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Improving Primary Care Provider Screening for Palliative Care Services

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Abstract

- Primary care providers (PCPs) have a life-long trusting and therapeutic relationship with patients, which allows for high-quality care throughout disease trajectory. Most patients visit a PCP before ever seeing a specialist, placing the PCP in prime position to screen for palliative care needs. Screening patients for palliative care early in the disease process produces the best outcomes and most cost-effective care at end of life.
- PCPs often do not screen for palliative care needs because they lack knowledge and have discomfort with disease prognostication. Evidence-based tools are needed in the primary care setting to improve knowledge and comfort and increase palliative care screening rates and referrals.
- This case study used an evidence-based online education intervention that improved PCP knowledge and comfort and increased palliative care screening rates and referrals.
- Building rapport and relationships with stakeholders is essential for buy-in. Collaborating with stakeholders and understanding internal and external motivators help tailor an intervention that leads to successful change.
- Finally, behavior change is achieved with a passionate and motivated leader.

Background

Assessing a patient's level of frailty has important implications for predicting mortality risk. A palliative care consult during times of frailty reduces unnecessary treatments and promotes quality of life. Palliative care effectively "increases quality of life, lowers health care costs and improves survival" when delivered early in the disease process.¹ Palliative care teams offer an interdisciplinary and holistic approach to care that focuses on addressing goals of care and symptom management and promoting quality of life. The World Wide Palliative Care Alliance and World Health Organization² estimate that over 19 million adults and 1.2 million children at the end of life are in need of palliative care services. Timely identification of palliative care needs can be achieved through routine screening and prompt referrals. The need to improve management and care of chronically ill patients in the primary care setting is of primary concern. Currently, palliative care screening is not a priority in the primary care setting. As providers of lifelong care, primary care providers (PCPs) are in a unique position to screen patients for palliative care throughout disease trajectory. Additionally, most patients visit their PCP before ever seeing a specialist.

All physicians who care for patients with serious illnesses should be trained in the principles of palliative care.³ Even though evidence supports screening patients for palliative care, providers often do not have the knowledge or skills to accurately assess these patients and refer them to palliative care services.^{3,4} Therefore, it is essential to equip them with the knowledge and resources to provide the best care for patients. To address these gaps, palliative care education is needed at the systems level in the primary care setting. In order to improve palliative care screening, this project was developed to replicate a study that identified improvements in palliative care screening comfort and knowledge.

Organizational Context

A primary care service for skilled nursing (SNF) and short-stay rehabilitation (SSR) facilities found that, according to bundled payment data, 20% of patients (not on hospice) die within 90 days of admission to SNF or SSR. Provider screening rates for palliative care on admission and discharge were 62%. Improving provider screening for degrees of patient frailty may identify

palliative care needs early in the disease process and suggest referral to hospice when appropriate. In turn, patients will be supported throughout their illness and in critical times of care transition.

The organization was a for-profit nurse practitioner (NP)-led and NP-driven primary care service for senior communities. The mission of the organization is to enhance the life of every person served. The organization has a hierarchical structure, with an NP as director. The current director conveys a transformational leadership style that is supportive, and she provides constant feedback. Shared governance incorporates the primary care providers in the decision-making process. During quarterly meetings, staff and management discuss the strengths, weaknesses, and potential improvements of the microsystem. Since the organization was established three years ago, the providers have experienced several changes in leadership and organizational processes. Thus far, the providers feel supported by the organization and are generally satisfied with changes.

Eight primary care NPs are at satellite locations across the state in various SNF and SSR facilities. Each provider works within a different microsystem with differing forms of organizational structure and policies. The NPs are placed in SNFs and managed by the director of the main organization. A majority of patients are 65 years and older with primary diagnoses of congestive heart failure, cancer, chronic obstructive pulmonary disease, and fracture status-post orthopedic surgery and status-post cardiovascular surgery. Top referrals are palliative care, hospice, and home health. Of the eight primary care providers, three participated in the project. Of interest, a retrospective chart review revealed that the providers who did not participate had the lowest screening rates.

Personal Context

With over 16 years of health care experience in senior services, the current director had a personal and professional commitment to making patient care evidence-based, safe, and cost-effective. She knew from experience that health care systems need to understand the elderly, their needs, and their functional abilities, and how to personalize care in the aging process. As an NP for eight years and leader of the organization for three years, she wanted peers and NPs to deliver the best possible care to optimize outcomes for patients and their families. She believed that NPs in the SNF and SSR setting are leaders in care delivery and communication of clinical prognostication, and she identified screening for frailty and identifying patients in need of palliative care services as crucial to the organization, stating:

Functional status in the aging population seems to be more predictive of mortality than medical diagnosis. Practitioners focus on diagnosis versus the functional abilities that contribute to overall health and wellness. Clinicians working with aging and chronic illness need to take a holistic approach to understanding the overall effects of aging and illness both acute and chronic. NPs need to provide the most holistic approach, using evidence-based tools. The challenge is educating and getting the NPs to be comfortable and consistent in using the tools.

Problem

A one-month retrospective chart review of all eight providers demonstrated a 62% screening rate at admit and discharge. Bundled payment data from the organization showed that 20% of patients not on hospice die within 90 days of admission to a SNF or SSR. National data demonstrates a similar trend. For instance, data from the National Center for Assisted Living (NACL) indicated that the mortality rate of SNF patients is highest during the first six months and is as high as 60% in the first 12 months.⁵ Providers who identify frailty and mortality risk

early in the SNF stay can provide necessary interventions to improve quality of life. Primary care providers in the SNF setting have the best opportunity to screen for palliative care services and make a significant impact on patient outcomes. Patients admitted to SNFs after an acute exacerbation or a new diagnosis of a chronic condition are too frail to return home. Primary care providers in the SNF setting offer care during a critical time of transition. It is during these transitions that palliative care can be most beneficial. At minimum, patients should be screened for palliative care services on admit to an SNF. Ideally, patients are screened at both admit and discharge to ensure that identify a patient's mortality risk and that an appropriate care plan is in place. . The need to improve primary care management of patients admitted to SNFs is of primary concern.

Evidence-based practice suggests the use of a prognostic tool to screen patients for frailty and to refer them to palliative care services if necessary. The organization's electronic medical record includes a template for the Palliative Performance Scale (PPS), a valid and reliable tool (Cohen's kappa 0.67- 0.71) that assesses degree of frailty to predict mortality risk and the need for palliative care referrals.^{6,7} Providers in the organization are inconsistently using the tool because they do not understand its implications and impact on practice outcomes. In order for patients to receive palliative care services that improve quality of life, change is needed at a systems level. At minimum, providers need to be routinely screening patients for palliative care on admission and at discharge from the SNFs.

The organization's goal is to implement an evidence-based intervention to improve provider PPS screening rates from 62% to 80% and increase the number of appropriate palliative care referrals to 80%. As a result, appropriate patients will be placed on hospice, provider knowledge base will be improved, and patients and families will be provided with the right resources at the right time. The organization hopes to create a culture that sustains and supports palliative care screening and referrals by integrating the intervention into an annual palliative care competency.

Several barriers for screening, specifically palliative care screening, are outlined in the literature. Providers are reluctant to screen and refer patients to palliative care services because they lack knowledge and are apprehensive about prognosticating disease trajectory.⁸ For instance, providers are reluctant to screen because of timeliness, added responsibility, lack of viable payment mechanism in a fee-for service environment; in addition, not all providers understand palliative care or are comfortable with prognosis conversations.^{9,10} A pre-intervention survey of barriers for PPS screening identified these same barriers within this organization. Screening barriers are perpetuated by a lack of education/training, inaccurate perceptions of palliative care as end-of-life care, patient refusal, overcoming the challenge of identifying patients appropriate for palliative care referral, inadequate referral resources, and the need for culture change across settings.^{9,3} Technology provides the opportunity to create efficient and effective screening methods through electronic medical record templates, palliative care referral, and service triggers.¹⁰ Additionally, technology provides the opportunity to educate providers and clarify the primary care-palliative care relationship through electronic education.¹⁰ Barriers to screening can be overcome with feasible and evidence-based methods.

Solution

In order to change provider-screening behaviors, a feasible and effective education intervention is needed at the microsystem level. Results from the pre-intervention survey indicated that an online education session that includes clinical vignettes will have the greatest impact on provider knowledge, comfort, and use of the PPS screening tool. Evidence surrounding online education and use of clinical vignettes was evaluated for reliability and

validity. Clinical vignettes are a valid and feasible tool that can be used in diverse settings for various types of situations to measure quality of clinical practices.¹¹ Use of clinical vignettes in online education modules increases provider knowledge, comfort, and screening rates.¹²

Provider education is a key component for the implementation and sustainability of practice guidelines. Kettinger (2012) noted that provider education is essential for tailoring the screening protocol, updating guidelines, and discussing testing costs.¹³ Online learning is as effective as in-person education.^{12,14, 15} Education alone has the ability to improve provider knowledge and comfort with screening.^{16,17, 8, 12, 14, 15} However, education alone may or may not change provider screening habits and compliance.^{18,19,20,15} Strong evidence supports the use of multimodal interventions. Education combined with electronic reminders and continuous feedback has the greatest impact on provider knowledge and comfort and on improving screening rates.^{21,22,23}

Due to cost and feasibility, a multimodal education intervention was not possible for this study. As a result, the strongest evidence for improving provider screening was not used. This project improvement attempts to recreate the findings as well as address the future implications of Fedel, Joosse, and Jeske's study of the PPS. They concluded that an educational intervention and the implementation of the PPS screening tool improve nursing knowledge of palliative care and nurses' comfort in determining the need for palliative care and requesting a referral. However, data were not collected on provider behaviors or knowledge and the sustainability of the education session. Finally, the authors recommended that future studies include hard data that correlate education and improved screening rates and appropriate referrals. The authors were contacted for permission to use validated clinical vignettes and assessment tools. This practice improvement project aims to address the gaps and validate the findings.

Implementation was guided by three theoretical models. First, the principles of Adult Learning Theory-Andragogy guided the intervention. The adult learning theory, also known as andragogy, has been utilized in quality improvement projects that focus on education and knowledge driven behaviors.¹⁸ These principles suggest that adults have internal motivation to learn when content impacts job or personal life.²⁴ Adults learn best through problem-centered content, engagement, application, experience and their environment.²⁴ As a result, the researcher created a 15-minute evidence-based online education module that included valid clinical vignettes from the Fedel et al. study. Learning was engaged through clinical vignettes that were specific to the PPS screening tool. The NPs were able to access the educational content at their convenience over a two-week period. Second, Bridges and Bridges' Managing Transitions model was used to guide the providers through the change process and address psychological and physical aspects of change²⁵. Data were collected for three months post-intervention, encouraging providers to contact the director and researcher with feedback. Finally, the Knowledge to Action model was used as a framework to translate the evidence into practice. The Knowledge to Action model is a cyclical model that suggests using available knowledge and resources to initiate and support change.²⁶

Overcoming barriers require evaluation and decisions that result in upholding the theoretical underpinning of the project while accounting for multiple limitations. For instance, while the researcher wanted to travel to all the provider sites across the state to present the principles of the project, travel and cost limitations prohibited this. Face-to-face contact and building relationships with the providers to achieve buy-in was therefore limited. Project ideals and pre-project feedback had to be made through email and telephone. As a result, only three out of eight providers participated. Additionally, the director wanted 100% of providers to receive training. As a leader, the director could not mandate participation but she could use the three

participating providers as early adopters and project champions to encourage and engage other staff members.

The three participating providers completed all the questionnaires and feedback pre- and post-intervention. The providers had a wide range of registered nurse and nurse practitioner experience (see Table 1). None of the providers had had formal palliative care education or certification prior to the intervention. Pre intervention, the three participating providers had a much higher screening rate (89%) than the organizational screening rate (67%). This suggests that participating providers might have internal and external motivators that are different from those who did not participate and who had lower screening rates.

A retrospective chart review was used to assess pre- and post-intervention screening rates. One month prior to the intervention, ten random patients were selected for each provider to assess screening rates on admission and discharge, as well as appropriate palliative care referral rates. There were no significant differences between pre- and post-patient samples (see Table 2). Differences in screening rates, therefore, were not because of differences in patient samples pre- and post-intervention.

The intervention was effective in improving comfort, knowledge, admission and discharge screening rates, and appropriate palliative care referrals (see Table 3). The same reliable comfort and knowledge questionnaires were used with permission from Fedel et al. The Palliative Care Provider Comfort Questionnaire⁸ is a valid and reliable tool to measure provider comfort with palliative care screening and services (Cronbach's alpha = 0.803). Knowledge was assessed with permission to use the revised Palliative Care Quiz for Nursing.⁸ Providers were screening 100% of patients on admission, an increase from 86%; and 84% of patients were being screened on discharge, an increase from 38%. Three-month post-intervention data demonstrated an overall increase in provider screening and appropriate palliative care referral (see Figure 1). One-month post-intervention, providers were screening 83% of patients, two months post 90% of patients, and three months post, 80% of patients. External organizational factors may have contributed to the drop in screening rate three months post-intervention. The director was on leave of absence during this month, providing further evidence that passionate leadership is needed to sustain change. To assess sustainability of the screening process, the Impact on Clinical Practice Questionnaire was revised with permission.²⁷ In general, providers felt knowledgeable about the PPS screening tool, felt supported in their efforts to use the PPS, and felt that completing the PPS tool enhanced quality of patient care to help families make decisions about palliative care (see Figure 2). However, providers rated the questionnaire item that the PPS enhances the quality of patient care the lowest. Future studies should explore providers' feelings about the PPS tool. This is a potential barrier for sustainability of screening behaviors.

Unresolved Questions and Lessons for the Field

The initiative successfully improved provider knowledge, comfort, screening rates, and appropriate palliative care referral rates with a decrease in missed referrals. Findings replicate those found in Fedel et al. study. Both studies found an increase in knowledge and comfort. Findings from this study further validate those of Fedel et al. and address the gaps requiring data about actual screening and palliative care referral rates.

Addressing resistance from stakeholders and achieving buy-in are key. Prior to implementation, providers stated that they were reluctant to screen because of timeliness, lack of reimbursement, and apprehension about using a tool versus intuition. Challenges such as addressing reimbursement will need new solutions that education alone cannot overcome. Achieving buy-in and participation requires more than education alone. New solutions such as

requiring an annual palliative care competency or providing continuing education credits are needed. Questions about what motivates providers internally and externally are important for achieving buy-in. Exploring why the three providers with higher screening rates decided to participate over the five providers with lower screening rates who did not would provide key insights into what motives exist before and after an intervention.

An additional limitation to implementing policies to support this practice improvement project include a lack of policy support in requiring the use of the PPS and palliative care continuing education. Addressing this limitation is imperative for the successful implementation of standardization of this screening.

Lessons learned include exploring external and internal motivators. Even though providers felt knowledgeable, comfortable, and supported in their PPS screening efforts, they did not feel that the tool enhances the quality of patient care. This is a motivational barrier for sustainability of screening practices. Providers observed that their intuition is just as accurate in identifying palliative care needs as the screening tool. Since the PPS tool is not an outcome measure and providers are not reimbursed, providers might not feel that the PPS tool is essential for patient care. Explaining how the PPS tool enhances patient care is key for sustaining screening behaviors. A motivated and passionate leader with positional authority is needed for successful change. Feedback and face-to-face presence to develop partnerships throughout the change process can help achieve buy-in. Provider buy-in is the key to success. Successful change is created by the “critical mass of onboard members...rather than the efforts of any single heroic individual or group of champions.”²⁸ Even if initial buy-in is minimal, early adaptors have the potential to be champions and to be additional leaders for change. Peer-to-peer communication can lead to greater buy-in than authoritative communication.

More research is needed to identify how to guide change and achieve buy-in in a setting with limited face-to-face interaction. According to Morley²⁹, among students, online communication tools strengthen and support practice learning. Students are likely to interact with online communication tools that are familiar and that complement practices, and online forums and practice sites offer a space for dialogue, continued engagement, and learning. Online communication between providers has high satisfaction and a rapid turn-around.³⁰ Additionally, intermittent check-ins and feedback via telephone or email ensure continuous engagement and buy-in; this allows for open dialogue to discuss implementation problems and a collaborative effort to refine the process.³¹

Table 1: Provider Demographics (N=3)		
	Mean	±SD
Number of years of RN experience before becoming an NP	6.5	1.80
Number of years of experience as an NP	7.5	7.86
Number of years of palliative care experience	0.33	0.58
Hours of formal palliative care training or continuing education	0	3
Number of specialty certifications other than palliative care	0.67	1.15

Table 2: Patient Characteristics					
Characteristic	Pre-Intervention (N=120)		Post-Intervention (N=180)		Chi-Squared
Female (N, %)	32	53.33%	49	54.44%	0.835
Male (N, %)	28	46.67%	41	45.56%	0.835
	T-test				
Number of Comorbidities (Mean, SD)	4.52	1.74	4.41	1.90	0.752
Primary Diagnosis (Mode)	Cardiovascular Disease		Cardiovascular Disease		
PPS at Admit (Mean, SD)	52.12	11.77	52.89	12.02	0.842
PPS at Discharge (Mean, SD)	52.17	12.78	54.74	12.16	0.628
	*P<0.05				

Table 3: Provider Outcomes				
Categories	Pre-intervention (N=3)		Post-intervention (N=3)	
	Palliative Care Knowledge Quiz for Nurses (Mean, SD)	7.67	1.53	8
Palliative Care Comfort Scale (Mean, SD)	15.33	2.31	18.33	1.53
	N=120		N=180	
Total Screening Rate for Admit and Discharge (N, %)	75	62.50%	166	92.22%
Screening Rate on Admit (N, %)	52	86.67%	90	100%
Screening Rate on Discharge (N,%)	23	38.33%	76	84.44%
Correct Referrals for PPS ≤50% (N, %)	19	34.55%	39	43.33%
Missed Referrals for PPS ≤ 50% (N, %)	8	14.55%	10	11.11%

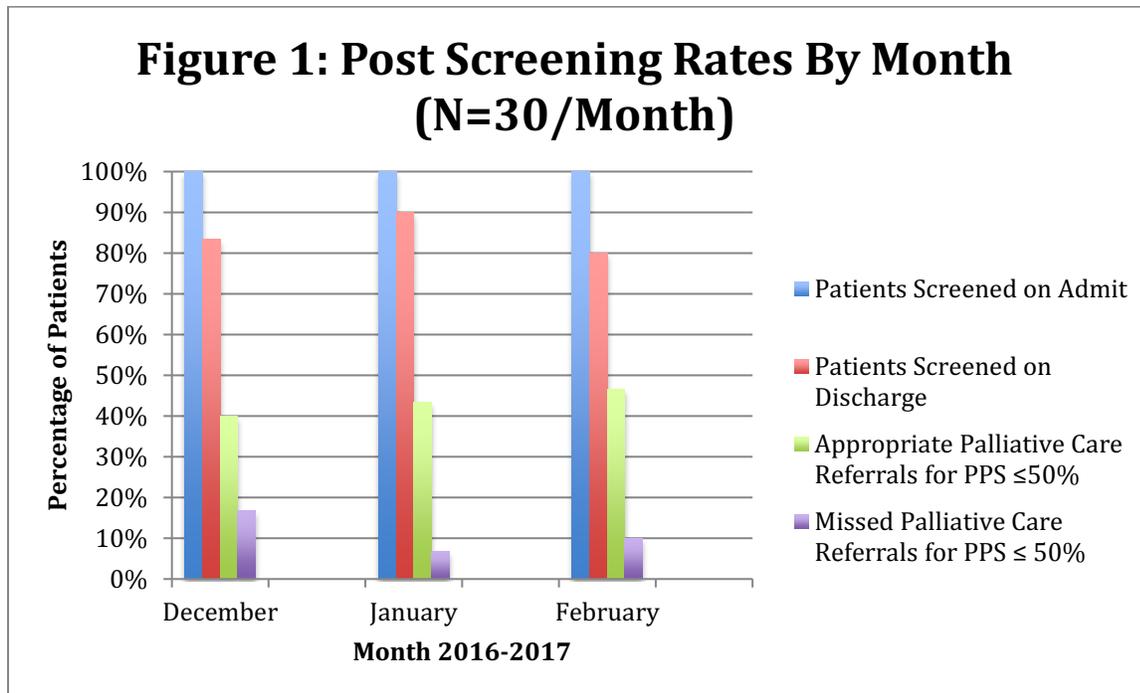
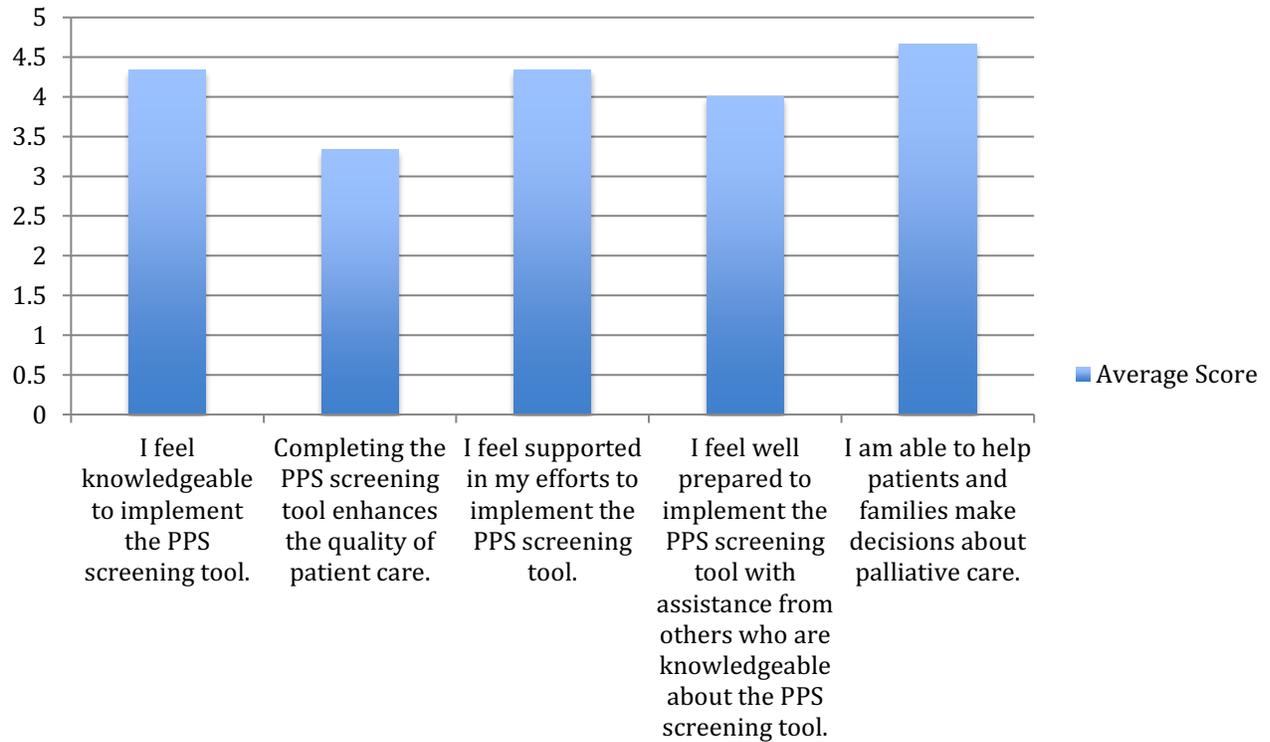


Figure 2: Impact on Clinical Practice Questionnaire (M)



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