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## Implementation of Education and Use of a Screening Tool to Assess Palliative Care Needs in the Critical Care Setting

Megan Stoeckinger  
mmst228@uky.edu

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Implementation of Education and Use of a Screening Tool to Assess Palliative Care Needs in the  
Critical Care Setting

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing  
Practice at the University of Kentucky

By: Megan Stoeckinger

April 2022

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

### Abstract

**Purpose:** The purpose of this study was to measure palliative care knowledge, attitudes, perceived empowerment, and familiarity of the Supportive Palliative Care Indicators Tool (SPICT) among critical care nurses and advanced practice providers (APPs) before and after viewing a web-based educational video on an adult medicine intensive care unit (MICU).

**Methods:** This study was a one group pre- and post- implementation assessment using a web-based educational video and electronic surveys. The population included critical care nurses and advanced practice providers (APPs). This study spanned the timeframe between January 2022 and March 2022.

**Results:** Paired t-tests comparing pre-intervention and post-intervention results were used. There was a significant increase in familiarity with intention to use the SPICT after the intervention ( $p < 0.001$ ). Based on a potential range of 1-4, with higher scores reflecting more agreement, participant means increased from 2.19 (SD = 0.52) in the pre-education survey to 3.00 (SD = 0.57) in the post. There was no change in palliative care knowledge ( $p = 0.67$ ), attitudes ( $p = 0.063$ ) and perceived empowerment ( $p = 0.454$ ) between pre-intervention and post-intervention results. However, baseline measures for these variables were already satisfactory based on pre-test findings.

**Conclusion:** Our population is aging and requiring more critical care resources. Palliative care is an important medical service that helps patients manage chronic and acute illnesses. This project showed a web-based education may be a feasible way to education bedside nurses and APPs on palliative care and screening tools.

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### **Dedication**

My doctoral work is dedicated to my family who has continued to provide encouragement throughout my time in the DNP program. To my parents, thank you for teaching me the value of hard work and knowing that I am capable of anything I set my mind to do. To my husband, thank you being a strong foundation for me to lean on throughout this program and for reminding me to give myself grace. Finally, to our baby girl who is due this summer. I hope to always make you proud and serve as a role model for you.

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### **Background and Significance**

Intensive care units (ICUs) provide complex care and life sustaining therapies to patients suffering from serious acute illnesses. Patients receiving this level of critical care have increased physiological demands, baseline comorbidities, and the need for continuous monitoring (Marshall, et al., 2017). All the strains within a critical care environment leaves patients and their families struggling to make difficult healthcare decisions.

Palliative care is an interdisciplinary specialty that helps patients diagnosed with a serious or chronic illness improve their quality of life through symptom management and support. Patients can receive palliative care once diagnosed with any serious or chronic illness, regardless of age or state of disease (NIH, 2021). Patients who receive even as little as two weeks of care under a palliative care service report increased quality of life (Delibegovic, et al., 2016). Aside from having a patient support benefit, palliative care also results in decreased 30-day hospital readmissions and unnecessary health care services such as dialysis and invasive line placements (Ranganathan, et al., 2013).

In current critical care practice, patients frequently lack palliative care involvement due to delayed communication between healthcare providers, time constraints, unrealistic expectations of the family and/or patient, and misperceptions about palliative care services (Aslakson, et al., 2014). Often, if the palliative care team is consulted, the patient and their family members have already gone through medical treatments and procedures that could have been prevented. These issues ultimately lead to unmet end of life needs including untreated pain, anxiety, confusion, shortness of breath, and nausea (Axelsson, et al., 2018). Not only are critically ill patients undergoing unnecessary suffering, but their medical care costs are needlessly increased. Palliative



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care consults are associated with reduced health care costs of up to \$20,000 per patient (Yadav, et al., 2020).

Education can be provided to healthcare staff to address unmet palliative care needs in the critical care setting. Recent research shows that educational interventions can effectively train health care workers. One study found that after implementing an educational module about palliative care, oncology nurses had a significant increase in palliative care knowledge, attitudes, and behaviors (Harden, et al., 2017). Additionally, screening tools can help preemptively recognize patients who would benefit from palliative care and predict patient mortality (Lapp & Iverson, 2015). The Supportive and Palliative Care Indicators Tool (SPICT) is a validated screening instrument that aims to identify indicators of deteriorating health to create a better plan of care for patients and their families (CAPC, 2019). Once a patient is screened using the SPICT, a recommendation can be made about future care.

### **Purpose and Aims**

The purpose of this study was to measure knowledge, attitudes, perceived empowerment, and familiarity with the SPICT among critical care nurses and advanced practice providers (APPs) in an adult medicine intensive care unit (MICU), before and after viewing a web-based educational video. The specific aims of this study are as follows:

1. Assess MICU nurses' and APP's knowledge surrounding palliative care
2. Assess MICU nurses' and APP's attitudes surrounding palliative care
3. Assess MICU nurses' and APP's perceived empowerment surrounding palliative care discussions
4. Assess if MICU nurses' and APP's intent to use the SPICT in practice to address palliative care needs

### **Theoretical Framework**

Widely considered the foundational theory of change management, Lewin's Change Theory encompasses a three-step guide to change prior learning and understanding. The three steps of Lewin's Change Theory are: (1) unfreezing, (2) changing, and (3) refreezing (Wojciechowski, et al., 2016). These three steps allow for practice changes to be made surrounding thoughts, feelings, and behaviors of stakeholders.

The first step, unfreezing, focuses on realizing there is a problem within a current practice. Here stakeholders are exposed to a new practice approach and learning to let go of their past learned approach. This initial step allows for old habits to be retired, and new habits to be formed through new understanding. The second step, change, involves the use of an intervention to enact the desired practice change. Two common interventions used within this step include education modules and training. The third and final step, refreezing, aims to standardize the new practice (Hussain, et al., 2018). Overall, the three steps of Lewin's Change Theory work to overcome the status quo set in place by restraining and driving forces (Wojciechowski, et al., 2016).

In the context of this study, Lewin's Change Theory was used as a guide to recognize a gap in the literature, realize an issue within the MICU at UK HealthCare (UKHC) surrounding staff palliative care education, implement a web-based educational module, and finally to assess data surrounding the module. The first step, unfreezing, occurred with the awareness that MICU nurses and APPs are untapped resources when it comes to initiating and providing palliative care consultations in the critical care setting. Currently, neither population receives any mandatory or voluntary palliative care education from UKHC. As a result, patients could be suffering from unmet palliative care needs and the overuse of life sustaining measures. The second step, changing,

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occurred with the distribution of a web-based education video about palliative care and the SPICT (see Appendix D). This module sought to address the lack of palliative care education in the critical care setting. The third and final step, refreezing, will occur when the results of this study are distributed to MICU nurses and APPs. It is important to note that this project focused on the unfreezing and changing steps of this theory. The final step of refreezing occurs when a change is established as a new practice and becomes a standard of care. The web-based educational video does not establish a new practice but moving forward more steps should be taken to achieve palliative care education as standard practice.

### **Review of Literature**

#### **Search Methods**

To better understand effective interventions for improving palliative care knowledge in the critical care setting, a review of the literature was performed. The search strategies used for this project are as follows. CINAHL was the database used. Original search terms included “palliative”, “knowledge”, “attitudes”, and “education”. Inclusion criteria included full text, peer-reviewed, academic journals, and published in English from the years 2017 to 2022. These search strategies yielded 96 studies. A common theme of empowerment was identified throughout the reviewed articles. Therefore, a secondary search was conducted to include the search term “empowerment”. This search strategy yielded an additional three studies. Studies that implemented an educational intervention among healthcare professionals were reviewed.

#### **Synthesis of Evidence**

The use of an educational module, whether in-person didactically or online, has the potential to increase topic knowledge and effects participant behaviors. When didactically educating intradisciplinary clinicians on palliative care, knowledge has been shown to increase

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by 94% and confidence to prepare discussions surrounding palliative care 100% (Lafond, et al., 2022). Traditionally, in-person trainings have been the most common way to educate. Yet web-based trainings have been shown to be a flexible and accessible alternative (Nadeau, et al., 2020). When provided with a web-based palliative care education tool, statistically significant improvement between pre and post palliative care knowledge and self-reported palliative care practices has been observed (Kudubes & Bektas, 2020).

Studies point to the use of screening tools to better assess palliative care needs in patients and their families. McCarroll (2018) and Karlekar, et al. (2017) found that palliative care consultations increased when an evidenced based screening tool was used. Nurses report that access to a palliative care screening tool improves palliative care resources and opportunities to further educate patients and their families about their clinical prognosis increased (Karlekar, et al., 2017).

It was incidentally found that bedside nurses felt empowered to be involved in palliative care when education and training on palliative care were accessible (Altaker, et al., 2018). Nurses are empowered to be present in palliative care discussions when appropriate education has been provided and access to palliative care is realistic. Current literature does not have a routine definition or measurement of empowerment, but an inverse relationship has been found between nurse moral distress and empowerment (DiGangi Condon, et al., 2021). Of the almost six million patients who are admitted to an ICU each year up to 29% will pass away (SCCM, 2018), and if access to palliative care is reduced bedside nurses experience moral distress (Wolf, et al., 2019). Future research should focus on defining empowerment and how to measure it in terms of palliative care.

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Bedside nurses and screening tools have been shown to be helpful in addressing palliative care needs for patients and their families. However, without proper education on palliative care nurses may not feel empowered to be involved in palliative care discussions. Current research is primarily being conducted with bedside nurses in mind.

### **Gaps in Practice and How this Project Addresses the Gaps**

There are gaps present in the current literature. Most notably, there is a lack of educating all healthcare providers on the importance and scope of palliative care. Most research is conducted with the bedside nurse population in mind, and within an oncology or pediatric setting. Future research needs to be piloted to include all members of the healthcare team and within adult critical care settings. This project aims to increase bedside nurse and APP palliative care knowledge, attitudes, perceived empowerment, and use of the SPICT in practice. By including APPs and placing awareness on outcomes within a critical care setting, this project seeks to address two gaps within current literature.

## **Methods**

### **Design**

This study was a one group pre- and post- implementation assessment that used electronic pre- and post- surveys. The time frame for this study was between January 2022 and March 2022.

### **Setting**

This study was conducted in the medicine intensive care unit (MICU) at UK HealthCare's (UKHC) Albert B. Chandler Medical Center and Good Smartian Hospital in Lexington, Kentucky. This 945-bed acute care academic center is a recognized level-1 Trauma Center and Comprehensive Stroke Center. The MICU is staffed by bedside nurses, APPs, and attending physicians. Both units share the same providing team of APPs and attending physicians.

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### **Congruence of Project with the Organization's Mission**

UK HealthCare states that they are committed to research, education and clinical care. Their mission: to “strengthen local health care and improve the delivery system by partnering with community hospitals and physicians” and to “support the organization’s education and research needs by offering cutting edge services on par with the nation’s best providers” (University of Kentucky, 2022, p. 1). UK Healthcare also stands on the five core values of diversity, innovation, respect, compassion and teamwork (University of Kentucky, 2022).

This project addresses UKHC’s core values of compassion and teamwork. The value of innovation strives for continued learning and improvement, while the value of teamwork looks to maintain positive relationships among professionals (University of Kentucky, 2022). This study sought to educate UKHC MICU nurses and APPs on palliative care and a screening tool to create innovative patient care. Perspectives of both critical care nurses and APPs were assessed as future education modules and patient screening initiatives may incorporate teamwork.

### **Stakeholders**

Stakeholders were important to the development and implementation of this study. The DNP committee for this study were essential to the development and implementation of this study. Additional relevant stakeholders for this project included UKHC MICU nurses, APPs, and patient care managers. Nurses and APPs remain invested to provide quality care to patients and patient families. By participating in this project, these healthcare professionals committed to increasing their understanding of how to better meet the needs of critically ill patients.

### **Facilitators and Barriers**

The facilitators for this project included all participating MICU nurses and APPs, who aided in this quality improvement (QI) study. Additional facilitators, if warranted, could have included

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MICU patient care managers and clinical nurse specialists (CNS). The MICU has three patient care managers, all of whom approved this study and provided the existing email list serve. The MICU also has two CNS that identify areas for QI within the unit and ways how address these issues.

A barrier for this study was participation on a volunteer basis. Survey fatigue within the MICU could have contributed to this lack of participation. No part of this study was mandatory for MICU nurses or APPs to complete, which affected sample size and the generalizability of results.

### **Sample and Recruitment**

The sample for this study included MICU nurses and APPs at UKHC. Inclusion criteria were as follows: at least 18 years of age, any gender, English speaking and writing, and currently hired and in good standing with UKHC. Exclusion criteria were as follows: under 18 years of age, primary language spoken is not English, currently not in good standing with UKHC, and traveling employees who are hired through an agency. Traveling employees were excluded due to the transient nature of their employment. The study sample consisted of 18 participants, 17 bedside nurses and one APP. Both the pre- and the post- surveys sent out using Qualtrics asked participants their highest degree completed and their level of experience in their current role. Recruitment of participants was on a volunteer basis and via an existing email list serve.

### **Procedures**

#### **IRB Approval**

Approval from the University of Kentucky Institutional Review Board (IRB) and the Nursing Research Council at UKHC were obtained (IRB #70473; final approval after modifications 12/13/2021). All study modifications were approved by the University of

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Kentucky IRB. Informed consent was waived since risk to participants would be considered minimal.

### **Evidenced Based Intervention**

The use of technology to provide education is continuing to expand. Web-based trainings have been shown to increase foundational understanding on a topic and have the capability of inspiring its viewers (Tompkins, et al., 2019). Palliative care education has been disseminated via web-based presentations and shown to significantly increase knowledge (Kudubes & Bektas, 2020). When creating a web-based educational video it was important to address perceived palliative care knowledge deficits found in the literature. Bedside nurses report an overall lack of knowledge surrounding palliative care (Achora & Labrague, 2019). Likewise, physicians also report a low understanding of palliative care practices which results in aggressive treatment practices (Batani, et al., 2018).

There is a noted deficit in general palliative care knowledge, so providing basic palliative care education was foundational to this study's web-based video. Additionally, a palliative care education needs assessment was performed in UKHC's MICU and indicated a need to distinguish the difference in palliative care and hospice care. Educational material included a review of palliative care, differences between palliative care and hospice care, information covering the SPICT and how to use the SPICT in practice. The video was in PowerPoint form, included narration, and almost seven minutes long.

### **Measures and Instruments**

Surveys for this study were approved via the project's DNP committee. Both surveys were sent out using a pre-existing email list serve. Participants were presented with an IRB approved cover letter that addressed information about the study including the purpose,



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methodology, risks/benefits, survey process, and investigator contact information should they have any questions about the study prior to participation in the survey. Clicking on the link for the pre- survey was considered consent to participate in the study. The first question on both surveys asked for the participant to create an anonymous identifier to pair their pre- and post-responses. This allowed for deidentified results to be recorded from participants.

The initial email included the IRB approved cover letter (see Appendix A), link to the pre-survey (see Appendix B) and link to the web-based educational video. The pre- survey assessed the participants' baseline palliative care knowledge, attitudes, perceived empowerment, and familiarity with the SPICT. Knowledge was assessed using true and false questions. Attitudes, perceived empowerment and familiarity of the SPICT were assessed using a 4-point Likert scale. On the post- survey the participants were asked if they had viewed the web-based educational video. The pre- survey was open for three weeks before the link expired. Four weeks later a post-survey (see Appendix C) was sent via the same email list serve to address the same measures as the pre-survey, as well as whether participants intent to use the SPICT in practice. The post- survey was open for two weeks before the link expired.

### **Data Collection**

Data were collected from each participant was via a web-based survey through Qualtrics. IP addresses were not collected from participants. Both survey results were collected via Qualtrics through an emailed link. Qualtrics is a secure web-based application for online surveys. Survey responses were automatically uploaded to a password protected Qualtrics account, accessible only by the researchers of this study.

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### Data Analysis

Frequency distributions were used to summarize demographic characteristics of participants. Paired sample t-tests were used to evaluate changes from pre-survey to post-survey after a web-based educational video on knowledge, attitudes, perceived empowerment, and utilization of the SPICT. Spearman's correlation coefficient was used to test for an association between years of experience in current position and all outcomes at baseline. SPSS version 28 was used for all analyses using an alpha level of  $p < 0.05$ .

### Results

#### Sample Demographics

A convenient sample of bedside nurses and APPs working in UKHC's MICU were included in this study. A total of 18 participants completed the pre-survey, web-based educational video, and post-survey. Majority of participants were BSN prepared registered nurses (94%; see Figure 1) with a minimum of five years' experience in their current role (50%; see Figure 1).

#### Survey Results

Paired t-tests comparing pre-intervention and post-intervention results were used. There was a significant increase in familiarity of the SPICT after the intervention ( $p < 0.001$ ; see Figure 2). Based on a range of 1-4, with higher scores reflecting more agreement, participant means increased from 2.19 (SD = 0.52) on the pre-education survey to 3.00 (SD = 0.57) on the post-survey. There was no change in palliative care knowledge ( $p = 0.67$ ; see Figure 2), attitudes ( $p = 0.063$ ; see Figure 2) and perceived empowerment ( $p = 0.454$ ; see Figure 2) between pre-intervention and post-intervention results. There was no correlation between participant number of years of experience and perceived empowerment to initiate palliative care discussions (Rho = 0.130;  $p = 0.607$ ).

### Discussion

This study looked at critical care nurse and APP palliative care knowledge, attitudes, perceived empowerment, and familiarity with the Supportive Palliative Care Indicators Tool (SPICT) before and after viewing a web-based educational video within an adult medicine MICU. The need for integrating palliative care into the acute care environment is increasing. Assuring healthcare professionals are educated on palliative care is essential to meeting patient palliative care needs (Health, et al., 2020). Research supports the use of an educational module to increase topic knowledge and change participant behaviors.

Results of this study showed that baseline palliative care knowledge and perceived empowerment of participants was already satisfactory in the MICU. Overall attitudes surrounding palliative care were unchanged. The web-based video significantly increased the familiarity of the SPICT among participants. Incorporating palliative care screening tools through web-based education should continue to be studied.

Findings in existing literature show that web-based education is accessible, flexible (Nadeau, et al., 2020), and have the capability to increase pre- and post- intervention knowledge (Kudubes & Bektas, 2020). This study aligned with current literature by showing a web-based educational video had the capability to significantly increase familiarity and intent to use the SPICT. However, literature also points to an overall deficit in palliative care knowledge which may negatively affects palliative care access and outcomes (Achora & Labrague, 2019). Results of this study found that baseline palliative care knowledge was sufficient and remained unchanged even after viewing the web-based video. This finding suggests that knowledge is not a barrier to palliative care involvement in UKHC MICU, and barriers should continue to be explored.

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The results of this study will be presented to UKHC MICU management and healthcare providers, as well as to all UKHC ICU staff. Since the results of this study are from a small sample size and cannot be generalized, mandatory annual palliative care education should be considered. Sustainability of this study can be achieved through additional surveys that explore palliative care barriers and implementation of a palliative care screening tool such as the SPICT.

### **Implications for Future Nursing Practice**

This study suggests that web-based education can be beneficial in educating bedside nurses and APPs on the SPICT. Future studies should focus on including all healthcare providers that are able to impact a patient's access to palliative care (physician assistants, residents, and attending physicians), as well as expanding the use of palliative care screening tools. If this study were to be repeated, the targeted population would be expanded and the setting would include all critical care areas (ICUs) at UKHC. Additionally, the effect of a palliative care screening tool on increasing communication between disciplines should be studied.

The pre- and post- surveys were able to assess participant palliative care knowledge and found that baseline knowledge was satisfactory. Ongoing education on palliative care is not required for any healthcare providers at UKHC. Future efforts to provide initial onboarding and annual palliative care education in the form of a web-based training should be considered and measured, especially for staff working in areas with patients known to have higher palliative care needs.

Looking to the future there should be an emphasis on educating all healthcare providers on palliative care to increase knowledge, attitudes, and perceived empowerment. Future research should emphasize empowerment related to all healthcare providers and education. Through

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education modules, patients and their families may receive better holistic care and have their palliative care needs met.

### **Limitations**

There were several limitations in this study. The study was conducted at one acute care academic center within one MICU, and with a limited sample size (n = 18). The majority of the participants were bedside nurses (n = 17), and were a predominantly female profession, which did lead to a homogenic sample. All possible healthcare providers (i.e. physician assistants, residents, and attending physicians) in the MICU were not included. This means results cannot be generalized to other facilities and populations.

It is possible that participants may have completed post- surveys without viewing the web-based educational video. The post- survey asked whether the participant viewed the web-based educational video, however responses were honor system based. Results assume participants accurately reported that the web-based educational video was viewed in its entirety.

Long-term effects on palliative care knowledge, attitudes, perceived empowerment, and use of the SPICT were not measured. This study spanned a total of 9 weeks between January 2022 and March 2022, so long-term effects could not be determined within this study.

### **Conclusion**

Palliative care continues to be an integral part of our healthcare system. As our population ages, the importance of palliative care will continue to grow. Research shows that palliative care is underutilized by healthcare professionals resulting in patients having unmet chronic illness needs and end of life care. This project examined how a web-based educational video could impact bedside nurse and APP palliative care knowledge, attitudes, perceived empowerment, and the use of the SPICT. Results showed that familiarity with the SPICT was significantly increased and that

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a web-based educational video may have the potential to significantly increase knowledge on a topic. Looking to the future, web-based educational modules should be considered as options to teach healthcare providers.

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Model was developed at research solutions and implementation changes.

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# IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

## Appendix A: IRB Approved Cover Letter

### Implementation of Education and a Screening Tool to Assess Palliative Care Needs in the Critical Care Setting Cover Letter

Dear Participant,

You are being invited to participate in this research study because you are a bedside nurse or advanced practice provider (APP) at UK HealthCare (UKHC) who provides critical care to patients in the medical intensive care unit (MICU). The purpose of this study is to educate and help healthcare providers implement a palliative care screening tool in the MICU.

Your participation will involve answering pre- survey questions about palliative care and the Supportive and Palliative Care Indicators Tool (SPICT). The survey will take about 5 minutes to complete. By clicking on the below link you are agreeing to participate in the study. This link will be available to you for the next three weeks and then expire. If you complete the pre- survey, please then view the educational presentation also included in this email. This educational presentation covers basic palliative care knowledge and how to use the SPICT in practice. This educational presentation will take less than 10 minutes to complete. Finally, a post- survey will be sent via email four weeks after this initial email. Again, this survey will take about 5 minutes to complete.

Your participation in this study is voluntary and you may withdraw at any time. Participation in this study is at no cost to you except for your time taken to complete the surveys and utilize the SPICT in practice. The risks involved in participating in this study are minimal. Benefits of participating in this study include gaining knowledge about palliative care, and learning about the SPICT tool and how it can improve patient care. There is a potential for breach of confidentiality. You will not be asked to provide your name on the surveys. Instead, you will be asked to create an anonymous identifier for both pre- and post-surveys, which will help connect your results. Your response to the survey is anonymous which means no names, IP addresses, email addresses, or any other identifiable information will be collected with the survey responses. We will not know which responses are yours if you choose to participate.

If you do not want to be included in this study, there are no other choices except not to take part in the study. Choosing to or not to participate in this study will not affect your job in any way. If you do participate you are free to skip any questions you do not want to answer. There is no personal gain achieved by participating in this study. All gathered answers and data will be used to better understand knowledge surrounding palliative care and whether utilizing the SPICT in practice helps empower healthcare providers to be more involved in palliative care discussions.

Please be aware, while we make every effort to safeguard your data once received from Qualtrics, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still on the survey company's servers, or while en route to either them or us. It is also possible the raw data collected for research purposes will be used for marketing or reporting purposes by the survey/data gathering company after the research is concluded, depending on the company's Terms of Service and Privacy policies.

If you have questions about the study, please feel free to ask; my contact information, as well as my advisor's contact information, are given below.

By clicking on the link to the pre- survey in this email, you are agreeing to participate in this research study. We appreciate your time and assistance in this project!

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

Megan Stoeckinger, BSN, RN  
UK College of Nursing  
Phone: 859-533-2745  
Email: mmst228@uky.edu

Julianne Ossege, PhD, FNP-BC, FNAP, FAANP  
Associate Professor UK College of Nursing  
Phone: 859-323-6615  
Email: julianne.ossege@uky.edu

If you have complaints, suggestions, or questions about your rights as a research volunteer, you may contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

### Appendix B: Pre- Survey

1. This is your anonymous identifier; please enter your birth year and street number below:

Year born -

Street number -

2. How many years of experience do you have in your current role?

a. 0-1

b. 1-3

c. 3-5

d. 5+

3. Select your highest level of education.

a. ADN

b. BSN

c. MSN

d. DNP

4. Both palliative care and hospice care provide patient comfort that begins at the time of a patient's diagnosis.

a. TRUE

b. FALSE

5. Palliative care only provides end-of-life care to patients.

a. TRUE

b. FALSE

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6. In order to receive palliative care, you must be at least 55 years old and recently diagnosed with a terminal illness.

- a. TRUE
- b. FALSE

7. I am familiar with the Supportive and Palliative Indicators Tool (SPICT).

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

8. I feel that I have a strong understanding about palliative care and the services it provides.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

9. I feel the primary team (including APPs and attendings) listens to my concerns when I initiated a palliative care discussion.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

10. I feel bedside nurses play an integral role in patients receiving palliative care.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

11. I feel empowered to initiate palliative care discussions with the primary team (including APPs and attendings).

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

12. I feel that my patient's palliative care needs are being met in the MICU at UKHC.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

13. I feel I have time to utilize a screening tool in my practice to assess my patients' palliative care needs.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4



## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

### Appendix C: Post- Survey

1. This is your anonymous identifier; please enter your birth year and street number below:

Year born -

Street number -

2. How many years of experience do you have in your current role?

a. 0-1

b. 1-3

c. 3-5

d. 5+

3. Select your highest level of education.

a. ADN

b. BSN

c. MSN

d. DNP

4. Did you review the educational PowerPoint presentation covering palliative care in the critical care setting and using the SPICT in practice?

a. YES

b. NO

5. Both palliative care and hospice care provide patient comfort that begins at the time of a patient's diagnosis.

a. TRUE

b. FALSE

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

6. Palliative care only provides end-of-life care to patients.

a. TRUE

b. FALSE

7. In order to receive palliative care, you must be at least 55 years old and recently diagnosed with a terminal illness.

a. TRUE

b. FALSE

8. I am familiar with the Supportive and Palliative Indicators Tool (SPICT).

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

9. I feel that I have a strong understanding about palliative care and the services it provides.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

10. I feel the primary team (including APPs and attendings) listens to my concerns when I initiated a palliative care discussion.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

11. I feel bedside nurses play an integral role in patients receiving palliative care.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

12. I feel empowered to initiate palliative care discussions with the primary team (including APPs and attendings) using the SPICT.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

13. I feel that my patient's palliative care needs are being met in the MICU at UKHC.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

14. I feel I have time to utilize a screening tool in my practice to assess my patients' palliative care needs.

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
1	2	3	4

Appendix D: Supportive and Palliative Care Indicators Tool (SPICT)



**Supportive and Palliative Care Indicators Tool (SPICT™)**



**The SPICT™ is used to help identify people whose health is deteriorating. Assess them for unmet supportive and palliative care needs. Plan care.**

**Look for any general indicators of poor or deteriorating health.**

- Unplanned hospital admission(s).
- Performance status is poor or deteriorating, with limited reversibility. (eg. The person stays in bed or in a chair for more than half the day.)
- Depends on others for care due to increasing physical and/or mental health problems.
- The person's carer needs more help and support.
- Progressive weight loss; remains underweight; low muscle mass.
- Persistent symptoms despite optimal treatment of underlying condition(s).
- The person (or family) asks for palliative care; chooses to reduce, stop or not have treatment; or wishes to focus on quality of life.

**Look for clinical indicators of one or multiple life-limiting conditions.**

**Cancer**

- Functional ability deteriorating due to progressive cancer.
- Too frail for cancer treatment or treatment is for symptom control.

**Dementia/ frailty**

- Unable to dress, walk or eat without help.
- Eating and drinking less; difficulty with swallowing.
- Urinary and faecal incontinence.
- Not able to communicate by speaking; little social interaction.
- Frequent falls; fractured femur.
- Recurrent febrile episodes or infections; aspiration pneumonia.

**Neurological disease**

- Progressive deterioration in physical and/or cognitive function despite optimal therapy.
- Speech problems with increasing difficulty communicating and/or progressive difficulty with swallowing.
- Recurrent aspiration pneumonia; breathless or respiratory failure.
- Persistent paralysis after stroke with significant loss of function and ongoing disability.

**Heart/ vascular disease**

- Heart failure or extensive, untreatable coronary artery disease; with breathlessness or chest pain at rest or on minimal effort.
- Severe, inoperable peripheral vascular disease.

**Respiratory disease**

- Severe, chronic lung disease; with breathlessness at rest or on minimal effort between exacerbations.
- Persistent hypoxia needing long term oxygen therapy.
- Has needed ventilation for respiratory failure or ventilation is contraindicated.

**Other conditions**

Deteriorating and at risk of dying with other conditions or complications that are not reversible; any treatment available will have a poor outcome.

**Kidney disease**

- Stage 4 or 5 chronic kidney disease (eGFR < 30ml/min) with deteriorating health.
- Kidney failure complicating other life limiting conditions or treatments.
- Stopping or not starting dialysis.

**Liver disease**

- Cirrhosis with one or more complications in the past year:
  - diuretic resistant ascites
  - hepatic encephalopathy
  - hepatorenal syndrome
  - bacterial peritonitis
  - recurrent variceal bleeds
- Liver transplant is not possible.

**Review current care and care planning.**

- Review current treatment and medication to ensure the person receives optimal care; minimise polypharmacy.
- Consider referral for specialist assessment if symptoms or problems are complex and difficult to manage.
- Agree a current and future care plan with the person and their family. Support family carers.
- Plan ahead early if loss of decision-making capacity is likely.
- Record, communicate and coordinate the care plan.

Please register on the SPICT website ([www.spict.org.uk](http://www.spict.org.uk)) for information and updates.

SPICT™ April 2019

## IMPLEMENTATION OF EDUCATION AND USE OF A SCREENING TOOL

**Figure 1: Descriptive Summary of Participant Demographics**

	<i>n (%)</i>
Years of Experience in Current Role	
1-3	3 (16.7%)
3-5	6 (33.3%)
5+	9 (50%)
Highest Level of Education	
ADN	0
BSN	17 (94.4%)
MSN	0
DNP	1 (5.6%)

**Figure 2: Analysis of Data**

Outcomes	Potential range	Pre-education <i>Mean (SD)</i>	Post-education <i>Mean (SD)</i>	<i>p</i>
Knowledge	0-3	2.27 (0.59)	2.33 (0.62)	0.67
Attitudes	1-4	2.86 (0.44)	3.12 (0.38)	0.063
Perceived Empowerment	1-4	3.06 (0.80)	3.22 (0.65)	0.454
SPICT	1-4	2.20 (0.52)	3.00 (0.57)	<0.001