

INCREASING POLST COMPLETION IN PATIENTS 65 AND OLDER: A PRIMARY CARE
QUALITY IMPROVEMENT PROPOSAL

by

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A scholarly project submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Nursing Practice

in

Family Nurse Practitioner

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2024

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ABSTRACT

The Physician Order for Life Sustaining Treatment (POLST) is a signed medical order, relied on when an individual is unable to communicate, or unaccompanied by a healthcare proxy; POLST protects individuals with active preferences to waive default life support interventions (Turnbull et al., 2019). Adults aged 65 and older require more emergency services than any other demographic, yet only 20% of injured adults requiring emergency transport have a POLST at the time of 911 contact (Zive et al., 2019). 25% of patients aged 65 and older receiving primary care at a rural, western Montana clinic have a POLST in the electronic medical record (EMR). A literature review of POLST expansion into the non-acute care setting was conducted to create a clinic workflow for POLST completion. Eight primary care providers were issued a discussion framework and EMR documentation aid. Number of new POLST were captured from the EMR bi-weekly. Patients 65 and older presenting for an annual wellness visit (AWV) were screened for POLST in the EMR. Provider offered POLST completion for those without and documented discussion regardless of completion. Those not ready to complete POLST were sent home with the document and offered a 2 month follow up appointment to complete it. 10.8% of qualifying AWVs (n=37) during the 30-day study period resulted in POLST completion. Provider guided POLST discussion promotes patient centered care in the event of an emergency. A longer study period, built-in EMR reminders, and an on-site POLST leader may increase metric compliance. Keywords: *Physician Orders for Life-Sustaining Treatment, primary care, aging population, annual wellness visit, advanced care planning*

CHAPTER ONE

REVIEW OF THE LITERATURE

Introduction

Adults aged 65 and older require more emergency services than any other demographic, yet only 20% of injured adults requiring emergency transport have an active Physician Order for Life Sustaining Treatment (POLST) at the time of 911 contact (Zive et al., 2019). The POLST document, displayed in Figure 1, aids the medical team in acute care decisions. 44% of Montana's population lives in rural areas (Montana State Legislature, 2020), emergency health events commonly involve life-flight or ambulance transfer to hospitals rich in resources and specialty providers. Older individuals with comorbidities or terminal illness may not desire higher level of care in a facility far from home.

The POLST document is a signed medical order to be relied on when an individual is unable to communicate, or unaccompanied by a healthcare proxy; the POLST protects individuals with active preferences to waive default life support interventions (Turnbull et al., 2019). Unlike other advance directives (i.e., living will or durable power of attorney), emergency medical services (EMS) are able to adhere to treatment preferences dictated by the signed form (Breyre et al., 2022). The introduction of the POLST, as a form of advanced care planning (ACP), in the primary care setting prepares adults at any stage of health for complex decision making in acute situations and/or end of life care and is associated with fewer hospitalizations (Sherry et al., 2022).

There are multiple avenues for individual ACP documentation, the POLST being the most utilized by emergency responders and the most explicit in expressing patient care preferences. Due to lack of clear goals of care in the absence of an advance directive or presence of a vague, outdated advance directive, people are receiving more invasive treatments and excessive hospitalizations than they or the healthcare proxy desire. Completion of a POLST prior to an acute medical event is ideal to aid in promotion or disruption of life-saving protocols that are initiated during an emergency and may contribute to unwanted hospitalization (Vranas et al., 2020). Patients with documented comfort measures on a POLST are 59-71% less likely to receive cardiopulmonary resuscitation than patients with no POLST or code status orders only; a signed POLST is associated with treatments provided (i.e., invasive or palliative) and location of death (Hickman et al., 2021).

Background

Advance directives have been criticized for portraying vague care preferences and demonstrating poor portability between sites of care (Mack & Dosa, 2020). The Oregon health system developed the POLST in 1994 in response to advance directive deficiencies in hopes to prevent unwanted medical interventions for individuals with advanced illness or nearing end-of-life; it now exists in various forms in all 50 states (Breyre et al., 2022). The POLST is a legal document, signed by a medical provider (i.e., physician, nurse practitioner, physician assistant) that communicates an individual's medical care preferences in acute situations when the person is unable to communicate. The Montana state POLST document has three sections that depict provision of standard life-saving measures for the patient without a pulse, and further medical interventions for the patient with a pulse. Section A declares desire of cardiopulmonary

resuscitation, section B determines level of care for the patient with a pulse (i.e., comfort measures, limited care, or intubation and transfer to higher level of care), and section C declares the desire for artificially administered nutrition (Figure 1). The National Quality Forum has endorsed POLST as the preferred document for acute injury planning (Constantine et al., 2021).

Compared with other advance care planning (ACP) documents, such as a living will or durable power of attorney, POLST elicits increased adherence by medical professionals due to the portable nature of immediate actionable medical orders (Constantine et al., 2021). 70 emergency department providers from both tertiary and county facilities were interviewed about the accessibility and usefulness of ACP documentation in acute situations, 50% of providers reported needing legal medical orders more than five times per week to provide appropriate care (Lakin et al., 2016). Providers in the study found that correctly completed POLST forms, transported with the patient, or present in the electronic medical record (EMR) were incredibly useful in promoting patient centered care.

Introducing the POLST in the clinic setting allows the patient time to discuss, seek clarification, and review choices, encouraging POLST completion in a controlled environment. Due to low health literacy, topic discomfort, family dynamics, or religious reasons, patients cannot be expected to initiate care preference discussions during an encounter. Providing provider education regarding POLST discussion initiation, document utility, and EMR documentation are keys to promoting this primary care metric (Nassikas et al., 2019). Completing a POLST in a primary care encounter is feasible with a structured and efficient conversation.

In a rural Western Montana clinic, only 25% of primary care patients aged 65 and older have an uploaded POLST document on file (Sampsel 2023). The clinic lacks a standardized process to ensure every patient aged 65 and older has the opportunity for POLST completion. Current ACP protocol requires providers to discuss POLST completion with Medicare beneficiaries as part of an optional Medicare annual wellness visit (MAWV) checklist. Provider reimbursement for documentation of end-of-life discussions was approved in 2016 by Centers for Medicare and Medicaid Services (CMS) (Mack & Dosa, 2019). As mentioned, these visits are optional, excluding numerous individuals from POLST discussion and potentially limiting revenue for the clinic. Screening patients for code status documentation during primary care encounters, similar to screening for preventative health measures, with a consistent and standardized approach will ensure greater opportunity for POLST completion in the 65 and older population.

Methods

To discover pertinent and recent research the following databases on the Montana State University (MSU) library website were searched, including PubMed, CINAHL, and Medline Web of Science. Search terms included: POLST, advance care planning, primary care provider, primary care setting, and code status. Pertinent literature was limited to published articles in peer reviewed journals, including systematic reviews and primary research studies. Exclusion criteria included literature reviews, opinion or consensus articles, research focused on a specific medical diagnosis, duplicate articles, articles published before 2017, in a language other than English, and studies taking place outside of the United States. Study selection was rooted in key terms and themes, observing patient population age 65 and older, primary care provider role in ACP, POLST utility in ACP, EMR application, and healthcare barriers to POLST expansion. Titles and abstracts were reviewed by this author and relevant studies were read in full for further review. The author utilized the Moher et al. (2009) PRISMA guidelines to evaluate and identify studies pertinent to the quality improvement initiative.

The original search, displayed in Figure 2, included 134 articles (PubMed =38, CINAHL = 16 Web of Science = 80). After duplicates were removed, 130 articles remained to be screened. 96 records were eliminated based on exclusion criteria leaving 34 full-text articles to be assessed for eligibility. 26 articles were further eliminated for poor generalizability and relevancy. Four quantitative articles and four qualitative articles were selected for literature synthesis.

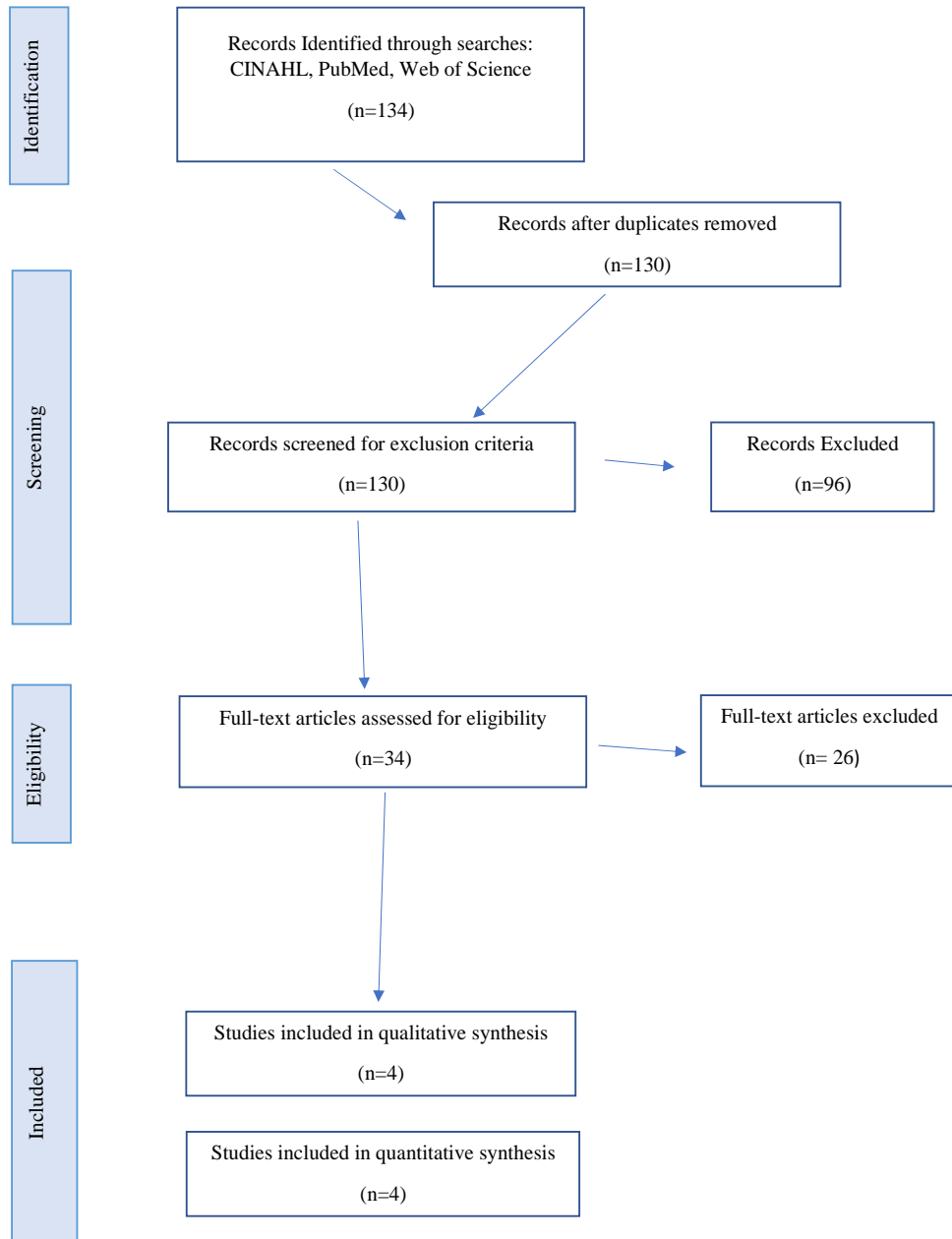


Figure 2. PRISMA diagram

Results

Articles that met inclusion criteria were a varied group of scholarly publications comprised of a phenomenology study (Dillon et al., 2017), a case control study (Hickman et al., 2020), a qualitative quasi-experimental study (Gedney-Lose et al., 2021), a qualitative prospective cohort study (Mack & Dosa, 2019), a quantitative pre-post study (Nassikas et al., 2019), a quantitative quasi-experimental study (Rose et al., 2019), a quantitative retrospective cohort study (Sherry et al., 2022), and a systematic review (Vranas et al., 2020).

The phenomenology study by Dillon et al. (2017) was conducted to assess the ACP practice patterns of 13 providers (3 PCPs & 10 specialists) in a multidisciplinary group practice. Outlier sampling was utilized to recruit providers with “high” and “low” rates of ACP documentation in the EMR. Structured interviews were performed until thematic saturation was achieved; themes were then confirmed using a coding structure. Providers found the POLST most efficient in documenting ACP, ACP information is beneficial although sometimes difficult to find or properly document, and all agreed upon the need for a standardized primary care ACP clinic workflow.

The retrospective cohort study by Sherry et al. (2022) observed demographic factors, mortality risk scores, palliative care involvement, and visits within the last year of life to PCPs and specialists of the charts of 403 deceased patients who received care from a U.S. primary care practice, housing 185 providers. PCP ACP involvement was associated with earlier healthcare proxy identification, POLST completion, and documented goals of care conversations. Only 29 subjects had the forementioned items documented three months prior to death, demonstrating great need for improvement (Sherry et al., 2022).

The case control study by Hickman et al. (2020) was conducted in 40 Indiana skilled nursing facilities (POLST is used n=29, and POLST is not used n=11) to assess concordance with recorded life-sustaining treatment preferences in the EMR with current stated preferences of either the resident (aged 65 and up) or their surrogate decision maker. Subjects were randomly selected to achieve 10 subjects in each category. Subjects with POLST on file were over three times more likely to have end-of-life care preferences mirror current preferences. This finding demonstrates the superiority of POLST compared to other ACP documents in clearly communicating end-of-life preferences although, there remains a gap in care with only 59.3% of residents with POLST having care preferences properly recorded (Hickman et al, 2020).

The systematic review by Vranas et al. (2020) aimed to observe the influence of POLST on treatment intensity in critically ill patients, hospital length of stay, and location of death. Eight retrospective cohort studies of good quality were selected and demonstrated a moderate strength of evidence for treatment limitations on POLST, correlating to less intensive treatment and death outside of hospital.

The qualitative quasi-experimental study by Gedney-Lose et al. (2021) was conducted at three Iowa primary care clinics (in a tertiary health care setting) to assess the benefit of a provider POLST toolkit to increase knowledge, self-reported comfort, and likelihood of use of Iowa Physician Orders for Scope of Treatment (IPOST). A Plan-Do-Study-Act (PDSA) cycle was applied to the toolkit, 10 PCPs participated and provided feedback via a 10-item survey and interview questions. Prior to the POLST toolkit intervention, most providers rated themselves as unlikely to use POLST in the clinic setting; providers post-intervention rated themselves as very likely to use POLST. Unrelated to the toolkit, PCPs noted the following barriers to POLST

completion in the clinic setting: time constraints, staff availability, and EMR documentation confusion (Gedney-Lose et al., 2021).

The prospective cohort study by Mack & Dosa (2019) was performed over three years in 14 states to advance the adoption of POLST in the United States. Convenience sampling determined state participation. A 31-item interview instrument was created to assess organizational readiness and potential barriers to POLST implementation. Themes that arose centered on funding and staff support, POLST education for provider and patient, and the creation of a statewide registry with goal metrics (Mack & Dosa, 2019).

The pre-post study by Nassikas et al. (2019) was conducted in a primary care clinic that provides care to an underserved population with high rates of chronic conditions and sparse EMR ACP documentation. Internal medicine residents (n=25) attended a 30-minute educational ACP session in hopes to increase ACP documents uploaded into the EMR, increase ACP counseling for patients aged 65 and older, and to increase resident confidence with leading ACP discussions. Over six months, all study goals improved demonstrating the positive effect of a brief educational intervention in targeting resident knowledge gaps.

The quasi-experimental study by Rose et al. (2019) was conducted in 36 metropolitan primary care clinics in the Mid-west to measure the impact of the Conversations of a Lifetime (COL) initiative in increasing ACP conversations and documentation. COL combined provider ACP training, EMR enhancements (alerts and charting aids), and the presence of an ACP facilitator (nurse liaison) to create a structured ACP workflow. This intervention was highly successful due to core leadership.

Literature Review

Primary care providers (PCPs) have the opportunity to see their patients annually and maintain a comprehensive understanding of the individual's health status. PCPs develop a personal relationship with their patients through annual and episodic visits making them 40% more likely to complete POLST with patients compared to specialty providers (Dillon et al., 2017). A POLST is to be completed while the individual is well and coherent to promote the desired level of care for future, unforeseen events. Patient healthy literacy regarding ACP is a gap related to primary care services (Nassikas et al., 2019). The assumption that family members know patient preferences in an acute medical situation is unsuitable and can lead to devastating outcomes. Promotion of patient centered care, aligning with individual goals and values for the future, must be the core of provider led POLST education and discussion (Bernard et al., 2020).

PCPs understand their patient's comprehensive health status and can appropriately guide goals of care conversations and the signing of a POLST. Sixty percent of patients aged 65 and older hospitalized with serious illness prefer ACP discussions to be led by their PCP versus a specialist or hospitalist; however only 20% of these inpatients confirmed ACP conversations with a PCP (Sherry et al., 2022). Early (prior to critically ill state) completion of POLST is five times more likely to occur when the PCP initiates a clinic-based discussion, factors promoting this statistic include favorable timing of discussion, preferred location, and comfort with provider (Sherry et al., 2022). Both inpatient and outpatient providers agree that POLST implementation requires a lead provider to initiate and continue to address ACP desires; the PCP most involved in care coordination is deemed the most appropriate ACP lead (Dillon et al., 2017).

Not all ACP documents are created equal in terms of specificity of care preferences, ease of use in an emergency, and legal operation. Advance directives, living wills, and designation of a surrogate decision maker in the form of a durable power of attorney fail to capture all possible medical scenarios. These documents can be cumbersome and difficult to find during a medical emergency. Legal barriers to completing these ACP documents include notarization and signature of witnesses (Vranas et al., 2020).

The POLST document aims to eliminate these barriers with required signage from only the patient and provider and acts as a portable medical order across all phases of medical care and settings. Standardized directives depicting specific medical interventions within the document can be initiated by prehospital medical services (e.g., emergency medical services, paramedics) (Vranas et al., 2020). The POLST can easily be altered by the patient and provider at any time with completion of a new one-page document, documentation in the EMR, and uploading of new form into the EMR.

Patients who completed a POLST prior to a critical illness were markedly more likely to have palliative care involvement and fewer hospitalizations than patients without a POLST and only a healthcare proxy (Sherry et al., 2022). In the skilled nursing facility setting, individuals with a completed POLST form-compared to other ACP documents, are 3.05 times more likely to have their end-of-life care preferences align with treatment received in the acute care setting (Hickman et al., 2020). The standardization of the POLST form increases the likelihood that patient preferences are documented and readily available.

Proactively screening patients prior to their PCP encounter for POLST documentation and defining *who* leads the conversation, *when* the conversation is initiated, and *how* the

conversation is documented are keys to metric success (Dillon et al., 2017). Perceived provider barriers to POLST implementation in the clinic setting include lack of POLST program leadership, time constraints, prioritization of clinic visit, EMR documentation concerns, confidence in leading ACP discussion, and interoperability of POSLT document (Mack & Dosa, 2019). Increasing provider confidence pertaining to ACP discussion and documentation through education modalities and creation of a standardized approach (including EMR adaptations, discussion framework, and screening assistance by nursing staff) will increase the number of uploaded POLST documents into the EMR (Nassikas et al., 2019).

The COL initiative, applied to the primary care setting, promoted ACP via structure and leadership (Rose et al. 2019). COL provided staff education and coaching, and EMR enhancements to help trigger unaddressed code status. The program attributed much of its success in multiple clinic sites to a nurse ACP leader, who was provided with COL implementation. Provider and nurse POLST education is required for metric improvement, although sustainability of POLST discussions and documentation requires funding a team lead for ongoing support (Mack & Dosa, 2019).

Studies demonstrate a PCP knowledge gap relating to POLST utility; prior to any ACP intervention a knowledge foundation must be addressed. PCP oriented ‘toolkits’ for addressing when to use POLST, shared-decision making, and billing and coding information can increase provider comfort with POLST discussion and completion (Gedney-Lose et al., 2021). A 30-minute presentation provided to internal medicine residents on ACP discussion framework and EMR documentation demonstrated a statistically significant increase in ACP discussions among primary care patients; online modules, role-playing, and direct observation have also been shown

to increase ACP confidence among providers (Nassikas et al., 2019). ACP in the form of POLST completion is feasible during a primary care encounter, although inadequate provider training (e.g., poor understanding or explanation of POLST) can exacerbate barriers to completion-such as time constraint.

Discussion

This literature review demonstrates distinct advantages to POLST completion in the primary care setting as observed by patient comfort with PCP, superior intolerability of document, and specific care preference promotion compared to an advance directive, living will or durable power of attorney. The presence of a POLST is linked to intensity of treatment provided and location of death (Hickman et al., 2020). Decreased hospitalizations, length of stay, and earlier palliative care involvement in the critically ill are observed with presence of a POLST.

A signed POSLT form implies that an educated conversation about end-of-life preferences occurred and that document selections are current and unbiased. Targeting providers for POLST education and solidification of shared decision-making skills are of utmost priority to avoid risk related to this healthcare intervention. The MAWV has built this document into work-flow structure at a rural clinic in Western Montana for Medicare beneficiaries aged 65 and older, although numerous patients remain underserved through the optional nature of MAWV.

Patient centered care can be promoted by screening for and expanding POLST into other patient encounters. This document should be reviewed and/or altered when a significant change in health status occurs or anytime the patient desires. All patients aged 65 and older

should have a completed POLST on file at their primary care facility (and a copy in their residence) depicting emergency care preferences.

Conclusion

POLST completion is a critical part of achieving goal-concordant care. Individual values, beliefs, and care preferences are to be reflected in life-sustaining treatment orders. The POLST rates highly as being an explicit and efficient tool in communicating patient care preferences across all healthcare settings. POLST completion is regarded as having minimal risk for great value in primary care patients aged 65 and older. ACP education interventions for providers demonstrates significant increases in ACP conversations and EMR documentation. Barriers to POLST completion can be amplified by inadequate provider training; equipping providers with the skill set for efficient conversations and documentation will streamline POLST completion in the primary care setting. Increasing provider knowledge of POLST, administrative buy-in, EMR enhancements, and program sustainability are key targets of this quality improvement initiative.

CHAPTER TWO

QUALITY IMPROVEMENT PROPOSAL

Introduction

The POLST document is a signed medical order to be relied on when an individual is unable to communicate or is unaccompanied by a healthcare proxy; the POLST protects individuals with active preferences to waive default life support interventions (Turnbull et al., 2019). Unlike advance directives (i.e., living will or durable power of attorney), the POLST only requires a signature from the patient (or healthcare proxy) and the provider to be an active order; the form is unique due to its readily actionable medical orders that emergency medical services (EMS) can legally adhere to (Breyre et al., 2022). The introduction of the POLST, as a form of advanced care planning (ACP), in the primary care setting prepares adults at any stage of health for complex decision making in acute situations and/or end of life care and is associated with fewer hospitalizations and earlier palliative care involvement (Sherry et al., 2022).

Patient healthy literacy regarding ACP is a knowledge gap related to primary care services (Nassikas et al., 2019). ACP is intended to be an upstream conversation, had while the individual is well and coherent to promote the desired level of care for future, unforeseen events. PCPs understand their patient's comprehensive health status and can appropriately guide goals of care conversations and the signing of a POLST. Sixty percent of patients aged 65 and older hospitalized with serious illness in a large, multicenter study would prefer ACP discussions to be led by their PCP versus a specialist or hospitalist; however only 20% of these inpatients confirmed ACP conversations with a PCP (Sherry et al., 2022). Both inpatient and outpatient

providers agree that POLST implementation requires a lead provider to initiate and continue to address ACP desires; the PCP most involved in care coordination is deemed the most appropriate ACP lead (Dillon et al., 2017).

Problem Statement

Currently there is no national standard or goal for POLST completion in the aging American population. The risk for cardiovascular disease (CVD) increases with age as well as accumulation of comorbidities; the American Heart Association reports that 75% of US men and women 60-79 years have CVD and the incidence increases to 86% in those 80 and older (Rodgers et al., 2019). Only 25% of patients aged 65 and older receiving primary care at a Western Montana clinic have an uploaded POLST in the electronic medical record (EMR) dictating care preferences in the event of cardiac arrest (Sampsel, 2023); the remaining 75% will receive full life sustaining measures, regardless of health status, with less control and direction over their medical treatment. The forementioned clinic provides Medicare Annual Wellness Visits (MAWV), which includes offering POLST discussion and completion as part of an appointment checklist. POLST is already integrated into work-flow structure for Medicare beneficiaries aged 65 and older, although numerous patients remain underserved through the optional nature of the MAWV.

Increasing provider knowledge and comfort regarding end-of-life care discussions has been demonstrated to increase ACP in the primary care setting. Screening for the presence of POLST in the EMR at each 65 and older annual wellness visit (AWV), equipping providers with a discussion framework to engage their patients in this care topic, and developing EMR

enhancements to ensure proper documentation, can increase the number of POLST documents completed and uploaded into the EMR (Nassikas et al., 2019).

Organizational Microsystem Assessment

At the intervention clinic site, the project lead observed two PCPs for multiple clinic days and noted that POLST discussion is only addressed during a MAWV, without mention in any other 65 and up encounter. Per EMR data extraction from the past one-year, only 25% of patients aged 65 and older receiving primary care at the intervention clinic site have a POLST on file (Sampsel, 2023).

Multiple intervention clinic site PCPs also work as hospitalists or emergency providers in the connected critical access hospital which shares the same EMR, promoting care communication in the outpatient and inpatient settings. One of these providers was interviewed by the project lead about the value of prior ACP documentation in the emergency setting; she described the following themes: frequently needing clear care direction in the aging population, family members unaware of patient end-of-life care preferences, end-of-life care preferences not being addressed until emergency event occurs. This dual provider believed that emphasizing POLST completion in primary care would aid in patient-centered care during emergency events (J. Billings, personal communication, September 15, 2023).

The project lead presented the low number of POLST documents on file for the 65 and older patient population to the clinic site manager and organization chief executive officer (CEO), both individuals viewed end-of-life care documentation as a valuable tool and agreed to a clinic work-flow intervention to increase POLST completion in the target population at the

primary care clinic. Eight PCPs and their team, consisting of either a registered nurse (RN) or medical assistant (MA), will participate in the intervention.

Quality Improvement Model

The Institute for Healthcare Improvement Quality Improvement Essentials Toolkit includes the Plan-Do-Study-Act (PDSA) evaluation tool that aids in critical assessment of an intervention to solidify a practice change in a unique environment. The PDSA will be utilized to promote POLST completion for the selected demographic in this clinic. The cycle will be run multiple times, considering stakeholder feedback and real time data, to assess if the practice change leads to the desired improvement. This is an appropriate quality improvement tool to gauge the feasibility of this intervention due to its ability to address extraneous factors not anticipated by the team, thus promoting continual avenues for improvement and desired intervention execution (Institute for Healthcare Improvement, 2017).

Plan: PCPs and their team (RN or MA) will screen patients aged 65 and older at every AWV for presence of POLST in the EMR during intake. The team will continue to offer POLST at MAWVs. If POLST not present, the PCP will present document and facilitate completion. A trial run of the forementioned POLST workflow will take place with two clinic PCPs. The primary POLST workflow intervention will occur one month later with the entire clinic PCP group. Intervention evaluations will take place every two weeks, to include: emailed surveys to PCPs to document their experience and share comments or suggestions, IT EMR data collection to calculate number of completed POLST, and chart review to tally number of POLST discussions without POLST completion. Modest POLST completion goals have been set due to anticipated patient discomfort with determining life-sustaining treatment options, patient desire

to take additional time to fill out the document, and the protentional need to consult family members prior to signing. PCPs will also be adjusting to the addition of POLST discussion in the AWV structure, this may place time constraints on POLST education and the shared decision-making process resulting in form completion at a later date. Scheduled follow up appointments within two months of initial POLST conversation will be monitored to ensure opportunity for POLST completion in the target population.

Do: The intervention will be trialed 12/04/2023-12/08/2023 with two providers prior to clinic-wide implementation to evaluate unanticipated barriers and likelihood of clinic-wide adoption. Provider and RN/MA feedback will be documented, as well as unexpected observations. Number of completed POLST, documented POLST discussions without completion, and follow up appointments made to complete POLST in the EMR will be calculated for the short observation period. The primary intervention will begin one month later with consideration of trial observations. The primary intervention will take place 01/17/2024-02/29/2024. Data collection and intervention evaluation will be completed every two weeks.

Study: During the trial run, EMR data and provider feedback will be obtained to alter proposed workflow. During the primary intervention, EMR data and provider feedback will be analyzed by project lead and site stakeholders. This data will be summarized and compared to intervention smart goals. Successes and pitfalls, rooted in qualitative and quantitative data, of the intervention will be documented and reflected upon for continued improvement.

Act: After observing and analyzing the data of the trial run with key stakeholders, necessary structural changes will be made, and the intervention will then be rolled out to all clinic PCPs and their team. Three PDSA cycles will be run in two-week intervals throughout the

primary intervention duration to solidify a clinic policy surrounding POLST approach and workflow.

Purpose Statement

The purpose of this quality improvement initiative is to align care desired with care provided in emergency and/or end of life situations by increasing POLST completion for the population aged 65 and older. Engaging patients and their family members in ACP early on can make this topic more approachable later in life as health status changes due to aging. Immediate goals of the intervention are to increase the number of POLST documents uploaded in the organization EMR to enhance care communication across multiple healthcare settings.

Downstream goals of this initiative are avoiding unwanted CPR, acute transfers, death in hospital, and increasing palliative or hospice involvement when indicated. Specific, measurable, achievable, relevant, and time-bound (SMART) POLST intervention goals are depicted in Tables 1 through 4 below:

<p>SMART Goal #1: <i>By March 1, 2024: 90% of patients 65 and older presenting for AWVs without POLST on file will complete a POLST during their visit.</i></p> <ul style="list-style-type: none"> • <i>Interim Goals:</i> <ul style="list-style-type: none"> ○ <i>At the end of the first PDSA cycle (02/01/2024): 25% of these patients will complete a POLST form at their encounter.</i> ○ <i>At the end of the second PDSA cycle (02/16/2024): 75% of these patients will complete a POLST form at their encounter.</i> 		
<p>Description of strategies to be utilized to accomplish goal including any needed resources:</p> <ul style="list-style-type: none"> • RN/MA to screen patient record for POLST prior to AWV & provide PCP with POLST form to bring into appointment • PCP to educate patient on utility of POLST and participate in shared decision making to complete document • PCP to document POLST discussion using optional smart-phrase (meeting CMS standards) and minutes spent discussing topic/completing form • RN/MA to scan and upload completed form into EMR, original copy to be sent home with patient. • PDSA cycles: progress toward goals and unexpected success and pitfalls will be evaluated at the end of each 2-week interval to determine needed workflow adjustments. 		
<p>Data to be collected</p>	<p>Method of Collection and who is responsible</p>	<p>Planned Data analysis</p>
<p>(1) Number of primary care patients (65+) with newly uploaded POLST in EMR. Three rounds of data collection, observing two-week period intervals.</p>	<p>(1) IT to run EMR report that captures number of newly uploaded POLST in primary care patients (65+). Three rounds of data collection, observing two-week period intervals.</p>	<p>(1) Number of new POLST completed for total number of AWV in 6 weeks will be presented in a run chart. Descriptive statistics will summarize dataset by 5-year age groups.</p>

Table 1. SMART goal for POLST completion at AWV and strategies to achieve goal

<p>SMART Goal #2: <i>By March 1, 2024: 50% of patients 65 and older who did not complete a POLST at their AWV (i.e., needing more time to review care options or discuss form with family members) will make a follow up appointment within two months to complete POLST.</i></p> <ul style="list-style-type: none"> • <i>Interim Goals:</i> <ul style="list-style-type: none"> ○ <i>At the end of the first PDSA cycle (02/01/2024): 20% of patients with an incomplete POLST form will make a follow up appointment within two months to complete.</i> ○ <i>At the end of the second PDSA cycle (02/16/2024): 35% of patients with an incomplete POLST form will make a follow up appointment within two months to complete.</i> 		
<p>Description of strategies to be utilized to accomplish goal including any needed resources:</p> <ul style="list-style-type: none"> • PCP educate patient on utility of POLST and participate in shared decision making to complete document. • PCP to document POLST discussion using optional smart-phrase (meeting CMS standards) and minutes spent discussing topic. • PCP to advise patient to review POLST with family members and reflect on care options if not ready to complete form during AWV. • PCP to advise patient to make a follow up appointment within two months to complete form. • PDSA cycles: progress toward goals and unexpected success and pitfalls will be evaluated at the end of each 2-week interval to determine needed workflow adjustments. 		
<p>Data to be collected</p>	<p>Method of Collection and who is responsible</p>	<p>Planned Data analysis</p>
<p>(1) Number of primary care patients (65+) who discussed POLST without completion of form. Three rounds of data collection, observing two-week period intervals.</p> <p>(2) Number of follow up appointments made within 2 months to further discuss and complete POLST. Three rounds of data collection, observing two-week period intervals.</p>	<p>(1) Chart review by project lead</p> <p>(2) Chart review by project lead</p>	<p>(1) Number of POLST discussions without completion for total number of AWVs in 6 weeks will be presented in a run chart. Descriptive statistics will summarize dataset by 5-year age groups.</p> <p>(2) Number of follow up appointments made within 2 months of AWV for POLST completion in 6 weeks will be presented in a run chart. Descriptive statistics will summarize dataset by 5-year age groups.</p>

Table 2. SMART goal for POLST follow up visit and strategies to achieve goal

<p>SMART Goal #3: <i>By March 1, 2024: PCPs will rate higher POLST-workflow satisfaction scores on 4-point Likert Scale survey compared to pre-intervention POLST-workflow survey results</i></p>		
<p>Description of strategies to be utilized to accomplish goal including any needed resources:</p> <ul style="list-style-type: none"> • New clinic workflow structure to address POLST completion in 65 and older patients, other than MAWVs. • Increased communication between RN/MA and PCP regarding presence of POLST in EMR • Creation of EMR smart phrase (meeting CMS standards) to aid in POLST discussion documentation. • POLST discussion framework made available to PCPs 		
Data to be collected	Method of Collection and who is responsible	Planned Data analysis
<p>(1) 4-point Likert Scale survey regarding PCP satisfaction with POLST clinic workflow (e.g., barriers, comfort with topic, patient dynamics, staff communication).</p>	<p>(1) Project lead to email survey to all participating PCPs prior to intervention start date (01/17/2024) and again on intervention end date (03/01/2024).</p>	<p>(1) Provider satisfaction Likert-Scale surveys will be presented using a Likert chart. The independent t-test will be applied to observe statistical significance between the pre- and post-intervention survey data sets.</p>

Table 3. SMART goal for POLST workflow satisfaction and strategies to achieve goal

<p>SMART Goal #4: <i>One year out from POLST intervention initiation, a decrease in undesired life-sustaining care interventions by EMS and ED will occur and an increase in palliative and hospice care involvement will be observed by hospitals near study clinic site and site PCPs.</i></p>		
<p>Description of strategies to be utilized to accomplish goal including any needed resources.</p> <ul style="list-style-type: none"> • POLST workflow uploaded to policy folder and distributed • Continued screening for POLST documentation in patients 65 and older • Thorough patient education regarding utility of POLST (e.g., informing family members of POLST choices, keeping POLST in an obvious location, updating document with health status change) • Annual review of POLST choices by PCP and patient • Appropriate comfort care referrals made by PCP for patients wanting to avoid CPR 		
Recommended data to be collected	Method of Collection and who is responsible	Recommended Data analysis
<p>(1) EMS/ED/Inpatient medical staff adherence to POLST in acute medical situation (2) Number of times CPR withheld due to POLST order</p>	<p>(1), (2) EMS/ED staff chart review and project lead to carry out staff interviews.</p>	<p>Chi-squared test to demonstrate significance of POLST in promoting desired emergency care.</p>

Table 4. Long term SMART goals of POLST implementation in the clinic setting and strategies to achieve goals

Methods

This intervention introduces a workflow change to initiate POLST EMR screening and voluntary POLST completion at AWWs for those 65 and older at a family practice clinic in Western Montana. The intervention will be six weeks in duration with EMR data collection, provider feedback, and work-flow critique occurring every two weeks. Based on data, necessary workflow adjustments will be made every two weeks. The aim of this intervention is to increase POLST documentation and completion from baseline POLST 2023 metrics to promote patient centered care across all healthcare settings.

Implementation

This work-flow intervention aims to increase POLST completion in the primary care setting. The intervention site is a family practice clinic in Western Montana; eight PCPs and their team (RN/MA) will screen patients 65 and older at every AWV for presence of POLST in the EMR. Those without a POLST will be presented with the document and offered shared decision making with their PCP to complete it (see Appendix A flowchart). Resources to aid in POLST completion will include RN/MA screening for POLST at intake, a provider focused discussion framework adopted from the National POLST Paradigm and a shareable EMR smart phrase for POLST documentation (see Appendix B and C for discussion framework and smart phrase). No facility or outside funding are necessary for this intervention development or implementation. The intervention will take place January 17, 2024, to February 28, 2024. A PSDA cycle will be performed by the project lead every two weeks to identify successes, barriers, and/or necessary structural changes. Data will be collected every two weeks, including: number of PCP led POLST discussions without form completion, number PCP led POLST discussions leading to form completion, and PCP experience with work-flow alteration. Maintaining a POLST on file can promote patient centered care within the facility and across all other healthcare settings. PCPs are the most appropriate entity to lead ACP shared decision making due to having a comprehensive understanding of their patient's health status.

EMR data collected will only include presence or absence of POLST and patient age, categorized in five-year increments to ensure confidentiality. A bi-weekly data collection tally sheet will be used to quantify EMR data. A 4-point Likert scale, developed by the project lead, will be emailed to PCPs prior to intervention start date and post intervention to gain insight on their experience with POLST promotion. Anticipated barriers to clinic site POLST promotion are

lack of time during patient encounter, staff forgetting to screen patient record for uploaded document, communication lapses between provider and RN/MA, and patient discomfort with topic. Barriers will be addressed by investigating communication patterns among PCP teams through direct feedback, assessing provider comfort with POLST knowledge and its utility, and observing time length and content of target patient AWWs to better understand where a POLST discussion would best fit in the appointment structure.

Evaluation and Analysis

Data collection will occur every two weeks of the six-week intervention. Clinic site IT department will assist with EMR POLST data capture organized by patient age in five-year increments. The number of new, completed POLST documents in the target-population at AWWs will be quantified and compared to the number of total target-population AWWs in two-week increments. Only the presence of POLST and patient age will be extracted from the EMR. Every two weeks, chart review will be performed by the project lead to quantify number of POLST discussions had without document completion in the target population (see Appendix E and F for data collection tools). POLST discussion and completion data will be summarized using descriptive statistics. A 4-point Likert scale survey will be emailed by the project lead to the eight PCPs prior to intervention start date and on the final intervention day to capture their experience, successes, and barriers regarding the intervention. A comments section for suggestions, concerns, or feedback will be available at the end of the survey to gather qualitative data from PCPs (see Appendix D). Likert scale data will be portrayed in a Likert chart for viewing purposes, and the two-sample t-test will be applied to the data to demonstrate statistical

significance between pre- and post-intervention PCP satisfaction scores with POLST clinic workflow.

Safety and Confidentiality

Data collected during the intervention will be free of individual identifying information. EMR POLST data will be quantified in five-year age groups (e.g., 65-69, 70-74) to avoid possible identification of patients who are 90 years and older. Patient gender identification, medical history, address, or insurance status will not be extracted from the EMR. There are no obvious risks to patients or clinic staff associated with increasing POLST completion in the clinic setting. Montana State University (MSU) and clinic site stakeholder approval was required for the development and implementation of this quality improvement intervention. Approval has been granted from both the MSU Mark and Robyn Jones College of Nursing advising faculty and the clinic site manager, as well as the healthcare facility CEO.

The EMR of patients aged 65 and older who have a scheduled PCP encounter during the six-week intervention will be viewed for specific data point extraction. No other information from PCP visit notes will be utilized in this study. Patient age and presence or absence of POLST documentation will be the only data extracted from the EMR by the IT department. The EMR visit note for each 65 and older patient will be read, screening for presence of POLST discussion documentation, this will be collected and reported as a numerical value. Likert scale survey data, regarding individual provider experiences during the intervention, will remain anonymous via survey completion through a website application (i.e., Google Forms).

Data extracted from the EMR by IT will be transmitted to the project lead through the secure healthcare facility email network. Data will be stored on the project lead's personal laptop

which is only accessible by the project lead. This device is protected with multiple password features. The data collected, as described above, will be reviewed outside of the clinic site for study and manuscript writing purposes. All data will be deleted from the project lead's personal laptop and healthcare facility email in May 2024 once intervention and presentation of findings have been completed.

CHAPTER THREE

INCREASING POLST COMPLETION IN PATIENTS 65 AND
OLDER: A PRIMARY CARE QUALITY IMPROVEMENT
PROJECT

Contribution of Authors and Co-Authors

Manuscripts in Chapters One, Two, Three, and Four

Author: Katherine Denali Troxel

Contributions: The author completed analysis of the clinical problem, review of the literature, developed methods of project implementation, implemented the project at the study site, performed data analysis, and wrote the first draft of the manuscript in its entirety.

Co-Author: Dr. Margaret Hammersla

Contributions: The co-author advised the author on project development and implementation and performed editorial review of manuscript.

Co-Author: Dr. Julie H. Alexander Ruff

Contributions: The co-author performed editorial review of manuscript.

Manuscript Information

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American Association of Nurse Practitioners

Status of Manuscript:

- Prepared for submission to a peer-reviewed journal
- Officially submitted to a peer-reviewed journal
- Accepted by a peer-reviewed journal
- Published in a peer-reviewed journal

Abstract

Background: The Physician Order for Life Sustaining Treatment (POLST) is a signed medical order, relied on when an individual is unable to communicate, or unaccompanied by a healthcare proxy; POLST protects individuals with active preferences to waive default life support interventions (Turnbull et al., 2019). Adults aged 65 and older require more emergency services than any other demographic, yet only 20% of injured adults requiring emergency transport have a POLST at the time of 911 contact (Zive et al., 2019). Local problem: 25% of patients aged 65 and older receiving primary care at a rural, western Montana clinic have a POLST in the electronic medical record (EMR). **Methods:** A literature review of POLST expansion into the non-acute care setting was conducted to create a clinic workflow for POLST completion. Eight primary care providers were issued a discussion framework and EMR documentation aid. Number of new POLST were captured from the EMR bi-weekly. **Interventions:** Patients 65 and older presenting for an annual wellness visit (AWV) were screened for POLST in the EMR. Provider offered POLST completion for those without and documented discussion regardless of completion. Those not ready to complete POLST were sent home with the document and offered a 2 month follow up appointment to complete it. **Results:** 10.8% of qualifying AWVs (n=37) during the 30-day study period resulted in POLST completion. **Conclusion:** Provider guided POLST discussion promotes patient centered care in the event of an emergency. A longer study period, built-in EMR reminders, and an on-site POLST leader may increase metric compliance.

Keywords: *Physician Orders for Life-Sustaining Treatment, primary care, aging population, annual wellness visit, advanced care planning*

Introduction

Individuals aged 65 and above necessitate increased emergency services compared to other age groups. Surprisingly, just under one-quarter of injured adults in need of emergency transport possess an active Physician Order for Life Sustaining Treatment (POLST) at time of 911 contact (Zive et al., 2019). The POLST document serves as a formally endorsed medical order, intended for use when an individual is incapable of communication or lacks a healthcare proxy. It safeguards individuals with specific preferences, allowing them to forego default life support interventions (Turnbull et al., 2019). This document plays a crucial role in guiding medical teams during acute care decision-making. In rural Montana, emergency health incidents often involve life-flight or ambulance transfers to hospitals equipped with abundant resources and specialized providers. Older individuals grappling with comorbidities or terminal illnesses may prefer not to undergo a higher level of care in a facility far from their home.

Presently, there is no established national standard for POLST completion among the aging population in the United States. The likelihood of cardiovascular disease (CVD) rises with age, along with the accumulation of comorbidities; this poses an increased risk for emergency response (Rodgers et al., 2019). Merely a quarter of patients aged 65 and above, who receive primary care at a clinic in Western Montana have a POLST uploaded in the electronic medical record (EMR), specifying their care preferences in the event of cardiac arrest (Sampsel, 2023). The remaining 75% will undergo full life-sustaining measures, irrespective of their health status, resulting in reduced control and guidance over their medical treatment. Screening at intake for presence of POLST in the EMR at annual wellness visits (AWV) for individuals aged 65 and older, promoting a structured framework for POLST discussion, and implementing EMR

enhancements for proper documentation, can boost POLST completion in the primary care setting (Nassikas et al., 2019).

Review of the Literature

Primary care providers (PCPs) develop a close relationship, and deep understanding of their patients' health status through regular visits, making them 40% more likely to offer and complete POLST compared to specialty providers (Dillon et al., 2017). Despite a vast majority of seriously ill hospitalized patients aged 65 and older preferring PCPs for advanced care planning (ACP) discussions, only 20% of inpatients confirmed such conversations with a PCP (Sherry et al., 2022). In both inpatient and outpatient settings, providers concur that the initiation and ongoing management of POLST implementation requires a lead provider. The PCP actively engaged in care coordination is considered the most suitable lead for ACP discussions (Dillon et al., 2017).

A knowledge gap exists among PCPs concerning the utility of POLST in the emergency setting. The provision of PCP-oriented 'toolkits' that cover when to promote POLST, shared decision-making, and proper documentation information can enhance provider confidence in discussing and completing POLST (Gedney-Lose et al., 2021). PCPs perceive various barriers to POLST implementation, including a shortage of POLST program leadership, time constraints, prioritization of clinic visits, concerns about EMR documentation, confidence in leading ACP discussions, and challenges related to the interoperability of POLST documents (Mack & Dosa, 2019). ACP initiatives in primary care, emphasizing nurse and provider education and coaching, demonstrate an increase in addressing unknown code status for the aging population. The key to

initiative success is maintaining an ACP leader, who is dedicated to metric improvement and available for ongoing support (Mack & Dosa, 2019).

Conceptual Framework

The Plan-Do-Study-Act (PDSA) evaluation tool aided in critical assessment of increasing POLST completion in the primary care setting for those 65 and older. With each two-week study interval, EMR data and assessment of provider adherence to workflow change was reviewed to improve upon the intervention to solidify an ACP practice change. The PDSA tool was suitable for assessing the feasibility of this intervention because it has the capability to address unforeseen external factors not accounted for by the team.

During the initial planning phase, the intervention was structured for success, and a leader identified. A proposed POLST clinic workflow, provider discussion framework, and EMR documentation enhancements were created. All eight primary care providers at the clinic site were briefed on the intervention and their expected participation. Nursing staff were briefed on their role of screening target population patients for POLST at AWVs. Data collection and organizational methods were identified.

The action, or “do” phase relied on the providers and their nursing team to carry out the new clinic workflow and note factors that impede POLST completion in the target population. The team lead was on site several days per week to promote the intervention and to provide staff support. Bi-weekly EMR data capture and provider feedback relating to patient response, usefulness of POLST supplementation tools, time conflicts, and comfortability with workflow were obtained.

During the study phase, qualitative and quantitative data were compared to intervention goals. Bi-weekly data results dictated intervention modifications and adjustment of realistic goals for a month-long intervention. The study phase probed the team lead to look deeper into creating and maintaining change within a group that operates in a structured environment. The intervention modifications, molded from the study phase were then implemented in the act phase for focused progress towards POLST completion in the primary care setting.

Project Aims

This quality improvement intervention aims to harmonize desired care with emergency and/or end-of-life care by expanding POLST completion for individuals aged 65 and older in the primary care setting. Early engagement in ACP with patients and their families renders the topic more approachable as health status changes with aging. The overarching intervention goal is to enhance patient-centered care, involving emergency care communication across multiple healthcare settings, by increasing the number of POLST documents uploaded into the EMR. Long-term objectives of this intervention include preventing undesired CPR, minimizing acute transfers, reducing hospital deaths, and increasing involvement in palliative or hospice care when necessary.

Methods

The POLST expansion intervention was implemented at a family practice clinic in rural, western Montana. The clinic houses eight primary care providers and their nursing teams (i.e., registered nurse or medical assistant). Each of the eight providers delivers care across all stages of life, pediatric to geriatric. At each patient encounter the nursing staff performs intake,

including vital signs, documenting patient concerns, and updating the patient's medical record. Site clinic providers offer optional Medicare Annual Wellness Visits (MAWV) to Medicare beneficiaries; these visits address preventative health screenings, health risk assessment, functional abilities, and POLST for those 65 and over. The MAWV has built POLST into clinic workflow at the site clinic, although numerous patients remain underserved through the optional nature of the MAWV.

By screening for and expanding POLST into regular AWVs for those 65 and older, site clinic providers can expose more patients to emergency medical care planning in a non-acute setting. A POLST should be reviewed and/or altered when a significant change in health status occurs, or at any point per the patient.

Intervention

The quality improvement intervention introduces a new clinic workflow, aimed at increasing POLST completion in the primary care setting outside of the optional MAWV. The POLST expansion clinic workflow, as well as tools for success, are described as follows:

Tools provided for success: To guide POLST discussions at AWVs and ensure proper documentation, clinic site providers are equipped with a focused discussion framework adopted from the National POLST Paradigm and access to an EMR smart phrase for POLST documentation (Appendix B and C). These tools were presented at a provider staff meeting and emailed to each of the eight participating providers.

Screening: In the clinic, nursing staff are to screen patients 65 and older who present for an AWV for presence of POLST in the EMR during intake. If the patient does not have a POLST

document uploaded into the EMR, the nurse will communicate this to the provider and hand them a physical POLST form to take into the visit.

POLST discussion/completion: The provider offers POLST completion, just as he or she would offer preventative health screenings at an AWW with shared decision making. The provider can utilize the POLST discussion framework to approach the topic clearly and sensitively. All three sections of the document are to be explained in detail with hypothetical scenarios if necessary to ensure patient understanding. If the patient opts to not complete the form during the visit, the option of a follow up appointment will be provided to further discuss the document. The follow up appointment will be made in 2 months' time. If successful completion of POLST occurs, with signage from both the patient and provider, a copy is made and the original POLST is sent home with the patient to be placed in an obvious location.

POLST documentation: The completed and signed POLST copy is then uploaded into the EMR by nursing staff, rendering the document visible to all providers in the facility involved in the patient's care. For efficiency, the provider may use the POLST smart phrase that has been made available in the EMR as a 'canned text'. This smart phrase ensures POLST documentation meets the Centers for Medicare and Medicaid Services (CMS) standards.

Measures

Due to the voluntary nature of the POLST, there is currently no national standard or site clinic goal for POLST completion in the aging population. Assessing the benefits and change produced by POLST expansion in primary care will be delayed, as POLST is utilized in an acute medical event in emergency medical settings and/or hospitalization. Increased referrals to

hospice or palliative care resources and a reduced occurrence of CPR are possible future outcomes of increased POLST completion in the aging population.

EMR data capture was performed bi-weekly, observing the following: qualifying patient encounters, number of new POLST completed, provider documentation of POLST discussion, and number of follow up appointments scheduled for further POLST discussion. The following goals were set to measure intervention success: by March 1, 2024, 90% of patients 65 and older presenting for AWV without POLST on file will be offered a POLST to complete during the visit; by March 1, 2024, 50% of patients 65 and older who did not complete a POLST at their AWV will schedule a follow up appointment within two months to complete POLST. A four-point Likert scale satisfaction survey (Appendix D) was provided pre-intervention to the eight providers to gain insight on their comfort with POLST discussion and documentation, barriers to completion, and perception of clinic staff contribution to POLST screening. A post-intervention satisfaction survey was administered to assess for improvement and provider acceptance of the POLST intervention.

Analysis

Quantitative POLST intervention data was captured from the EMR and tallied in Microsoft Excel, grouped by patient age in five-year increments. A descriptive statistics table was generated to portray number of patients 65 and older presenting for AWV without POLST and the resulting number of patients completing POLST at their encounter. The pre-intervention Likert scale satisfaction survey administered to site clinic PCPs was quantified in a Likert scale chart using Microsoft Excel. An insufficient number of post-intervention Likert scale surveys

were completed to perform an inferential statistics test, comparing pre- and post-intervention PCP responses.

Results

Throughout the 30-day intervention period there were 37 qualifying patient encounters (i.e., patient 65 and older presenting for an AWV without POLST in the EMR). As visualized in Table 5, POLST was presented and completed at four of these encounters demonstrating a 10.8% POLST completion rate. Documentation of POLST completion was present in the performing provider's documentation for all four encounters. The developed POLST EMR smart phrase was utilized one time. In the remaining 33 patient encounters, POLST discussion was not documented, and the assumption is that a POLST was not offered by the provider. There were zero follow up appointments made for further POLST discussion.

Annual Wellness Visit POLST Completion: <i>January 22, 2024-March 1, 2024</i>		
Total Visits n=37	Did complete POLST	Did not complete POLST
	4 (10.8%)	33 (89.2%)
Patient age		
65-69	2	20
70-74	1	5
75-79	0	8
80-84	0	0
85 +	1	0

Table 5: POLST completion per qualifying AWV (n=37) during the 30-day intervention period.

Prior to the intervention start date, the Likert scale POLST satisfaction survey was administered with four of the eight providers contributing responses as seen in Figure 3; the majority of providers felt they had adequate time to discuss POLST with their patients during their visit, the majority was unsure if their documentation met CMS standards, and the majority felt confident in their ability to answer patient POLST related questions. Each of the four providers had a varying response for the nursing staff’s role in performing POLST screening. Only one provider completed the post-intervention survey, deeming comparison of the pre- and post-intervention provider feedback unsubstantial.

Provider POLST Workflow Perspective: Pre-intervention

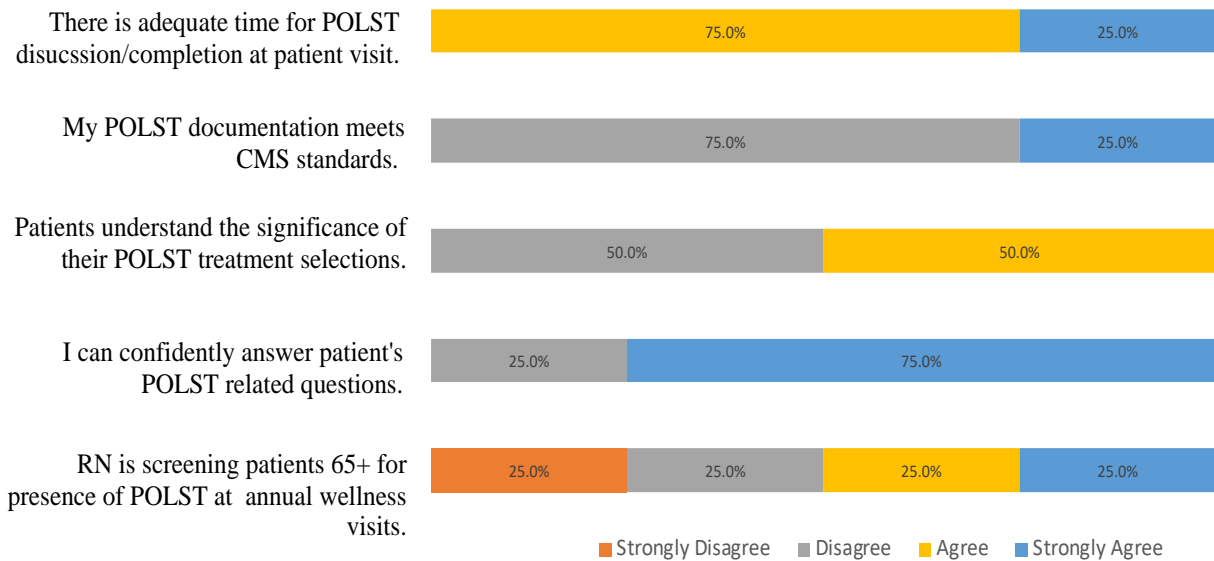


Figure 3: Likert chart portraying four providers survey responses to the pre-intervention Likert scale satisfaction survey regarding POLST clinic workflow.

Discussion

The intervention failed to greatly increase POLST expansion in the primary care clinic setting. Providers at the site clinic continue to rely on the MAWV for POLST completion in the

aging patient population despite only 25% of primary care patients 65 and older having a POLST in the EMR (Sampsel 2023). An insufficient number of patients are scheduling MAWVs at the site clinic possibly due to the extended appointment length, copious amounts of pre-visit paperwork, or unwanted screenings. Despite development and dissemination of an updated POLST clinic workflow for the AWV, results from this intervention were pale in comparison to studies identified in the literature review. Only four (10.8%) of the qualifying 37 patient encounters completed a POLST during the study period.

The four patients who were granted the opportunity to discuss and complete POLST with their PCP have now made their life sustaining care preferences known to their home healthcare facility, shared their care selections with family, and have gained more control over their medical care. Preliminary conversations about death and dying renders future ACP more approachable from the patient and family perspectives as health status changes with aging.

Extending POLST discussion into the AWVs altered provider routine and encroached on time spent physically examining the patient, discussing preventative wellness, medications, care plans, and more. Inadequate time for POLST discussion was a barrier to completion despite pre-intervention survey data portraying that providers felt they had adequate time to discuss POLST during patient visits. Nursing staff were tasked with screening for POLST at AWVs, adding an additional check point to their patient intake routine. The target patient population was posed with discussing, and critically thinking about emergency or end-of-life care with POLST presentation. Some patients were shocked at the suggestion of completing a POLST while others were grateful for the opportunity. The intervention did not place financial or resource strain on the clinic site.

There were several factors that negatively impacted the robustness of intervention results. Two providers were traveling for two weeks during the 30-day study period, and several others rotated clinic work weeks with hospitalist duties in the inpatient unit; the absence of providers during the five-day clinic week reduced the number of qualifying visits. POLST screening was frequently not completed by nursing staff at patient intake. Float pool nursing staff are routinely utilized at the site clinic, they are not always up to speed on new workflow or clinic organization due to the site clinic not being their “work-home.” The POLST intervention team lead was on-site only one to two days per week during the study period, limiting staff reminders and provider schedule surveillance. An insufficient number of provider satisfaction surveys were completed, imparting limited insight into the usefulness or acceptance of the new workflow and accompanying resources by the provider team.

Limitations

There are multiple limitations that impacted the success and generalizability of the quality improvement intervention. The study period was only 30 days, which was deemed inadequate for staff to accept and find comfortability with the new POSLT workflow. Barriers to POLST screening and document presentation at AWVs included other health concerns taking precedent over POLST during patient visit, two PCPs on vacation for half of the study period, and an additional two providers working as an inpatient hospitalist for one week, limiting number of patients seen.

The site clinic is family medicine focused, with eight PCPs caring for patients of all ages. Only 37 qualifying patient encounters occurred during the 30-day intervention period. The number of patient encounters was unknown prior to the intervention start date. The number of

AWVs for the 65 and older population may be larger at an internal medicine or geriatric focused clinic, therefore providing a larger sample. PCPs were not held accountable by clinic administration to adhere to the POLST workflow intervention; and provider participation incentive was also lacking. Due to poor provider adherence, the intervention has limited generalizability to other family practice settings attempting to promote POLST expansion.

A confounding variable was poor POLST documentation adherence, two providers reported offering POLST to a patient; the patients declined, and this interaction was not documented in the EMR. POLST discussion may have been presented more frequently than the data portrays, but due to lack of documentation the true POLST refusal rate is unknown. Several float pool nurses did not properly identify a POLST in the patient's EMR, therefore foregoing screening.

Recommendations

Increasing POLST completion in the aging population can promote patient goals of care between emergency, inpatient, and outpatient settings. POLST completion prior to critical illness, is associated with an increased likelihood of palliative care involvement and fewer hospitalizations compared to those without a POLST and only a healthcare proxy. (Sherry et al., 2022). To promote POLST expansion in the primary care setting, a meeting with local emergency responders, emergency department (ED) providers, and PCPs in attendance could help illuminate the importance of patients completing the document when they are well and coherent. In this intervention, the PCP was promoting a document that is most used in the emergency setting to support patient preferences regarding life saving measures. Confirming with EMS and ED providers that POLST completion is in fact valuable to their practice by

inhibiting unwanted CPR or acute patient transfer could help incentivize POLST expansion in the clinic setting.

It is challenging to alter staff workflow without immediate gratification for placed efforts. Each provider has curated their own approach to AWWs and how to approach sensitive topics with patients; adjusting routines and incorporating an extra element into a patient visit requires time. The addition of an on-site project lead is critical to POLST workflow compliance and improved metric sustainability. A funded, project leader that has the capability to review providers schedules and identify qualifying visits could intercept providers and ensure a POLST is being offered at qualifying patient encounters.

To increase nursing staff involvement in POLST expansion, it is prudent to assess the realistic amount of time required to perform chart review prior to an AWW. Is screening for POLST an unrealistic expectation of the nursing staff? Interviewing nursing staff on the likelihood of completing this task would solidify POLST expansion workflow. Educating float pool nursing staff on how to identify POLST in the EMR and how to upload the scanned document into the EMR would help mitigate this part of the POLST screening deficit. The EMR system used by the site clinic does not have the capability to notify or remind a provider that a patient qualifies for a treatment, screening, or immunization. Other EMRs have built-in clinical decision support (CDS) tools to notify providers when to offer routine medical care; the addition of POLST screening to a CDS algorithm could increase provider adherence to POLST promotion and decrease reliance on nursing staff for chart review.

Conclusion

In the event of a medical emergency, a signed POLST is associated with treatment provided (i.e., invasive or comfort measures) and location of death (Hickman et al., 2020). By targeting the 65 and older population for POLST completion, the provider is targeting the age group most likely to require emergency services and/or be hospitalized due to increasing risk of physical and cognitive disease. An inpatient stay should not be the first place an individual views a POLST; the individual's primary provider should be the entity presenting the thought of life sustaining measures via shared decision making regarding current health status and spiritual or religious beliefs. Death is a natural and inevitable part of life; by engaging patients and their families in discussions about life sustaining treatment earlier in the aging process this topic can be more approachable as health status changes. It is the responsibility of the provider to understand POLST treatment selections and provide appropriate explanations of care to best serve their patients. Identifying a target age group (65 and older), a specific patient encounter (AWV), and a clinic workflow can support adherence and sustainability for POLST completion in the primary care setting. Further collaboration with local EMS and ED providers regarding the utilization of POLST can promote patient centered care and reduced family stress.

CHAPTER FOUR

ADVANCED NURSING ESSENTIALS REFLECTION

Introduction

The Montana State University Doctor of Nursing program (DNP) prepares the registered nurse or advance practice nurse to thrive as a leader in their chosen field, and to become a compassionate provider who implements evidence-based practice in medical decision making and systems level improvement. The American Association of Colleges of Nursing promotes ten core competencies that guide development towards becoming a professional nurse leader and provider. Four of these domains uniquely reflect my progress towards becoming a doctorally prepared family nurse practitioner: knowledge of nursing practice; person-centered care; informatics and healthcare technologies; and personal, professional, and leadership development (American Association of Colleges of Nursing, 2021). These competencies are reflected in my research, development, and dissemination of a scholarly project entitled: *Increasing POLST completion in patients 65 and older: A primary care quality improvement proposal*.

Domain #1: Knowledge for Nursing Practice

There are four advanced practice clinical courses in the DNP curriculum that require examination and a total of 675 clinical hours. Each of these courses focuses on a unique segment of the human lifespan. Completion of these courses has prepared me to be proficient in physical assessment, diagnosing, and care plan management. The clinical courses have emphasized holistic, evidence-based care, and cost-effective decisions; these practices are at the forefront of shared-decision making that I offer to patients. My experience as a registered nurse has centered

my focus on the patient and not their diagnosis. I understand that the individual has unique needs and desires as health status changes.

I routinely analyze treatment algorithms and associated patient outcomes that are published in scholarly resources to best guide clinical judgement. Patient safety and best possible treatment outcomes are my goal as a future provider. Maintaining membership with the American Association of Nurse Practitioners provides me with access to current diagnostic, and treatment practices, as well as opportunities to grow as a professional. Practicing the knowledge of nursing competency has guided to me to keenly assess gaps in patient care and strive for health system improvement. My scholarly project focus is on advance care planning for the older, non-acutely ill patient. The 65 and older population utilizes EMS more than any other age group in Montana, yet a low percentage of this population has discussed cardiac arrest or near-death care preferences. Implementing POLST completion in the primary care setting during annual wellness visits is a method to improve critical care communication.

Domain #2: Person Centered Care

Throughout clinical rotations I have enjoyed getting to know patients at a rural family practice clinic. I have cared for and learned from a diverse patient population (i.e., new mothers, the pediatric population, the geriatric population, and individuals with developmental delays) that has required utilizing advanced communication skills to gather a medical history and review of systems. Understanding how to phrase questions to ensure patient comprehension and knowing when to utilize alternative communication methods aids in proper identification of illness and preferred testing.

The family practice setting, where I spent the majority of my clinical hours, accommodates provider-patient relationship building through repeat visits. Overtime, the provider can learn the patient's core values, support structure, and proximity to resources; I attempt to tailor care plans and treatment options with these items in mind. Patients should feel cared for, be educated on diagnoses, and linked with appropriate resources to promote positive health outcomes.

A core curriculum DNP course, Vulnerability and Health Care in Diverse Communities, focuses on providing healthcare to culturally diverse and/or socioeconomically challenged populations. During this course I studied the Blackfeet Nation, including the people, geographical area in relation to medical resources, and cultural viewpoints relating to wellness. I observed prevalence of non-modifiable and modifiable risk factors that were inciting chronic and acute illness, access to medical resources, and community engagement. By researching diverse communities, leaders in healthcare can acknowledge gaps in care, begin acquisition of resources, and provide culturally sensitive care. Cost effective care promotion was an emphasis of the didactic portion of the advanced clinical courses. Examples include avoiding unnecessary imaging or lab orders, acknowledging the limits of one's health insurance, and promoting evidence-based care algorithms for effective treatment. Patients desire quality, effective care that does not result in significant financial stress.

Increasing POLST completion in the primary care setting provides patients the opportunity to discuss care options, receive clarification, and select treatment that aligns with their unique end of life or near-death desires. I have guided several patients in completion of a POLST during clinical rotations; I explain each of the three sections in detail, describe

hypothetical scenarios that aid in understanding of care options, and allow time for questions and deep thought. POLST discussion employs shared-decision making and strengthens patient-provider relationship.

Domain #8: Informatics and Healthcare Technologies

The core curriculum DNP course, Healthcare Informatics, illuminated how to utilize electronic patient information to support quick acquisition of knowledge and to promote safe, appropriate treatment options. Two beneficial health information technologies for improving patient safety, utilized in the EMR, are computerized physician order entry (COPE) and clinical decision support (CDS). Utilizing COPE alongside CDS plays a role in enhancing adherence to preventative health screenings; optimizing medication, immunization, and lab ordering; and ultimately improving overall clinical outcomes (Alotaibi & Federico, 2017). EMR systems vary in the abundance and usefulness of CDS tools, when an organization is selecting an EMR it is prudent to investigate software COPE and CDS utility.

Prior to each patient encounter I review provider notes, imaging, lab results, and other specialty reports so that I am prepared to conduct an efficient visit. When a patient receives care outside of their home clinic, reports are often transcribed in a different EMR software. Patient records are to be requested in a timely manner so that primary care providers have a comprehensive understanding of patient status and care received. I ensure that pertinent exams or results completed in primary care are faxed to consulting, specialty providers to support patient centered care. I promote online patient health portals to enhance patient and care team communication. Online health portals are an efficient way for patients to review recent and past

lab results, summaries of care, treatment plans, and communicate with clinic staff. Engaging patients with their health data promotes accountability.

Learning the capabilities of an organization's EMR can aid investigations of health screening disparities of specific demographics. Throughout the research, development, and data collection periods of my quality improvement intervention, data was captured from the project site's EMR. I obtained baseline POLST data for the 65 and older population receiving primary care at the project site, and weekly counts of qualifying patients with new POLST completion during the intervention period. EMR data collection demonstrated a large POLST deficit for the target population, portraying need for an advanced care planning intervention. Project data was organized in Microsoft Excel and visually displayed to demonstrate significance.

Domain # 10: Personal, Professional, and Leadership Development

My quality improvement project relied on the participation of eight primary care providers operating in the same clinic. Engaging with these providers on increasing POLST completion catapulted my student status to a professional leadership role in the clinic setting. Although still definitely a student, I experienced personal growth and enhanced responsibility while contributing to team and taking ownership of an intervention.

Prior to my quality improvement project implementation, I had to gain approval from the facility CEO and site clinic manager; this involved thorough discussion of my research and proposed workflow. To relay project details to the provider group, I seized the opportunity to present my quality improvement intervention and accompanying clinic workflow to improve POLST completion at a monthly provider staff meeting. I presented baseline POLST data pertaining to the target patient population and supporting evidence as to why this care metric

should be improved. Throughout the intervention period I respectfully engaged with providers to seek feedback, constructive criticism, and to better understand their POLST workflow pitfalls and successes.

Throughout DNP clinical rotations, I have encountered many providers, nurses, and patients that have contributed greatly to my education. With each encounter I have represented Montana State University well, demonstrating composure, respectfulness, gratitude, and professional appearance. I am an asset to my preceptors and contributing clinic staff, rather than a burden, by showing up each day prepared and motivated to learn. I document patient exams and care plans in a timely manner, ask clarifying questions, and never operate out of my scope of practice without supervision. Peer review, constructive criticism, and engaging cohort discussions are commonplace in the DNP core curriculum (i.e., Evidence Based Practice I&II, Advanced Nursing Leadership and Roles, and Program Planning & Evaluation, Outcomes, & Quality Improvement), these opportunities have allowed me to learn from my peers and enhance my professional communication (via writing and speaking) with others.

REFERENCES CITED

- Alotaibi, Y. K., & Federico, F. (2017). The impact of health information technology on patient safety. *Saudi medical journal*, 38(12), 1173–1180. <https://doi.org/10.15537/smj.2017.12.20631>
- American Association of Colleges of Nursing. (2021). *The essentials: Core competencies for professional nursing education* [E-book].
- Bernard, C., Tan, A., Slaven, M., Elston, D., Heyland, D. K., & Howard, M. (2020). Exploring patient-reported barriers to advance care planning in family practice. *BMC Family Practice*, 21(1). <https://doi.org/10.1186/s12875-020-01167-0>
- Breyre, A., Sporer, K. A., Davenport, G., Isaacs, E. B., & Glomb, N. W. (2022). Paramedic use of the physician order for life-sustaining treatment (POLST) for medical intervention and transportation decisions. *BMC Emergency Medicine*, 22(1). <https://doi.org/10.1186/s12873-022-00697-3>
- Bomba, P. (2006). *8-Step POLST Protocol*. National POLST. <https://polst.org/wp-content/uploads/2018/01/8-Step-POLST-Protocol.pdf>
- Constantine, L., Wang, K., Funk, D. C., Speis, A., & Moss, A. H. (2021). Use of a state registry to compare practices of physicians and nurse practitioners in completing physician orders for life-sustaining treatment forms. *Journal of Palliative Medicine*, 24(7), 994–999. <https://doi.org/10.1089/jpm.2020.0515>
- Dillon, E. C., Chuang, J., Gupta, A., Tapper, S., Lai, S. W., Yu, P. K., Ritchie, C. S., & Tai-Seale, M. (2017). Provider perspectives on advance care planning documentation in the electronic health record: the experience of primary care providers and specialists using advance health-care directives and physician orders for life-sustaining treatment. *American Journal of Hospice and Palliative Medicine*, 34(10), 918–924. <https://doi.org/10.1177/1049909117693578>
- Gedney-Lose, A., Hand, L. L., & McCarthy, A. M. (2021). Toolkit to increase provider knowledge, comfort, and adoption of POLST. *Journal of Nursing Care Quality*, Publish Ahead of Print. <https://doi.org/10.1097/ncq.0000000000000578>
- Hayes, S. E., Zive, D., Ferrell, B., & Tolle, S. W. (2017). The role of advanced practice registered nurses in the completion of physician orders for life-sustaining treatment. *Journal of Palliative Medicine*, 20(4), 415–419. <https://doi.org/10.1089/jpm.2016.0228>
- Hickman, S. E., Torke, A. M., Sachs, G. A., Sudore, R. L., Tang, Q., Bakoyannis, G., Smith, N. H., Myers, A. B., & Hammes, B. J. (2020). Do life-sustaining treatment orders match patient and surrogate preferences? The role of POLST. *Journal of General Internal Medicine*, 36(2), 413–421. <https://doi.org/10.1007/s11606-020-06292-1>

- Institute for Healthcare Improvement. (2017). *Plan-Do-Study-Act (PDSA) Worksheet*.
https://www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx?PostAuthRed=/resources/_layouts/download.aspx?SourceURL=/resources/Knowledge%20Center%20Assets/Tools%20-%20Plan-Do-Study-ActPDSASWorksheet_2f9145ee-2203-49c6-be19-7dcda98b31c5/QIToolkit_PDSASWorksheet.pdf
- Lakin, J. R., Isaacs, E. B., Sullivan, E. E., Harris, H. A., McMahan, R. P., & Sudore, R. L. (2016). Emergency physicians' experience with advance care planning documentation in the electronic medical record: useful, needed, and elusive. *Journal of Palliative Medicine, 19*(6), 632–638. <https://doi.org/10.1089/jpm.2015.0486>
- Mack, D. S., & Dosa, D. (2019). Improving advanced care planning through physician orders for life-sustaining treatment (POLST) Expansion across the United States: lessons learned from state-based developments. *American Journal of Hospice and Palliative Medicine, 37*(1), 19–26. <https://doi.org/10.1177/1049909119851511>
- Montana State Legislature. (2020). *Census 2020*. <https://leg.mt.gov/information-legislators/census-2020/#:~:text=Counting%20Rural%20Montana&text=About%2044%20percent%20or%2047%2C000,have%20fewer%20than%202%2C500%20people>.
- Nassikas, N. J., Baird, G. L., & Duffy, C. (2019). Improving advance care planning in a resident primary care clinic. *American Journal of Hospice and Palliative Medicine, 37*(3), 185–190. <https://doi.org/10.1177/1049909119872757>
- Rodgers, J. L., Jones, J., Bolleddu, S. I., Vanthenapalli, S., Rodgers, L. E., Shah, K., Karia, K., & Panguluri, S. K. (2019). Cardiovascular risks associated with gender and aging. *Journal of Cardiovascular Development and Disease, 6*(2), 19. <https://doi.org/10.3390/jcdd6020019>
- Rose, B., Leung, S., Gustin, J., & Childers, J. (2019). Initiating advance care planning in primary care: a model for success. *Journal of Palliative Medicine, 22*(4), 427–431. <https://doi.org/10.1089/jpm.2018.0380>
- Sampsel, J. (2023, October 16). *Legal indicators: code status on file*. Ronan, MT: Saint Luke Community Clinic.
- Sherry, D., Dodge, L. E., & Buss, M. K. (2022). Is primary care physician involvement associated with earlier advance care planning: A study of patients in an academic primary care setting. *Journal of Palliative Medicine, 25*(1), 75–80. <https://doi.org/10.1089/jpm.2021.0069>

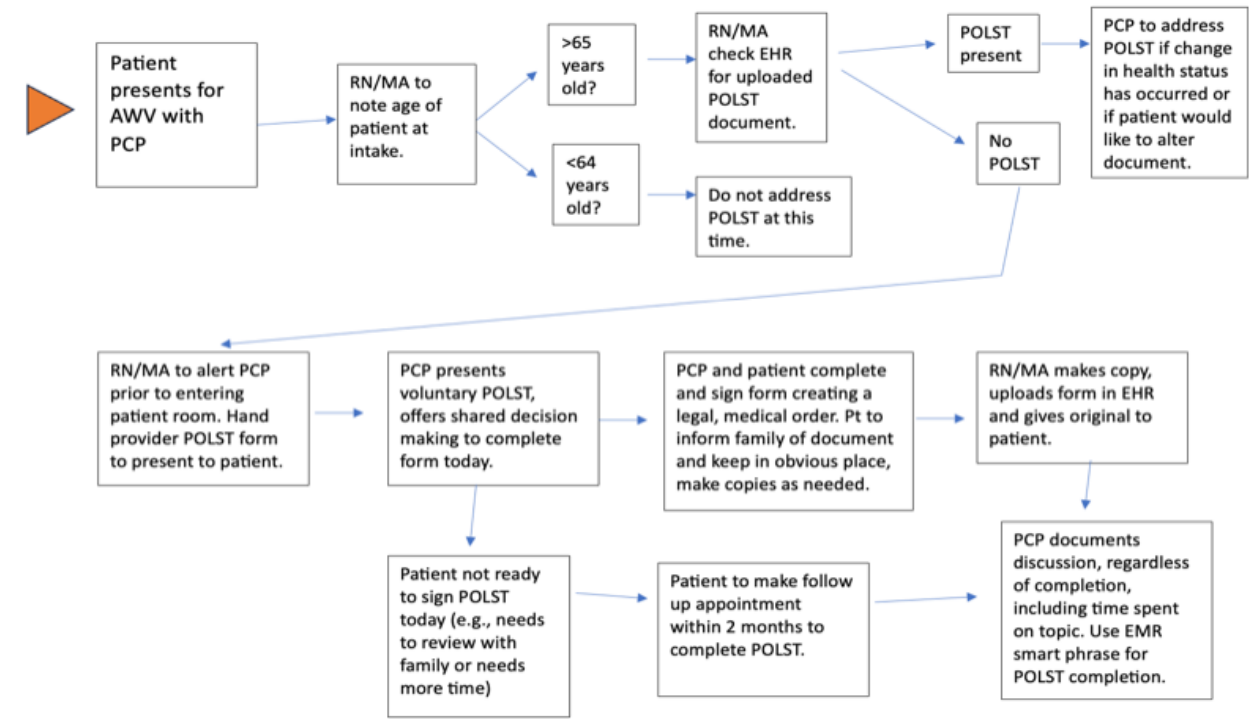
- Turnbull, A. E., Ning, X., Rao, A., Tao, J. J., & Needham, D. M. (2019). Demonstrating the impact of POLST forms on hospital care requires information not contained in state registries. *PLOS ONE*, *14*(6), e0217113. <https://doi.org/10.1371/journal.pone.0217113>
- Vranas, K. C., Lin, A., Zive, D., Tolle, S. W., Halpern, S. D., Slatore, C. G., Newgard, C. D., Lee, R. J., Downey, L., & Sullivan, D. R. (2020). The association of physician orders for life-sustaining treatment with intensity of treatment among patients presenting to the emergency department. *Annals of Emergency Medicine*, *75*(2), 171–180. <https://doi.org/10.1016/j.annemergmed.2019.05.008>
- Zive, D., Newgard, C. D., Lin, A., Caughey, A. B., Malveau, S., & Eckstrom, E. (2019). Injured older adults transported by emergency medical services: One-year outcomes by POLST status. *Prehospital Emergency Care*, *24*(2), 257–264. <https://doi.org/10.1080/10903127.2019.161>

APPENDICES

APPENDIX A

FLOWCHART: POLST CLINIC WORKFLOW

A1. Flowchart depicting clinic workflow for POLST completion at AWV. The flowchart demonstrates action from patient arrival to end of patient encounter. The roles of the patient, RN/MA, and PCP are demonstrated.



APPENDIX B

POLST DISCUSSION FRAMEWORK FOR PCP

This 8-Step Protocol was originally developed by Dr. Patricia Bomba for the MOLST Program of New York State in 2006 to aid providers in POLST discussions with patients.

Protocol available on National POLST Paradigm website:

<https://polst.org/wp-content/uploads/2018/01/8-Step-POLST-Protocol.pdf>

8-Step POLST Protocol

1. Prepare for discussion

- Review what is known about patient and family goals and values
- Understand the medical 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 DNR 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

2. Begin with what the patient and family knows

- Determine what the patient and family know regarding condition and prognosis
- Determine what is known about the patient's views and values considering their health status

3. 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 considering patient health status

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

- Negotiate and try to reconcile differences; seek common ground
- Determine what is important to patient; quality vs. quantity of life
- Use conflict resolution when necessary

5. Respond empathetically

- Acknowledge
- Legitimize
- Explore
- Empathize
- Reinforce commitment and non-abandonment

6. Use POLST to guide choices and finalize patient/family wishes

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

7. Complete and sign POLST

- Patient or health care representative to sign the document
- Provider to sign the document
- Document conversation

8. Review and revise periodically

APPENDIX C

POLST DOCUMENTATION: EMR SMART PHRASE

A2. Below is the EMR smart phrase, available to providers as canned text. Smart phrase was developed to aid in POLST documentation that meets CMS standards as well as charting efficiency.

(The patient) was offered voluntary POLST completion at this encounter, shared-decision making was utilized to discuss care options. Patient understands that once signed, POLST is a portable medical order to be honored by emergency responders in any healthcare setting. POLST was (completed/not completed) during this encounter. The patient, their (relationship to patient), and this provider were present for the discussion. (#) minutes were spent discussing POLST in the face-to-face encounter.

APPENDIX D

LIKERT SCALE SURVEY: POLST WORKFLOW SATISFACTION

A3. Four-point Likert scale survey regarding POLST clinic workflow with comments section. Survey administered pre-intervention and post-intervention.

Provider Satisfaction: POLST Workflow	Strongly Disagree	Disagree	Agree	Strongly Agree
The RN/MA is screening patients 65(+) for presence of POLST in EHR and communicating this to provider.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can confidently answer all patient POLST related questions (i.e., utility of document, descriptions of care options)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My patients have an excellent understanding of their POLST treatment selections.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that my POLST documentation in the EHR meets CMS standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have adequate time for POLST discussion/completion during patient visit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments and/or suggestions for improvement:				

APPENDIX E

DATA COLLECTION TOOL: EMR PRESENCE OF POLST

A4. Data collection table to quantify number of AWVs by age, number of patients with POLST already on file, and number of new POLST completed during two-week observation period

POLST Completion at AWV with Upload into EMR: 2 week observation of 8 Primary Care Providers						
Number of Patient encounters by Age						
65-69	70-74	75-79	80-84	85 and older	Total	
Number of Patients with Current POLST						
65-69	70-74	75-79	80-84	85 and older	Total	
Number of New POLST uploaded into EMR						
65-69	70-74	75-79	80-84	85 and older	Total	