

Integration of Infection Management in Physician Orders for Life-Sustaining Treatments (POLST)

Aluem Tark, FNP-BC, RN, CHPN¹, Mansi Agarwal, PhD, MPH¹, Patricia W. Stone, PhD, RN, FAAN¹

¹Columbia University School of Nursing, Center for Health Policy, New York, NY  COLUMBIA UNIVERSITY
School of Nursing

Background

- Physician Orders for Life-Sustaining Treatment (POLST) is an Advance Care Planning (ACP) tool, which aims to facilitate End-of-Life (EoL) care discussions
- Care wishes documented on POLST form become set of actionable medical orders
- Infections are common occurrences at EoL and integration of infection management in ACP is important

Aims

- Examine variations in POLST programs
- A)** Determine if preference for antibiotic use was captured on POLST form; and **B)** If antibiotic preference was captured, identify how frequently, and in what sections
- Examine the association between maturity status and the presence of antibiotic use option on POLST forms

Methods

- An environmental scan was conducted using the national POLST website (www.polst.org), and the Department of Health websites of the 50 U.S. states and the District of Columbia
- Data collection:** A standardized data collection tool was developed to identify the following
 - Presence of POLST programs and maturity status (i.e. non-conforming, developing, endorsed, mature)
 - Presence of antibiotic use preference option on a POLST form (i.e., yes / no)
 - If antibiotic use preference option is present, we captured
 - frequency of antibiotic use preference assessment (min:0 to max: 4times); and
 - Location and the level of medical intervention (i.e. Comfort care, Limited care, Full-treatment care or under a separate section)

Methods (cont.)

- Double data collection for a 20% of random sample by a second researcher to ensure accuracy of data
- Descriptive statistics used to examine variation in POLST programs
- Chi-square tests used to examine association between maturity status and presence of an antibiotic use assessment

Figure 1. Example of Medical Interventions on POLST form

B Check One

MEDICAL INTERVENTIONS: *If patient has pulse and is breathing.*

☐ **Comfort Measures Only.** Provide treatments to relieve pain and suffering through the use of any medication by any route, positioning, wound care and other measures. Use oxygen, suction and manual treatment of airway obstruction as needed for comfort. *Patient prefers no transfer to hospital for life-sustaining treatments. Transfer if comfort needs cannot be met in current location.*
Treatment Plan: Provide treatments for comfort through symptom management.

☐ **Limited Treatment.** In addition to care described in Comfort Measures Only, use medical treatment, antibiotics, IV fluids and cardiac monitor as indicated. No intubation, advanced airway interventions, or mechanical ventilation. May consider less invasive airway support (e.g. CPAP, BiPAP). *Transfer to hospital if indicated. Generally avoid the intensive care unit.*
Treatment Plan: Provide basic medical treatments.

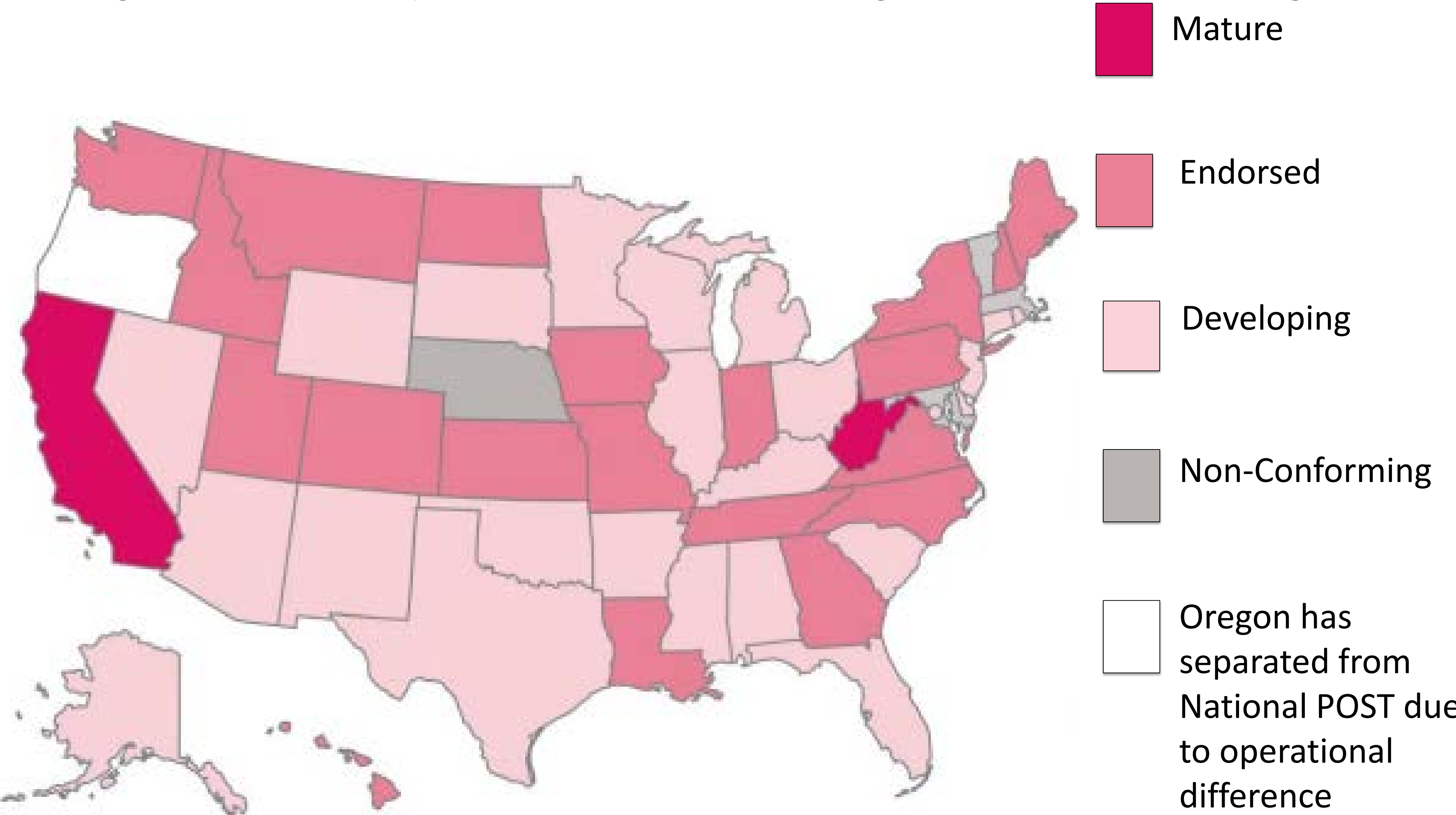
☐ **Full Treatment.** In addition to care described in Comfort Measures Only and Limited Treatment, use intubation, advanced airway interventions, and mechanical ventilation as indicated. *Transfer to hospital and/or intensive care unit if indicated.*
Treatment Plan: All treatments including breathing machine.

Additional Orders: _____

Results

- Majority (92%) of U.S. regions were actively participating in POLST program

Figure 2. Maturity status of POLST program across U.S. regions



- Of 45 POLST forms available, 32 POLST forms (71.1%) captured patient's preference for antibiotic use
- There was no association between POLST maturity status and the assessment antibiotic use option presented (N=45, $X^2=4.2163$, $p=0.37$)

Results (cont.)

Table 1. Frequency of antibiotic use option on POLST forms

	N (%)
Not mentioned	13 (28.9%)
Mentioned once	
Comfort measures	13 (28.9%)
Full treatment	15 (33.3%)
Mentioned twice	
Comfort + Limited	3 (6.7%)
Limited + Separate	1 (2.2%)
Total	45 (100%)

Discussion

- POLST program continues to be widely implemented across the nation, however, there are variations in maturity status
- Although integration of infection management at EoL is an important aspect of ACP, only a few U.S. regions had a separate section for documentation of antibiotics preference at EoL
- Future research is needed to examine regional factors associated with assessment of care preference and actual use of antibiotic at EoL

Conclusion

- Although POLST programs are gaining increased attention as a preferred ACP tool, the usage of the tool in practice to document patient preference for antibiotic use at EoL varied greatly among U.S. regions

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