



POLST eRegistry Pilot

Report to the California Legislature

Emergency Medical Services Authority
California Health and Human Services Agency

February 2018





**HOWARD BACKER, MD, MPH, FACEP
DIRECTOR**

**DANIEL R. SMILEY
CHIEF DEPUTY DIRECTOR**

Contents

Overview 1

Project Description 2

Budget Plan..... 2

Partners/Audience/Stakeholders Engagement and Identification Plan 2

Pilot Site and Vendor Selection Plan..... 3

Evaluation Plan 4

POLST eRegistry Operation..... 4

Contra Costa County..... 4

San Diego 5

High Level Work Plan and Timeline 5

Conclusion 5

Overview

Decisions on end of life care for oneself and for loved ones are some of the most difficult for anyone to make. Physician Orders for Life-Sustaining Treatment (POLST) is a process that encourages open and thoughtful discussion between providers and their patients regarding end of life care. In California, the POLST form allows a patient to clearly state what level of medical treatment is desired toward the end of life. POLST differs from advance directives because the form is signed by both the patient and the medical provider and represents a medical order. Current law¹ requires that POLST be honored in all care settings and gives immunity to medical providers who honor the document in good faith. The law also grants the Emergency Medical Services Authority (EMSA) oversight of this form, which is approved through the Commission on EMS.

Today, most POLST information is stored in paper format using a standardized form approved by EMSA. This form must be kept with the patient in order for it to be easily accessed and implemented. However, during emergencies, there are times when the paper form may not be readily available, hindering care and/or resulting in care that is against the wishes of the patient. In October 2015, Governor Brown signed Senate Bill 19 (Wolk, Chapter 504, Statutes of 2015) authorizing the California POLST electronic registry (eRegistry) pilot project under the authority of EMSA.

The POLST eRegistry pilot will provide two electronic databases that will store an electronic representation of the POLST forms, and will allow it to be accessible by health providers through web-based portals, health information exchanges (HIEs), electronic medical records (EMRs), or through a 24/7 call center. The POLST eRegistry pilot will allow emergency personnel to access POLST forms in a timely, secure manner, improving compliance with patient wishes and reducing unnecessary medical treatments. The pilot study has identified select locations to test POLST form submission, storage, and accessibility of the form through electronic registries.

The Probate Code (Section 4788(b)(6)(A)) states that “prior to implementation of the POLST eRegistry Pilot, the authority shall submit a detailed plan to the Legislature that explains how the POLST eRegistry Pilot will operate”. This document is being submitted in compliance with this requirement and to inform the Legislature of EMSA’s plan to implement the POLST eRegistry pilot, as required by the California POLST eRegistry Pilot Act.

It is the goal of this pilot study to gather real-world information through the pilot on the electronic input, storage, and retrieval of POLST forms that would inform a potential statewide electronic access to POLST across care settings to ensure patient wishes are met. In order to evaluate whether the pilot study reaches this goal, independent evaluators will be retained to review the process, identify deficiencies and strengths, and provide an analyses of the overall success of the study.

¹ SB 3000 (Wolk, Chapter 266, Statutes of 2008)

Project Description

The POLST eRegistry pilot provides a cloud-based platform with a secure web portal for electronic submission, storage, and retrieval of POLST data. This project is designed in three phases:

- Phase One: Create guidelines and build the registry to allow for connectivity with pilot sites
- Phase Two: Implement and evaluate the registry at two pilot locations
- Phase Three: Maintenance and planning phase to broaden electronic access to POLST forms statewide

Budget Plan

Under SB 19 non-state funds were required to implement the eRegistry pilot study. EMSA worked with the California Health Care Foundation (CHCF) to evaluate the feasibility of the project and their interest in funding it. On June 23, 2016, the CHCF Board of Directors approved up to \$3 million to fund the development and implementation of the eRegistry pilot project. This funding will be used to pay for the first two of the three phases of the pilot study. Funding for phase three may be sought through the CHCF Board and/or other funding sources upon successful completion of the first two phases.

Partners/Audience/Stakeholders Engagement and Identification Plan

CHCF and the Coalition for Compassionate Care of California (the Coalition) have partnered with EMSA to assist with the start-up and operation of the eRegistry pilot project.

Both the CHCF and the Coalition are organizations that have a longstanding interest in the promotion of the POLST form. CHCF has worked to promote adoption of the POLST form in California since 2007; and the Coalition has been a key grantee for efforts to help California become one of only three states (with OR and WV) to achieve a “mature status” designation from the National POLST Paradigm Task Force for meeting strict national guidelines on POLST adoption.

Stakeholders include representatives from the following groups:

- The POLST Task Force of the Coalition
- Major health systems based in pilot sites
- Potential patients and users of the POLST form
- Local EMS system(s) and their personnel

These stakeholders worked with EMSA to create guidelines for the implementation of the eRegistry. As required by SB 19, the guidelines included information on:

- Submission, modification, and withdrawal of POLST information to the eRegistry

- Procedures for verifying the identity of an authorized user
- Procedures for ensuring accuracy of information
- Notification of POLST submissions
- Requirements for POLST information to be accessible within the eRegistry

Stakeholders will continue to contribute throughout the pilot study to eliminate barriers, create policies and procedures and ensure the forward movement of the study.

Pilot Site and Vendor Selection Plan

EMSA worked in conjunction with CHCF and the Coalition to:

- Identify key pilot site requirements
- Identify key software vendor requirements
- Create and release requests for proposals (RFPs)
- Evaluate proposals
- Select and approve vendors and pilot sites

The EMS Authority, in collaboration with CHCF, released the eRegistry pilot study RFPs in June of 2016. Pilot sites and vendors were given one month to submit responses for the RFPs. Three responses were received and reviewed for adequate compliance with identified requirements and the sites' abilities to implement the project.

Two pilot sites were selected to ensure the data collected properly represents the diverse medical system in the State. The two sites will guarantee an evaluation of both a site with health information exchange (HIE) capabilities and one without. These sites include:

- City of San Diego, California, led by the San Diego Health Connect (SDHC). SDHC is a health information exchange organization that has operated in San Diego since 2010.
- Contra Costa County, led by the Alameda Contra Costa Medical Association (ACCMA). The ACCMA site, is located in area that currently does not have an HIE in place.

The software vendors contracts have been awarded to Vynca and Stella Technology (Stella). A backup call center has also been identified to provide 24/7 access to the registry if provider connectivity not be available when needed. The call center contract was awarded to the California Poison Control System, managed by the University of California, San Francisco. As pilot site leads, SDHC and ACCMA will work with Vynca and Stella, respectively, to establish local input and retrieval connectivity to their individual POLST eRegistry.

Vynca is a software company with roots in the Stanford Biodesign Program and has experience working on technology integration with the Oregon POLST Registry (OPR), linking the OPR to the electronic health record. Stella Technology, Inc. is a health information technology services and product development company formed through the collaboration of some of the most recognized names in the HIE industry.

The California Poison Control System (CPCS) provides immediate, free expert treatment advice and referral over the telephone in case of exposure to poisonous or toxic substances. This system will allow providers 24-hour access to the registry for emergency responders that are unable to establish connectivity to the registry during a call.

Evaluation Plan

Oregon Health & Science University (OHSU) and the Public Health Institute (PHI) have partnered to implement a distributed, wrap-around evaluation plan throughout the development and implementation of the California POLST eRegistry Pilot. The evaluators are working with the project partners (EMSA, CHCF, the Coalition, technology vendors, and the providers in the pilot sites through SDHC and ACCMA) to evaluate the data collection strategy, utilization, quality, and impact measures. The evaluator will work with the technology vendors and the providers in the pilot sites to collect Phase One and Two data, analyze data and suggest mid-course pilot site corrections.

By the end of the pilot period, the independent evaluation will:

- Determine California POLST eRegistry operations and functionality
- Assess utilization, quality and impact measures
- Assess user experience
- Contribute to continuous quality improvement of registry implementation
- Develop lessons learned, best practices, and implications for the business case

POLST eRegistry Operation

CONTRA COSTA COUNTY

In the Contra Costa County pilot site, POLST forms will be uploaded to an electronic database, or eRegistry, from participating health systems (including hospitals), skilled nursing facilities, hospices, and community clinics and physicians. The forms will be uploaded by those facilities' medical or office staff, if the facility is connected through its electronic health record (EHR) software. Otherwise, medical doctors, nurse practitioners, and physician assistants or their staff designees will upload the POLST forms through the online eRegistry web portal upload service.

Existing POLST forms from participants will be back loaded into the eRegistry, while new POLST forms will be uploaded to the database on an ongoing basis. As forms are revised, the updated POLST form will be submitted for a patient, and the existing POLST form will be archived within the registry, ensuring that only one active POLST form is available at any time. POLST forms can also be removed by users regardless of the connection method (EHR software or web portal). The primary function of web portal users will be to upload POLST forms for the purpose of populating the eRegistry and improving data retrieval among those utilizing an EHR connection.

Vynca’s ePOLST registry platform provides a HIPAA-compliant means to securely store and transmit the data in the eRegistry system. All data is encrypted both in transit and in at rest. Ownership, protection controls, and the return of data submitted to the eRegistry are governed by a business associate agreement with the participant, which states that the data is owned by the submitting party.

SAN DIEGO

In the San Diego pilot site, POLST forms will be uploaded to the electronic database, or eRegistry, from participating members of the San Diego HIE, San Diego Health Connect (SDHC) (including hospitals, clinics, medical groups, physician practices, skilled nursing facilities and hospice sites). The forms will be uploaded by those sites designated personnel who have access to the SDHC interface.

Existing POLST forms from participants will be backloaded into the eRegistry and new POLST forms will be uploaded on an ongoing basis. New forms will be entered into the system and will be considered to have priority over any older forms. Processes for removal of old forms will be vetted through the pilot study.

The POLST forms will be stored in a stand-alone cloud hosted as part of the SDHC infrastructure and maintained by the vendor, Stella.

High Level Work Plan and Timeline

Deliverable	Date/Timeline
Complete contracting, select evaluator and begin Phase One of project development	September 1, 2016
Outline and submit implementation guidelines to EMS Commission for approval	March 2017
Finalize input, processing, and retrieval technology modules for POLST eRegistry	December 31, 2017
Go-live with POLST form uploads	October 31, 2017
Registry accessible by providers when sufficient number of forms have been entered into the registry	February 2018
Collect and analyze data; suggest mid-course corrections	continuous
Quarterly reports from pilot sites; Quarterly pilot partners and project team meetings	Ongoing, December 2017 – December 2018
Demonstrate the value of the POLST eRegistry and develop business case	continuous
Complete 12 months of data collection	December 2018
Review of Phase Two results and Determine if Phase Three is warranted	December 2018

Conclusion

The POLST eRegistry pilot project is a complex undertaking that includes a partnership of public, private, and non-profit entities at the state and local levels working with a

broad spectrum of health care entities to advance the sharing of certain electronic health information to improve compliance with end of life wishes. The pilot is being designed within an environment of limited health information exchange between various types of health care facilities at different stages of developing electronic health records. The securely stored patient information must be accurately and rapidly available to emergency healthcare providers. The State lead agency is the Emergency Medical Services Authority, with primary support from the Coalition for Compassionate Care of California and the California Health Care Foundation, which is also the funder for the pilot project. All partners are committed to testing a functional design that might be feasible for later expansion to larger areas of California and eventually, to the entire state.

ePOLST Registry

Report to the California Legislature

Edmund G. Brown Jr.
Governor
State of California

Diana S. Dooley
Secretary
Health and Human Services Agency

Howard Backer, MD, MPH, FACEP
Director
Emergency Medical Services Authority

February 2018

www.emsa.ca.gov