

Information Technology Capital Investment Program
Project Status Report

To: Information Technology Strategy and Investment Committee
John Vittner, Office of Policy and Management

From: Steve Mc Conaughy/Beth Frugalle

Email: Stephen.McConaughy@ct.gov

Agency: Department of Public Health

Project: Vital Records - Death Registry Module Integration Project

Project Manager: Beth Frugalle (State Vital Records Registrar)

Reporting Period: Project Inception through 06/30/2021

Total Funds Requested: \$1,760,715

Total Funds Allotted to Agency: \$1,760,715

Accumulative Total Capital Fund Expenditures to Date: \$1,659,387

Brief Project Description/Summary:

The Electronic Vital Records Registration System Module Integration Project will add three software modules to the EVRRS Birth/Core Registration System to complete the implementation of the comprehensive Vital Records Registration System at DPH. The modules to be added into the system are for Death, Fetal Death and Issuance (Point of Sale).

The Electronic Vital Records Registration System for Birth Registration (ConnVRS) is completed and in production. That system provides a web-based data collection and registration software application that is used by 29 hospitals and 169 towns for the recording and registration of all births in Connecticut and to allow issuance of Birth certificates from any Town Office and the State Vital Records Office.

This Vital Records Module Integration Project of the DEATH module will provide for the expansion of that system to include the collection and registration of all CT Deaths and Fetal Deaths into a unified database, and provide the capability for the State Vital Records Section to issue Death Certificates. The enhanced ConnVRS and CT-Vitals systems will also allow the State of CT to provide timely reporting of all CT birth, death and fetal death data to the National Center for Health Statistics (NCHS), which mandated the electronic data submission of this statistical data by January 2014.

This project will simplify and modernize the processes for the collection and registration of death and fetal deaths from hospitals, nursing homes, funeral homes, and town halls across the state of Connecticut. This application update with the new CT-VITALS module will result in replacement of the current paper based death registration process, and several outdated stand-alone computer systems that use various collection techniques, tracking processes and databases. It will be known as the CT-VITALS application.

Summary of Progress Achieved to Date:

8/9/2021 – The CT-Vitals Electronic Death Registry is operational. The EDRS Project Team continues its efforts to onboard all stakeholders to achieve statewide implementation for electronic filing of all deaths in the CT-Vitals EDRS. All Connecticut Licensed Funeral Directors/Funeral Homes are currently training and onboarding with an expected completion date of September 1, 2021. Outreach and communication continue with Connecticut licensed hospitals and nursing homes. Hospitals/healthcare systems are scheduled to onboard through the month of September and October. Town Clerk/Local Registrar training will coincide with the hospital system implementation. There has been delay in onboarding hospital and nursing homes, which has contributed to a change in the implementation strategy moving away from the county by county implementation. All funeral homes will be trained by September 2021, and hospital/hospital systems will onboard throughout the month of September and October 2021. Virtual training live training continues to be provided, as well as e-learning training modules for medical certifiers.

Helpdesk Support team has been established and in place for September 2021.

The EDRS Project Team is actively pursuing “interoperability” modernization activities with a bi-directional communication and data sharing between the EDRS and the OCME’s case management system using FHIR standard protocol messaging in Phase I. VPN connection has been established as of August 6, 2021. Bi-directional data exchange testing will be facilitated in testing environments August 2021-September 2021. Upon successful completion, the FHIR API will be implemented into production environment by October 2021. Phase 2 of “interoperability” activities is to include data feeds from hospital Electronic Health Records (EHR) to the EDRS to begin October 2022. Communication on phase 2 interoperability plans has been initiated with several Connecticut Hospital Healthcare systems. An EDRS Interoperability advisory group will be established.

The Fetal Death module procurement has been completed. The module development has been initiated, with an implementation to begin January 2022.

The Vital Records Office has submitted a Change Request to the Electronic Birth Registry system (EBRS) Vendor for EBRS system modifications to support the implementation of the Connecticut Parentage Act, effective January 2022.

Next Steps in the EDRS implementation:

1. Continue outreach and training of all EDRS stakeholders.
2. Validate and test the interoperability between the OCME Case Management system and EDRS. Upon successful completion of testing, implement the FHIR API into production environments.
3. Statewide rollout and use of EDRS planned to continue through October 2021.
4. Initiate data conversion – Move historical death data from DRegistry Access database to CT-Vitals.
5. Begin testing FHIR data exchange in test environment between OCME Case Management system and CT-Vitals. Upon successful completion, implement protocols in production environment.

Next steps in the Module Integration Project:

1. Finalize requirements and functionality for the Fetal module system. Continue with system development and initiate testing of the Fetal Death module.

Next Steps for Implementation of Connecticut Parentage Act.

1. Finalize the requirements for the EBRS modifications with vendor.
2. Initiate system testing upon completion of the updates by vendor.

1/30/2021 -

The DPH Vital Records Project Team continues to be on course with modernizing the death registration process with the implementation of the CT-Vitals EDRS (electronic death registry system) and the Core (point of sale) modules. The death registry has been in production since April 2020, with a successful pilot initiated in July 2020 and an expansion to the New London County in December 2020. The project experienced a minor delay in the New London County expansion as a result of system issues identified during pilot. The issues have been resolved with a new updated release of the software.

The project team continues to support training using a virtual training platform. The next phase of the project included an expansion to New London County stakeholder groups, with the training of 22 local registrar offices and 19 funeral directors and staff. The nursing home and healthcare facilities training is underway and is scheduled for completion in February 2021.

The EDRS project team phase approach by county will continue with a monthly phased approach by county until statewide implementation is achieved.

The EDRS project team continues to work with the OCME and their case management system vendor, Quincy Technologies, to establish interoperability, with bi-directional communication, between the EDRS and the OCME case management system. QuincyTech has been able to make

necessary adjustments to meet the FHIR technical requirements. The EDRS to OCME interoperability has reached the final phase of development. New Servers are being installed at OCME to better handle the interactive functionality. Test will begin upon completion of the server installation and VPN access.

The Module Integration Project including the procurement of the Fetal Death Module has been completed. The Fetal Death Statement of Work has been finalized. The development of the installation plan is in process and will continue through July 2021.

Next Steps in the EDRS implementation:

1. Continue outreach and training of EDRS stakeholders in preparation for the phased County by County roll out/implementation.
2. Validate and test the interoperability between the OCME Case Management system and EDRS.
3. Statewide rollout and use of EDRS planned to continue through September 2021.
4. Initiate data conversion – Move historical death data from DRegistry Access database to CT-Vitals.

Next steps in the Module Integration Project:

1. Schedule JAD sessions with VitaChek to review requirements and functionality for the Fetal module system. Initiate GAP analysis phase.

8/6/2020 -

The DPH Vital Records Project Team continues to be on course with modernizing the death registration process with the implementation of the CT-Vitals EDRS (electronic death registry system) and the Core (point of sale) modules. The team's initial plan for Pilot deployment scheduled for April 1, 2020 with the City of New London stakeholders was delayed due to the pandemic. However, the team successfully activated the Production EDRS system internally in April to improve the timeliness in the collection and reporting of all COVID related deaths.

Due to the pandemic's social distancing requirements, the training strategy of in-person training had to be revised to include Web-based and E-learning training. The team was able to retool training materials and successfully complete the training for the City of New London pilot groups. This revised process resulted in a successful Pilot during the month of July 2020. The New London stakeholder group included the New London City Clerk, Lawrence & Memorial Hospital, 6 New London Funeral Homes and 2 New London Nursing homes, as well as the Office of the Chief Medical Examiner (OCME).

The result of the pilot led to a strategic phased in approach with a Phase II expansion to all stakeholders in the county of New London, beginning September 2020. Phase II stakeholders will include an additional 19 funeral homes, 18 nursing homes, 22 town clerk offices and 1 hospital. The EDRS project team will continue a monthly phased approach by county until statewide implementation is achieved.

The EDRS project team continues to work with the OCME and their case management system vendor, Quincy Technologies, to establish interoperability, with bi-directional communication, between the EDRS and the OCME case management system. VitalChek, the EDRS vendor, has provided the technical implementation requirements for data exchange and is establishing a test environment for use in testing the data exchange. A recent change in the technical requirements for the data exchange from XML message format to FHIR standards have contributed to a delay in the availability of the exchange for the pilot program. The interoperability functionality is intended to be available and initiated during Phase II of the EDRS Pilot.

Helpdesk resources have been secured to support the system during the expanded pilot and full implementation roll out.

Next Steps in the EDRS implementation:

1. Establish Helpdesk support team in preparation for the pilot and go live implementation.
2. Expand the EDRS Pilot Program to include roll out to the New London County Stakeholders as of September 2020.
3. Continue outreach and training of EDRS stakeholders in preparation for roll out/implementation by county of the Electronic Death Registry.
4. Validate and test the interoperability between the OCME Case Management system and EDRS
5. Statewide rollout and use of EDRS planned to begin January 2021.

Next steps in the Module Integration Project:

1. Submit a requisition to encumber \$175,000 of the remaining capital IT funds for the purchase and implementation of the VitalChek DAVE (Database application for Vital Events) Fetal Death Module .
2. Finalize the Statement of Work with VitalChek for the purchase and installation of the Fetal Death Module by September 2020.
4. Develop implementation plan for module installation to begin in January 2021.

2/28/2020 -

The DPH Vital Records continues to be on course with modernizing the death registration process with the planned implementation of the EDRS (electronic death registry system) with a Go-Live roll out to begin July 2020. The EDRS will modernize and replace the current paper death certificate collection and reporting processes. The initial build of the application has been deployed by VitalChek and DPH has installed into both staging and production environments. The EDRS project team has been actively performing user acceptance testing on the 19.1.7.6 release build provided by the vendor. The vendor has been engaged in reviewing and resolving any system issues identified through testing.

The EDRS project team has initiated outreach with communication to all future system Stakeholder user groups and data providers on the intended implementation and roll out of the EDRS system. The team has engaged multiple stakeholders groups within the city of New London for an EDRS Pilot program, to be begin April 1, 2020. The New London stakeholder group includes the New London City Clerk, Lawrence & Memorial Hospital, 6 New London Funeral Homes and 2 New London Nursing homes, as well as the Office of the Chief Medical Examiner (OCME). The EDRS Project team has recently been expanded to include a new Project Manager and two Trainers, who started on with DPH in December 2019 and February 2020, respectively. The EDRS trainers have initiated training with the New London stakeholders in February and will continue through March in preparing the New London users and the OCME office to begin piloting the EDRS as of April 1, 2020.

The EDRS project team continues to work with the Office of the Chief Medical Examiner and their case management system vendor, Quincy Technologies, to establish interoperability, with bi-directional communication, between the EDRS and the OCME case management system. VitalChek, the EDRS vendor, has provided the technical implementation requirements for data exchange and is establishing a test environment for using in testing the data exchange. A recent change in the technical requirements for the data exchange from XML message format to FHIR standards have contributed to a delay in the availability of the exchange for the April pilot program. The interoperability functionality is intended to be available and initiated with the July 2020 EDRS implementation and roll out.

The EDRS project team has initiated a request for Statement of Work for temporary Helpdesk resources to support the system during the pilot and implementation roll out.

Next Steps in the EDRS implementation:

1. Establish Helpdesk support team in preparation for the pilot and go live implementation.
2. Initiate the EDRS Pilot Program as of April 1, 2020.
3. Continue outreach to and training of EDRS stakeholders in preparation for the July 2020 implementation of Electronic Death Registry.
4. Validate and test the interoperability between the OCME Case Management system and EDRS
5. Go-Live July 2020.

Next steps in the Module Integration Project:

1. Purchase and implement the VitalChek DAVE (Database application for Vital Events) Fetal Death Module.
 - a. Obtain a Statement of Work from VitalChek for the purchase and install of the Fetal Death Module by June 2020.
 - b. Purchase software by August 2020
 - c. Develop implementation plan for installation to begin in January 2021.

1/30/2020 - The configuration and infrastructure buildup for PRD and STG environment has been completed. A real time data interface between the State Medical Examiner's office and the Death registry has been agreed to. This enhancement will reduce the double entry currently occurring. Initial rollout to the identified Pilot group is in progress and complete adaptation is anticipated by 7/1/2020.

Project close out documentation has been submitted, as this project has moved from a IT development initiative to an ongoing operational state for completing the onboarding in the domain of the DPH Vital Records office.

6/14/2019 – The DPH Vital Records office is on course with the development and customization of the COTS CT-VITALS death registry system, with software deployment anticipated between the dates, July 15th – 26th, 2019. The Vitals Project Team continues to review the death registry workflows and customize the COTS system based on statutory and regulatory requirements and feedback from major stakeholders. Upon deployment of software, the Vitals Project team will begin testing of EDRS functionality to validate all required workflows.

The EDRS project will also include bi-directional communication (interoperability) with the Office of Chief Medical Examiners (OCME) case management system. The interoperability will provide for the exchange of death and cremation information and improved timeliness in reporting of all deaths. DPH Vital Records is working with the OCME and their case management system vendor to finalize the Statement of Work for the interoperable data exchange by 7/15/2019. Weekly project meetings continue with the vendors and OCME.

Next steps include the completion of the training plan requirements. The Vitals Project Team will be customizing vendor provided training videos and developing training schedules

Issues and Risks:

COVID pandemic delayed the initial pilot launch and required a change in training strategy.

Stakeholder engagement could lead to delays in project schedule.

Next Steps & Project Milestones:**Next Steps in the EDRS implementation:****Next Steps in the EDRS implementation:**

1. Continue outreach and training of all EDRS stakeholders.
2. Validate and test the interoperability between the OCME Case Management system and EDRS. Upon successful completion of testing, implement the FHIR API into production environments.
3. Statewide rollout and use of EDRS planned to continue through October 2021.
4. Initiate data conversion – Move historical death data from DRegistry Access database to CT-Vitals.
5. Begin testing FHIR data exchange in test environment between OCME Case Management system and CT-Vitals. Upon successful completion, implement protocols in production environment.

Next steps in the Module Integration Project:

1. Finalize requirements and functionality for the Fetal module system. Continue with system development and initiate testing of the Fetal Death module GAP analysis phase.

Next Steps for Implementation of Connecticut Parentage Act.

1. Finalize the requirements for the EBRIS modifications with vendor.

2. Initiate system testing upon completion of the updates by vendor.