REFERENCES

1. Baltimore MD. Centers for Medicare and Medicaid Services. Hospital care quality information from the consumer perspective. http://www.hcahpsonline.org. Accessed June 01, 2018
2. Boulding W, Glickman SW, Manary MP, Schulman KA, Staelin R. Relationship between patient satisfaction with inpatient care and hospital readmission within 30 days. Am J Managed Care. 2011;17:41-48.
3. Barnett DD, Koul R, Coppola NM. Satisfaction with health care among people with hearing impairment: a survey of Medicare beneficiaries. Disabil Rehabil. 2014;36:39-48.
4. Mick P, Foley DM, Lin FR. Hearing loss is associated with poorer ratings of patient–physician communication and healthcare quality. J Am Geriatr Soc. 2014;62:2207-2209.
5. Lin FR, Niparko JK, Ferrucli L. Hearing loss prevalence in the United States. Arch Intern Med. 2011;171:1853-1855.
6. Foley DM, Frick KD, Lin FR. Association between hearing loss and healthcare expenditures in older adults. J Am Geriatr Soc. 2014;62:1188-1189.
7. Genther DJ, Betz J, Pratt S, et al. Association between hearing impairment and risk of hospitalization in older adults. J Am Geriatr Soc. 2015;63:1146-1152.
8. Agrawal Y, Platz E, Niparko JK. Prevalence of hearing loss and differences by demographic characteristics among US adults: data from the National Health and Nutrition Examination Survey, 1999–2004. Arch Intern Med. 2008;168:1522-1530.
9. Deal JA, Sharrett AR, Albert MS, et al. Hearing impairment and cognitive decline: a pilot study conducted within the atherosclerosis risk in communities neurocognitive study. Am J Epidemiol. 2015;181:680-690.
10. Blustein J, Weinstein BE, Chodosh J. Tackling hearing loss to improve the care of older adults. BMJ. 2018;360:k21.

IT IS TIME TO REMOVE FEEDING TUBES FROM POLST FORMS

To the Editor: In 1993, an Oregon team of healthcare professionals (HCPs) created the Physician Orders for Life-Sustaining Treatment (POLST) program to help ensure that patients with advanced illness had their wishes to have or to limit treatment honored as portable orders across settings of care. Other states have implemented components of Oregon’s POLST program using a variety of program names. POLST-like forms include orders about cardiopulmonary resuscitation (CPR), use of mechanical ventilation, and placement of a feeding tube. In the early 1990s, Oregon law specified that artificial nutrition be provided unless refused by a patient, supporting the inclusion of this treatment option on the initial version of the POLST form. When the POLST program was developed, little was known about artificial nutrition outcomes in persons with advanced illness.

WHY WE RECONSIDERED ARTIFICIAL NUTRITION ORDERS ON THE OREGON POLST FORM

Oregon has a greater penetration of POLST use than other state programs and therefore has the capability to provide guidance on quality improvement innovations based on Oregon POLST Registry data. As research began to...
demonstrate that artificial nutrition by feeding tube was of no value in patients with advanced dementia (compared to stroke with dysphagia, amyotrophic lateral sclerosis, or persistent vegetative state, where it can extend life), we chose to specifically examine POLST Registry data for orders for artificial nutrition by feeding tube.

Historically, most patients (76.1%) with advanced illness and frailty were completing POLST forms to set limits on treatment. Most Oregon POLST forms had orders for “comfort measures only” (CMO) or “limited treatment” and “no artificial nutrition by tube.” However, recent patterns of POLST orders have changed, with a rise in “attempt CPR and full treatment.” Notably, this group has a higher rate of orders authorizing feeding tube placement (Figure 1).

Orders for attempt CPR and full treatment increased 33.5% in 5 years, from 23.9% in 2012 to 31.9% in 2017 (Figure 1), and it is now the most common order combination submitted to the Registry. Orders to receive “long-term artificial nutrition by tube” increased to more than 2500 registrants. Of all the registrants with orders for long-term artificial nutrition by tube, 75% are attempt CPR and full treatment. The rising orders for long-term feeding tubes at a time when national professional organizations documented harm in patients with advanced dementia served as a call to action.

POLST IS FOR EMERGENCY SITUATIONS, ARTIFICIAL NUTRITION IS NOT AN EMERGENCY

Decisions about artificially administered nutrition are not a medical emergency. The HCP has time for an informed consent process with signature of the patient or surrogate with his or her understanding of the risks, benefits, and alternatives to feeding tube use in the context of the patient’s diagnosis. The process is unlike decisions to limit CPR and endotracheal intubation that require orders in advance of a crisis to avoid presumed consent for these standard emergency treatments. Given the nonemergent nature of tube feeding decision making, the best method to document wishes is an advance directive, not POLST.

Furthermore, Oregon’s 2017 registry data show that HCPs are completing more POLST forms for CPR and full treatment, with 81.2% preferring temporary or long-term feeding tube use. This compares to those opting for “do not attempt resuscitation” and CMO, with only 5.1% preferring temporary or long-term feeding tube use (Figure 1). Because the default in medicine is to provide CPR and full treatment without a POLST form, POLST completion is not changing the care received and may cause inadvertent harms.

HARMS OUTWEIGH BENEFITS

Oregon’s rate of feeding tube placement in advanced dementia is one of the lowest in the country, and percutaneous endoscopic gastrostomy tube placement is dropping across the country. After more than 25 years of Oregon’s POLST experience, evidence is growing regarding the disadvantages of having orders about artificially administered nutrition on the Oregon POLST form and we are unable to identify data supporting the benefits. Surrogates of those with advanced dementia might be misled to believe that

Figure 1. Artificially administered nutrition order combinations on 37,569 Oregon Physician Orders for Life-Sustaining Treatment (POLST) forms registered in 2017. Figure 1 does not include two smaller categories, “do not resuscitate (DNR) and full treatment,” n = 1642 (long-term artificial nutrition by tube, n = 108), and “attempt cardiopulmonary resuscitation (CPR) and limited treatment,” n = 2363 (long-term artificial nutrition by tube, n = 79). *Missing orders in at least one section of POLST form (n = 1334) are not included in the data set. CMO, comfort measures only.
tube feeding is a viable treatment option when it does not extend life and may increase suffering.\textsuperscript{5,6}

POLST remains an effective method to ensure a patient’s wishes regarding emergency medical treatments, such as CPR and endotracheal intubation, are honored.\textsuperscript{2,10} However, with harms outweighing the benefits, the time has come to remove the option of artificially administered nutrition from the POLST form. An advance directive is the better method to clarify wishes regarding tube feeding and other nonemergency treatments. Effective January 2019, the Oregon POLST form no longer includes orders regarding artificially administered nutrition.

\textbf{REFERENCES}

1. Oregon POLST. Oregon POLST history (online). https://oregonpolst.org/history. Accessed December 31, 2018.
2. Zive DM, Jimenez V, Fromme EK, Tolle SW. Changes over time in the Oregon POLST Registry: a study of two decedent cohorts. J Palliat Med 2018. https://doi.org/10.1089/jpm.2018.0446 [Epub ahead of print].
3. Teno JM, Gozalo P, Mitchell SL, Kuo S, Fulton AT, Mor V. Feeding tubes and the prevention or healing of pressure ulcers. Arch Intern Med 2012;172(9):697-701.
4. Schmidt TA, Zive D, Fromme EK, Cook JN, Tolle SW. Physician Orders for Life-Sustaining Treatment (POLST): lessons learned from analysis of the Oregon POLST Registry, Resuscitation 2014;85(4):480-485.
5. Fischberg D, Bull J, Casaret D, et al. Five things physicians and patients should question in hospice and palliative medicine. J Pain Symptom Manage 2015;49(3):595-605.
6. American Geriatrics Society Ethics Committee and Clinical Practice and Models of Care Committee. American Geriatrics Society feeding tubes in advanced dementia position statement. J Am Geriatr Soc 2014;62(8):1590-1593.
7. Sabatino C. POLST: avoid the seven deadly sins. Bifocal 2018;39(4):60-62.
8. Tolle SW, Teno JM. Counting POLST form completion can hinder quality (online). https://www.healthaffairs.org/do/10.1377/hblog20180709.244065/full/. Accessed December 31, 2018.
9. The Dartmouth Atlas of Health Care. Percent of decedents with dementia receiving a feeding tube during the last six months of life by state (online). http://www.dartmouthatlas.org/data/map.aspx?id=355. Accessed December 31, 2018.
10. Fromme EK, Zive D, Schmidt TA, Cook JN, Tolle SW. Association between physician orders for life-sustaining treatment for scope of treatment and inhospital death in Oregon. J Am Geriatr Soc 2014;62:1246-1251.