OREGON AT A GLANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2013)</td>
<td>3.93 million</td>
</tr>
<tr>
<td>Number of deaths (2013)</td>
<td>33,931</td>
</tr>
<tr>
<td>Number of hospitals</td>
<td>58</td>
</tr>
<tr>
<td>Number of nursing homes</td>
<td>136*</td>
</tr>
<tr>
<td>Emergency Medical Services (EMS) coordination</td>
<td>Single statewide trauma system</td>
</tr>
</tbody>
</table>


ESTABLISHING THE REGISTRY

Legislation
www.orpolstregistry.org

The Oregon Legislative Assembly House Bill 2009 created the Registry within the Oregon Health Authority. The legislation requires signing health care professionals or their designee to submit a patient’s POLST form to the Registry, unless the patient decides not to have their form in the Registry. (There is no requirement for any patient to fill out a POLST form — POLST participation is always voluntary.)

Pilot testing

The Registry was pilot tested in Clackamas County for six months. The pilot served to develop the infrastructure for POLST form receipt and entry in the Registry and to establish the hotline for urgent form requests.

The pilot project was funded by several private philanthropies, the largest of which was The Greenwall Foundation. The Oregon POLST Task Force oversaw the pilot. In addition, extensive educational outreach was provided pro bono by the Center for Ethics in Health Care and nearly 1,000 health care professionals statewide.

Evolution of the Oregon POLST Program

1990
EMS and ethics leaders are concerned that individuals’ treatment preferences are not being honored because of lack of documentation of actionable medical orders.
A task force forms that eventually becomes the Oregon POLST Task Force.

1995
POLST form is released statewide, accompanied by education and communications efforts.

1999
Oregon Medical Board redefines the EMT/first responder scope of practice to provide protective immunity.

2000
Oregon’s POLST Registry launches in December and becomes the first statewide POLST Registry in the country.

2005

2007
Oregon Medical Board changes rules to clarify that POLST orders must be followed in all Oregon health care facilities, even if the POLST orders are signed by someone not on that facility’s medical staff, until or unless health care professionals receive new information to the contrary.
Physician assistants are added as signers.

2009
The Registry is pilot tested in one county.

www.orpolstregistry.org
REGISTRY FORMS

POLST only, or other forms
POLST forms only

Pros/cons of this model
Emergency responders need written physician orders as they operate under protocol; advance directives cannot be followed in the field because they are not medical orders.

FINANCING

Cost to run the Registry
Pilot program and start-up costs (excludes education costs): $250,000
Annual operating budget: $370,000 (year 1) to $380,000 (year 6)
Research costs vary by project.

Source of funding
State general fund (except research and education/outreach costs)

ADMINISTRATION

Administrative agencies
The Oregon Health Authority contracts with the Oregon Health & Science University (OHSU), Department of Emergency Medicine for Registry operations. The department subcontracts with the 24/7 Trauma Transfer Center, also located at OHSU, to serve as the Registry’s emergency communications center for urgent hotline calls.

Other groups involved in oversight or other roles
The POLST Registry Advisory Committee is convened by the Oregon Health Authority. The Registry is a public/private partnership. The content of the POLST form is controlled by the Oregon POLST Task Force which provides ongoing education and outreach regarding POLST and the Registry. Administrative support of the Oregon POLST program and the expenses of education and research are borne by the Center for Ethics in Health Care at OHSU through private philanthropy and volunteer efforts of health care professionals statewide.

Voluntary elements
Completion of the POLST form is voluntary. An individual may also complete the form and check the opt-out box to choose not to have it submitted to the Registry.

Mandatory elements
The signing health care professional, or designee, is mandated to submit the form to the Registry unless the patient chooses not to have it submitted. For a form to be entered into the Registry, it must have at least one order recorded, as well as the patient’s first and last name, date of birth, and an MD, DO, NP, or PA signature and date of signature.

Registry staff
- 1.0 FTE project coordinator who manages day-to-day operations, including staff supervision and daily work planning for the Registry team.
- 3.5 FTE Registry specialists who process all forms received, including validation, data entry, activation, and resolution of “not Registry ready” forms. The team also responds to nonurgent requests for POLST forms and processes registrant mailings.
- 0.5 FTE project liaison who works with state government partners, the POLST Registry Advisory Committee, the Oregon POLST Task Force, and the call center, and provides Registry outreach and education for EMS.
- 0.25 FTE senior management for budget development and oversight, strategic planning, and reporting.
Oregon POLST Registry Fact Sheet

OPERATIONAL

Deaths with POLST forms
During 2010 and 2011, nearly 18,000 people who died in Oregon had POLST forms in the Registry: 31% of deaths.

Wishes honored
Using the data described above, researchers found a strong association between scope of treatment orders on Oregon POLST forms and patient location of death.

<table>
<thead>
<tr>
<th>Scope of Treatment</th>
<th>Percentage Dying in Hospital</th>
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</thead>
<tbody>
<tr>
<td>Full Treatment</td>
<td>44%</td>
</tr>
<tr>
<td>No POLST in Registry</td>
<td>34%</td>
</tr>
<tr>
<td>Limited Treatment</td>
<td>22%</td>
</tr>
<tr>
<td>Comfort Measures Only</td>
<td>6%</td>
</tr>
</tbody>
</table>

PERCENTAGE DYING IN HOSPITAL


Revisions and form reconciliation
Approximately 15% of forms received each month are updated POLST forms for existing registrants. A Registry search function is required to provide information to EMS in the field. An algorithm was developed to weight information available from emergency health care professionals (e.g., name, date of birth, address, Registry ID). When an updated form is received, the registrant’s earlier form is archived and replaced with the newer form.

Missing information
All forms must have an MD, DO, NP, or PA signature to be entered into the Registry. Registry staff members confirm that the signer’s license is active. Forms without signatures, orders, the patient’s first or last name, the patient’s date of birth, or date of signature are considered “not Registry ready,” and are marked for follow up. Approximately 15% of forms received are not Registry ready, and of those, the Registry team is able to resolve 40% when the sender of the form is known, resulting in a form that can be entered. With implementation of ePOLST, the Registry anticipates fewer forms that are not Registry ready.

Registration confirmation
After entering their first POLST form into the Registry, registrants are mailed a confirmation packet, which includes a magnet (see right) and three stickers, all with their Registry ID number and name. When the Registry receives an updated form, it sends the registrant a letter, which summarizes the registrant’s updated POLST information. The registrant ID number stays the same. The Registry mails, on average, over 32,000 letters each year.

Registry Form Status through November 30, 2014

Active 59%
Archived* 41%

*Match to death certificate data.
Source: Communication with staff members of the Oregon POLST Registry, www.orpolstregistry.org.

Oregon POLST Registry
OR000000
POLST Patient
confirmation magnet
**POLST Registry Hotline Functionality for Urgent Calls**, May 15, 2009 to November 30, 2014

**HOTLINE CALLERS, n=4,559**

<table>
<thead>
<tr>
<th>Emergency Department</th>
<th>Hospital Acute Care</th>
<th>EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td>21%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Nonurgent calls are responded to by the business office during regular working hours. The Registry provides hospitals, clinics, long-term care facilities, hospices, and other health care professionals who submit forms to the Registry with registered POLST forms for their patients or residents. Bar chart on the right compares the nonurgent business line calls with these urgent calls.

†While all calls are now classified, this was not standardized at outset.

‡Calls with no match mean the patient in question did not have a POLST form, or did not have a form in the Registry, or that there was too little information to yield a match.


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**TECHNOLOGY**

**Source code**
The Registry is a SQL-server database with a .NET web-based front-end.

**Customization**
The program search function for the Oregon POLST Registry was custom built to serve EMS in the field. A subcontract with the developer is maintained for ongoing updates and upgrades.

**Pros/Cons**
The search and match functionality allows health care professionals to quickly locate POLST orders for people in emergency situations when limited patient information is available (for example, the patient’s medical record number is not available).

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**Requests for Information, Urgent vs. Nonurgent**
Cumulative through November 30, 2014

Authors
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Form Without Errors
1. Scanned
2. Data entered
3. “Pending” additional review and not eligible for searches
4. Reviewed and confirmed
5. “Activated” and eligible for searches
6. Confirmation packet mailed to the patient

Form With Errors
1. Follow-up with sender to retrieve appropriate information
2. Recorded in database of forms with completion errors (protected health and other personal information is removed)
3. New form follows cycle from the top

Source: Communication with Oregon POLST Registry staff.