

Implementation of POLST in a rural Indian Health Services Clinic

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DNP Project Proposal

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POLST Quality Improvement Project

The clinical manager, medical director, and family care providers at a rural Indian Health Services (IHS) clinic in eastern Oregon identified the need for a Physician Orders for Life Sustaining Treatment (POLST) program in their practice. They recognized a significant number of patients with advanced illness had no POLST form and the clinic had no formal method to address this. Clinic staff also recognized the need to identify which patients needed POLST, the best way to implement the program, other local entities that should be involved, and how best to track the form.

The lack of a formal POLST process has shown to greatly reduce the effectiveness of POLST programs. Providers intermittently identifying and addressing POLST with patients does not allow the program to reach its full potential. To have a successful POLST program, research supports including local emergency medical service (EMS) personnel, submitting POLST forms to the registry for easy access, and verifying medically actionable forms. The lack of training and appropriate resources in this clinic can also contribute to POLST inadequacy. Including social workers, religious entities, and program advocates are helpful measures to increase POLST program success (Mack & Dosa, 2019; Moss et al., 2017; National POLST, 2019; Schmidt et al. 2014).

Studies show that most people with advanced illness desire to avoid aggressive medical care at the end of life and wish for out-of-hospital deaths. Research shows that patients with POLST forms are significantly more likely than those with advance directives to have out-of-hospital deaths. While POLST forms do not guarantee out of hospital death, they can help medical personnel identify appropriate treatment at the end of life based on patient wishes

(Nugent et al., 2019; Pedraza et al., 2016). By implementing a formal POLST program in this IHS clinic, providers and patient advocates can help to honor patient wishes near the end of life.

Current Research

Literature searches were conducted between April and August 2020 to determine the current research surrounding POLST programs. The search included the following databases: CINAHL, Cochrane Library, EBSCOHost Databases, PubMed (Medline), Google Scholar, and UpToDate. Reference lists were also reviewed to determine additional relevant articles. 28 articles were identified, 13 of which were used for this project proposal paper. The National POLST website contained additional information. Keywords used for the literature search included: *physician orders for life-sustaining treatment (POLST) form, advance care planning, end-of-life care, POLST implementation, and POLST outcomes*. Articles reviewed were limited to those: 1) written in English, 2) published after 2005, and 3) involving POLST specific measures. Articles were excluded if their focus was evaluating other advance care planning documents.

Research shows that the majority of people wish to die at home. However, analysis shows that many people receive unwanted and aggressive medical care at the end of life. The POLST program was created in Oregon to provide individuals with advanced illness a way to choose specific medical treatments that were acceptable to them near the end of life. While Oregon has provided significant foundational research for the POLST form, these programs have not fully reached all areas of the state. Ongoing research is needed to understand the scope and utility of POLST for end-of-life decision-making (Mack & Dosa, 2019; Nugent et al., 2019; Pedraza et al., 2016; Zive et al., 2015).

Studies on POLST implementation programs have commonly focused on nursing homes. Nursing homes are often sites for frail elderly or patients recovering from significant health events. This makes nursing homes an ideal situation for implementation. Multiple studies have shown that the majority of nursing home residents have POLST forms on file. Nursing homes are well suited for central filing of forms and often have staffs that are trained in having POLST discussions. These studies showed that having policies to address POLST were also beneficial (Sebastian et al., 2015; Wenger et al., 2013). Staff education and insurance incentives for POLST have increased rates of POLST completion. Inclusion of emergency medical services (EMS) in the POLST process is also supported in the literature. Easy access to POLST forms for EMS providers is essential to ensure that patient wishes are maintained in emergent situations (Schmidt et al., 2013; Sebastian et al. 2015; Wegner et al. 2013). While POLST programs may not translate precisely across healthcare settings, recognizing the importance of these factors can assist in implementation.

Current literature recognizes that POLST is dynamic and that legal implications must be understood for program success. POLST programs are dictated on a state-by-state basis and legal restrictions may create barriers to actionable medical care. While most states have recognized POLST, only California and West Virginia have made POLST the standard of care through the national program (National POLST, n.d.). However, the majority of states are actively working towards their own variations of POLST programs. The increasing implementation of POLST programs across the country may help to address some of the legal barriers to end-of-life decision-making. However, default decision maker laws, diagnostic language requirements, and state-by-state variation in POLST forms are barriers that should be considered when designing a POLST program (DeMartino et al., 2017; Hickman et al., 2008; National POLST, n.d.). For

residents who live close to state borders or receive care in different states, these barriers are especially important, as they may prevent actionable orders for healthcare providers.

Other research from POLST programs illustrates the importance of ensuring actionable medical orders and using state registries to file POLST forms. One analysis found that up to five percent of forms were medically contradictory. Improper provider education and form completion may lead to forms that are not actionable. A state registry for POLST forms has also been supported by research. In situations where a paper copy of POLST forms was unavailable, EMS and hospital providers have been able to easily access the registry. Most importantly, care providers indicated that they were able to support patient wishes through easy access to the POLST registry (Moss et al., 2017; Schmidt et al., 2014). Oregon POLST has worked to ensure ongoing access through the COVID-19 pandemic with the acceptance of virtual POLST completion. Verbal orders and forms without signatures are being accepted for EMS and registry use. Proper documentation on photocopied forms allows the continued use of POLST through virtual care (Oregon POLST, n.d.). An established registry in Oregon along with provider education can support POLST program implementation.

Multiple survey studies have identified limited resources and ethical barriers to POLST programs. Securing resources for support staff and outreach programs were seen as barriers in one study. Some states have relied on volunteers and provider buy-in to support programs. POLST program participants have indicated lack of awareness, inadequate funding, and poor access to resources as barriers to implementation (Mack & Dosa, 2019). POLST may also pose ethical dilemmas for some. Authors of one article discussed concerns that they believe are inherent to POLST. They argued that the form ignores the complexities of individualized care at the end-of-life and that sections on nutrition and hydration contrast Catholic principles and create

issues for Catholic institutions providing care. Some believe that the verbiage used on POLST forms may bias patients towards less intervention and that acceptable medical treatment may be foregone without adequate information at the time of care (Brugger et al., 2013). There are a number of ethical dilemmas that may arise upon implementation of a POLST program. Provider awareness and frequent feedback may help overcome some of these barriers to POLST implementation.

Established in 1991, POLST is still a relatively new concept in healthcare. Multiple reviews recognize that continued research will be important to understand the full scope and utility of POLST. However, research conducted to this point can provide guidance and principles to develop a successful POLST program. POLST is now recognized nationally and states are developing their own programs. The expansion of these programs can contribute to overall understanding of POLST and help validate use through ongoing research.

Rationale

Inherent in most improvement projects is the concept of profound knowledge. Profound knowledge is discussed in relation to subject matter knowledge in improvement science. In this concept, variation is inevitable and it is important to understand that systems are complex and interrelated. Profound knowledge also encompasses Plan-Do-Study-Act (PDSA) cycles as a means to build knowledge. By understanding a system, predictions can be made about what might result in improvement. Understanding human behavior and motivation for change is also described as an essential component to predict how changes can lead to improvement (Langley et al., 2009). Using the concepts of profound knowledge may help understand what changes can lead to effective implementation of a POLST program. The profound knowledge concept fits

well with improvement science, in general. However, other models and theories may fit more specifically with POLST implementation.

One model that relates to POLST is the Health Promotion Model. Providers recognized that patients were receiving aggressive, and often futile, medical care at the end of life due to an inability to express their wishes. The Health Promotion model is directed toward enhancing a patient's well being. POLST follows this model by attempting to address health behaviors and promoting self-efficacy (Polit & Beck, 2017). The Uncertainty in Illness Theory also fits well with POLST ideals. The idea traditionally revolves around those with acute illness or declining health status. While advancing illness may cause uncertainty for individuals about their health, it can promote use of resources in order to adapt (Polit & Beck, 2017). POLST offers a resource to adapt to the uncertainty of end-of-life healthcare.

The POLST form was developed to fill a void in end-of-life care. POLST is able to provide more specific designations for care than advance directives. It also allows people with advanced illness or frailty to make their wishes known towards the end-of-life (National Polst, n.d.). This void in end-of-life decision-making is the basis for development and continued use of POLST programs. Many theories in health care include elements of self-efficacy and health promotion behaviors, both highly relevant to POLST. These characteristics are reasons to believe in the success of POLST implementation.

Aims

The purpose of this report is to display the significance of POLST, identify strategies to address POLST in a clinic setting, and develop approaches to implement successful interventions. This project aims to increase the percentage of Yellowhawk Tribal Health Center patients with advanced illness or frailty who have completed a POLST form by June 2021. 20

percent of qualifying patients at the eastern Oregon IHS clinic will have actionable POLST forms after thorough education and discussion with the healthcare team.

Context

The site for this project is a rural eastern Oregon IHS clinic for enrolled tribal members. The tribal board is involved with the majority of the decisions made in the clinic. The providers perceive this as a barrier to healthcare decisions at times, sometimes feeling that actions are taken based on opinion, rather than research. The clinic is a federally funded healthcare center. This can place restrictions on the projects, equipment, or protocols that they choose to implement. Other contextual factors that may affect project success are patient perceptions and provider turnover. Interactions with patients previously have revealed provider mistrust. They express difficulty in building relationships with their provider due to poor longevity. This problem is especially apparent for intimate discussions regarding end-of-life care. Provider turnover may also be problematic for the clinic in attempts to continue an intervention. New providers who are unfamiliar with established processes are often perceived as a barrier by other healthcare staff.

However, supportive leadership within the clinic may promote positive outcomes. The providers in the clinic are able to openly discuss issues with clinic management and other members of the healthcare team. The frequent provider turnover may also promote adaptability within the clinic. The staff is required to adapt to altered workflows and new schedules. This adaptability might contribute to a perceived readiness for change. This clinic is also located in Oregon, which has a well-established POLST background. This factor can contribute to project success through established POLST registry and availability of resources.

Implementation of the Project

Initial intervention stages consisted of Likert scale surveys to assess staff knowledge about POLST. After gathering data on POLST completion rate and knowledge at the clinic, the intervention provided staff education on POLST in Oregon. Materials were provided to highlight important aspects of POLST and an educational presentation was given to the clinical team. The presentation provided information for determining appropriate patients for POLST and how to access and use POLST. It also provided information on the importance of POLST registry. Initially, the goal was to provide a broader context for patients considered appropriate for POLST. However, the criteria evolved to solely include patients over 65 years as a starting point for ease of project implementation. Early project development included the student researcher being in the clinic as the project champion and to provide on site assistance. To comply with clinic regulations regarding Covid-19, materials were created remotely and all communication was done electronically.

For the initial intervention, collaboration with one provider team was conducted. Each team consists of a provider, registered nurse, medical assistant, and case manager. As a result of the Covid-19 pandemic, planned weekly staff interviews and face-to-face follow up was not feasible. At the request of the staff, bi-weekly e-mail communication with the provider offered an opportunity for project updates and allowed for further education regarding POLST. The goal is to extend the POLST program to other provider teams in the future, if the program is found to be sustainable.

After implantation of the intervention and collecting all project data, useful information was obtained. Overall, average staff knowledge ratings of POLST improved. It is important to note that one staff member who was surveyed pre-intervention resigned during the course of the project. Therefore, the post-intervention averages are likely skewed. Pre and post intervention

surveys largely expressed the same advantages and disadvantages related to POLST. Advantages included allowing patients to relay their wishes for end of life care to family and providers as well as eliminating guesswork in tough situations. Disadvantages included the need for regular updating and the inability to address more nuanced situations. Barriers to implementation after the intervention provided some insight. Team members expressed a lack of time with the patient related to other concerns during the visit as well as lack of patients meeting criteria for POLST as outlined in the project. The provider team reported a low number of visits with patients older than 65. Avoiding clinic visits related to the fear of Covid 19 is thought to have played a role in decreased clinic visits for more vulnerable older adults. The staff recognized Covid-19 as a barrier; however, recommendations for future implementation reflected the need for more clinic time with patients and the importance of an on sight project advocate. They also recognized the importance of POLST informational brochures and supported this as helpful for future implementation. Ultimately, this project fell well short of the proposed 20 percent target for qualifying POLST patients. The provider panel included 116 patients meeting the outlined criteria for POLST, none with a current POLST form. Over the course of the project intervention, two patients had completed and registered POLST forms and an additional five patients were provided information on POLST.

Outcomes

While there were no identified projects in the research that involved this type of clinic setting, some of the findings were reflective of previous research. The Likert scale results showed increased in staff knowledge surround POLST after the intervention. Clinic team responses also reflected the need for greater involvement of the project supervisor. This reflects previous research that staff education and project champions are important components of

POLST implementation (Mack & Dosa, 2019, Sebastian et al., 2015; Wenger et al., 2013). Reflections by clinic staff also indicated how vague language in POLST forms and lack of resources can be barriers to implementation. These sentiments are supported by the literature, which indicated complexity of medical care and poor resource support as barriers (Brugger et al., 2013; Mack & Dosa, 2019).

Post intervention results revealed differences from expected outcomes. Time constraints and the need for follow up visits to discuss and complete POLST forms was not considered as a barrier initially. While busy schedules and full patient panels regularly place constraints on frequent visits in primary care, it was not considered as a barrier prior to implementation. This time limitation is likely what allows nursing homes to be a more accessible environment for POLST implementation (Sebastian et al., 2015; Wenger et al., 2013). Lack of knowledge surrounding Native American culture and end-of-life beliefs led to further unexpected results. While Brugger et al, (2013) indicated religion as a barrier to POLST, culture and religious practices were not identified as a barrier in this project. Direct contact by the student researcher may have revealed more context around this matter. A greater understanding of Native American culture and beliefs around death and dying would be beneficial for POLST implementation moving forward.

Measures

Process measures included surveys of the provider team to assess helpfulness of education. Education and instructional materials were adapted based on feedback. Outcome measures were assessed with Likert scales. Likert scale surveys to determine staff knowledge on POLST aspects were consistent to ensure retest reliability. To ensure reliability and validity of the intervention, criteria for POLST patients remained the same pre and post intervention.

Ongoing communication with the provider helped to reinforce education measures and determine the success of interventions.

Analysis

Qualitative and quantitative data was collected through interviews, Likert scale surveys, and analysis of pre and post intervention POLST registration. Representation of the data was converted into graphs to show pre and post intervention results. Survey responses were grouped to depict similarities between reflections and determine areas for improvement (Polit & Beck, 2017).

Ethical Considerations

This project was approved through the institutional review board process. The researcher reviewed no patient charts. No individual patient information was reported on or displayed in project materials. POLST programs may also involve ethical dilemmas for some related to religion or end-of-life care values. Staff was allowed to opt out of project participation to respect ethical dilemmas; however, this option was not exercised by any clinic staff.

Conclusion

While relatively few patients were registered in the POLST program, the goal for increasing education and engagement of the clinic staff was achieved. The overall cost of the POLST resources should be minimal. Considering available online POLST forms, free Oregon POLST registry, and online printable brochures for the patient, financial cost of a POLST program should be insignificant. Time and lack of a project champion are likely the greatest barriers to sustainability of a POLST program in a primary care setting such as this one. Expansion of POLST education to more provider teams could promote greater awareness and identify more project champions to promote sustainability.

Based on results and staff feedback, moving forward with this project would require an available and on sight project champion, more schedule availability for follow up visits, and ongoing education for project sustainability. While the staff surveyed recognized utility of a POLST form in certain situations, the value of a POLST program in this setting is difficult to determine. However, based on the research and this project, a POLST champion is identified as crucial to success. POLST implementation in a rural health clinic is unlikely to be successful if that resource is not available.

Next Steps

Further research is required to determine the sustainability of a POLST program in a rural Indian Health Services clinic. To determine the ability of this program to be effective, the education should be expanded to the other provider teams at the clinic. After further survey results and longer term follow up, utility of this program would be clearer. Expansion of the program should also include identifying other individuals who are passionate about POLST and can function as project champions. As project implementation increases, it would also be important to interview or survey patients to gain insight into individual or population level barriers to the program. Ultimately, the goal moving forward will be to expand awareness surrounding POLST in order to support patients now and in the future.

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