

A Summary of POLST Program Research

1. A Method to Communicate Patient Preferences About Medically Indicated Life-Sustaining Treatment in the Out-of-Hospital Setting.

Focus groups were conducted with health care professionals in Oregon to facilitate the development of the Medical Treatment Coversheet (MTC), the precursor to the POLST form. Next, acute and long-term care providers were provided with hypothetical scenarios and asked to describe their treatment response to each scenario twice: Once without the MTC and once with the MTC. Use of the MTC changed treatment decisions in hypothetical scenarios for 37% of acute care providers and 29% of long-term care providers. The majority of treatment decisions were more appropriate (consistent with patient preferences) with use of the MTC. (Dunn PM, Schmidt TA, Carley MM, Donius M, Weinstein MA, & Dull VT (1996). *Journal of the American Geriatrics Society*, 44, 785-791.)

2. A Prospective Study of the Efficacy of the Physician Orders for Life Sustaining Treatment

A sample of n = 180 resident charts at 8 nursing facilities in Oregon were reviewed prospectively over a one-year period. Only the residents whose charts contained POLST forms documenting “do not resuscitate” and “comfort measure only” orders were followed. No participants received unwanted cardiopulmonary resuscitation, intensive care unit care, or ventilator support during the course of the study. Approximately one third had an order for narcotics and a majority (63%) of the residents who died had either PRN or scheduled orders for narcotics. The POLST form orders were consistently followed at this select sample of facilities. (Tolle SW, Tilden VP, Dunn P, & Nelson C (1998). *Journal of the American Geriatrics Society*, 46(9), 1097-1102.)

3. Physician Orders for Life-Sustaining Treatment (POLST): Outcomes in a PACE Program.

A second, retrospective study evaluated the records for the last two weeks of life for enrollees in an Oregon PACE (Program of All-Inclusive Care for the Elderly) site, a program that cares for frail older adults who meet the criteria for nursing facility placement but are maintained at home. It was found that care matched POLST instructions regarding CPR for 91% of participants, antibiotics for 86%, intravenous fluids for 84%, feeding tubes for 94%, and medical interventions for 46%, with more invasive medical interventions given to 20% of participants. (Lee MA, Brummel-Smith K, Meyer J, Drew N, & London MR (2000). *Journal of the American Geriatrics Society*, 48, 1219-1225.)

4. Pilot Study On POST (Physician Orders for Scope of Treatment): Report on POST Form Evaluations

This study examined the completion of the West Virginia POST forms at three West Virginia nursing facilities and one hospice for n = 135 subjects. The POST form is identical to the POLST form on which it was modeled but carries a different name. The majority of forms (64%) indicated DNR status. Comfort care only or limited interventions were requested for 60% of residents. Most forms indicated full treatment with antibiotics (80%). No or limited artificial nutrition and hydration was indicated on 41% of forms (38% requested use of artificial nutrition and hydration and 21% had “other” instructions for this section). The West Virginia Center for End-of-Life Care developed informational brochures and sent a letter to all relevant stakeholders to share the findings of this study and provide additional information about state regulations relating to use of the POST form. (Demanelis A, & Moss A (2002). *Unpublished study.*)

5. The Physician Orders for Life-Sustaining Treatment (POLST) Program: Oregon Emergency Medical Technicians' Practical Experiences and Attitudes

In order to better understand the use of the POLST Program, a mail survey was conducted of a random sample of Emergency Medical Technicians (EMTs) with a 55% (572/1050) response rate. Most respondents (72%) had treated at least one patient with a POLST. The majority of patients (71%) with POLST forms were found in long-term care settings. In 45% of cases where a POLST was present, EMTs reported that it changed treatment. Most (74%) of the respondents agreed that the POLST Program provides clear instructions about patient's preferences and 91% agreed that the POLST Program is useful in determining which treatments to provide when the patient has no pulse and is apneic. Fewer (62%) agreed that the program is useful in determining treatments when the patient has a pulse and is breathing. Findings suggest that EMTs find the POLST Program useful in making treatment decisions for seriously ill patients and often use the form, when present, to change treatment decisions. (Schmidt TA, Hickman SE, Tolle SW, Brooks HS (2004). *Journal of the American Geriatrics Society*, 52, 1430-1434.)

6. Use of the POLST (Physician Orders for Life-Sustaining Treatment) Program in Oregon Nursing Facilities: Beyond Resuscitation Status

All licensed nursing facilities in the state of Oregon (n = 151) were surveyed in 2002 to assess use of the POLST Program. The majority (97%) of all facilities participated (3% could not be reached). Of those surveyed, most (71%) reported that they used the POLST form for at least half of their residents and 96% who used the POLST reported that it is used to guide treatment decisions in the facility. Permission was obtained to conduct on-site reviews of records at a sub-sample of 7 facilities identified as users of the POLST Program. POLST forms were present in 92% (429/467) of medical charts reviewed. Treatment orders for adults ages 65+ (n = 397) included do not resuscitate (DNR: 88%), comfort care or limited interventions (88%), no or limited antibiotic use (42%), and no or limited artificial nutrition/hydration (87%). On forms indicating DNR, 77% reflected preferences for more than the lowest level of treatment in at least one other category. On POLST forms indicating orders to resuscitate, 47% reflected preferences for less than the highest level of treatment in at least one other category. The oldest old (aged 85 and up, n = 167) were more likely than the young old (aged 65-74, n = 48) to have orders to limit resuscitation, medical treatment, and artificial nutrition and hydration. Although optional, the majority (71%) of forms were signed by a resident or surrogate. (Hickman SE, Tolle SW, Brummel-Smith K, & Carley MM (2004). *Journal of the American Geriatrics Society*, 52, 1424-1429.)

7. Use of the Physician Orders for Life-Sustaining Treatment (POLST) Form to Honor the Wishes of Nursing Home Residents for End of Life Care: Preliminary Results of a Washington State Pilot Project.

Chart reviews were conducted at nursing facilities in two eastern Washington counties approximately 6 months after implementation of the POLST Program in Washington. POLST forms were found in 21 charts at these facilities. Chart reviews and analysis of interviews with staff and residents/surrogates found evidence that the POLST form accurately conveyed treatment preferences 90% of the time. Most charts contained documentation regarding an informed consent process (76%) and there was evidence that resident's wishes were honored in a majority of cases (90%). When patients had advance directives in their charts, the POLST form was congruent with the advance directive 100% of the time. (Meyers JL, Moore C, McGrory A, Sparr J, & Ahern M. (2004). *Journal of Gerontological Nursing*, 30(9), 37-46.)

8. Changing End-of-Life Planning: The Oregon Experience

Large state-by-state variations exist in location of dying and level of aggressive treatment during the final phase of life. This paper describes Oregon's incremental gains toward improving advance planning for end-of-life care in a state with the lowest rate of in-hospital deaths. Action strategies have required data gathering and reporting, and coalition building with a focus on systems change. Also, public education through the news media has proved to be a vital component of Oregon's process of change. The impact of media coverage is complemented by continuing education for health professionals. Special efforts are still needed to improve access to the Physician's Order for Life-Sustaining Treatment program (POLST) for some rural, minority, and pediatric populations and for persons living at home with a diagnosis other than cancer. However, with enough time, a sustained effort, and a broad coalition of partners, profound change is possible. (Tolle SW, Tilden VP (2002). *Journal of Palliative Medicine*, vol. 5, Number 2, 311-317).