



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
REQUEST FOR INFORMATION
FOR
ELECTRONIC PUBLIC-HEALTH INFORMATION (EPI) SYSTEM**

**RFI # 34301-20318
May 22, 2017**

1. STATEMENT OF PURPOSE:

The State of Tennessee, Department of Health issues this Request for Information for the purpose of gathering information to develop a Request for Proposals (RFP) for Phase II of the implementation of a statewide Electronic Public-Health Information (EPI) system. The information obtained from responses to this request will be used by the State to improve the quality of services provided and assist in the RFP development for the EPI system Phase II.

2. BACKGROUND:

The Tennessee Department of Health (TDH) is implementing a statewide Electronic Public-Health Information (EPI) system. The EPI initiative is a comprehensive, multi-year effort, which will transform and enhance the tools and information available to public health providers and policy makers. Phase II (EPI v2.0) includes a new patient management system which contains features for registration, scheduling, billing, accounts receivable and more.

PTBMIS (Patient Tracking Billing and Management Information System) currently serves as the operational system supporting multiple public health programs in thirteen regions and metros, in 2 time zones, and over one hundred twenty (120) service locations across the state, providing direct services to 1.4 million Tennesseans per year. Loosely based on NetSmart's Patient Care Management System product (PCMS), PTBMIS has evolved to reflect the unique needs and requirements of TDH's clinic practice management and public health program services. PTBMIS supports approximately two million patient encounters per year. The intent is that the EPI system will completely replace PTBMIS. PTBMIS currently provides patient registration, appointment scheduling, documentation of insurance information, third party billing, insurance and patient collections as well as other administrative functions. In EPI v1.0 (already implemented), TDH provides interoperability and application integrations between the vxVistA EHR solution and certain PTBMIS modules including patient registration, appointment scheduling, and insurance information. Interoperability for sending vxVistA encounter information to PTBMIS will be implemented in the coming months.

The Tennessee Department of Health and its Commissioner have direct policy and supervisory oversight of seven rural health department regions. Rural health department regions include over 100 county health department clinic sites providing direct patient services. Additionally six large county Metropolitan health departments have contractual relationships with the Tennessee Department of Health and its Commissioner. The direct policy and supervisory oversight of staff in Metropolitan health departments resides with their respective county governments.

Current System

Technically, PTBMIS is a group of non-centralized applications running concurrently in fourteen different installations of AS/400 hardware. The applications are written primarily in COBOL/DB2. In addition, certain data aggregation and reporting functions utilize external information tools, including Microsoft Access, Excel, SAS and Web Query. Daily and weekly data aggregation occurs through FTP scripts bringing required information into separately managed Central Office databases and spreadsheets. Information is also transferred to external repositories such as Tennessee Immunization Information System (TennIIS), Centers for Disease Control and Prevention (CDC) registries, and the State Lab. Currently, each regional installation of PTBMIS may have slight variances in program codes, data elements, and hardware configurations, and is supported by one or more local PTBMIS systems administrators. This will be centralized in the new system.

vxVistA is a centralized EHR system integrating with PTBMIS and an MPI (Master Patient Index) to provide patient charting, pharmacy, encounter entry, lab integrations, and limited reporting. Utilizing custom templates in CPRS (Computerized Patient Record System), TDH Clinical Application Coordinators (CACs) have developed Public Health functionality into the EHR. TDH uses vxDocman (scanning), vxROI, (release of information), and vxAudit as well as the capability of interfacing with Tennessee Immunization Information System (TennIIS), Master Patient Index (MPI), PTBMIS, Reference Lab (currently contracted laboratories that receive a specimen from another laboratory and that performs one or more tests on such specimen), and Tennessee Women Infants and Children, Food and Nutrition Service (TNWIC).

Proposed Solution

TDH would like to review options to meet the program needs of the rural and metro health clinics throughout the state. An enterprise patient management system must accommodate Tennessee's public health clinics. The solution must contain the features listed below, and accommodate thirteen (13) regionalized divisions crossing multiple time zones and TDH's central office in Nashville. It must interface with both existing TDH systems, as well as other electronic systems currently in use.

Patient Scheduling	
C.1	Create appointment profiles for clinics that include the times available, maximum number of patients per time slot, and clinic types Copy/update/delete appointment profiles Search for available appointments Schedule providers availability Schedule by time, by provider, by clinic, and by program Schedule immediate, past, and future appointments Schedule group encounters for various clinics and programs Schedule a single patient for multiple visits at one time Control user profile to the appropriate level based on location(s) and clinics Send schedule information to other systems via HL7 messages Receive schedule information from other systems via HL7 messages Update status of appointments List appointments per patient or provider Cancel appointments (patient or clinic cancellation) Generate missed appointment and reminder letters
Patient Registration	
C.2	Search for patients Link duplicate patients from different regions Register patients by registration type Modify registration Copy registrations for family members Link appointments to patient at registration Gather demographic, health care coverage, and financial information (in complete and abbreviated

	<p>scenarios)</p> <p>Retain information gathered for at least 5 years (demographic, health care coverage and financial)</p> <p>Record patient as “Confidential” and associate Confidentiality indicator to billing</p> <p>Send and receive registration information with other similar systems via HL7 messages</p> <p>Link encounters with appointments</p>
	Billing
C.3	<p>Calculate patient liability on a fixed or sliding scale</p> <p>Bill private or governmental payers based on program/encounter type</p> <p>Bill patient based on financial eligibility</p> <p>Show discounts and/or adjustments on bills</p> <p>Receive payments (including electronic payments) and denials</p> <p>Post payments and denials to accounts</p> <p>Create HIPAA compliant professional and institutional insurance claim and patient eligibility files to submit to TDH contracted clearinghouse vendor</p> <p>Enter and maintain national standard coding files (CPT®, HCPCS, ICD 10, CVX, and NDF at a minimum) and successor versions</p> <p>Enter and maintain multiple custom procedure codes</p> <p>Apply charges to multiple funding sources</p> <p>Track receipts by specific programs</p> <p>Store and maintain multiple payers, fee schedules, benefit packages, benefit plans</p> <p>Bill non insurance (contracted party) payers</p> <p>Maintain cash drawer</p> <p>Maintain patient ledger</p> <p>Maintain cost reports</p> <p>Maintain multiple funding sources for programs</p> <p>Record encounter or service as “Confidential”</p> <p>Suppress certain claim types from generating a claim</p>
	Case Management
C.4	<p>Manage patient care service delivery via protocol</p> <p>Manage home and community based services</p> <p>Manage different programs</p>
	Master Patient Index
C.5	<p>Interface with a master patient index to interoperate with other systems</p> <p>Interface with a master patient index to prevent duplicate patient entries</p>
	Pharmacy
C.6	<p>Record the order, issuance and administration of drugs</p> <p>Print prescriptions</p> <p>Manage inventory</p> <p>ePrescribe</p> <p>Bill pharmacy issued drugs to Tennessee Medicaid agency</p> <p>Link drugs to programs and/or funding sources such as VFC (vaccines) or 340B (medications)</p>
	Interoperability
C.7	<p>Interface with multiple systems using HL7 messages or proprietary file formats:</p> <ul style="list-style-type: none"> MPI vxVista EHR Tennessee Immunization Information System (TennIIS) Third party billing/clearing house partners Tennessee Women Infants Children (TNWIC) program Health Enterprise Warehouse Laboratory Vendors State of Tennessee Financial systems (Edison/iNova for payments)
	Reporting

C.8	Generate a wide variety of standard and customizable reports Export reports in various formats including but not limited to MS Excel, PDF, Text, MS Word, etc.) Print all reports to network attached printers Query the database for custom reports
Patient Portal	
C.9	Schedule appointments Interact with providers through a messaging system View encounter summary View lab results View patient liability and make payments through outside vendor
Program Management	
C.10	Record program type: Tennessee Women, Infants, and Children Food and Nutrition Service (TNWIC) Dental Children Health and Development Program (CHAD) Help Us Grow Successfully (HUGS) Tuberculosis (TB) AIDS Prevention (AP) Women's Health (WH) And others
Claims Payer	
C.11	Pay claims Maintain vendor files Maintain payer files Manage payments

3. COMMUNICATIONS:

- 3.1. Please submit your response to this RFI to:
Jennifer Garrison, Sourcing Account Specialist
Central Procurement Office
William Snodgrass Tennessee Tower, 3rd Floor
312 Rosa L. Parks Ave.
Nashville, TN 37243
615-532-2440
Jennifer.B.Garrison@tn.gov
- 3.2. Please feel free to contact the Department of Health with any questions regarding this RFI.
The main point of contact will be:
David Traeger, EPI Project Director
Information Technology Services
Andrew Johnson Tower, 6th Floor
710 James Robertson Parkway
Nashville, TN 37243
615-253-3583
David.Traeger@tn.gov
- 3.3. Please reference RFI # 34301-20318 with all communications to this RFI.

4. RFI SCHEDULE OF EVENTS:

EVENT	TIME (Central Time Zone)	DATE (all dates are State business days)
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1.	RFI Issued		May 22, 2017
2.	Question and Comment Deadline	2:00 PM	June 1, 2017
3.	State Response to Written "Questions & Comments"		June 9, 2017
4.	Response Due Date		June 16, 2017

5. GENERAL INFORMATION:

- a. Please note that responding to this RFI is not a prerequisite for responding to any future solicitations related to this project and a response to this RFI will not create any contract rights. Responses to this RFI will become property of the State.
- b. The information gathered during this RFI is part of an ongoing procurement. In order to prevent an unfair advantage among potential respondents, the RFI responses will not be available until after the completion of evaluation of any responses, proposals, or bids resulting from a Request for Qualifications, Request for Proposals, Invitation to Bid or other procurement method. In the event that the state chooses not to go further in the procurement process and responses are never evaluated, the responses to the procurement including the responses to the RFI, will be considered confidential by the State.
- c. The State will not pay for any costs associated with responding to this RFI.

6. INFORMATIONAL FORMS:

The State is requesting the following information from all interested parties. Please fill out the following forms:

RFI #34301-20318
TECHNICAL INFORMATIONAL FORM

- 1. RESPONDENT LEGAL ENTITY NAME:
- 2. RESPONDENT CONTACT PERSON:
Name, Title:
Address:
Phone Number:
Email:
- 3. BRIEF DESCRIPTION OF EXPERIENCE PROVIDING SIMILAR SCOPE OF SERVICES/PRODUCTS

Vendor Background and Experience

- 4. **Implementation Projects:**
Describe up to three (3) projects in which your company has implemented an enterprise-wide Registration, Scheduling, and Billing and Accounts Receivable application. Projects should have been implemented within the last ten (10) years. For each project, please describe:
 - a) Client Name and Industry, e.g., State Public Health Department, County Hospital, etc.
 - c) Name of the project, e.g., Electronic Health Record, Practice Management System, etc.
 - d) Brief description of the project
 - e) Size of the project in terms of: # users, # patients/customers, # patient records, # locations
 - f) Technology platform and architecture
 - g) Interfaces/interoperability with other application or organizations using standard protocol
 - h) Date implemented
 - i) The services and activities that your company performed for the project and the activities that the customer performed
 - j) Is the system still in use today? If yes, who is providing maintenance and support services?

Proposed Solution

- 5. Describe the solution you feel could meet the critical needs of the Tennessee Department of Health.

Resource Requirements

- 6. **Implementation:**
Describe the ideal and/or minimum number and type of project team members and roles that would be required to design, develop, implement, and deploy a Registration, Scheduling, Billing and Accounts Receivable solution. Please indicate whether the team member would ideally be a State employee, a contract employee of your company, or other contractor. Describe the recommended State resources needed to assist in implementation?
- 7. **Maintenance & Support:**
Describe the ideal and/or minimum number and type of project team members and roles that would be required to maintain and support a Registration, Scheduling, Billing and Accounts Receivable solution. Please indicate whether the team member would ideally be a State employee, a contract employee of your company, or other contractor. Describe the recommended State resources needed to assist in maintaining and supporting the system?

8. Contractor Resources: Describe the number, type, and specific skills and experience of the resources the State should require of Contractor staff with experience in the technology components required to implement and support a Registration, Scheduling, Billing and Accounts Receivable implementation. What are the constraints, if any, of finding and/or retaining these skills? What would you recommend to TDH regarding obtaining the required skill sets for its project?
Software
9. Interfacing/Interoperability: Describe the interfaces and interoperability you have implemented with and between Registration, Scheduling, Billing and Accounts Receivable solutions and other applications, such as legacy billing applications or third party billing systems.
10. Updates and Maintenance: Describe how you: plan and prepare for updates; ensure releases are current; and ensure that modifications required as a result of federal and state law changes are implemented in a timely manner. What communication protocols (e.g., Contractor to State, State to Local Health Office, Contractor to third-party vendor, etc.) would you recommend to the State regarding system update?
11. Technical Architecture: Describe what kind of architecture you would recommend for your solution? What are the pros/cons for the various types of architecture the State could use?
Reporting Solutions
12. Describe reporting solutions you have implemented to integrate and report aggregate data from a Registration, Scheduling, Billing and Accounts Receivable solution and external systems (e.g., legacy systems, State or Federal systems, etc.). Include the tools, software, etc. used to implement the reporting solution and types of State resources that would be needed.
Converting Application Data
13. Describe the typical strategy and approach your company has utilized to convert structured data from an existing application to a Registration, Scheduling, Billing and Accounts Receivable solution. What were the challenges with your approach? Successes?
Training
14. Describe the typical strategy and approach your company has provided for training user and technical staff to use and support a Registration, Scheduling, Billing and Accounts Receivable solution.
Security
15. Describe how your solution meets the security needs of the State of Tennessee as outlined in the State's Enterprise Information Security Policies https://www.tn.gov/assets/entities/finance/oir/attachments/Enterprise-Information-Security-Policies-ISO-27002-Public.pdf
Challenges / Risks

16. Based on your experience and your high-level understanding of the background of TDH's project, please list and briefly discuss the top five (5) challenges or risks you would advise the State to consider as it moves forward with the project, and suggested mitigation strategies.

COST INFORMATIONAL FORM

1. Describe what pricing units you typically utilize for similar services or goods (e.g., per hour, each, etc.).

2. Describe the typical price range for similar services or goods.

3. Based on the State's initiative and goals for this project, please provide an estimated cost that the State should expect to pay for: the EPI v2.0 pilot deployment; statewide deployment of the pilot solution; and costs for ongoing maintenance and support, including software modifications and enhancements for future releases.

ADDITIONAL CONSIDERATIONS

1. Please provide input on alternative approaches or additional things to consider that might benefit the State.

Term	Definition
Benefit package	This usually applies to employees and benefits they are offered by their employer.
Benefit plan	Covered benefits a member is entitled to through their insurance company.
CAC	Clinical Application Coordinator. CACs make configuration updates to vxVistA.
Charge	The amount the patient or insurance is assessed for services rendered.
Clinic	There may be multiple clinics in each region and/or health department. There may be a general clinic, primary care, TB clinic, family planning clinic, etc. in each health department. Clinics may or may not have a different cosite number.
CODB	Central Office Database. This is a database retained at the central office in Nashville which has merged data from the 13 regional offices.
Co-site	There is one main clinic in a county and if others are added to a county then the other facilities are referred to as co-sites.
CPRS	Computerized Patient Record System
EDI	Electronic Data Interchange – A standardized method format for exchanging data between different systems
Edison	State accounting system which services both A/R and A/P
EHR	Electronic Health Record. Systematic collection of electronic health information about individual patients or populations. It is a record in digital format that is capable of being shared across different health care settings.
EPI	Electronic Public Health Information – Title given to a long term project which will yield an EHR (Electronic Health Record) and a practice management system to replace the current system (PTBMIS)
Encounter	Face-to-face 1:1 interaction between a patient and a health department provider. Does not include Front Desk Services or non-face-to-face interactions such as telephone calls.
Fee	Each service has may have a fee or associated charge.
HEW	Health Enterprise Warehouse Data repository used to collect and report information from multiple systems.
HL7	Health Level 7 Standard of clinical messaging for EDI transactions which defines a standard protocol enabling differing systems to transmit transactional information and both systems can expect the content information in a standard format.
iNovah	Revenue management solution – online payment processor
MPI	Master Patient Index - An Index pointing to information contained at various systems in order to combine data for a single patient.
Program Code	Services provided by TDH are organized by funding source(s) and type of service offering into 'programs', such as the 'Immunizations program', 'TB program', 'Breast & Cervical Cancer Screening program', etc. When coding encounters, the individual services provided are tied to a program code, which is used for allocation of funds for clinics, regions, programs and subprograms.
PTBMIS	Patient Tracking and Billing Management System
Reference Lab	A reference lab is the lab that receives a specimen from another laboratory and that performs one or more tests on such specimen – (AEL, ARUP, and Quest).
RVU	Relative Value Units - Work unit of measure produced by an encounter used to distribute funding for some programs across sites/co-sites/regions. Relies on the Medicare Resource-Based Relative Value Scale developed by Medicare and approved by Congress in 1992 to support a Physician Fee Schedule. For each type of clinical service uses financial and labor distribution information.
TennIIS	Statewide Immunization registry developed by the TN Department of Health to be a comprehensive source of immunization records for Tennessee residents.
TNWIC	Tennessee women, infants, and children supplemental food and nutrition program