

## Sample **Quality Improvement Project Paper** Abstract Submission

### ***Dancing the WOLST: A Quality Improvement Project on Withdrawal of Life Sustaining Therapies (WOLST) (SA511C)***

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#### **Objectives**

- Design a systematic approach to the WOLST process.
- Integrate the systematic approach to WOLST into the EMR.
- Maximize interdisciplinary team communication during a WOLST procedure.

**Background:** Literature demonstrates many patients with life threatening complex chronic conditions die in the intensive care unit (ICU), with nearly half of these patients dying after withdrawal or withholding of life sustaining therapies.<sup>1-7</sup> There is considerable variation in how WOLST occurs and whether formal training is provided.<sup>2</sup> No prior research has established the best practices for this procedure.<sup>1-7</sup>

**Aim Statement:** In patients undergoing WOLST, we will use a best practice guideline and electronic medical record (EMR) templated note to increase provider confidence and quality of death by 10% in 12 months.

**Methods:** We created a best practice WOLST guideline through literature review and expert consensus. This guideline included a pre-WOLST huddle template and a templated EMR note. Care team members involved in a WOLST received a survey to assess their confidence with the process and evaluate their perception of quality of death in their patient. Participants included clinicians involved in a patient's WOLST. The setting included all ICUs at a quaternary children's hospital.

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**Results:** Baseline data was collected following 35 WOLST procedures, 250 surveys were sent with 116 responses, resulting in a survey response rate of 46%. Physicians and nurses reported a mean score of 84 and 82 out of 100 respectively for confidence in preparing families for the dying process. Data revealed marked variability when evaluating clinicians perception of death, with scores ranging 0-100; mean=81. Thematic analysis identified key processes on which to focus PDSA cycles including: anticipatory guidance to team and family, provider role clarity, and earlier involvement of interdisciplinary team members.

**Conclusions and Implications:** Little has been published regarding a specific methodology for teaching the process of WOLST to care teams, thus development of a systematic approach is critical to providing the best care at the end of life. Identifying key drivers to WOLST procedures has enabled creation of a practice guideline and EMR template for continued PDSA cycles.

Sample **Quality Improvement Project Poster** Abstract Submission

***The PACT Conversation Trigger Tool: Assessing Reliability, Acceptability and Validity (QI706)***

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**Objectives**

1. Describe a novel approach to screening patients for unmet advance care planning needs.
2. Describe the reliability, acceptability and validity of the PACT Trigger Tool.

**Background:** Many patients who would benefit from Advance Care Planning (ACP) do not have discussions with providers. One barrier is the lack of a standardized method to identify these patients.

**Aim Statement:** As part of a larger initiative whose aim was to increase ACP conversations, the Preference-Aligned Communication and Treatment (PACT) Trigger Tool was developed to help inpatient clinicians of any discipline identify patients with ACP needs based on serious illness, care dependency and functional decline. This study evaluated the reliability, acceptability and validity of the tool.

**Methods:** To assess inter-rater reliability, 100 patients were double-scored across participating hospitals. For acceptability, nurses ( $N=185$ ) completed a 10-item survey using a Likert scale. Validity was measured using retrospective chart reviews ( $N=135$ ).

**Results:** The PACT Trigger Tool demonstrated moderate to high reliability. A factor analysis of the acceptability survey showed that nurses found the tool useful ( $M=4.07$ ,  $SD=0.73$ ) and easy to complete ( $M=4.24$ ,  $SD=0.67$ ). Nurses who had been trained to use the tool found it easier to complete ( $F(1, 183)=12.69$ ,  $p<.001$ ) and more useful ( $F(1, 183)=26.42$ ,  $p<.001$ ) than those who

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had not. Chart reviews revealed that patients who triggered positive ( $n=40$ ) were significantly more likely to have a DNR order (43% vs 11%) and palliative care consult (53% vs 20%) during the index admission and less likely to discharge home (53% vs 86%) compared with patients who triggered negative ( $n=95$ ). Patients who triggered positive had shorter survival times ( $M=125$  days,  $Mdn=69$  days) than those who triggered negative ( $M=248$  days,  $Mdn=240$  days; log rank test  $p<.001$ ).

**Conclusions and Implications:** The PACT Trigger Tool is a reliable, acceptable, and a valid means of identifying hospitalized patients who may benefit from ACP discussions. A larger validity study and evaluation of optimal ACP methods for patients who trigger positive are needed.

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Sample **Scientific Paper Abstract** Submission

***Engaging Diverse English- and Spanish-Speaking Older Adults in Advance Care Planning: The PREPARE Randomized Clinical Trial (FR421D)***

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**Objectives**

- Describe the design and implementation of free, easy-to-use, patient facing advance care planning tools ([www.prepareforyourcare.org](http://www.prepareforyourcare.org)), particularly for vulnerable and disenfranchised populations.
- Describe the comparative efficacy of an online advance care planning program called PREPARE ([www.prepareforyourcare.org](http://www.prepareforyourcare.org)) plus an easy-to-read (5th-grade reading level) advance directive versus an advance directive alone on new advance care planning documentation and self-reported advance care planning engagement without additional clinician or system-level interventions.

**Original Research Background:** Advance care planning (ACP) improves value-aligned care; yet, it remains sub-optimal among diverse patient populations. To mitigate literacy, cultural, and language barriers, we created easy-to-read advance directives (ADs) and a patient-directed, online ACP program called PREPARE in English and Spanish.

**Research Objectives:** To compare the efficacy of PREPARE plus an easy-to-read AD (PREPARE arm) to an AD alone to increase ACP documentation and patient-reported engagement.

**Methods:** We conducted a comparative efficacy randomized trial from February 2014 to November 2017 in four San Francisco, safety-net, primary-care clinics among English- or Spanish-speaking adults age  $\geq 55$  years, with  $\geq 2$  chronic or serious illnesses. Participants were

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randomized to the PREPARE arm or the AD alone. There were no clinician/system-level interventions. Staff were blinded for all follow-up assessments. The primary outcome was new ACP (i.e., legal forms and/or documented discussions) at 15 months. Patient-reported outcomes included ACP engagement at baseline; 1 week; and 3, 6, and 12 months using validated surveys. We used intention-to-treat, mixed-effects logistic and linear regression, controlling for time, health literacy and baseline ACP, clustering by physician, and stratifying by language.

**Results:** The mean (SD) age of 986 participants was 63.3 years ( $\pm$  6.4); 39.7% had limited health literacy; and 45% were Spanish-speaking. No participant characteristic differed between arms; retention was 85.9%. Compared to the AD alone, PREPARE resulted in higher ACP documentation (adjusted 43% vs. 32%;  $p < 0.001$ ) and higher self-reported increased ACP engagement (98.1% vs. 89.5%;  $p < 0.001$ ). Results remained significant among English and Spanish speakers.

**Conclusion:** The patient-facing PREPARE program and an easy-to-read AD, without clinician/system-level interventions, increased ACP documentation and patient-reported engagement, with statistically higher gains for PREPARE for both English- and Spanish-speaking older adults.

**Implications for Research, Policy, or Practice:** These tools may mitigate literacy and language barriers to ACP, allow patients to begin planning on their own, and could substantially improve the process for diverse, English- and Spanish-speaking populations.

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Sample **Scientific Poster** Abstract Submission

***Intensity in End-of-Life Care and Hospice Utilization for Patients Dying with Heart Failure (S832)***

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**Objectives**

1. Describe results from this analysis which found that patients dying with advanced heart failure had high rates of healthcare utilization.
2. Recognize patient characteristics that are associated with receipt of more aggressive care for patients dying with heart failure.

**Original Research Background:** Little is known about end-of-life (EOL) care received for patients dying with congestive heart failure (CHF). One prior Medicare analysis found CHF patients received aggressive care at EOL and had low rates of hospice utilization.

**Research Objectives:** We used claims data to understand EOL healthcare utilization for patients dying with CHF.

**Methods:** We analyzed a multi-payer database to identify 11,685 patients 35 or older who died with CHF in Maine between 2013 and 2016. The primary outcome was healthcare utilization during EOL, defined as 180 days prior to death, including emergency department (ED) visits, hospitalizations, ICU admissions and hospice utilization. Patient characteristics analyzed included age, gender, medical comorbidities, area deprivation index (ADI) and rurality.

**Results:** Among 11,685 patients, 49% had  $\geq 2$  hospitalizations, 73% had  $\geq 2$  ED visits, and 30% had an ICU stay during EOL; 62% were admitted to hospice. Younger patients, men and patients with  $\geq 2$  other comorbidities (compared with none) were more likely to receive aggressive care on all measures and less likely to utilize hospice. Rural patients were more likely to have an ICU admission (34% in most rural vs 24% in urban,  $p < 0.0001$ ) but less likely to have  $\geq 2$  ED visits or receive hospice. Patients residing in areas with higher ADI were less likely to enroll in hospice

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(54% of those from the most deprived vs 69% in the least, p-value <0.0001) and more likely to have an ICU stay (33% in most deprived vs 27% in least deprived, p-value <0.0001).

**Conclusion:** Healthcare utilization is high for patients dying with advanced CHF, and we observed variation across patient groups and according to rurality and ADI.

**Implications for Research, Policy, or Practice:** Decreasing undue aggressiveness at EOL for patients with advanced CHF may require better recognition of EOL, education of providers, patients and families, and increased access to palliative care, especially in rural and socioeconomically deprived areas.