

ATTACHMENT 1

DETAILED SCOPE OF WORK

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Definitions:

- a. "Card" shall mean the Tennessee WIC EBT Card.
- b. "CPS": shall mean the Central Processing Site.
- c. "EBT" shall mean electronic benefits transfer, which is an electronic payment mechanism for payment by the State for WIC benefits through a processor.
- d. "EBT Contractor" shall mean the electronic benefits transfer contractor.
- e. "EPI" shall mean Electronic Public health Information System, the TDH's electronic health record system.
- f. "FFP" shall mean Federal Financial Participation, the portion or amount of allowable costs (up to 100 percent) that a Federal grantor agency provides through a grant, contract, or other agreement. Specifications shall be based upon a clear level of funding established through legislation or regulation. This is the net amount provided by the Federal participating agency.
- g. "FNS" shall mean the Food and Nutrition Service of the USDA that administers the WIC Program.
- h. "FReD" shall mean Functional Requirements Document of the USDA-FNS for a Model WIC System.
- i. "FTE" shall mean full time equivalent.
- j. "HL7" shall mean "Health Level Seven International" a not-for-profit, ANSI-accredited standards developing organization that is dedicated to providing a framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information. HL7 standards are used for the transfer of clinical and administrative data between software applications used by various healthcare providers.
- k. "IT" shall mean Information Technology.
- l. "Level 1 Help Desk" shall mean an individual who filters calls from clinic staff, identifies the underlying issue, and provides basic support and troubleshooting.
- m. "Level 2 Help Desk" shall mean an individual who investigates elevated issues by confirms and solves the elevated issue.
- n. "Master Person/Patient Index" shall mean the index of TDH systems where a person has patient data.
- o. "MIS" shall mean the Management Information System for WIC.
- p. "PTBMIS" shall mean the current MIS for the State, the Patient Tracking and Billing Management Information System.
- q. "Patient Scheduling System" shall mean the module of the PTBMIS or new TNWIC that allows for scheduling patients.
- r. "PAN" shall mean Primary Account Number.
- s. "PHI" shall have the same definition as provided at 45 C.F.R. 160.103.
- t. "PMSC" shall mean the Project Management Services Contractor.
- u. "QA Contractor" shall mean the Quality Assurance Contractor.
- v. "SDLC" shall mean the System Development Life Cycle.
- w. "System Recipients" shall mean individuals and organizations that service or are serviced by the TNWIC.
- x. "Task Plan" shall mean the services described in the General Requirements section of this attachment.
- y. "TennIIS" shall mean the Tennessee Immunization Information System or immunization registry.
- z. "TDH" shall mean the Tennessee Department of Health.

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- aa. "TNWIC" shall mean the transferred Tennessee WIC MIS.
- bb. "TNWIC Advisory Council" shall mean the senior members of the TDH who bear the responsibility for the TNWIC project.
- cc. "TNWIC Project Manager" shall mean the individual who leads the TNWIC project for the TDH.
- dd. "USDA" shall mean United States Department of Agriculture, the federal executive department responsible for developing and executing federal laws related to WIC under FNS.
- ee. "UAT" shall mean User Acceptance Testing in which an application is tested, usually by or in conjunction with users, to ensure that the application is functioning according to specifications and defined requirements and is acceptable to the TDH.
- ff. "VistA" shall mean the Medical Records System component of EPI.
- gg. "VPN" shall mean a Virtual Private Network, a virtual network built on top of existing physical networks that can provide a secure communications mechanism for data and control information transmitted between networks.
- hh. "WIC" shall mean the Special Supplemental Nutrition Program for Women, Infants and Children, at 42 U.S.C. § 1786.
- ii. "WHIPS" shall mean WIC Highly Involved Proficient Staff– who are selected regional and clinic staff who will become super users during the implementation of TNWIC.

General Requirements:

The Contractor shall submit to the State documents and plans in the following Task Plan in draft and final form, using the State's current standard Microsoft Office formats. The Contractor shall submit drafts and subsequent revisions with all changes tracked. The Contractor shall submit all deliverables to the PMSC and to the TNWIC Project Manager and will post all deliverables on a dedicated project website determined by the State. The State will determine if the documents and plans have met the State's requirements.

The Contractor shall provide all deliverables as found in the following Task Plan, detailed in Attachment 1 and outlined as follows:

Task 1 – Project Initiation, Planning and Management

- 1.1 Project Initiation Meeting and Memorandum.
- 1.2 System Transfer, Modification and Testing Plan.
- 1.3 Final Work Plan and Schedule.

Task 2 – System Design

- 2.1 System Orientation Training.
- 2.2 System Design Sessions.
- 2.3 Detailed Functional Design Document (DFDD).
- 2.4 Detailed Technical Specifications Document (DTSD).
- 2.5 Implementation, Conversion, Training and Security Plans.

Task 3 – System Transfer, Modification and Technical Testing

- 3.1 System Transfer Initiation/System Transfer, Modification and Testing Plan.
- 3.2 System Transfer, Modification and Technical Testing.
- 3.3 Operational Planning, Documentation and Training Materials.

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Task 4 – User Acceptance Test (UAT)

- 4.1 System Installation.
- 4.2 System Training.
- 4.3 System Operations Support/Data Conversion.
- 4.4 Support UAT and System Revision.
- 4.5 Assessment of Tennessee Disaster Recovery Procedures/Disaster Plan.
- 4.6 Assessment and Readiness for Pilot.

Task 5 – Pilot Test

- 5.1 System Pilot Initiation Meeting and Memorandum.
- 5.2 Help Desk Training.
- 5.3 Pilot Agency (State Office and Clinic) Training.
- 5.4 Installation of System Software – Pilot Test.
- 5.5 Data Conversion.
- 5.6 System Pilot Test
- 5.7 Evaluate Pilot, Modify and Retest System.

Task 6 – Rollout

- 6.1 System Rollout Initiation Meeting.
- 6.2 User Training, Conversion and Implementation.
- 6.3 Post Implementation Problem Resolution and Checkpoint.
- 6.4 System Documentation Update.

Task 7 – Initial Warranty Period

- 7.1 TN State's Operation and Maintenance Staff Training and Mentoring.
- 7.2 One Year Warranty Period.
- 7.3 System Problem Reporting.
- 7.4 System Modification.

Task 8 – Project Closure and Transition

- 8.1 Final System Documentation, Forms, Source Code, Data and Other Materials.
- 8.2 Contract Closure.

Task 9 – Extended Warranty, Maintenance and Operation Period

- 9.1 Extended Warranty Period Option.
- 9.2 System Modification.

The Contractor will submit to the State, within ten (10) business days of the Effective Date of the Contract, a list of key personnel assigned to and responsible for each Task and Subtask. Should a change in key personnel be made during the term of the Contract, the Contractor shall present the replacement to the State who will have the right to refuse the replacement.

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1.0. TASK 1 – PROJECT INITIATION, PLANNING AND MANAGEMENT

Deliverable 1: Project Initiation Meeting and Memorandum

The MIS T&I Contractor shall provide for the conduct of a project initiation meeting, prepare the plans that will guide and track the project's progress and initiate project status reporting.

The following subtasks have been identified as necessary to this phase effort:

1.1. Project Initiation Meeting and Memorandum

No later than two (2) weeks after the Contract Effective Date, the MIS T&I Contractor must attend a two (2) to three (3) day project initiation meeting at the WIC central office. The MIS T&I Contractor's project manager and other key Contractor staff as deemed necessary by the TNWIC Advisory Council, the Project Management Services Contractor (PMSC), the EBT Contractor and the Quality Assurance (QA) Contractor, must participate in the meeting. The MIS T&I Contractor shall review the work plan, schedule, and deliverables, and discuss the management of change orders. Within five (5) working days of the meeting, the MIS T&I Contractor must deliver to the State for written approval, a technical memorandum documenting a summary of all decisions, agreements, understandings, and contingencies arising from the project initiation meeting. Any revisions to the project objectives, timeline or scope in the technical memorandum must be approved in writing by the State.

1.2. System Transfer, Modification and Testing Plan

Deliverable 2: System Transfer, Modification and Testing Plan

Within one (1) week, the MIS T&I Contractor must deliver to the State for written approval, a comprehensive system transfer and modification plan, describing in detail, its approach to the transfer, modification/potential development and implementation of the new TNWIC system. The plan must include a description of the structured system life cycle development methodology to be employed throughout the project. Subjects to be covered include the system transfer and modification process; the methods for maintaining requirements traceability throughout the development process; types and conduct of test activities, and the change control and configuration management processes.

The MIS T&I Contractor must include a discussion of the Contractor's approach to quality control, dispute resolution process, and security and must reflect the results of discussions with the State staff regarding the final design of the system.

The change control and configuration management portion of the plan shall detail the Contractor's approach to version control and should include, at a minimum:

- How the Contractor will assign identification numbers to releases of the system (e.g., *version#.build#*, where *version#* = the number of the latest entire system release and *build#* = the number of the latest release containing a single or a few module updates);
- How the Contractor will check out/check in of system modules inclusive of automated support and control;

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- How releases of the system will be archived (e.g., each new version will be archived, as will each build since the last archive);
- Procedures to ensure that only one (1) release of the system is being system tested (either internally or in UAT) at any given time; and,
- Procedures to ensure that only one (1) release of the system is operational at any time in all installations during pilot, roll out and operations.

1.3. Final Work Plan and Schedule

Deliverable 3: Final Work Plan and Schedule

Within two (2) weeks, the MIS T&I Contractor must provide to the State for written approval, as a component of the final work plan, a comprehensive schedule for the project in both standard calendar and Gantt chart format for Tennessee's review and approval. The MIS T&I Contractor shall provide the schedule in an automated project management package such as Microsoft Project and also submit it in Adobe Acrobat and include the ability to calculate and display the critical path at any point in the project.

The schedule must incorporate all MIS T&I Contractor requirements (deliverables and milestones) and Tennessee requirements such as review periods for deliverables, schedule of staff participation in system review/design sessions, design document (DFDD) walkthroughs, user acceptance testing, training sessions, pilot testing, rollout, and transition and closure. The MIS T&I Contractor shall present this deliverable in the form of a draft version for review and a final version for approval by the State.

The MIS T&I Contractor must incorporate in the final work plan any changes from the plan submitted with the Contractor's proposal that were discussed and agreed to during the project initiation meeting. The final work plan must be maintained throughout the life of the project and must be updated as necessary to reflect the accurate status of the project. (For example, the dates of the modification and testing tasks will be known accurately only when the system modification design phase is completed, so the work plan must be updated at that point.) The MIS T&I Contractor must also update the plan as needed when tasks are completed. The MIS T&I Contractor's final work plan and schedule shall be combined with the EBT implementation Contractor's final work plan and the QA master work plan by the PMSC to generate an Integrated Master Schedule (IMS) for the Tennessee system transfer, modification, and project implementation effort.

2.0. TASK 2 – SYSTEM DESIGN

The MIS T&I Contractor must lead and facilitate the conduct of system modification design sessions, update the system functional and technical documentation, and prepare the detailed plans for system implementation, data conversion, user training, and maintenance of system security. This project task ends with formal acceptance of the MIS T&I Contractor's plans and design documentation by the State.

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The MIS T&I Contractor shall provide for System Orientation Training, as detailed below, as a subtask of Task 2.0 - System Design.

2.1. System Orientation Training

Deliverable 4: System Orientation Training

Tennessee has developed a team of local agency and State Agency “super-users” (known as WHIPS) who will be utilized to assist the MIS T&I Contractor in the conduct of training and will provide support to the clinics as they go live with the new MIS. The WHIPS were drawn from the State and clinic staff who have participated in the design sessions leading to the development of the Tennessee WIC Functional Requirements Traceability Matrix (Exhibit 4). To prepare the super user group, the MIS T&I Contractor must conduct an in-person system orientation training for the group prior to initiation of detailed design sessions. The MIS T&I Contractor must address all system operations and must provide the same training plan, materials and approach that will be employed for future activities, including UAT, pilot and rollout. The WHIPS will then be able to approach the detailed design of the system with an understanding of the transfer system functionality and operation. The MIS T&I Contractor shall provide five (5) business days of in-person training for State designated WHIPS. The training shall take place at a time and central location determined by the State. This deliverable will be considered complete after the State provides written approval that the training was completed and acceptable.

2.2. System Design Sessions

Deliverable 5: System Design (JAD) Sessions

The MIS T&I Contractor must be onsite to conduct a review of the proposed transfer system’s functionality in comparison to the Tennessee requested enhancements and modifications to identify required revisions to the system. To develop a detailed design of the modifications, the MIS T&I Contractor must conduct joint application design (JAD) sessions for the definition of the required new system functionality. The MIS T&I Contractor must include a review of all system functionality by area and must focus on the desired modifications. The JAD sessions must be held with the PMSC and the QA Contractor and appropriate staff from Tennessee and its clinics, as selected by the Tennessee WIC Program. Primary contributors to the JAD sessions are expected to be the TNWIC WHIPS. In the system review/JAD sessions, the MIS T&I Contractor must discuss the—existing system utilizing both the application and system documentation and confirm the details of requested modifications or enhancement for the new WIC system, including screens, processing, and outputs of each functional area of the system (e.g., certification or vendor management). The MIS T&I Contractor shall utilize the USDA Functional Requirements Document (FReD) for the system being transferred as the baseline for review and definition of system functionality. The MIS T&I Contractor must conduct the JAD sessions early enough in the project process to ensure incorporation of all decisions made during the reviews into the DFDD. While revised sections of the DFDD may be presented for consideration during the JAD sessions, the MIS T&I Contractor shall not submit the final, updated DFDD until all JAD sessions have been successfully concluded, and all design decisions and specifications have been incorporated in the document.

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The State will provide for three (3) weeks of JAD sessions early in the project effort, estimated to require fifteen (15) business days as defined by the State of Tennessee, i.e. 7.5 hours per business day. The MIS T&I Contractor and the State shall mutually agree upon a suitable schedule and sufficient duration for these JAD sessions and the locations. The MIS T&I Contractor shall provide for sufficient JAD sessions to address all needs. The MIS T&I Contractor shall conduct the JAD sessions by functional area of the system (e.g., clinic services, appointment scheduling, vendor management, etc.). The MIS T&I Contractor must lead these sessions and must bear responsibility for tracking and recording all design decisions. The MIS T&I Contractor shall provide a lead program analyst to direct each session and a junior staff member to record all discussions and decisions. The MIS T&I Contractor must suggest a suitable schedule for these activities potentially inclusive of concurrent JAD sessions for different functional areas of the system in order to expedite the design activity. If there are no modifications being made to one or any of the functional areas of the MIS T&I Contractor's baseline MIS that they are transferring to the State, the scheduled JAD session will serve as an opportunity to review the system functionality of that area of the MIS.

This deliverable will be considered complete once the MIS T&I Contractor has completed the JAD sessions and the State has given written approval of the planned modifications.

2.3. Detailed Functional Design Document (DFDD)

Deliverable 6: Detailed Functional Design Document (DFDD)

Within two (2) weeks, following completion of the design sessions, the MIS T&I Contractor must deliver to the State for written approval, an updated Detailed Functional Design Document (DFDD) comprehensively describing the functional requirements of the system and highlighting the new design specifications added to the document to describe the State modifications. All revisions to the existing DFDD must adhere to the form and content standards of the current document. This deliverable is to be presented in the form of a draft version for review and a final version for written approval by the State. The MIS T&I Contractor shall provide that the draft submission be accompanied by a formal walk-through of the revisions to the document with designated State staff, the PMSC, and the QA Contractor allowing an appropriate review period, which shall be twenty (20) working days for the draft and ten (10) working days for the final. The review period must be extended if the level of modifications and enhancements to the system requested by the State is deemed extensive by the State.

As part of the DFDD, the MIS T&I Contractor must prepare a requirements traceability matrix that relates each requirement in the Tennessee WIC Functional Requirements Traceability Matrix (Exhibit 4) to the section(s) in the DFDD where the requirement is addressed. During the system functionality review, additional necessary modifications may be identified by the State; therefore, the modifications are not limited to this matrix. The contractor must provide a "crosswalk" to this matrix. The MIS T&I Contractor must maintain this matrix throughout the course of the project and must identify where each original requirement is realized in the final application.

The MIS T&I Contractor must keep the updated DFDD, once formally accepted by the State, current and maintained in accordance with configuration management standards throughout the life of the contract as it will form the basis for the modifications and enhancements to the system.

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Written approval of the DFDD by the State will be required before system development activities in Task 3 may begin.

2.4. Detailed Technical Specifications Document (DTSD)

Deliverable 7: Detailed Technical Specifications Document (DTSD)

Pursuant to the development of this deliverable, the MIS T&I Contractor must conduct a technical specification workgroup session with designated State project management and technical staff, the PMSC, and the QA Contractor to ensure that the appropriate staff understands the presentation and organization of the technical specification documents prior to reviewing them. Prior to beginning modifications for the State, the MIS T&I contractor shall provide the DTSD and all internal specifications for the system they are proposing.

Within two (2) weeks after the technical specification session, the MIS T&I Contractor must deliver to the State for written approval, an updated Detailed Technical Specifications Document(s) (DTSD), reflecting the final requirements for system configuration and operation. In this document, the MIS T&I Contractor shall describe all internal specifications of the transfer system in detail. All revisions to the existing DTSD must adhere to the form and content standards of the current document. This deliverable is to be presented as a draft version for review and a final version for approval by the State. The MIS T&I Contractor shall provide that the draft submission be accompanied by a formal walk-through of the revisions to the document with designated State staff, the PMSC, and the QA Contractor allowing an appropriate review period which shall be twenty (20) working days for the draft and ten (10) working days for the final. The review period must be extended if the level of modifications and enhancements to the system requested by the State is deemed extensive by the State.

The final DTSD, once formally approved in writing by the State, shall join together with the approved DFDD to constitute the complete system definition for the new TNWIC MIS system. The DFDD and the DTSD together shall constitute the agreement between the State and the MIS T&I Contractor regarding the functionality and operation of the new system. Final written approval of the DTSD by the State will be required before the beginning of system development. The MIS T&I Contractor shall use the DFDD and the DTSD as documentation during system development and shall be the basis for the development of the User Acceptance Test (UAT).

2.5. Implementation, Conversion, and Training

Deliverable 8: Pilot, Implementation, Conversion, and Training

For the remaining aspects of system development, the MIS T&I Contractor must deliver a series of written plans which shall detail its approach to the pilot test, system implementation, data conversion, training, and security. Each of these plans must be delivered to the State and each requires written approval by the State.

The written plans must detail, in Gantt format, the portion of the overall project schedule (brought up to date as of submission of the deliverable) that includes all tasks subsequent to system development by the MIS T&I Contractor, Contractor milestones, and State tasks (e.g., developing new policies and procedures) and checkpoints. Alternatively, the deliverable may refer to the overall project schedule if all tasks are included and the overall schedule is up to date. The written plans shall include a detailed description of each task within five areas: pilot,

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implementation, conversion, training, and security. The plans must encompass the MIS T&I Contractor's approach for the following: 1) a Pilot test plan, 2) a draft State implementation schedule, 3) conversion and testing of converted data, 4) state office, clinic and operations staff training and 5) the means by which security will be maintained in the new TNWIC MIS. The MIS T&I Contractor must present each of the four (4) plans in the form of a draft version for review and a final version for approval by the State. The conversion, and training, shall include the following details as delineated below:

Conversion Plan: The MIS T&I Contractor must provide a field-by-field mapping (including how the values will be converted) from the legacy system in Tennessee to the new system, detailing:

- Any assumptions or proposed calculations involved in the conversion;
- Default values for required fields that do not exist in the legacy system or a method to allow for missing data until all participants are in the new system;
- Methods for handling anomalies in the data between the systems (data elements with incompatible length and/or type between the systems, or data elements with stricter edit requirements in the new system that fail those edits in the old); and,
- How data elements that have been assigned default values by the automated conversion procedures will be populated with actual data once automated conversion is complete for a site.

In the Conversion Plan, the MIS T&I Contractor must detail any data "clean up" procedures in the individual clinics that can effectively improve the conversion effort. The Conversion Plan must take into account possible exceptions to full conversion of the databases. The MIS T&I Contractor shall detail here exception reports that will be produced by the conversion programs and provide for a fully auditable conversion of data files. The MIS T&I Contractor must, in the Conversion Plan, comprehensively address all State WIC data, inclusive of the vendor, financial, schedule, clinic and client data in the legacy and describe how each type of data will be converted. The MIS T&I Contractor must justify any existing data that may not be converted for use in the new system.

Training Plan: In the Training Plan, the MIS T&I Contractor must:

- describe the types of training and the audiences for each,
- provide a description of training materials and training methodology,
- include a detailed list of topics to be covered for each type of training,
- and describe the methodology for evaluation of training effectiveness.

The MIS T&I Contractor must provide, at a minimum, clinic user training, regional office user training, state office user training, central system operator training, and "train the trainer" training as delineated throughout this document. The MIS T&I Contractor must incorporate changes to WIC policies and procedures into state and local user training by consultation with State WIC staff. The MIS T&I Contractor must indicate in the Training Plan the overall schedule including the number of days and preliminary agendas for the trainings. The MIS T&I Contractor must provide an overview of tools and materials to be

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employed in the trainings including workbooks, handouts, evaluative materials, and any training systems to be utilized. The MIS T&I Contractor must identify the proposed training staff in its written Training Plan.

3.0. TASK 3 - SYSTEM TRANSFER, MODIFICATION AND TECHNICAL TESTING

In this task, the MIS T&I Contractor shall conduct the system modification/potential development and comprehensive technical testing of the modifications to the application. The MIS T&I Contractor shall not initiate this activity until the State provides written approval of the system functional and technical design documents. This project phase ends with a MIS T&I Contractor demonstration of error-free system operation and system certification of readiness for UAT.

The MIS T&I Contractor shall provide the following as a subtask to Task 3.0.:

3.1. System Transfer, Initiation/System Transfer, Modification and Testing Plan

Deliverable 9: System Transfer Initiation Meeting Memorandum

Upon written approval of the system design documentation by the State, the MIS T&I Contractor shall convene a development and testing phase initiation meeting to be attended by designated State staff, the EBT implementation Contractor, the PMSC, and the QA Contractor. The MIS T&I Contractor shall review plans and schedule for system development and testing and highlight Tennessee and QA activities during the project phase. Prior to the meeting, the MIS T&I Contractor shall prepare and deliver to the State for its written approval, a development and technical testing plan, which will serve as the basis for the meeting presentation. Within five (5) working days after the meeting, the MIS T&I Contractor shall provide a technical memorandum documenting all agreements, understandings and contingencies resulting from the system development initiation meeting.

3.2. System Transfer, Modification and Technical Testing

3.2.1. System Transfer, Modification and Technical Testing

Deliverable 10: System Transfer, Modification and Technical Testing

This task includes the modification/potential development and testing of the transferred and modified WIC system. Based on the specifications developed during the design sessions and documented in the updated DFDD and DTSD, the MIS T&I Contractor must modify the system to meet the new functional requirements and conduct thorough technical testing of the system prior to presentation for User Acceptance Testing.

The MIS T&I Contractor shall formally advise the State that the system is ready for UAT when development and internal testing is finished and a thorough system qualification test of all system functionality has been performed with zero errors. The MIS T&I Contractor shall assure that this advisement includes the conversion routines for converting records from the legacy system, as this system functionality will also be tested during the UAT. The MIS T&I Contractor shall provide for generating the test data and test cases to be used for its own system qualification test.

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The transfer system shall meet the requirements in the FNS-USDA FReD as well as those detailed below:

- a. The Contractor shall provide services for the transfer, modification, configuration, interface testing, and implementation the TNWIC. The Contractor shall provide a Tennessee WIC MIS that employs modern web technology, standard WIC elements, open system architecture, modular components, operate with EBT, and fully interoperate with the State's EPI system, using HL7 standards. The Contractor shall ensure that the Tennessee WIC MIS complies with FNS laws and regulations and with the most recent version of the FReD found on the FNS website, subject to change, as well as all other policies and guidance found at:
 - <http://www.fns.usda.gov/wic/wic-laws-and-regulations>
 - <http://www.fns.usda.gov/wic/wic-electronic-benefits-transfer-ebt>
- b. The Contractor shall provide the State with a MIS that is interoperable using the HL7 version specified by the State with the following major data exchanges:
 - i. PTBMIS or a successor Practice Management System which provides patient registration, including financial and eligibility information, until replacement systems for these features are identified;
 - ii. Master Person/Patient Index;
 - iii. VistA or a non-VistA medical records system deployed by one or more regions of the State;
 - iv. TennIIS;and
 - v. Patient Scheduling, which shall be supplied with basic interoperability functions for WIC and other systems.

The Contractor shall include in the MIS the capability to export data to be used by other systems, including an interface with the EBT processor and the USDA/FNS minimum data set and shall provide that appointment data can be passed from the MIS to an auto-dialer system for telephone, text, or email notifications.

At this time, Knox County does not plan to interoperate with EPI, and will need the ability to enter WIC information directly into the TNWIC MIS without using the interoperability mentioned above. Therefore, the Contractor shall ensure that the Tennessee WIC MIS system has functionality to allow end users to enter data directly into the Tennessee WIC MIS.

- c. The Contractor shall ensure that the TNWIC is EBT operational and interfaces with the EBT Contractor under the specifications of the USDA WIC Universal Interface guidelines. The TNWIC system shall:
 - i. pass demographic and benefit data to the EBT system, which will maintain WIC household EBT accounts, maintain Card information, acquire and validate WIC redemption transactions from the WIC vendors, process payments to the WIC vendors, and supply the WIC MIS with redemption data for reporting and reconciliation; and

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- ii. encompass data and system features to include identification of Head of Household/ Primary Card Holder, PAN capture, record Card replacement, foster child identification, family demographics and income, food packages by category/subcategory/unit of measure, historical record of food packages issued, and PAN linkage to food package issuance.
- d. The Contractor shall provide the Tennessee WIC MIS with functionality that will allow it to:
 - i. function as a new scheduler for Tennessee's EPI system, which shall include the ability to structure appointments by program and sub-program and type of appointment, and to assign appointments to an individual provider or type of provider, accommodating approximately four hundred thirteen (413) appointment types for twelve (12) programs and one hundred ninety-five (195) sub-programs;
 - ii. Should the Contractor's WIC MIS scheduling module, as described above, not be selected to be the scheduler for Tennessee's EPI system, the Contractor shall provide a bi-directional interface between this major WIC module and PTBMIS/EPI for appointment scheduling.
- e. The Contractor shall provide a Tennessee WIC MIS that complies with the FReD and supports multiple locations from CPS, the State Agency, State Regional offices, and WIC clinics. The Contractor shall ensure that:
 - i. the clinic application contains business rules to support clinic level operations (appointment scheduling, participant certification, food benefit issuance, documentation of nutrition education, food package changes, mid-certification updates and edits, participant transfers, and reporting);
 - ii. the Regional office application contains vendor management functionality; and
 - iii. the State Agency application contains functions for statewide reporting, vendor management, financial management, to include communications with the host processor for EBT, food instrument reconciliation, program integrity, and dual participation oversight.
- f. The Contractor shall update its system documentation replacing all references with a reference to the Tennessee WIC MIS and allowing that any functionality added, modified, or deleted from the base transfer application be so noted in all documents. The Contractor will revise all existing training materials and/or user manuals to reflect system modifications made for the Tennessee WIC MIS.

The MIS T&I Contractor must develop the new TNWIC MIS using a structured system life cycle development methodology that includes the following types of test activities:

Unit/Module Test

The MIS T&I Contractor shall use the unit/module test to validate that an individual program module or script functions correctly. The test validates the module's logic, adherence to functional requirements and adherence to technical specifications. Each unit/module test must

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execute every source statement and each conditional branch in the module. Unit/module tests are usually conducted by the programmer who writes the module. Test results are recorded in the software development folder for that module. The MIS T&I Contractor must conduct unit/module tests for any system module that has been modified.

Subsystem Integration Test

The MIS T&I Contractor shall perform a subsystem integration test to examine subsystems that are made up of integrated groupings of software modules. The MIS T&I Contractor must conduct subsystem integration testing in the development environment for any system that has been modified. It is the first level of testing where problem reports are generated, classified by severity, and the resolution monitored and reported. The MIS T&I Contractor shall, if needed, run subsystem integration testing several times for each subsystem and shall consider it complete only when the test has run with zero errors.

System Qualification Test

The MIS T&I Contractor shall provide an independent test group within its organization to test the entire system when coding and testing of all system modules and subsystems has been completed. The MIS T&I Contractor's system qualification tests shall determine whether the system complies with standards, satisfies functional, technical, and operational requirements, and confirms that both individual system modules and the entire system perform in accordance with the functional requirements and technical specifications. During this test period, the MIS T&I Contractor must check system documents and training manuals for accuracy, validity, completeness and usability. The MIS T&I Contractor shall ensure, during this test, that the software performance, response time, and ability of the system to operate under stressed conditions and maximum load are tested. The MIS T&I Contractor must at the same time test external system interfaces and the ability of the system to correctly process data converted from legacy systems. The MIS T&I Contractor shall document all findings during the test and compile a system qualification test analysis report for delivery to the State. As with the integration subsystem test, the MIS T&I Contractor may need to run subsystem integration testing several times, and shall deem it complete when the test has run with zero errors.

Regression Testing

The MIS T&I Contractor must perform regression testing to re-test a system component (unit, module, or subsystem) following any modification and verify that the problem was corrected without adverse side effects and to ensure the component still complies with its requirements. Regression testing also refers to rerunning the entire system qualification test after errors have been corrected. The MIS T&I Contractor shall perform regression testing to ensure that unanticipated errors have not been introduced elsewhere in the system by another error correction activity.

Periodic Reviews

During the System Development and Technical Testing task, the MIS T&I Contractor must schedule periodic reviews for the State's review and written approval of the final product prior to UAT. The MIS T&I Contractor shall measure overall progress, status, and work products (screens, reports, etc.) and allow the State to see the product of system modifications prior to the submission of the system for UAT. The MIS T&I Contractor must provide an opportunity to

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clarify and correct any modifications made to the system that do not correctly address the intended functional modification. The MIS T&I Contractor shall provide prototype reviews and demonstrations for each system modification as they become available.

3.2.2. *Readiness Certification for UAT*

Deliverable 11: Readiness Certification for UAT/System Software

When the system meets the functional requirements and technical specifications, the MIS T&I Contractor must provide the State with a written certification that the system is ready for User Acceptance Testing (UAT). The certification must include detailed information on all errors identified during migration testing and their remedies. The certification must verify that the MIS T&I Contractor staff are able to conduct full system testing from start to finish with no identified outstanding errors. The MIS T&I Contractor shall provide this certification only after it has determined that the system has passed all tests with no known errors.

In order to demonstrate the system readiness for UAT, the MIS T&I Contractor must perform a key function system walkthrough onsite with the TNWIC Project Manager and other agency staff. In this demonstration, the MIS T&I Contractor must prove that the system can perform the following functions, at a minimum, with zero errors:

- Establish clinic calendar, schedule various types of appointments, mark appointments as kept or missed, demonstrate appointment lookups and changes, and produce appointment related reports;
- Create security/user roles;
- Perform certification (including assigning automated risk factors and appropriate category);
- Issue EBT benefits;
- Transfer between clinics;
- Authorize a new Vendor;
- Redeem food benefits;
- End-of-day/month processing;
- System Administration;
- Print Participation, Schedule, Vendor, and Financial Reports;
- Print food benefit Reconciliation Report; and,
- Demonstrate system response times in adherence with Contract requirements.

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The MIS T&I Contractor must provide fully developed system source code and executable code for the local and state office applications to be operated at the central processing site in support of UAT - as well as any required software application packages for the operation of the Help Desk. The software must conform to all functional and technical specifications mutually agreed to by the MIS T&I Contractor and the State during the project and be thoroughly tested prior to delivery to the State for UAT. The MIS T&I Contractor must provide the source code and executable code to the State for independent testing two (2) weeks prior to UAT.

Upon written approval from the State, the MIS T&I Contractor shall proceed with UAT when the State determines there are no errors (other than cosmetic errors) during the demonstration.

3.3. Operational Planning, Documentation and Training Materials

Deliverable 12: User Training Materials

The MIS T&I Contractor shall submit to the State, training materials, operations manuals and the help desk plan deliverables in draft form for review and written approval by the State. Final products must be submitted within one (1) week of receipt of the State's comments and in appropriate quantities for implementation and system operation purposes. The MIS T&I Contractor must provide any additional documentation, such as equipment manuals and COTS (Commercial off the Shelf) applications user manuals at this time.

3.3.1. Training Materials

The MIS T&I Contractor must prepare and submit comprehensive User Training materials for all levels of system training: state agency, clinic, help desk, and data center operations. The MIS T&I Contractor may draw these materials from the existing transfer system's training materials but must update and revise them to address Tennessee-specific functionality and business practices. The MIS T&I Contractor shall provide training that addresses all aspects of system use and all security considerations and must offer materials that may be used by clinic, regional and state office WIC staff for system training after the conclusion of the implementation phase of the project.

The MIS T&I Contractor must develop and install a training/test area on the system servers for new employee training and enhancement testing. The MIS T&I Contractor may provide that the transfer system utilize on-line help instead of hard copy user manuals and, in such case, shall develop and distribute supportive materials as a complement to on-line help and user documentation.

3.3.2. e-Learning Training Modules

Deliverable 13 e-Learning Training Modules

The MIS T&I Contractor shall create and provide e-Learning training modules for the clinic and regional vendor management staff. In these training modules, the MIS T&I Contractor must address all aspects of the clinic and vendor management applications of the system. The modules must be segmented to allow for staff to only view those system functions which are applicable to their assigned WIC role. The MIS T&I Contractor shall accommodate that the Tennessee WIC program uses eLearning modules on Adobe Presenter and trainings are designed for self-study, practice, observation and evaluation within the staff member's respective work

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environment, with each of the eLearning modules consisting of educational content, an associated test, and a skills checklist to be completed in the WIC clinics and these training modules must have written approval by the State.

4.0. TASK 4 – USER ACCEPTANCE TEST (UAT)

The MIS T&I Contractor shall facilitate and support user acceptance testing and shall remedy all errors identified during testing. The MIS T&I Contractor shall provide on-site support for the duration of UAT at the State office. The MIS T&I Contractor shall be on site to participate in a UAT Phase initiation meeting, convened by the PMSC to review the UAT plan, schedule, deliverables, and risks with, at a minimum, the EBT implementation Contractor, the QA Contractor and the PMSC, who will manage the UAT. Within two (2) working days of the meeting the MIS T&I Contractor must deliver a technical memorandum documenting all agreements, understandings, and contingencies arising from the UAT initiation meeting to the PMSC who will distribute to all contractors and the State. It is expected that the EBT implementation Contractor will submit a technical memorandum also documenting all agreements, understandings, and contingencies.

The MIS T&I Contractor shall provide the following as a subtask to Task 4.0.:

4.1. System Installation

Deliverable 14: Installation/Operation of System Software

Upon completion of system modification/potential development and testing and achievement of certification of readiness for UAT, the MIS T&I Contractor must prepare and install the necessary software for the test bed application. This may include coordinating installation with Tennessee's Strategic Technology Solutions (STS) staff and integrating the server into existing environments if needed (e.g. Active Directory, NDS, and firewalls).

MIS T&I Contractor must coordinate the installation of the system on the State's servers with the TDH Information Technology Services Division and STS. The MIS T&I Contractor must coordinate the installation of the system at the agreed upon operations site. The system installation must include an operational system and a test bed system. Upon completion of system installation, the MIS T&I Contractor must assist in the conduct of an operations test to verify that the system is correctly functioning. The system installation must be conducted sufficiently in advance of the initiation of UAT to ensure system availability for the scheduled testing. This deliverable will be considered complete when the State verifies in writing that the system and software are functioning correctly.

4.2. System Training

Deliverable 15: User Training – UAT

The MIS T&I Contractor must provide comprehensive system training to the end-users who will conduct acceptance testing. The training must address all system operations and be based on the training plan, materials, and approach that will be employed for pilot and rollout training.

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During UAT and Pilot, the MIS T&I Contractor shall begin training and mentoring of the state operations staff onsite. The MIS T&I Contractor shall provide support to the State in implementing the Help Desk, and shall assess the State's disaster recovery procedures.

This deliverable shall be considered complete when the State approves in writing that the UAT user training was complete and successful.

4.3. System Operations Support/Data Conversion

Deliverable 16: Data Conversion - UAT

During UAT and Pilot, the MIS T&I Contractor must ensure that the central processor application provides all functionality and processing required to fully support the Tennessee State WIC Program and its clinics. The Central Processor application must, at a minimum, provide the following services:

- Provide on-line access to the functionality in the state agency and clinic applications for operations, analysis, and the generation of reports.
- Provide all file maintenance, including backups, archiving of data, and maintenance of database synchronization between system modules on a daily basis.
- Assure all data communications between the Central Processor, the regions and their clinics, and the Tennessee State central office.
- Provide extensive disaster recovery procedures to ensure meeting system availability requirements.
- Provide the software and support required to exchange data with other state and federal programs electronically. This electronic data exchange shall meet the requirements of the financial transactions with the EBT services Contractor and the USDA/FNS minimum data set and TIP report. Other data exchange, such as comma separated value files with selected border states' and tribal agencies' WIC Programs may be required to facilitate cross-program data analysis such as dual participation. Interoperability incorporating HL7 with other TDH systems shall require the exchange of data as well.
- Functionality that allows end users to manually or directly enter information into the WIC MIS system if that end user elects not to use another state-owned system that is interoperable with WIC MIS.
- Provide all system enrollment, reconciliation, expenditures, vendor and other required reports in the media required and according to the agreed upon schedule.

The MIS T&I Contractor shall maintain responsibility for system operations, at a minimum, until Pilot is complete. The MIS T&I Contractor shall provide operations on-site at the Tennessee State offices throughout the UAT and Pilot.

Based on that defined in the Conversion Plan, the MIS T&I Contractor must include a specified set of data from the legacy system for use during UAT as designated by the State and this deliverable will be considered complete when approved in writing by the State.

4.4. Support UAT and System Revision

Deliverable 17: Acceptance Test Support

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When the key function walkthrough has been completed with no errors, the MIS T&I Contractor must make the system available to the State, who will conduct a formal User Acceptance Test of the modified WIC system. Tennessee staff will participate in the UAT, using a script provided by the QA Contractor. While the State reserves the right to subject the entire system to UAT, the intent is for testing to focus on those modules and subsystems that have been affected by system modifications, inclusive of functions that receive or pass data to modified functions. Although testing may be scaled back dependent on the extent of the modifications, the State anticipates some level of end-to-end testing of the system prior to acceptance for Pilot. Prior to UAT, the MIS T&I Contractor must provide comprehensive system training to the end users who will conduct the UAT. The MIS T&I Contractor must provide on-site support in the form of at least one (1) staff person knowledgeable in the application for the duration of the UAT and ensure that programming staff are available for consultation by phone for problem resolution. The MIS T&I Contractor must convert data from the legacy system as required and provide systems training to the user acceptance test team.

The system, as delivered by the MIS T&I Contractor for UAT, is expected to have relatively few errors. The State expects that the UAT can be completed in two (2) rounds—one to uncover any errors, and a second to verify that any errors identified have been fixed and that no new errors have been introduced. This requires that the MIS T&I Contractor not only fix the errors identified in round one but also run the resulting system through their system qualification test prior to delivering it for the second round of UAT. The period of User Acceptance Testing will be ten (10) weeks in duration at the State office, providing the above expectations are satisfied. The MIS T&I Contractor must make all required corrections and revisions to the system resulting from the acceptance testing process. System re-testing must be conducted as required.

The MIS T&I Contractor must provide an application for the capture, reporting, and tracking of errors identified during UAT. The application may be a commercial off-the-shelf product or a custom application. The reporting and tracking application must provide for the following data elements, at a minimum:

- Test procedure name and number;
- System module under testing;
- Test round;
- Test date;
- Error description;
- Error severity;
- Tester name;
- Clinic identification (or SA);
- Error attachments (screenshots, reports);

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- MIS T&I Contractor initial analysis and response;
- Work order number;
- Fix date;
- Regression test date;
- Test Director sign-off; and,
- Error closure date.

If at any time during the UAT using interactive test scripts, the percent of test procedures of any module failed exceeds twenty percent (20%), excluding State identified cosmetic errors; the MIS T&I Contractor shall halt the UAT and return the system for correction.

During UAT, the MIS T&I Contractor shall evaluate the user manuals and on-line help. The UAT procedures shall instruct the testers to reference the user manuals or on-line help for directions regarding how to perform the required actions. The MIS T&I Contractor shall correct with no additional cost to the State any inadequacies in the manuals prior to final acceptance of those documents by the State.

The UAT will be complete when the system is capable of successfully processing the operations of all the UAT test procedures without significant (other than cosmetic) error or failure. After successful completion of the acceptance test, the MIS T&I Contractor shall provide the State with a formal assessment of the system's readiness for pilot implementation. The UAT is complete when the State has provided written approval that the system is ready for pilot testing.

4.5. Assessment of Tennessee Disaster Recovery Procedures/Disaster Plan

Deliverable 18: Assessment of Tennessee Disaster Recovery Procedures/Disaster Plan

Prior to and during the acceptance test, the MIS T&I Contractor must assess the Tennessee's statewide disaster recovery policy. The MIS T&I Contractor shall identify any deficiencies in the State's approach and provide suggestions for improvement as needed. The MIS T&I Contractor shall prepare and present a comprehensive Disaster Plan specific to the new system, building upon and incorporating Tennessee Disaster Recovery Policy provisions. The MIS T&I Contractor shall submit the Disaster Recovery Plan to the State in the form of a draft version for review and a final version for written approval by the State.

4.6. Assessment and Readiness for Pilot

Deliverable 19: Assessment and Certification of System Readiness for Pilot Implementation

Upon the State's written approval of UAT, the MIS T&I Contractor must provide a formal memorandum addressing their assessment and certification of system readiness for Pilot Implementation. The certification must include detailed information on all errors identified during UAT and their remedy (this may be provided by automated reporting capabilities of the error tracking application employed), and must verify the error free operation of the system and a

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stability sufficient to be implemented in pilot installations. The MIS T&I Contractor shall provide the written assessment and certification within five (5) working days of the completion of UAT and will be accepted after it receives written approval from the State.

5.0. TASK 5 – PILOT TEST

Using the approved Pilot Test Plan, the MIS T&I Contractor shall support and facilitate the system pilot test. Once the system has passed UAT and has been approved by the State and FNS, the MIS T&I Contractor shall provide a pilot test in at least one (1) Tennessee county health department and associated clinic, one (1) Region and in the WIC central office.

The MIS T&I Contractor shall conduct the pilot test to verify that the system works correctly in conditions of actual use. The MIS T&I Contractor shall not proceed to pilot until it is confident that there is very little possibility of an unsuccessful outcome to the pilot and has written approval from the State to proceed.

The MIS T&I Contractor shall provide the following as a subtask to Task 5.0.:

5.1. System Pilot Initiation Meeting and Memorandum

Deliverable 20: System Pilot Initiation Meeting and Memorandum

Within two (2) weeks following successful completion of the UAT, the MIS T&I Contractor shall attend a meeting at the State WIC office for approximately 2 (two) to 3 (three) days with, at a minimum, the TNWIC Project Manager, the MIS T&I Contractor's project manager, the EBT implementation Contractor, the PMSC, the QA Contractor, and other key State and Contractor staff as necessary. The MIS T&I Contractor shall discuss and review the project plan, schedule, and deliverables for the implementation of the system pilot. Within five (5) working days of the meeting, the MIS T&I Contractor must provide to the State for its written approval, a technical memorandum documenting all agreements, understandings and contingencies, resulting from the system pilot initiation meeting.

5.2. Help Desk Training

Deliverable 21: Help Desk Training

The MIS T&I Contractor shall provide training to the State in-house Help Desk staff onsite for approximately 2 (two) to 3 (three) days at the State office to address the help desk process and issue escalation. The MIS T&I Contractor shall assist WIC staff with any questions they might have. Following this training, the MIS T&I Contractor shall provide additional assistance to the help desk staff remotely from its own facilities as requested by the State. This deliverable shall be considered complete after the State approves in writing that the training is completed and successful.

5.3. Pilot Agency (State Office and Clinic) Training

Deliverable 22: User Training - Pilot

After successful completion of the UAT, the MIS T&I Contractor must provide face-to-face on-site training at the State office for approximately 1 (one) to 2 (two) weeks for the staff who will be involved in the pilot sites as described and supported by the approved Training Plan and

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Training Materials. The MIS T&I Contractor shall employ hard copy exhibits and handout materials but must also include extensive hands-on, on-line exercises and objective evaluations in order to ensure user proficiency and competence. The MIS T&I Contractor must provide the the State with documented evidence of each trainee's competence to operate the system within one (1) week of the training event and shall make sure that training is of sufficient length to ensure adequate comprehension addressing all system operations and security considerations. This deliverable shall be considered complete after the State approves in writing the successful completion of the training.

5.4. Installation of System Software – Pilot Test

Deliverable 23: Installation of System Software – Pilot Test

The MIS T&I Contractor must provide on-site installation and operation or support the installation and operation, as applicable, of the WIC software application and communications software necessary for the operation of the system in support of pilot, both at the central processor and the pilot sites. This deliverable shall be considered complete after the State approves the installation in writing.

5.5. Data Conversion

Deliverable 24: Data Conversion - Pilot

The MIS T&I Contractor must convert all databases in the legacy system for the state and clinic pilot sites to the correct format and load it on the new system. The MIS T&I Contractor shall ensure that this conversion will occur immediately prior to implementation of the pilot site, as the agency will not be allowed to make any other changes to legacy system records once the conversion has been accomplished. This deliverable shall be considered complete after the State approves the data conversion in writing.

5.6. System Pilot Test

Deliverable 25: System Pilot Support

The MIS T&I Contractor shall oversee the pilot test of the new TNWIC MIS at the state central office and in the clinics. The MIS T&I Contractor shall be onsite during pilot test for, at a minimum, the first 1 (one) to 2 (two) weeks at the pilot site designated by the State. The MIS T&I Contractor and the State shall mutually agree upon the locations for the pilot during the project initiation meeting, and mutually agree that the pilot is expected to last for two (2) calendar months prior to the evaluation and one (1) additional month while preparations are made for rollout to the remaining agencies.

The MIS T&I Contractor shall assist in the daily operation of the Central Processing Site during the pilot period, assigning designated staff members to provide consultation and assistance as needed. This deliverable shall be considered completed after the State approves in writing that the Pilot was completed and successful.

5.7. Evaluate Pilot, Modify and Retest System

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5.7.1. Regression Test

Deliverable 26: Regression Acceptance Test

The MIS T&I Contractor shall begin evaluation of the system software concurrently with the start of the pilot. The MIS T&I Contractor shall ensure that corrections and regression testing of updated versions occur as problems are encountered. The State shall determine which problems are serious enough to require immediate correction and a new release mid-pilot. Prior to the start of the pilot test, the MIS T&I Contractor shall develop a Regression Acceptance Test in consultation with Tennessee staff, FNS and the QA Contractor. This test, based on the MIS T&I Contractor's own internal test procedures, must be used to test modifications and corrections made in response to problems identified during the pilot before they are released to the pilot users. The MIS T&I Contractor shall design the Regression Acceptance Test to test overall system operability after modifications have been installed but before the release of the software to the user community. It will not replace the normal development testing required for changes. The MIS T&I Contractor shall ensure that the changes do not affect other aspects of system functionality, and that the test uses standardized inputs and known outputs to assess the impacts of changes.

The MIS T&I Contractor shall program and test new versions of the system when software errors are encountered during the conduct of the system pilot. After correction and testing of each new version, the MIS T&I Contractor shall conduct Regression Acceptance Testing on all versions to check that the error correction has not introduced new errors elsewhere in the system. If there are any outstanding errors at the end of system pilot, the MIS T&I Contractor shall produce one (1) last version by this process that corrects the remaining errors, and that version shall be installed and run for five (5) business days at the pilot agencies before the system is rolled out to the remaining agencies. The MIS T&I Contractor shall, during these five (5) days, ensure that there are no errors introduced into the latest version of the system that were not caught by the Regression Acceptance Test. This deliverable shall be considered complete after the State approves in writing.

5.7.2. System Pilot Evaluation

Deliverable 27: System Pilot Report and Rollout Readiness Certification

Within ten (10) days following the end of the pilot, the MIS T&I Contractor, with input from the pilot clinics, shall complete and submit to the State for its written approval, a system pilot report and rollout readiness certification technical memorandum. This technical memorandum shall assess the following for readiness for rollout:

- System stability;
- Meeting functional requirements;
- User satisfaction;
- Impact on client flow and convenience;
- Impact on clinic operations;

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- Availability and accuracy of state-level data;
- Adequacy of help messages and user documentation;
- Security and system integrity; and,
- Need for modification of system or user processes.
- Compile a list of all open test problems (bugs) and their resolution status.

The MIS T&I Contractor shall document the results of the evaluation in a technical memorandum to be delivered to the TNWIC Project Manager, the EBT Contractor, the PMSC, and the QA Contractor. The PMSC under the direction of the TNWIC Project Manager must approve all system revisions resulting from the evaluation of the pilot. Following any system revisions made, the MIS T&I Contractor shall conduct an abbreviated acceptance test (if deemed necessary by the State) with the TNWIC Project Manager, EBT Contractor and QA Contractor participation as directed by the PMSC. Following the evaluation of the Pilot and the remedy of any remaining defects, the MIS T&I Contractor must certify the system as ready for implementation statewide. The QA Contractor will be required to conduct an evaluation and it is expected that the EBT Contractor will participate provide an independent certification of the system readiness for implementation. Upon State acceptance of these certifications and FNS approval, the MIS T&I Contractor shall initiate statewide rollout with written approval by the State.

6.0. TASK 6 – ROLLOUT

The MIS T&I Contractor shall conduct, support, and facilitate the rollout of the system to the non-pilot agencies with contractor-provided onsite assistance as needed. After successful completion of the pilot, the MIS T&I Contractor shall roll out the system to the remaining agencies. The rollout shall occur over a sixteen (16) week period. To meet this time frame, the MIS T&I Contractor shall provide that multiple agencies are rolled out per week. The MIS T&I Contractor shall train each agency in the use of the new system one (1) week, shall have data converted from the legacy system on the last business day of a week, and be ready to begin using the system the next business day. As one group of agencies begins using the new system, the MIS T&I Contractor shall begin training the next group.

The MIS T&I Contractor shall provide the following as a subtask to Task 6.0.:

6.1. System Rollout Initiation Meeting

Deliverable 28: System Rollout Initiation Meeting Memorandum

Following successful completion of the system pilot, the MIS T&I Contractor shall participate in an on-site meeting convened by the State at the Tennessee WIC central office which will include the MIS T&I Contractor's project manager, the EBT implementation Contractor, the PMSC, the QA Contractor, and other Tennessee agency staff as deemed necessary. The MIS T&I Contractor shall discuss and review the work plan, schedule, and deliverables for the rollout of the Tennessee WIC system to the remaining agencies. Within two (2) working days of the

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meeting, the MIS T&I Contractor shall provide to the State for its written approval, a technical memorandum documenting all agreements, understandings and contingencies resulting from the system rollout initiation meeting.

6.2. User Training, Conversion and Implementation

6.2.1. Train-the-Trainer Training

Deliverable 29: Conduct Train-the-Trainer Training for Tennessee Staff

Subsequent to a successful system pilot, the MIS T&I Contractor must conduct at least three (3) Train-the-Trainer Training events for, at a minimum, twenty-five (25) selected Tennessee WHIPS over a 3 (three) to 5 (five) day time frame per event at each Grand Division of the State. The MIS T&I Contractor shall provide appropriate training for these individuals to train each clinic as it rolls out. The MIS T&I Contractor shall place emphasis on answering questions that may arise during the training from clinic staff and comprehensively address all system operations as well as security considerations. This deliverable shall be considered complete after the State approves in writing.

6.2.2. User Training

Deliverable 30: User Training – Rollout

In preparation for rollout, the MIS T&I Contractor, EBT implementation Contractor, and WHIPS must co-conduct regional/clinic staff training events at each of the fourteen (14) local agencies over a three (3) to five (5) day time frame per event. This training shall consist of a system overview for all regional/clinic staff and functionally specific training for staff that will utilize various functions of the new system. The MIS T&I Contractor shall provide real-world examples of system tasks for each staff responsibility and functional program area. To the extent there is a separation of responsibility between clinic staff, the MIS T&I Contractor shall train in functions of the system related to their duties, such as participant data input, food benefit issuance, and appointment scheduling. Nutritionists and other professional or health assessment staff will be trained in functions of the system related to health assessment, certification, etc. The MIS T&I Contractor must take into account in these trainings that in many clinics, there are only a few staff, and each person may need to be trained in a number of functions. The MIS T&I Contractor shall cover the material, and online help participants will use the web interface.

The trainings shall be held in several locations around the State for groups of regional/clinic staff. Training groups shall not exceed thirty (30) participants. The MIS T&I Contractor shall provide that Regional/clinic staff be trained the week prior to their clinics going live to ensure retention of necessary skills.

The MIS T&I Contractor staff must conduct State Agency staff training over a three to five (3 to 5) day time frame at the State central office. This training shall consist of functionally specific training for all TDH staff that will utilize the new system, and shall include hands-on examples of system tasks for each program operational area. The MIS T&I Contractor shall provide different training for each functional program area and shall offer real-world examples of system tasks. The MIS T&I Contractor shall allow that training in some functional areas may extend beyond immediate TDH staff and may involve staff in other state resources (e.g., finance). This

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deliverable shall be considered complete after the training is held and the State has approved its completion and success in writing.

6.2.3. Data Conversion

Deliverable 31: Data Conversion - Rollout

The MIS T&I Contractor must convert all data from the legacy system for each clinic in advance of their implementation of the new system. As the clinics will not be able to utilize the legacy system once the data has been converted, the MIS T&I Contractor shall provide that data conversion for each agency shall occur during the week in which the clinic staff is being trained.

As soon as the database is converted to the new system and training described in section 6.2.2 of this scope is provided, the MIS T&I Contractor shall advise the State that each local agency can resume clinic operations and use the new system in their clinics.

Approximately four (4) days following system rollout to the first group of clinics, the MIS T&I Contractor shall convene a meeting by conference call with the EBT implementation Contractor, the PMSC, the TNWIC Project Manager, the QA Contractor, and other Tennessee staff as deemed necessary to identify any problems that must be fixed before rollout to the remaining agencies. This deliverable shall be approved in writing and be considered complete after the successful data conversion and rollout to all clinics.

6.3. Post Implementation Problem Resolution and Checkpoint

Deliverable 32: Post-Implementation Assessment and Problem Resolution

The MIS T&I Contractor shall remedy any problems encountered during the initial system operation, subject to regression testing, and provide the remedies to operational sites as a new system release. If any deficiencies in the system functional requirements, technical operation, system performance and response times or reliability are identified by the State, the MIS T&I Contractor shall repair these at no cost to the State. The MIS T&I Contractor must provide all remedies in a timeframe deemed reasonable by the State.

Approximately five (5) days following rollout to the final clinic, the MIS T&I Contractor shall attend a meeting by conference call in which the status of the system following complete rollout shall be assessed. The meeting shall be attended by the MIS T&I Contractor, the EBT implementation Contractor, the TNWIC Advisory Council and PMSC, the QA Contractor, and selected other Tennessee staff determined by the State. Within five (5) days of the meeting, the MIS T&I Contractor must provide a technical memorandum documenting all agreements, understandings and contingencies resulting from the system rollout assessment meeting. Within two (2) weeks following this meeting, the State shall in writing, determine whether the system is ready to proceed to the operation and maintenance phase. Once approved, the MIS T&I Contractor shall begin the initial warranty period.

6.4. System Documentation Update

Within fifteen (15) business days of completion of system implementation, the MIS T&I Contractor must update all system documentation, functional, technical, and operational and user manuals, to reflect any revisions made to the system. The MIS T&I Contractor must provide a

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complete set of documentation to the State for its written approval, in electronic and hard copy and include the timeframe for completion of this in the Work plan. The MIS T&I Contractor shall submit all versions of materials that are actual documents in both hard copy and electronic form.

7.0. TASK 7 – INITIAL WARRANTY PERIOD

Deliverable 33: System Warranty

The MIS T&I Contractor shall provide system operations and maintenance support to the State and provide for a one-year warranty of the software against errors and defects.

The MIS T&I Contractor shall provide the following as subtasks to Task 7.0.:

7.1. TN State's Operation and Maintenance Staff Training and Mentoring

The MIS T&I Contractor must provide support and mentoring to the Tennessee operations staff during the one year warranty period sufficient to ensure their ability to assume responsibility for the system upon contract closure.

7.2. One Year Warranty Period

The MIS T&I Contractor must provide a one-year warranty of the system software against all defects and errors beginning with completion of the rollout process (the completion of the final clinic installation in the state). The one-year warranty period for the system software must commence on the business day immediately following the successful TNWIC MIS implementation in the final Tennessee clinic as agreed upon by the State. During the one-year warranty period, the MIS T&I Contractor must address all deficiencies in the system.

7.3. System Problem Reporting

The MIS T&I Contractor must provide the PMSC with a written response to any reported system problem, addressing the technical nature of the problem and the proposed plan to resolve the issue. The MIS T&I Contractor must document and separately track all change orders approved by the TNWIC Advisory Council.

7.4. System Modification

The MIS T&I Contractor must remedy any deficiencies identified in the system during the one-year period at no cost to Tennessee. The MIS T&I Contractor must subject all software modification and repairs to regression testing prior to distribution as a new release. The State at its discretion may request that the MIS T&I Contractor conduct modifications and enhancements to the system deemed necessary or desirable. In this event, the MIS T&I Contractor shall prepare a cost estimate for the requested modification. Should the State then elect to proceed, the modification shall be treated as a change order to the Contract.

The MIS T&I Contractor and the State shall mutually agree upon the changes to be designed, developed, tested and implemented, in addition to the schedule for each. The MIS T&I Contractor shall involve state operations staff so that they can become familiar with the system enhancement process. Costs for these changes must adhere to the rates in Section C.3.c of the

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Pro Forma Contract. The MIS T&I Contractor must provide documented test results and updated system documentation prior to implementation of the change.

8.0. TASK 8 – PROJECT CLOSURE AND TRANSITION

The MIS T&I Contractor shall provide a final submission of the updated system documentation and other project materials, and shall support transition of the system operations and maintenance responsibilities to the system operations staff (unless the State contracts with the MIS T&I Contractor for on-going system maintenance), and achieve formal project closure.

MIS T&I Contractor shall provide the following as subtasks to Task 8.0.:

8.1. Final System Documentation, Forms, Source Code, Data and Other Materials

8.1.1. System Maintenance and Support Plan

Deliverable 34: System Maintenance and Support Plan

Prior to the completion of the one-year warranty period, the MIS T&I Contractor must provide a written plan for the system operation and maintenance including their plan for procedural, staffing, and resources requirements. The MIS T&I Contractor shall present this written plan in the form of a Draft version for review and a Final version for written approval by the State.

8.1.2. Final System Documentation

Deliverable 35: Final System Documentation and Source Code

Upon completion of the one-year warranty period, the MIS T&I Contractor shall provide to State for written approval, a final, updated version of all system documentation and user materials reflecting the current status and operations of the system, including but not be limited to source code, user and operational manuals and training materials, and functional and technical design documents electronically and hard copy as required for all document

The MIS T&I Contractor shall return to the State any materials, forms or data sets developed during the course of the project effort.

8.2. Contract Closure

Upon completion of the final system documentation presentation, the State will provide formal notification of contract closure.

9.0. TASK 9 - EXTENDED WARRANTY, MAINTENANCE AND OPERATION PERIOD

The MIS T&I Contractor shall provide the following as subtasks to this task effort:

9.1. Extended Warranty Period Option

Deliverable 36: Maintenance Period

At the expiration of the one-year warranty period, an extended warranty period option may be exercised by the State. The MIS T&I Contractor must offer a yearly warranty on the system

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software for services similar to the initial one-year warranty. During the extended warranty period, the Contractor shall be responsible for correcting all errors in the system software. The MIS T&I Contractor and the State shall mutually agree upon the MIS T&I Contractor staff that shall be available as needed during the extended warranty period for repair or system enhancement purposes.

If any changes are made to the software application during this period, the MIS T&I Contractor must update the following items to reflect any and all changes:

- System source and executable code for the local, state, and central processor WIC applications;
- Comprehensive materials for use in system training;
- User and operational manuals; and,
- Functional and technical design documents.

During the extended warranty period, the MIS T&I Contractor shall regularly communicate with the Help Desk to report the nature and type of problems identified. The MIS T&I Contractor must advise the State of any solutions that do not require programming fixes.

9.2. System Modification

During the extended warranty period, the State may request the MIS T&I Contractor to make enhancements to the existing system. The MIS T&I Contractor shall design, develop, test and implement these changes on a schedule mutually agreed upon with the State and shall adhere to the rates in Section C.3.c of the Pro Forma Contract. The MIS T&I Contractor must provide documented test results and updated system documentation prior to implementation of the change. Maintenance required to the system to meet the system and functional requirements approved prior to the one-year warranty shall adhere to the rates in Section C.3.c of the Pro Forma Contract.

10.0. RECURRING TASKS AND DELIVERABLES

The following deliverables shall recur throughout the project on a scheduled basis.

10.1. Project Status Reports and Meetings

The MIS T&I Contractor must provide monthly, detailed reports electronically on overall project status, work accomplished in the reporting period, objectives for the next reporting period, client responsibilities for the next period, decision/information requests outstanding, problems and warnings, and schedule and budget issues. The MIS T&I Contractor must provide a quarterly summary status report to support the State's reporting to USDA/FNS. As a supplement to formal monthly reports, the MIS T&I Contractor must participate in bi-weekly project status meetings via conference calls which shall serve as a forum for the reporting of progress and discussion of upcoming activities and emergent issues. The Tennessee PMSC will host and provide an agenda (with input from the State and other project Contractors) for the meetings.

10.2. Meeting Summaries

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Throughout the course of the project, the MIS T&I Contractor shall attend numerous meetings with the State. If the MIS T&I Contractor hosts the meeting, the MIS T&I Contractor must provide a technical memorandum summarizing the meeting, inclusive of a listing of attendees, discussion of major topics, and a report of any decisions made and items needing follow-up.

LIST OF EXHIBITS

Exhibit 1: TDH Programs

Exhibit 2: TDH Sub Programs

Exhibit 3: TDH Program Appointment Types

Exhibit 4: TN Functional Requirements Traceability Matrix

EXHIBIT 1: TDH Programs

1. Women's Health
2. Men's Health
3. WIC
4. EPSDT (Early Periodic Screening, Diagnosis and Treatment)
5. Dental
6. HUGS (Help Us Grow Successfully)
7. CSS (Children's Special Services)
8. AIDS Prevention
9. Communicable Disease
10. Child Health
11. Environmental Health
12. Family Planning
13. Immunization
14. STD (Sexually Transmitted Diseases)

EXHIBIT 2: TDH Sub Programs

1. Alcohol & Drug
2. Chad
3. Adult Health
4. Administration
5. Aids Prevention (Testing)
6. Aids Ryan White (Treatment)
7. Birth Certificate (Local)
8. Breast/Cervical Cancer Program
9. Breastfeeding Promotion
10. Birth Certificate-Vital Record
11. Care Coordination, CSS Only
12. Communicable Disease
13. Child Health
14. Child Health Free
15. Child Health Homeless
16. Child Health Housed Homeless
17. Child Health, Hispanic
18. Child Health Housed
19. Community Service
20. Choices Program (Davidson Co.)
21. Chronic Disease
22. Chronic Disease/Frail Elderly
23. Central Referral
24. Children's Special Services
25. Civil Service (Metro Davidson)
26. Current Year CSS Certification
27. Dental Arc Grant (Hancock Co)
28. Dental Co-Op
29. Dental Head Start
30. Dental Local
31. Dental
32. Dental Free
33. Dental Homeless (Hamilton)
34. Dental (Volunteer)
35. Dental Preventive
36. School Based Dental Screening
37. Dental Transport Program
38. Dysplasia Clinic
39. Employee Health
40. Epidemiology
41. Environmental
42. Environmental, Dept. Of Agr.(K)
43. Environmental, Food Inspection
44. Environmental, Radon (Knox)
45. Environmental, Sanitation Fees
46. Environmental, Tattoo Parlor Fee
47. EPSDT
48. Exposure
49. Frail/Elderly
50. Families First
51. Food And General Sanitation
52. Senior Farmers Market Nutrition
53. WIC Farmers Market Nutrition
54. Family Planning
55. Family Resource Center
56. Gatekeeper Access/Med Plus
57. Gatekeeper BC/BS
58. Gatekeeper Health Net
59. Genetics
60. Gatekeeper Phoenix
61. Gatekeeper Preferred Health
62. Gatekeeper Tnselect No Risk
63. Gatekeeper Tnselect High Risk
64. Gatekeeper Universal Care
65. Gatekeeping, Veterans Adm
66. Community Health Agency
67. Community Health Clinic
68. Home Health
69. Homemaker
70. Health Promotion
71. School Health
72. Healthy Start Federal
73. School Health Home Visits
74. Healthy Start
75. Hug (Help Us Grow)/Care Coord
76. Hypertension
77. Indigent Health
78. Immunization
79. Infant Mortality Prg.-Ham. Co.
80. Insurance
81. International Travel
82. Jury Duty
83. Local Appropriation
84. Laboratory (Knox)
85. Lead Investigation
86. Local Supplemental

- 87. Men's Health (Age 21 And Over)
- 88. Men's Health (Age 21+) Free
- 89. Men's Health Homeless
- 90. Men's Health Housed Homeless
- 91. Men's Health, Hispanic
- 92. Men's Health Housed
- 93. Migrant Health
- 94. Medicaid Labs
- 95. Medicaid Transportation
- 96. Newborn Screening
- 97. Newborn Screening
- 98. Nutrition
- 99. Off-Site Monitoring
- 100. Outreach, Other
- 101. Other
- 102. PPI Substance Abuse
- 103. Primary Care
- 104. Primary Care Child Health
- 105. Preventive Dental
- 106. Presumptive Expansion
- 107. Perinatal
- 108. PPI Immunization
- 109. PPI Infant Mortality
- 110. Primary Care Men's Health
- 111. Prenatal
- 112. PPI Obesity
- 113. Primary Prevention Initiative
- 114. Special Payment
- 115. Project Teach
- 116. PPI Smoking
- 117. PPI Teen Pregnancy
- 118. Primary Care Women's Health
- 119. Prior Year CSS Certification
- 120. Smoking Cessation Program
- 121. Renal Disease
- 122. Renal Disease/Frail Elderly
- 123. Rural Health
- 124. Rape Prevention
- 125. Pharmacy (Knox)
- 126. Child Safety
- 127. SARS Monitoring
- 128. Sick Child
- 129. SIDS
- 130. CSFP (Commodity Supp Food Prg)
- 131. Speech and Hearing
- 132. Supplemental Pay
- 133. Social Services (Knox County)
- 134. Sexually Transmitted Diseases
- 135. Tuberculosis
- 136. TennCare Enrollment/Verificat
- 137. Teen Health (Hamilton Co.)
- 138. TennCare Overages
- 139. TennCare Outreach
- 140. TB in Regional Office
- 141. TennCare Reverification
- 142. Undetermined Payments
- 143. Veteran's Capitated Program
- 144. V with Immunizations
- 145. Vital Records
- 146. Well Child
- 147. Women's Health (Age 21 & Over)
- 148. Women's Health (Age 21+) Free
- 149. Women's Health Homeless
- 150. Women's Hlth Housed Homeless
- 151. Women's Health, Hispanic
- 152. Women's Health Housed
- 153. WIC
- 154. Wise Moves
- 155. WIC Overcharges
- 156. Chad without Regard Of Income
- 157. X-Ray (Knox)
- 158. Community Outreach
- 159. Community Partner Initiatives
- 160. Educational Materials
- 161. Home Visits
- 162. Mass Media, All
- 163. Meetings
- 164. Phone Outreach (Tennercare)
- 165. Written Outreach
- 166. Child Health Referrals
- 167. Crippled Children Services
- 168. Pediatric Specialty Unit
- 169. Headstart
- 170. CSS Special Projects (C-C)
- 171. CSS Special Projects
- 172. TEIS Program (Care-Coord)
- 173. Renal Disease
- 174. HIV/STD Homeless Outreach
- 175. Chest Clinic
- 176. HIV Program
- 177. Infusion Program
- 178. Dental Medicaid

- 179.Dental Homeless
- 180.Dental - BCBS TN Care
- 181.Dental - Healthnet TN Care
- 182.Midas
- 183.Homeless Primary Care
- 184.Mobile Outreach
- 185.Homeless Mental Health
- 186.Alcohol and Drug
- 187.Homeless Social Work Serv.
- 188.Homeless Employment Serv.
- 189.Homeless Respite Services
- 190.Homeless Serv.Center-Other
- 191.Homeless Tb
- 192.Traveler's Assistance
- 193.Aids Testing & Counseling
- 194.Refugee Program
- 195.Misc. Family Planning

Exhibit 3: TDH Program Appointment Types

1. 12 Visits for Co2 Test and DIA
2. 2nd Counseling Visit with Nurs
3. 3rd Counseling Visit with Nurs
4. 4th Counseling Visit with Nurs
5. Adult Health
6. Adult Health Immunization
7. Adult Health Medical Visit
8. Adult Health Other
9. Adult Health Physical Exam
10. Adult Health Pregnancy Test
11. Adult Health, Sick
12. Adult Paps
13. Amalgam Filling
14. Amalgam Fillingte
15. Baby and Me
16. Baby and Me Blow Test
17. Baby and Me Counseling
18. Baby and Me Postpartum
19. Baby and Me Prenatal
20. Baby and Me Vouchers
21. Biopsy
22. Birth Certificate
23. Blood Pressure
24. Blood Pressure Check (Pc)
25. Blood Pressure Class
26. Body Mass Index Class
27. Breast/Cervical Cancer
28. Breast/Cervical Cancer Screen
29. Car Seats
30. Chest Xray and Office Visit
31. Child Health
32. Child Health Doctor Vst
33. Child Health Exam
34. Child Health Immunization
35. Child Health Immunization Only
36. Child Health Medical Visit
37. Child Health New
38. Child Health Other
39. Child Health Re-Check
40. Child Health Special Physicals
41. Child Health, Sick
42. Child Recheck Visit
43. Child Sick Visit, Follow Up
44. Childrens Special Services
45. Cleaning/New Initial Patient
46. Colpo
47. Colposcopy
48. Colposcopy (UCR Clinic)
49. Communicable Disease Warts
50. Composite Filling
51. Comprehensive Care Follow-Up
52. Comprehensive Care Initial
53. Consultation
54. Contraceptive Implant
55. Contraceptive Implant Check
56. Contraceptive Implant Removal
57. Counseling-SS
58. Counseling-SS w/Interpreter
59. Crown
60. Crown Prep
61. Cryosurgery (UCR Clinic)
62. Dcs 72 Hr Exam
63. Dcs Dental Exam
64. Dcs Dental Visit, Prophy/Exam
65. Dcs Ep Within 72 Hours
66. Dcs EPSD&T Exam
67. Dcs PE
68. Dcso Correct. Officer Applican
69. Dcso Property Clerk
70. Dcso Security Applicant
71. Death Certificate
72. Dental
73. Dental Adult Pain Relief
74. Dental Amalgam
75. Dental Amalgam Filling
76. Dental Cleaning
77. Dental Composite
78. Dental Composite Filling
79. Dental Emergency
80. Dental Exam
81. Dental Exam and Xray
82. Dental Extraction
83. Dental Extraction Private Pay
84. Dental Extraction TennCare
85. Dental Filling Private Pay

- 86. Dental Filling TennCare
- 87. Dental Impression
- 88. Dental Prenatal
- 89. Dental Prophylaxis TennCare
- 90. Dental Prophylaxis/Exam (Cleaning)
- 91. Dental Pulp Treatment
- 92. Dental Pulpotomy
- 93. Dental Root Canal
- 94. Dental Sealant
- 95. Dental Toothache
- 96. Dental Treatment
- 97. Dental Xray
- 98. Dental, Prenatal
- 99. Dental, Private Pay
- 100. Dental, Sealant
- 101. Dental, TennCare
- 102. Depo Provera Injection
- 103. Description
- 104. Drug Refill
- 105. Dysplasia
- 106. ECP
- 107. Education Services
- 108. EKG
- 109. Emergency Contraception
- 110. Emergency Contraceptive Plan B
- 111. Emergency Exam
- 112. Employee Health
- 113. Employee Training
- 114. Ems Annual
- 115. Ep Call Center
- 116. Epidemiology Visit
- 117. EPSDT Done in 72 Hrs For Dcs
- 118. EPSDT Exam
- 119. EPSDT Exam, Central Off.Sched.
- 120. EPSDT PE
- 121. Established Patient (Pc)
- 122. Exam and Cleaning
- 123. Extraction
- 124. F.P. Visit for Implanon (1 Hr)
- 125. Family Planning
- 126. Family Planning Annual
- 127. Family Planning Annual/Depo
- 128. Family Planning Deferred Exam
- 129. Family Planning Evaluation
- 130. Family Planning Implanon
- 131. Family Planning Initial
- 132. Family Planning IUD
- 133. Family Planning Medical
- 134. Family Planning Other
- 135. Family Planning Procedure
- 136. Family Planning Readmission
- 137. Family Planning Removal
- 138. Family Planning Resupply
- 139. Family Planning Supply
- 140. Family Planning/EPSDT Exam
- 141. Farmer Mkt Nut Counseling
- 142. Fast Track (FP Deferred Visit)
- 143. Fast Track FP
- 144. Female STD/HIV (45 Min.)
- 145. Filling
- 146. Filling Composite
- 147. Fire Annual
- 148. Fire Applicant
- 149. Fire Initial/Annual Hazmat
- 150. Flu
- 151. Flu Shot
- 152. Flu Shot - Baby (6-35 Months)
- 153. Flu Shot Child (3-18 Years)
- 154. Follow Up Visit
- 155. Follow-Up (UCR Clinic)
- 156. FP Repeat Pap
- 157. General Services Applicants
- 158. General Services-911
- 159. General Services-Maint/Repair
- 160. General Sessions
- 161. Group Session
- 162. Head Check
- 163. Head Start Blood Lead Testing
- 164. Health Depart. Animal Control
- 165. Health Department Applicant
- 166. Health Department CDL Driver
- 167. Health Department Respiratory
- 168. Hemoglobinopathies
- 169. Hepatitis Shot
- 170. High Risk Certification (WIC)
- 171. High Risk Vouchers (WIC)
- 172. Hisf (STD Female + HIV)
- 173. Hism (STD Male + HIV)
- 174. HIV
- 175. HIV, Female
- 176. HIV, Male
- 177. HIV/STD Female

178.HIV/STD Male
 179.Hug Visit
 180.Immunization
 181.Immunizations
 182.Implan/Nexplan Implant
 183.Implanon
 184.Implanon Exchange (UCR Clinic)
 185.Implanon Insert (UCR Clinic)
 186.Implanon Insertion
 187.Implanon Removal
 188.Implanon Removal (UCR Clinic)
 189.Implant Insertion
 190.Implant Removal
 191.Implant Removal & Insertion
 192.Impressions for Denture/Partia
 193.Initial Appt (Ucr Clinic)
 194.Initial Exam Dental
 195.Initial Prenatal Postpartum
 196.Initial Visit Nurse/Nutrition
 197.Inmate Chest Xray
 198.Internat'nl Travel Immunizat'n
 199.Interpreter
 200.Int'l Travel
 201.IUD
 202.IUD Check/Cultures
 203.IUD Exchange (UCR Clinic)
 204.IUD Insertion (UCR Clinic)
 205.IUD Removal
 206.IUD Removal (UCR Clinic)
 207.Juvenile Court Probation Ofcr
 208.Lab Work
 209.Lab Work Only
 210.Labs Only (UCR Clinic)
 211.Male STD/HIV (30 Min.)
 212.Medical Nutrition Therapy
 213.Medication Refill (Pc)
 214.Meet & Greet W/Pediatrician
 215.Men Health's Immunization
 216.Men's Health
 217.Men's Health (Age 21 & Over)
 218.Men's Health Blood Work
 219.Men's Health, Annual
 220.Men's Health, Immunization
 221.Men's Health, Initial
 222.Men's Health, Medical Visit
 223.Men's Health, Other
 224.Men's Health, Physical
 225.Men's Health, Re-Check
 226.Men's Health, Sick
 227.Metro Action Drivers
 228.Metro Action (Teacher/S Lunch)
 229.Mid-Certification Assessment
 230.Mo of Newborn WIC Infant
 231.New Patient (PC)
 232.Newborn Screening (PKU)
 233.Nitrous Oxide
 234.Nutrition Counseling
 235.Nutrition Counseling Non-WIC
 236.Nutritional Education
 237.Nutritionist Diet Consultation
 238.Occupational Clinic Generic Oth
 239.Office Visit
 240.Office Visit Patient in Isolat
 241.Parks Maintenance & Repair
 242.Parks Police Annual/Applicant
 243.Parks Rec Leader Applicant
 244.Paternity Acknowledgement
 245.Perio Root Planing and Scaling
 246.Perio Scaling/Root Planing
 247.Periodontal
 248.Pneumonia Shot
 249.Police Annual - Academy
 250.Police Annual - Spec Team
 251.Police Applicant
 252.Police Department
 253.Police School Crossing Guard
 254.Police Security Guard
 255.Post and Core
 256.Post Op Visit
 257.Pregnancy Test
 258.Pregnancy Test Presumptive
 259.Prenatal
 260.Prenatal Initial Visit
 261.Presumptive Eligibility
 262.Presumptive
 263.Presumptive Eligibility
 264.Primary Care Mens Health
 265.Primary Care Procedure
 266.Primary Care Womens Health
 267.Provider Referral Followup
 268.Pulpotomy
 269.Quick WIC

270.Recheck Visit (Pc)
 271.Referral
 272.Refill
 273.Revisit/Recheck/Results-15 Min
 274.Risk Assessment Tool
 275.Root Canal Therapy
 276.Scaling
 277.Sealants
 278.See Martha Only (UCR Clinic)
 279.Shot Only (UCR Clinic)
 280.Smoking Cessation Visit
 281.Space Maintainer
 282.Speech and Hearing
 283.Speech and Hearing (Dawn)
 284.Sports Physical
 285.Stainless Steel Crown
 286.STD
 287.STD - Sexually Trans Disease
 288.STD Female
 289.STD Male
 290.STD Treatment
 291.STD Treatment Meds/Lab
 292.Stdrx (STD Treatment)
 293.Surgical Extraction
 294.TB
 295.TB Consult/Follow Up (No Meds)
 296.TB Follow-Up (UCR Clinic)
 297.TB Initial Medications
 298.TB Initial Meds Visit
 299.TB Medication
 300.TB Medications
 301.TB New Positive Test
 302.TB Positive Test (UCR Clinic)
 303.TB Reading Walk-In
 304.TB Report Evaluation Card
 305.TB Screen and Xray
 306.TB Skin Test
 307.TB Skin Test Reading
 308.TB Supply
 309.TB Suspect/Case
 310.TB Treatment (Med &/OR Lab)
 311.TennCare Enrollment
 312.TennCare Physicals
 313.TennCare Reverification
 314.Test Results
 315.Therapeutic Formula
 316.To Apply Ppd Skin Test
 317.To Read Ppd Skin Test
 318.Tooth Ache
 319.Travel Immunizations
 320.Treatment
 321.Vital Records
 322.Volunteer
 323.Vouchers & Immunizations Only
 324.Vouchers Online Nu Counseling
 325.Well Child/Sports Physical
 326.Wh Bleeding (UCR Clinic)
 327.Wh Lesion/Polyp (UCR Clinic)
 328.WIC
 329.WIC Aid & Nutrition Visit
 330.WIC and Child Health Exam
 331.WIC and EPSDT Exam
 332.WIC and EPSDT Exam/Infant
 333.WIC and Family Planning
 334.WIC and Immunizations
 335.WIC and Prenatal
 336.WIC and Prenatal/Interpreter
 337.WIC Breastfeeding Group Visit
 338.WIC Breastfeeding Peer Counsel
 339.WIC Breastfeeding Visit
 340.WIC Cert with TNC
 341.WIC Certification
 342.WIC Check Iron
 343.WIC Class
 344.WIC Computer Nutr Assessment
 345.WIC Farmer's Market
 346.WIC Formula Change
 347.WIC Group Education
 348.WIC Group High Risk
 349.WIC Group Mid-Cert
 350.WIC Group Nutrition
 351.WIC c Group Nutrition Class
 352.WIC Group Visit
 353.WIC Height and Weight
 354.WIC High Risk Nutrition
 355.WIC Inf Of WIC Mom
 356.WIC Initial
 357.WIC Lab & Nutrition Visit
 358.WIC Low Risk Nutrition
 359.WIC Mid Cert Assess
 360.WIC Mid Cert Assessment
 361.WIC Mid Cert-Assessment

- 362. WIC Mid Certification & EPSDT
- 363. WIC Midcert Breastfeeding Mom
- 364. WIC Mid-Cert EPSDT
- 365. WIC Mid-Cert Immunizations
- 366. WIC Midcertification
- 367. WIC Mid-Certification
- 368. WIC Mid-Certification Assess.
- 369. WIC Mid-Certification Assessme
- 370. WIC New
- 371. WIC Nutrition Education
- 372. WIC Nutrition Only
- 373. WIC Nutrition Only/Interpreter
- 374. WIC Other
- 375. WIC Pickup with Shots
- 376. WIC Post-Partum
- 377. WIC Post-Partum/Interpreter
- 378. WIC Post-Partum/Miscarriage
- 379. WIC Prenatal Group
- 380. WIC Prenatal Initial
- 381. WI Prenatal Initial/Interpret
- 382. WI Prenatal Subsequent Visit
- 383. WIC Recert
- 384. WIC Recert Ep Exam
- 385. WIC Recert EPSDT
- 386. WIC Recert Immunizations
- 387. WIC Recert/Interpreter
- 388. WIC Recertification
- 389. WIC Special Formula
- 390. WIC Therapeutic Formula
- 391. WIC Transfer
- 392. WIC Transfer/Interpreter
- 393. WIC Voucher Pick Up
- 394. WIC Vouchers
- 395. WIC Vouchers Ep Exam
- 396. WIC Vouchers Only
- 397. WIC /Hemoglobin Visit
- 398. WIC /Hug New
- 399. WIC /Hug Recert
- 400. Women's Health
- 401. Women's Health (Age 21 & Over)
- 402. Women's Health Blood Work
- 403. Women's Health, Immunization
- 404. Women's Health, Initial
- 405. Women's Health, Medical (Knox)
- 406. Women's Health, Other
- 407. Women's Health, Pap
- 408. Women's Health, Physical
- 409. Women's Health, Re-Check
- 410. Women's Health, Sick
- 411. Women's Hlth Cancer Screening
- 412. Work-In
- 413. X-Ray

EXHIBIT 4: TN WIC Functional Requirements Traceability Matrix

#	Requirement	New WIC MIS	Base Function	EBT Function	Comments
3.1	Certification				
3.1.1	Create and Locate Data Records				
3.1.1.1	Create New Applicant Record	X			
3.1.1.1 Process	<ul style="list-style-type: none"> Accept user entry of minimum required data record data elements Assign individual participant identification number and family/household identification number (as applicable) Maintain record for search, view, and update 				Associate the individual's EPI/PTBMIS assigned number with the WIC record. If the participant's EPI/PTBMIS number is changed, update the WIC record.
3.1.1.2	Search for Applicant/Participant Record	X			
3.1.1.2 Process	<ul style="list-style-type: none"> Compare data search criteria with existing database records Display records that match search criteria Allow user to access the data record(s) matching search criteria 				Allow for auto-search for dual participation or existing records on basic data elements. Compare data with that in EPI/PTBMIS to assist with determining whether individual is already a WIC participant.
3.1.2	Manage Application Process				
3.1.2.1	Maintain Basic Information on Applicant/Participant	X	X		
3.1.2.1 Process	<ul style="list-style-type: none"> Add new applicant data to or update existing records for each family/household member Associate all other family/household members to the Participant Family/Household Identification Number Make changes to applicable applicant data to all records associated with the family/household identification number Generate screen display of linked participant family/household 				1) To allow the new WIC system to share individual data with PTBMIS/EPI, will require Social Security Number but allow for 999s to be accepted. 2) Naming conventions for middle and last names must comply with TNCARE. 3) TNWIC must capture individual's alias name.
3.1.2.2	Screen Applicant for Prior Enrollment	X	X		
3.1.2.2 Process	<ul style="list-style-type: none"> Match newly entered applicant data with data in participant data store Display potential matches in Dual Participation Potential Match data fields Accept user input to potential matches 				
3.1.2.3	Determine Adjunct or Automatic Income Eligibility	X	X		
3.1.2.3 Process	<ul style="list-style-type: none"> Accept user input of participation in adjunctive or automatic eligibility program, self-declared income, and participant income information Update participant data store for all members of the family/household, as applicable 				the WIC income determination record must be a separate function in the WIC module that is not linked to the PTBMIS/EPI record. This will ensure that PTBMIS users do not overwrite income screening information.
3.1.2.4	Determine Documented Income Eligibility	X	X		
3.1.2.4 Process	<ul style="list-style-type: none"> Accept annual updates to income guidelines for all household sizes Update Income Guideline data store Add, update, and delete income and family/household data Capture the specific documents used as proof of income (e.g., pay stub, tax return) or the reason for an exception. Generate a notice with the specific date that specific documents must be provided, if not provided Calculate annual or monthly family/household income Retrieve and compare income with income eligibility guidelines (Income Guidelines data store) Allow user input of income levels that exceed maximum allowed level if the participant has been determined adjunct or automatically eligible Display status of income eligibility determination and update Participant Ineligibility Date and Participant Ineligibility Reason Code Apply income eligibility determination to all applicable members of the family/household. Allow separate income determinations for some members of the family/household (as applicable) Generate a notice of ineligibility and the reason(s) for ineligibility, if applicable Automatically terminate applicants who have not provided income documents within applicable timeframes 				If participant loses eligibility because of income, provide 15 remaining days of benefits. Capture reason participant is no longer eligible for WIC.
3.1.2.5	Maintain Waiting List	X			
3.1.2.5 Process	<ul style="list-style-type: none"> Update applicant status with participant status code for waiting list Calculate waiting list priority Retrieve participant records with waiting list active status Sort records by waiting list priority Display waiting list in priority order Update participant status 				

3.1.3	Determine Nutrition Risk of Applicant				
3.1.3.1	Maintain Applicant Nutrition and Health Characteristics	X	X		capture head circumference, gestational age at delivery. Birth weight and birth length are to be required fields, however allow for the entry of 999999s if this information is not available.
3.1.3.1 Process	<ul style="list-style-type: none"> Accept user entered Participant, Participant Health, and Breastfeeding data for nutrition assessment Update the Participant, Participant Health, and Breastfeeding data stores 				Capture recent surgeries had by participant
3.1.3.2	Calculate Body Mass Index and Produce Automated Growth Chart	X	X		
3.1.3.2 Process	<ul style="list-style-type: none"> Accept user input of anthropometric data or retrieve data from Participant Health data store Compare actual measurements to CDC standards Assign BMI score and weight status classification (if applicable) Generate graphic growth chart or percentile chart with participant's data 				system to automatically adjust the chart baseline to reflect premature birth of infant
3.1.3.3	Capture and Document Blood Test Results	X	X		TNWIC requires ability to indicate the reason blood work was not done (client religion; physical challenges; etc.)
3.1.3.3 Process	<ul style="list-style-type: none"> Accept user input of bloodwork or retrieve data from Participant and Participant Health data stores 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 Determine participants requiring bloodwork 				
3.1.3.4	Determine Nutrition Risk and Calculate Priority	X	X		
3.1.3.4 Process	<ul style="list-style-type: none"> Retrieve data from Participant, Participant Health, and Nutrition Assessment data stores Automatically assign Participant Priority based on Participant Nutrition Risk Code and Participant Category, with the opportunity to allow staff to override the value, and store in the Participant Health data store Enable entry of Participant Nutrition Risk Codes or automatically calculate the Participant Nutrition Risk Codes based on entered data and store in the Participant Health data store Accept user input of new Participant Priority Level Code and store in the Participant data store 				Automatically assign premature birth high risk factor.
3.1.4	Complete Certification				
3.1.4.1	Assess Applicant for Temporary Certification/Presumptive Eligibility Requirements and Documentation Status	X			
3.1.4.1 Process	<ul style="list-style-type: none"> Capture the specific documents used as proof of identity, and proof of residency (e.g., a current utility bill, rent or mortgage receipts), or the reason for an exception Capture that applicants were physically present at the certification visit or the reason for an exception Determine type of documentation missing from required certification data Calculate date missing documents are due Flag record to ensure that benefits cannot be issued for a timeframe greater than the approved timeframe unless missing documentation is provided Generate a notice for the applicant with the date that specific documents must be provided Automatically terminate the participant after the applicable timeframe and prevent issuance of food instruments if documents are not provided 				
3.1.4.2	Certify Applicant	X	X		Capture electronic signature of individual to document Rights and Responsibilities
3.1.4.2 Process	<ul style="list-style-type: none"> Retrieve data from Participant data store Run an algorithm to determine if all certification conditions have been met. If so, update Participant Certification Status Code to Certified. If not, update ineligibility/termination information or allow user to enter missing data and attempt the certification again System automatically calculates the next certification date and store in the Participant data store [calculated field Participant Certification End Date]17. 				
3.1.4.3	Maintain Proxy Information	X			
3.1.4.3 Process	<ul style="list-style-type: none"> Accept user entered Proxy data Store Proxy data in Participant data store 				
3.1.4.4	Issue Identification Card	X			
3.1.4.4 Process	<ul style="list-style-type: none"> Using data contained in the Participant data store (including parent/guardian name for infants and children), produce an identification card Track card replacements Flag records of participants with multiple card replacements for local agency follow-up 				

3.1.5	Prescribe Food Package				
3.1.5.1	Select and Tailor Food Prescription	X	X		
3.1.5.1 Process	<ul style="list-style-type: none"> Retrieve Participant's Category from Participant data store Display appropriate standard packages or list of supplemental foods Select Food Package based on Participant Category Code19 and display Food Package with assigned food items to user Alert user to inappropriate food package selection and flag for over issuance, if applicable Accept user food package confirmation or Food Package updates Update the Food Benefit Prescription data store to assign a Food Package to the participant If WIC formula or supplemental foods that require medical documentation are issued, add or update the WIC formula or supplemental foods received and reason in the Participant data store. 				
3.1.5.2	Change Food Prescription	X			Capture formula returned to stock inventory in clinic.
3.1.5.2 Process	<ul style="list-style-type: none"> Accept user input of participant identification and food package identification Retrieve and display existing Food Package Prescription Accept new Food Package selection and update Food Benefit Prescription 				
3.1.6	Process Participant Changes and Transfers				
3.1.6.1	Change Family/Household Grouping	X			
3.1.6.1 Process	<ul style="list-style-type: none"> Accept user input of data changes and apply changes to all applicable members of the family/household Accept user input of participant identification number and family/household identification number and retrieve participant's existing family/household grouping Display list of existing family/household grouping Accept user selection of an existing family/household grouping or generate new family/household Link participant to selected/newly created family/household grouping Update Participant data store with new Participant Family/Household Identification Number 				
3.1.6.2	Change Participation Status and/or Category	X			
3.1.6.2 Process	<ul style="list-style-type: none"> Accept user input of participant identification number and retrieve and display existing participant participation status or category Update Participant data store with updated status or category or automatically update status or category (if applicable) 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 Notify user of food package changes due to status change Generate notice of participant change 				Generate a notice of ineligibility automatically from system.
3.1.6.3	Process In-State Transfers and Produce VOC	X	X		
3.1.6.3 Process	<ul style="list-style-type: none"> Retrieve existing Participant or Family/Household data Terminate Participant record access at originating agency Update authorization to access record at receiving agency Update Participant or Family/Household data store with participant information 				
3.1.6.4	Process Out of State Transfers and Produce VOC	X			
3.1.6.4 Process	<ul style="list-style-type: none"> Retrieve data from Participant, Participant Health, Transfer, Local Agency, and Food Instrument data stores Produce a VOC from data resident in the system 				Provide participant access to VOC, medical history and transfer of prescriptions through a patient portal.

3.2	Nutrition Education, Health Surveillance, and Referrals				
3.2.1	Maintain Nutrition Education Data				Capture approval for participant to perform online nutrition education, refusal to accept nutrition education.
3.2.1.1	Create Participant Care Plan	X			Allow for the creation of a family care plan template (e.g., multiple toddlers in household, or mom and breast feeding infant) and a high risk care plan template.
3.2.1.1 Process	<ul style="list-style-type: none"> Retrieve Participant Care Plan template appropriate for participant risk and category Retrieve relevant participant data from Participant data store and populate template Retrieve relevant data from Comment, Education/Training, Nutrition Assessment, Participant Health, Participant Care Plan, and Scheduled Appointment data stores Accept Participant Care Plan updates and update Comment, Education/Training, Nutrition Assessment, Participant Care Plan, Participant Health, Participant Health, and Appointment data stores Display updated Participant Care Plan 				
3.2.1.2	Track Nutrition Education Contacts and Topics Covered	X	X		Allow for the acceptance of nutrition education contacts made via the online nutrition education tool and approve the issuance of eligible food benefits.
3.2.1.2 Process	<ul style="list-style-type: none"> Accept input of offered education/training topics Update Education/Training and Participant Care Plan data store Display updated Nutrition Education screen 				Capture individual nutrition education conducted online by the participant and document it in WIC system.
3.2.2	Perform Participant Referrals				
3.2.2.1	Track Incoming and Outgoing Referrals	X	X		Capture referrals made to/from EPI.
3.2.2.1 Process	<ul style="list-style-type: none"> Accept user entered participant referral data Update Referral data store 				
3.2.3	Provide Voter Registration Information				
3.2.3.1	Provide Voter Registration Information				
3.2.3.1 Process	<ul style="list-style-type: none"> Accept user input of participants offered voter registration services Create Voter Registration Report 				
3.2.4	Determine Immunization Status				
3.2.4.1	Screen and Refer Participant for Immunization Services	X			
3.2.4.1 Process	<ul style="list-style-type: none"> Accept user input of immunization status, data sharing, and referral information and update Participant, Participant Health, and Referral data stores Display list of participants by immunization status, using sort parameters Generate lists of participants who have granted consent for sharing with outside entities 				
3.3	Food Management				
3.3.1	Maintain Food Categories/Subcategories				
3.3.1.1	Maintain Food Category/Subcategory Table	X		X	TN WIC has prepared a category/subcategory list of food items based on the federal model.
3.3.1.1 Process	<ul style="list-style-type: none"> Add or update new approved foods and store in Category/Subcategory data store 				
3.3.2	Maintain Foods and Food Package Information				
3.3.2.1	Establish and Maintain Approved Foods	X			
3.3.2.1 Process	<ul style="list-style-type: none"> Add or update new approved foods and store in Food Item data store Associate foods with a category and subcategory 				
3.3.2.2	Set up and Maintain Food Package Data	X	X		
3.3.2.2 Process	<ul style="list-style-type: none"> Add or update new approved food packages, associate with a participant category, and store in Food Package data store 				
3.3.2.3	Determine Food Package Proration Schedule	X			TN prorates by week. Half a package if two weeks late for pickup. For formula, 75% of package if one week late, 50% of package if two weeks late, 30% of package if three weeks late.
3.3.2.3 Process	<ul style="list-style-type: none"> Select the appropriate food package type Calculate reductions in the food package Create or update prorated food package and assign a Food Package Identification Number 				
3.3.4	Maintain UPC Database and Food Item Maximum Allowed Amounts				Select TN WIC staff will have the ability to maintain the UPC database.
3.3.4.1	Maintain UPC Database for WIC Authorized Foods	X		X	The WIC MIS will support the UPC database.
3.3.4.1 Process	<ul style="list-style-type: none"> Add, update and delete food UPCs and PLUs in the Food UPC/PLU data store 				
3.3.4.2	Establish Food Item Maximum Allowed Amounts	X		X	
3.3.4.2 Process	<ul style="list-style-type: none"> Using price survey or redemption data, calculate food item maximum allowed amount by peer group for each item (or food subcategory) Update Food UPC/PLU data store 				

3.4	Food Benefit Issuance				
3.4.2	Issue Benefits via EBT				
3.4.2.1	Establish EBT Account	X		X	
3.4.2.1 Process	<ul style="list-style-type: none"> Transmit the Participant Family/Household Identification Number and cardholder/HOH information to the EBT system for establishing a new EBT account Receive a response from the EBT system indicating the results of the account set-up process 				
3.4.2.2	Add Participant(s) to an Account	X		X	
3.4.2.2 Process	<ul style="list-style-type: none"> Transmit participant data to the EBT system for establishing a new participant record in the EBT account Receive a response from the EBT system indicating the results of adding the participant to the account 				
3.4.2.3	Issue Electronic Benefits	X		X	
3.4.2.3 Process	<ul style="list-style-type: none"> Transmit benefit data (batch or real time) to the EBT system for issuing benefits to the EBT account Receive a response (batch or real time) from the EBT system indicating the results of the benefit issuance process Update the count of participants for the month and store in the Participation data store for later reporting and management purposes Update the estimated food benefit obligation value for the month and store in the Obligation data store for later reporting and management purposes 				Allow for online benefits to be applied to the EBT account as soon as online nutrition education is completed.
3.4.2.4	Issue EBT Card	X		X	
3.4.2.4 Process	<ul style="list-style-type: none"> An over-the-counter card is selected from the clinic inventory and the card number is selected, keyed into, or obtained by the system through a card reading device. The cardholder selects a PIN using a PIN selection device. The PIN is transmitted from the device to the EBT system or smart card depending on technology used. Transmit the card number and Participant Family/Household Identification Number (and/or optionally Participant Identification Number) to the EBT system for linking the card to the EBT account. Receive a response (real time or batch) from the EBT system indicating the results of the card issuance process 				Allow for more than one card to be issued to a household.
3.4.2.5	Obtain Account Balance	X		X	
3.4.2.5 Process	<ul style="list-style-type: none"> Send balance inquiry message. Offline: Read card balance from EBT card. Online: Transmit a message requesting the current account balance to the EBT system. The message will include Participant Family/Household Identification Number (or, optionally, Participant Identification Number), or other data element to be used in identifying the account from which to retrieve the account balance. Receive a response from the EBT card or the EBT system containing the account balance data. 				
3.4.2.6	Update EBT Account Information	X		X	
3.4.2.6 Process	<ul style="list-style-type: none"> Transmit family/household and/or participant data to the EBT system for updating account demographic data in the system Receive a response from the EBT system indicating the results of updating the account information 				
3.4.2.7	Remove Participant(s) from an Account	X		X	
3.4.2.7 Process	<ul style="list-style-type: none"> Transmit participant data to the EBT system for removing a participant from the EBT account. Receive a response from the EBT system indicating this action. 				
3.4.2.8	Process Changes to Electronic Benefits (Benefit Adjustments, Voids and Reissuance)	X		X	
3.4.2.8 Process	<ul style="list-style-type: none"> Transmit benefit data to the EBT system for updating benefits in the EBT account. Receive a response from the EBT system indicating the results of updating benefits in the EBT account. This may be implemented by the EBT system as a complete void and reissue of benefits or as an adjustment to existing benefits. Both capabilities may be necessary. 				

3.4.2.9	Process Changes to EBT Card (Status Changes/Card Replacements)	X		X	
3.4.2.9 Process	<ul style="list-style-type: none"> For status changes, the system transmits Participant Family/Household Identification Number, Participant Identification Number, or current card number (PAN) (if known) along with the Card Status Change/Replacement Reason Code37 to the EBT system to update the card status and/or hot card list 				
	<ul style="list-style-type: none"> Receive a response from the EBT system indicating the results of the card status change process 				
	<ul style="list-style-type: none"> For card replacements, the new card number (PAN) is entered into the system or obtained by the system through a card reading device. The system transmits the new card number (PAN) and the, reason code, date, and Participant Family/Household Identification Number or Participant Identification Number to the EBT system for linking the card to the EBT account and updating the status of the old card 				
	<ul style="list-style-type: none"> Receive a response from the EBT system indicating the results of the card replacement process 				
3.5	Food Benefit Redemption, Settlement and Reconciliation				
3.5.3	<i>Pay Vendor for Food Benefits Redeemed via EBT</i>				
3.5.3.1	Process Vendor Payment	X		X	
3.5.3.1 Process	<ul style="list-style-type: none"> Retrieve Transaction History Data Calculate vendor credits/State WIC debits Create payment file (i.e., ACH file) Initiate process to perform electronic funds transfer (i.e., ACH credit) for transmission to vendor bank 				
3.5.4	<i>Reconcile EBT Benefits</i>				
3.5.4.1	Retrieve Benefit Issuance File	X		X	
3.5.4.1 Process	<ul style="list-style-type: none"> Retrieve benefit issuance file for all benefits that have Food Item Prescribed First Date to Spend within the specific timeframe that will be reconciled 				
3.5.4.2	Retrieve Transaction History Data /Reconcile Redeemed, Adjusted, Voided, and Expired Benefits with Issuance File	X		X	
3.5.4.2 Process	<ul style="list-style-type: none"> Obtain issued benefit file Obtain transaction history data and identify benefit redemption, expiration, void and adjustment data Compare issued benefits to redeemed, expired, voided and adjusted benefits at the family/household level by category/subcategory Post redemption data back to family/household records Compare total amount paid to vendors with drawdown amount and obligation estimates Display or provide report of reconciliation discrepancies Calculate food item average redemption amounts for all vendors, for all vendors excluding WIC A50 vendors, for only WIC A50 vendors, and by peer group and updated the Food Item data store. 				
3.6	Financial Management				
3.6.1	<i>Manage Grants and Budgets</i>				
3.6.1.1	Track Grants	X			
3.6.1.1 Process	<ul style="list-style-type: none"> Accept user input of grant funding information Adjust the State grant to correspond to Federal fiscal year funding Calculate total available Federal and State funds for all grant types Update Grant data store 				

3.6.1.2	Maintain State Agency Budget Information				
3.6.1.2 Process	<ul style="list-style-type: none"> Calculate adjusted total available Federal and State funds for Food Calculate adjusted total available Federal and State funds for NSA Calculate total NSA budget for local agencies Calculate total NSA budget for the State agency Update Grant and NSA Budget data stores 				
3.6.1.3	Maintain Local Agency Budget Information	X			
3.6.1.3 Process	<ul style="list-style-type: none"> Record budget information for each local agency Update NSA data store 				Accept scanned images of local agency (metro) monthly billing supporting documentation.
3.6.2	Monitor Program Expenditures				
3.6.2.1	Monitor NSA Expenditures				
3.6.2.1 Process	<ul style="list-style-type: none"> Calculate actual NSA expenditures from State and local agency expenditure reports Calculate any unliquidated NSA obligations for upcoming months Update expenditures to date in the NSA data store Compare expenditures as a proportion of the budget amounts for each category 				
3.6.2.2	Monitor Food Expenditures	X			
3.6.2.2 Process	<ul style="list-style-type: none"> Retrieve the estimate of future month food obligations from the Future Obligation By Month data store For systems issuing benefits via paper, retrieve the estimated food instrument redemption values for the month, and past months that are not closed out. For systems issuing benefits via EBT, 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 issued for each household For each upcoming month, add any estimates for breast pump costs that will be purchased with food funds Retrieve any vendor collections, participant collections and program income from the Grants data store and subtract the estimated amount the State agency expects to use from the obligation amount Retrieve estimated rebates from the Rebate data store Subtract the estimated rebates, from the food obligation balance to get the net obligation (Note: The system should revise net obligations each month as actual outlay data are received) 				
3.6.2.2 Process	<ul style="list-style-type: none"> For systems issuing benefits via paper, retrieve the total of all redemptions by issue month. For systems issuing benefits via EBT, retrieve actual food outlays from the EBT system Subtract any vendor or participant collections, other credits, and program income needed to fund food outlays for the month Add any food expenditures for breast pump costs to the outlays Retrieve the total value of rebates billed from the Rebate data store and subtract the rebates billed from actual outlays to arrive at the net federal outlays for each issue month 				
3.6.2.3	Perform Financial Modeling				
3.6.2.3 Process	<ul style="list-style-type: none"> Use projected participation and food cost data to estimate future months obligations Calculate an estimate of future expenditures under various scenarios using different food cost and/or participation variables Store future obligations by month in the Future Months Obligation data store 				
3.6.2.4	Manage Cash Flow				
3.6.2.4 Process	<ul style="list-style-type: none"> Calculate the total cash inflows by adding Federal grants, State grants, manufacturer rebates, program income and vendor/participant collections from the Grants data store Calculate total cash outflows by adding vendor payments and NSA expenditures from the Outlays and NSA Expenditure data stores 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 outflows 				
3.6.3	Process Manufacturer Rebates				
3.6.3.1	Estimate Total Annual Rebates	X			
3.6.3.1 Process	<ul style="list-style-type: none"> Capture information about Rebate manufacturer Calculate the number of infants estimated to receive each type and form of infant formula (estimated infant participation less the number of infants receiving non-contract and exempt infant formula and fully breastfed) Calculate the total number of units expected to be purchased by multiplying the estimated number of infants times an estimated number of units per infant by type and form of infant formula Calculate the estimated total rebate by multiplying the rebate for each type and form of infant formula by the estimated number of units for each infant formula by type and form Calculate the total estimated rebate amount from the sum of the rebates for all of the individual infant formula types and form and store in the Rebate data store 				

3.6.3.2	Calculate Rebate and Prepare Invoice	X	X		
3.6.3.2 Process	<ul style="list-style-type: none"> For systems that issue benefits via EBT, retrieve the food item transaction data for infant formula from the rebate data store and multiply the number of units purchased by the rebate rate for each type/form 				
	<ul style="list-style-type: none"> For systems that issue benefits via paper, retrieve redemption data and calculate number of units of each type and form of the rebated items that were redeemed using vendor peer group or shelf prices. The system must estimate the actual number of units of redeemed infant formula, taking into account the number of full versus partial infant formula packages, to ensure that the invoice for rebates is as close as possible to the actual number of units purchased 				
	<ul style="list-style-type: none"> Calculate the rebate for each product form and type by multiplying the rebate rate by the number of units of each type form purchased 				
	<ul style="list-style-type: none"> Prepare rebate invoice for the manufacturer and/or create electronic file with invoice data for submission to rebate manufacturer 				
3.6.3.3	Monitor Rebate Collections	X			
3.6.3.3 Process	<ul style="list-style-type: none"> As rebate payments are received, enter the amount collected Enter any adjustments made and the reason code and update Rebate data store 				
3.7	Caseload Management				
3.7.1	<i>Capture and Maintain Caseload Data</i>				
3.7.1.1	Capture Data on Potentially Eligible Population				
3.7.1.1 Process	<ul style="list-style-type: none"> Add, update, or delete potentially eligible population data Update the Caseload - State Agency and Caseload - Local Agency data stores 				
3.7.1.2	Capture Historical Participation Data				
3.7.1.2 Process	<ul style="list-style-type: none"> Retrieve participation data for each local agency from the Caseload- Local Agency and Participation data stores Update the Caseload- Local Agency data store 				
3.7.2	<i>Allocate Caseload</i>				
3.7.2.1	Determine Maximum State Caseload				
3.7.2.1 Process	<ul style="list-style-type: none"> Adjust monthly State agency caseload with any caseload achievement rate factor Adjust monthly caseload to allow for participation levels fluctuations and/or targeted growth or reduction rates Store maximum State agency caseload level by month in Caseload- State Agency data store 				
3.7.2.2	Prepare Local Agency Caseload Allocation Estimates				
3.7.2.2 Process	<ul style="list-style-type: none"> Retrieve data from the Caseload- State Agency and Caseload- Local Agency data stores Assign caseload to local agencies according to the State caseload allocation formula Provide "what if" analysis capability to demonstrate the impact on caseload allocation by changing the formula and/or data used for calculating State and local caseload allocations 				
3.7.2.3	Record Caseload Allocations				
3.7.2.3 Process	<ul style="list-style-type: none"> Collect and store local agency caseload allocation in Caseload- Local Agency data store Compare sum of local agency caseload allocations to maximum state allocation Update Caseload-Local Agency data store with monthly caseload assignment 				
3.7.3	<i>Monitor Caseload</i>				
3.7.3.1	Track Actual Participation	X	X		
3.7.3.1 Process	<p>The following analyses may be made for each local agency.</p> <ul style="list-style-type: none"> Calculate caseload achievement rate and current rate of change (from previous months) in caseload achievement rate Store in Caseload- Local Agency data store Update Participation data store 				
3.7.3.2	Conduct Caseload Reallocations				
3.7.3.2 Process	<ul style="list-style-type: none"> Monitor participation, food package costs, and expenditure data for significant changes from the original data used to allocate caseload If significant changes occur, input the necessary updated data and recalculate caseload allocations Collect and store local agency caseload allocation in Caseload- Local Agency data store Compare sum of local agency caseload allocations to the State agency total caseload allocation Update Caseload-Local Agency data store with monthly caseload assignment 				

3.8	Operations Management				
3.8.1	Monitor Administrative Operations				
3.8.1.1	Maintain Information on Regions and Clinics	X			
3.8.1.1 Process	<ul style="list-style-type: none"> • Input data on local agencies and clinics and store in Local Agency and Clinic data stores • Save local agency and clinic data 				TN WIC site numbers are made up of the region/metro number + county number + clinic number.
3.8.1.2	Analyze Regional Operations	X			
3.8.1.2 Process	<ul style="list-style-type: none"> • Retrieve information on local agency and clinics from the Local Agency and Clinic data stores • Retrieve data from other applicable data stores (e.g., number of participants served from the Participation data store, "no show" data from the Scheduled Appointment data store) • Calculate applicable factors • Prepare analysis report by local agency/clinic of participant to staff type and square foot of space 				
3.8.1.3	Support Clinic/Patient Flow Monitoring	X			
3.8.1.3 Process	<ul style="list-style-type: none"> • Retrieve data for the specific type of analysis being performed • Calculate appropriate values for the type of analysis being performed • Compare values to Statewide standards, if applicable 				
3.8.2	Manage Participant Outreach				
3.8.2.1	Maintain Outreach List for Clinics	X			
3.8.2.1 Process	<ul style="list-style-type: none"> • Add, update or delete outreach organizations • Store in Outreach data store 				
3.8.2.2	Track Outreach Campaign Activities	X			
3.8.2.2 Process	<ul style="list-style-type: none"> • Retrieve Participant-Source of Info About WIC data from Participant data store • Accept user input of Outreach Campaign Cost • Retrieve data on the number of participants for each local agency involved in the campaign from the Participation data store for the month before and after the outreach campaign • Compute the participation difference between the participation for the month before and after the outreach campaign • Divide the cost by the participant difference to obtain a cost per participant 				
3.8.3	Monitor Customer Service				
3.8.3.1	Document and Track WIC Customer Service Calls	X			
3.8.3.1 Process	<ul style="list-style-type: none"> • Accept input of service requested code into the Customer Service data store or create new customer service record • Assign appropriate call type and enter call information, including disposition if available • Update Customer Service data store 				
3.8.3.2	Document Complaints	X			
3.8.3.2 Process	<ul style="list-style-type: none"> • Input complaint data on participant/vendor/staff member in the Complaint data store in a new complaint record or as an update to an existing complaint record • Link the complaint data to the appropriate record using the participant/vendor/staff member unique identifier • Generate report of complaints for follow-up action 				
3.8.3.3	Track Call or Complaint Outcomes	X			
3.8.3.3 Process	<ul style="list-style-type: none"> • Accept staff input related to call or complaint • Update data in Customer Service or Complaint data store 				
3.8.4	Provide Survey Capability				
3.8.4.1	Monitor Participants' Views of WIC Program Services	X			
3.8.4.1 Process	<ul style="list-style-type: none"> • Design survey instrument and update Survey Questionnaire and Survey Question data stores • Accept user entered survey results and update Survey Response data store • Generate analysis of survey responses 				
3.8.5	Maintain Inventory				

3.8.5.1	Maintain Inventory of Serialized Items	X			
3.8.5.1 Process	<ul style="list-style-type: none"> • Input serial numbers when shipments are received by State agency • Input serial numbers or equipment identification numbers for items sent to a local agency • Input local agency code for the local agency receiving the shipment • Update Item Stock-Serialized data store 				
3.8.5.2	Maintain Inventory of Non-Serialized Items	X			Support scanning capabilities to track drop-shipments. Allow inventory of special infant formula to be shared between clinics, as one clinic may have special formula needed by a nearby clinic.
3.8.5.2 Process	<ul style="list-style-type: none"> • Input number of items when shipments are received by State agency • Input number of items for items sent to a local agency • Input local agency code for the local agency receiving the shipment • Update Item Stock-Non-Serialized data store 				formula inventory needed
3.8.6	<i>Monitor Program Integrity</i>				
3.8.6.1	Monitor Participant Integrity	X			
3.8.6.1 Process	<ul style="list-style-type: none"> • Retrieve data from the appropriate data store • Separate clinics into peer groups according to caseload size to set baseline trend data for differing clinic caseloads • Calculate results (as applicable) and store in the appropriate data store • Monitor reports based on the baseline trend data 				
3.8.6.2	Monitor Clinic Integrity	X			
3.8.6.2 Process	<ul style="list-style-type: none"> • Retrieve data for all local agencies the specific type of analysis being performed. • Calculate data for the clinic abuse indicators for each local agency in the State • Calculate an average for all local agencies • Compare each local agency average to the average with all local agencies 				
3.8.6.3	Track Participant Sanctions	X			
3.8.6.3 Process	<ul style="list-style-type: none"> • Input data on participant violations, sanctions and claims imposed and claims collected along with the corresponding date • Update the Sanction data store 				
3.8.6.4	Track Administrative Hearings	X			
3.8.6.4 Process	<ul style="list-style-type: none"> • Add, update, and delete Administrative Hearings data store • Generate report on Status of Administrative Hearings 				
3.9	Vendor Management				
3.9.1	<i>Manage Vendor Peer Groups</i>				
3.9.1.1	Establish Vendor Peer Groups	X			
3.9.1.1 Process	<ul style="list-style-type: none"> • Establish multiple peer groups in the system and store results in the Vendor Peer Group data store 				
3.9.1.2	Update Vendor Peer Group/Criteria	X			
3.9.1.2 Process	<ul style="list-style-type: none"> • Add or delete peer groups and store results in the Vendor Peer Group store • Update peer group characteristics and store results in the Vendor Peer Group store 				
3.9.2	<i>Create and Locate Data Records</i>				Vendor application, authorization, training, monitoring, and communication data must be maintained at both the state and regional level. Access at the regional level to be available to only those staff in the region. Access to the state office application and the regional levels application will be driven by security levels.
3.9.2.1	Create New Applicant Record	X			
3.9.2.1 Process	<ul style="list-style-type: none"> • Accept user entry of minimum data record data elements • Assign vendor identification number • Maintain record for search, view, and update 				
3.9.2.2	Search for Vendor Record	X			
3.9.2.2 Process	<ul style="list-style-type: none"> • Compare data search criteria with existing database records • Display records that match search criteria • Allow user to access the data record(s) matching search criteria 				
3.9.3	<i>Maintain Vendor Authorizations</i>				
3.9.3.1	Maintain Vendor Application Data	X			
3.9.3.1 Process	<ul style="list-style-type: none"> • Input vendor characteristics data from vendor applications for new and currently authorized vendors and store results in Vendor data store • Assign vendor peer group based on specified peer group criteria 				

3.9.3.2	Track Vendor Authorization Process	X			
3.9.3.2 Process	• Input activities scheduled and completed for each vendor and store results in Vendor Authorization Progress data store				
3.9.3.3	Maintain Vendor Price Survey Data	X			
3.9.3.3. Process	• Input vendor prices for each vendor and store results in Vendor Price Survey data store				
3.9.3.4	Authorize Vendors	X	X		
3.9.3.4 Process	• Retrieve history of violations on vendors who are seeking authorization/reauthorization from the Vendor Compliance Activity Store				
	• Retrieve a compliance history on vendors who are seeking authorization/reauthorization from the Sanction data store				
	• Retrieve vendor application data from the Vendor data store				
	• Calculate the food package price for each vendor applicant using the food price survey data collected in the Vendor data store perform price for comparison with peer group maximum allowed amounts				
	• Array vendors by price for each location				
	• Select the required number of vendors for authorization				
	• For competitive bid systems, store the vendors contract price for food as the maximum allowed amount value in the Food/UPC data store				
	• Update vendor authorization status				
3.9.3.5	Maintain Authorized Vendor Data	X	X		
3.9.3.5 Process	• Update Vendor Authorization Status to authorized				
	• Update Vendor Authorization Start Date and Vendor Authorization Expiration Date				
3.9.4	Monitor Vendor Training				
3.9.4.1	Track Scheduled Vendor Training	X	X		
3.9.4.1 Process	• Input scheduled vendor training dates, locations and vendor, which should attend and record in Education/Training Offer and Event Slot data store				
3.9.4.2	Track Attendance at Vendor Training and Technical Assistance Conducted				
3.9.4.2 Process	• Input vendors' attendance at training sessions or appointments and record in Education/Training Offer and Scheduled Appointment data store				
3.9.5	Support Vendor Communications				
3.9.5.1	Produce Correspondence to Vendors				
3.9.5.1 Process	• Input selection of authorized vendors to receive information or correspondence				
	• Retrieve name and address information from Vendor data store				
3.9.6	Perform Confidential High Risk Vendor Analysis				
3.9.6.1	Determine Vendor Peer Group (High Risk Analysis)	X	X		
3.9.6.3	Determine High Risk Vendors (EBT Environment)	X	X	X	
3.9.7	Track Compliance Investigations				
3.9.7.1	Maintain Special Investigator Record for Compliance Buys	X			
3.9.7.1 Process	• Add or update a participant record for the investigation the Participant data store to enable the issuance of food benefits				Access to the special investigator record for compliance buys is to be limited by assigned security roles and responsibilities. The Program's investigators work out of the state central office but do not require access to other areas of the vendor management module.
3.9.7.2	Maintain Food Benefit Redemption Data from Compliance Buys	X			
3.9.7.2 Process	• Retrieve the food benefit redemption data for the vendor under investigation using the investigator's Participant Identification Number				
3.9.7.3	Maintain Compliance Buy Data	X	X		
3.9.7.3 Process	• Input data about the compliance activity and record in Vendor Compliance Activity data store				
	• Provide correspondence to vendors regarding investigations as required by federal guidance				
3.9.7.4	Support Inventory Audits	X			
3.9.7.4 Process	• For each supplemental food item (e.g., gallon of milk), compare the total amount of that item the vendor purchased for sale in its store to the total amount of redemptions for that item				
	• Flag any food items for which the vendor had redemptions that exceeded the store's documented inventory and store in Monitoring Activity data store				
3.9.8	Track Routine Monitoring				
3.9.8.1	Maintain Routine Monitoring Data	X	X		
3.9.8.1 Process	• Input data about the compliance activity and record in Vendor Monitoring Activity data store				

3.9.9	Monitor Sanctions and Appeals				
3.9.9.1	Manage Vendor Sanctions	X			
3.9.9.1 Process	<ul style="list-style-type: none"> Input the violation code for each vendor that commits a violation Assign a corresponding sanction for the particular violation Calculate the number of points for each vendor violation Determine sanction type and dollar amount of CMP, if CMP is assessed Prepare notice to vendor of sanction imposed, including the name of the vendor, address, identification number, the type of violation(s), and the length of disqualification or the length of the disqualification corresponding to the violation for which the civil money penalty was assessed, the procedures to follow to obtain a full administrative review, and the effective date of the action. 				
	<ul style="list-style-type: none"> When a vendor is disqualified due in whole or in part to violations subject to mandatory sanctions, such notification must include the following statement: "This disqualification from WIC may result in disqualification from the Food Stamp Program. Such disqualification is not subject to administrative or judicial review under the Food Stamp Program." Update Sanction data store 				
3.9.9.2	Monitor and Track CMP Payments	X			
3.9.9.2 Process	<ul style="list-style-type: none"> Maintain CMP account receivable data and store in Grants data store Create installment plans for vendor payment Track vendor payments Update Sanction data store 				
3.9.9.3	Maintain Vendor Appeal Data	X			
3.9.9.3 Process	<ul style="list-style-type: none"> Input data on vendor sanctions initiated in the Sanctions data store Update data on vendor sanctions that are resolved in the Sanctions data store 				
3.9.10	Coordinate with Food Stamp Program				
3.9.10.1	Maintain Food Stamp Program Violation Data	X			
3.9.10.1 Process	<ul style="list-style-type: none"> Search the list of authorized WIC vendors by FSP identification number List vendors with matches 				
3.9.10.2	Report WIC Sanctions to the Food Stamp Program	X			
3.9.10.2 Process	<ul style="list-style-type: none"> Produce a notice of the mandatory WIC sanction including the required vendor information 				
3.1	Scheduling				
3.10.1	Maintain Master Calendar				
3.10.1.1	Maintain Master Calendar	?			
3.10.1.1 Process	<ul style="list-style-type: none"> Accept user input specific parameters Generate calendar with available characteristics and slots based on these parameters Assign needed resources from the available resource list and remove the resource from the list for that slot Update the Master Calendar and Event Slot data stores 				
3.10.2	Manage Appointments				
3.10.2.1	Perform Appointment Scheduling	?			
3.10.2.1 Process	<ul style="list-style-type: none"> Accept user entered appointment preferences and store in Event Preference data store Check for appointment availability at particular time and date that meet preference parameters and present viable options or allow staff members to search the available schedule Collect and store daily appointment schedule data and applicant appointment data in the Scheduled Appointment data store 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 				
3.10.2.2	Perform Mass Rescheduling	?			
3.10.2.2 Process	<ul style="list-style-type: none"> Retrieve appointment schedule for the selected day, time, or event Update Scheduled Appointment Outcome Code to indicate the appointment or event is rescheduled Update Scheduled Appointment Date and Scheduled Appointment Time with new appointment information in the Scheduled Appointment data store 				
3.10.2.3	Track Appointment Outcomes	?			Track diagnosis/medical codes by appointment.
3.10.2.3 Process	<ul style="list-style-type: none"> Access appointment for individual, family/household, or group Update appointment outcome 				
3.10.3	Generate Appointment Notices				
3.10.3.1	Generate Appointment Notices	?			Generate upcoming appointment file for use in auto-dialer software.
3.10.3.1 Process	<ul style="list-style-type: none"> Accept user request to generate an appointment notice Retrieve data from the Scheduled Appointment and Participant data stores Create appointment and reschedule notices 				

3.11	System Administration				
3.11.1	<i>Maintain System Data Tables</i>				
3.11.1.1	Maintain System Code Table Data	X			
3.11.1.1 Process	<ul style="list-style-type: none"> Edit new and updated data elements Store edited data in appropriate data code table 				
3.11.2	<i>Administer System Security</i>				
3.11.2.1	Locate User Record	X			
3.11.2.1 Process	<ul style="list-style-type: none"> Compare data search criteria with existing database records Display records that match search criteria Allow user to access the data record(s) matching search criteria 				
3.11.2.2	Maintain User Identification	X			
3.11.2.2 Process	<ul style="list-style-type: none"> Create User Identification (if not entered) Store edited user data in the User data store 				
3.11.2.3	Maintain User Capabilities	X			
3.11.2.3 Process	<ul style="list-style-type: none"> Accept user-entered user access function and function privileges Validate User Identification and capability data Store or update capability data in the User Access data store 				
3.11.2.4	Monitor Unauthorized Access	X			
3.11.2.4 Process	<ul style="list-style-type: none"> Record user ID, date, time, and terminal location or IP address for each unauthorized access attempt Generate Unauthorized Access Report upon request 				
3.11.2.5	Monitor Record Updates	X			
3.11.2.5 Process	<ul style="list-style-type: none"> Record user ID, date, and time each change to system data Create Audit File 				
3.11.3	<i>Manage System</i>				
3.11.3.1	Perform System Back-Up/Restoration	X			
3.11.3.1 Process <i>Back-up</i>	<ul style="list-style-type: none"> Initiate timed back-up procedure Create Back-Up File 				
3.11.3.1 Process <i>Restoration</i>	<ul style="list-style-type: none"> Load Back-Up File Copy Back-Up File to Database 				
3.11.3.2	Import/Export Data Files	X			
3.11.3.2 Process <i>Export</i>	<ul style="list-style-type: none"> Retrieve Data Format Data Create export file 				
3.11.3.2 Process <i>Import</i>	<ul style="list-style-type: none"> Receive import file Update system database with data from import file 				
3.11.3.3	Provide Version Control	X			
3.11.3.3 Process	<ul style="list-style-type: none"> Log software version release Install new software at the host 				
3.11.4	<i>Archive System Data</i>				
3.11.4.1	Archive and Restore Historical Data	X			
3.11.4.1 Process <i>Archive</i>	<ul style="list-style-type: none"> Copy historical data to storage medium based on user-provided date parameters Strip archived data from the system 				
3.11.4.1 Process <i>Restoration</i>	<ul style="list-style-type: none"> Load data files or individual records according to user-specified parameters 				
3.11.4.2	Purge Unnecessary Data	X			
3.11.4.2 Process	<ul style="list-style-type: none"> Retrieve data that meets the purge parameters Strip data to be purged from the system 				
3.12	Reporting				
3.12.1	<i>Generate Standard Reports</i>				All reports must be generated at one of five levels - State, Region, Local Agency, County and Clinic or a combination of more than one level. Reports must have capability to be produced for one or multiple organizations within the level being reported by a specific date, calendar month or date range.
3.12.1.1	Generate Standard Reports	X	X		
3.12.1.1 Process	<ul style="list-style-type: none"> Accept user input of selected report Generate report 				
3.12.2	<i>Conduct Ad Hoc Queries and Generate Reports</i>				
3.12.2.1	Conduct Ad Hoc Queries and Generate Reports	X	X		
3.12.2.1 Process	<ul style="list-style-type: none"> Accept user input of selection parameters and query system Display results and generate reports 				
3.12.3	<i>Maintain Data Warehouse</i>				
3.12.3.1	Maintain Data Warehouse	X			
3.12.3.1 Process	<ul style="list-style-type: none"> Transmit and store appropriate information in the data warehouse Accept user input of data selection parameters and query system Display results and generate report 				

System Wide Requirements				
<i>Open System Architecture</i>	X			
System must be built employing open system architecture				
<i>Design Flexibility</i>	X			
Configuration must be table driven with an associated audit				
System parameters must be configurable				
Search capability to locate records such as but not limited to participants and vendors				
Be adequately flexible to keep up with ever changing technology and WIC regulations				
Be adequately flexible by enable/disable switches for specific functionality				
<i>Legacy System Data Conversion</i>	X			
All relevant WIC data in the existing WIC system must be converted to the new system to prevent having to re-enter all data.				
All data conversion must be supported by automated conversion processes that address referential integrity, handle and correct common data anomalies, data cleansing in an automated fashion when possible, and handling of new data elements including population of null values when necessary.				
The system will report data conversion errors.				
<i>User Interface</i>	X			
Provide a graphical user interface				
All screens require names for identification purposes				
Allow user to print screens in a printer friendly format				
Context sensitive help for all screens, processes and fields is required. (e.g., Windows style - menu bar and "right click" pop-up selection items). The system must supply on-line context sensitive help for all screens and processes and the ability to print Help instructions in a printer friendly format				
Automatically retrieve data from appropriate sources and populate applicable data fields. For example, if mailing and physical address are the same, auto-populate one field based on the other.				
Carry forward data from appropriate fields and populate applicable data fields				
Edit data against existing data to identify and flag potential conflicts or errors in data and accept correction				
Facilitate data entry using standard accepted practices deployed in Web applications, as applicable. For example, list boxes for all code fields, entry of a letter to take user to desired appropriate selections, type ahead options, etc				
Provide field level on-screen edits (e.g., valid ethnic, migrant and other codes, within reasonable range) with configurable user-friendly error messages				
Have clear and/or cancel functionality on all data entry screens				
Provide the ability to navigate from field-to-field or screen-to-screen using multiple methods of navigation rather than having to follow a prescribed order. The system must provide a navigation bar or other advanced navigation method				
Inactive fields are disabled until required fields are filled in or calculated, when necessary				
Cursor must automatically advance to the next logical input field when the maximum allowed numbers of characters have been entered for the keyed field after data validation has occurred				
Selections from drop-down boxes must automatically take you to the next field. If the user types it in, the user tabs or hits enter to the next field.				

	Electronic Signatures	X			
	Provide electronic signature capacity 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, CPA for certification, income verification)				
	System must accept an X as a signature and allow for one signature as witness				
	Automatic English/Metric Conversion	X			
	Automatically convert user entries in English or metric to their respective equivalent and display both values, as applicable				
	Scanning Capability	X			
	Accept scanned documents				
	Accept scanned document and convert to data as appropriate				
	Accept data from bar scans and populate data as appropriate				
	Note Pad	X			
	Provide a notes/memo pad feature with the ability to sort by type of note and sort by date of note				
	Provide spell check capabilities including a spell check for medical terms, list of pre-defined WIC terms, and an on-line connection to a drug nutrient interaction database (i.e. PDR) for all free-form text with the ability to add words to a dictionary				
	Audit Trail	X			
	Provide an audit trail for all system transactions to include details of user, changes, date and time				
	Provide an audit trail for all configuration changes to include state-maintained tables				
	Dashboard				
	Provide a dashboard feature. The dashboard will monitor participant flow beginning with participant/applicant check-in at the clinic with status change captured as participant/applicant records are accessed (i.e. opened or closed) within specified modules in the system based on State-defined parameters (i.e. eligibility, anthropometrics, nutrition counseling, and food instrument issuance).				
	Dashboard must be able to associate clinic sites to a particular region				
	Dashboard must provide multiple views, to allow agencies to view their individual clinic sites for the State office to view individual regions, and clinic sites of all regions				
	Periodically update the dashboard based on State-defined criteria (e.g., 60 second interval).				
	Security	X			
	The system is required to have multi-level system access security and functional level security, such as ensuring that only the CPA can assign risk codes and food packages, or only authorized staff can print checks.				
	The system must track unusual or out of normal system operations usage or user access.				
	System communications must be protected by at least 128-bit encryption.				
	Web communications must be supported by public key/private key encryption SSL (Secure Socket Layer) Certificates				
	The system must include a disaster plan and provide contingency plans for the production and distribution of food benefits in the event of a disaster.				
	Information in the system must be automatically backed up daily at all locations where system data is stored.				
	Each clinic and region will only have access to data pertaining to its caseload. Clinics should be able to view participant data within the state's central database at state defined levels of access based on user security privileges.				
	Maintain the privacy and participant consent requirements of the WIC participants, at the time of system design				

	Interface Requirements	X			
	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, as required at the time of system design				
	System must produce and provide to USDA data with the required and optional data elements, as required at the time of system design, in the required format.				
	System must produce the USDA's requirements for annual reporting of vendor management results for electronic export, a.k.a. The Integrity Profile (TIP), as required at the time of system design.				
	System must interface with the financial institutions that have responsibility for making payments to authorized vendors based on food benefits redeemed. The requirement includes the functional ability for transferring issuance records to a bank and receipt of payment records from the bank in electronic form compatible with UCC and ISO standards.				
	System must provide an output file for sharing with bordering tribal agencies and geographic states for each state to detect potential dual participants.				
	System must interface with the existing PTBMS and the future EPI in order to deliver a comprehensive, seamless, fully integrated automated health information system that will support the current and future automation needs of the TN Department of Health				
	System must interface with the EBT processor for payment and reconciliation				
	System must 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				
	System must interface with the National UPC database to compare items and capture any new food items approved for national usage by FNS				
	System must interface with the online nutrition education tool to capture nutrition education provided.				
	System must provide communications interface with word processing software for individual form letters printing and group mail merge process.				
	System Performance	X			
	Provide optimum response times to all system queries and actions under normal operating situations				
	Specific response time standards will be based on the type of telecommunication capability of each site (e.g., dial-up, cable modem, T1, etc).				
	System will be developed using code optimization and database tuning (related to system response time).				
	Performance of the application will be measured at the server				
	System Capacity	X			
	The system and its databases must support existing clinic caseloads (active, eligible and applicants), future caseload increases and additional clinics as needed				
	The system must be a centralized, Web-based application for all installations (State agency, region and clinics) with sufficient bandwidth to support system operations				
	Telecommunications and architecture employed in each of these instances must not adversely affect or cause significant variance in system operation, appearance, or navigation. When suitable bandwidth becomes available, it must support off-line sites				
	Edits and Calculations				
	Validation checks on edits should include relational or cross-field edits such as participant number and participant name. Table validations such as ethnicity codes must also be included. All edits must be done on the front-end, invalid entries must be immediately identified to the user rather than being posted to the database.				
	All calculated data must be accurate and all calculations must be specified in detail in the system documentation. Any rounding of numbers or similar adjustment must be explicitly stated.				
	Data Integrity	X			
	The integrity of the data must be protected and ensured across all system installations inclusive of portable clinic use. Data must be accurate and timely. All data must be consolidated in the central system and synchronized with any stand alone or portable sites on a daily basis.				
	Processing efficiency is a key design parameter. The tables must be efficiently designed and the system must make efficient use of indexes. The design must minimize redundant data populating the data base.				

	System Availability	X			
	The system will be available for use 24 hours a day, 7 days a week, 52 weeks a year outside normal operation windows such as maintenance and upgrades to the system				
	The system must include time locks to prevent the printing of food benefits before or after clinic hours. (Authorized users should be able to override the time lock when necessary.)				
	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.				
	The system will perform scheduled end of day processing/replication (as necessary) after the normal working hours of the clinics				
	Reports	X			
	All reports must be generated at one of five levels - State, Region, Local Agency, County and Clinic or a combination of more than one level. Reports must have capability to be produced for one or multiple organizations within the level being reported by a specific date, calendar month or date range.				
	Users will have the ability to produce all outputs to view on screen and/or save to a file as well as print capability.				
	The system must provide the ability to build reports and save report templates. These reports need filtering capabilities and must be seamless to the user. A Commercial-off-the-Shelf software (COTS) application will be selected for this purpose.				
	EBT Requirements				
E.3.2	Account Maintenance				
E.3.2.1	Establish EBT Account			X	Same as MIS requirement 3.4.2.1
E.3.2.2	Update EBT Account Information (Household Demographics)			X	Same as MIS requirement 3.4.2.6
E.3.2.3	Add or remove a participant from EBT account			X	Same as MIS requirement 3.4.2.2 and 3.4.2.7
E.3.2.4	Change status of EBT account			X	Same as MIS requirement 3.4.2.9
E.3.3	Benefit Maintenance				
E.3.3.1	Issue and Update EBT Benefits			X	Same as MIS requirement 3.4.2.3
E.3.3.2	Process changes to available benefit balance - future month			X	Same as MIS requirement 3.4.2.8
E.3.3.3	Process changes to available benefit balance - current month			X	Same as MIS requirement 3.4.2.8
E.3.3.4	Replace food benefits/benefit adjustments			X	Same as MIS requirement 3.4.2.8
E.3.3.5	Balance inquiry			X	Same as MIS requirement 3.4.2.5
E.3.4	Card Management				
E.3.4.1	Issue EBT card			X	Same as MIS requirement 3.4.2.4
E.3.4.2	Establish an alternative cardholder and issue card to alternate cardholder (online only)			X	
E.3.4.3	Replace EBT card			X	Same as MIS requirement 3.4.2.9
E.3.4.4	Maintain card status			X	Same as MIS requirement 3.4.2.9
E.3.4.5	Select and change PIN			X	
E.3.4.6	Track card usage			X	
E.3.4.7	card inventory/automated restocking			X	
E.3.5	Transaction Processing				
E.3.5.1	Process retail balance inquiry transactions			X	
E.3.5.2	Process purchase transactions			X	
E.3.5.3	Capture price			X	
E.3.5.4	Maximum allowed amount/not-to-exceed pricing			X	
E.3.5.5	Exception processing			X	
E.3.6	Settlement				
E.3.6.1	Settlement end points/banking data			X	
E.3.6.2	Process vendor payment			X	Same as MIS requirement 3.5.3.1
E.3.7	Reconciliation				
E.3.7.1	Reconcile payments			X	Same as MIS requirement 3.5.4.2
E.3.7.2	Reconcile food items			X	Same as MIS requirement 3.5.4.2
E.3.7.3	Reconcile issuance			X	Same as MIS requirement 3.5.4.2
E.3.7.4	Reconcile expired benefits			X	Same as MIS requirement 3.5.4.2
E.3.7.5	Reconcile other activities impacting balance			X	
E.8	Vendor Management				
E.3.8.1	Maintain WIC vendor data				

<i>E.3.9</i>	<i>UPC and Not To Exceed Management</i>				
E.3.9.1	Maintain approved product list (APL)/UPC database			X	Same as MIS requirement 3.3.4.1
E.3.9.2	Calculate maximum allowed amounts			X	Same as MIS requirement 3.3.4.2
E.3.9.3	Download Approved Product List (APL) to Grocers			X	
E.3.9.4	National UPC database interface			X	
E.3.9.5	Start up UPC			X	
<i>E.3.10</i>	<i>Reporting</i>				
E.3.10.1	Calculate rebate amounts			X	Same as MIS requirement 3.6.3.2
E.3.10.2	food magagement/approved product list			X	
E.3.10.3	food cost management			X	
E.3.10.4	card management			X	
E.3.10.5	performance and operating metrics			X	
E.3.10.6	fraud/high risk vendor analysis			X	
E.3.10.7	ad hoc reporting			X	