor cannot substitute a "rain check" or cash. There is no scenario where substitution is allowed.

For EBT systems, the vendor uses a scanning system; the UPC identifiers for WIC foods automate the screening process. Screening for all of the above requirements is automatic and performed at the point of sale. If any scanning violations are detected, the transaction is completed and the item that would not scan is not allowed for purchase by the participant and the vendor is not paid for the item(s). If any item is priced higher than the sanity check, that food item will not be allowed for purchase, but the rest of the transaction can be completed. If any item is priced higher than the maximum price, the food item will be allowed for purchase, but the price paid to the Vendor for the food item will be adjusted before settlement. Post-transaction, pre-payment edits by individual food item/UPC are preferred.

If the Participant wishes to purchase quantities greater than the food benefit allows, the WIC benefit will be debited first and remaining purchase amounts paid for with alternate tender. The participant will have the ability to redeem WIC benefit foods mixed with the participant's other purchases.

Food Benefit Redemption, Settlement and Reconciliation are comprised of the following functions:

- Pay Vendor for Food Benefits Redeemed (EBT Systems)
 - Verify WIC Card
 - Screen for Food Item Eligibility and Verify Available Balance
 - Approve Purchase
 - Compile File of Transaction Data and Upload to Processor
 - Conduct Settlement
- Maintain Food Transaction Data (EBT Systems)
 - Maintain Household Food Account Balance
 - Process Inquiries for Food Account Balance and Last Date to Spend
 - Track Food Purchases by Household Track Food Purchases and Price

- Reconcile Redeemed File with Issuance File
 - Reconcile Food items
- Conduct Food Benefit Payment and Reconciliation Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse

9.1 Pay Vendor for Food Benefits Redeemed (EBT System)

The EBT food transaction can be performed in either an off-line or an on-line mode with a magnetic stripe card or smart card with a microprocessor chip, or other technology that fulfills program requirements. The primary difference pertains to where the Household account database resides. If Offline is used, household account data is on the card, and the Point of Sale (POS) terminal retrieves the data from the card. With a magnetic stripe card, in an on-line mode, the vendor electronically contacts the processor to retrieve and download the Household account database to the POS terminal.

The WIC food transaction process involves a substantial amount of electronic communication between the vendor's POS terminal, the card and the vendor's scanning and electronic cash register (ECR) system.

The participant uses a shopping list, issued by the Local Agency or obtained at an inquiry terminal in the grocery store, to purchase WIC foods. When the participant completes shopping, he or she enters the checkout lane with WIC items. The participant places the card in the POS terminal and enters the PIN. The terminal retrieves Household account information from the card/host database. Once the Household account is verified and available balance identified (adjustments made), the sale begins.

The cashier scans the UPC code on each food item. During each food item scan, the terminal communicates with the Household account database and the authorized UPC database (the Vendor's WIC UPC database is not controlled by the Vendor), to verify that an eligible food item is selected and that there is an available balance for the food item. The terminal captures data on the food item, UPC, and price. After all items are scanned, the sale is completed, the account balance is adjusted, and a food transaction data file is captured at the grocery store. The transaction data file is then routed to the processor.

The system must interface with the vendor's systems eliminating double scans and dual systems.

Once the processor receives the transaction file, it debits the household food benefit account for food items purchased (adjusts the host balance) and records the value of the redemption. The processor then generates and transmits an electronic credit to the vendor's bank and a debit to Vermont WIC's bank for the redemption value of all of the transactions. A separate file is also compiled with detailed information on the transaction (e.g., food item purchased by UPC, category/subcategory and price) for management information purposes.

9.1.1 Verify WIC Card

When the participant inserts the card in the POS terminal, the card and the terminal perform a message exchange as a type of recognition that they can communicate. The terminal prompts the participant to enter the PIN, and the card is validated against the card database. (PANs listed on hot list are sent by the EBT Processor to the Vendor's WIC Database which "locks" the card at the Balance Inquiry or POS before a transaction is processed.) These processes are performed by the vendor EBT system and are external to the WIC system.

Input:

Food Benefit Household Account Card Primary Account Number

Food Benefit Household Account End Date
Food Benefit Household Account Participant Personal Identification Number (PIN)

Process:

- 9.1.1.1 Participant inserts card in POS terminal
- 9.1.1.2 The terminal prompts the participant to enter PIN
- 9.1.1.3 The PIN is verified against the PIN offset on the card

Output:

- 9.1.1.4 Acceptance or rejection of card

9.1.2 *Screen for Food Item Eligibility and Verify Available Balance*

The food item is scanned and the terminal checks the vendor's UPC database to confirm it is an approved WIC item. If the food item is an authorized item, the system checks the available balance for that food item in the household food account. If there is sufficient balance, the item is deducted from the card's Household account balance, and the vendor's transaction file is updated to reflect the purchase of this food item. This process is repeated for each WIC food item.

Input:

Food Benefit Household Account Balance Aggregate Prescribed Amount
Food Benefit Household Account Balance Aggregate Prescribed Date
Food Benefit Household Account Balance Date
Food Benefit Household Account Balance Remaining Amount
Food Benefit Household Account Balance Used to Date Amount
Food Benefit Household Account Card Primary Account Number
Food UPC/PLU Code
Food Item Shelf Price

Process:

- 9.1.2.1 After UPC for each food item is scanned, confirm that the item is WIC approved by checking the vendor UPC database
- 9.1.2.2 Confirm that the Household account has a sufficient balance to purchase this item
- 9.1.2.3 Deduct the food item from the Household account food balance in the MIS
- 9.1.2.4 Capture the Item shelf price and adjust if it exceeds the NTE price.
- 9.1.2.5 Update the vendor transaction file to reflect the purchase of this item

Output:

- 9.1.2.6 Updated vendor transaction file
- 9.1.2.7 Update food benefit account balance information

9.1.3 *Approve Purchase*

Once all the food items are scanned, the cashier will check to see if there are any “cents-off” coupons, reduced Price offers, or “Buy One Get One Free” (BOGO) offer to apply. If so, the cents off coupon is scanned and the value deducted from the total transaction value. The transaction does not decrement the BOGO “Free” item from the EBT benefit account. In a “BOGO” promotion, the retail system shall not include the free item in the WIC Purchase Request message. In a buy one, get one at a reduced price promotion, the retailer shall allow the participant to have the option of purchasing the reduced price item with an alternate tender type. Manufacturers may add extra ounces to their products at no extra cost to the customer. Participants may use the EBA to purchase WIC-approved food items that have bonus ounces added to the package. Any additional ounces included in the package will not be counted against the ounces of that food item remaining on the EBA. Free Ounces or Bonus Packages have a unique Universal Product Code (UPC) number. The Bonus Package UPC will be maintained by the state agency with the standard package unit of measure (UOM) and benefit quantity. Then the sale is completed, and a cash register receipt is printed.

Input:

Food Benefit Household Account Card Primary Account Number
Food UPC/PLU Code
Vendor Transaction Detail Coupon UPC
Vendor Transaction Detail Coupon Value

Process:

- 9.1.3.1 Total WIC transaction sale
- 9.1.3.2 Scan UPC for any coupons and deduct value from total sale (scan manufacturer coupons also – enable/disable)
- 9.1.3.3 Print separate WIC cash register receipt for the participant

Output:

- 9.1.3.4 Cash register receipt with food balance
- 9.1.3.5 An updated food balance always remains on the bottom of the receipts

9.1.4 Exception Processing (Online EBT Only)

If Vermont WIC chooses to implement an online EBT system, the FNS requires the system must be able to process exception transactions. These are transactions in addition to the standard balance inquiry and purchase transactions, and include voids, reversals, vouchers, and store and forward transactions.

9.1.4.1 Void (online only)

This transaction is used to cancel a transaction that has been processed. It is often set up so that only the most recent transaction can be voided (also called a Void Last). The Void is different from a reversal in that the Void is always human initiated.

9.1.4.2 Reversal (online only):

A reversal is a system-generated cancellation of a transaction. A reversal can occur when a transaction has been initiated, but the host or vendor system

does not receive all of the required information to complete the transaction. When this happens, any changes made to the account are reversed.

9.1.4.3 Store and forward (online only):

This is a type of transaction that can occur when the retail system cannot connect to the EBT host. If a vendor has implemented store and forward, the vendor system can capture the transaction information for submission to the EBT host at a later time. While convenient for the cardholder, the risk is on the vendor if there are insufficient benefits to cover the purchase.

9.1.5 *Compile File of Transaction Data and Upload to Processor*

Once the sale has concluded, the card or host is updated with the transaction information. The Vendor Transaction File and Vendor Transaction Detail File are compiled. The Vendor Transaction File contains the transaction total amount used to pay the vendor for the foods purchased (this is also used for Program Integrity Research). The Vendor Transaction Detail File provides food item detail on the food items purchased, including price, which is used for expenditure and cost containment purposes. The Vendor Transaction File is transmitted to the processor for settlement. The Vendor Transaction Detail File is also transmitted to the EBT Processor host who batches this data for daily transmission to Vermont WIC MIS system. Alternately, in an online system, the Vendor Transaction Detail File could be transmitted to the EBT Processor host and accessed via the EBT warehouse.

Input:

Food Benefit Household Account Balance Used to Date
Food Benefit Household Account Card Primary Account Number
Vendor Identification Number
Vendor Outlet Identification Number
Vendor Transaction Amount
Vendor Transaction Date
Vendor Transaction Detail Redemption Value
Vendor Transaction Identification Number
Vendor Transaction Reject Reason Code per Food Item
Vendor Transaction Terminal Identification Number

Process:

- 9.1.5.1 Update account to close transaction
- 9.1.5.2 Compile Vendor Transaction File and Vendor Transaction Detail File with Transaction Total Amount and Transaction Sales Detail
- 9.1.5.3 Transmit Vendor Transaction and Vendor Transaction Detail Files to the EBT Processor Host

Output:

- 9.1.5.4 Updated account
- 9.1.5.5 Vendor transaction file
- 9.1.5.6 Vendor transaction detail file

9.1.6 Conduct Settlement

The EBT Processor host generates a vendor credit for the total vendor transaction amounts and transmits the credit to the Automated Clearing House (ACH). The ACH credits the vendor's account and debits the State WIC bank account. (The EBT processor has to draw resources from the State's letter of Credit to fund the ACH account in order to pay vendors.)

For an Offline System, the EBT Processor host batches the Vendor Transaction Detail Files every day with all of the vendor credit amounts and transaction details. This file is used to update the Household account for the transactions (on the host) and to build reports on food item purchases and update food obligations and outlays.

Input:

These data exist in the EBT Processor host system. However, they may be downloaded by the MIS for use.

State Agency Debit Amount
Vendor Credit Amount
Vendor Transaction File

Process:

- 9.1.6.1 Retrieve Vendor Transaction File
- 9.1.6.2 Calculate vendor credits and State WIC debits
- 9.1.6.3 Generate ACH Transaction File for transmission to vendor, vendor's bank and State bank
- 9.1.6.4 Generate and transmit Vendor Transaction Detail File to Vermont WIC system

Output:

- 9.1.6.5 ACH transaction file
- 9.1.6.6 Vendor transaction detail file

9.2 Maintain Food Transaction Data (EBT Systems)

The system must maintain the central household food account balance based on the Vendor Transaction Detail Files received (the EBT Processor's account balance and the card balance will agree in an Offline System). Vermont WIC can use the household account balances to evaluate its expenditure status each day. In addition, the participant often needs to determine his or her Household food account balance before shopping. The vendor system needs to accept his or her inquiry from a designated terminal, and print a statement of his or her food balances and the last date he or she can purchase these items.

The EBT transaction data also provides valuable data for program management. The system can track the food items purchased by Household to evaluate participant food preferences and patterns. (This data will also be used to track program integrity by both participants and Vendors *i.e.*, transactions outside of store hours of operation; a high number of transactions for

the same price; high number of invalid PIN attempts.) The system can also track the food items purchased by brand and cost per item. This enables Vermont WIC to maintain up-to-date food cost data for caseload and financial management. The system must be able to track expenditure and participation data for each participant issued a food prescription.

9.2.1 *Maintain Household Food Account Balance*

When the processor receives the Vendor Transaction file, it adjusts the Food Benefit Household Account for each transaction conducted with the card. When this occurs, the Food Benefit Household Account food obligation value (estimated redemption value for all of the food items in the account) is decremented and the actual redemption value increased. Therefore, the system can calculate the total food obligation and total food expenditures for a Household account at any time to assess expenditure status. The WIC system adjusts the Food Benefit Household Account Balance of foods based on the Vendor Transaction Detail. The total amount of food items prescribed for the Household is decremented by the amount of foods purchased. The remaining balance is stored.

In addition, with the UPC price information obtained at the point of sale in the Vendor Transaction Detail file, Vermont WIC will use these current prices to update food item prices in its database. The system will maintain a running average of prices for a particular category such as milk for all vendors, by peer groups, and by individual vendors. Each time a purchase is made, the new price for milk would replace an old price. In this way, Vermont WIC will maintain an up-to-date estimate of average food costs as often as it wishes. This, in turn, enables the WIC system to adjust obligations in all Household accounts to reflect current food prices.

Input:

Food Benefit Household Account Balance Used to Date
Food Benefit Household Account Card Primary Account Number
Food Benefit Household Account Redemption Value
Food Item Category Code
Food Item Subcategory Code
Food UPC/PLU Code
Food UPC/PLU Vendor Specific UPC Average Price (by peer groups)

Process:

- 9.2.1.1 These processes occur in the EBT Processor's system.
- 9.2.1.2 Retrieve Vendor Transaction and Vendor Transaction Detail Files for redemption transactions
- 9.2.1.3 Debit Food Benefit Household Account and Food Benefit Household Account Balance for the food used and value of food used
- 9.2.1.4 Update the Obligation and Outlay data stores to reflect the food transaction value

Output:

- 9.2.1.5 Updated Food Benefit Household Account and Food Benefit
- 9.2.1.6 Household Account Balance data stores

9.2.2 *Process Inquiries for Food Account Balance*

In an Offline System, if the participant loses their printed food prescription, or needs an updated balance of foods in the Household food account, they can go to an inquiry terminal at the Local Agency or vendor and insert their card in the inquiry terminal. After entering the PIN, an account balance is automatically displayed and the terminal can print a statement listing the food item balance based on information in the card database. In an Online System, Food Account Balance inquiry must be available via Customer Service by Phone and/or website.

Input:

Food Benefit Household Account Balance Date
Food Benefit Household Account Card Primary Account Number
Food Benefit Household Account Participant Personal Identification Number PIN

Process:

- 9.2.2.1 Insert card in inquiry terminal and enter PIN
- 9.2.2.2 Display statement of beginning food balance, identifies any updates to the balance and then prints updated food balance of food remaining in the Food Benefit Household Account Balance by category, subcategory and quantity.
- 9.2.2.3 Print statement with food account balance by food item if user desires

Output:

- 9.2.2.4 Food benefit Household account balance of foods

9.2.3 *Track Food Purchases by Household*

The system can use the food item transaction data to determine which foods are consistently selected by participants, and which are less popular. This information can assist Vermont WIC in making changes to authorized foods, such as deleting expensive and unpopular food items. This function is especially important in tracking infant formula purchases. Vermont WIC can bill the formula manufacturer for rebates on the exact quantity by type, form and brand purchased by the participant. It enables Vermont WIC to assess the amount of non-contract formula issued including special formulas for infants with health conditions that require special formula. It can also help identify the food purchases of some particular groups with special needs such as participants with lactose intolerance.

Input:

Food Benefit Household Account Balance Used to Date
Food Benefit Household Account Card Primary Account Number
Food Benefit Household Account Redemption Value
Food Item Category Code
Food Item Subcategory Code
Food UPC/PLU Code

Process:

- 9.2.3.1 Retrieve Vendor Transaction Detail File
- 9.2.3.2 Sort foods purchased by Households into Food Category/Subcategory and

UPC to identify the number of Households that selected particular food products

- 9.2.3.3 Extract infant formula purchases by brand and quantity and store in the Rebate data store

Output:

- 9.2.3.4 Report of infant formula purchased
- 9.2.3.5 Report or data file of Household food purchase frequency by food item and brand

9.2.4 Track Food Purchases and Price

The system can use the food item transaction data to determine the price by brand of food that participants are selecting. The system will update the prices in the food database so that future food obligations reflect recent price trends. This can help Vermont WIC in forecasting food cost trends and identifying the brand of food items that are most frequently redeemed by participants. These data could also assist Vermont WIC in pursuing rebates for these foods based on the WIC market share of sales.

Input:

- Food Benefit Household Account Redemption Value
- Food Item Category Code
- Food Item Subcategory Code
- Food UPC/PLU Code
- Food UPC/PLU Vendor Specific UPC Average Price (by peer group and individual vendor)
- Vendor Identification Number

Process:

- 9.2.4.1 Retrieve Vendor Transaction Detail File
- 9.2.4.2 Sort foods purchased by UPC and price and average for all vendors to determine the respective prices for different brands of food
- 9.2.4.3 Sort foods purchased by food category/subcategory and price and average for all vendors to determine the respective prices for different types of food (e.g., Milk, Juice)

Output:

- 9.2.4.4 Food purchase price report

9.3 Conduct Food Benefit Payment, Settlement and Reconciliation Reporting

Food benefit payment, settlement and reconciliation reports will provide data on payments to vendors, the status and value of food redemptions and array redemption values by vendor and by food or food benefit type. The data are critical for both expenditure management and vendor monitoring. All reports will be available as screen displays, files, or printed reports.

9.3.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu.

The specific standard reports required for Benefit Redemption, Settlement, and

Reconciliation varies between the paper and EBT systems. The reports will be available by size, geographic location, size of store, *etc.*, in order to provide the most information for food authorization decisions.

The following reports will be available:

- 9.3.1.1 Balance Inquiries – This report provides data on the number of balance inquiries. It can be broken out by participant, Local Agency and/or vendor
- 9.3.1.2 Voided Transactions Report by Vendor – This report provides a listing of voided transactions
- 9.3.1.3 Foods Purchased – This report lists the foods purchased by brand, type, quantity and price and is useful for overall assessment of food purchasing trends and cost containment analysis
- 9.3.1.4 Foods Purchased by Household – This report shows the number of families/households that selected particular foods
- 9.3.1.5 Infant Formula Purchases – This report lists all infant formula purchased by type, form, and quantity. A subset could array the same data for special formulas or non-contract formula along with the price and reason for issuance
- 9.3.1.6 Redemption Value by Issue Month – This report provides the outstanding estimated redemption values and actual redemption value by month of issuance for all household food benefits
- 9.3.1.7 Summary Household of Food Redemptions by Vendor – This report provides the value of food benefits redemption broken out by vendor
- 9.3.1.8 Summary of foods not purchased for the last 6 months-This report provides a list of UPCs that have not been purchased by WIC households in the last 6 months and helps to determine which foods to remove from the authorized food list
- 9.3.1.9 Summary of households not redeeming at least 50% of their monthly benefits issued-This report would be used to show which households are underutilizing their WIC benefits and could be used as an education tool during certification or benefits pick up and also may indicate the need to tailor the participant's food package

9.3.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be "report by Local Agency" and a "date range".

The following are a few examples of the types of Ad hoc queries that may be needed within the Benefit Redemption, Settlement, and Reconciliation function:

- Food Price Comparisons By Vendor
- Local Agencies With High Food benefit Void Rates
- Purchasing Trends Of Particular Brands By Time Period
- Rejection Rates For Specific Vendors By Time Period

9.3.3 *Maintain Data Warehouse*

The most complex level of reporting requires synthesis of data from multiple systems over extended periods of time. The requestor is often attempting sophisticated research to identify trends in data over historical periods. Examples of the use of the data warehouse in the Benefit Redemption, Settlement, and Reconciliation functional area are:

- Impact Of Nutrition Education And Food Purchase Trends On Dietary Assessments
- Impact Of Participant Characteristics And Price On Food Choices
- Patterns Of Food Benefit Rejections In The Vendor Community
- Trends In Food Prices Over Different Time Periods And Across Types Of Vendors

10. MIS Financial Management

The Financial Management functional area provides Vermont WIC with a tool for managing food and Nutrition Services and Administration (NSA) grants and expenditures. It allows Vermont WIC to manage budget information, track expenditures, calculate rebates due from manufacturers on approved products (*i.e.*, infant formula), monitor actual cash flows and prepare participation and expenditure reports for FNS from data compiled under several other functions.

These data also allow WIC managers to perform more sophisticated analyses of projected WIC Program funds usage. The WIC MIS system will allow either manual data entry of summary information, or the importing or exporting of data to and from the Vermont state accounting system (VISION) that could involve different file formats as needed to minimize duplication of effort. The functionality described below for obtaining data required for financial management analysis may occur in the WIC system or an alternative system.

Financial Management is made up of the following functions:

- Manage Grants and Budgets
 - Track NSA and Food Grants
 - Maintain State Agency Budget Information
 - Maintain and Transmit Local Agency Budget Information
- Monitor Program Expenditures
 - Monitor NSA Expenditures
 - Monitor Food Expenditures
 - Perform Financial Modeling
 - Manage Cash Flow
- Process Manufacturer Rebates
 - Estimate Total Annual Rebates
 - Assess Rebates
 - Assess Rebate Alternatives
 - Monitor Rebate Collections
- Conduct Financial Management Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse

10.1 Manage Grants and Budgets

Vermont WIC receives separate but related Federal grants for food and NSA expenditures each federal fiscal year. Food grants are primarily used to purchase supplemental foods but may also be used to rent or purchase breast pumps. The cost of supplemental foods in a retail

food delivery system equals the net amount paid out for food items redeemed by WIC participants to authorized vendors for approved foods. The net amount is the gross amount paid for the shelf prices of foods minus offsetting rebates and vendor collections. NSA funds are used for participant services, breastfeeding, nutrition education, and program operation and administration. Funds are allocated to states at the beginning of each fiscal year, and periodically adjusted through recovery and reallocation of funds. If state agencies receive a state appropriation for food or NSA costs they must account for these funds separately. For FNS reporting purposes, states must account for their federal funds on a federal fiscal year; however, their states may also require accounting for them by state fiscal year if this is different. States also receive program income from non-governmental sources such as grants or Civil Money Penalties (CMPs) from vendors. The WIC system must track Federal and State WIC funding allocations and food package costs to determine the maximum State caseload and allocate Local Agency caseload. Federal law and regulation provide several rules that must be incorporated into the financial management component of a WIC system. These include Back Spend Authority (supporting prior year over expenditures with current year funds); Breastfeeding Support and Promotion Spending Requirements; Conversion of Grant Funds (from NSA funds to food costs and from food funds to NSA under certain conditions); Food and NSA Expenditure Performance Standards; Nutrition Education Spending Requirement; Reporting of Program Income; Spend Forward Authority; and Reporting of Vendor/Participant Collections.

10.1.1 *Track NSA and Food Grants*

The system will record the FNS food and NSA grants, State appropriations and other grants that are allocated for that Federal fiscal year. Since the NSA and food grant amounts change over the course of the year, the system must update food and NSA grants and use the new information to recalculate and reallocate caseload levels at the State level and across Local Agencies. The system will maintain a current balance of funding levels in both grant categories and federal/state allocations throughout the year.

Input:

- Adjusted Available Food Funds
- Adjusted Available NSA Funds
- Backspend Food Funds
- Backspend NSA Funds
- Beginning Grant Date
- Ending grant date
- Converted Food Funds from vendor collections
- Converted NSA Funds from vendor collections
- Operational Adjustment Funds
- Ending Food Grant
- Estimated and Actual Monthly and Annual Rebate
- Estimated Conversion from Food to NSA Based on Caseload
- Estimated Other Credits
- State Funded Food Grant
- State Funded NSA Grant
- Estimated Vendor Collections
- Federal Fiscal Year
- Food Reallocations
- Letter of Credit Number

Medicaid Reimbursements
NSA Reallocations
Original Federal Food Grant
Other Adjustments
Other Credits
Other Grant Income
Other Program Income
Participant Collections
Program Income
Report Type Code
Report Type Description
FPRS (Federal Program Reporting System) Code
Spend Forward NSA Funds
Spend forward food funds
State DUNS number
State Agency Identification Number
State Fiscal Year
Local Agency Fiscal Year
Grant Period – special grants begin and end dates (not calculated in 798)
State Food Grant FFY
State Food Grant SFY1
State Food Grant SFY2
State Name
State NSA Grant FFY State NSA Grant SFY1
State NSA Grant SFY2
Total Available Food Funds
Total Available NSA Funds
Total Available Revenues
Unspent Food Funds
Unspent NSA Funds
Vendor Collections
Vendor Postpayment Collections
Vendor Prepayment Collections

Process:

- 10.1.1.1 Accept user input of Federal and State grant funding information
- 10.1.1.2 Adjust the State grant to correspond to Federal fiscal year funding
- 10.1.1.3 Calculate total available Federal and state food funds
- 10.1.1.4 Calculate total available Federal and State NSA funds
- 10.1.1.5 Update Grant data store
- 10.1.1.6 Calculate grant amounts on alternative fiscal years i.e., adjust federal grant to state fiscal year or Local Agency fiscal year

Output:

- 10.1.1.7 Screen display or report of Food and NSA Grants Status

10.1.2 Maintain State Agency Budget Information

Vermont WIC budget is comprised of both food grant funds and NSA grant funds. The food budget is the total federal and state food funds available. The NSA budget is the total federal and state budget funds available.

The NSA budget function will be flexible enough to allow Vermont WIC to establish the line items or cost centers that will comprise Vermont WIC budget. Expenditure information to be applied to the budget will likely come from Vermont's accounting system. While Vermont systems can be used to monitor NSA expenditures, it is necessary for the WIC system to capture at least summary NSA expenditures in order to create the monthly FNS-798 report. The system will provide, at a minimum, a data entry screen to allow manual entry of summary expenditures to be applied against the budget. The system may also provide an import function to allow expenditure data from other systems to be imported into the WIC system.

The system will provide the ability to retrieve and view State Agency grant and budget data and Local Agency budget information on-line. The system must allow users to update grant data and budget estimates at any time as funding levels change. The system will generate a copy of the NSA budget and related expenditures upon request.

Input:

Grant Estimated Breast Pump Costs
Grant Federal Fiscal Year
Grant Total Available Food Funds
Grant Total Available NSA Funds
Other Available Administrative Funds (allow multiple entries for other grants, refunds, etc.)
NSA Budget Beginning Grant Date (System could default to federal fiscal year start and end dates.)
NSA Budget Ending Grant Date
NSA Budget Beginning Report Date
NSA Budget Ending Report Date
NSA Budget Breast Pump
Food Budget Breast Pump
NSA Budget Breastfeeding Spending Target (This could be calculated and updated monthly based on participation by pregnant and postpartum women)
NSA State Specified Budget Category (line item or cost center) Screen
NSA Budget for Participant Services
NSA Budget for Breastfeeding Promotion and Support
NSA Budget for Nutrition Education
NSA Budget for General Administration
NSA Budget Federal Fiscal Year
Total Local NSA Budgets
NSA Budget Nutrition Education Spending Target
NSA Budget Program Income Received
Administrative Grant per Participant (AGP) FNS assigned

Process:

- 10.1.2.1 Calculate adjusted total available Federal and State funds for Food
- 10.1.2.2 Calculate adjusted total available Federal and State funds for NSA
- 10.1.2.3 Calculate total NSA budget for Local Agencies
- 10.1.2.4 Calculate total NSA budget for Vermont WIC

- 10.1.2.5 Update Grant and NSA Budget data stores
- 10.1.2.6 Calculate and project penalties based on spending and performance standards.
- Output:**
- 10.1.2.7 Screen display or report of State Budget for Food and NSA
- 10.1.2.8 Screen display or report of Food and NSA Grants Status
- 10.1.2.9 Screen display or report for Functional NSA Categories (Nutr. Ed, BFP, clinic admin)

10.1.3 Maintain and Transmit Local Agency Budget Information

Food funds are monitored at the state level only; caseloads are allocated to Local Agencies and are covered in the Caseload Management section of the Vermont FReD (section II).

The system must allow Vermont WIC to define the level of detail regarding Local Agency budgets that will be entered. This may range from individual line items to a single total. The system must allow recording of local expenditures at the same level of detail as the budget. The system will allow Vermont WIC to generate a copy of the budget information for Local Agencies on request.

Input:

- Local Agency Identification Number
- Special purpose grants – budgets, begin date and end date
- NSA Budget Beginning Grant Date (System will default to beginning and ending of federal fiscal years)
- NSA Budget Ending Grant Date
- NSA Budget Beginning Report Date
- NSA Budget Ending Report Date
- NSA Budget Breast Pump
- NSA Budget Breastfeeding Spending Target
- NSA Budget for Participant Services
- NSA Budget for Breastfeeding Promotion and Support
- NSA Budget for Nutrition Education
- NSA Budget for Program Administration
- Local NSA Budget- Total
- Local NSA Budget by State Specified Category Input Screen
- NSA Budget Program Income Received

Process:

- 10.1.3.1 Record budget information for each Local Agency and update NSA data store
- 10.1.3.2 Transmit NSA budget allocations to Local Agencies

Output:

- 10.1.3.3 Screen display or report of Local Agency Budgets by Budget Category

10.2 Monitor Program Expenditures

The system will accept import of daily files of food redemptions from a fiscal intermediary and compare monthly and year to date costs with the amounts budgeted. It will also allow data

entry or import of NSA expenditures from Vermont's accounting system.

A major task under the Financial Management function is to create the monthly WIC Financial Management and Participation Report (FNS-798). For closeout, Vermont WIC must report its spending option elections (spendforward/backspend) and also provide a report on categories of NSA expenditures for the FNS-798 report.

10.2.1 Monitor NSA Expenditures

The system must allow recording of State and Local Agency NSA expenditures against the amounts budgeted in the same level of detail identified for the budget. The system must allow for manual entry of this information or provide the ability to import data from Vermont's accounting system. The system must maintain data for Federal reporting purposes on total NSA outlays per month and the year to date, and any unliquidated obligations. For the annual closeout report, Vermont WIC must report NSA expenditures by State and local levels for the following categories: Program Management, Nutrition Education, Breastfeeding, and Participant Services.

Input:

Local Agency Identification Number
NSA Outlays by State Specified Category
Program Income Expended
Total Unliquidated NSA Obligations
NSA Outlays Beginning Grant Date
NSA Outlays Ending Grant Date
NSA Outlays Beginning Report Date
NSA Outlays Ending Report Date
NSA Outlays for Participant Services
NSA Outlays for Breastfeeding Promotion and Support
NSA Outlays for Nutrition Education
NSA Outlays for Program Management
NSA Outlay Date
NSA Outlay Federal Fiscal Year
NSA Outlay Program Income
Outlay for special purpose grants, begin date and end date

Process:

- 10.2.1.1 Calculate actual NSA Outlays from State and Local Agency expenditure reports
- 10.2.1.2 Allow entry of total Unliquidated NSA Obligations for upcoming months
- 10.2.1.3 Update Outlays to date in the NSA data store
- 10.2.1.4 Compare Outlays as a proportion of the budget amounts for each category
- 10.2.1.5 Calculate expenditure trends and projections and compare to budget
- 10.2.1.6 Calculate AEP

Output:

- 10.2.1.7 Screen display or exportable file showing NSA Outlays by month (and total Outlays/Unliquidated obligations) Compared to Budget
- 10.2.1.8 Screen display or exportable file showing NSA Outlays (and total Outlays/Unliquidated obligations) for year to date (populating appropriate

fields, as listed in the data dictionary) Compared to Budget

10.2.1.9 Screen or print expenditure trends and projections compared to budget.

10.2.2 Monitor Food Outlays

Vermont WIC must maintain records of its estimated food obligations for current and future months as well as actual outlays for current and past months. These data are collected and compiled from various functions and data stores. When food benefits are issued to a participant, an estimated food redemption value, or obligation, is recorded for each food issued. The obligation is calculated based on food price redemption data maintained in the system and an historical non-redemption rate. As the system processes files of redeemed food items, the obligated value of each outstanding food item is replaced with the actual paid value of that item.

The total of all food benefit payments and outstanding obligations is calculated by month of issuance to project the expenditures for a month. The system also estimates obligations for future months using food obligation estimates prepared under the Financial Modeling function. These data are used for Federal reporting and to help Vermont WIC estimate future costs to stay within the grant.

Once all food benefits for an issue month are paid or otherwise accounted for, the issue month is closed out.

The system must also subtract from the food obligations all outstanding rebate invoice amounts and rebates received, vendor collections, participant collections, program income collected, and other credits used to fund food costs. All of the data are used to report to FNS on the FNS-798.

For EBT systems, the Food Benefit Household Account data store maintains an ongoing balance of obligations and outlays by food category and item that is updated each time a transaction occurs. This will also be reflected as a dollar amount.

Input:

Future Obligation Date
Future Obligation Federal Participation Estimate
Future obligation state participation estimated
Future Obligation Food by Month
Future Obligation Food Inflation Factor
Future Obligation Food Package Cost Estimate
Obligation Breast Pump Costs
Obligation Date of Current Obligation
Obligation Net Obligation (post rebate as on the 798)
Obligation Program Income Received
Obligation Total Estimated Obligation
Obligation Total Estimated Other Credits
Obligation Total Estimated Participant Collections
Obligation Total Estimated Rebates
Obligation Total Estimated Vendor Collections
Obligation Total Redemption Value per Month
Obligated Not Redeemed Rate
Obligation Value per Month
Outlay Breast Pump Costs
Outlay Date
Outlay Net Federal Outlay

Outlay Participant Collections Received
Outlay Program Income Received
Outlay Total Other Credits Received
Outlay Total Rebates Billed
Outlay Total Redemption Value per Month
Outlay Vendor Collections Received

Process:

EBT System – Obligations

- 10.2.2.1 Retrieve the estimate of future month food obligations from the Future Months Obligations data store
- 10.2.2.2 Retrieve the estimate of gross food obligations for the report month, and past months that are not closed out, from the monthly estimated redemption value of food for each household in the Food Benefit Household Account data store
- 10.2.2.3 Add any estimates for breast pump costs
- 10.2.2.4 Subtract any vendor or participant collections, other credits, and program income and the estimated obligation amount Vermont WIC expects to use from obligations
- 10.2.2.5 Retrieve estimated rebates from the Rebate data store
- 10.2.2.6 Calculate net obligations by subtracting the estimated rebates from the gross food obligation (Note: The system will revise net obligations each month as actual outlay data are received)
- 10.2.2.7 Calculate non redemption rate

EBT System – Outlays

- 10.2.2.8 Retrieve actual food outlays from the Food Benefit Household Account data store by food category, subcategory and UPC
- 10.2.2.9 Subtract any vendor or participant collections, other credits, and program income needed to fund food outlays for the month
- 10.2.2.10 Add any food fund expenditures for breast pump costs
- 10.2.2.11 Retrieve total value of rebates billed from the Rebate data store
- 10.2.2.12 Calculate net federal outlays by subtracting the rebates billed from actual outlays to arrive at the net federal outlays for each issue month

Output:

- 10.2.2.13 Screen display or report of Federal Food Obligations and Outlays
- 10.2.2.14 Screen display or report of Federal Food Obligations and Outlays Compared to the Budget

10.2.3 Perform Financial Modeling

The system will include a financial modeling function to assist Vermont WIC in managing the WIC food grant and NSA grant to spend as close to 100 percent as possible. The function will incorporate the rules in the federal regulations regarding backspend and spendforward authority, the 97% performance standard, and conversion. It will allow Vermont WIC to adjust the model to reflect changes in federal funding levels, inflation rate, or other anticipated changes in food costs, NSA costs, *etc.* The modeling function must have a high degree of flexibility to accommodate multiple accounting systems including a data export. The financial modeling function will estimate the future caseload and associated financial obligations for the remainder of the federal fiscal year that can be supported with the available funds, based on historical records of food package costs by category and the other factors such as inflation and rebates listed above. Each month, as new redemption information is available, the system will update the average cost of each food package and the average cost for each participant category. In EBT the system will update average food costs by category, subcategory and UPC monthly and/or on demand. Calculations of average costs will be based on full retail shelf prices paid. The model will then factor in rebates received and outstanding rebate invoices to determine the net federal obligation.

Estimated obligations for future months will be calculated by state determined methods such as:

- The number of expected participants in each category (*e.g.*, pregnant women, infants, *etc.*) multiplied by the corresponding category's average food package cost.
- The number of expected redemptions by food multiplied by the average value per food
- Redemption/Non-redemptions by category, sub category and individual UPC.

The system will also allow Vermont WIC to prepare "what-if" scenarios, to illustrate the effect of changes in participation, rebates, or food costs. The modeling function will allow Vermont WIC to change variables such as food package costs, participation trends, and inflation projections to show the affect on future expenditures. The modeling function will show a comparison between predicted food costs and the FNS grant levels and between estimated participation and the participation levels used in the federal funding formula. It will show whether the state would potentially be eligible to exercise conversion authority and use food funds to covert to NSA funds.

Input:

For "what if" financial modeling, various parameters can be input to see the impact of the parameter on the projected outcome. These parameters include:

Food Inflation Factor

Food Package Cost Estimate

Participation Estimate

Other Factors as Appropriate (inputs will vary for each model, for example, changes in rebate)

Food Item Costs

Process:

10.2.3.1 Use projected participation and food cost data to estimate future months' obligations and use non redemption rates

10.2.3.2 Calculate an estimate of future expenditures under various scenarios using

different food cost and/or participation variables

10.2.3.3 Save future obligations by month to the Future Months Obligation data store

Output:

10.2.3.4 Export to other applications i.e., Excel, 798 Report

10.2.3.5 Screen display or report of Estimated Future Obligations and Expenditures

10.2.4 Manage Cash Flow

The system will enable Vermont WIC to view the effect of actual NSA, food outlays, and special purpose grants outlays on the Agency's cash position at any given point in time. The system must record all cash inflows (draws against the federal Letter of Credit (LOC), rebates received, vendor recoveries, etc.) as well as cash outflows (food payments to vendors, payments from the NSA grant for state or Local Agency expenditures).

The system will provide advance warning of potential problems with significant cash shortfalls or excesses so that Vermont WIC may take appropriate action. Finally, when the fiscal year financial activity is closed out and reconciled, cash drawn from the Federal WIC grants must reconcile to Vermont WIC's reported expenditures.

In an EBT system, Vermont WIC may choose to have the processor make direct cash draws from the Federal letter of credit to pay vendors. The state will coordinate with the processor to suspend draws at such time as rebate funds are available.

Input:

Cash Flow as Of Date

Cash Flow Current Food Funds Available

Cash Flow Current NSA Funds Available

Cash Flow Current Food Expenditures

Cash Flow Current NSA Expenditures

Cash Flow Previous Food Balance

Cash Flow Previous NSA Balance

Process:

10.2.4.1 Calculate the total cash inflows by adding Federal grants, State grants, manufacturer rebates, program income and vendor/participant collections from the Grants data store

10.2.4.2 Calculate total cash outflows by adding vendor payments and NSA expenditures from the Outlays and NSA Expenditure data stores

10.2.4.3 Calculate the current cash balances for NSA and food funds by adding total cash inflows to the previous cash balance for each and subtracting the total cash outflow

10.2.4.4 Create alerts based on state set parameters to support letter of credit and cash management decisions

Output:

10.2.4.5 Screen display and exportable file of Cash Flows

10.3 Process Manufacturer Rebates

Use of EBT historical data of exact purchasing patterns non-redemption rates and projected infant caseloads are used to estimate future rebates.

10.3.1 Estimate Total Annual Rebates

The system will provide an estimate of future monthly and total annual rebates by maintaining information from the current rebate contract. For Example, rebates per can and comparing it with projections of the number of infants to be served in future months (from the caseload management function). In addition to the estimated number of infants, the functionality will take into account number of units per infant, percentage of infants that do not receive formula, historical percentage breakdown of formula sold by product type and form, rebate rate per product type and form, the expected number or percentage of infants that will receive non-contract formula, and the number that are solely breastfed. The system will include flexibility to enter new rebate contract information mid-year in the event a new contract is signed. The system must allow for changes in product size or product changes. The system must provide the ability to track multiple rebate contracts. In addition, the system must allow for multiple manufacturers.

Input:

Rebate Estimate Federal Fiscal Year
Rebate Estimate Number of Participants to Receive Type/Form
Rebate Estimate Product Type/Form Rate
Rebate Estimate Product/ Type Form Code
Rebate Estimate Quantity of Product Type/Form per Participant per Time Period
Rebate Estimate Rate for Contract 1
Rebate Estimate Rate for Contract 2
Rebate Manufacturer Address- City
Rebate Manufacturer Address- State
Rebate Manufacturer Address- 1
Rebate Manufacturer Address- 2
Rebate Manufacturer Address- Zip Code
Rebate Manufacturer Contact Name
Rebate Manufacturer Contact Telephone Number
Rebate Manufacturer Contract End Date
Rebate Manufacturer Contract Number
Rebate Manufacturer Contract Start Date
Rebate Manufacturer Email Address
Rebate Manufacturer Identification Number
Rebate Manufacturer Name

Process:

- 10.3.1.1 Capture information about Rebate manufacturer
- 10.3.1.2 Calculate the number of participants estimated to receive each type and form of formula or food item (For Formula, estimated infant participation less the number of infants receiving non-contract and exempt formula and fully breastfed)
- 10.3.1.3 Calculate the total number of units to be purchased by multiplying the estimated number of product per participant by type and form of food product

or infant formula.

- 10.3.1.4 Calculate the estimated total rebate by multiplying the rebate for each type by the estimated number of units for by type and form
 - 10.3.1.5 Calculate the total estimated rebate amount from the sum of the rebates for all of the individual types and form and store in the Rebate data store
 - 10.3.1.6 Calculate redemption rate for each type
- Output:**
- 10.3.1.7 Screen display or report on Projected Total Rebate for Each Type and Form

10.3.2 Assess Rebates

Rebate payments received must be compared to the corresponding invoices sent so that rebate payments can be recorded by the month of issue of the food benefit rather than the month of redemption.

The system will generate an itemized invoice that provides supporting detail, such as an extracted database, on the rebate calculations. The system must show the status of all invoices (e.g., outstanding, paid, adjusted and paid).

In an EBT system, the transaction data will provide the number of units by brand, type and form of infant formula purchased. The number of units purchased is multiplied by the rebate for that infant formula type and form to determine the rebate amount to be invoiced.

If other food items receive rebates, the system will use a process similar to the one used for infant formula to calculate these rebates.

Input:

Rebate Actual Average Redemption Price
Rebate Actual End Date
Rebate Actual Product Type/Form Code
Rebate Actual Product Type/Form Rate
Rebate Actual Redeemed Quantity
Rebate Actual Sale Identification Number (check number or PAN number)
Rebate Actual Start Date
Rebate Invoice Bill Amount
Rebate Invoice Identification Number
Rebate Invoice Total Items Purchased Quantity
Rebate Manufacturer Identification Number

Process:

For EBT System:

- 10.3.2.1 Retrieve the food item transaction data for infant formula or other rebated product from the Rebate data store and multiply the number of units purchased by the rebate rate for each type/form
- 10.3.2.2 Generate and print rebate invoice for the manufacturer

Output:

- 10.3.2.3 Data file extract for rebate billing
- 10.3.2.4 Screen display and exportable file on Rebate Amount for Each Product

10.3.2.5 Rebate Bill for Infant Formula Manufacturer or other Food Manufacturer

10.3.3 Monitor Rebate Collections

The system must track the invoicing and receipt of manufacturer rebates by recording the invoice dates and amounts when they are generated by the system and allowing for data entry of the payments received including their dates. The system must accommodate increases or decreases to the original rebate invoice amount that might arise due to subsequent adjustments.

Input:

Rebate Invoice Adjustment Reason Code
Rebate Invoice Amount Adjusted
Rebate Invoice Amount Collected
Rebate Invoice Bill Amount
Rebate Invoice Identification Number

Process:

- 10.3.3.1 As rebate payments are received, enter the amount collected
- 10.3.3.2 Enter any adjustments made and the reason code and update Rebate data store (for check system need to link to month of issuance)

Output:

- 10.3.3.3 Screen display and report of Rebate Status

10.4 Conduct Financial Management Reporting

The system must generate the monthly WIC Financial Management and Participation Report (FNS-798). This report provides information monthly on projected and actual participation, projected and actual food and NSA obligations and outlays, rebates, program income, post-payment vendor and participant collections, and amounts and sources of funds available to cover projected and actual expenditures. The final monthly report is also Vermont WIC's annual closeout report and reflects Vermont WIC's current year spending options and use of funds from the prior or subsequent fiscal years.

The system will have the capability of producing an exportable file and an electronic version in Excel format. The hard copy is used to enter information into the SNPIIS On-Line Data Entry System for submission to the central FNS data system.

The system must also generate other standard federal reports to assist in funds management for Vermont WIC, *i.e.*, 269,424 and other state designated reports.

10.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. Standard reports are requested through a report menu and can be displayed on screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. The following standard financial management reports will be provided by the system:

- 10.4.1.1 WIC Financial Management and Participation Report (FNS 798) – This report reflects monthly food and NSA funds and costs, as well as the status of food and NSA grants as Vermont WIC exercises spending options. The closeout FNS-798 records the final status of Vermont WIC’s WIC grant and costs for the report year
- 10.4.1.2 Addendum to WIC Financial Management and Participation Report (FNS-798A) – The FNS-798A report provides a breakout of total fiscal year NSA expenditures by category—Nutrition Education, Breastfeeding, Participant Services and Program Management

The following reports will also be available on request for State Agency management.

- 10.4.1.3 Breast Pump Budget and Expenditures – This report provides data on each Local Agency’s breast pump expenditures and compare expenditures to their budget
- 10.4.1.4 Cash Flow – This report shows cash inflows and outflows on a daily basis
- 10.4.1.5 Local Agency NSA Expenditures – This report provides data on each Local Agency’s expenditures and compares expenditures to their budget including the ability to print or electronically send invoice to state
- 10.4.1.6 NSA Budget by Local Agency – This report provides the local level NSA budgets by function and line item
- 10.4.1.7 Rebate Status – This report provides data on rebate estimates, rebates billed and rebates collected
- 10.4.1.8 State Agency NSA Budget – This report provides the State level NSA budget by function and line item
- 10.4.1.9 Summary of Food Expenditures – This report provides data on total obligations and outlays for the year to date, broken out by month of issuance
- 10.4.1.10 Summary of Funds Receipts – This report provides data on the receipt and use of program income, vendor and participant collections and any other funds that increase the grant or reduce expenditures
- 10.4.1.11 Summary of Grants – This report provides data on the Federal (and State if applicable) grants received for the year to date as well as spendforward or spendback funds applied to the grant. Include all special purpose grants with varying grant periods

10.4.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

An example of a desired report would be the current and historical food redemption by PAN broken out by food category, sub-category and UPC and sorted by state defined

thresholds to support individual Household food purchasing patterns used in nutrition counseling. The system will show the report and link to Household members. The system will enable users to generate Ad hoc reports such as the following:

- 10.4.2.1 Comparison of daily cash flows with expenditures
- 10.4.2.2 Comparison of Local Agency expenditures for budget line items such as salaries
- 10.4.2.3 Per participant cost for budget line items or functions (e.g., nutrition education)
- 10.4.2.4 Financial modeling reports with “what-if” assumptions

10.4.3 *Maintain Data Warehouse*

Data on budgeted and actual expenses, rebates, and food item price data will be combined with participant demographic, nutritional education, health surveillance, and dietary assessment data to enable cost benefit analyses and performance outcome measurement. Financial data will be used in conjunction with no-show, participation, and other participant service data to perform “what if” analysis for enhanced caseload management.

Examples of possible data warehouse inquiries include:

- 10.4.3.1 Cost effectiveness of increasing staff time spent on nutrition education to improve health outcome
- 10.4.3.2 Cost effectiveness of specific food items for encouraging proper weight gain over time

11. MIS Caseload Management

The Caseload Management functional area is intended to support the tracking and analysis of participation in the WIC Program. It collects and stores information on caseload allocation to Local Agencies, monitors participation against assigned caseloads, and conducts caseload reallocations.

Caseload Management is comprised of the following functions:

- Capture and Maintain Caseload Data
 - Capture Data on Potential Eligible Population
 - Capture Historical Participation Data
- Allocate Caseload
 - Determine Maximum State Caseload
 - Prepare Local Agency Caseload Allocation Estimates
 - Record Caseload Allocation
 - Transmit Caseload Allocation Data to Local Agencies
- Monitor Caseload
 - Track Actual Participation
 - Conduct Caseload Reallocations
- Conduct Caseload Management Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse
 -

11.1 Capture and Maintain Caseload Data

Vermont WIC will enter data on the potential eligible population by Local Agency area, and the system will maintain historical data on actual participation trends.

11.1.1 *Capture Data on Potential Eligible Population*

The system will provide a data entry screen and import capability for Vermont WIC to enter data from multiple sources on the potentially eligible WIC population in each Local Agency area and the statewide participation level that can be supported with the current year's grant funds and rebates.

Input:

Caseload-Local Agency Potential Eligible Participation (state defined)
Caseload-State Agency Participation Estimate
Caseload-State Wide Potential Eligible Participants

Process:

- 11.1.1.1 Add, update, or delete potential eligibles data
- 11.1.1.2 Update the Caseload – State Agency and Caseload – Local Agency data stores

Output:

- 11.1.1.3 Screen display or report of potential eligible data

11.1.2 *Capture Historical Participation Data*

The system will maintain data on each Local Agency's prior year caseload allocations, actual participation levels by participant category (pregnant, breastfeeding, postpartum, infant and child), priority levels served, number of applicants on waiting lists, participation by racial/ethnic category, and number of migrant participants.

Input:

Participant Local Agency and Clinic
Participant Category Code
Participant Priority Level Code
Participant Residential Status Code
Participant Status Code (*i.e.*, migrant, homeless, foster children.)
Participation Actual
Participation Month
Participation Projected

Process:

- 11.1.2.1 Retrieve participation data for each Local Agency from the Caseload- Local Agency and Participation data stores
 - Prior Year Caseload Level
 - Participation by Participant Category
 - Waiting List Applicants
 - Participation by Priority Level
 - Local Agency Migrant Participation
 - Participation by Location
- 11.1.2.2 Update the Caseload- Local Agency data store

Output:

11.1.2.3 Screen or report of Local Agency participation profile

11.2 Allocate Caseload

The Financial Modeling function assists Vermont WIC in determining the total caseload that can be allocated to Local Agencies based on expenditure and cost projection data. Caseload levels are assigned by the state office through the caseload management function based on greatest unmet need in the eligible population and the capacity of each Local Agency to serve its assigned caseload. Appropriate caseload must be allocated to expend as close to 100 percent of grant funds as possible without overspending.

The system must allow Vermont WIC to reallocate caseload during the year as a result of changes in funding levels or food package cost, or to recognize differences in performance between agencies.

11.2.1 Determine Maximum Statewide Caseload

The system will calculate the maximum number of participants the State can serve on a monthly basis but allow Vermont WIC to override the estimate and allocate additional caseload. The system will allow planned fluctuations in month-to-month participation due to factors such as seasonal presence of migrant participants. The system will store the total allocated statewide caseload for each month in the Federal fiscal year along with the estimate of projected participation from the FNS funding formula tables. If the actual participation exceeds the FNS estimate, Vermont WIC may elect to convert food funds to NSA funds at the rate specified for that fiscal year.

Input:

Caseload- Statewide Caseload Achievement Rate
Caseload- Statewide Caseload Growth or Reduction Rate
Caseload- State Month
Caseload- Statewide Total Monthly Caseload

Process:

- 11.2.1.1 Adjust monthly statewide caseload with any caseload achievement rate factor
- 11.2.1.2 Adjust monthly caseload to allow for participation levels fluctuations and/or targeted growth or reduction rates
- 11.2.1.3 Store maximum statewide caseload level by month in Caseload-State Agency data store

Output:

- 11.2.1.4 Screen or report showing monthly state caseload target

11.2.2 Prepare Local Agency Caseload Allocation Estimates

After the maximum monthly statewide caseload is determined, the system will calculate an initial allocation of caseload among the Local Agencies based on a state approved method that factors in, at a minimum, current participation levels compared to eligible population. Other factors that may be included in the algorithm include no-show and redemption rates, prior year caseload target achievement, expected migrant participation, Commodity Supplemental Food Program (CSFP) operations in the WIC service area, and

waiting lists for each Local Agency.

The system will allow Vermont WIC to override and adjust the allocations between Local Agencies. If funding or food package costs change or are anticipated to change during the year, the system must be able to update the statewide caseload allocation and the allocation among agencies.

Input:

Caseload-Local Agency Caseload Achievement Rate
Caseload-Local Agency Caseload Growth or Reduction Rate
Caseload-Local Agency Monthly Caseload Assignment
Caseload-Local Agency Prior Year Caseload Level
Caseload-Local Agency Total Actual Local Agency Monthly Participation Over Time
Caseload-State Agency Total Monthly Caseload over Time
Caseload Allocation Parameters (to use “what if” capability)

Process:

- 11.2.2.1 Retrieve data from the Caseload-Statewide and Caseload-Local Agency data stores
- 11.2.2.2 Apportion caseload among Local Agencies according to the state approved method
- 11.2.2.3 Provide “what if” analysis capability to demonstrate the impact on caseload allocation by changing the caseload allocation parameters
- 11.2.2.4 Accept manual override and adjustment of initial allocations by agency, ensuring that the new total does not exceed the statewide allocation

Output:

- 11.2.2.5 Screen display or report showing proposed caseload allocation by Local Agency

11.2.3 Record, Store, and Transmit Caseload Allocations

Once the allocation among Local Agencies is final and approved by Vermont WIC, the system will store the caseload allocation data, either as recommended by the system, or as manually adjusted by Vermont WIC. This information will then become available for viewing on screen by Local Agencies and will be available in a table that can be sent electronically to Local Agencies.

Inputs:

Caseload – Local Agency Month
Caseload – Local Agency Monthly Caseload Assignment
Clinic Identification Number
Local Agency Identification Number
Clinic Monthly Caseload Assigned by Local Agency

Process:

- 11.2.3.1 Collect and store Local Agency caseload allocation in Caseload-Local Agency data store
- 11.2.3.2 Compare sum of Local Agency caseload allocations to maximum state allocation

- 11.2.3.3 Update Caseload – Local Agency data store with monthly caseload assignment
- 11.2.3.4 Retrieve Caseload Assignment from Caseload – Local Agency data store
- 11.2.3.5 Generate Caseload Allocation Transmission File, Caseload Allocation Report

Output:

- 11.2.3.6 Screen or report of caseload by Local Agency
- 11.2.3.7 Caseload allocation transmission file
- 11.2.3.8 Caseload allocation report
- 11.2.3.9 Caseload allocation notice

11.3 Monitor Caseload

The system must track actual participation levels compared to assigned caseload levels at both the State and Local Agency.

11.3.1 Track Actual Participation

The system will support this function by retrieving assigned caseload data and comparing it to actual participation data on a month-by-month and year to date basis. The system will flag Local Agencies that fail to meet or exceed their assigned monthly and year to date caseloads by significant percentages. The system will alert the State or Local Agency as Local Agencies approach predetermined caseload levels. The system will also provide information on key trends that may affect Vermont WIC's decision to perform caseload reallocations among Local Agencies, including increases or decreases in no-show and non-redemption rates or exceeding target participation for particular participant categories.

Input:

- Caseload- Local Agency Caseload Authorized level
- Caseload- Local Agency Caseload Growth or Reduction Rate
- Caseload- Local Agency Total Actual Local Agency Monthly Participation

Process:

The following analyses may be made for each Local Agency.

- 11.3.1.1 Calculate caseload achievement rate (authorized divided by actual) and current rate of change (from previous months) in caseload achievement rate
- 11.3.1.2 Store in Caseload-Local Agency data store
- 11.3.1.3 Update Participation data store

Output:

- 11.3.1.4 Screen display or report on Local Agency caseload utilization current and over time

11.3.2 Conduct Caseload Reallocations

If Vermont WIC determines that caseloads need to be increased, decreased, or simply

reallocated among Local Agencies, the system will allow Vermont WIC to initiate the caseload allocation function described in a preceding section.

Input:

Caseload-Local Agency Month
Caseload-Local Agency Monthly Caseload Assignment
Clinic Identification Number
Local Agency Identification Number
Participation Actual
Participation Month

Process:

- 11.3.2.1 Monitor participation, food costs and expenditure patterns for significant changes from the original data used to allocate caseload
- 11.3.2.2 Accept Input the necessary updated data and recalculate caseload allocations if substantial changes have occurred
- 11.3.2.3 Collect and store Local Agency caseload allocation in Caseload-Local Agency data store
- 11.3.2.4 Compare sum of Local Agency caseload allocations to maximum state allocation
- 11.3.2.5 Update Caseload – Local Agency data store with monthly caseload assignment
- 11.3.2.6 Calculate average monthly migrant participation and display on FNS 798 report

Output:

- 11.3.2.7 Screen display or report with updated caseload allocations

11.4 Conduct Caseload Management Reporting

The system will produce reports for FNS reporting requirements and for State and Local Agency internal use in managing caseload.

11.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. The system will produce standard reports with pre-defined data sets in a consistent format that can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. The system will allow users to enter data selection or sort parameters to limit the scope of data included in the report or define the method of presenting the data. Standard caseload management reports include the following:

- 11.4.1.1 Caseload by Local Agency – This report shows caseload by Local Agency
- 11.4.1.2 Local Agency Caseload Utilization – This report shows caseload,

participation, and percent of caseload reached. (In both table and graphic form)

- 11.4.1.3 Local Agency Participation Profile – This report shows each Local Agency's participation characteristics
- 11.4.1.4 Monthly State Caseload Target – This report shows the caseload target and the assumptions used to arrive at the caseload level
- 11.4.1.5 Potential Eligibles Data – This report displays the potential eligibles for Vermont WIC and by Local Agency

11.4.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be "report by Local Agency" and a "date range".

The system will enable the state staff to produce Ad hoc reports that focus on particular Local Agency participation patterns such as:

- Caseload growth rate in relation to potential eligibles reached
- Participation by category/priority and respective growth rate
- Participation patterns at particular months

11.4.3 *Maintain Data Warehouse*

The data warehouse is used in the Caseload Management functional area to look at historic trends in participation, food costs, and Local Agency caseload achievement rate. Monthly Federal and State funded caseload, caseload achievement rate, and caseload growth rate data from the Caseload – Local Agency and Caseload – State Agency data stores will be incorporated into the data warehouse.

Examples of Caseload Management data warehouse queries include:

- 11.4.3.1 Caseload Achievement by Local Agencies over time
- 11.4.3.2 Comparison of Local Agency caseload and health and dietary assessment outcomes
- 11.4.3.3 Multiple year caseload and funding history and trends by federal fiscal year or state fiscal year or local year, including Local Agency detail and summary

12. **Operations Management**

The Operations Management functional area provides general support to WIC Local Agencies and clinics for a variety of activities and provides program management support for Vermont WIC. It automates administrative tasks and reports such as inventory control for serialized and non-serialized items; captures contact information and statistics for Local Agencies and clinics for use in conducting outreach activities; provides customer service support and tracks WIC participant satisfaction with program services; and provides data to help Vermont WIC assess participant and Local Agency integrity.

- Monitor Administrative Operations
 - Maintain Information on Local Agencies and Clinics

- Track Staff Time Allocation
- Manage Participant Outreach
 - Maintain Outreach List for Local Agencies
 - Track Outreach Campaign Activities
- Monitor Customer Service for Participants, Vendors and Providers
 - Receive and Route WIC Customer Service Calls
 - Track Call Outcomes
- Provide Survey Capability
 - Monitor Participants' Views of WIC Program Services
- Maintain Inventory
 - Maintain Inventory of Serialized Items
 - Maintain Inventory of Non-Serialized Items
- Monitor Program Integrity
 - Monitor Participant Integrity
 - Monitor Local Agency Integrity
 - Track Administrative Hearings
- Conduct Operations Management Reporting
 - General Standard Reports
 - Generate Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse

12.1 Monitor Administrative Operations

The system will provide information about caseload demographics and participant flow at each Local Agency, including the total number of education classes given, number of participants certified, and the number of benefits issued during each month.

12.1.1 Maintain Information on Local Agencies and Clinics

The system will maintain basic data on each Local Agency for use in evaluating Local Agency performance. For Local Agencies that operate several clinics, the data is further defined by clinic. The system uses this data to generate mailing lists, productivity reports, infrastructure assessments and clinic efficiency reports.

Input:

Local Agency

Local Agency Address- 1
 Local Agency Address- 2
 Local Agency Address- County
 Local Agency Address- City
 Local Agency Address- State
 Local Agency Address- Zip Code
 Local Agency Contact Name
 Local Agency Contact Title
 Local Agency Email Address
 Local Agency Fax Number
 Local Agency Identification Number
 Local Agency Name
 Local Agency NSA Cost per Participant

Clinic

Clinic Address- 1
 Clinic Address- 2

Clinic Address- City
Clinic Address- County
Clinic Address- State
Clinic Address- Zip Code
Clinic Contact Name
Clinic Contact Title
Clinic Email Address
Clinic Fax Number
Clinic Identification Number
Clinic NSA Cost per Participant
Clinic Telephone Number
Local Agency Identification Number

Process:

- 12.1.1.1 Input data on Local Agencies and clinics and save in Local Agency and Clinic data stores
- 12.1.1.2 Retrieve participation data from the Participation data store
- 12.1.1.3 Retrieve administrative cost information from the NSA Expenditure data store and calculate the NSA cost per participant by Local Agency
- 12.1.1.4 Upon request, calculate Local Agency and Clinic factors such as No Show Rate and staff to participant ratio for clinic and Local Agency monitoring

Output:

- 12.1.1.5 Screen display or report on Local Agency and Clinic profile data
- 12.1.1.6 Screen display or report on NSA cost per participant by Local Agency/clinic

12.2 Manage Participant Outreach

The system will maintain contact lists of organizations and individuals such as health or social service organizations, church groups, and physicians that have contact with potential WIC participants. The lists will be used for referrals or outreach efforts.

The system will track the aggregate number of referrals to other health and social services organizations for state and Local Agency monitoring purposes.

12.2.1 Maintain Outreach List for Local Agencies

The system will allow either Vermont WIC or Local Agency to enter and update the name, address, and telephone number for organizations in the database, and record the last time each organization's record was updated. The system must allow the user to customize the Outreach List at the Local Agency and clinic levels. The system must also provide "reminder alerts" of when it is time to contact outreach organizations again.

Input:

Outreach Address- City
Outreach Address- State
Outreach Address- 1
Outreach Address- 2
Outreach Address- Zip Code

Outreach Address- County
Outreach Contact Name
Outreach Contact Title
Outreach Email Address
Outreach Fax Number
Outreach Identification Number
Outreach Organization Name
Outreach Telephone Number
Date Information Updated
Date Organization was contacted
Target Contact Date/Time Frame

Process:

- 12.2.1.1 Add, update or delete outreach organizations
- 12.2.1.2 Store in Outreach data store

Output:

- 12.2.1.3 Screen display or report of outreach organizations
- 12.2.1.4 Screen display or report of outreach organizations that need to be contacted based on contact dates

12.2.2 Track Community Outreach Activities

The system will provide data to help Vermont evaluate the success and cost/benefits of outreach activities by providing data on the number of additional participants in the area targeted by the activity. A screen and an optional set of questions will be provided as part of the certification intake process to enter how the participant heard about the WIC Program. Once an activity has concluded, the State will be able to calculate the cost per participant by dividing the additional participants into the total activity expense. The system will also store narrative text about outreach activity for future reference.

Input:

Local Agency Identification Number
Outreach Activity Date
Outreach Activity Description
Outreach Activity Outcome Code
Outreach Activity Time
Outreach Activity Cost
Outreach Activity Description
Participant "Source of Information about WIC" Code
Participation Actual (for month prior to activity and month following activity)

Process:

- 12.2.2.1 Retrieve Participant-Source of Information about WIC data from Participant data store
- 12.2.2.2 Accept user input of Outreach Activity Cost
- 12.2.2.3 Retrieve data on the number of participants for each Local Agency involved in the activity from the Participation data store for the month before and after the

outreach activity

12.2.2.4 Calculate the participation difference between the participation for the month before and after the outreach activity

12.2.2.5 Divide the cost by the participant difference to obtain a cost per participant

Output:

12.2.2.6 Screen display or report of outreach activity cost benefit

12.3 Monitor Customer Service for Participants, Vendors and Providers

The system will support customer service functions by managing calls from participants who have questions or problems such as lost or stolen benefits, appointment questions, such as next appointment date, what to bring, and general questions. This management may take the form of text boxes to record notes in a participant record; a method to log and document incoming calls, or an interface to a commercial Automated Response Unit (ARU). The system will also provide an interface between the scheduling system and an auto dialer program, to automate reminder calls for appointments. This functionality must be supported by enable/disable capability.

12.3.1 Receive and Route WIC Customer Service Calls, Maintain Customer Service Data Store

When the designated office receives a Customer Service call, the individual answering will request a participant identifier, determine the nature of the call, log the call, and assign a service code and customer service staff member to resolve the issue. The system will provide a complete list of contacts and their area of specialty so the call can be routed to the appropriate staff.

If an ARU is used, the ARU will answer the call and provide a menu choice for the appropriate response. The system will then accept any applicable input to the Customer Service data store from the ARU.

Input:

Participant Identification Number
Customer Service Identification Number
Customer Service Queue Size
Customer Service Queue Threshold
Customer Service Representative Name
Customer Service Request Code
Customer Service Request Date

Process:

12.3.1.1 Answer call and provide recorded message or Customer Service Representative

12.3.1.2 Input Participant Identifier

12.3.1.3 Input service requested code into the Customer Service data store or accept caller input to menu choice

12.3.1.4 Assign appropriate call type based on caller input to menu

12.3.1.5 Update Customer Service data store

12.3.1.6 Determine appropriate Customer Service Representative Based on Menu Input (ARU)

12.3.1.7 Determine Queue Size of Appropriate Customer Service Representatives

12.3.1.8 Determine Routing Disposition

12.3.1.9 Retrieve participant file

Output:

12.3.1.10 Display Screen of Participant Information to Customer Service Rep

12.3.1.11 Report of assigned customer service issues

12.3.2 Track Call Outcomes

In a manual environment, the system will allow the identification number of the person calling to be entered into a log. Once the person has been assisted, the staff person providing assistance will be able to record the nature of the problem and the outcome of the call for system tracking.

In an ARU (Automated Response Unit) environment, the receiving Customer Service Representative or automated system will be able to update the call tracking entry with the disposition of the call.

Input:

Customer Service Action Taken Code

Customer Service Action Taken Date

Customer Service Encounter Identification Number

Customer Service Problem Description

Customer Service Problem Resolution Code

Customer Service Problem Resolution Date

Customer Service Representative Name

Process:

12.3.2.1 Accept Customer Service Representative Input

12.3.2.2 Route call to next level of escalation

12.3.2.3 Update problem resolution data in Customer Service data store

Output:

12.3.2.4 Screen display or report of customer service calls and outcomes

12.4 Provide Survey Capability

The system will support fully automated collection of survey data by providing a self administered, on-line survey form for participants to complete. The system will capture the results of each participant survey and generate a summary assessment. The system must allow the WIC Admin to develop questions, set Start, and End dates for the survey. The Inputs may vary per specific survey. Survey Result data must be exportable for statistical use.

12.4.1 Monitor Participants' Views of WIC Program Services

The self-administered survey will include questions about the participant's experience at certification, the usefulness of the nutrition education provided, whether he or she obtained the recommended health care service and satisfaction with shopping for food benefits.

Input:

Clinic Identification Number
Local Agency Identification Number
Participant Identification Number (Optional; for self administered surveys, participants must be allowed to answer anonymously)
Survey Question Identification Number
Survey Question Text
Survey Question WIC Service Type Code
Survey Questionnaire Identification Number
Survey Questionnaire Question Sequence Number
Survey Questionnaire Survey Name
Survey Questionnaire Survey Type Code
Survey Response Nutrition Education Size
Survey Response Nutrition Education Type
Survey Response Opinion Score
Survey Response WIC Service Date
Survey Response WIC Service Type Code
Vendor Identification Number

Process:

- 12.4.1.1 Design survey instrument for type of customer and services received and update Survey Questionnaire and Survey Question data stores
- 12.4.1.2 Accept user entered survey results and update Survey Response data store
- 12.4.1.3 Generate analyses of survey responses

Output:

- 12.4.1.4 Report of customer survey opinions

12.5 Perform Study

The Perform Study functionality will be used to track surveys or case studies that are being conducted by the Vermont Department of Health. In the case of surveys, the functionality is used for surveys that are being conducted in the clinics. A character will be issued to the clinic indicating what survey is being conducted in the clinic. The character of the survey will be entered for survey tracking purposes. The results of field entries will be exportable to other software products.

Input

WIC Program defined fields

Process

12.5.1.1 Accept users input into open fields

12.5.1.2 Create Exportable file

Output

12.5.1.3 Exportable file

12.6 Maintain Inventory

The system will maintain an inventory of serialized items ranging from EBT cards to breast pumps, and of non-serialized items such as pamphlets and forms. The inventories will not duplicate inventories maintained by the Vermont Agency of Human Services, the Vermont Department of Health and the State of Vermont, such as computer equipment.

12.6.1 Maintain Serialized Inventory

When Vermont WIC orders and receives items such as EBT cards, each item will have a unique number. The system will record the ranges of stock numbers in each shipment received. When these items are shipped to Local Agencies for use, the system will record the beginning and ending stock numbers of the shipment and the Local Agency to receive the shipment. The system will calculate the number of days supply and have a projected date for replenishment based on typical usage. The Local Agencies can also use this functionality for tracking when they receive and use serialized items. As serialized items are used, the stock remaining is decremented.

For equipment, each item will have an identification number. The system will maintain a list of all equipment, where the equipment is located and the date of receipt. When equipment is no longer useful, Vermont WIC will input the date of retirement in the record.

Input:

Item Stock- Serialized Batch Beginning Serial Number
Item Stock- Serialized Batch Ending Serial Number
Item Stock- Serialized Card Stock Batch Number
Item Stock- Serialized Card Stock Serial Number
Item Stock- Serialized Date Received by Local Agency
Item Stock- Serialized Date Received by State Agency
Item Stock- Serialized Date Shipped to Local Agency
Item Stock- Serialized Equipment Identification Number
Item Stock- Serialized Equipment Retirement Date
Item Stock- Serialized Type Code
Local Agency Identification Number

Process:

- 12.6.1.1 Input serial numbers when shipments are received by State Agency
- 12.6.1.2 Input serial numbers or equipment identification numbers for items sent to a Local Agency
- 12.6.1.3 Input Local Agency code for the Local Agency receiving the shipment
- 12.6.1.4 Calculate number of day's stock and anticipated replenishment date
- 12.6.1.5 Update Item Stock-Serialized data store

Output:

- 12.6.1.6 Display screen or report of serialized item stock inventory status

12.6.2 Maintain Non-Serialized Inventory

The system will record the quantity of each shipment of non-serialized items for Vermont WIC inventory. The system will estimate the need for each item based on historical use, and project the date for replenishment based on historical use rates.

Input:

- Item Stock- Non-Serialized Entry Date
- Item Stock- Non-Serialized Identification Number
- Item Stock- Non-Serialized Number of Items Received by Local Agency
- Item Stock- Non-Serialized Number of Items Received by State Agency
- Item Stock- Non-Serialized Number of Items Shipped to State Agency
- Item Stock- Non-Serialized Received by Local Agency Date
- Item Stock- Non-Serialized Received by State Agency Date
- Item Stock- Non-Serialized Shipped to Local Agency Date
- Item Stock- Non-Serialized Type Code
- Local Agency Identification Number

Process:

- 12.6.2.1 Input number of items when shipments are received by State Agency
- 12.6.2.2 Input number of items for items sent to a Local Agency
- 12.6.2.3 Input Local Agency code for the Local Agency receiving the shipment
- 12.6.2.4 Calculate inventory balances
- 12.6.2.5 Update Item Stock-Non-Serialized data store

Output:

- 12.6.2.6 Screen display or report of item stock non-serialized inventory status

12.7 Monitor Program Integrity

The system must maintain data that assists the State and Local Agency in monitoring program integrity, including processes for periodically reviewing data to determine if false eligibility information was provided, if there was fraudulent use of benefits, or if there was dual

participation.

For Local Agency integrity, the system will review data to detect suspicious patterns such as creation of fictitious records to obtain benefits or applying lenient eligibility determinations for friends and relatives.

12.7.1 *Monitor Participant Integrity*

To monitor program integrity, the system will identify participants who are routinely shopping at a vendor outside their normal shopping area, or have other suspicious patterns of benefit use. The system will also contain a method for recording complaints about individual participants. It must document and track the types of program violations uncovered and the sanctions imposed, such as suspension or imposition of a claim.

Input:

Complaint Date
Complaint Identification Number
Complaint Resolution
Complaint Source Type
Complaint Status
Complaint Subject
Complaint Summary
Complaint Type Code
Dual Participation Potential Match Applicant Community Supplemental Food Program
Dual Participation Potential Match Applicant Other State Agency
Dual Participation Potential Match Applicant WIC
Dual Participation Potential Match Certified Community Supplemental Food Program
Dual Participation Potential Match Certified Other State Agency
Dual Participation Potential Match Certified WIC
Participant Address- City
Participant Address- State
Participant Address- 1
Participant Address- 2
Participant Address- Zip Code
Participant County
Participant Identification Number
Sanction Case Appeal Indicator
Sanction Case Appeal Outcome Code
Sanction Case Current Status
Sanction Case Identification Number
Sanction Case Start Date
Sanction Case Type Code
Sanction Effective Date
Sanction Type Code
Vendor Address- City
Vendor Address- State
Vendor Address- 1
Vendor Address- 2
Vendor Address- Zip Code
Vendor Identification Number

Process:

12.7.1.1 Retrieve data on participant certifications from the Participant data store

- 12.7.1.2 Load participant data from other State agencies or Community Supplemental Food Program
- 12.7.1.3 Match participant data against the State's participant data to determine if there are matches
- 12.7.1.4 Save matches in the Dual Participation Potential Match data store
- 12.7.1.5 Input complaint data on participants in the Complaint data store
- 12.7.1.6 Retrieve data from the Food Benefit Household Account and Participant data stores and determine the vendor where the participant redeemed food benefits
- 12.7.1.7 Compare vendor and participant addresses to determine how many participants are shopping at vendors outside the normal geographic radius of the participant's address
- 12.7.1.8 Input data on participant violations, sanctions and claims imposed and claims collected along with the corresponding date in the Sanction data store
- 12.7.1.9 Monitor reports based on the baseline trend data (See 10.4.2: Generate Ad hoc Queries and Generate Reports)

Output:

- 12.7.1.10 Screen display or report on potential dual participation matches
- 12.7.1.11 Screen display or report of complaints about participants
- 12.7.1.12 Screen display or report of participants shopping outside their neighborhoods
- 12.7.1.13 Screen display or report of participant sanctions and claims status

12.7.2 Monitor Clinic Integrity

The system will compare each Local Agency's data to all other Local Agency's to determine if the particular Local Agency has unusually low no-show rates or low attendance rate at nutrition education classes, disproportionate number of infants (who have high redemption value food benefits), high incidence of twins, unusually high number of certifications, production of EBT cards at unusual hours and a large number of participants with no reported income. The system will also identify potential conflicts of interest that may develop when an employee is responsible for both certifying eligibility and issuing benefits or when an employee is also a WIC participant.

Input:

Clinic Identification Number
 Local Agency Identification Number
 Additional inputs will vary depending on the type of clinic analyses conducted

Process:

- 12.7.2.1 Retrieve data for all Local Agencies on:
 - No-show rates
 - Attendance rate at nutrition education classes
 - Number of infants
 - Number of twins

- Number of certifications
- Participants with no reported income
- Benefit issuance activities that were reported outside of normal hours of operation
- Other factors the State wants to analyze

12.7.2.2 Calculate percentages of no-shows, participants not receiving nutrition education, infants, twins, certifications, and issuance of benefits at abnormal hours for each Local Agency

12.7.2.3 Calculate an average for all Local Agencies

12.7.2.4 Compare each Local Agency average to the average of all Local Agencies

Output:

12.7.2.5 Screen display or report of potential clinic abuse indicators

12.7.3 Track Administrative Hearings

The system will track the disposition of administrative hearings in response to participant or vendor sanctions and maintain a history of the program integrity case and its eventual outcome. The system will also aggregate this data and identify historical trends in program violation.

Input:

Administrative Hearing Date
 Administrative Hearing Description
 Administrative Hearing Identification Number
 Administrative Hearing Outcome Code
 Administrative Hearing Outcome Date
 Administrative Hearing Outcome Description
 Administrative Hearing Type Code
 Clinic Identification Number
 Local Agency Identification Number
 Participant Identification Number
 Vendor Identification Number
 Vendor Outlet Identification Number

Process:

12.7.3.1 Add, update, and delete Administrative Hearings data store

12.7.3.2 Generate report on Status of Participant Administrative Hearings

Output:

12.7.3.3 Screen display or report on participant hearing status

12.8 Conduct Operations Management Reporting

The system will produce standard reports on a scheduled basis as well as provide an ad hoc reporting capability. The examples of reports are divided into standard data reports that are critical to routine operations, ad hoc data reports that are done as needed, and data warehousing reports.

12.8.1 *Generate Standard Reports*

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system will allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard operations management reports include the following:

- 12.8.1.1 Report of Complaints about Participants – List of participants for which complaints are filed and nature of complaint
- 12.8.1.2 Report of Customer Service Calls and Outcomes – Provide log of type of calls received and their disposition. Customer Service reports generated by an ARU can provide the number of calls handled by type (i.e., by provider, Participant, and vendor), average time to handle call, reason for call, number of automated versus operator assisted calls, and time to answer calls
- 12.8.1.3 Report of Local Agency/Clinic Participant to Staff – Provide analysis of ratio of Local Agency/clinic participant to staff type to enable State and Local Agencies to monitor and assess the workload of the Local Agency
- 12.8.1.4 Report Of Non-Serialized Item Stock Inventory Status – Provide status of non-serialized items in storage and shipped to Local Agencies
- 12.8.1.5 Report of Outreach Organizations – Enable Local Agencies to review outreach organization information and provide mailing labels in order to increase participation levels when additional caseload is assigned by Vermont WIC
- 12.8.1.6 Report of Participant Violations, Sanctions, and Claims – Provide reports on participant violations, sanction imposed and claims collected
- 12.8.1.7 Report of Participants Shopping Outside Their Neighborhoods – List of participants that are shopping at vendors outside the normal geographic boundary of their addresses
- 12.8.1.8 Report of Potential Clinic Abuse Indicators – Provide data on patterns that may indicate clinic abuse
- 12.8.1.9 Report of Referrals to and from WIC by Program/Agency – Support the analysis of referral program effectiveness by identifying those external health and social service agencies that refer Participants to WIC or receive referrals from WIC
- 12.8.1.10 Report of Serialized Item Stock Inventory Status – Provide status of serialized items in storage and shipped to Local Agencies
- 12.8.1.11 Report on Local Agency and Clinic Profile Data – Provide a snapshot of Local Agency or clinic operations for review by State Agency or preparation for site visitation. Profile will include information that reflects the size, capacity, productivity, and operating costs of the Local Agency or clinic
- 12.8.1.12 Report on NSA Cost per Participant by Local Agency and Clinic – Provide

summary comparison of the NSA cost per participant among Local Agencies

12.8.1.13 Report On Participant Hearing Status – Provide summary of participant hearings status

12.8.1.14 Report on Potential Participant Dual Participation Matches – List of participants that may be participating in another Local Agency within the State or in other State agencies or CSFP

12.8.2 *Generate Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

Some sample ad hoc queries in this area include:

12.8.2.1 Redemption rates by Local Agency

12.8.2.2 Local Agency serving a greater number of participants than the service area shows as eligible

12.8.2.3 Sudden decrease in no-show rates

12.8.2.4 Decrease/Increase in the number of voided cards

12.8.2.5 Disproportionate numbers of applications that indicate “twins”

12.8.2.6 Fluctuations in infant caseload within a given Local Agency

12.8.2.7 Infant formula issuance as compared to the number of post-partum women

12.8.2.8 Large number of food benefits redeemed outside a Local Agency service area

12.8.2.9 Large number of one Local Agency’s redemption by one or two vendors, or a small number of vendors in a town/county

12.8.2.10 Outreach Activity Cost Benefit – Provide a cost benefit analysis for targeted activities based on number of participants added to the Program

12.8.2.11 Participant addresses that indicate a P.O. Box

12.8.2.12 Participant Integrity Review – Provide reports on a particular participant.

12.8.2.13 Participant’s dual participation, complaints filed and other analysis reports that detect possible abuses.

12.8.2.14 Non-contracted formula and Medical Foods issuance

12.8.2.15 The numbers of automatically-terminated participants that are being reinstated and redeeming food benefits

12.8.3 *Maintain Data Warehouse*

Some topics for analysis from this functional area using the capabilities of a data warehouse include:

- 12.8.3.1 Clinic Integrity Review – Provide reports using combined data including system access data that identify patterns over time that may indicate clinic abuse
- 12.8.3.2 Local Agency Performance – Combine data on participation, nutrition education classes offered and attended, outreach contacts, referrals to and from agencies, financial administration, customer service data, and history of abuse to obtain broad view of an agency's performance over time
- 12.8.3.3 Participant Integrity Review – Combine vendor, participant, and benefit redemption data to identify possible patterns of abuse

13. **Vendor Management**

The Vendor Management functional area supports the management of the retail vendor aspect of the WIC Program. It tracks the vendor authorization process; captures information about authorized vendors; monitors vendor training and communications, helps identify potentially abusive vendor practices for which additional monitoring or investigation is needed; supports record audits; maintains a comprehensive vendor profile, including information about compliance activities, and supports coordination of sanctions with the SNAP Program. In addition, the data collected under this function supports the annual electronic transmission to FNS of The Integrity Profile (TIP) Report.

Vendor authorization approval is conducted at the state level as are compliance monitoring and fraud analysis. Local Agencies assist in the vendor authorization process to varying degrees. Local Agency vendor management activities include assisting with vendor orientation, annual and three year interactive training, and collecting, documenting and assisting in the resolution of vendor complaints. For these reasons, the system must provide for a Local Agency vendor management capacity in these functional areas. Local Agency level data capture must be rolled up to the state level and utilized to populate vendor records. Similarly, certain State Agency level information and actions (e.g., routine monitoring assignments, price survey activity, vendor complaints, vendor authorization status, demographics and contact information) must be made available at the Local Agency level with the exception of fraud analysis and compliance activities.

The system will have the availability to assign data elements to produce multiple peer grouping manually and the ability to auto assign vendors to a peer group for each state agency based on user entered parameters. Vendor Management consists of the following functions:

- Maintain Vendor Authorizations
 - Maintain Vendor Application Data
 - Track Vendor Authorization Process
 - Select Authorized Vendors Maintain Authorized Vendor Data
 - Maintain Authorized Vendor Data Including History
 - Monitor Vendor Training
 - Track Scheduled Vendor Training
 - Track Attendance at Vendor Training and Technical Assistance Conducted
- Support Vendor Communications
 - Produce Correspondence to Vendors (including labels)
- Perform Confidential High-risk Vendor Analysis

- Track Compliance Investigations and Routine Monitoring
 - Maintain Special Investigator Record for Compliance Investigations
 - Maintain Compliance Investigation and Routine Monitoring Data
 - Support Inventory Audits
- Maintain Food Benefit Redemption Data for Compliance Monitoring
- Monitor Sanctions and Appeals
 - Manage Vendor Sanctions
 - Maintain Vendor Appeal Data
- Coordinate with SNAP Program
 - Maintain SNAP Program Violation Data
 - Track WIC Sanctions that are required to be sent to the SNAP Program
- Conduct Vendor Management Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse
 -

13.1 Maintain Vendor

13.1.1 Establish Vendor Peer Groups

The system will support the establishment of vendor Peer Groups to be used in categorizing vendors based upon Monthly WIC redemptions, number of cash registers, vendor type code, type of ownership and A50 indicator, for grouping stores by price charged for WIC approved products.

Input

Vendor Peer Group Description
Vendor Peer Group Code

Process

13.1.1.1 Establish multiple peer groups in system based upon accepted input

13.1.1.2 Save Peer Groupings to Vendor Peer Group data store

Output

13.1.1.3 Display or Report of Vendor Peer Groups

13.1.2 Update Vendor Peer Groups

The system will support the editing, addition and deletion of vendor Peer Groups and the criteria used to establish Vendor Peer Groups.

Input

Vendor Peer Group Description
Vendor Peer Group Code

Process

13.1.2.1 Add, edit or delete peer groups in system based upon accepted input

13.1.2.2 Save Peer Grouping changes to Vendor Peer Group data store

Output

13.1.2.3 Display or Report of Vendor Peer Groups

13.1.3 *Maintain Vendor Application Data*

The system will electronically capture (or on paper as needed) and maintain data about the vendors that apply for WIC authorization. These data include reference data such as the vendor's name, location, ownership, business volume and, SNAP authorization number.

The system will also include data about the prices for WIC authorized foods. These data are captured during the vendor application process to compare the vendor's prices to other vendors seeking authorization.

To assist in vendor authorization determinations, the system will provide a history of vendor compliance, including any warnings or sanctions imposed against a particular vendor and its outlets and a history of a vendor's participation in required training. The data regarding vendor's prior WIC compliance and on-site monitoring visits are captured and maintained by other functions within the Vendor Management functional area. The system will provide information that will help Vermont WIC determine the appropriate number of WIC vendors to authorize in specific locations, and provide vendor characteristics to help determine the best vendors to authorize.

Input:

Store Number
Vendor Name
Vendor Address- City
Vendor Address- State
Vendor Address- 1
Vendor Address- 2
Vendor Address- Zip Code
Vendor Authorization Expiration Date
Vendor Authorization Start Date
Vendor Authorization Status
Vendor Business Year End Month/Year
Vendor Business Year Start Month/Year
Vendor Chain Code
Vendor Contact Name- First
Vendor Contact Name- Last
Vendor Contact Name- MI
Vendor Contact Telephone Number
Vendor Contact E-mail
Vendor Contact Title
Vendor Manager Name First
Vendor Manager Name Last
Vendor Days of Operation
Vendor Federal Tax Identification Number
Vendor Food Inventory Shelf Space
Vendor SNAP Identification Number
Vendor SNAP Sanctions
Vendor Hours of Operation
Vendor WIC Identification Number
Vendor Last Modified Date
Vendor Last Modified User

Vendor Mailing Address- City
Vendor Mailing Address- State
Vendor Mailing Address- 1
Vendor Mailing Address- 2
Vendor Mailing Address- Zip Code
Vendor E-mail
Vendor Phone Number
Vendor Fax Number
Vendor Owner Name- Last
Vendor Owner Name- First
Vendor Owner Name- MI
Vendor Owner Telephone Number
Vendor Multiple Locations Flag
Vendor Number of Cash Registers
Vendor Gross Sales Edible Food
Vendor Gross Total Sales
Vendor Sales SNAPs
Vendor Sales Non-Foods
Vendor Sales WIC
Vendor Scanner Availability
Vendor Scanner Screens WIC Purchases
Vendor Type Code
Vendor past WIC Sanctions/Disqualifications
Vendor requested Formula Waiver/Contract Formula Waiver
Date Given Vendor Handbook
Number of EBT Equipped Lanes
Vendor Wholesaler
Vendor Formula Supplier
Vendor Geographic Location
Vendor History of Business Integrity
Date Vendor Cashiers Trained
Vendor Price Contact
Vendor Price Data

The following data elements are repeated for each vendor outlet:

Vendor WIC Identification Number
Vendor Outlet Address- City
Vendor Outlet Address- State
Vendor Outlet Address- 1
Vendor Outlet Address- 2
Vendor Outlet Address- Zip Code
Vendor Outlet Identification Number
Vendor Outlet Number Cash Registers
Vendor Outlet Sanction Points
Vendor Outlet Status Code
Vendor Outlet Telephone Number

Additional to data elements

WIC Foods Inventory/Shelf Space
Vendor Authorization Status
WIC Food Price Collection by Item/UPC
Vendor Wholesaler

Vendor Infant Formula Distributor
Vendor Square Footage of Store
Vendor WIC Contact Name at Store
Vendor Store Manager
Calculated Ratio between Gross Food Sales, WIC Sales and SNAP Sales
Date Training Received by Vendor
Type of Training Received by Vendor
Date Orientation Conducted
Individual Who Conducted Training
Local Agency Clinic and Vendor Representative Assigned to Vendor
Contractor or EBT Processor or Banking Vendor Number

Process:

13.1.3.1 Input vendor characteristics data from vendor applications for new and currently authorized vendors and save results in Vendor data store

Output:

13.1.3.2 Screen display or report of vendor applications

13.1.4 Track Vendor Authorization Process

To support vendor authorization tracking, the system will record the steps in the authorization process for each vendor, including scheduled and actual completion dates. The system will produce a screen display or report showing the status of all vendor authorizations, as well as an exception report showing only actions overdue. The system will provide for note fields at each screen level and maintain a vendor authorization history

Input:

Vendor Identification Number
Vendor Authorization Activity Code
Vendor Authorization Activity Scheduled Date
Vendor Authorization Activity Complete Date
Vendor Authorization Start Date
Vendor Authorization Expiration Date
Vendor Authorization Status
Vendor Authorization Ineligibility Reason Code
Vendor Note(s)

Process:

13.1.4.1 Input vendor authorization tracking data and save

13.1.4.2 Input activities scheduled and completed for each vendor and save results in Vendor Authorization Progress data store

Output:

13.1.4.3 Screen display or report on vendor authorization actions scheduled and completed

13.1.5 Authorize Vendors

The system must support the selection of authorized vendors. Information on food

prices, vendor participant ratios, and compliance history may be used to support these decisions.

Input:

Limiting Criteria

Food UPC/PLU Code

Food UPC/PLU Vendor Specific UPC Average Price by Vendor Peer Group

Vendor zip code to calculate the participant/vendor zip code ratio

Selection Criteria

Vendor Compliance Activity Violation Indicator Code

Vendor Food Inventory/Shelf Space

Vendor SNAP Sanctions

Vendor Monthly Redemptions

Vendor Outlet WIC Sanction Points

Vendor Peer Group Designation Code

Vendor Price Data/Competitively Priced

Vendor Price List Late

Vendor Gross Sales Edible Food

Vendor Total Sales

Vendor Sales SNAPs

Vendor Sales Non-Foods

Vendor SNAP Status Code

Vendor Business Hours

Vendor Business Integrity Code

Vendor SNAP or FNS Number

Vendor Number of Participants Willing to Shop at the Vendor

Vendor Type

Vendor Minimum Stock Requirement Status

Process:

- 13.1.5.1 Retrieve history of violations on vendors who are seeking authorization or reauthorization from the Vendor Compliance Activity Store
- 13.1.5.2 Retrieve a compliance history on vendors who are seeking authorization or reauthorization from the Sanction data store
- 13.1.5.3 Retrieve vendor application data from the Vendor data store
- 13.1.5.4 Calculate the food package price for any requested package for each vendor based on the food price survey data submitted on the application
- 13.1.5.5 Calculate vendor/participant ratios by selected geographic area and/or zip codes
- 13.1.5.6 Array vendors by price for each location
- 13.1.5.7 Select the required number of vendors for authorization

Output:

- 13.1.5.8 Screen display or report of all violations and compliance activities for the vendor within a user specified timeframe

- 13.1.5.9 Screen display of notes exchanged between Vermont WIC and Local Agency level vendor management staff (Vendor Note Log)
- 13.1.5.10 Screen display or report of vendor's food prices sorted by peer group
- 13.1.5.11 Screen display or report of participant to applicant vendor ratio by location (region, clinic, zip codes)
- 13.1.5.12 List of selected vendors

13.1.6 Maintain Authorized Vendor Data

Once vendors have signed the vendor agreement, the system must allow Vermont WIC to manually assign a vendor number.

Input:

Vendor Authorization Status
Vendor Identification Number

Process:

- 13.1.6.1 Input vendor identification number for newly authorized vendors
- 13.1.6.2 The system will provide the option and flexibility of the assignment of up to twelve digits for the vendor number.
- 13.1.6.3 Update Vendor Authorization Status to authorized
- 13.1.6.4 Update Vendor Authorization Start Date and Vendor Authorization Expiration Date

Output:

- 13.1.6.5 List of authorized vendors by geographic area (e.g., city, county, zip code, Local Agency service area) for Local Agency/participant use
- 13.1.6.6 List of authorized vendors by identification number
- 13.1.6.7 List of authorized vendors by EBT processor or banking ID number
- 13.1.6.8 List of authorized vendors by all input data elements

13.1.7 Create EBT Vendor Maintenance Transfer file

Once a vendor is authorized, the EBT system must set up a retailer file. Data from the MIS Vendor management function will be duplicated in the EBT system for EBT Functions

Input

MIS Vendor Outlet Number
Vendor Peer Group ID
Vendor Name
Vendor Activation Date
*ACH Settlement Time
Over 50%
*Direct Connect Flag

*Direct Connect Auto- recon
Vendor Total Food Sales
Vendor Contracting Agency
Vendor Outlet Address
Vendor Contact Name
Vendor Contact Phone

Process:

- 13.1.7.1 The MIS System will accept input of fields
- 13.1.7.2 The MIS System will format a transfer file of the accepted data
- 13.1.7.3 The MIS system will transfer the file to the EBT system

Output:

- 13.1.7.4 Vendor file sent to the EBT system

13.2 Monitor Vendor Training

The system will support vendor training by recording and reporting on scheduled training sessions and the vendor's participation at required training. The system will enable WIC staff to identify which vendors have not fulfilled their training requirements.

13.2.1 Track Scheduled Vendor Training

The system will capture and maintain data necessary for tracking vendor training and participation to avoid duplication of data entry. For each training session, the data will reflect the scheduled date, location (e.g., whether on site or at WIC offices or some other central location conducive to group training – (training is not always done in person – video conferencing, self-paced models, etc)), and the expected number of participants for each vendor.

Input:

Training Offer Date
Training Offer Location
Event Slot Identification Number
Master Calendar Identification Number
Resource Identification Number
User Identification Number
Vendor Identification Number
Vendor Reason for Training
Individual(s) Providing Training
Type of Training
Training Method

Process:

- 13.2.1.1 Input scheduled vendor training dates, locations, or type, and vendor, which will attend and record in Training Offer and Event Slot data store

Output:

- 13.2.1.2 Vendor training schedule

13.2.1.3 Vendor training notice

13.2.2 *Track Attendance at Vendor Training*

The system will capture, maintain, and report data about each vendor's participation at the scheduled vendor training.

Input:

Training Offer Status Code
Event Slot Identification Number
Scheduled Appointment Date
Scheduled Appointment Identification Number
Scheduled Appointment Missed Reason
Scheduled Appointment Number of Actual Attendees
Scheduled Appointment Outcome Code
Scheduled Appointment Time
Vendor Identification Number
Vendor Reason for Training
Individuals Providing Training
Type of Training
Training Method

Process:

13.2.2.1 Input vendors' participation at planned sessions and record in Training Offer and Scheduled Appointment data store

Output:

13.2.2.2 Screen display or report of vendor participation at training sessions

13.3 Support Vendor Communications

The system will automate the production of vendor communications, including mail and e-mail.

13.3.1 *Produce Correspondence to Vendors*

The system will enable users to produce mailing labels for individual vendors, or vendor outlets, and to produce labels in bulk for mass mailing of notifications. The system will enable the user to enter specific vendor data (for example: identification numbers, vendor outlet identification numbers, chain number, and Local Agency assignment) to produce short batch runs of labels.

The system will merge vendor data to produce vendor correspondence.

Input:

Vendor Identification Number
Vendor Chain Number
Vendor Outlet Identification Number

Process:

13.3.1.1 Input selection of authorized vendors to receive information or correspondence

13.3.1.2 Retrieve name and address information from Vendor data store

Output:

13.3.1.3 Mailing labels

13.3.1.4 Customized correspondence

13.4 Perform Confidential High-risk Vendor Analysis

13.4.1 Identify High-risk Vendors

A major function of vendor management is to identify those vendors that based on their history of participation in WIC, present a high-risk of program fraud or abuse. FNS and State WIC agencies have developed several methods for identifying high-risk vendors. Although there is not agreement on the single best method, many of the factors used to identify high-risk are common to most methods. These factors include multiple sales of single items in a short period of time, and a spike in redemptions in the last day or hour of the month among others. The determination of vendors that are high-risk usually considers the redemption patterns of vendors with comparable characteristics (e.g., type of store, location, business volume). These vendors often are referred to as a "peer group".

Identifying high-risk vendors is extremely important because this function serves as the basis for targeting vendors and deploying the compliance resources of Vermont WIC. High-risk vendors are targeted for more frequent undercover "compliance buys" than other vendors. Effective high-risk identifications will result in a higher percentage of positive compliance investigations (i.e., the vendor violated program rules), and ultimately the termination of vendors who abuse the WIC program, resulting in reduced food costs and the ability to serve more participants.

The WIC system will provide extensive support of this function. Specific minimum capabilities that the system will provide include recording data on the assignment of vendors to vendor peer groups and calculating risk factors for all vendors based on the formula selected by Vermont WIC. The system will also provide extensive data analysis of EBT sales data to track irregular/fraudulent vendor activity. Optionally, the system will provide data analysis capabilities to support the delineation of peer groups.

13.4.1.1 Minimum Recommended Capabilities – Identify High-risk Vendors

Identify High-risk Vendors Using Basic Analysis:

The WIC system will support determinations of high-risk vendors by capturing data about vendor peer groups, performing a number of analyses of vendors' WIC activities, and calculating a vendor risk measure using the formula selected by Vermont WIC. At a minimum, the system will flag vendors as high-risk if they are determined to have a low variation in redemption prices for a food or high average food prices compared with the vendor's peer group. For EBT reporting, low variation in price will be analyzed by UPC for each store; a high variation would indicate fraudulent activity by the vendor. Regardless of the formula used, the WIC system will store the resulting determination of vendor risk.

Input:

Required Data Elements

Vendor Peer Group Number

Vendor Identification Number

Process:

The WIC system will perform the following processes:

13.4.1.2 Accept user edits of input of peer group data and save results in

Vendor data store

13.4.1.3 Determine risk measure for every vendor and store results in Vendor data store. Store the risk level and risk factor identification for significant risk factors. The specific determination represents the weighing of different factors selected by Vermont WIC. The most common factors that Vermont may elect to use, and the location of the data within the WIC system, is briefly described below:

Primary Risk Measures

- Actual costs for individual food UPCs exceed the estimated cost for the food UPCs (data recorded in Food data store) by a certain percentage or by a standard deviation relative to each peer group for individual foods
- Actual food UPCs (recorded in Food data store) exceed the sum of the vendor's reported shelf prices (contained in WIC Food Prices data store) for the foods included by a fixed percentage [the percentage reflects a cushion for inflation].
- High variances in price by UPC item for EBT.

Other Risk Measures

- WIC sales are a very high percentage of total sales relative to peer group
- Actual UPC cost consistently is a fixed amount lower than the maximum cost limit, or consistently is a fixed percentage of the limit
- Very large increase in WIC sales over time
- Combined WIC sales and SNAP Sales are a high percentage of total sales relative to peer group
- High ratio of complaints about vendor relative to total WIC sales
- Large percentage of area's total WIC redemptions
- Large number of high-risk participants redeeming Food Benefits at one vendor
- Large number of participants redeeming Food Benefits outside the Local Agency Area
- Suspicion of questionable business integrity practices
- Vendors disqualified/assessed a Civil Money Penalty from SNAP Program that are not disqualified from the WIC Program due to Participant Hardship
- New Vendors
- EBT: high number of invalid PIN attempts
- EBT: purchase outside of store hours
- EBT: High number of transactions redeemed at the same price in one shopping lane

Output:

13.4.1.4 Detailed screen display or report of vendor risk analysis

13.4.1.5 Summary screen display or report of vendor risk rankings

Other Calculated Data

This output will also include statistics calculated by the WIC system for each risk factor used by the State (e.g., low variance, high mean, WIC sales to total sales), showing the statistics in a standard format that facilitates visual comparisons across vendors.

13.4.2 *Identify High Price Vendors*

The system will provide a listing of vendors with high prices relative to other vendors in the same peer group to assist State vendor management staff in targeting compliance buys. The report will inform WIC staff of daily, weekly and quarterly results of food benefit reconciliation for individual vendors and aid in identifying the need for a compliance buy and/or follow-up during the next routine monitoring visit.

Input:

Vendor Peer Group
Vendor WIC Identification Number
Vendor Mailing Address-City
Vendor Mailing Address-State
Vendor Mailing Address-1
Vendor Mailing Address-2
Vendor Mailing Address-Zip
Vendor Multiple Locations Flag
Vendor Name
Vendor Phone Number
Vendor Fax Number
Vendor E-mail Address
Vendor Total WIC Redemption Value
UPC Average Cost for Peer Group
UPC Number and Percentage of UPC Exceeding the Average Cost for Peer Group
UPC Item Price by Vendor

Process:

13.4.2.1 For each vendor peer group and food UPC, calculate the average actual price for all UPCs during the past three months, and calculate the number and percentage of food UPCs for each vendor that exceed the average price by a specified percentage selected by Vermont WIC

Output:

13.4.2.2 Summary food benefit reconciliation report, by vendor

13.4.3 *Identify High-risk Vendors Using Additional Analytic Tools*

The basic capability described above for determining vendor risk uses a set of software programs that are built into the WIC system. A more advanced capability would provide, in addition to these programs, an interface to a standard statistical software package. This interface would enable the user to create a data file (or files) within the WIC system that could be loaded into the software package and used to perform more sophisticated statistical analyses to evaluate the effectiveness of the selected vendor risk indicators. Alternately, a customized data file(s) for transmission could be prepared to export data to

external analytical software packages. These analyses may be used to confirm the ability of the risk factors currently being used by Vermont WIC to predict vendor abuse. These analyses also may be used to identify potential other risk factors which are predictive of abuse by vendors that operate within the State, and develop a more refined overall risk measure for each vendor. The WIC system will produce the required data file(s), and enable the user to enter the vendor risk level directly into the system.

Input:

In addition to data elements identified previously, the WIC system will allow input of the following data elements:

Required Data Element

Vendor Risk Level

Optional Data Elements

Food UPC identification

Process:

13.4.3.1 Edit vendor risk level and other risk factor values, and update Vendor data store

13.4.3.2 Prepare an export file per export file specifications

Output:

13.4.3.3 Analytical data Export file

13.4.4 Program Variations

No major capabilities to support program variations are specified for this function. Vermont will use different combinations and weightings of factors to determine high-risk vendors. These variations are reflected in the descriptions of "Determine High-risk Vendors Using Basic Analysis" and "Determine High-risk Vendors Using Additional Analysis," above.

Input:

Ability to select one or all risk criteria (*i.e.*, high-mean; low-variance), and apply to UPC level and food package level.

Ability to assign two or more risk factors a weighting factor and calculated a total weighted score based on risk criteria

Output:

13.4.4.1 Non-Redemption rate calculation

13.4.4.2 Sum statistics, including redemptions total and food purchases for each vendor and calculate percentages by Local Agency, zip code and by vendor and vendor chain

13.5 Track Compliance Investigations and Routine Monitoring

The system will record data about monitoring visits and investigations as part of a comprehensive profile of vendor's WIC practices. This is necessary for imposing sanctions,

responding to appeals of sanctions, and targeting future compliance activities. Vermont will track a minimum of 5% of Vermont Vendors as of October 1, each fiscal year. Routine tracking includes store site visits, confirmation of price survey data, and observation of cashiers' adherence to required procedures.

13.5.1 *Maintain Special Investigator Record for Compliance Investigations*

The system will capture compliance investigator data and produce WIC benefits for investigators who visit vendors to perform compliance buys, participant Identification Cards (enable/disable) and EBT cards. However, to protect the investigator's identity, the system will not include information about an investigator or food benefits/EBT Cards issued to investigators in any caseload reports or in summary statistics regarding food benefits issued and redeemed.

Input:

Local Agency Identification Number (this will be a separate compliance investigative clinic)

Participant Address- 1

Participant Address- 2

Participant Address- City

Participant Address- State

Participant Address- Zip Code

Participant Category Code

Participant Certification Date

Participant Certification End Date

Participant Identification Number

Participant Name- First

Participant Name- Last

Participant Name- MI

Participant Nutrition Risk Criteria Code

Process:

13.5.1.1 Add or update a participant record for the investigation in the Participant data store to enable the issuance of EBT cards and benefits.

13.5.1.2 Complete EBT card set up and issue benefits (processed outside of the clinic certification system so as to not count as active participants – this will be set up in a separate Local Agency used only for state investigative purposes/testing) for buys

Output:

13.5.1.3 Participant identification card

13.5.1.4 Listing of investigator participant records

13.5.1.5 EBT card Issued

13.5.2 *Maintain Compliance Buys and Routine Monitoring Data*

The WIC system will capture, maintain and report data about compliance activities. The data will reflect the type of activity (e.g., routine monitoring, compliance buy), the tasks performed as part of each activity, the date the activity was conducted, a summary of the results indicating potential violations, and cross references to PANs if violations may

have been detected regarding specific EBT transactions. The system will also capture and maintain data on complaints about vendors received from participants, other vendors, and other sources.

Input:

Vendor Identification Number
Vendor Outlet Identification Number
Vendor Complaint Date
Vendor Complaint Identification Number
Vendor Complaint Status Code
Vendor Complaint Subject
Vendor Complaint Source Type
Vendor Complaint Type Code
Vendor Complaint Summary
Household Identification Number
Participant Identification Number
Local Agency Identification
EBT Processor Number
Compliance Investigator Number
Compliance Activity Type Code
Compliance Activity Reason Code
Compliance Activity Date
Compliance Activity Task Code
Compliance Activity Results
Compliance Violation Indicator Code
Vendor Risk Factor Type Code
PAN

Process:

- 13.5.2.1 Accept user input
- 13.5.2.2 Save Compliance Activity record in Compliance Activity data store
- 13.5.2.3 Save Vendor Complaint record in Vendor Complaint data store
- 13.5.2.4 Prepare correspondence to Vendors

Output:

- 13.5.2.5 Compliance Summary Report
The Compliance Summary Report Provides a listing of vendors scheduled for compliance buys and routine monitoring during a designated period, or a listing of the activities conducted during a specified period.
- 13.5.2.6 Vendor Compliance History
The Vendor Compliance History provides a report of history of vendor compliance activities and vendor training conducted for given vendor and vendor outlets to assist compliance investigators in preparing for a compliance buy and assist other WIC staff in conducting routine monitoring.

13.5.2.7 Data for TIP Report

13.5.2.8 Vendor letters regarding investigations

13.5.3 *Maintain Compliance Food Benefit Redemption Data*

Once the investigator has completed a compliance buy, the system must retrieve the data for the food benefits redeemed as a result of the compliance buy. The redemption data are compared to data collected by the investigator during the compliance buy to determine whether the vendor transacted and redeemed the investigator's benefits in accordance with program rules. This analysis would include whether the vendor redeemed the food benefits for more than the shelf price recorded by the investigator or any other irregularities. Records of the transaction may be used as evidence in the event that a vendor is sanctioned for program non-compliance. If using a contractor, coordinate with EBT contractor for data sharing to allow for the tracking of vendor sales data

Input:

Category/Subcategory Category Code
Category/Subcategory Subcategory Code
Food Item Prescribed Unit Quantity
Food Benefit Prescription Date
Food Benefit EBT Card/PAN
Food Item Prescribed First date to spend
Food Item Prescribed Last date to spend
Food Item UPC/PLU
Food Item UPC/PLU Description
Food Item UPC/PLU Exchange Value
Food Item UPC/PLU Price Paid
Food Item UPC/PLU Shelf Price
Household Identification Number
Participant Identification Number
Vendor Credit Amount
Vendor Identification Number
Vendor Outlet Identification

Process:

13.5.3.1 Retrieve the food benefit redemption data for the vendor under investigation using the investigator's Participant Identification Number or PAN number used for the benefit redemption in question.

Output:

13.5.3.2 Display or report of Food Benefit redemption prices for supplemental foods purchased during a compliance buy

13.5.4 *Maintain Compliance Investigation and Routine Monitoring Data*

The system will capture, maintain, and report data about monitoring activities. The data will include the dates the compliance buys or monitoring visits were conducted, the tasks performed as part of each activity and a summary of any noted violations. The system will also capture and maintain data on complaints about vendors received from participants, other vendors, and other sources.

(Note: Compliance Investigation, Routine Monitoring and Complaint data collection are

separate and discrete functions of the system.)

Input:

Complaint Date
Complaint Identification Number
Complaint Resolution
Complaint Source Type
Complaint Status
Complaint Subject
Complaint Summary
Complaint Type Code
Local Agency Identification Number
Local Agency Action
Investigator Identification Number
Vendor Compliance Activity Date
Vendor Compliance Activity PANs
Vendor Compliance Activity Reason Code
Vendor Compliance Activity Task Code
Vendor Compliance Activity Type Code
Vendor Compliance Activity Violation Indicator Code
Vendor Identification Number
EBT Processor Number
Vendor Monthly Redemptions
Vendor Outlet Identification Number
Vendor Risk Factor Type Code
Vendor Comment Field

Process:

13.5.4.1 Input data about the compliance activity and record in Vendor Compliance Activity data store

13.5.4.2 Input data from vendor complaints and record in Complaint data store

Output:

13.5.4.3 Compliance summary report

13.5.4.4 Vendor compliance history

13.5.4.5 Vendor complaint log

13.5.5 Support Inventory Audits

The system will assist in preparing for inventory audit investigations. These audits include comparing a vendor's redemptions with the vendor's internal inventory and sales records. The system will support inventory audits by calculating for a selected vendor outlet the quantities of supplemental foods sold based on the vendor's transactions to compare with inventory records that show the quantities of foods purchased for a corresponding period.

Input:

Vendor Identification Number
Vendor Outlet Identification Number
Vendor Audit Activity Date Began

Vendor Audit Activity Date Ended
Vendor Audit Activity Type Code
Vendor Audit Activity Result Code
Vendor Audit Activity Food Redemption Value
Vendor Risk Factor Type Code
Vendor Number of Food Items and Quantity at Beginning of Audit
Vendor Number of Food Items and Quantity at End of Audit
Vendor Number of Food Items Purchased from Wholesaler for Resale during Audit Period
Vendor Comment Field

Process:

- 13.5.5.1 For each supplemental food item (e.g., gallon of milk) redeemed by the vendor during the audit period, compare the total amount of that item the vendor purchased for sale in its store to the total amount of redemptions for that item
- 13.5.5.2 Flag any food items for which the vendor had redemptions that exceeded the store's documented inventory and store in Compliance Activity data store

Output:

- 13.5.5.3 Vendor sales analysis report
- 13.5.5.4 Data for TIP Report

13.5.6 *Maintain Other Vendor Contact Records (Vendor Contact Log)*

The system must provide for tracking and recording other vendor visits and contacts such as orientation visits, phone conversations, educational buys, follow-up visits, problem visits, or informal visits (history cumulative).

Input:

Vendor Contact Date
Vendor Contact Type Code
Vendor Identification Number
Vendor Outlet Identification Number
EBT Processor Number

Process:

- 13.5.6.1 Record the contact in the vendor record

Output:

- 13.5.6.2 Screen display or report of vendor other contacts

13.6 Monitor Sanctions and Appeals

The system will support the monitoring or sanctions and appeals by retaining a complete history of compliance investigations and vendor sanctions, including those investigations that resulted in sanctions and those for which sanctions were not imposed or not upheld on administrative or judicial review.

13.6.1 *Manage Vendor Sanctions*

Vendors who violate the WIC Program are sanctioned in accordance with State and Federal policy and regulations. Vendors who are disqualified cannot accept WIC food

benefits for the duration of their disqualification period. When a vendor is disqualified, the system will store the disqualification information in the Sanction data store and update the Vendor Authorization data store to reflect a change in vendor status. Federal rules require mandatory sanctions for the most serious vendor violations. These sanctions include either imposing a disqualification or a Civil Money Penalty in lieu of disqualification where Vermont WIC determines that disqualification of the vendor would result in inadequate participant access. The sanctions include:

- Permanent Disqualification—Conviction of trafficking food instruments/benefits or selling firearms, ammunition, explosives or controlled substances in exchange for food instruments/benefits.
- Six-year Disqualification—One incidence of trafficking food instruments/benefits or selling firearms, ammunition, explosives or controlled substances in exchange for food instruments/benefits.
- Three-year Disqualification—
 - One incidence of the sale of alcohol or alcoholic beverages or tobacco products in exchange for food instruments/benefits.
 - A pattern of claiming reimbursement for the sale of an amount of a specific supplemental food item that exceeds the store's documented inventory of that food item for a specific period of time.
 - A pattern of charging participants more for supplemental food than non-WIC customers or charging participants more than the current shelf or contract price.
 - A pattern of receiving, transacting and/or redeeming food instruments/benefits outside of authorized channels, including the use of an unauthorized vendor and/or unauthorized person.
 - A pattern of charging for supplemental food not received by the participant.
 - A pattern of providing credit or non-food items, other than alcohol, alcoholic beverages, tobacco products, cash, firearms, ammunition, explosives, or controlled substances in exchange for food instruments/benefits.
- One-year Disqualification—A pattern of providing unauthorized food items in exchange for food instruments/benefits, including charging for food provided in excess of those listed on the food instrument/benefits.
- Second Mandatory Sanction—When a vendor receives a second sanction for any of the above sanctions, the sanction is doubled.
- Third or Subsequent Mandatory Sanction—When a vendor receives a third or subsequent sanction for any of the above sanctions, the sanction is doubled and Vermont WIC may not impose a Civil Money Penalty in lieu of disqualification.

In addition, vendors disqualified from the SNAP are disqualified from WIC for the same length of time as the SNAP disqualification, and the disqualification period may begin at date later than the SNAP disqualification. However, participant access must be assessed before disqualification action may be taken.

When Civil Money Penalties are imposed for mandatory sanctions, Federal rules prescribe a formula for calculating the penalty. The Civil Money Penalties is 10 percent of the vendor's average monthly redemptions for the period that the disqualification would have been imposed. Civil Money Penalties cannot exceed \$10,000 per violation or \$40,000 per investigation. When a Civil Money Penalties is imposed, Vermont WIC may allow the vendor to pay under an installment plan and funds paid become program income.

The system will support the use of a point system for State Agency established

sanctions. The system will automatically determine the number of points to be assigned for specific types of violations (as specified by Vermont WIC) and maintain a tally of points accumulated by each vendor. When the point threshold is reached, the system would alert Vermont WIC to sanction the vendor.

The system will support the imposition of sanctions by automatically assigning the correct sanction for each type of violation. If a Civil Money Penalties is imposed in lieu of disqualification, the system will set up an account receivable.

Input:

Vendor Identification Number
Vendor Outlet Identification
Sanction Case Identification Number
Sanction Case Start Date
Sanction Case Status
Sanction Case Type Code
Sanction Effective Date
Sanction Points Number
Sanction Type Code
Sanction Length of Disqualification
Sanction Case Identification Number
Sanction Vendor Civil Money Penalties Amount Assessed
Sanction Vendor Civil Money Penalties Amount Assessed Date
Sanction Vendor Civil Money Penalties Amount Collected
Sanction Vendor Civil Money Penalties Due Date
Sanction Vendor Civil Money Penalties Installment Amount
Sanction Vendor Civil Money Penalties Installment Term
Sanction Violation Code

Process:

- 13.6.1.1 Accept user input of Violation code
- 13.6.1.2 Assign a corresponding sanction for each violation
- 13.6.1.3 Calculate the number of points for each violation
- 13.6.1.4 Determine sanction type and dollar amount of CMP
- 13.6.1.5 Prepare notice to vendor of sanction imposed
- 13.6.1.6 Maintain Civil Money Penalties accounts receivable data
- 13.6.1.7 Create Installment plans for vendor payment
- 13.6.1.8 Track vendor payments
- 13.6.1.9 Save Civil Money Penalties accounts receivable data in Grants data store
- 13.6.1.10 Update Sanction data store

Output:

- 13.6.1.11 Vendor sanction summary report
- 13.6.1.12 Notice to vendor of sanction imposed (correspondence)

13.6.1.13 Summary report of Civil Money Penalties due and paid to date

13.6.1.14 Data for TIP Report

13.6.2 *Maintain Vendor Appeal Data*

Vendors have the right to appeal adverse actions, including sanctions. When vendors appeal State Agency actions, the system will capture and maintain data about vendor appeals, including tracking appeals from initial request through the final decision. For completed appeals, the system will maintain data regarding the decision and outcome of the appeal.

This functionality will be supported by enable/disable switching at Vermont WIC level.

Input:

Sanction Case Appeal Indicator
Sanction Case Appeal Outcome Code
Sanction Case Identification Number
Sanction Case Start Date
Sanction Case Status
Sanction Case Type Code
Vendor Identification Number
Vendor Outlet Identification

Process:

- 13.6.2.1 Input data on vendor sanctions initiated in the Sanctions data store
- 13.6.2.2 Update data on vendor sanctions that are resolved in the Sanctions data store

Output:

- 13.6.2.3 Vendor appeal summary report
- 13.6.2.4 Vendor appeal history
- 13.6.2.5 Notice to vendor indicating outcome of appeal

13.7 Coordinate with SNAP – 3 Squares VT

The WIC State Agency and the SNAP Program must exchange information about mandatory sanctions imposed on vendors/retailers. If a vendor is disqualified by SNAP, the WIC Program must disqualify the vendor, unless participant access would be jeopardized by the disqualification. Conversely, if WIC disqualifies a vendor based on a mandatory sanction, SNAP must disqualify the vendor, unless exempt in cases of participant hardship. Timely exchange of information between WIC and SNAP accelerates the disqualification of abusive vendors, reducing the risk of fraud and abuse in both programs, as well as increasing the effectiveness of investigative resources.

The system will support this data exchange by accepting as input information about SNAP sanctions, and by producing reports of WIC sanctions for use by SNAP.

13.7.1 *Maintain SNAP Program Violation Data*

The system must have the capability of accepting data about SNAP regarding sanctions imposed against vendors that are also authorized by the WIC Program (the nature of this exchange will depend on the Memorandum of Understanding with SNAP). When the

WIC State Agency receives notification that vendors have been disqualified from SNAP, the WIC State Agency will use the SNAP ID number to determine if this vendor is WIC-authorized. If so, Vermont WIC can initiate disqualification action (this will be an Enable/Disable function).

Input:

Sanction Referred from SNAP
Vendor SNAP Identification Number
Vendor SNAP Sanctions
Vendor Identification Number

Process:

- 13.7.1.1 Search the list of authorized WIC vendors by SNAP identification number
- 13.7.1.2 List vendors with matches

Output:

- 13.7.1.3 Listing of WIC vendors that have been disqualified from SNAP
- 13.7.1.4 Notice to WIC vendors of disqualification due to SNAP disqualification

13.7.2 Report WIC Sanctions to the SNAP

(Depends on MOU with SNAP program – enable/disable function)

The system will generate a notice of disqualification to vendors who abuse WIC, with a copy sent to SNAP for reciprocal action. The notice will identify the violation(s) committed by the vendor and include the following required language: "This disqualification from WIC may result in disqualification as a retailer in SNAP. Such disqualification may not be subject to administrative or judicial review under SNAP." Although SNAP does not disqualify vendors based on WIC Civil Money Penalties, SNAP may use such information during its authorization/reauthorization process. Consequently, the system will produce a notice to SNAP of WIC vendors that have been assessed Civil Money Penalties in lieu of disqualification and the length of the disqualification periods corresponding to the vendor's violations. When WIC imposes a mandatory sanction on a vendor, the system will produce a notice to SNAP with the vendor's name, identification number, type of violation(s), and length of disqualification. The notice must be provided to SNAP no later than 15 days after a vendor's opportunity to appeal a WIC sanction has either expired or been exhausted.

Input:

Sanction Effective Date
Sanction Referred to Food Stamps
Sanction Type Code
Sanction Violation Code
Vendor Food Stamp Identification Number
Vendor Identification Number
Vendor Referred to Food Stamps

Process:

- 13.7.2.1 Within fifteen days after the vendor date to appeal has either expired or been exhausted, produce a notice to SNAP of the mandatory WIC sanction

including the required vendor information

Output:

- 13.7.2.2 Screen notification to user to send disqualification information to SNAP
- 13.7.2.3 Notice to SNAP of WIC vendors receiving mandatory sanctions
- 13.7.2.4 Data for TIP Report

13.8 Conduct Vendor Management Reporting

The system will analyze data in the existing database to provide management information for each functional area in a variety of formats. The reporting requirements range from “standard” reports required regularly by the state or the federal program to “ad hoc” reports supporting unique analysis system. The system must provide suitable automation of the requirements for other federal reporting when they are defined.

(Note: Printed reports will be on-demand only or designated automatic (by month, quarter, etc), enable/disable)

13.8.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu.

The following standard reports are needed within the Vendor Management function.

- 13.8.1.1 Compliance Summary Report – This report would list the vendors scheduled for compliance buys with data on the vendor’s name, address, history of past violations, high-risk indicators, past routine monitoring visits and date planned investigation and assigned investigator
- 13.8.1.2 List of Authorized Vendors by Identification Number – This report would list all vendors authorized by the program with key information (e.g., name, address, type, date authorized, etc.)
- 13.8.1.3 List of Authorized Vendors by EBT Processor Number – This report would list all vendors authorized by the program with key information
- 13.8.1.4 Listing of WIC/Food Stamp Program Dual Disqualification Report – This report would list all vendors that the SNAP has disqualified and sent to WIC and the action taken by WIC. It would also list the vendors WIC disqualified and sent to the SNAP
- 13.8.1.5 Report of High-risk Vendors and Their Risk Scores – This report lists all vendors designated as high-risk, the reason for high-risk identification, their respective risk scores and the factors that support the risk scores. The report will array the vendors by location to facilitate the scheduling of compliance investigations
- 13.8.1.6 Routine Monitoring Schedule Report – This report would list the vendors scheduled for monitoring visits with data on the vendor’s name, address, history of past violations, high-risk indicators, past routine monitoring visits and date planned for the visit. Report is to be produced at the State and Local Agency level
- 13.8.1.7 The Integrity Profile (TIP) Report – FNS requires that all State agencies submit

an annual TIP report, which provides vendor characteristics, training, compliance activities and sanctions. The system must support the statistical analysis requirements of the TIP report.

- 13.8.1.8 Vendor Applications Report – This report would list all vendors that have applied for and are under consideration for WIC authorization. This report would display the basic vendor characteristics provided on the vendor application
- 13.8.1.9 Vendor Attendance at Training Sessions – This report would provide a calendar of vendor training activities and the vendors that attended as well as those that did not and need to reschedule training
- 13.8.1.10 Vendor Authorizations Actions Scheduled and Completed – This report would outline the steps needed to complete vendor authorization and whether each step has been completed for each applicant vendor
- 13.8.1.11 Vendor Complaint Log – This report would log all complaints received about vendors, date received, complainant information and action taken. Report is to be produced at the State and Local Agency level
- 13.8.1.12 Participant fraud tracking – This report would provide information on sanctions by type and follow-up. (Tracking participant complaints will be separate function/database and tied into certification)
- 13.8.1.13 Participant complaints – This report would provide listings of participants' complaints by type by vendor. (Tracking participant complaints will be separate function/database and tied into certification)
- 13.8.1.14 Vendor Compliance History – This report would consolidate all education, monitoring and compliance activities for each vendor. The report will show the type of visit, the date of the visit and the results of each visit. The User will be able to filter for time period, type of buy, etc.
- 13.8.1.15 Vendor Inventory Audit Analysis Report – This report would summarize the data from a record audit. It would list the foods audited, the vendor food purchase invoices for those foods, and the total WIC redemptions for those foods
- 13.8.1.16 Vendor Sanction and Appeal Summary Report – This report would list all vendors that Vermont WIC has sanctioned and the vendor has appealed. It would have the date of appeal, status of appeal, hearing date, and outcome of the hearing
- 13.8.1.17 Vendor Sanction Summary Report – This report would list all vendors with sanctions and describe the violation, the sanction imposed (warning, disqualification, Civil Money Penalties) and date the vendor was advised of the sanction
- 13.8.1.18 Vendor Selection Assessment – This report would list all applicant vendors and the selection factors used to determine authorization, including shelf/bid prices of supplemental foods. The system must track the history of selection for each vendor
- 13.8.1.19 Vendor Training Schedule – This report would provide a calendar of upcoming

vendor training activities and the vendors scheduled to attend

- 13.8.1.20 Vendors by Peer Groups – This report lists all vendors according to their peer group assignment
- 13.8.1.21 Vendor Food Items Report – Report listing the food items redeemed per month per vendor for the previous quarter
- 13.8.1.22 Vendor Risk Analysis Report – Report listing individual risk factors for each vendor and a total weighted score for each vendor
- 13.8.1.23 Vendor Risk Factor Report – Listing of all vendors by peer group with every risk factor assigned.
- 13.8.1.24 Vendor Redemption Level Variance Report – Report lists vendors by peer group with four months of redemption by dollars and a percentage of variance percentage between the last month and the current month

13.8.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

The following are a few examples of the types of ad hoc queries that may be needed in the Vendor Management function:

The following are a few examples of the types of ad hoc queries that may be needed in the Vendor Management function:

- 13.8.2.1 Investigators with the highest rate of positive Compliance Buys
- 13.8.2.2 Prepayment Edit/Post-Payment Cost Savings Report
- 13.8.2.3 Ranking of high volume vendors
- 13.8.2.4 Vendor Training and High-risk History Report
- 13.8.2.5 Vendor WIC redemptions that have increased over several months
- 13.8.2.6 Vendors failing to attend new vendor or annual training report
- 13.8.2.7 Vendors with low monthly WIC redemptions
- 13.8.2.8 Vendor Visit History – show selected education, monitoring or compliance activities for each vendor. Showing the type of visit, the date of the visit and the results of each visit (include comment field). The User will be able to filter for time period, type of buy, etc.

13.8.3 *Maintain Data Warehouse*

Examples of the use of the data warehouse in the Vendor Management functional area are:

- 13.8.3.1 Characteristics of Participants Shopping at Abusive (high-risk) Vendors
- 13.8.3.2 Positive (violations) Compliance Buys among High-risk and Non-High-risk Vendors by Investigator

14. Appointment Scheduling

The system must provide a flexible, easy to use integrated scheduling component for the Local Agencies. Clinics require and must have the ability to override the established calendar availability of an appointment slot to “shoe horn” in a needed appointment.

Examples of services that can be received are scheduling appointments, benefit pick-up and card problems/replacement.

The appointment scheduling function must be integrated with the service delivery components of the system in the Caseload Management, Food Benefit Issuance, Certification, and Nutrition Services functional modules. The appointment-scheduling module also provides information to the Caseload Management functionality in regards to service delivery, no-show rates, *etc.*

Above all, the appointment scheduling functionality must be easy to use and user friendly.

The Scheduling functions are:

- Maintain Master Calendar
 - Maintain Master Calendar
- Schedule Appointments
 - Perform Appointment Scheduling
 - Perform Mass Rescheduling
- Generate Appointment Notices
- Conduct Scheduling Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports
 - Maintain Data Warehouse
- Track Non-Scheduled Contacts and Clinic Activity

14.1 MIS Master Calendar

The system will maintain a master calendar for scheduling purposes. This master calendar can be used by a Local Agency or individual clinic. A WIC Admin staff person can build the master calendar by specifying the maximum available slots, the available staff, and other appointment dates, types and durations (dependent upon the scheduling model employed by the agency). Additional parameters for other characteristics of appointments, such as the language of the class, can be added into the calendar. The user must be able to develop calendar “templates” for a given type of clinic day, week, or month. These templates may be used to populate selected calendar days, weeks, or months and replicated as desired up to one year in advance. The calendar must also support the blocking out of normal clinic operational days for such events as meetings, administrative days, and holidays. Based on these parameters, the system will create a calendar in advance. Calendars will be available for set-up for Clinic functions and Administrative functions; for example, Customer Service, Equipment Maintenance, Management Reviews, Vendor Monitoring visits and System Training.

14.1.1 Maintain Master Calendar

Input:

Clinic Identification Number
Event Slot Date
Event Slot Description
Event Slot Duration
Event Slot Language Code

Event Slot Maximum Number of Slots
Event Slot Required Resource Type Code
Event Slot Time
Event Slot Type Code
Local Agency Identification Number
Master Calendar Create Date
Master Calendar End Date
Master Calendar Identification Number
Master Calendar Start Date
Master Calendar Type Code
Resource Description
Resource Identification Number
Resource Type Code

Process:

- 14.1.1.1 Accept user input specific parameters
- 14.1.1.2 Generate calendar with available characteristics and slots based on these parameters
- 14.1.1.3 Assign needed resources (staff) from the available resource list
- 14.1.1.4 Update the Master Calendar and Event Slot data stores

Output:

- 14.1.1.5 Master calendar

14.2 Manage Appointments

14.2.1 Perform Appointment Scheduling

Using the master calendar, WIC staff can track the availability of a particular date and time to ensure that a particular appointment slot is available when scheduling a participant. Each time an appointment is scheduled for a specific slot, the system will decrement the number of available slots. When all the slots are full (meaning the date and time is full for a particular day or all class slots are filled for a particular class time), the system will notify the WIC staff of this condition. However, the system will allow the staff to select another time and/or date, or add an appointment even when all schedule slots appear to be full (e.g., allow overbooking to compensate for expected no shows).

The system will schedule appointments for certification, nutrition education, and food benefit pick-up. The system will also allow the provision of extra time slots to accommodate walk-in applicants by allowing for overbooking. The system will also be flexible enough to accommodate the scheduling needs for different target audiences and levels of the WIC Program. For example, the appointment scheduler will be capable of scheduling customer service events and outreach activities. In some cases, as in a nutrition education class, the system must keep track of the number of anticipated attendees.

The system will track attendance at scheduled events. The user may manually enter the status of an appointment (e.g., attended, rescheduled, no show) into the system. The system must also record attendance automatically when a participant record is updated

to show service activity on the appointment day.

The system will accept applicant preferences for an appointment time. The preferences may include such parameters as time of day, day of week, language, linkage with other Household members, and linkage with other services (e.g., prenatal or well-child appointments). Once the preferences are entered, the appointment scheduler will suggest available appointments that match the preference criteria.

The system will provide a flag for special needs associated with a given participant whenever they are scheduled or a scheduled appointment is viewed or listed in a report. Examples of special needs include handicap special accommodations necessary, interpreter needed and language, foster care, breast pump returns, missed signatures, custody issues, follow up questions, prescription needs, etc.

The system will also automate the regulatory scheduling criteria and notify the user if they are scheduling an appointment outside of the 10-20 days timeframe. However, the system must allow the appointment to be scheduled and provide for a field to document the reason for the delayed appointment.

In a class with multiple anticipated attendees, the system will track the number of actual attendees.

Input:

Education Offer Class Code
Event Preference Preferred Day
Event Preference Preferred Language Code
Event Preference Preferred Time
Participant Household Identification Number
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Missed Reason
Scheduled Appointment Number of Actual Attendees
Scheduled Appointment Number of Expected Attendees
Scheduled Appointment Outcome Code
Scheduled Appointment Time
Scheduled Appointment Type Code

Process:

- 14.2.1.1 Accept user entered appointment preferences and store in Event Preference data store
- 14.2.1.2 Check for appointment availability at particular time and date or length of time slot that meet preference parameters
- 14.2.1.3 Adjust appointment time when preferences cannot be matched
- 14.2.1.4 Collect and store daily appointment schedule data and applicant appointment data in the Scheduled Appointment data store
- 14.2.1.5 Decrement the Appointment Maximum Available Slots (the maximum number of slots available for a particular day and time or for a particular class) each time a new appointment is made (allow for overbooking)
- 14.2.1.6 Maintain class list by name, WIC category and Household ID

- 14.2.1.7 Provide for “walk-in” appointments to be added to the clinic schedule on the schedule day
- 14.2.1.8 Accept user entered appointment outcome data and update Scheduled Appointment data store with attendance data

Output:

- 14.2.1.9 Screen display of appointment schedule availability
- 14.2.1.10 Screen display of applicant's appointment schedule
- 14.2.1.11 Daily schedule of appointments by event type, staff assigned, or entire day

14.2.2 *Perform Mass Rescheduling*

Clinics may need to reschedule all appointments on a certain day or at a certain time due to conflict, availability of staff, or adverse weather conditions.

The system will allow the user to select a day, time, or event and reschedule all appointments for another day, time, or event. The system will generate a list of applicants, participants, vendors, or other parties that have been rescheduled.

The system will generate a notice to each applicant, participant, vendor, or other party who has had an appointment rescheduled to send to an Auto-dialer.

Input:

Education Offer Class Code
Scheduled Appointment Date
Scheduled Appointment Outcome Code
Scheduled Appointment Time

Process:

- 14.2.2.1 Retrieve appointment schedule for the selected day, time or event
- 14.2.2.2 Update Scheduled Appointment Outcome Code to Rescheduled
- 14.2.2.3 Reschedule appointments to next available calendar days, option to reschedule all appointments to one date, or “sprinkle” appointments throughout next available days
- 14.2.2.4 Update Scheduled Appointment Date and Scheduled Appointment Time with new appointment information in the Scheduled Appointment data store
- 14.2.2.5 Create file to send to auto-dialer or letter generator

Output:

- 14.2.2.6 Screen display or report of rescheduled appointments
- 14.2.2.7 Notify participants of new appointment time via auto-dialer or written notice

14.3 **Generate Appointment Notices**

The system will print a notice (on demand) or output to auto-dialer or e-mail for the applicant or participant if an appointment is made for a subsequent visit. This notice would serve as a reminder to the applicant or participant and would include the individual’s name, the type of appointment, the date, the time of the appointment, what to bring and directions to clinic. The

system will also be able to print out mailing labels to expedite the postage of notices to participants. Appointment notices can be printed for certification, nutrition education, and food benefit pick-up, as well as daily missed appointments. The system will have the ability to maintain appointment notice templates that can be filled with specific information related to a participant, as necessary.

14.3.1 *Generate Appointment Notification*

The system will have the ability to download a file into an automated dialer, so participants may be reminded in advance of their appointments or notified that they need to reschedule a missed appointment. An enable/disable switch at the Local Agency level must support this functionality. Future functionality may allow this process to occur via E-mail as well.

In addition, all appointment notice generations, either via Auto-dialer or paper printout must be linked to a confidentiality flag in the participant's record to prevent calls or notices being sent to participants that do not wish to be contacted by the Program. The system will document in the participant record all appointment notices or auto-dialer calls made to a participant. The system will aggregate notification into one notification for household participants with consecutive appointments.

Input:

Auto Dialer Return Information
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Document Code
Scheduled Appointment Time

Process:

- 14.3.1.1 Accept user request to generate an appointment notice or mailing labels
- 14.3.1.2 Retrieve data from the Scheduled Appointment and Participant data stores
- 14.3.1.3 Create an Appointment and Reschedule Notices inclusive of instructions for cancellation
- 14.3.1.4 Create Mailing Labels, also create labels for charts, etc.
- 14.3.1.5 Create an Appointment File
- 14.3.1.6 Download Appointment File to Auto-dialer

Output:

- 14.3.1.7 Appointment and reschedule notices (includes notification of appointment type, reminders of what to bring, etc.)
- 14.3.1.8 Mailing labels
- 14.3.1.9 Appointment file
- 14.3.1.10 Generate report of call outcome

14.4 Track Non-Scheduled Contacts and Clinic Activity

The system must provide a separate function specifically for tracking non-scheduled clinic

activities. In most WIC clinics considerable activity and service delivery occurs outside of scheduled appointments and clinic operations. For example, a participant may “drop in” on a day when they do not have a scheduled appointment to discuss some issue or question they may have or to seek breastfeeding support advice. In these events, the system must provide a means for the WIC staff to record the in person or by phone contact in the system without needing to schedule an appointment and mark it as kept. Another example is when prospective applicants drop in to the clinic or call in to inquire about the WIC Program and determine if they may be eligible. Upon discussion with a WIC staff member, it is determined that the person is not eligible for the Program categorically, by income level, *etc.* The person then does not request a formal certification appointment. In this event, the system must again allow the WIC staff to record the contact and service delivery without requiring the creation of an applicant record or appointment.

The system must provide a pick list of non-scheduled actions/service delivery types for the user to select. The system must record the date of the contact (auto-generated), the type of contact (user selected from list), the time the contact was recorded (auto-generated), the duration of the contact (user entered), the name of the staff member providing the service (auto-recorded by user name sign-on), and a note field for further information (user entered).

14.4.1 Track Contacts

Inputs:

Contact Date
Contact Time
Contact Duration
Contact/Service Activity Type Code
Staff Name
Local Agency Name
County of Residence
Contact Note Field

Processes:

- 14.4.1.1 Accept user entry of non-scheduled contact/service delivery
- 14.4.1.2 Record contact/service delivery in clinic activity database
- 14.4.1.3 Accept Input from ARU (Audio Response Unit) for auto population of contact data.

Outputs:

- 14.4.1.4 Report of non-scheduled contact/service delivery

14.5 Conduct Scheduling Reporting

The system will produce reports for Local Agencies to use in managing their appointment schedule. While standard reports are necessary, ad hoc reports are also particularly helpful in determining appointments for individuals.

14.5.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu.

The following standard reports will be available from the Scheduling functionality:

- 14.5.1.1 Clinic Daily Appointment Schedule – This report will list all appointments currently scheduled for the clinic for a given day, week, or month as selected by the user. The report will list the appointments by time slot, indicate the appointment type, list the participant(s) or applicants for whom the appointment is scheduled, and note any specific needs such as an interpreter
- 14.5.1.2 Appointment Schedule Availability – Although appointment scheduling is usually performed electronically, there may be some instances in which a report of available appointments would be helpful. This report is used to display the appointment schedule availability for a particular day and time to aid WIC staff in confirming the availability of a requested appointment slot
- 14.5.1.3 Daily Schedule of Nutrition Risk Assessments – This report is used to display all nutrition risk assessment appointments (certification and recertification) for a particular day to support appointment scheduling and staff requirements for that day. Similar reports can be generated for other types of appointments including nutrition education.
- 14.5.1.4 Kept Appointment Report – This report calculates and tracks the show rate of the clinics appointments
- 14.5.1.5 Missed Appointment Report – This report lists the participants who missed an appointment and can be used for follow-up. It also generates the clinic no-show rate

14.5.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. WIC staff will be able to enter selection parameters and query the system. The most common customizations would be “report by Local Agency” and a “date range”.

Ad hoc queries are particularly useful in the scheduling area. Individual staff members may choose to query the master calendar for their own list of appointments. These appointment lists may be generated for the day, week, or month. The following are examples of ad hoc queries in the Scheduling functional area:

- 14.5.2.1 Times at which breastfeeding classes in a language other than English will be taught
- 14.5.2.2 Number of appointments available during evening and Saturday hours
- 14.5.2.3 Frequency of class offerings in Infant Feeding
- 14.5.2.4 Schedule of WIC clinic special events

14.5.3 *Maintain Data Warehouse*

The data warehouse may be used in the Scheduling functional area to look at trends in clinic traffic, impact of evening hours on participation rate, and the potential relationship between convenient class times and popularity of WIC classes. Data from the Event Slot, Event Preference, Master Calendar, and Scheduled Appointment data stores will be incorporated into the data warehouse.

Examples of data warehouse queries for the Scheduling functions include:

- 14.5.3.1 Impact of class times on attendance rates among different categories of

participants

14.5.3.2 Impact of evening hours on participant satisfaction

14.5.3.3 Impact of vendor education attendance on vendor sanction

15. System Administration

The System Administration functional area is intended to contribute to the overall flexibility, efficiency, and security required to operate and maintain the system. This functional area provides the capabilities to maintain information contained in system data (reference) tables, to control general access to the system as well as the ability to perform specific functions, to perform system “housekeeping” and maintenance functions, and to move certain files to off-line storage for increased system efficiency. Additionally, this functional area includes reports that are relevant to monitoring system operation and performance.

System Administration is composed of the following functions:

- Maintain System Data Tables
 - Maintain System Code Table Data
- Administer System User Security
 - Maintain User Identification
 - Maintain User Capabilities
 - Monitor Unauthorized Access
 - Monitor Record Updates
- Manage System
 - Manage System Sites
 - Manage Communications
 - Perform System Back-Up/Restoration
 - Perform End-of-Day Processing
 - Import/Export Data Files
- Create/Rebuild Clinic System
 - Provide Version Control/Distribute Updates
- Archive System Data
 - Archive and Restore Historical Data
 - Purge Unnecessary Data
- Conduct System Administration Reporting
 - Generate Standard Reports
 - Conduct Ad hoc Queries and Generate Reports

15.1 Maintain System Data Tables

15.1.1 Maintain System Code Table Data

The system will support this function by allowing authorized users to add, delete, or change data elements in the defined tables and templates via the application (*i.e.*, screen). Users will not change any of the characteristics of the data elements such as field length or field type through this function – those types of changes will necessitate programming modifications.

The act of updating of data code tables will occur at Vermont WIC program level and changes will be global for all system installations. However, some table’s data edits are more appropriate to the Local Agency level, for example local outreach organizations. The system will provide for Local Agency level update of these tables as appropriate, subject to user authorization.

Input:

The system will allow addition, deletion, or update of any unrestricted data element contained in the data code table. Most data code tables consist of a code and a description of the data that each code represents.

Process:

15.1.1.1 Edit new and updated data elements

15.1.1.2 Store edited data in appropriate data code table

Output:

15.1.1.3 Screen display and report of data code table

15.2 Administer System Security

Federal regulations require that only authorized individuals have access to WIC information. Access to sensitive health and income information must be limited to those individuals at State and Local Agencies that require such information to serve WIC participants. The issuance of food benefits is another sensitive area that requires tighter controls than most other management information or participant processing functions. The various controls placed on access to the system in general and these areas in particular constitute a large part of system security. System Security will be designed to be compatible with SOV, DII, AHS, VDH and WIC standards at the time of deployment. All system users are State of Vermont Employees who have access to system networks controlled by AHS.

15.2.1 Maintain User Identification

Once a new user is added and authorized via AHS IT to the VDH level, the system will allow an authorized user, the WIC System Administrator, to add, delete, or update users in the system. When a new user is entered, the system will use the employee's State ID number to uniquely identify the user and associate the user with a specific WIC Local Agency. The system will then produce a notice to be sent/given (not by e-mail) to the supervisor, which provides the User ID and a temporary password to gain initial entry into the system.

Password Policy (SOV, DII, WIC)

It will be required that users change their temporary passwords at the time they first log onto the system and every 30 days thereafter. The system will prompt users to change their passwords 14 days in advance of password expiration and will maintain a list of the last few used passwords so that the user cannot select a password that they recently used. Passwords used to access data classified data may be reused every sixth password. As such, a completely new password is required for the first five expires; thereafter, the first password can be reused. "Completely new" is defined as having at least fifty percent (50%) of the characters different from the previous password. User account lockout feature shall disable the user account after five (5) unsuccessful login attempts and the account lockout duration shall be fifteen (15) minutes. Accounts shall be systematically disabled after ninety (90) days of inactivity to reduce the risk of compromise.

Password Policy

- Passwords must be changed every ninety (90) days (DII/SOV) and every Thirty days

for WIC (DII/WIC), at minimum, to reduce the risk of compromise through guessing, password cracking or other attack and penetration methods. Exception: If a user terminates for any reason, passwords and accounts will be disabled immediately by the appropriate IT department personnel.

- Password changes shall be systematically enforced where possible.
- Passwords shall be systematically disabled after ninety days of inactivity to reduce the risk of compromise.

Password Construction will:

- Contain both upper and lower case characters (e.g., a-z, A-Z)
- Have digits and punctuation characters as well as letters, (e.g., 0-9 , !number\$%^&*()+~`-=\{}[]:~";<>?@)
- Be at least eight alphanumeric characters long
- Not be a word in any language, slang, dialect, jargon, etc.

Input:

User Identification Start Date
User Identification End Date
User Identification Number
User Last Modified Date
User Last Modified User
User Last Name
User First Name
User Organization Supervisor
User Password (Encrypted)
User Supervisor Telephone Number
User Telephone Number
User Title/Role

Process:

- 15.2.1.1 Create/Accept User Identification
- 15.2.1.2 Store edited user data in the User data store
- 15.2.1.3 Maintain history of user data

Output:

- 15.2.1.4 User ID confirmation notice (e-mail notification of ID and temporary password)
- 15.2.1.5 Screen display/report of all users. Screen display/report must display all user permissions within a group and individual user permissions within a group.

15.2.2 Maintain User Capabilities

The system will also control access to specific functions within the system. Access to these functions is controlled by a series of yes/no indicators for each user ID in the system that specify which functions the user is authorized to perform. For example, a clerk may be allowed to enter eligibility data, but not allowed to issue food benefits. The system will enable authorized users (e.g., System Administrator) at the WIC State level to update these indicators for each user at their specific site. The system will provide a display screen that identifies the authorized capabilities, and print a listing with the names of all users at a site authorized to perform a specific function. User access control capabilities must include the ability to create and assign group level, screen level, individual level, and inherited group permissions. In some instances,

dependent upon system design and organization, it may be necessary to provide the ability to control user access to the data field level as well. User access will be defined as a selection of one of the following: view/edit new entry or update; view/edit update only; view only; or, no access. Access permissions will be incremental, that is, addition of an access area adds to capabilities of the user and does not apply exclusions related to the capability that are overridden by other assigned access.

Input:

User Access Function Code
User Access Function Privilege
User Identification Number

Process:

- 15.2.2.1 Accept user entered user access function and function privileges
- 15.2.2.2 Validate User Identification and capability data
- 15.2.2.3 Store or update capability data in the User Access data store

Output:

- 15.2.2.4 User capability profile
- 15.2.2.5 Audit file (includes history of changes to the user capability profile)

15.2.3 Monitor Unauthorized Access

The system will monitor attempts by users (who have general access to the system) to gain access to specific functions for which they are not authorized according to the capability list described in the previous section. In addition, the system will record unauthorized (failed) attempts to access the system. The system will produce a report, upon request, that lists individuals who have attempted to gain unauthorized access to WIC functions. User attempts to access the system are recorded for unauthorized users. For those screens that users do not have access to they will be grayed out or will not be shown on the system.

Input:

Unauthorized Access Date
Unauthorized Access Function Code
Unauthorized Access Terminal Identification Number
Unauthorized Access Time
User Identification Number

Process:

- 15.2.3.1 Record user ID, date, time, and terminal location for each unauthorized access attempt
- 15.2.3.2 Generate Unauthorized Access Report upon request

Output:

- 15.2.3.3 Unauthorized access report

15.2.4 Monitor Record Updates

To support detailed auditing of system usage the system will capture the specific user who has updated system records and the changes that are made. Each time a user enters or changes a data element, the system will associate a user ID number, user name, and a date stamp field on the data field change. If there is any need in the future to trace changes to the database, the system audit files produced as a result of this function could be reviewed along with additional system history files to be determined. The system will produce a report, upon request, that lists specific changes to data and the user and date associated with these changes. This is especially important for tracking certification functions that must be performed by different entities.

Input:

Created Date
Created User
Last Modified Date
Last Modified User
User Identification Number

Process:

- 15.2.4.1 Record user ID, date, and time each modification of the system data
- 15.2.4.2 Create Audit File

Output:

- 15.2.4.3 Modified data element audit screen display/file/report

15.3 Manage System

The system will automatically monitor and support the ongoing operation of the system and its components. This function includes system configuration processes, system back-up and recovery activities, and end-of-day processes. These functions are performed at the central data facility for the application. For the distributed system installations (satellite sites with low telecommunications capacity), the systems will be “synched” with the main application upon the return of the mobile units thus eliminating the need for Local Agencies to perform routine system “housekeeping” functions.

15.3.1 Manage System Sites

The system will enable system administrators to specify parameters for configuring the installation of the system. Distributed systems will have the flexibility to set-up individual locations to operate in a stand-alone or LAN environment, depending upon the characteristics of the local technical environment.

Input:

System Set-Up Parameter

Process:

- 15.3.1.1 Accept system configuration parameters
- 15.3.1.2 Edit new and updated system configuration parameters
- 15.3.1.3 Store edited parameters

Output:

- 15.3.1.4 Screen display and report of system parameter settings

15.3.2 *Manage Communications*

The system will have the capability to transmit and receive transactions of various types through designated communications capabilities. The types and content of the transmissions will vary depending on whether the site accesses an on-line application or is a distributed site. Food transactions and participant certification data will be communicated electronically in real-time (for on-line sites) or in batch transmission during end-of-day processing (for distributed sites). For example, a distributed system may aggregate certification data and transmit that data at the end of the day to the central state database or, in the case of EBT, also to the EBT Processor. For EBT, current month issuance will be transmitted to EBT processor on-line. Similarly the system may receive downloads of system code tables, participant transfer data, dual participation verification files, or "hot card" lists from the State. The transmission may operate over dial-up or point-to-point lines, public networks (*i.e.*, the Internet), or wireless transmission (*e.g.*, radio frequency or satellite transmission).

Regardless of the transmission content or channel, the system must be able to perform the following functions when transmitting a transaction/file: aggregate appropriate data for transmission, route the transmission, and receive notice of the success or failure of the transmission. In the case of transmission failure, the system must be able to retransmit the transaction and to acknowledge transmission failures (as well as successes). Conversely, when receiving transmissions from other systems, the system must be capable of receiving the transmission, checking the transmission for error, and generating an acknowledgement transaction. The system may use polling techniques, scheduled transmissions, on-demand transmissions or other protocols depending on the requirements and design of the specific system.

Input:

The transaction file content depends upon the type of data being transmitted. However, the following standard transaction control elements will be included:

- Bit Map, Primary
- Bit Map, Secondary
- Message Type
- Other Optional Data Elements Depend upon the Transaction Type
- Other Required Data Elements Depend upon the Transaction Type
- Systems Trace Audit Number
- Transmission Date and Time

Process:

15.3.2.1 To transmit transactions, the system will perform the following processes:

15.3.2.2 Aggregate Transactions

15.3.2.3 Create Transaction File

15.3.2.4 Transmit/Route Transaction File

15.3.2.5 Receive Transaction Response

15.3.2.6 Retransmit Transaction

15.3.2.7 To receive transactions, the system will perform the following processes:

- 15.3.2.8 Receive Transaction
- 15.3.2.9 Check Transaction for Error
- 15.3.2.10 Generate Transaction Response
- 15.3.2.11 Update System with aggregated transactions

Output:

- 15.3.2.12 Transaction response

15.3.3 Perform System Back-Up/Restoration

The Production system will be backed-up hourly so that production data are restored in the event of a system outage. The method for back-up will vary for the centralized system in comparison to distributed system installations. Typically, in centralized systems the data are backed-up at the data center, while in distributed systems the data are backed-up at each site. Each system will have an automated back-up system that triggers an hourly back-up at a scheduled time without user intervention. If a system failure occurs, the backed-up data are used to restore the database to its existing state just prior to the failure. To restore the database, the data are copied from the back-up file to the database tables. Offsite storage of the application and vital program data at a remote mirror site will occur to assure continuation, in case of disaster. A mirrored backup on a backup drive would provide redundancy for quick recovery in case of drive failure for distributed systems.

Input:

All newly entered data since last back-up

Process:

To back-up the data, the system will perform the following processes:

- 15.3.3.1 Initiate timed back-up procedure
- 15.3.3.2 Create Back-Up File (for the central site this may be accomplished by an external back-up program defined by Vermont IT services)

To restore the data, the system will perform the following processes:

- 15.3.3.3 Load Back-Up File
- 15.3.3.4 Copy Back-Up File to Database

Output:

- 15.3.3.5 Screen display confirming completion of successful data backup/restoration (a back-up log and e-mail notification of back-up status will be created)

15.3.4 Perform End-of-Day Processing (distributed sites only)

For the on-line centralized architecture (networked or web-based system), in which the Local Agencies are directly connected to the host processor and transactions are performed in real time, end-of-day processing will likely be limited. For the distributed systems without an ongoing, on-line connection to the central host, transactions must be collected during the day and transmitted in a batch file at the end of the day. These aggregated transactions may include new certifications, changes to existing participant

records, participant transfers, food benefits issued, and any other transactions performed over the course of the workday in local clinics. End-of-day transaction files may be sent to a variety of systems including, but not limited to, the central host, financial institution, State Agency, or EBT Processor. End-of-day processing may also entail the uploading of modified satellite clinic data to the local administrative site when the satellite clinic database has been checked out from the local administrative site.

For the Offline EBT environment the system would collect account set-up and benefit authorizations from local clinics and send it to the EBT Processor during the end-of-day processing cycle. Online EBT systems would send account set-up and benefit authorizations from local clinics in real time. Additionally, during the Offline redemption phase, vendors collect food item level sales data that is typically stored in a store controller during the day and sent to the EBT Processor for settlement during end-of-day closeout. Such item level data are consolidated by the EBT Processor and sent to Vermont WIC system. This data are used by the State for vendor management, financial management, and dietary assessment.

Input:

Bit Map, Primary

Bit Map, Secondary

Message Type

Systems Trace Audit Number

Transmission Date and Time

Other Required Data Elements Depend upon the Transaction File Type being transmitted

Other Optional Data Elements depend upon the Transaction File Type being transmitted

Process:

15.3.4.1 Retrieve Transactions

15.3.4.2 Create End-of-Day Transaction File

15.3.4.3 Transmit/Route End-of-Day Transaction File

15.3.4.4 Verify Receipt of End-of Day Transaction File

15.3.4.5 Retransmit End-of-Day Transaction File

Output:

15.3.4.6 Screen display, e-mail, and log confirming completion of successful end-of day transmission

15.3.5 Import/Export Data Files

Some functionality needed to support WIC business processes are automated but will be performed outside the main system. This functionality is provided through stand-alone applications that operate on separate hardware platforms, but require the use of data collected and maintained through the main system. For example, the State of Vermont performs certain financial management and analyses in state accounting systems. These systems require financial and participation data collected through the WIC system to perform this functionality.

Alternatively, other state applications may create data that is needed for processing within the WIC system. For example, a WIC system may use information imported from the state Medicaid files to determine adjunct income eligibility. Consequently, the WIC

system will be able to import data from other systems as well as to extract data to be exported to external systems.

Data needs to be possibly placed in a temporary table or a staging area and checked for accurate data before the data is moved to production. An error log must be created to identify data conflicts.

Input:

Required data elements depend upon the type of data being exported or imported

Process:

To export the data, the system will perform the following processes:

- 15.3.5.1 Retrieve Data
- 15.3.5.2 Format Data
- 15.3.5.3 Create Export file
- 15.3.5.4 Send Export file

To import the data, the system will perform the following processes:

- 15.3.5.5 Receive Import file
- 15.3.5.6 Check data Integrity
- 15.3.5.7 Accept or reject file
- 15.3.5.8 Send rejected file notification
- 15.3.5.9 Update system database with data from accepted import file

Output:

- 15.3.5.10 Required data elements depend upon the export file type

15.3.6 Create/Rebuild Clinic System

The WIC Program often uses temporary facilities as clinic sites. Consequently, the clinic system may have to be created or rebuilt frequently to accommodate changes in clinic locations. To initially create a clinic system, the system administrators will configure the system for the specific technical environment of the particular location, populate the appropriate code tables, and assign relevant system usage parameters. For distributed system sites, creating satellite clinics may entail checking out the database from the "owning" local administrative site.

Input:

All legacy data in the central state site at system initiation including system code and security tables

Process:

Note: The following processes are likely external to the application.

- 15.3.6.1 Configure the system
- 15.3.6.2 Build the local database/convert data from legacy system/check-out satellite

database from “owning” site

15.3.6.3 Set-up system code tables

15.3.6.4 Set-up security tables

15.3.6.5 Set-up communications structure

15.3.6.6 Set-up system parameters

Output:

15.3.6.7 Configured clinic system

15.3.7 Provide Version Control/Distribute Updates

The requirements for configuration management will vary according to the architecture of the system (central or distributed) for each site. For centrally networked sites, software version control will be managed centrally. The data center staff controls the version of software running on the central host to which all sites are linked. When an update to software is made, the software is replaced on the central processor and the linked terminals/workstations all run the same software. However, for distributed sites, it is more difficult to ensure proper version control and standard participant configurations. A consistent process is needed for maintaining version control, as well as distributing and installing any updates to software in individual sites.

The system will have the ability to poll distributed local sites (during Beginning of Day or End of Day process) to verify that the correct software version is running on workstations at the local sites. Further, the system will enable the downloading of updated software to be automatically distributed to each local LAN or standalone workstation at distributed sites and to ensure that updates run during periods of low (or no) clinic activity. The system will also acknowledge failed and successful updates.

Input:

Software Updates

Process:

15.3.7.1 Log software version release

15.3.7.2 Poll terminals/workstations for software version

15.3.7.3 Download software update to workstation

15.3.7.4 Verify software version by retrieving current version number from local database and matching the retrieved version number with the required version number

15.3.7.5 Install new software when retrieved version number does not match required version number

Output:

15.3.7.6 Updated software

15.4 Archive System Data

WIC Program requirements stipulate that program records be retained for a minimum of three years. To satisfy this requirement while preserving efficient system operation, it is necessary to remove information that is not required for the day-to-day processing in the system. Historical WIC data will be automatically stripped from the system (according to user entered parameters) and stored off-line (archived) for potential future use.

15.4.1 *Archive and Restore Historical Data*

The system will archive historical WIC participant records according to parameters specified by Vermont WIC. It will be possible to specify different periods for different types of records since it is important to retain some types of data for longer periods than others are. The system will leave some type of indicator that informs a user that a record was previously stored in the system and is now located in the system archives. The system must also be able to retrieve those files for user access within 24 hours, or upon request.

If archived data is to be available to clinics real-time a storage area network (SAN) is necessary and expected. The SAN will be large enough to hold data for 7 years.

Input:

Archive End Date
Archive File Number
Archive Location
Archive Name
Archive Parameters to select data for archiving
Archive Record Type Code
Archive Start Date

Process:

To archive historical data, the system will perform the following processes:

15.4.1.1 Copy historical data to storage medium based on user-provided date parameters

15.4.1.2 Strip archived data from the system

To restore archived data, the system will perform the following processes:

15.4.1.3 Load data files or individual records according to user-specified parameters

Output:

15.4.1.4 Archive files

15.4.1.5 Restored Data

15.4.2 *Purge Unnecessary Data*

This process is identical to the archive process described above, with the exception that the data are not stored before they are stripped from the system. Vermont WIC may collect some types of information that are of no use after the period that they are needed on-line. For example, aged appointment data, food benefit data over 3 years old, etc. The system will allow this information to be purged completely via an automated process and according to user-entered parameters.

Input:

Purge Parameters

Process:

- 15.4.2.1 Retrieve data that meets the purge parameters
- 15.4.2.2 Strip data to be purged from the system

Output:

- 15.4.2.3 Purge file
- 15.4.2.4 Purge report

15.5 Conduct System Administration Reporting

In the System Administration functional area, standard reports are used in addition to ad hoc queries and data warehouse searches.

15.5.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu.

The following standard reports are needed within the System Administration function:

- 15.5.1.1 Authorized User Report – This screen provides a list of all authorized users at a specified site to assist the system administrator.
- 15.5.1.2 Code Table Change Report – This screen/report allows users to identify when changes have been made to the content of data tables and who has made these changes
- 15.5.1.3 Code Table Report – This report allows users to verify the current content of data tables to be used in preparing inputs to the system and in reading output reports. The Code Table Report is generally requested by the System Administrator as needed to verify code table updates
- 15.5.1.4 Communications Exception Report – This report provides detailed information about transactions that were not completed satisfactorily. It can identify sources of transmission errors or patterns of transmission problems
- 15.5.1.5 End-of-Day Processing Transaction Log – This report provides a detailed audit log of all transactions that occurred during a processing day at a local site
- 15.5.1.6 Modified Data Element Report – This report provides detailed audit information about changes to the system data. It can be used to report information to identify any fraudulent patterns of system usage by entering a particular location, period of time, or user to show types of changes made
- 15.5.1.7 New User ID Report – This report confirms the establishment of new users in the system and provides the new ID and temporary password to that user
- 15.5.1.8 System Back-up/Restoration Report – This report provides detailed information about files that were backed-up or restored at a local clinic
- 15.5.1.9 System Performance Report – This report provides a detailed listing of the performance level of terminals at each site. It can be generated for an individual site or for all sites, is used to detect equipment problems in a particular location

- 15.5.1.10 Hardware Configuration Report – This report provides a detailed listing of the hardware at each site and the software running on each terminal. This report can be used to control the software configuration on workstations. This will likely be done with a third party application yet to be decided. However, if the application can easily support this need it may be utilized for this purpose
- 15.5.1.11 Transaction Processing Report – This report provides detailed information about batch transmissions sent to the host. It shows the last upload by terminal, number of transactions in a batch, and counts of transactions by type. This will likely be done with a third party application yet to be decided. However, if the application can easily support this need it may be utilized for this purpose
- 15.5.1.12 Unauthorized Access Report – This report provides detailed information about attempts to gain access to the system (invalid entry of PIN) or to specific functions for which a user is not authorized. It is used by State or Local Agencies to verify a specific user’s unauthorized access and help detects user fraud
- 15.5.1.13 User Profile Report – This report provides a listing of the functional capabilities for a user in the system. It is used on demand by State and Local Agencies to verify user privileges

15.5.2 *Conduct Ad hoc Queries and Generate Reports*

The user must be able to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. The most common customizations would be “report by Local Agency” and a “date range”. The following are a few examples of the types of ad hoc queries that may be needed within the system administration function:

- 15.5.2.1 Performance history of a particular terminal or site
- 15.5.2.2 Record updates by specific location or user over period of time
- 15.5.2.3 Type of Code Table Changes by location and/or user
- 15.5.2.4 Unauthorized access attempts by a specific user over a specific period of time

15.6 Maintain Data Warehouse

Most of the data in the data warehouse will be based on clinic transactions. However, some system administration data about unauthorized access and record updates may be useful in a data warehouse when tracking vendor or clinic fraud over a period of time. Security data from the User and User Security data stores showing user access privileges and system access attempts by the user may be useful in the data warehouse. Data from the system audit files may be useful in pinpointing security issues, such as more than three unsuccessful PIN entry attempts. In the data warehouse environment, this security data may be fused with data from other functional areas, such as Benefit Issuance and Benefit Redemption, Settlement, and Reconciliation to identify areas of potential clinic fraud.

Some examples of data warehouse queries include:

- 15.6.1.1 Identification of clinics showing a high number of unauthorized access attempts, as well as a high incidence of unissued but redeemed food benefits

15.6.1.2 Patterns in security breaches over time

15.6.1.3 Regions of the state with the highest level of security breaches over time

16. EBT Security

In order for a retail system to have access to real-time services and screens in the EBT System, a retail system must be logged into the EBT System. Real-time access is needed to process online retailer purchase requests, exchange auto-reconciliation files and provide Allowed Product lists. Accessing screens in the EBT System carries some additional security requirements that are documented in the following SSO section. The additional security requirements are geared at appropriately restricting access of individual users based on group memberships once inside the EBT System. However, once access to an EBT System screen has been granted, only the EBT System security module may control the access level of the individual user. Note that within this construct, the MIS still has requirements to define the roles and capabilities of its users when providing direct access to the EBT environment.

16.1 Maintain User for Single Sign On (SSO)

User maintenance for SSO comprises operations for maintaining SSO users in the EBT System. Users from a MIS that are setup in the EBT System shall be able to access screens in the EBT System via direct links from the MIS without having to go through an additional log on process in the EBT System. Note that users may be setup independently in the EBT System. However, such users will not have SSO functionality available.

16.1.1 SSO Functionality

All data elements and functions are mandatory.

Input

WIC Authority ID
System ID
Password
Security Token

Process

- 16.1.1.1 EBT System shall validate that the WIC Authority ID is valid
- 16.1.1.2 EBT System shall validate that System ID has access for the WIC Authority ID.
- 16.1.1.3 The EBT System shall decrypt the Password and validate that it is correct for the given System ID.
- 16.1.1.4 The EBT System shall generate and return Security Token in response. The generated Security Token shall be valid for a configurable number of minutes

Output

- 16.1.1.5 Security Token valid for specified period of time

16.1.2 Create User

The Create User operation is used to create a SSO user in the EBT System. User

Address and e-mail address are optional.

Input

Username
Name of User
User Address
User Email Address

Process

16.1.2.1 The EBT System shall validate that Username does not already exist for the calling system.

Output

16.1.2.2 The EBT system Validates or Rejects username and password.

16.1.3 Update User

The Update User operation is used to update SSO user information in the EBT System. Address and e-mail address are optional.

Input

Username
Name of User
User Address
User Email Address

Process

16.1.3.1 The EBT System shall validate that Username does not already exist for the calling system.

16.1.3.2 The EBT System shall accept the updated user data.

Output

16.1.3.3 The EBT System displays the updated user record.

16.1.4 Deactivate User/Reactivate User

The Update User operation is used to deactivate or reactivate a SSO user in the EBT System. The EBT System will not accept subsequent EBT System Access requests after a SSO user has been deactivated, until reactivated.

Input

Username

Process

16.1.4.1 The EBT System shall deactivate the Username.

Output

16.1.4.2 The status of the user is changed to inactive. Note that the user record still exists in the EBT System.

16.1.5 Access the EBT System

The Access the EBT System operation is used to provide access to the EBT System screens from the MIS for a SSO user that is logged on to the MIS.

Input

WIC Authority ID
System ID
Username
Security Token
SSO Action

Process

- 16.1.5.1 EBT System shall validate that the WIC Authority is valid
- 16.1.5.2 EBT System shall validate that System ID has access for the WIC Authority ID.
- 16.1.5.3 The EBT System shall validate that the Username is valid and in active status for the given System ID.
- 16.1.5.4 The EBT System shall generate and return Security Token in response. If no session exists for the user and Action is not present, then a new session is created in the EBT System for the given user. Furthermore, the session will expire after an agency configured timeout. If a session already exists for the user and Action is not present, then the expiration time for the session is extended for another 20 minutes. When the session is created, the EBT System security settings for user (based on the user's group memberships) are loaded.
- 16.1.5.5 Optionally, the only accepted value can be logoff. If the parameter is null, then the EBT System will log on the user or will extend the user's session if it already exists. If Action is logoff, then the user's session is invalidated so that no further access to the EBT System is allowed (until the MIS initiates another logon for the user).

Output

- 16.1.5.6 MIS user is validated to access EBT screens.

17. EBT Message Based Access

The following table lists common parameters required for most EBT System web services. These parameters are unique to real time transactions. Batch files will have different requirements and some of the information will be present in the header record of the file.

Note that these parameters are not required for screen calls in the EBT System since the necessary parameter values are either:

- Derived from the user's session (Username, MIS System ID, WIC Authority)
- Initialized by the EBT System (System ID, Token, Date/Time)
- Not required when called from the EBT System screens (Trace Number)

Field	Condition
System ID	Mandatory
Security Token	Mandatory
MIS Local Agency ID	Optional
MIS Clinic ID	May be Required
Trace Number	Mandatory
Username	Mandatory
MIS System ID	Mandatory
Workstation ID	Optional
Date/Time	Mandatory
WIC Authority ID	Mandatory

17.1 Account Maintenance

Account maintenance comprises operations for maintaining an electronic benefit account (EBA) in the EBT System. In particular, the EBA is linked to a household using the MIS Household ID. An EBA ties together all of the various data elements required to enable EBT functionality for a household. Such data elements include benefit information and transaction history. Subsequent operations on the EBA require the presence of the MIS Household ID, which is used by the EBT System to identify the EBA to which the operation shall apply. EBT system maintains account demographics, but account set-up, update, and deactivation is initiated from the MIS

17.1.1 Create EBA

EBT system maintains account demographics, but account set-up, update, and deactivation are initiated from the MIS. The Create EBA operation is used to establish an EBA in the EBT System and link the EBA to a household from the MIS. This operation returns an EBA ID that is generated by the EBT System. Use of this information by the WIC MIS is optional.

Input

Household Mailing Address
MIS Household ID
Head of Household Name (Optional)
Head of Household Date of Birth or other HOH identifier

Process

- 17.1.1.1 The EBT System shall validate that the MIS Household ID does not already exist for calling WIC Authority (Vermont WIC).
- 17.1.1.2 The EBT System shall validate that the HOH DOB or other identifier is present and is a valid date if HOH Name was provided.

Output

- 17.1.1.3 EBA ID is created
- 17.1.1.4 EBA is linked to the MIS household

17.1.2 Update EBA

The Update EBA operation is used to update EBA information in the EBT System. In

particular, it may be used to update the MIS Household ID associated with the individual Participant's EBA.

Input

(OLD Associated) MIS Household ID
(NEW Associated) MIS Household ID
Household Address
HOH Name (Optional)
HOH DOB (Optional)

Process

- 17.1.2.1 The EBT System shall validate that the (OLD) MIS household ID exists.
- 17.1.2.2 The (NEW) MIS Household ID is validated that it does not already exist.
- 17.1.2.3 The (NEW) Household ID will be associated to the EBA and the old Household ID will be deactivated.

17.1.3 View EBA Details

The View EBA Details operation causes the EBT System to display a screen with detailed information on the EBA. A SSO user must be granted access to the EBT System via the Access the EBT System operation prior to invoking this operation.

Input

MIS Household ID

Process

- 17.1.3.1 The System shall accept the MIS Household ID number.

Output

- 17.1.3.2 The EBT System shall display a screen with elements as described in the subsequent rules.
 - The screen shall contain: Account Details and Benefits.
 - The Account Details will display the MIS Household ID, Account Status, Household Address, and a list of cards associated with the account (active or inactive).
 - The list of cards will include Actions (described below), Card Number, Card Status, Cardholder Status, Cardholder Type, Cardholder Name, and Cardholder Birth Date.
 - The following Actions are possible for active cards (depending on the security level of the user): Change PIN, Deactivate Card, Replace Card, and View Transactions.
 - For inactive cards, the only possible Action is View Transactions.
 - The list of cards shall be sorted so that the active cards are on top following by a sort with the primary card on top.
 - The benefits section shall be subdivided according the to the date ranges of benefits.
 - The benefit sections shall be sorted with current benefits on top followed by benefits that are available soonest.

- The header for each benefits section shall include the date range of the benefits.
- The benefits will include the following: category, subcategory, unit of measure and quantity.

17.1.4 *Get EBA Details*

The Get EBA Details operation causes the EBT System to return detailed information on the EBA.

Input

MIS Household ID

Process

17.1.4.1 The system shall accept the entered MIS Household ID

17.1.4.2 The System shall display the Head of Household Date of Birth (HOH DOB), Head of Household (HOH) Name, MIS Household ID, Household Address (Mailing Address)

17.1.4.3 The EBT System shall display a screen with elements as described in the subsequent rules.

- The screen shall contain: Account Details and Benefits.
- The Account Details section of screen shall display the MIS Household ID, Account Status, Household Address, and a list of cards associated with the account (active or inactive).
- The list of cards will include: Actions (described below), Card Number, Card Status, Cardholder Status, Cardholder Type, Cardholder Name, and Cardholder Birth Date.
- The following Actions are possible for active cards (depending on the security level of the user): Change PIN, Deactivate Card, Replace Card, and View Transactions.
- For inactive cards, the only possible Action is View Transactions.
- The list of cards shall be sorted so that the active cards are on top following by a sort with the primary card on top.
- The benefits section shall be subdivided according to the date ranges of benefits.
- The benefit sections shall be sorted with current benefits on top following by benefits that are available soonest.
- The header for each benefits section shall include the date range of the benefits.
- The benefits will include the following columns: category, subcategory, unit of measure and quantity.

17.1.5 *Get Household ID Using Card Number*

The Get EBA Details operation causes the EBT System to return detailed information on the EBA.

The EBT System shall display a screen with elements as described in the subsequent rules.

Input

EBT Card Number

Process

17.1.5.1 The system looks up card number and gets the associated household ID

Output

17.1.5.2 The system displays the Cardholder Type, Card Status, Household ID, and Card Status Date

17.2 Benefit Maintenance

Benefit maintenance comprises operations for maintaining benefit information associated with an EBA in the EBT System. The MIS has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality.

17.2.1 Add / Adjust Benefits

The Add / Adjust Benefits operation is used to add or remove benefits from an EBA in the EBT System. It is either a debit or a credit of a benefit amount. In particular, this operation is used for benefit issuance. Request fields are noted, others are returned fields.

Input

MIS Household ID
Credit/Debit Indicator
Card Number
Reason Code
Benefit ID
Benefit Begin Date
Benefit End Date
Category Code
Benefit Quantity
Subcategory Code

Process

17.2.1.1 The EBT System Processor shall validate that the MIS Household ID exists and is active

17.2.1.2 The EBT System Processor shall validate that the Reason Code is defined for the WIC Authority.

17.2.1.3 The EBT System Processor shall validate that the Benefit End Date is after the Benefit Begin Date. If the transaction is a credit, then the EBT System Processor shall validate that the Benefit Begin Date and Benefit End Date does not "overlap" with existing benefits (i.e. there are not existing benefits where Benefit Begin Date < existing benefit end date < Benefit End Date or existing benefit begin date < Benefit End Date < existing benefit end date). If the transaction is a debit, then the Benefit Begin Date and Benefit End Date must exactly match the Benefit Begin Date and Benefit End Date for the categories and subcategories to be debited.

17.2.1.4 The EBT System Processor shall validate that the Category Code is valid.

17.2.1.5 The EBT System Processor shall validate that the Subcategory Code is valid.

Note: If the transaction is a debit, then the EBT System Processor shall only perform the debit if there is sufficient balance to post the entire debit. If the transaction is a credit, then the EBT System Processor shall validate that the total Benefit Quantity (units) available for the Category Code and Subcategory Code on a given date shall not exceed 999.99 (this would exceed the maximum balance that can be returned in an X9.93 message).

17.2.2 *Get Benefit Balance*

The Get Benefit Balance operation is used to retrieve benefit information for EBA.

Input

WIC Authority ID
Card Number
MIS Household ID
Request Begin Date
Request End Date

Process

17.2.2.1 The EBT System Processor shall validate that the WIC Authority ID is valid.

17.2.2.2 The EBT System Processor shall validate that the MIS Household ID exists and is active.

17.2.2.3 The EBT System Processor shall get records between the Request Begin Date and the Request End Date

Output

17.2.2.4 The EBT System Processor shall only return records where the current date is between the Benefit Begin Date and Benefit End Date.

17.2.2.5 If all benefits are requested, then the EBT System Processor shall return the current balance plus any benefits available in the future. Expired benefits are not returned.

The following fields are returned

- Benefit ID
- Category Code
- Category Description
- Subcategory Code
- Subcategory Description
- Unit of Measure Description
- Subcategory Description
- Unit of Measure Description
- Available Benefit Quantity
- Manual Authorization Quantity
- Active Hold Quantity
- Benefit Begin Date
- Benefit End Date

17.3 Local Agency Maintenance

The MIS is identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality.

17.3.1 Create Local Agency

The Create Local Agency operation creates a clinic information record in the EBT System.

Input

Local Agency ID
Local Agency Name
*Local Agency Address (Optional)
*Phone Number (Optional)
*Local Agency Contact Name (Optional)

*These are required if the EBT System is providing card inventory management services.

Process

17.3.1.1 The MIS System will create the Local Agency Record in the EBT system

Output

17.3.1.2 The Local Agency Record will be available to the EBT System

17.3.2 Update Local Agency

The Update Local Agency operation updates the clinic information record in the EBT System. The following table lists the data elements in the request.

Input

Local Agency ID
Local Agency Name
Local Agency Address (Optional)
Phone Number (Optional)
Local Agency Contact Name (Optional)

Process

17.3.2.1 The EBT System shall validate that Local Agency ID already exists for the calling system

17.3.2.2 The EBT System will update and save the record

Output

17.3.2.3 The updated record will be available to the EBT System

17.3.3 Deactivate Local Agency

The Deactivate Local Agency operation is used to deactivate a Local Agency in the EBT System. The EBT System will not accept transactions from a local Agency once it has been deactivated.

Input

Local Agency ID
Local Agency Deactivation Date

Process

- 17.3.3.1 The EBT System Processor shall validate that the Local Agency ID already exists.
- 17.3.3.2 The EBT System shall update the status associated with the local agency to indicate that it is no longer active.
Note that the local agency record is not deleted from the EBT System. If this parameter is NULL, then the EBT System assumes the current date.

Output

- 17.3.3.3 The Local Agency Record is no longer available to the EBT system.

17.4 Retailer Maintenance

Retail maintenance comprises operations for maintaining retailer information needed by the EBT System. The recommend operations are Create Retailer, Update Retailer, and Deactivate Retailer. The MIS is the database of record.

17.4.1 Create Retailer

The Create Retailer operation creates a Retailer information record in the EBT System from data imported from the MIS Vendor Management Function.

Input

MIS Retailer Number
Peer Group ID
Retailer Name
Retail Activation Date
*ACH Settlement Time
Over 50%
*Direct Connect Flag
*Direct Connect Auto- recon
Total Food Sales
Contracting Agency
Retailer Address
Contact Name
Contact Phone

* This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.

Process

17.4.1.1 The EBT System shall validate that MIS Retailer Number does not already exist for the calling system.

17.4.1.2 The EBT System will create a Retailer Record

Output

17.4.1.3 The Retailer Record is available for use in the EBT System

17.4.2 Update Retailer

The Update Retailer operation updates a Retailer information record in the EBT System.

Input

MIS Retailer Number
Peer Group ID
Retailer Name
Retail Activation Date
*ACH Settlement Time
Over 50%
*Direct Connect Flag
*Direct Connect Auto- recon
Total Food Sales
Contracting Agency
Retailer Address
Contact Name
Contact Phone

* This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.

Process

17.4.2.1 The EBT System will accept the submitted data elements

17.4.2.2 The EBT System will update the Retailer Record

Output

17.4.2.3 The updated Retailer Record is available for use in the EBT System

17.4.3 Deactivate/Reactivate Retailer

The Update Retailer operation is used to deactivate a retailer in the EBT System. The EBT System will not accept transactions from a retailer once it has been deactivated. The EBT System shall update the status associated with the retailer to indicate that it is no longer active. Note that the retailer record is not deleted from the EBT System.

Input

MIS Retailer Number
Retailer Deactivation Date
Retailer Reactivation Date

Process

- 17.4.3.1 The EBT System Processor shall validate that the Retailer ID already exists.
- 17.4.3.2 The EBT System shall update the status associated with the Retailer to indicate that it is no longer active or is reactivated. Note that the Retailer record is not deleted from the EBT System

Output

- 17.4.3.3 The updated Retailer Record is no longer available for use in the EBT System or is reinstated for the EBT system.

17.5 Category/Subcategory Maintenance

The area of category/subcategory maintenance comprises operations for maintaining the list of food categories and subcategories used by the WIC authority. The preferred solution is to use the FNS standard list of categories and subcategories. This list is maintained within the National Universal Product Code (NUPC) database (maintained by FNS).

The assumption is that an agency will be using functionality provided by the NUPC to maintain their list of food categories / sub categories and approved products (UPCs). This information will be downloaded as needed to either the MIS or the EBT environments (both will have a need for this information) for local use. It is an agency option as to whether the MIS, the EBT System, or both provide the functionality to download this information. Vermont prefers the MIS as the provider of the functionality for the NTE, and the UPC database. The MIS will provide the EBT system with a data import from the MIS to maintain current UPCs. However, Vermont is not opposed to this functionality being provided by the EBT if the chosen configuration of systems favor that option.

The functionality described in this section assumes that the MIS System is maintaining a connection with NUPC for the purpose of retrieving UPC information and that rather than having the EBT also support this interface, it will retrieve the category and subcategory information it needs from the MIS System. To have the MIS be the master of UPC management then an interface will be required to allow the transfer of EBT needed information to the EBT system. This is envisioned to be a batch data transfer. The NUPC is the database of record for this functionality. Transaction processing rules for the NUPC database are located in the FNS System Upload Download Specifications.

http://www.fns.usda.gov/apd/library/WIC_EBT/WIC_NUPC_DB_System_Upload_Download_spec_Nov192009.pdf

17.5.1 *Get Category Information*

The following list is information needed by MIS in order to maintain food categories. Ultimately, NUPC shall be the database of record for food categories. The MIS System shall maintain a link with NUPC to obtain updated food category information. This information shall be made available to the EBT from the MIS System. The following mandatory data elements are returned:

Output

WIC Authority ID
Category Code
Category Long Description
Category Short Description
Category Begin Date
Category End Date

17.5.2 *Get Subcategory Information*

The following list is the data elements needed by MIS in order to maintain food subcategories. Ultimately, NUPC shall be the database of record for food subcategories. The MIS System shall maintain a link with NUPC to obtain updated food subcategory information. This information shall be made available to EBT from the MIS System. The following mandatory data elements are returned:

Output

WIC Authority ID
Category Code
Subcategory Code
Subcategory Long Description
Subcategory Short Description
Unit of Measure Abbreviation
Require Prescription Flag
Subcategory Begin Date
Subcategory End Date

17.6 Cardholder/Card Maintenance

Cardholder maintenance comprises operations for maintaining cardholders in the EBT System. Cardholders and cards are required in order to access EBT benefits associated with an EBA in the EBT System.

The EBT System implements additional operations for updating cardholder information as well as operations for deactivating and replacing cards. These operations are not included as part of the recommended interface because it is expected that these operations will be accessible via the View EBA Details screen described earlier. The database of record will be the EBT database.

17.6.1 *Add Cardholder Identification (PIN)*

The following lists the general data elements that are required for establishing a cardholder in the EBT System. This operation causes the EBT System to display a screen that prompts for the input of any optional parameters not supplied. For example, if the cardholder name is not supplied, then the screen will accept input of a cardholder name entered by the user. When the user saves the information, the card and cardholder are linked to the EBA associated with the MIS Household ID.

The following lists the data elements in the request:

Input

MIS Household ID
*Card Number
*Cardholder Type

* Optional

Process

17.6.1.1 The screen shall retrieve the encrypted PIN block from a secure PIN pad attached to the local machine. The acquired PIN block shall be masked (i.e. it

shall not be displayed in the clear). If the card number is not supplied, the screen shall have the capability of acquiring the card number from a card reader attached to the local machine.

17.6.2 *Add Cardholder/Card*

If all validations are passed, then the EBT System Processor shall create a new cardholder record and associate the cardholder with the given card and household. The following lists the general data elements that are required for establishing a cardholder and card in the EBT System.

Input

MIS Household ID
Card Number
Cardholder Name
Cardholder Date of Birth (DOB)
Cardholder Type
*Encrypted PIN Block
*Card Holder Phone number

* Optional

Process

- 17.6.2.1 The EBT System Processor shall validate that the MIS Household ID exists and is active.
- 17.6.2.2 The EBT System Processor shall validate that the Card Number exists and has not been previously issued.
- 17.6.2.3 The EBT System Processor shall validate that there is not already an active cardholder associated with the given household.
- 17.6.2.4 If the Encrypted PIN Block is supplied and is valid, then the EBT System Processor shall translate the Encrypted PIN Block into a new encrypted PIN block that is suitable for internal database storage.

17.6.3 *Submit Pin*

This operation is used to associate a PIN with the cardholder of the given card.

Input

Card Number
Encrypted PIN Block
New PIN Flag

Process

- 17.6.3.1 The EBT System Processor shall validate that the Card Number is active and associated with a valid EBA.
- 17.6.3.2 The EBT System Processor shall validate that the Encrypted PIN Block is valid.
- 17.6.3.3 If valid then the EBT System Processor shall translate the Encrypted PIN Block

into a new encrypted PIN block that is suitable for internal database storage

17.6.4 *Get Cardholder/Cards*

This operation is used to get a list of cardholders and cards. It is designed to provide maximum flexibility to the MIS and to support the varying methods that different MIS's may use to search for cards/cardholders.

Input

- *Cardholder Name
- *Cardholder DOB
- *Cardholder Address
- *Card Number
- *Household ID
- *Cardholder Type
- *Card Status

- Optional

Output

- Cardholder I
- Cardholder Name
- Cardholder DOB
- Cardholder Address
- Card Number
- Household ID
- Cardholder Type
- Card Status
- Card Activation Date
- Card Deactivation Date

17.6.5 *Deactivate Card*

This operation is used to deactivate a card. A common use for this operation occurs when a participant wishes to report a card as lost or stolen. Usually a participant will not know the card number of the card that they are reporting as lost or stolen. It is advised that the calling system first use Get Cardholders/Cards or Get Cardholders/Cards by Household in order to find the card number of the card to be deactivated. A list of deactivated cards will populate a hot card list to be downloaded daily by vendor in an off-line system. In an on-line EBT system, the EBT system will deny authorization for a deactivated card at during the authorization process during a benefit redemption.

Input

- Card Number
- Card Status Code

Process

17.6.5.1 The card status is changed to the value in Card Status Code.

Output

17.6.5.2 The card will no longer be usable for transactions.

17.6.5.3 The EBT Card identifier will be added to a "Hot Card" list

17.6.6 *Replace Card*

This operation is used to replace a card. Since the PIN is associated with the cardholder, the PIN is unchanged for the new. Note that the PIN may still be changed by invoking the Submit PIN operation.

Input

Cardholder ID
New Card Number
Card Status Code

Process

17.6.6.1 If the cardholder currently has an active card, then the existing active card is deactivated.

17.6.6.2 The EBT System Processor shall validate that the Card Number exists and has not been previously issued.

Output

17.6.6.3 The new card will be usable for transactions.

17.6.7 *Unlock PIN*

This operation is used to remove a PIN block from a card and reset the invalid PIN attempt count to zero.

Input

Card Number

Process

17.6.7.1 The EBT System Processor shall validate that the Card Number is active and associated with a valid EBA.

17.6.7.2 The PIN block is removed and the invalid PIN attempt count is reset to 0.

17.7 EBT Reporting

The system will produce reports for WIC Central staff and Local Agency staff to use. While standard reports are necessary, ad hoc reports are also helpful. The EBT system should also support the transfer of data to the WIC IS and a data transfer to a data warehouse for reporting purposes.

17.7.1 *Generate Standard Reports*

Standard reports provide pre-defined data sets in a consistent format that can be requested through a report menu. The list below does not exhaust the range of reports that Vermont WIC may find useful.

The following standard reports will be available from the EBT System:

- 17.7.1.1 Calculate Rebate Amounts
- 17.7.1.2 Food Management / Approved Product List
- 17.7.1.3 Food Cost Management
- 17.7.1.4 Settlement and Reconciliation
- 17.7.1.5 Card Management
- 17.7.1.6 Performance and Operating Metrics
- 17.7.1.7 Fraud / High Risk Vendor Analysis

18. EBT – Batch Files Interfaces

There may be a need for the communication of bulk data between the MIS and EBT system. Use of this form of interface depends upon where certain EBT related functionality has been implemented. It is expected that this form of data interchange will be implemented using the following standard batch file formats.

18.1 General File Structure

Definition of a header and trailer record, standard file, confirmation protocols and error reporting mechanisms for all file types is left to the discretion of the developer as an implementation consideration. However, a standard set of file management data that will be conveyed as a component of each file transfer has been defined. It is up to the application designer as to how to convey this information. These data items could be in a standard header and trailer format; they can be conveyed as XML data elements or even via file naming conventions and FTP set up. The implementation of the batch interface will provide the functionality to: Confirm to the sending party that the file was received, Report a file level error (e.g. wrong sequence, wrong record count, etc.), and Report a detail record error (e.g. provide specific record identifier and indication of specific error)

18.1.1 Required Data in all Files

- File Type – Standard identifier unique to each file type
- Originator of file – Unique identifier of the file origination entity
- Target of file – Unique identifier of the intended destination for the file
- File sequence number – A unique number that is incremented by 1 for each file that is successfully transferred
- Date and Time – Date and time the file was created
- Format and version – An indicator of the format and version of the file being transferred
- Security – User id, password, or token used to authenticate the file
- Record count – Count of detail records contained in the file
- *BIN – Bin associated with file

*Optional

18.1.2 *Processing Standards*

The batch files presented below represent situations where the MIS is the source of data and through an interface is updating tables in the EBT system.

- Retailer file
- Category/Subcategory file
- APL/MAR file

When a file is transmitted it is a full replace of the existing data held in EBT tables. Files will be transmitted daily with a zero record file indicating no action will be taken by the EBT System.

18.1.3 *Daily Interface Reconciliation Batch File*

At a specified time each day, the EBT System shall create a file that contains information for each Adjust (add / update / delete) Benefits transaction that was approved during the prior 24 hour period. The MIS will use this information to match against its view of successful Adjust Benefits transactions initiated by the MIS during the same period. The MIS is the database of Record and the Interface. The MIS will also use this information to identify households that have expired unredeemed benefits.

Required Data

- Trace number – MIS trace number
- Date and Time – When transaction occurred
- Clinic ID – Clinic where issuance originate
- User ID – System user initiating issuance
- Household ID – WIC Household ID
- *Benefit Number – Unique identifier for this benefit
- Benefit Begin Date – First date of benefit availability
- Benefit End Date – Last date of benefit availability
- Activity type – Debit or Credit
- Count of Cat / Sub Cats – Number of following cat / sub cats
- Cat / Subcat – Standard Code
- Quantity – Quantity added or removed

*Optional

18.1.4 *Redemption Batch File*

The MIS may want to receive a daily file of redemption information (originated by the EBT system) for its own purposes. This file will be provided in the format of an X9.93: Part 2 Auto- reconciliation file. The database of record is the EBT and Interface is the MIS.

18.1.5 *Vendor Batch File*

The MIS is the master of vendor data. This batch interface (which is an alternative to the real time interface), provides functionality to allow the EBT system to have and maintain a current list of authorized WIC vendors, including minimal demographics and their peer group. The database of record is the EBT and Interface is the MIS.

Input

- Activity type – Add or Delete

- Vendor Number – Agency vendor identifier
- Store Name – Unique name associated with location
- Peer Group ID – Agency assigned peer group
- Store Location – street, city, state, Zip
- Store Mail address – street, city, state, Zip
- *Corporate affiliation – Name of corporation
- Store contact name – Contact point
- Store phone number – Store phone number
- Effective Date – When this did or will become active
- *Deactivate date – When store is to be deactivated
- *Agency – WIC agency
- *Clinic – Clinic Agency

* Optional

18.1.6 *Cat/SubCat Batch Files*

The MIS system provides the interface with the NUPC database. A batch file as described below must be provided to convey a current list of allowable food category and sub category to the EBT system. The D6 record in the NUPC will provide this information. The database of record is the MIS and the interface is the EBT.

Required Data

Activity type
 Category
 Sub Category
 Receipt description
 Unit of measure
 Activation Date
 Deactivation Date

18.1.7 *APL and MAR Batch File*

The recommendation for the maximum pricing functionality is that it be placed in the MIS system. Since the MIS is the database of record for the redemption data used to calculate maximum prices and it is the user of this data as a key component of transaction approval and settlement.

The interface will be used to pass the maximum price information, by UPC and by peer group, to the EBT system. Note that placing this functionality in the MIS requires the use of the Redemption File defined above to provide the MIS with the information required for the calculation and maintenance of maximum prices. The database of record is the MIS and the interface is the EBT.

Required Data

UPC / PLU
 Product Description
 Broadband flag
 Rebate flag
 Pharmacy flag
 Effective Date
 Deactivate date
 Category Code
 Sub Category code

Exchange Size
Number of peer groups
Peer Group ID
Maximum Price

18.1.8 *Benefit Month Reconciliation Batch File*

WIC grant accounting and financial management is usually organized around a “Benefit Month” which is an accounting of all food benefit issuance with a first date to spend that falls within a given calendar month. The MIS determines benefit eligibility and authorizes benefit to households while the EBT system is responsible for the management of household benefit accounts and the disbursement of those benefits.

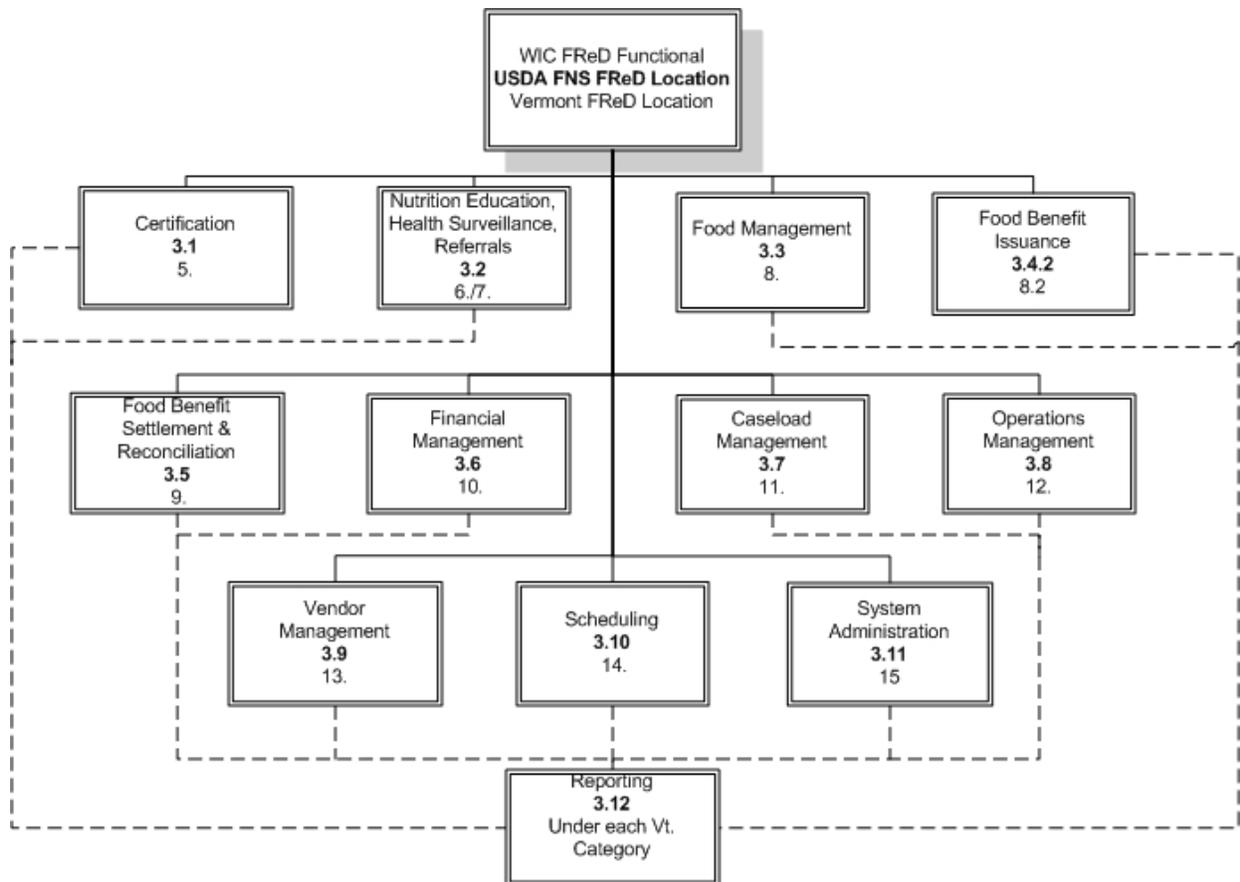
This optional batch interface is designed to provide a final point of reconciliation of all benefit activity for a given month against the WIC financial accounting for that month as documented in the 798 report to FNS. This accounting will occur at the close out of a benefit month, which occurs when all benefits issued for that month have either been redeemed or have expired. This is generally 31 days (or more depending on the need for adjustments and other late closing transactions) after the last day of the month. The EBT system will generate and send to the MIS a batch file that documents the issuance and subsequent disbursement of all benefits that were authorized for a benefit month. The MIS will reconcile this against its accounting of all benefits that were authorized to WIC participants for the same benefit month. The database of record is the MIS/EBT and the interface is the MIS.

Required Data

Benefit Month
WIC Household ID
Last Date to Spend
Dollars settled
Number of cat / sub cats
Cat / Sub Cat – Standard codes
Action – I = issued, v=voided (by MIS), e=expired, r=redeemed
Quantity – Total quantity for each action type

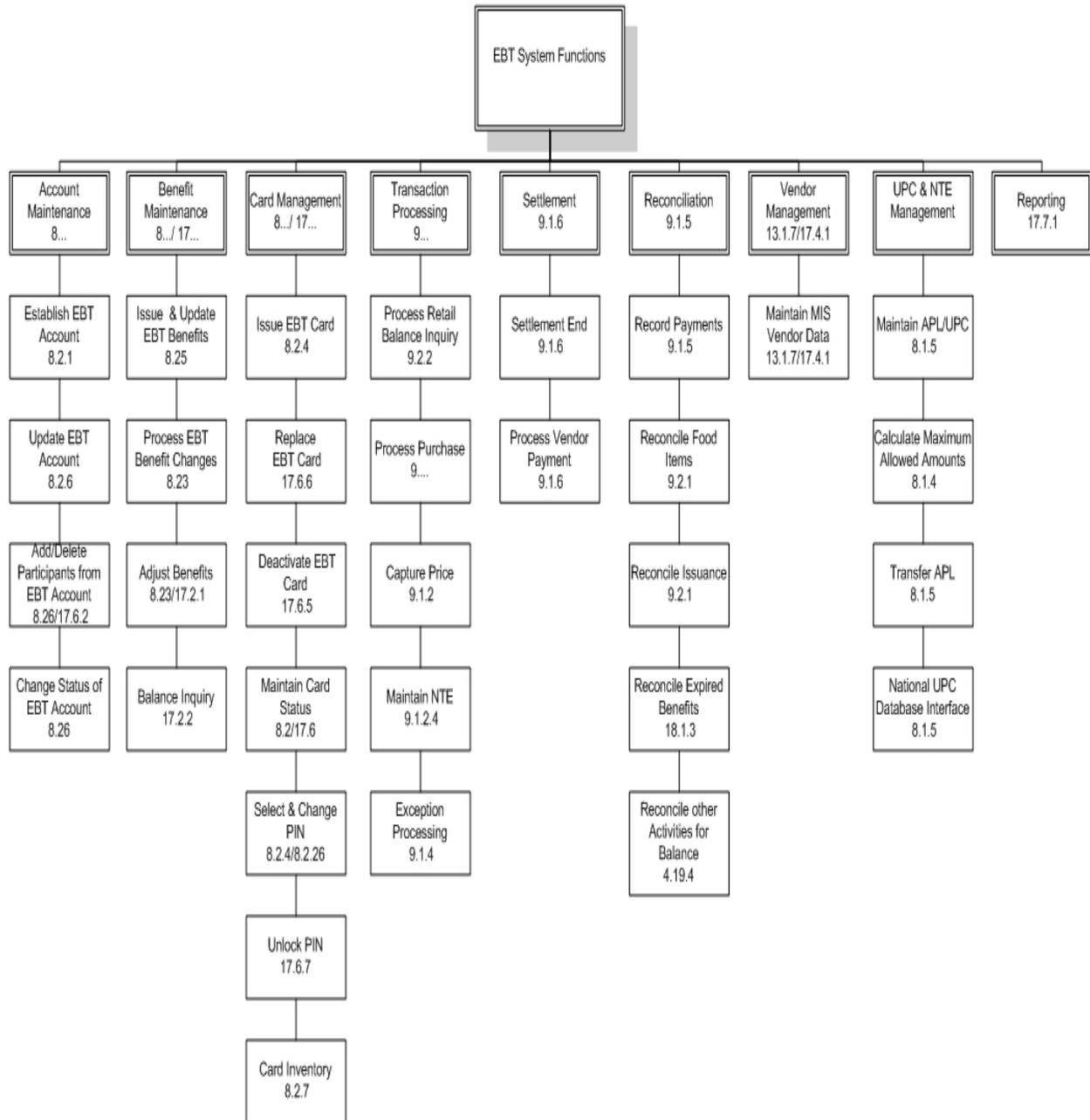
19. Appendix 1 – FNS FReD High Level Functional Decomposition Mapped

The following Diagram maps the FNS High Level Functional Decomposition Numbering System to the Vermont FReD Function location.



20. Appendix 2 – FNS FReD EBT Appendix E mapped to VT FReD

The following Diagram maps the FNS EBT Appendix E Functions to the Vermont FReD EBT Function location.



21. Appendix 3 – MIS Nutrition Data sets

The following table lists those data elements required for submission to FNS and/or CDC and matches them against the data elements in the WIC system.

MDS/SDS/Vermont Data Element	FRED-E Data Element
MDS	
State Agency ID	[State specific IS]
Local Agency ID or Service Site	Local Agency Identification Number/Clinic Identification Number
Case ID (a unique number for each participant that maintains privacy)	Participant Identification Number
Date of Birth	Participant Date of Birth
Racial/Ethnicity	Participant Racial/Ethnic Code
Certification Category	Participant Category Code
Expected Date of Delivery or Weeks Gestation	Participant Expected Date of Delivery or Participant Health Infant Gestational Age
Date of Certification	Participant Certification Date
Sex	Participant Sex
Priority Level	Participant Priority Level Code
Participation in TANF, SNAP Program, Medicaid	Participant Adjunct or Automatic Income Eligibility Code -or- Participant Participation in SNAPs Participant Participation in TANF Participant Participation in Medicaid
Migrant Status	Participant Residential Status
Number in Household or Economic Unit	Participant Household Size
Household or Economic Unit Income	Participant Income per Period and Participant Income Period
Nutritional Risks Present at Certification	Participant Nutrition Risk Criteria Code
Hemoglobin or Hematocrit	Participant Health Hemoglobin or Participant Health Hematocrit
Weight	Participant Health Weight
Height	Participant Health Height/ Length
Date of Height and Weight Measure	Participant Health Anthropometric Date
Currently Breastfeed	Breastfeeding Infant Currently Breastfeeding
Ever Breastfed	Breastfeeding Infant Ever Breastfeeding
Length of Time Breastfed	Breastfeeding Duration
Date Breastfeeding Data Collected	Breastfeeding Data Collection Date
Food Packages	Food Benefit Prescription Identification Number(s)
SDS	
Date of First WIC Certification	Participant Date of First Certification
Education Level	Participant Education Level Code
Number in Household on WIC	
Source of Prenatal Care	Participant Health Source of Prenatal Care
Date When Prenatal Care Began	Participant Date When Prenatal Care Began
Date Previous Pregnancy Ended	Participant Health Previous Pregnancy End Date
Total Number of Pregnancies	Participant Health Previous Pregnancy
Total Number of Live Births	Participant Number of Live Births

MDS/SDS/Vermont Data Element	FRED-E Data Element
Pre-Pregnancy Weight	Participant Health Weight Prepregnancy
Weight Gain During Pregnancy	Participant Health Weight Prepregnancy, Participant Health Weight at Labor
Birth Weight	Participant Health Infant Birth Weight
Birth Length	Participant Health Infant Birth Length
Date of Last Routine Checkup or Immunization	Participant Date of Last Checkup/Immunization
Length of Time Mother on WIC During Pregnancy	Participant Mother's Time on WIC- Infant
Participation in the Food Distribution on Indian Reservations Program	Participant Participation in the Food Distribution on Indian Reservations Program

22. Appendix 4 – MIS Breastfeeding Data sets

The following table lists those data elements required for submission to FNS and/or CDC and matches them against the data elements in the WIC system.

MDS/SDS Data Element	FRED-E Data Element
MDS	
State Agency ID	[State specific IS]
Local Agency ID or Service Site	Local Agency Identification Number/Clinic Identification Number
Case ID (a unique number for each participant that maintains privacy)	Participant Identification Number
Date of Birth	Participant Date of Birth
Racial/Ethnicity	Participant Racial/Ethnic Code
Certification Category	Participant Category Code
Expected Date of Delivery or Weeks Gestation	Participant Expected Date of Delivery or Participant Health Infant Gestational Age
Date of Certification	Participant Certification Date
Sex	Participant Sex
Priority Level	Participant Priority Level Code
Participation in TANF, SNAP Program, Medicaid	Participant Adjunct or Automatic Income Eligibility Code -or- Participant Participation in SNAPs Participant Participation in TANF Participant Participation in Medicaid
Migrant Status	Participant Residential Status
Number in Household or Economic Unit	Participant Household Size
Household or Economic Unit Income	Participant Income per Period and Participant Income Period
Nutritional Risks Present at Certification	Participant Nutrition Risk Criteria Code
Hemoglobin or Hematocrit or IEP	Participant Health Hemoglobin or Participant Health Hematocrit
Weight	Participant Health Weight
Height	Participant Health Height/ Length
Date of Height and Weight Measure	Participant Health Anthropometric Date
Currently Breastfeed	Breastfeeding Infant Currently Breastfeeding and postpartum woman
Ever Breastfed	Breastfeeding Infant Ever Breastfeeding asked postpartum
Length of Time Breastfed	Breastfeeding Duration
Date Breastfeeding Data Collected	Breastfeeding Data Collection Date
Food Packages	Food Benefit Prescription Identification Number(s)
SDS	
Date of First WIC Certification	Participant Date of First Certification
Education Level	Participant Education Level Code
Number in Household on WIC	
Source of Prenatal Care	Participant Health Source of Prenatal Care
Date When Prenatal Care Began	Participant Date When Prenatal Care Began
Date Previous Pregnancy Ended	Participant Health Previous Pregnancy End Date

MDS/SDS Data Element	FRED-E Data Element
Total Number of Pregnancies	Participant Health Previous Pregnancy
Total Number of Live Births	Participant Number of Live Births
Pre-Pregnancy Weight	Participant Health Weight Prepregnancy
Weight Gain During Pregnancy	Participant Health Weight Prepregnancy, Participant Health Weight at Labor
Birth Weight	Participant Health Infant Birth Weight
Birth Length	Participant Health Infant Birth Length
Date of Last Routine Checkup or Immunization	Participant Date of Last Checkup/Immunization
Length of Time Mother on WIC During Pregnancy	Participant Mother's Time on WIC- Infant
Participation in the Food Distribution on Indian Reservations Program	Participant Participation in the Food Distribution on Indian Reservations Program
Introduction to supplementary feeding	Age of child when first fed something other than breast milk for all children < 24 months old
Date of most recent breastfeeding response	Age of child, used with date of birth, to establish breastfeeding duration when child is currently breastfeed.

23. Appendix 5 – Glossary of Terms

TERM	DEFINITION
ACH Settlement Time	For a direct connect, this is the time that the EBT System uses for processing retail activity for the purpose of computing the retail settlement amount. The EBT System will process transactions that occurred during the 24 hours prior to this time.
Acquirer	Provides an entry point into transaction networks for all transactions (all tender types) from a store
Active Hold Quantity	Quantity of benefit in active hold at grocer
American National Standards Institute (ANSI)	Membership organization responsible for overseeing the creation, promulgation and use of U.S. standards and conformity assessment systems impacting all business sectors and for accrediting programs that assess conformance to standards
Anthropometric	Anthropometry in physical anthropology refers to the measurement of the human individual for the purposes of understanding human physical variation.
Allowed Product	A food item that is approved for redemption by a WIC Authority.
Allowed Product List (APL)	Electronic list (file) identifying food items approved by the WIC Authority for purchase with WIC benefits by food category and subcategory and by a unique product identifier, either a Universal Product Code (UPC) or Price Lookup (PLU) code
Available Benefit Quantity	Quantity of available benefit units in the standard unit of measure for the category and subcategory
Bank Identification Number	Bank Identification Number. The BIN is recorded as a portion of the identifying number of a financial transaction card. It identifies the major industry (e.g., finance or banking) and the card issuer. A BIN must be issued in accordance with Part I of the ISO/IEC-7812 standards and registered as described in Part II of the standard.
Barcode	A machine-readable representation of information, usually dark parallel lines on a white or light background that is most often used by Auto ID Data Capture (AIDC) systems for inventory management – item identification, tracking, status reporting, etc.
Benefit Begin Date	First date on which benefits may be used
Benefit End Date	Last date on which benefits may be used
Benefit ID	A unique number identifying a benefit issuance
Benefit Instrument	The medium used to record and convey information about a WIC participant and the products and services provided to that participant under the WIC program. In this system, the benefit instrument is the WIC EBT card.

TERM	DEFINITION
Benefit Period	A time period during which WIC benefits may be redeemed. This includes the beginning benefit availability date and ending benefit availability date.
Benefit Prescription	WIC allowable items prescribed to WIC participants for specific benefit periods.
Broadband/Wild Card/Any Subcat	Subcat that allows the purchase of items in multiple Subcats within a category. Subcat is the subcategory 000. UPCs can be specified under the Broadband Subcategory only, a specific subcategory (subcategory number > 000), or under both the Broadband Subcategory and one specific subcategory. This allows the WIC Program to issue specific food items via a Specific Subcategory to a participant in a food prescription. Another participant's nutritional needs may allow a greater choice of food items within a category (e.g., milk). In this case, this food prescription issuance is made via the Broadband Subcategory. Since a household's food benefits are aggregated on the card, in some cases UPCs may be redeemed via both the Broadband and Specific Subcategories.
Card Activation Date	Date that card is activated
Card Deactivation Date	Date that card is deactivated
Card Status	A code indicating the status of the card
Card Status Date	Date that card status was changed to given value in Card Status
Cardholder Date of Birth	Date of birth associated with cardholder. It may be the cardholder's DOB, the head of household, or in the case of an alternate, the alternate's DOB or either of the above.
Cardholder ID	Unique EBT System generated identification number for cardholder that may be used for other cardholder/card based transactions.
Cardholder Name	Name of the cardholder
Cardholder Phone Number	Phone number for cardholder
Cardholder Type	Indicates whether the cardholder is the primary cardholder
Cash Value Voucher (CVV)	A type of WIC benefits issued to some WIC participants for the purchase of fruits and vegetables. Unlike prescribed WIC benefits, the WIC participant may purchase any fresh fruit and vegetable product not specifically excluded and, at the option of the WIC Authority, canned, dried and/or frozen fruits and vegetables meeting WIC nutritional guidelines.

TERM	DEFINITION
Cashier	The retail employee responsible for attending the checkout lane and executing the WIC transaction
Category Begin Date	The date for which the category shall become available for use
Category Code	A code identifying the type of food product
Category End Date	The last date for which the category shall be used
Category Long Description	A long description of the category suitable for printing or displaying in areas where display width is not a concern
Category Short Description	A short description of the category suitable for displaying on screen and reports where display width is a concern
Category/Subcategory (Cat/Subcat)	Standardized way to identify foods
Check Digit	A digit calculated from the other digits of an Element String, used to check that the data has been correctly composed. A GS1 System utilizes an algorithm for the calculation of a Check Digit to verify accuracy of data. (e.g.: Mod 10, Price Check Digit).
Clinic Address	Address of clinic
Clinic Contact Name	Primary WIC contact person at clinic
Clinic ID	MIS assigned identifier for clinic.
Clinic Name	Name of clinic
Clinic Phone Number	Phone number of clinic
Contact Name	The name of a point of contact at the retail location
Contracting Agency	The MIS Clinic ID of the clinic that contracts with the retailer
Coupon	A voucher redeemable at the point of sale for a cash value or free item. GS1 standards define coupon bar codes as 12 and 13 digits, or with a supplemental bar code, used only in North America, that can be printed on a coupon to provide additional information (i.e., offer codes, expiration dates, and household identification numbers).
Credit/Debit Indicator	Indicates if the values are to be credited (added) or debited (subtracted) to/from the account
Date of Birth	Date of birth (DOB) of the cardholder, or participant. This is typically used as a security question for calls to customer service.

TERM	DEFINITION
Date/Time	EST date and time on the MIS when an operation is initiated.
Direct Connect	Transaction strategy that bypasses traditional payment networks
Direct Connect Auto <input type="checkbox"/> recon	For a direct connect, this signals whether or not the EBT System generates an auto- reconciliation file for the location.
Direct Connect Flag	Signifies whether or not the retailer connects directly to the EBT System for transactions or comes through the gateway.
Element String	The combination of a GS1 Application Identifier and GS1 Application Identifier Data Field, where the GS1 Application Identifier is the field of two or more characters at the beginning of an Element String that uniquely defines its format and meaning and the GS1 Application Identifier Data Field is the data used in a business application defined by one application identifier.
Encrypted PIN Block	Triple DES (Data Encryption Standard) DUKPT (Derived Unique Key Per Transaction) encrypted PIN block.
Free Erythrocyte Protoporphyrin	A blood test conduct at Dartmouth Hitchcock Hospital instead of HCT or HGH
File Transfer Protocol	This protocol allows for the transfer of electronic files between a participant and a remote server or between any two-computer systems using standard communication lines such as telephone.
Food and Nutrition Service (FNS)	An agency within the U.S. Department of Agriculture responsible for the administration of the Supplemental Nutrition Program for Women, Infants and Children (WIC)
Forwarder ID	Also known as Forwarding Institution Identification Code. This is the identity of the institution forwarding the request or advice message in a WIC EBT data interchange system.
Function	A task, action, or activity that must be accomplished to achieve a desired outcome.
Gateway	Consolidates transactions from multiple acquirers on behalf of a host processor
Global Trade Item Number (GTIN)	The GS1 Identification Key used to identify trade items. The GTIN is comprised of a GS1 or UPC Company Prefix followed by an Item Reference Number and a Check Digit.
GS1	A global standards organization. In the United States, the GS1-US, formerly the Uniform Code Council, Inc. (UCC), is the organization responsible for the development of the GS1 System, a series of standards designed to improve supply chain management. The GS1 System is composed of four key product areas, two of which are essential to WIC EBT: 1) Barcodes, used to automatically identify things; and 2) eCom, electronic business messaging to allow automatic electronic transmission of data.
GS1 Databar (formerly RSS)	Household of GS1 bar code symbols. A GS1 Databar can be printed as a stand-alone linear symbol or as a composite symbol with a 2D Composite Component printed directly above the stand-alone linear

TERM	DEFINITION
	symbol. The GS1 Household encompasses GS1 DataBar Retail POS bar codes symbols designed to be read in segments by omni directional scanners at retail POS, including GS1 DataBar Omni directional; GS1 DataBar Stacked Omni directional; GS1 DataBar Expanded; GS1 DataBar Expanded Stacked.
GS1 UPC2	GS1 symbol used to identify store-assigned random weight items.
Head of Household Date of Birth	Date of birth for the head of household. This is usually used a security question when handling queries from the head of household over the phone.
Head of Household Name	Name of the head of household. The head of household may be used by the MIS to identify the responsible party for the Household.
Host or EBT Host System	The system that maintains account, benefit, card information, and determines retailer payment
Hot Card	A WIC EBT card which has been invalidated for any reason, including loss, theft, or administrative action by the WIC clinic
Hot Card List (HCL)	See WIC Hot List Replacement File. These terms are used interchangeably. This is defined in ANSI X9.93 – 2002, Part 2.
Household Address	This is the address for the household used for any EBT related correspondence.
International Federation of Produce Standards (IFPS)	GS1 member organization responsible for the promulgation of rules and standards and for the assignment and maintenance of fruits and vegetables global and restricted use Price Look-Up (PLU) codes. PLU codes associate variable weight pricing (\$/lb) with fresh and dried produce items.
Issuer	Works on behalf of Vermont WIC, holds participant EBT accounts and authorizes redemption transactions
Manual Authorization Quantity	The quantity of benefits involved with a manual auth purchase.
MAR	Maximum Allowable Reimbursement, previously known as NTE
Maximum Price	WIC Authorities establish the maximum price that the retailer will be reimbursed for an approved WIC item. (Sometimes known as the Not-to-Exceed price)
MIS Clinic ID	If the operation is initiated from a clinic, then this is the ID of the initiating clinic.
MIS Household ID	This is the household ID assigned by the MIS
MIS Retailer Number	A number assigned by the MIS identifying the retailer
MIS System ID	For direct service calls, this value will be equal to System ID. It is used by the EBT System to log the calling MIS System ID for operations invoked by the EBT System screens on behalf of the MIS.

TERM	DEFINITION
Mixed Basket	Scanning WIC-allowed and non-WIC items in the lane without having to sort and scan the WIC-allowed items versus non-WIC items separately.
New PIN Flag	Indicates if Submit PIN operation is for selecting a new PIN or changing an existing PIN
Not-to-Exceed (NTE) Price	FNS-approved cost containment methodology whereby WIC authorized vendors are subject to price limitations. For NTE items, payments to vendors are adjusted (reduced) to ensure the price paid for individual food items may be equal to but not in excess of the maximum, not-to-exceed price. In WIC EBT systems, NTE price controls are enforced within the store ECR/POS system, the vendor corporate host system, the WIC EBT host, or the State WIC host, if different than the WIC EBT host
Over 50%	Signifies whether or not the volume of WIC sales is over 50% of the total sales for the retailer
Password	Password used by the system to log on to the EBT System. This parameter is always encrypted.
Peer Group ID	The peer group assigned to the retailer.
Point-of-Sale (POS)	The checkout lane; the physical location where a sale occurs
Point-of-Sale (POS) System	The system, including hardware, software, card acceptor devices and other devices physically installed and supporting WIC food sales in the store checkout lane.
Price Look-Up (PLU) Code	A 4-5 digit identifier used to identify individual and bulk produce. The International Federation of Produce Standards (IFPS) assigns PLU codes. A PLU code is commonly printed on a small sticker or 'PLU label' and affixed to the individual produce items by the grower, distributor or by store personnel.
Purchase Receipt	One or more printed documents printed at the POS and provided a WIC EBT cardholder. The purchase receipt identifies the foods purchased with WIC tender.
Reason Code	Reason for a particular entry or adjustment to a data field
Request Begin Date	Causes any benefits that are valid (current or future) after this date to be retrieved
Request End Date	Causes any benefits that are valid (current or future) prior to this date to be retrieved
Require Prescription Flag	Indicates if medical documentation is necessary in order to issue from this subcategory
Requirement	1. A condition or capability that must be met by a system or a system component to satisfy a contract, standard, specification, or other formal document. 2. A statement of such a capability.

TERM	DEFINITION
Retail Activation Date	The date on which the retailer becomes active. The EBT System will start accepting transactions from the retailer on this date.
Retail Address	Address of the retail location.
Retail Contact Phone	A phone number for the retail location
Retail Deactivation Date	The date on which the retailer is no longer active. The EBT System will not accept transactions from the retailer after this date.
Retail Electronic Cash Register/Point-of-Sale System (ECR/POS)	In a retail store, an all-inclusive term referring to the in-store cash management system, comprised of hardware, software, cash drawer, scanner, scale, monitor, card acceptor devices, receipt and coupon printers, and other peripherals installed and use in the lane or "point-of-sale" (POS); in-store telecommunications network; and in-lane and backroom store servers/controller(s); and more.
Retailer Assigned PLU Code	A code assigned by a WIC vendor at the corporate, distributor or outlet level to identify an individual or bulk produce item at the POS. A retailer assigned PLU Code may be either an IFPS compliant PLU code or a non-standard PLU code.
Retailer Name	The name of the retailer
Retailer	A dealer in foodstuffs, meats, produce, and dairy products. In the context of this document, the term also covers any parties who are authorized by the State to be a vendor of WIC approved items, and/or perform WIC-related computing or financial transactions for them.
Security Token	A token issued by the EBT System when a systems logs on to the EBT System. The issued token is required for all subsequent operations.
Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	Administered by the U.S. Department of Agriculture, Food and Nutrition Service, the WIC provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.
SSO Action	Single Sign On, indicates type of action for Access the EBT System operation
Store Manager	The person responsible for overall management of an outlet, including back office and technology support functions. In practice, several people at a given store and/or corporate office staff may share this responsibility.
Subcategory Begin Date	The date for which the subcategory shall become available for use
Subcategory Code	A code further identifying the type of food product within a category
Subcategory Description	Description of the food subcategory

TERM	DEFINITION
Subcategory End Date	The last date for which the subcategory shall be use
Subcategory Long Description	A long description of the subcategory suitable for printing or displaying in areas where display width is not a concern
Subcategory Short Description	A short description of the subcategory suitable for displaying in areas (particularly POS stand- beside receipts) where display width is a concern
System	A collection of hardware, software, persons, and procedures that work together to perform a set of functions
System ID	An ID assigned by the EBT System to the MIS or a subsystem within the MIS. The System ID is used for security and tracking purposes within the EBT System. In particular, if an MIS chooses to implement SSO with the EBT System, then the MIS must maintain a separate System ID for any subsystem that maintains its own set of usernames.
Total Order /Total Transaction	Prior to completing the WIC portion of a transaction, the system must have a function that prints/displays all WIC items to be decremented from the card and allow the WIC participant to accept or decline the completion of the transaction.
Transaction	A trip through the checkout lane by the WIC participant, completing either a balance inquiry or WIC redemption
Transaction time	Date/time when benefits are read from the WIC EBT card
Terminal	The retailer's hardware device that provides the user interface for the WIC participant. The terminal may or may not include an integrated Card Acceptor Device. The same hardware device may also provide the cashier's user interface.
Total Food Sales	The volume of total food sales reported by the retailer
Trace Number	A unique value supplied by the MIS to be associated with the particular invocation of the operation.
T=0	This is a data communications protocol that defines the structure and processing of commands in a half-duplex transmission of asynchronous characters. T=0 protocol is defined in the international standards ISO/IEC-7816-3.
Unit of Measure Abbreviation	An abbreviated description of the unit of measure associated with the food subcategory
Unit of Measure Description	Description of the unit of measure associated with the food subcategory
Universal Product Code (UPC)	A machine-readable barcode symbol used to identify and track products at any point within any supply chain. UPCs are a component of GTINs (Global Trade Item Numbers), which are assigned to manufacturers by the GS1 Organization.

TERM	DEFINITION
UPC Prefix	A special representation of the GS1 Prefixes '00 – 09' with the leading zero removed. A UPC Prefix is used when representing the GTIN-12, Coupon-12, RCN-12, and VMN-12 in a UPC-A Bar Code symbol.
User Address	Contact address of the user
User Email Address	Email address of the user
Username	String used to identify user in a System. Used in conjunction with User System ID to create a unique identifier
Variable Measure Number (VMN); VMN-12	A restricted circulation number assigned by the GS1 member organization to identify variable measure products for scanning at Point of Sale within a country. VMN-12 is the 12-digit restricted circulation number encoded in UPC-A Symbols to allow scanning of variable measure products at Point of Sale, which is defined in accordance with UPC Prefix 2 rules.
WIC Authority	A governmental organization that oversees the WIC program for a jurisdiction, such as a state or tribal organization. The WIC Authority is responsible for issuing WIC food benefits
WIC Authority ID	ID of WIC authority for which the operation is being initiated
WIC-allowable, WIC-eligible	A FNS designation. A WIC allowable or WIC eligible food item meets federal WIC dietary and nutritional standards and guidelines
WIC-approved, WIC-authorized	A WIC Authority designation. A WIC approved or WIC authorized food item is an item identified as WIC allowable or WIC eligible by FNS and approved or authorized by the WIC authority for purchase with WIC benefits.
WIC Benefit	A product provided by the WIC program to a WIC participant. For purposes of this system, a WIC benefit can be thought of as an authorized food product.
WIC Category	A grouping of authorized food products, such as milk or formula
WIC/EBT UPC/PLU Price File	A listing of approved products provided to retailers by WIC Authorities.
WIC Host	An information system that manages data exchange between a retailer and a WIC Authority. WIC host includes communication, database, file posting, security authorization and may include terminal application downloads. Electronically it acts as a proxy for a WIC Authority in the processing of WIC EBT benefits and redemptions
WIC Participant	The individual to whom WIC benefits are issued
WIC subcategory	A specific type of authorized food product within a WIC category, such as whole milk or skim milk. These are subcategories to the category of milk. Subcategories can be either Broadband (000) or Specific (> 000).

TERM	DEFINITION
WIC UPC/PLU Store File	This is an ANSI specified (X9.93 – 2002, Part 2) listing of the WIC Allowed Products (UPCs/PLUs) approved by the WIC Authority. Also known as the Allowed Product List or Allowed Product File (APL).
Workstation ID	ID of the workstation initiating the operation
X9.93	WIC EBT Transaction Processing Standard

24. Appendix 6 – Acronyms

TERM	DEFINITION
ACH	Automated Clearing House
ACS	Affiliated Computer Systems
AHS	Vermont Agency of Human Services
ANSI	American National Standards Institute
AP	A woman having one or more embryos or fetuses in utero.
APD	Advance Planning Document
APL	Approved Product List; a list of Vermont WIC's WIC Allowed Products
AVR	Automated Voice Response
BF	A woman who is breastfeeding or providing breast milk to her infant on average at least one time per day, up to the infant's first birthday.
BIN	Bank Identification Number
BPR	Business Process Re-engineering
C	Child – a person over one year of age who has not reached his or her fifth birthday
CAD	Card acceptance device
CDP	Custom Data Processing
CIS	Children's Integrated Services
CPA	Competent Professional Authority
CPCM	Cost per Case per Month
CVV or CVB	Cash Value Voucher or Cash Value Benefit; a dollar amount benefit for the purchase of fruits and vegetables part of the new food package rule
DAIL	Vermont Department of Aging and Independent Living

TERM	DEFINITION
DCF	Vermont Department for Children and Families
DFO	Director of Field Operations
DOB	Date of Birth
DII	Vermont Department of Information and Innovation
EAN	European Article Numbering
EAR	Emergency Acquisition Request
EBA	Electronic Benefit Account
EBT	Electronic Benefits Transfer. The electronic transfer of government benefits to individuals through the use of card technology and point-of-sale terminals.
EBT ID	Electronic Benefit Transfer Identification Number. The 4-character identifier assigned to each retail store to identify it to the electronic settlement server. The EBT ID is used in the composition of the electronic file name submitted to the state and in the FTP directory structure.
ECR	Electronic Cash Register
EDD	Estimated Date of Delivery
EP	Free Erythrocyte Protoporphyrin
FI	Food Instrument
FIS	Fidelity National Information Services, Inc.
FNS	Food Nutrition Service of the USDA
FRED	Functional Requirements Document
FRED-E	Functional Requirements Document with EBT
FTP	File Transfer Protocol. This protocol allows for the transfer of electronic files between a participant and a remote server or between any two-computer systems using standard communication lines such as telephone.
GSO	Global Standards Organization

TERM	DEFINITION
GTI	Global Trade Item Number
HCL	Hot Card List
Hct	The hematocrit is the proportion of blood volume that is occupied by red blood cells. It is normally about 48% for men and 38% for women. It is considered an integral part of a person's complete blood count results, along with Hemoglobin concentration, white blood cell count, and platelet count.
Hgb	Hemoglobin is the iron-containing oxygen-transport metalloprotein in the red blood cells of vertebrates.
HNQ	Health and Nutrition Questionnaire Forms
HOH	Head of Household
I	Infant – a person under one year of age
IAPD	Implementation Advance Planning Document
IAPDU	Implementation Advance Planning Document Update
ICD	Interface Control Document
IFPS	International Federation of Produce Standards
IMR	Vermont's Immunization Registry
INCP	Individual Nutrition Care Plan
IP	Internet Protocol. This is a standardized protocol used to transfer data from one node to another on a network.
IRFP	Implementation Request for Proposal
IS	Information Systems
IVR	Interactive Voice Response is an interactive technology that allows a computer to detect voice and keypad inputs
JPM	JP Morgan Chase
MIS	Management Information System

TERM	DEFINITION															
MPCOS	Multi-application Payment Chip Operating System															
NRF	Nutritional Risk Factor															
NTE	Not to Exceed Amount															
NUPC	National UPC (Database),A system that maintains UPC(s) at a national level															
OLH	Office of Local Health															
Over 50%	Signifies whether or not the volume of WIC sales is over 50% of the total sales for the retailer															
PAN	<p>Primary Account Number The Primary Account Number (PAN) is a 16 digit numeric field that provides the means of identifying the participant to whom the card was issued. The system shall issue EBT cards containing a 16 digit PAN that utilizes the Vermont's current BIN/Issuer Identification Number (IIN).</p> <p>PAN Number Sequence</p> <table border="1"> <thead> <tr> <th>Position</th> <th>Length</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1-6</td> <td>6</td> <td>BIN</td> </tr> <tr> <td>7-9</td> <td>3</td> <td>Discretionary</td> </tr> <tr> <td>10-15</td> <td>6</td> <td>Client Identification</td> </tr> <tr> <td>16</td> <td>1</td> <td>Check Digit</td> </tr> </tbody> </table>	Position	Length	Description	1-6	6	BIN	7-9	3	Discretionary	10-15	6	Client Identification	16	1	Check Digit
Position	Length	Description														
1-6	6	BIN														
7-9	3	Discretionary														
10-15	6	Client Identification														
16	1	Check Digit														
PAPD	Planning Advance Planning Document															
PC	Personal Computer															
PIN	Personal Identification Number															
PLU	Price Look Up Code															
POS	Point-of-Sale (POS) refers to both a checkout counter in a retail location, the location where a transaction occurs and the in-lane device that processes the transaction															
PP	A Postpartum Woman non-breastfeeding woman, up to six months from the termination of her pregnancy. The end of a pregnancy is the date the pregnancy terminates (date of delivery, abortion, fetal death or miscarriage).															
RFO	Request For Offer															
RFP	Request For Proposal															

TERM	DEFINITION
RFU	Reserved for Future use
S.M.A.R.T.	Specific Measurable Attainable Realistic Time-Based The S.M.A.R.T. acronym defines five characteristics needed to develop a well-designed action plan.
SAM	State Agency Model
SFY	State Fiscal Year
SME	Subject Matter Expert
SNAP	Supplemental Nutrition Assistance Program
SOR	System of Record
SOV	State of Vermont
SOW	Statement of Work
SSO	Single Sign On
TANF	Temporary Assistance for Needy Families, known as Reach-Up in Vermont
TPP	Third Party Processors
TRSM	Tamper Resistant Security Module
UOM	Unit of Measure
UI	User Interface
UPC	Universal Product Code
USDA	United States Department of Agriculture
VDH	Vermont Department of Health
VHIEN	Vermont Health Information Exchange Network

TERM	DEFINITION
VHITP	Vermont Health Information Technology Plan
VMN	Variable Measure Number
WESS	WIC EBT Settlement Service
WIC	Women, Infants and Children
X9.93	WIC EBT Transaction Processing Standard

25. Appendix 7 – References

- "Advance Planning Documents ." *USDA FNS*. USDA, 07/27/2010. Web. 9 Aug 2010.
<<http://www.fns.usda.gov/apd/default.htm> >.
- Bister, Donna. "Planning Advance Planning Document for the Vermont WIC Program Management Information System." Vermont *WIC MIS*. Burlington, Vt: State of Vermont, Vermont Department of Health, 2010. Print.
- Bister, Donna. "WIC System Planning" Vermont *WIC MIS*. Burlington, Vt: State of Vermont, Vermont Department of Health, Information Technology Advisory Team, 2008. Print.
- "Functional Requirements Documents (FReD)." *USDA FNS*. USDA, 01/01/2009. Web. 9 Aug 2010.
<http://www.fns.usda.gov/apd/wic_fred.htm>.
- Keller, Jeannie. "VT WIC MIS Planning Project Charter." Vermont *WIC MIS*. 1.2. Burlington, Vt: State of Vermont, Vermont Department of Health, 2010. Print.
- "Mountain Plains States Consortium (VERMONT) Systems Documents." *USDA FNS*. USDA, 04/06/2010. Web. 9 Aug 2010. <http://www.fns.usda.gov/apd/library/Vermont_docs.htm >.
- "Planning for WIC's Future Technology Needs." *USDA FNS WIC*. USDA, 2005. Web. 24 Aug 2010.
<<http://www.fns.usda.gov/wic/stateinformationsystems/ReporttoCongress/TechPlan.pdf>>.
- "Third Party Connectivity Policy" *State of Vermont Department of Information and Innovation*, State of Vermont, 11/02/2010. Web 3 Jan 2011. <http://dii.vermont.gov/sites/dii/files/pdfs/Third-Party-Network-Connectivity.pdf> .
- "SPIRIT Systems Documentation." *USDA FNS*. USDA, 06/09/2010. Web. 9 Aug 2010.
<http://www.fns.usda.gov/apd/library/spirit_docs.htm >.
- "State Agency Model (SAM) Project ." *USDA FNS*. USDA, 01/01/2009. Web. 9 Aug 2010.
<<http://www.fns.usda.gov/wic/stateinformationsystems/samprojectoverview.htm>>.
- "Vermont Health Information Technology Plan." Vermont's *Health Care Reform*. State of Vermont Agency of Administration, 23/07/2010. Web. 10 Aug 2010.
<http://hcr.Vermont.gov/sites/hcr/files/Vermont_HIT_Plan_4_1__07-23-10_.pdf>.
- "WIC EBT Document Library ." *USDA FNS*. USDA, 04/06/2010. Web. 9 Aug 2010.
<http://www.fns.usda.gov/apd/library/wic_ebt_docs.htm >.
- "WIC Direct – The EBT Solution." *WIC Direct* . WIC Direct , 2010. Web. 9 Aug 2010.
<<http://www.wicdirectsystem.com/>>.

26. Appendix 8 – USDA FNS/Vermont FReD Traceability Matrix

FNS FReD	Vermont FReD	Vermont Description
3.1	5	<i>Certification</i>
3.1.2	5.1	Manage Application Process
3.10.1.1	5.1.1	Schedule Certification Appointment
3.1.2.5	5.1.2	Maintain Waiting List
3.1.1	5.1.3	Maintain Basic Applicant Data
3.1.2.2	5.1.4	Screen Applicant for Prior Enrollment
3.1.2.3	5.1.5	Determine Adjunct or Automatic Income Eligibility
3.1.2.4	5.1.6	Determine Documented Income Eligibility
3.1.2.4	5.1.7	Maintain Eligibility Documentation and Status
3.1.3	5.2	Determine Nutrition Risk of Applicant
3.1.3.1	5.2.1	Maintain Applicant Nutrition and Health Characteristics
3.1.3.1	5.2.2	Perform Dietary Assessment
3.1.3.2	5.2.3	Perform Measurements
3.1.3.3	5.2.4	Capture Blood Test Results
3.1.4	5.2.5	Certify Applicant
3.1.3.3	5.2.6	Conduct On-going Assessment of Bloodwork Needed
3.1.1.1	5.2.7	Maintain Participant Data
3.1.5	5.3	Prescribe Food Package
3.1.5.1	5.3.1	Select Food Prescription
3.1.5.2	5.3.2	Tailor or Change Food Prescription
3.1.6	5.4	Process Participant Changes and Transfers
3.1.6.1	5.4.1	Change Household Grouping
3.1.6.2	5.4.2	Change Participation Status
3.1.6.3	5.4.3	Process In-State Transfers
3.1.6.4	5.4.4	Process Transfers Out of State
3.4.2.1	5.5	Establish EBT Account
3.12	5.6	Conduct Certification Reporting
3.12.1	5.6.1	Generate Standard Reports
3.12.2	5.6.2	Conduct Ad hoc Reporting
3.12.3	5.6.3	Maintain Data Warehouse
3.2	6	<i>Nutrition Education, Health Surveillance and Referrals</i>
3.2.1	6.1	Maintain Nutrition Education Data
3.2.1.1	6.1.1	Create Participant Care Plan
3.10.2.1	6.1.2	Schedule Nutrition Education
3.2.1.2	6.1.3	Track Nutrition Education
3.10.2.3	6.1.4	Track Missed Nutrition Education Appointments
3.8.1	6.1.5	Track Staffing Ratios
3.2.1	6.2	Evaluate Nutrition Assessments

FNS FReD	Vermont FReD	Vermont Description
3.2.1.1	6.2.1	Assess/Reassess Changes in Nutrition Risk
3.2.2	6.3	Perform Participant Referrals
3.2.2.1	6.3.1	Track Referrals
3.2.3	6.4	Provide Voter Registration Information
3.2.3.1	6.4.1	Provide Voter Registration Information
3.1.3	6.5	Provide WIC Data
3.1.3.1	6.5.1	Provide WIC Population Data
3.1.3.1	6.5.2	Provide Participant Characteristics Minimum Data Sets (MDS)
3.1.3.1	6.5.3	Provide WIC Participant Characteristics Health Data to the CDC
3.2.4	6.6	Determine Immunization Status
3.2.4.1	6.6.1	Screen and Refer Participant for Immunization Services
3.12	6.7	Conduct Nutrition Education, Health Surveillance and Referrals Reporting
3.12.2	6.7.1	Conduct Ad hoc Reporting
3.1.1	6.7.2	Maintain a Participant Master Record
3.2	7	<i>Breastfeeding Education, Health Surveillance and Referrals</i>
3.2.1	7.1	Maintain Breastfeeding Data
3.2.1.1	7.1.1	Create Participant Care Plan- Dyads/Multiples – Low priority
3.2.1.1	7.1.2	Assignment of all breastfeeding risk factors
3.2.1.1	7.1.3	Screen display and output of Participant Care Plan;
3.2.1.2	7.1.4	Track Nutrition Education and Breastfeeding
3.10.2.3	7.1.5	Track Missed Breastfeeding Education Appointment
3.8.1	7.1.6	Track Staffing ratios
3.2.1	7.2	Evaluate Participant Nutrition and Breastfeeding Assessment and Counseling
3.1.3.1	7.2.1	Assess/Reassess Changes in Nutrition/Breastfeeding Risk
3.1.3.1	7.2.2	Collect on Participant Data on Breastfeeding
3.2.1.2	7.2.3	Provide breastfeeding counseling, education and support information applicable to breastfeeding risk
3.2.2	7.3	Perform Participant Breastfeeding Referrals
3.2.2.1	7.3.1	Track Incoming and Outgoing Breastfeeding Referrals
3.12	7.4	Provide Data Sets to External Entities
3.12	7.4.1	Provide WIC Population on Breastfeeding Data to External Entities
3.12	7.4.2	Provide Participant Characteristics Breastfeeding Minimum Data Sets to FNS
3.12	7.4.3	Provide WIC Participant Characteristics on Breastfeeding Health Data to the Centers for Disease Control and Prevention (CDC)
3.12	7.5	Conduct Breastfeeding Education, Health Surveillance, and Referrals Reporting
3.12.1	7.5.1	Generate Standard Reports

FNS FReD	Vermont FReD	Vermont Description
3.12.2	7.5.2	Conduct Ad hoc Breastfeeding Queries and Generate Breastfeeding Reports
3.3	8	<i>Food Management</i>
3.3.2	8.1	Maintain Food Package Data
3.3.2.1	8.1.1	Maintain Approved Foods and Food Package Data
3.3.2.2	8.1.2	Record Food Package Variations
3.3.2.3	8.1.3	Reduce Food Quantities for Late Pick-Up by Prorating Benefits for Static Month Issuance
3.3.4.2	8.1.4	Estimate Redemption Value
3.3.4.1	8.1.5	Maintain UPC Database for WIC Approved Foods
3.3.1	8.1.6	Maintain WIC Category/Subcategory Table
3.3.1.1	8.1.7	Maintain WIC Unit of Measure Table
3.3.2	8.1.8	Process Food Package Changes
3.4.2	8.2	Issue Electronic Benefit (EBT Systems)
3.4.2.1	8.2.1	Establish EBT Account
3.4.2.3	8.2.2	Authorize Benefits
3.4.2.4	8.2.3	Prepare to Load Food Benefits
3.4.2.3	8.2.4	Load EBT Data on Card
3.4.2.3	8.2.5	Load Food Benefits and Print Food Prescription
3.4.2.8	8.2.6	Process Card Changes
3.8.5.1	8.2.7	Maintain Inventory of Cards Issued to Local Agency
3.12	8.3	Conduct Food Benefit Issuance Reporting
3.12.1	8.3.1	Generate Standard Reports
3.12.2	8.3.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	8.3.3	Maintain Data Warehouse
3.5	9	<i>Food Benefit Redemption, Settlement and Reconciliation</i>
3.5.3	9.1	Pay Vendor for Food Benefits Redeemed (EBT System)
EBT	9.1.1	Verify WIC Card
EBT	9.1.2	Screen for Food Item Eligibility and Verify Available Balance
EBT	9.1.3	Approve Purchase
EBT	9.1.4	Exception Processing (Online EBT Only)
3.5.3.1	9.1.5	Compile File of Transaction Data and Upload to Processor
3.5.3.1	9.1.6	Conduct Settlement
3.5.4	9.2	Maintain Food Transaction Data (EBT Systems)
3.5.4.2	9.2.1	Maintain Household Food Account Balance
3.4.2.5	9.2.2	Process Inquiries for Food Account Balance
EBT	9.2.3	Track Food Purchases by Household
EBT	9.2.4	Track Food Purchases and Price
3.12	9.3	Conduct Food Benefit Payment, Settlement and Reconciliation Reporting
3.12.1	9.3.1	Generate Standard Reports

FNS FReD	Vermont FReD	Vermont Description
3.12.2	9.3.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	9.3.3	Maintain Data Warehouse
3.6	10	<i>MIS Financial Management</i>
3.6.1	10.1	Manage Grants and Budgets
3.6.1.1	10.1.1	Track NSA and Food Grants
3.6.1.2	10.1.2	Maintain State Agency Budget Information
3.6.1.3	10.1.3	Maintain and Transmit Local Agency Budget Information
3.6.2	10.2	Monitor Program Expenditures
3.6.2.1	10.2.1	Monitor NSA Expenditures
3.6.2.2	10.2.2	Monitor Food Outlays
3.6.2.3	10.2.3	Perform Financial Modeling
3.6.2.4	10.2.4	Manage Cash Flow
3.6.3	10.3	Process Manufacturer Rebates
3.6.3.1	10.3.1	Estimate Total Annual Rebates
3.6.3.2	10.3.2	Assess Rebates
3.6.3.3	10.3.3	Monitor Rebate Collections
3.12	10.4	Conduct Financial Management Reporting
3.12.1	10.4.1	Generate Standard Reports
3.12.2	10.4.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	10.4.3	Maintain Data Warehouse
3.7	11	<i>MIS Caseload Management</i>
3.7.1	11.1	Capture and Maintain Caseload Data
3.7.1.1	11.1.1	Capture Data on Potential Eligible Population
3.7.1.2	11.1.2	Capture Historical Participation Data
3.7.2	11.2	Allocate Caseload
3.7.2.1	11.2.1	Determine Maximum Statewide Caseload
3.7.2.2	11.2.2	Prepare Local Agency Caseload Allocation Estimates
3.7.2.3	11.2.3	Record, Store, and Transmit Caseload Allocations
3.7.3	11.3	Monitor Caseload
3.7.3.1	11.3.1	Track Actual Participation
3.7.3.2	11.3.2	Conduct Caseload Reallocations
3.12	11.4	Conduct Caseload Management Reporting
3.12.1	11.4.1	Generate Standard Reports
3.12.2	11.4.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	11.4.3	Maintain Data Warehouse
3.8	12	<i>Operations Management</i>
3.8.1	12.1	Monitor Administrative Operations
3.8.1.1	12.1.1	Maintain Information on Local Agencies and Clinics
3.8.2	12.2	Manage Participant Outreach

FNS FReD	Vermont FReD	Vermont Description
3.8.2.1	12.2.1	Maintain Outreach List for Local Agencies
3.8.2.2	12.2.2	Track Community Outreach Activities
3.8.3	12.3	Monitor Customer Service for Participants, Vendors and Providers
3.8.3.1	12.3.1	Receive and Route WIC Customer Service Calls, Maintain Customer Service Data Store
3.8.3.1	12.3.2	Track Call Outcomes
3.8.4	12.4	Provide Survey Capability
3.8.4.1	12.4.1	Monitor Participants' Views of WIC Program Services
None	12.5	Perform Study
None	12.5.1	Maintain Study data
3.8.5	12.6	Maintain Inventory
3.8.5.1	12.6.1	Maintain Serialized Inventory
3.8.5.2	12.6.2	Maintain Non-Serialized Inventory
3.8.6	12.7	Monitor Program Integrity
3.8.6.1	12.7.1	Monitor Participant Integrity
3.8.6.2	12.7.2	Monitor Clinic Integrity
3.8.6.4	12.7.3	Track Administrative Hearings
3.12	12.8	Conduct Operations Management Reporting
3.12.1	12.8.1	Generate Standard Reports
3.12.2	12.8.2	Generate Ad hoc Queries and Generate Reports
3.12.3	12.8.3	Maintain Data Warehouse
3.9	13	Vendor Management
3.9.1	13.1	Maintain Vendors
3.9.1.1	13.1.1	Establish Vendor Peer Groups
3.9.1.2	13.1.2	Update Vendor Peer Groups
3.9.3.1	13.1.3	Maintain Vendor Application Data
3.9.3.2	13.1.4	Track Vendor Authorization Process
3.9.3	13.1.5	Authorize Vendors
3.9.3	13.1.6	Maintain Authorized Vendor Data
For EBT	13.1.7	Create EBT Vendor Maintenance Transfer file
3.9.4	13.2	Monitor Vendor Training
3.9.4.1	13.2.1	Track Scheduled Vendor Training
3.9.4.2	13.2.2	Track Attendance at Vendor Training
3.9.5	13.3	Support Vendor Communications
3.9.5.1	13.3.1	Produce Correspondence to Vendors
3.9.6	13.4	Perform Confidential High-risk Vendor Analysis
3.9.6.3	13.4.1	Identify High-risk Vendors
3.9.6.3	13.4.2	Identify High Price Vendors
None	13.4.3	Identify High-risk Vendors Using Additional Analytic Tools

FNS FReD	Vermont FReD	Vermont Description
3.9.6.3	13.4.4	Program Variations
3.9.7 & 3.9.8	13.5	Track Compliance Investigations and Routine Monitoring
3.9.7.1	13.5.1	Maintain Special Investigator Record for Compliance Investigations
3.9.7.1	13.5.2	Maintain Compliance Buys and Routine Monitoring Data
3.9.7.2	13.5.3	Maintain Compliance Food Benefit Redemption Data
3.9.7.3	13.5.4	Maintain Compliance Investigation and Routine Monitoring Data
3.9.7.4	13.5.5	Support Inventory Audits
3.9.8.1	13.5.6	Maintain Other Vendor Contact Records (Vendor Contact Log)
3.9.9	13.6	Monitor Sanctions and Appeals
3.9.9.1	13.6.1	Manage Vendor Sanctions
3.9.9.3	13.6.2	Maintain Vendor Appeal Data
3.9.10	13.7	Coordinate with SNAP – 3 Squares VT
3.9.10.1	13.7.1	Maintain SNAP Program Violation Data
3.9.10.2	13.7.2	Report WIC Sanctions to the SNAP
3.12	13.8	Conduct Vendor Management Reporting
3.12.1	13.8.1	Generate Standard Reports
3.12.2	13.8.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	13.8.3	Maintain Data Warehouse
3.10.0	14	Appointment Scheduling
3.10.1	14.1	MIS Master Calendar
3.10.1.1	14.1.1	Maintain Master Calendar
3.10.2	14.2	Manage Appointments
3.10.2.1	14.2.1	Perform Appointment Scheduling
3.10.2.2	14.2.2	Perform Mass Rescheduling
3.10.3	14.3	Generate Appointment Notices
3.10.3.1	14.3.1	Generate Appointment Notification
None	14.4	Track Non-Scheduled Contacts and Clinic Activity
None	14.4.1	Track Contacts
3.12	14.5	Conduct Scheduling Reporting
3.12.1	14.5.1	Generate Standard Reports
3.12.2	14.5.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	14.5.3	Maintain Data Warehouse
3.11	15	System Administration
3.11.1	15.1	Maintain System Data Tables
3.11.1.1	15.1.1	Maintain System Code Table Data
3.11.2	15.2	Administer System Security
3.11.2.2	15.2.1	Maintain User Identification
3.11.2.3	15.2.2	Maintain User Capabilities

FNS FReD	Vermont FReD	Vermont Description
3.11.2.4	15.2.3	Monitor Unauthorized Access
3.11.2.5	15.2.4	Monitor Record Updates
3.11.3	15.3	Manage System
3.11.3	15.3.1	Manage System Sites
None	15.3.2	Manage Communications
3.11.3.1	15.3.3	Perform System Back-Up/Restoration
None	15.3.4	Perform End-of-Day Processing (distributed sites only)
3.11.3.2	15.3.5	Import/Export Data Files
3.11.3.2	15.3.6	Create/Rebuild Clinic System
3.11.3.3	15.3.7	Provide Version Control/Distribute Updates
3.11.4	15.4	Archive System Data
3.11.4.1	15.4.1	Archive and Restore Historical Data
3.11.4.2	15.4.2	Purge Unnecessary Data
3.12	15.5	Conduct System Administration Reporting
3.12.1	15.5.1	Generate Standard Reports
3.12.2	15.5.2	Conduct Ad hoc Queries and Generate Reports
3.12.3	15.6	Maintain Data Warehouse
EBT	16	EBT Security
EBT	16.1	Maintain User for Single Sign On (SSO)
EBT	16.1.1	SSO Functionality
EBT	16.1.2	Create User
EBT	16.1.3	Update User
EBT	16.1.4	Deactivate User/Reactivate User
EBT	16.1.5	Access the EBT System
EBT	17	EBT Message Based Access
EBT	17.1	Account Maintenance
EBT	17.1.1	Create EBA
EBT	17.1.2	Update EBA
EBT	17.1.3	View EBA Details
EBT	17.1.4	Get EBA Details
EBT	17.1.5	Get Household ID Using Card Number
EBT	17.2	Benefit Maintenance
EBT	17.2.1	Add / Adjust Benefits
EBT	17.2.2	Get Benefit Balance
EBT	17.3	Local Agency Maintenance
EBT	17.3.2	Update Local Agency
EBT	17.3.3	Deactivate Local Agency
EBT	17.4	Retailer Maintenance
EBT	17.4.1	Create Retailer

FNS FReD	Vermont FReD	Vermont Description
EBT	17.4.2	Update Retailer
EBT	17.4.3	Deactivate/Reactivate Retailer
3.3	17.5	Category/Subcategory Maintenance
EBT	17.5.1	Get Category Information
EBT	17.5.2	Get Subcategory Information
EBT	17.6	Cardholder/Card Maintenance
EBT	17.6.1	Add Cardholder Identification (PIN)
EBT	17.6.2	Add Cardholder/Card
EBT	17.6.3	Submit Pin
EBT	17.6.4	Get Cardholder/Cards
EBT	17.6.5	Deactivate Card
EBT	17.6.6	Replace Card
EBT	17.6.7	Unlock PIN
EBT	17.7	EBT Reporting
EBT	17.7.1	Generate Standard Reports
EBT	18	<i>EBT – Batch Files Interfaces</i>
EBT	18.1	General File Structure
EBT	18.1.1	Required Data in all Files
EBT	18.1.2	Processing Standards
EBT	18.1.3	Daily Interface Reconciliation Batch File
EBT	18.1.4	Redemption Batch File
EBT	18.1.5	Vendor Batch File
EBT	18.1.6	Cat/SubCat Batch Files
EBT	18.1.7	APL and MAR Batch File
EBT	18.1.8	Benefit Month Reconciliation Batch File