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POLST: An improvement over traditional advance directives

ABSTRACT

Physician Orders for Life-Sustaining Treatment (POLST) is a process that translates a patient's goals for care at the end of life into medical orders that follow the patient across care settings. POLST overcomes the limitations of traditional advance directives. It enables physicians and other health care professionals, through a conversation with a patient or surrogate, to assess and convey the wishes of patients with serious life-limiting illness who may have a life expectancy of less than 1 year, or of anyone of advanced age interested in defining his or her wishes for end-of-life care.

KEY POINTS

Failures and opportunities for improvement in current advance care planning processes highlight the need for change.

Differences exist between traditional advance directives and actionable medical orders.

Advance care planning discussions can be initiated by physicians as a wellness initiative for everyone 18 years of age and older and can help patients and families understand advance care planning.

POLST is outcome-neutral and may be used either to limit medical interventions or to clarify a request for any or all medically indicated treatments.

Shared, informed medical decision-making is an essential element of the POLST process.

An 89-year-old woman with advanced dementia is living in a nursing home and is fully dependent in all aspects of personal care, including feeding. She has a health care proxy and a living will.

Her husband is her health care agent and has established that the primary goal of her care should be to keep her comfortable. He has repeatedly discussed this goal with her attending physician and the nursing-home staff and has reiterated that when his wife had capacity, she wanted "no heroics," "no feeding tube," and no life-sustaining treatment that would prolong her dying. He has requested that she not be transferred to the hospital and that she receive all further care at the nursing home. These preferences are consistent with her living will.

One evening, she becomes somnolent and febrile, with rapid breathing. The physician covering for the attending physician does not know the patient, cannot reach her husband, and sends her to the hospital, where she is admitted with aspiration pneumonia.

Her level of alertness improves with hydration. However, the hospital nurses have a difficult time feeding her. She does not seem to want to eat, "pockets" food in her cheeks, is slow to swallow, and sometimes coughs during feeding. This is nothing new—at the nursing home, her feeding pattern had been the same for nearly 6 months. During this time she always had a cough; fevers came and went. She has slowly lost weight; she now weighs 100 lb (45 kg), down 30 lb (14 kg) in 3 years.

With treatment, her respiratory distress and fever resolve. The physician orders a swallowing evaluation by a speech therapist, who determines that she needs a feeding tube. After that, a meeting is scheduled with her husband

TABLE 1**Differences between POLST and advance directives**

CHARACTERISTICS	POLST	ADVANCE DIRECTIVES
Population	For the seriously ill	All adults
Time frame	Current care	Future care
Who completes the form	Health care professionals	Patients
Resulting form	Medical orders (POLST)	Advance directive
Health care agent or surrogate role	Can engage in discussion if patient lacks capacity	Cannot complete
Portability	Provider responsibility	Patient/family responsibility
Periodic review	Provider responsibility	Patient/family responsibility

POLST = Physician Orders for Life-Sustaining Treatment

and physician to discuss the speech therapist's assessment. The patient's husband emphatically refuses the feeding tube and is upset that she was transferred to the hospital against his expressed wishes.

Why did this happen?

■ TRADITIONAL ADVANCE DIRECTIVES ARE OFTEN NOT ENOUGH

Even when patients fill out advance directives in accordance with state law, their preferences for care at the end of life are not consistently followed.

Problems with living wills

Living wills state patients' wishes about medical care in the event that they develop an irreversible condition that prevents them from making their own medical decisions. The living will becomes effective if they become terminally ill, permanently unconscious, or minimally conscious due to brain damage and will never regain the ability to make decisions. People who want to indicate under what set of circumstances they favor or object to receiving any specific treatments use a living will.

The Patient Self-Determination Act of 1990 states that on admission to a hospital or nursing home, patients have to be informed of their rights, including the right to accept or refuse treatment.¹ However, the current system of communicating wishes about end-

of-life care using solely traditional advance directives such as the living will has proven insufficient. This is because traditional advance directives, being general statements of patients' preferences, need to be carried out through specifications in medical orders when the need arises.²

Further, traditional advance directives require patients to recognize the importance of advance care planning, understand medical interventions, evaluate their own personal values and beliefs, and communicate their wishes to their agents, loved ones, physicians, and health care providers. Moreover, these documents apply to future circumstances, require further interpretation by the agent and health care professionals, and do not result in actionable medical orders. Decisions about care depend on interpreting earlier conversations, the physician's estimates of prognosis, and, possibly, the personal convictions of the physician, agent, and loved ones, even though ethically, all involved need to focus on the patient's stated wishes or best interest. A living will does not help clarify the patient's wishes in the absence of antecedent conversation with the family, close friends, and the patient's personal physician. And living wills cannot be read and interpreted in an emergency.

The situation is further complicated by difficulty in defining "terminal" or "irreversible" conditions and accounting for the different perspective that physicians, agents, and loved

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ones bring to the situation. For example, imagine a patient with dementia nearing the end of life who eats less, has difficulty managing secretions, aspirates, and develops pneumonia. While end-stage dementia is terminal, pneumonia may be reversible.

Increasingly, therefore, people are being counseled to appoint a health care agent (see below).³

The importance of a health care proxy (durable power of attorney for health care)

In a health care proxy document (also known as durable power of attorney for health care), the patient names a health care agent. This person has authority to make decisions about the patient's medical care, including life-sustaining treatment. In other words, you the patient appoint someone to speak for you in the event you are unable to make your own medical decisions (not only at the end of life).

Since anyone may face a sudden and unexpected acute illness or injury with the risk of becoming incapacitated and unable to make medical decisions, everyone age 18 and older should be encouraged to complete a health care proxy document and to engage in advance care planning discussions with family and loved ones. Physicians can initiate this process as a wellness initiative and can help patients and families understand advance care planning. In all health care settings, trained and qualified health care professionals can provide education on advance care planning to patients, families, and loved ones.

A key issue when naming a health care agent is choosing the right one, someone who will make decisions in accordance with the person's current values and beliefs and who can separate his or her personal values from the patient's values. Another key issue: people need to have proactive discussions about their personal values, beliefs, and goals of care, which many are reluctant to do, and the health care agent must be willing to talk about sensitive issues ahead of time. Even when a health care agent is available in an emergency, emergency medical services personnel cannot follow directions from a health care agent. Most importantly, a health care agent must be able to handle potential conflicts between family and providers.

TABLE 2

Four questions about treatment at the end of life

Will treatment make a difference?

Do the burdens of treatment outweigh its benefits?

Is there hope of recovery? If so, what will life be like afterward?

What does the patient value? What is the patient's goal for his or her care?

POLST ENSURES PATIENT PREFERENCES ARE HONORED AT THE END OF LIFE

Approximately 20 years ago, a team of health care professionals at the University of Oregon recognized these problems and realized that physicians needed to be more involved in discussions with patients about end-of-life care and in translating the patient's preferences and values into concrete medical orders. The result was the Physician Orders for Life-Sustaining Treatment (POLST) Paradigm Program.⁴

What is POLST?

POLST is an end-of-life-care transitions program that focuses on patient-centered goals for care and shared informed medical decision-making.^{5,6} It offers a mechanism to communicate the wishes of seriously ill patients to have or to limit medical treatment as they move from one care setting to another. TABLE 1 lists the differences between traditional advance directives and POLST.

The aim is to improve the quality of care that seriously ill patients receive at the end of life. POLST is based on effective communication of the patient's wishes, with actionable medical orders documented on a brightly colored form (www.ohsu.edu/polst/programs/sample-forms.htm; FIGURE 1) and a promise by health care professionals to honor these wishes.⁷ Key features of the program include education, training, and a quality-improvement process.

Who is POLST for?

POLST is for patients with serious life-limiting illness who have a life expectancy of less

**Everyone
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POLST

HIPAA PERMITS DISCLOSURE TO HEALTH CARE PROFESSIONALS & ELECTRONIC REGISTRY AS NECESSARY FOR TREATMENT									
Physician Orders for Life-Sustaining Treatment (POLST)									
<p>Follow these orders until orders change. These medical orders are based on the patient's current medical condition and preferences. Any section not completed does not invalidate the form and implies full treatment for that section. With significant change of condition new orders may need to be written.</p> <p><i>Guidance for Health Care Professionals:</i> http://www.ohsu.edu/polst/programs/documents/Guidebook.pdf</p>		Patient Last Name: _____ Patient First Name: _____ Middle Init. _____ Date of Birth: (mm/dd/yyyy) _____ Gender: <input type="checkbox"/> M <input type="checkbox"/> F Last 4 SSN: _____ Address: (street / city / state / zip) _____							
A Check One	CARDIOPULMONARY RESUSCITATION (CPR): Patient has no pulse and is not breathing. <input type="checkbox"/> Attempt Resuscitation/CPR <input type="checkbox"/> Do Not Attempt Resuscitation/DNR <p>When not in cardiopulmonary arrest, follow orders in B and C.</p>								
B Check One	MEDICAL INTERVENTIONS: If patient has pulse and/or is breathing. <input type="checkbox"/> Comfort Measures Only (Allow Natural Death). 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: Maximize comfort through symptom management. <input type="checkbox"/> Limited Additional Interventions 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. <input type="checkbox"/> Full Treatment In addition to care described in Comfort Measures Only and Limited Additional Interventions, use intubation, advanced airway interventions, and mechanical ventilation as indicated. Transfer to hospital and/or intensive care unit if indicated. Treatment Plan: Full treatment including life support measures in the intensive care unit. <i>Additional Orders:</i> _____								
C Check One	ARTIFICIALLY ADMINISTERED NUTRITION: <i>Offer food by mouth if feasible.</i> <input type="checkbox"/> No artificial nutrition by tube. <input type="checkbox"/> Defined trial period of artificial nutrition by tube. <input type="checkbox"/> Long-term artificial nutrition by tube. <i>Additional Orders:</i> _____								
D	DOCUMENTATION OF DISCUSSION: <input type="checkbox"/> Patient (Patient has capacity) <input type="checkbox"/> Parent of minor <input type="checkbox"/> Court-Appointed Guardian <input type="checkbox"/> Health Care Representative or legally recognized surrogate <input type="checkbox"/> Surrogate for patient with developmental disabilities or significant mental health condition (Note: Special requirements for completion. See reverse side.) <input type="checkbox"/> Other _____								
Signature of Patient or Surrogate Signature: <u>recommended</u> Name (print): _____ Relationship (write "self" if patient): _____ <p>This form will be sent to the POLST Registry unless the patient wishes to opt out, if so check opt out box <input type="checkbox"/></p>									
E	SIGNATURE OF PHYSICIAN / NP / PA <p>My signature below indicates to the best of my knowledge that these orders are consistent with the patient's current medical condition and preferences.</p> <table border="1"> <tr> <td>Print Signing Physician / NP / PA Name: <u>required</u></td> <td>Signer Phone Number: _____</td> <td>Signer License Number: (optional) _____</td> </tr> <tr> <td>Physician / NP / PA Signature: <u>required</u></td> <td>Date: <u>required</u></td> <td>Office Use Only</td> </tr> </table>			Print Signing Physician / NP / PA Name: <u>required</u>	Signer Phone Number: _____	Signer License Number: (optional) _____	Physician / NP / PA Signature: <u>required</u>	Date: <u>required</u>	Office Use Only
Print Signing Physician / NP / PA Name: <u>required</u>	Signer Phone Number: _____	Signer License Number: (optional) _____							
Physician / NP / PA Signature: <u>required</u>	Date: <u>required</u>	Office Use Only							
SEND FORM WITH PATIENT WHENEVER TRANSFERRED OR DISCHARGED. SUBMIT COPY TO REGISTRY <small>© CENTER FOR ETHICS IN HEALTH CARE, Oregon Health & Science University, 3181 Sam Jackson Park Rd., UHN-86, Portland, OR 97239-3098 (503) 494-3965</small>									

FIGURE 1. Oregon's Physician Orders for Life-Sustaining Treatment (POLST) form.

than 1 year, or anyone of advanced age interested in defining their end-of-life care wishes. Qualified and trained health care professionals (physicians, physician's assistants, nurse practitioners, and social workers) participate in discussions leading to the completion of a POLST form in all settings, particularly along the long-term care continuum and for home hospice.

The key element of the POLST process: Shared, informed medical decision-making
 Health care professionals working as an interdisciplinary team play a key role in educating patients and their families about advance care planning and shared, informed medical decision-making, as well as in resolving conflict. To be effective, shared medical decision-making must be well-informed. The decision-maker

HIPAA PERMITS DISCLOSURE TO HEALTH CARE PROFESSIONALS & ELECTRONIC REGISTRY AS NECESSARY FOR TREATMENT			
Information for patient named on this form PATIENT'S NAME: _____			
<p>The POLST form is always voluntary and is usually for persons with advanced illness or frailty. POLST records your wishes for medical treatment in your current state of health. Once initial medical treatment is begun and the risks and benefits of further therapy are clear, your treatment wishes may change. Your medical care and this form can be changed to reflect your new wishes at any time. However, no form can address all the medical treatment decisions that may need to be made. The Oregon Advance Directive is recommended for all capable adults, regardless of their health status. An Advance Directive allows you to document in detail your future health care instructions and/or name a Health Care Representative to speak for you if you are unable to speak for yourself.</p>			
Contact Information			
Surrogate (optional):	Relationship:	Phone Number:	Address:
Health Care Professional Information			
Preparer Name:	Preparer Title:	Phone Number:	Date Prepared:
PA's Supervising Physician:	Phone Number:		
Primary Care Professional:			
Directions for Health Care Professionals			
Completing POLST <ul style="list-style-type: none"> Completing a POLST is always voluntary and cannot be mandated for a patient. Should reflect current preferences of persons with advanced illness or frailty. Also, encourage completion of an Advance Directive. Verbal / phone orders are acceptable with follow-up signature by physician/NP/PA in accordance with facility/community policy. Use of original form is encouraged. Photocopies, faxes, and electronic registry forms are also legal and valid. A person with developmental disabilities or significant mental health condition requires additional consideration before completing the POLST form; refer to Guidance for Health Care Professionals at http://www.ohsu.edu/polst/programs/documents/Guidebook.pdf. 			
Sending to Oregon POLST Registry (Required unless "Opt Out" box is checked) <p>For the Oregon POLST Registry the following must be completed:</p> <ul style="list-style-type: none"> Patient's full name Date of birth Section A MD / DO / NP / PA signature Date signed <p>Send a copy of both sides of this POLST form to the Oregon POLST Registry.</p> <p>FAX or eFAX: 503-418-2161 or Mail: Oregon POLST Registry CDW-EM 3181 SW Sam Jackson Park Rd. Portland, OR 97239</p> <p>Date Submitted ____ / ____ / ____</p> <p>MAY PUT REGISTRY ID STICKER HERE:</p> <p>Registry Phone: 503-418-4083 *Please allow up to 10 days from receipt for processing into the Registry. Mailed confirmation packets may take four weeks for delivery.</p>			
Reviewing POLST <p>This POLST should be reviewed periodically and if:</p> <ul style="list-style-type: none"> The patient is transferred from one care setting or care level to another, or There is a substantial change in the patient's health status, or The patient's treatment preferences change, or The patient's primary care professional changes. 			
Voiding POLST <p>A person with capacity, or the valid surrogate of a person without capacity, can void the form and request alternative treatment.</p> <p>Draw line through sections A through E and write "VOID" in large letters if POLST is replaced or becomes invalid.</p> <p>Send a copy of the voided form to the POLST Registry as above (required).</p> <p>If included in an electronic medical record, follow voiding procedures of facility/community.</p>			
<p>For permission to use the copyrighted form contact the OHSU Center for Ethics in Health Care. Information on the POLST program is available online at www.polst.org or at polst@ohsu.edu.</p> <p>SEND FORM WITH PATIENT WHENEVER TRANSFERRED OR DISCHARGED, SUBMIT COPY TO REGISTRY</p>			

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(patient, health care agent, or surrogate) must weigh the following questions (**TABLE 2**):

- Will treatment make a difference?
- Do the burdens of treatment outweigh its benefits?
- Is there hope of recovery? If so, what will life be like afterward?
- What does the patient value? What is the patient's goal for his or her care?

In-depth discussions with patients, family members, and surrogates are needed, and these people are often reluctant to ask these questions and afraid to discuss the dying process. Even if they are informed of their diagnosis and prognosis, they may not know what they mean in terms of their everyday experience and future.

Health care professionals engaging in these conversations can use the eight-step POLST

Most hospice patients choose at least one life-sustaining treatment on POLST

TABLE 3**POLST eight-step protocol****Prepare for discussion**

Review what is known about patient and family goals and values
Understand the facts about the patient's medical condition and prognosis
Review what is known about the patient's capacity to consent
Retrieve and review completed advance directives and prior do-not-resuscitate documents
Determine who key family members are, and (if the patient does not have the capacity), see if there is an identified health care agent, guardian or health care representative
Find uninterrupted time for the discussion

Begin with what the patient and family know

Determine what the patient and family know about the patient's condition and prognosis
Determine what is known about the patient's views and values in light of the medical condition

Provide any new information about the patient's medical condition and values from the medical team's perspective

Provide information in small amounts, giving time for response
Seek a common understanding; understand areas of agreement and disagreement
Make recommendations based on clinical experience in light of the patient's condition

Try to reconcile differences in terms of prognosis, goals, hopes, and expectations

Negotiate and try to reconcile differences; seek common ground; be creative
Use conflict resolution when necessary

Respond empathetically

Acknowledge
Legitimize
Explore (rather than prematurely reassure)
Empathize
Reinforce commitment and nonabandonment

Use POLST to guide choices and finalize patient and family wishes

Review the key elements with the patient and family
Apply shared medical decision-making
Manage conflict resolution

Complete and sign POLST

Get verbal or written consent from the patient or health care agent, guardian, health care representative
Get written order from the treating physician and witnesses
Document conversation

Review and revise periodically

*POLST (Physician Orders for Life-Sustaining Treatment) is a medical order form designed to provide a single, community-wide document that would be easily recognizable and would enable the patient's wishes for life-sustaining treatment to be honored. This eight-step protocol was originally developed by Dr. Patricia Bomba for the MOLST Program of New York State. Program information is found at www.CompassionAndSupport.org.

protocol (**TABLE 3**) to elicit their preferences at the end of life. **TABLE 4** lists tools and resources to enhance the understanding of advance care planning and POLST.

What does the POLST form cover?

The POLST form (**FIGURE 1**) provides instructions about resuscitation if the patient has no

pulse and is not breathing. Additionally, the medical orders indicate decisions about the level of medical intervention that the patient wants or does not want, eg, intubation, mechanical ventilation, transport to the hospital, intensive care, artificial nutrition and hydration, and antibiotics.

Thus, POLST is outcome-neutral and can

be used either to limit medical interventions or to clarify a request for any or all medically indicated treatments.

Both the practitioner and the patient or patient's surrogate sign the form. The original goes into the patient's chart, and a copy should accompany the patient if he or she is transferred or discharged. Additionally, if the state has a POLST registry, the POLST information should be entered into the registry.

POLST is expanding across the country

The use of POLST has been expanding across the United States, with POLST programs now implemented in all or part of at least 30 states. There are endorsed programs in 14 states, and programs are being developed in 26 more. Requirements for endorsement are found at www.polst.org. FIGURE 2 shows the status of POLST in the 50 states.

Oregon's POLST form is the original model for other forms designed to meet specific legislative or regulatory requirements in other states. POLST-like programs are known by different names in different states: eg, New York's Medical Orders for Life-Sustaining Treatment (MOLST) and West Virginia's Physicians Orders for Scope of Treatment (POST), but all endorsed programs share common core elements.

POLST research

A number of studies in the past 10 years have shown that POLST improves the documentation and honoring of patient preferences, whatever they may be.^{4,8–16}

Emergency medical technicians in Oregon reported that the POLST form provides clear instructions about patient preferences and is useful when deciding which treatments to provide. In contrast to the single-intervention focus of out-of-hospital do-not-resuscitate orders, the POLST form provides patients the opportunity to document treatment goals and preferences for interventions across a range of treatment options, thus permitting greater individualization.¹³

Comfort care is not sacrificed if a POLST document is in place. Most hospice patients choose at least one life-sustaining treatment on their POLST form.¹⁴

In a multistate study published in 2010, the medical records of residents in 90 randomly chosen Medicaid-eligible nursing homes

TABLE 4

Tools and resources to enhance the understanding of advance care planning and POLST

AARP Public Policy Institute. Improving Advanced Illness Care: The Evolution of State POLST Programs

<http://assets.aarp.org/rgcenter/ppi/cons-prot/POLST-Report-04-11.pdf>

Center for Ethics in Health Care and National POLST Paradigm Program

www.polst.org

Community-wide End-of-life/Palliative Care Initiative and New York State's MOLST

www.CompassionAndSupport.org

Aging Institute of UPMC Senior Services and the University of Pittsburgh Web site

www.aging.pitt.edu/professionals/resources.htm

West Virginia Center for End-of-Life Care POST

www.wvendoflife.org

End-of-Life and Palliative Care Education Resource Center

www.eperc.mcw.edu

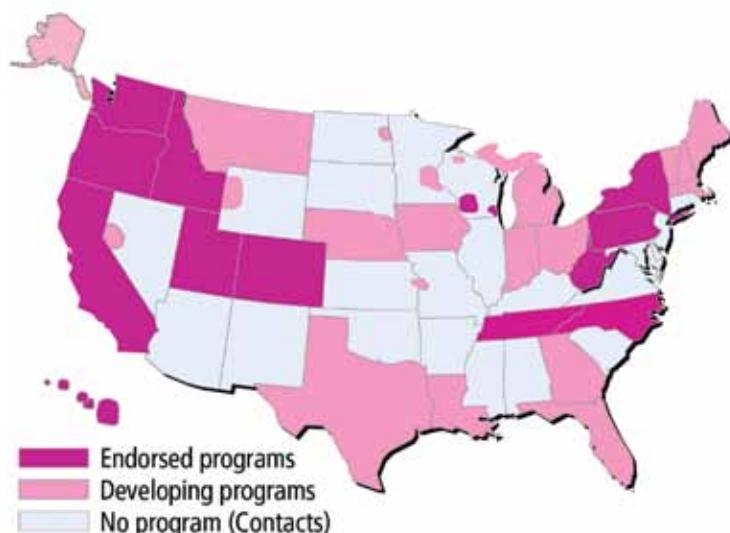


FIGURE 2. Status of POLST programs, by state, as of May 2012.

SOURCE: WWW.OHSU.EDU/POLST.

were reviewed.¹⁵ POLST was compared with traditional advance care planning in terms of the effect on the presence of medical orders reflecting treatment preferences, symptom management, and use of life-sustaining treatments. The study found that residents with POLST forms had significantly more medical orders about life-sustaining treatments than

PHYSICIAN ORDERS

residents with traditional advance directives. There were no differences between residents with or without POLST forms on symptom assessment or management measures. POLST was more effective than traditional advance planning at limiting unwanted life-sustaining treatments. The study suggests that POLST offers significant advantages over traditional advance directives in nursing facilities.^{15,16}

In summary, more than a decade of research has shown that the POLST Paradigm Program serves as an emerging national model for implementing shared, informed medical decision-making. Furthermore, POLST more accurately conveys end-of-life care preferences for patients with advanced chronic illness and for dying patients than traditional advance directives and yields higher adherence by medical professionals.

■ CLINICAL CASE REVISITED

Let's consider if the physician for our 89-year-old woman with dementia had completed a POLST form with orders indicating "do not attempt resuscitation (DNR/no CPR)" and "comfort measures only, do not transfer to hospital for life-sustaining treatment and transfer if comfort needs cannot be met in current location."

The patient's respiratory distress and fever would have been treated at her nursing home with medication and oxygen. She would have been transferred to the hospital only if her comfort needs would not have been met at the nursing home. Unwanted life-sustaining treatment would have been avoided. The wishes of the patient, based on her values and careful consideration of options, would have been respected.

■ REFERENCES

1. Dunn PM, Tolle SW, Moss AH, Black JS. The POLST paradigm: respecting the wishes of patients and families. *Ann Long-Term Care* 2007; 15:33–40.
2. Patient Self-Determination Act of 1990. Pub. L. No. 101-508, ss 4206, 104 Stat. 1388.
3. Bomba PA, Sabatino CP. POLST: an emerging model for end-of-life care planning. *The ElderLaw Report* 2009; 20:1–5.
4. Sabatino C, Karp. AARP Public Policy Institute, Improving advance illness care: the evolution of state POLST programs 2011. <http://assets.aarp.org/rgcenter/ppi/cons-prot/POLST-Report-04-11.pdf>. Accessed May 30, 2012.
5. Bomba PA. Discussing patient preferences and end of life care, Journal of the Monroe County Medical Society, 7th District Branch, MSSNY 2011; 12–15. www.compassionandsupport.org/index.php/research_references/references. Accessed May 30, 2012.
6. Citko J, Moss AH, Carley M, Tolle SW. The National POLST Paradigm Initiative, 2ND ed. Fast Facts and Concepts 2010; 178. www.eperc.mcw.edu/fastfact/f_f_178.htm. Accessed May 30, 2012.
7. Center for Ethics in Health Care, Oregon Health & Science University. www.ohsu.edu/polst/. Accessed May 30, 2012.
8. Lee MA, Brummel-Smith K, Meyer J, Drew N, London MR. Physician orders for life-sustaining treatment (POLST): outcomes in a PACE program. Program of All-Inclusive Care for the Elderly. *J Am Geriatr Soc* 2000; 48:1219–1225.
9. Meyers JL, Moore C, McGrory A, Sparr J, Ahern M. Physician orders for life-sustaining treatment form: honoring end-of-life directives for nursing home residents. *J Gerontol Nurs* 2004; 30:37–46.
10. Dunn PM, Schmidt TA, Carley MM, Donius M, Weinstein MA, Dull VT. A method to communicate patient preferences about medically indicated life-sustaining treatment in the out-of-hospital setting. *J Am Geriatr Soc* 1996; 44:785–791.
11. Cantor MD. Improving advance care planning: lessons from POLST. Physician Orders for Life-Sustaining Treatment (comment). *J Am Geriatr Soc* 2000; 48:1343–1344.
12. Tolle SW, Tilden VP, Nelson CA, Dunn PM. A prospective study of the efficacy of the physician order form for life-sustaining treatment. *J Am Geriatr Soc* 1998; 46:1097–1102.
13. Schmidt TA, Hickman SE, Tolle SW, Brooks HS. The Physician Orders for Life-Sustaining Treatment program: Oregon emergency medical technicians' practical experiences and attitudes. *J Am Geriatr Soc* 2004; 52:1430–1434.
14. Hickman SE, Nelson CA, Moss AH, et al. Use of the Physician Orders for Life-Sustaining Treatment (POLST) paradigm program in the hospice setting. *J Palliat Med* 2009; 12:133–141.
15. Hickman SE, Nelson CA, Perrin NA, Moss AH, Hammes BJ, Tolle SW. A comparison of methods to communicate treatment preferences in nursing facilities: traditional practices versus the physician orders for life-sustaining treatment program. *J Am Geriatr Soc* 2010; 58:1241–1248.
16. Hickman SE, Nelson CA, Moss AH, Tolle SW, Perrin NA, Hammes BJ. The consistency between treatments provided to nursing facility residents and orders on the physician orders for life-sustaining treatment form. *J Am Geriatr Soc* 2011; 59:2091–2099.

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CORRECTION

In the June 2012 issue, on page 384 of the Clinical Picture article by Álvarez-Twoose et al (Álvarez-Twoose I, Vañó-Galván S, Sanchez-Muñoz L, Fernandez-Zapardiel S, Escribano L. The Clinical Picture: anemia, leukocytosis, doi:10.3949/ccjm.79a.c7464

abdominal pain, flushing, and bone and skin lesions. Cleve Clin J Med 2012; 79:384–386), Dr. Alvarez-Twoose's first name was spelled incorrectly. The correct spelling is Iván. This error has been corrected in the online version.