EVALUATION OF A PALLIATIVE CARE SCREENING TOOL (PCST) TO IDENTIFY AND INCREASE PALLIATIVE CARE CONSULTS IN THE MEDICAL INTENSIVE CARE UNIT (MICU)

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Abstract

Introduction and Background

Palliative care (PC) is a fundamental aspect of holistic and patient-centered care that aims to anticipate, prevent, and manage all aspects of suffering to improve the overall quality of life for patients, their families, and caregivers (National Institute of Health, 2021). There is a significant demand for PCs in intensive care units (Brunker et al., 2023).

Objectives

This project aimed to assess the impact of incorporating the Palliative Care Screening Tool (PCST) to identify patients admitted to the MICU in a large academic medical center with unmet Palliative Care needs and to increase the timeliness of Palliative Care consultations.

Hypothesis

Implementing the PCST will identify patients with unmet palliative care (PC) needs and increase the number of PC consults.

Methodology

A retrospective chart review of patients admitted or transferred to the MICU over 15 months to gather demographic information and compare patients eligible for a PCC based on their PCST score to the actual number of consultations received.

Results

A total of one hundred and sixty-two charts were reviewed, and 110 patients (67.9%) received a positive PCST score, indicating their eligibility for a consultation. Among those eligible, only 47 patients (42.7%) received a consult, while 63 eligible patients (57.3%) did not. An independent t-test showed that those with a PCC had mean total comorbidities .781 higher than those who did not have a consult ($t=3.471$; $p<.001$). A crosstabulation shows that 44% of those with cardiac comorbidities were noted as having a PCC vs. 23% who did not ($\chi2 = 7.205$, $p=.007$).

Conclusion

It is important to integrate palliative care consults as a trigger on an ongoing basis to increase the number of patients receiving one while hospitalized.

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Chapter I: Introduction

Background

Over 5 million patients are admitted annually to U.S. ICUs (Intensive Care Units) for intensive monitoring, invasive procedures, and critical medical care (Society of Critical Care Medicine, 2021). These patients require constant assessment and rely heavily on technological support, distinguishing them from those admitted to non-ICU beds (Society of Critical Care Medicine, 2021). Despite their diverse backgrounds, ICU patients all require comprehensive care to address acute medical issues, manage injuries or illnesses, and ensure comfort for those nearing the end of life. According to previous research (Janczewski et al., 2024), approximately 20-30% of individuals who die in the U.S. do so in the ICU, and nearly 60% of ICU admissions end in death. In recent years, there have been significant changes in the demographics of patients admitted to the ICU. Due to advancements in medical knowledge, sophisticated life support, and life-extending technologies, older and more critically ill patients are now frequently treated in the ICU, leading to severely ill adults surviving for longer durations than in the past (Gonçalves-Pereira et al., 2023). However, due to these patients often having various underlying medical conditions, they are frequently exposed to medical procedures that can potentially intensify emotional and physical distress, ultimately impacting their quality of life in their remaining weeks and months (Morgan, 2021).

In recent years, palliative care has gained recognition as a fundamental aspect of holistic and patient-centered healthcare (Kyamulabi et al., 2021). With an aging population and an increase in serious illnesses, there has been a significant demand for palliative care in ICUs (Brunker et al., 2023). According to research, implementing palliative care at an early stage can enhance quality of life, decrease ICU duration, lower mortality rates and aggressive interventions, and ultimately reduce overall healthcare expenses (Duncan et al., 2023). Over the past 30 years, ICU-based palliative care has developed and advanced thanks to clinicians, researchers, and advocates' dedication to patient-centered care (Wiencek, 2024). Currently, palliative care is a vital element of high-quality critical care and a fundamental skill for all critical care clinicians (Wiencek, 2024).

Furthermore, it is widely acknowledged that critical care nurses, advanced practice registered nurses (APRNs), physicians, and other members of the ICU team require training and expertise in delivering primary palliative care (Wiencek, 2024). Clinicians frequently believe that palliative care consultations should be used more extensively. However, inconsistent methods for identifying and referring patients result in unequal access to this essential service (Evans et al., 2020). Evidence-based screening tools have been shown to effectively predict mortality rates and identify individuals who would gain the most from palliative care services (Low et al., 2022).

Numerous assessment instruments are currently utilized to monitor and report relevant data to the palliative care team. The Palliative Performance Scale (PPS) and the Karnofsky Performance Scale (KPS) are frequently used tools. Both offer a snapshot of a patient's ability to self-mobilize, level of activity, self-care capability, food, and fluid intake, and level of consciousness (Mehta et al., 2021). Despite its common usage, these tools have limitations. They do not account for the level of distress or suffering experienced by a patient nor assist in measuring pain or predicting time until death. In addition, their reliability is more robust when assessing a patient with a cancer diagnosis. However, it is reduced when used with other diagnoses such as stroke, heart attack, dementia, or renal failure.

The Center to Advance Palliative Care (CAPC) is the leading national organization in the United States advocating for improving palliative care services. To fill the gap in a reliable screening tool, CAPC convened an interdisciplinary team, CAPC IPAL-ICU (Improving

Palliative Care in the ICU) Consensus Panel, to create checklists for identifying unmet palliative care needs in hospitalized patients at admission and during daily rounds (Center to Advance Palliative Care [CAPC], 2023). The panel developed a Palliative Care Screening Tool (PCST) that, in less than a minute, identifies patients who may benefit from a palliative care consultation and assists with decision-making and the awareness of palliative care services (Center to Advance Palliative Care [CAPC], 2023).

Multiple studies strongly support palliative care screening upon admission to the ICU as an effective method for early palliative care consultations (Martz et al., 2020). However, the authors of these studies also emphasized the importance of periodic screening during the ICU stay to identify patients who may develop a high level of symptoms after the initial screening. This highlights the need for ongoing screening to ensure timely and appropriate palliative care is provided.

Identification of the Problem

Palliative care is a holistic system that aims to anticipate, prevent, and manage all aspects of suffering - physical, psychological, social, and spiritual - to improve the overall quality of life for patients, their families, and caregivers (National Institute of Health, 2021). Every year, there are over 5 million admissions to ICUs in the US, with a mortality rate of up to 29% and a total cost exceeding $108 billion (Society of Critical Care Medicine, 2021). Extensive studies have shown that palliative care can significantly improve the welfare and mitigate stress levels of adult patients in the ICU, making it a crucial element of comprehensive critical care regardless of prognosis or treatment goals (Chapman et al., 2022). Even with the recent progress in palliative care initiatives, it must be utilized more. Research has shown that patients and healthcare professionals associate palliative care solely with end-of-life care, resulting in misconceptions and delayed referrals (Flieger et al., 2020). Such delays can lead to adverse outcomes such as prolonged hospital stays, diminished quality of life, poorly addressed symptom management, increased healthcare expenses, and moral conflicts (Chapman et al., 2022).

In addition, taking care of these seriously ill patients has posed a great challenge for ICU personnel. Conflicts among the ICU team regarding life-saving interventions, difficult treatment decisions due to critical illnesses, time-sensitive decisions without full consideration of ethical concerns, clashes with administrative personnel and legal regulations dictating the decision-making power of patients and families and permissible forms of end-of-life care can all contribute to moral distress (Carnevale, 2020). According to a study by Rakhshan et al. (2022), an alarming 92% of ICU nurses experienced moral distress while tending to patients receiving futile treatments. In addition to potential burnout, nurses can feel frustrated and angry while providing futile care, resulting in compromised quality of work (Rakhshan et al., 2022). The complexities of end-of-life care for patients with no chance of recovery pose a significant challenge for nurses.

Furthermore, performing invasive procedures, which may also cause discomfort, can exacerbate the patients' conditions and lead to extended hospital stays, increased workload for nurses, and additional expenses for families and the healthcare system (Rakhshan et al., 2022). Thus, these findings can potentially guide the development of guidelines and policies for end-of-life care for ICU patients. To address these issues, an increase in palliative care consultations in the ICU can alleviate moral distress and provide additional support for patients, families, and healthcare providers (Neukirchen et al., 2023).

Palliative care delivered promptly involves a structure approach to identifying patients with advanced support care needs and promptly referring them to specialized palliative care services using standardized referral criteria (Hui et al., 2022). This approach requires four essential elements: (1) regular screening of supportive care needs at oncology clinics, (2) establishment of locally agreed upon criteria for referrals, (3) implementing a system to prompt referrals when criteria are met, and (4) ensuring availability of outpatient palliative care resources for timely access (Hui et al., 2022).

The focus now lies on determining the optimal time to refer a patient for specialist palliative care rather than questioning whether it would beneficial them. Therefore, it is crucial to establish a straightforward procedure for identifying Medical ICU (MICU) patients who require palliative care services. Evidence has demonstrated that nurse-driven palliative care screening tools may increase palliative care consults and improve patient outcomes (Martz et al., 2020).

Morristown Medical Center has a palliative care team providing care to patients with palliative care needs. The team is physician-led and consists of five physicians and two APNs.

Purpose of the Study

This project aims to assess the impact of incorporating the Palliative Care Screening Tool (PCST) to identify patients admitted to the MICU at Morristown Medical Center with unmet Palliative Care needs and increase the timeliness of Palliative Care consultations.

A PICOT question was formulated:

- **Population** – patients admitted or admitted to the MICU at Morristown Medical Center from May 31, 2023, to July 31, 2024
- **Intervention** – a retrospective chart review of discharged patients to determine eligibility for palliative care consult by applying the PCST criteria.
- **Comparison** – a retrospective chart review to determine whether a palliative care consult was initiated without using the PCST.
- **Outcome** – determine the impact of incorporating the PCST on increasing PC consults.
- **Time** – 15 months (May 31, 2023, to July 31, 2024)

Significance to Nursing

Numerous assessment tools are utilized to track and report information in the context of preventive medicine. One crucial aspect of this approach is screening, which aims to identify patients early to facilitate prompt treatment and prevent or minimize symptoms and their related consequences. Proper utilization of screening tools can lead to improved health outcomes for the population and prevent excessive expenses (World Health Organization [WHO], 2020b). A study by Sheridan et al. (2021) demonstrated that patients who received a palliative care consultation had an average cost of $5,834 per patient, which was lower than the average cost of $7,784 for patients receiving usual care (a decrease of 25%; p<0.0001). The cost savings were highest for patients who received a consultation within seven days of death, reducing healthcare costs by $451 (Sheridan et al., 2021). However, even for patients who received a consultation more than four weeks before their death, there was a significant cost decrease of $4,643 (Sheridan et al., 2021). In addition, a considerable correlation was observed between shorter hospital stays and lower charges when palliative care consultations were initiated within 24 hours of hospital admission, regardless of the underlying disease (Macmillan et al., 2020). Patients referred early had median hospital charges of $38,600, while the control group had $95,300 (Macmillan et al., 2020). In addition, a systematic review by Yadav et al. (2020), most of the studies examined demonstrated a decrease in healthcare expenses, ranging from $1285 to $20,719 for inpatient palliative care, $1000 to $5198 for combined outpatient and inpatient care, $4258 for home-based care, and $117 to $400 per day for combined home and hospice care. These findings highlight the potential cost-saving benefits of early palliative care consultation.

When caring for hospitalized patients who are critically ill, the primary clinical team often faces challenges in navigating complex care, managing recommendations from various consultants, navigating interprofessional dynamics, balancing patient-family relationships, and addressing multiple psychosocial issues (Foxwell et al., 2022). These stressors and factors can add to the strain on clinicians. Nurses may encounter difficult situations that can lead to caregiver distress and frustration. These challenges include perceived differences between physicians and nurses in their roles in end-of-life care (EOLC), a lack of widespread integration of palliative care in the ICU, and inadequate emotional and organizational support for EOLC provisions, such as private space for family meetings and grieving support for ICU staff (Choudhuri et al., 2020). Findings also suggest that unrealistic expectations from patients and families are a significant barrier to ICU-palliative care integration, and a trigger-based approach may be the most effective way to promote integration (Choudhuri et al., 2020). Furthermore, there is a necessity for improved assistance in the reliable identification of individuals who could benefit from palliative care intervention. Given these obstacles, the implementation of a screening tool for palliative care could alleviate some of these challenges.

DNP Project Objectives

1. To measure the impact of adding a PCST to identify patients with unmet palliative care and increase palliative care consults.
2. To uncover any barriers preventing a PC consult in the MICU for appropriate patients.

Research Question

"Would the introduction of a Palliative Care Screening Tool (PCST) effectively identify patients at high risk for unmet Palliative Care (PC) needs and lead to an increase in PC consultations within the Medical Intensive Care Unit (MICU) at Morristown Medical Center (MMC)"?

Operational Definitions

Palliative Care (PC) - According to the World Health Organization, palliative care is defined as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness" (World Health Organization [WHO], 2020a, para. 1). This form of care centers on alleviating discomfort and other symptoms, while also acknowledging the emotional, societal, and spiritual needs of the patient and their loved ones.

Unmet Palliative Care Needs are the lack of access to appropriate and timely palliative care services for individuals with life-threatening illnesses (ElMokhallalati et al., 2020). These services may include inadequate pain and symptom management, insufficient emotional and spiritual support, and limited access to end-of-life care planning and decision-making (ElMokhallalati et al., 2020).

The **Palliative Care Screening Tool (PCST)** is a valuable tool for healthcare professionals to identify patients who are approaching end-of-life (EOL) and require palliative care (Yen et al., 2022b). The PCST gathers clinical information, such as functional status and other medical conditions, and utilizes a scoring system to predict patients' remaining lifespan and appropriateness for a palliative care consult (Yen et al., 2022b). The CAPC PCST has been selected for this study (see Appendix A).

Palliative Care Consult is an integrated method for providing expert medical treatment to individuals suffering from severe or terminal conditions (Center to Advance Palliative Care [CAPC], 2023). The primary goal is to effectively address symptoms, alleviate pain and stress, and enhance the general well-being of patients and their loved ones. This approach promote4s optimal quality of life (Center to Advance Palliative Care [CAPC], 2023). This type of care involves a collaborative effort by an interdisciplinary team consisting of physicians, nurses, social workers, and other healthcare professionals. Their collective aim is to attend to the patient's physical, emotional, and spiritual needs (Center to Advance Palliative Care [CAPC], 2023). A consultation for palliative care seeks to assist patients and their families in traversing the complex healthcare system, making knowledgeable choices, and finding solace and assistance during challenging circumstances (Center to Advance Palliative Care [CAPC], 2023). This approach can potentially yield benefits at any point during an illness and can be integrated with curative treatments (Center to Advance Palliative Care [CAPC], 2023).

Summary

Per the National Institute of Health (NIH) (2021), palliative care is advantageous at any stage of an illness and ought to be initiated immediately following diagnosis. In addition to enhancing quality of life and addressing symptoms, palliative care can aid patients in understanding their medical treatment options (National Institute of Health, 2021). In general, the average mortality rates for patients in adult ICUs range from 10% to 29%, depending on factors such as age, the presence of other health conditions, and the severity of their illness (Society of Critical Care Medicine, 2021). According to findings reported by Gonçalves-Pereira et al. (2023), there was an overall ICU all-cause mortality rate of 16.1%. This rate was seen to rise with increasing age and was marginally higher in males ($p < 0.001$) (Gonçalves-Pereira et al., 2023). In addition, of the 31,136 ICU patients who were discharged alive, 9.4% eventually passed away while still in the hospital (Gonçalves-Pereira et al., 2023).

Many institutions use an extensive list of "triggers" through a screening tool to ensure that palliative care is administered promptly. Research in the medical intensive care unit (MICU) setting has often focused on functional status, age, shock/multi-system organ failure, and patients requiring ventilator/tracheostomy (Kistler et al., 2020). The most frequently occurring criteria in the trigger tools identified advanced or life-limiting diseases, such as cancer, neurologic diseases, and chronic comorbidities like end-stage liver or kidney disease (Kistler et al., 2020). Specific hospitalization characteristics were also linked to higher resource utilization and poorer outcomes, including longer stay lengths and increased readmission risk (Kistler et al., 2020).

Could the implementation of palliative care screening tools be a means of identifying patients with unmet palliative care needs and offering them an informative palliative care consultation? This objective aligns with Dame Cicely Saunder's conceptual framework of holistic suffering, encompassing the physical, psychological, spiritual, and social aspects of care that are impacted by suffering (Dzierżanowski, 2021).

Chapter II: Theoretical Framework and Review of the Literature

Introduction

Chapter two will explore existing literature to examine the project's theoretical foundations and provide supporting evidence for its implementation. This literature review will cover studies from 2020 through 2024. The timely recognition of individuals who could benefit from a palliative care approach has resulted in enhanced clinical outcomes, symptom management, quality of life, and optimized allocation of healthcare resources within diverse cancer patient populations (Mittmann et al., 2020).

Methodology

A comprehensive search of electronic databases, including PubMed, MEDLINE, and Google Scholar, was conducted using relevant keywords such as "palliative care," "trigger tools," "screening tools," "scales," "ICU/intensive care units," and variations thereof. The search was limited to articles published in the last five years to ensure the inclusion of recent research. Both quantitative and qualitative studies were considered for inclusion. A total of 53 records were identified during the initial literature review. Twelve records were selected to meet the preliminary literature search's inclusion and exclusion criteria. Several themes resonated within the literature review that fell within the project proposal's aim. The four most common themes included

- unmet palliative care needs
- strategies and tools for fast identification of appropriate patients through a trigger-based model
- barriers to palliative care consultations within the ICU and
- benefits of early palliative care consultation

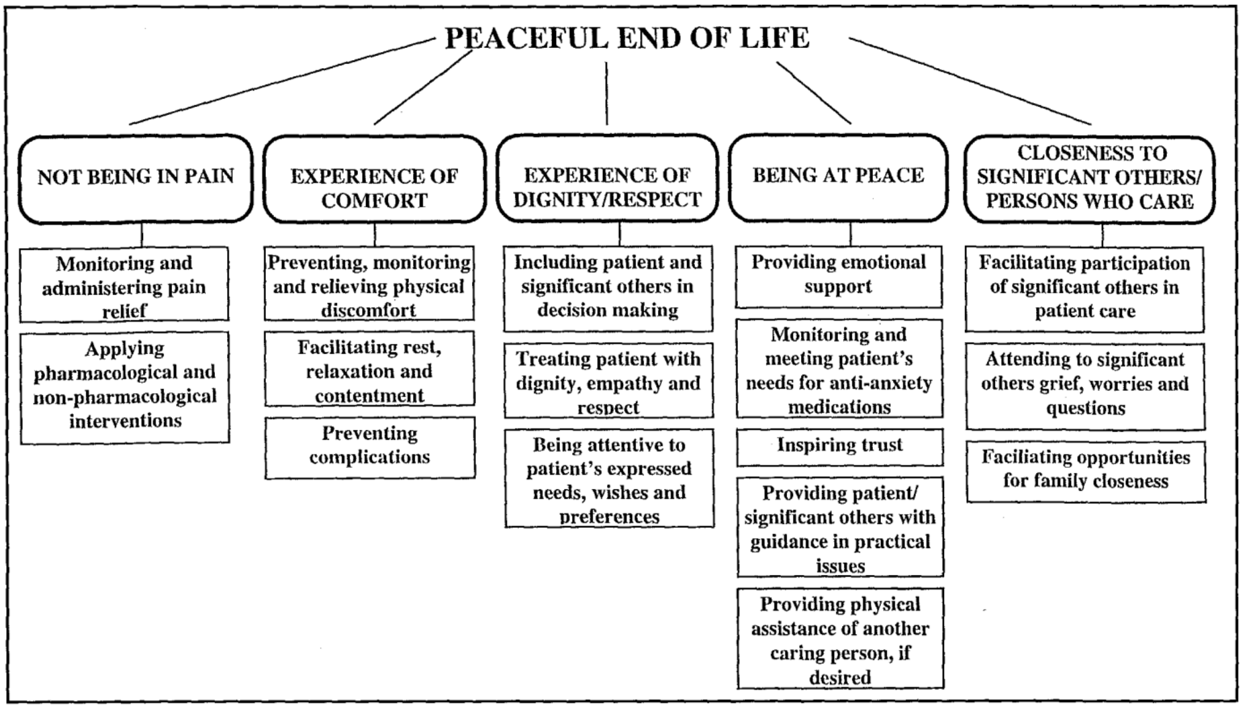
Theoretical Framework

The Peaceful End of Life Theory (PELT)

The demand for palliative care (PC) is increasing, with more patients facing life-threatening illnesses seeking this approach to ease their symptom burden and enhance their quality of life (QOL) (Ogundunmade et al., 2024). Palliative care is a comprehensive healthcare approach that relies on a team of professionals. These professionals work together to support patients and their families as they navigate the challenges associated with life-threatening or life-limiting illnesses (Ogundunmade et al., 2024). The primary objective of this approach is to alleviate suffering by promptly identifying, diagnosing, and addressing pain and other issues, whether psychological, spiritual, or physical (Ogundunmade et al., 2024). The global rise in chronic diseases and an aging population drive the need for high-quality palliative care services, underscoring the crucial role of professionals in this field (Cotogni & De Luca, 2022).

The Peaceful End of Life Theory (PELT) is a middle-range theory developed based on clinical nurses' observations and experiences caring for patients with terminal illnesses (Jimenez et al., 2022). This theory is a valuable framework for nursing research and interventions to promote peace and comfort for patients at the end of life (Jimenez et al., 2022). The PELT was developed by Cornelia Ruland and Shirley Moore in 1998. This nursing theory promotes peace and comfort for patients at the end of life (Lacet Zaccara et al., 2020). The theory emphasizes the importance of communication, relationship-building, and holistic care in helping patients achieve a peaceful death (Lacet Zaccara et al., 2020). It also highlights the role of nurses in providing compassionate care and support to patients and their families during this challenging time (Lacet Zaccara et al., 2020). The PELT also confirms the patient's end-of-life wishes and ensures the appropriate implementation (Lacet Zaccara et al., 2020).

Based on the proposed project, the relationship between the Peaceful End of Life Theory (PELT) and the utilization of a Palliative Care Screening Tool (PCST) is evident. The PELT emphasizes the importance of communication, relationship-building, and holistic care in promoting peace and comfort for patients at the end of life. Using the PCST, nurses can effectively identify patients with unmet palliative care needs and initiate a PC consult, resulting in appropriate interventions to provide compassionate and holistic care that aligns with the principles of the PELT. By confirming patients' end-of-life wishes and involving them in decision-making, nurses can ensure a peaceful and dignified dying experience. Therefore, the PELT serves as a valuable framework for this project and can enhance its success in promoting optimal end-of-life care for patients in the MICU setting.



Peaceful End of Life Theory (Ruland & Moore, 1998).

Literature Review

Unmet Palliative Care Needs

Research shows that end-of-life patients often do not receive the care they anticipate or deserve, and this is highlighted by the conflict between aggressive life-prolonging treatments and a patient's care goals (Chen et al., 2020). Studies have also demonstrated the benefits of palliative care interventions in improved outcomes, more efficient care, shorter hospital stays, hospice referrals, patient and family satisfaction, reduced utilization of intensive care resources, and cost savings (Senderovich & McFadyen, 2020). The importance of palliative care for patients with terminal illnesses has been increasingly recognized. However, despite its benefits in managing symptoms and reducing healthcare expenses, patients often need access to palliative care due to financial constraints and limited expertise among healthcare providers (Liao et al., 2020). In addition, aggressive treatment methods that aim to prolong life may clash with a patient's goals of care (Chen et al., 2020). Cox et al. (2022) argued that palliative care should be an integral part of high-quality ICU care as it aims to enhance or maintain quality of life and alleviate symptoms by addressing the unmet needs of seriously ill individuals. However, implementing ICU-based palliative care needs to be more consistent by identifying patients who would benefit most (Cox et al., 2022).

Furthermore, research by Rizvi et al. (2023) revealed that implementing palliative care techniques has led to enduring enhancements in cooperation among medical professionals, resulting in a rise in consultations and prompt referrals. However, the level of palliative care in ICU settings differs significantly due to the need for more consensus regarding effective strategies for identifying eligible patients, providing suitable levels of primary or specialized care, and assessing its effects on patient-centered outcomes. (Rizvi et al., 2023).

Strategies and Tools for Fast Identification

The Center to Advance Palliative Care (CAPC) has acknowledged the disparity between the unmet demands for palliative care in hospitalized patients and the capabilities of specialized palliative care teams to meet those needs (Aljurf et al., 2022). A crucial step in addressing this disparity is efficiently and promptly identifying patients with a high likelihood of requiring palliative care (Aljurf et al., 2022). Nevertheless, there is a need for more comprehensive assessment techniques and tools for identifying palliative care needs in hospitalized patients (Aljurf et al., 2022).

Which trigger tool is the most effective or helpful in identifying appropriate palliative care patients has yet to be supported. Despite the widespread implementation of status-based protocols in different clinical settings by healthcare systems worldwide, it is still being determined whether these protocols effectively measure needs in palliative care, such as symptoms, decision-making conflicts, spiritual concerns, and discrepancies between values and treatments (Hugar et al., 2021). Therefore, a practical approach was taken to determine which tools would be included in the studies and evaluated for effectiveness (Nadkarni et al., 2022).

While seven palliative care trigger tools have been reviewed, the results have shown that these tools are tailored to different target populations and have varying outcomes (Kistler et al., 2020). The various trigger tools reviewed were all checklists or scales completed during the admission or transfer assessment. The number of triggers ranged from 22 to nine, which is a consideration when determining ease of use. Most of the tools address the diagnosis of life-threatening illness and functional dependencies. All the tools addressed co-morbidities, and five of the seven addressed symptom management and support needs (Kistler et al., 2023).

In a systematic review by Xie et al. (2023), seven screening instruments for early identification of patients requiring palliative care were evaluated for their psychometric properties and clinical performance. The review revealed that the methodological quality of evidence regarding the reliability and validity of these screening instruments varied from very low to moderate (Xie et al., 2023). None of the instruments assessed all aspects of care, including physical, psychological, social, and spiritual domains. Palliative care screening instruments must encompass these various domains to address the diverse needs of patients effectively (Xie et al., 2023). The review underscores the importance of screening tools to raise awareness among healthcare providers about the growing disease burden in patients and identify those needing palliative care early on (Xie et al., 2023). This approach encourages patients and clinicians to consider palliative care a viable option and conduct comprehensive assessments whenever necessary (Xie et al., 2023). By ensuring that patients receive timely and personalized care in line with their preferences, this approach aims to enhance the overall quality of care provided (Xie et al., 2023).

The CAPC has designed a toolbox and an ICU screening tool to aid in identifying patients who may require palliative care. These tools can be customized to meet the unit's needs (Center to Advance Palliative Care [CAPC], 2023). The PCST tool was developed by the Center to Advance Palliative Care (2004/2007) to comply with the policy set forth by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) (Clara et al., 2019). Created specifically for hospital settings, the PCST aims to evaluate patients based on predetermined criteria and determine the necessity of palliative care (Lüthi et al., 2022). Four assessment criteria, including underlying disease, comorbidities, functional status, and personal conditions of patients, are used to generate an assessment score that ranges from no indication for palliative care to the recommendation for a palliative care consultation (Coutinho Leite et al., 2020). The study findings indicated that most hospitalized participants with chronic illnesses were deemed suitable for a palliative care consultation based on their PCST score (Coutinho

Leite et al., 2020). The determination of palliative care eligibility using the PCST scale is determined by a total of the criteria and is classified in the following manner: a score of up to two points indicates no need for palliative care; a score of up to three points indicates the patient should be monitored clinically; and a score of four or more points indicates a potential need for palliative care (Coutinho Leite et al., 2020).

The empirical study conducted by Andersen et al. (2013) focused on assessing the interrater reliability of the CAPC PCST when used during patients' hospital admissions to identify palliative care needs. The researchers employed a retrospective, descriptive, exploratory design to evaluate the tool's reliability. Two nurse co-investigators independently reviewed the medical records of randomly selected patients at admission, assessing the presence of PCST criteria that indicated the need for a palliative care assessment (Andersen et al., 2013). Both nurses accessed the same patient information and classified patients based on the screening tool's criteria. The interrater reliability analysis revealed that the two nurse investigators agreed that 80% of patient classification cases were within the same screening category (Andersen et al., 2013). The kappa coefficient, a measure of agreement between raters, was calculated to be 0.75 with a 95% confidence interval of 0.62 to 0.88, suggesting good interrater reliability (Andersen et al., 2013). This highlights the tool's potential utility in facilitating the early identification and assessment of patients who could benefit from palliative care services.

According to a recent study by Clara et al. (2019), the CAPC PCST has shown a high level of sensitivity, making it a valuable tool for identifying patients who would benefit from palliative care. Compared to the well-established and reliable Palliative Care Performance Scale (PPS), the PCST demonstrated perfect agreement with a score of 1.0 using the Kappa test (Clara et al., 2019). However, it should be noted that one limitation of this tool is the need for the identification of religious and spiritual aspects (Clara et al., 2019).

Barriers to Palliative Care Consultation

The ICU was created to care for individuals with sudden injuries or illnesses and those who anticipated leaving the unit satisfactorily. However, in modern times, a significant percentage of patients in the ICU have ongoing health conditions that are linked to a higher chance of death. Roughly 10-29% of adult ICU patients pass away while in the ICU or shortly after (Ganz et al., 2020).

Although numerous clinical studies have proven the advantages of providing early palliative care to individuals with a terminal illness, accessing these services often occurs very late or not at all (Collins et al., 2022). The study by Kyeremanteng et al. (2020) identified the following factors as hindrances to delivering palliative care in the ICU. Palliative care in the ICU is inadequate, with 78% of participants expressing the belief that integrating it more would enhance the quality of end-of-life care (Kyeremanteng et al., 2020). The primary obstacle to this integration was unattainable expectations from patients and their families (Kyeremanteng et al., 2020). A feasible solution for integration was identified as having criteria-driven consultations for palliative care (Kyeremanteng et al., 2020). Developing evidence-based "triggers" or designated times for the routine inclusion of early palliative care could help bridge this gap between research and practice (Collins et al., 2022).

Developing and implementing a proven screening tool for identifying unmet palliative care needs among ICU patients is feasible and acceptable, and it may help to systematically integrate the palliative approach into routine care for critically ill patients (Venis & Dodek, 2020). According to ElMokhallalati et al. (2020), primary care teams are crucial for individuals with advanced chronic illnesses. One of their primary obstacles is identifying patients who may require additional palliative care (ElMokhallalati et al., 2020) By incorporating a systematic tool, these teams can effectively identify patients with progressive and advanced diseases who may benefit from palliative care (ElMokhallalati et al., 2020).

Benefits of Early Palliative Care Consultation

A study by Churchill et al. (2020) researched to improve the identification of patients who could benefit from palliative care and increase the number of palliative care consults. Utilizing a PCST, the study aimed to screen all patients admitted within 24 hours. The percentage of newly admitted patients screened, and the total number of consultations were evaluated. The results showed a 9.2 percent increase in consultation during the program's first three months (Churchill et al., 2020). In addition, the timeliness of referral to consult within 24 hours increased from 43.5 percent before the program initiative to 92.6 percent, resulting in a 25 percent overall increase in timeliness (Churchill et al., 2020). Lastly, the demographics shifted from cancer patients to non-cancer patients, with an increase of 8.3 percent of non-cancer patients receiving a PC consult (Churchill et al., 2020). This quality improvement project helps support increased PC consults using a PCST.

In a cohort study conducted by Yen et al. (2022b) involving 21,109 patients, 1,751 individuals passed away within 12 months of undergoing palliative care screening. The research indicated that a Palliative Care Screening Tool (PCST) score exceeding four was identified as an independent predictor for 12-month mortality in patients (Adjusted Odds Ratio = 1.43; 95% Confidence Interval 1.21 to 1.70; $p<0.001$). Additionally, the PCST demonstrated a sensitivity of 45.8%, specificity of 92.0%, positive predictive value (PPV) of 34.1%, and negative predictive value (NPV) of 94.4%.

The objective of the research conducted by Bhattacharya et al. (2023) was to implement a PCST for hospitalized patients with congestive heart failure to enhance the number of consultations. 41 patients, accounting for 38% of the sample, were identified as suitable for an inpatient palliative care consultation (Bhattacharya et al., 2023). Out of these, 19 patients (46.3%) received the consultation, indicating a significant increase compared to the pre-intervention period (46.3% vs 27.7%; p=0.02) (Bhattacharya et al., 2023). Additionally, in the post-intervention period, there was a notable enhancement in the proper documentation by the provider during hospital admission (28.7% vs. 10.7%; p<0.001), which was further improved upon hospital discharge (47.2% vs 11.4%; p<0.001) when compared to the pre-intervention period (Bhattacharya et al., 2023).

Philips et al. (2024) conducted a quality improvement initiative to increase patient accessibility to timely palliative care consultations and expand the range of the palliative care team's services. Patients with positive screening tool results were automatically referred for palliative care consultation. Out of 267 patients, 59 (22%) had positive screening tool results, a significant increase compared to the 31 (11.6%) identified through the traditional consultative method (Philips et al., 2024). Further analysis showed that patients identified for referral without using the screening tool were hospitalized for an average of 6 days before a consultation was requested (Philips et al., 2024). Phillips et al. (2024) concluded that the screening process could optimize the benefits of palliative care services by identifying patients early, streamlining consultation, reducing the use of critical care resources, and decreasing readmission rates.

In separate research conducted by Yen et al. (2022a), a comparison was made between using a PCST and a traditional intuitive assessment for end-of-life patients. The study utilized intuitive assessment and PCST methods to predict the 6-month mortality and select suitable candidates for palliative care (Yen et al., 2022a). The results indicated that the PCST had a significantly higher c-statistic value in predicting 6-month mortality compared to intuition (0.723 vs. 0.679; p < 0.001) (Yen et al., 2022a).

Summary

Through the literature review, various studies were discovered that evaluated the effectiveness of trigger tools or scales in promoting the utilization of palliative care consultations in ICUs. Results indicate that using such tools may facilitate the identification and referral of palliative care services. The study conducted by Phillips et al. (2024) showed a sustained increase in referrals and timeliness of referrals. The study by Bhattacharya et al. (2023) demonstrated similar results, increasing from 27.7% to 46.3%. These advanced instruments show potential in aiding healthcare professionals in recognizing patients who could benefit from palliative care sooner, leading to better symptom control, enhanced communication, higher satisfaction levels among patients and their families, and more effective utilization of resources.

Moreover, trigger tools or scales have demonstrated the potential to reduce healthcare expenditures and prevent hospital readmissions (Zaborowski et al., 2022). To fully optimize their impact, it is recommended that these tools be integrated into current clinical workflows and that healthcare professionals be trained on their usage (Zaborowski et al., 2022). Despite their potential, further research is necessary to establish standardized protocols and guidelines for their implementation in diverse healthcare settings.

Just a decade ago, there was a prevalent belief that palliative care and intensive care were incompatible in the care of terminally ill patients (Hua et al., 2022). However, it is now widely acknowledged that palliative care plays a vital role in a comprehensive treatment approach for ICU patients (Hua et al., 2022). Further research is required to improve the identification of patients who could benefit from palliative care. One potential solution is the implementation of a palliative care screening tool to prompt consultations in the ICU. Additional investigation is needed to assess the efficacy of this tool in identifying patients and increasing palliative care consultations. This study, focusing on using a PCST in the MICU, will contribute to the existing body of research on this topic.

Chapter III: Methods

Introduction

Chapter three outlines and discusses the research design, sample, methods, instructions, data collection, and analysis plan in detail. This study hypothesizes for that implementing the PCST will identify patients with unmet palliative care (PC) needs, thereby increasing the number of PC consults and benefiting patients.

Research Design

The research utilized a retrospective chart review (RCR) to explore the correlation between the predictor and the dependent variables. The independent variable was the score obtained on the CAPC PCST when applied to the information gathered from the chart, while the dependent variable involved identifying positive referrals for palliative care. A retrospective chart review involved collecting data from a patient's medical record or a database without any intervention or interaction with the research subjects. This type of clinical research study did not involve any direct involvement or communication with the subjects.

Sample

For this study, a convenience sampling technique was implemented due to the availability of existing predictor, confounding, clinical, and outcome variables that could be easily accessed and analyzed. The proposed setting was the 12-bed Medical Intensive Care Unit (MICU) within the 700-bed Morristown Medical Center in Morristown, New Jersey. The target unit cared for critically ill patients with diagnoses such as acute respiratory failure, sepsis, hepatic failure, kidney failure, and sequelae of cancers. All adult patients over the age of 18 who were admitted or transferred to the MICU during the study period (from May 1, 2023, through July 31, 2024) were included.

Determining the appropriate sample size was crucial for accurate statistical analysis. While various methods were available, this study employed a power analysis with a 95% confidence level and a significance level of $p<0.05$, using a standard deviation of 1.96 to determine the necessary sample size. The total population for this study was based on the number of patients admitted during the designated time frame of May 1, 2023, through July 31, 2024.

Exclusion Criteria

Patients under 18 and all medical overflow patients were excluded from the study.

Methods

The project aim was to assess the impact of incorporating the Palliative Care Screening Tool (PCST) to identify patients with unmet palliative care needs and increase Palliative Care consultations. The study retrospectively reviewed charts of patients admitted to the 12-bed teaching unit of the MICU over 15 months from May 1, 2023, through July 31, 2024, who met the selection criteria. Electronic charts (EPIC) were carefully examined for all patients who met the criteria, with attention given to data collected from admission notes, daily progress notes, physical assessments, lab values, and test results to identify the presence of PCST criteria. Additionally, the number of potential consults was compared to the actual number of consults for that sample. Furthermore, the mortality rate was calculated, focusing on patients who passed away during their MICU admission.

Instrumentation/Screening Tool

A standardized palliative care screening tool does not currently exist for the ICU setting. However, the Center to Advance Palliative Care (CAPC) created a Palliative Care Screening Tool (PCST), which considers factors such as the patient's underlying and associated diseases and functional and personal conditions to determine the need for palliative care (Clara et al., 2019). The PCST designed by CAPC and utilized in other studies is identified in Appendix A.

The Center to Advance Palliative Care cannot confirm the reliability of the PCST, but it states that CAPC members commonly use it to determine eligibility for palliative care (Appendix E). Morristown Medical Center is a participating member of the CAPC and has been granted permission to access all resources and tools offered by the organization. CAPC has been notified that the PCST would be utilized for this project (Appendix E).

Protection of Human Subjects

This proposal was submitted to the Institutional Review Board (IRB) at William Paterson University (WPU) and Morristown Medical Center (MMC) and received approvals (see Appendix C and Appendix D). Complete confidentiality and anonymity to protect the identity of the participants were employed with a numerical coding of the data collected. Approval had been obtained from the Director of Critical Care, the Medical Director of the Post-ICU Care Center, the Director of Nursing, and the Nursing Manager of the MICU prior to the implementation of the project.

Data Collection and Analysis

Patients who fit the inclusion criteria for this retrospective chart review were identified through EPIC reports at Morristown Medical Center, and their electronic medical records were accessed using their Medical Record Number (MRN). From these records, demographic and outcome data were extracted, including data correlating to advance care planning, code status on admission and discharge, admitting diagnosis, comorbidities, 30-day readmission, conduction of a palliative care consult, number of days from admission to consultation, length of stay, and discharge disposition. In addition, every patient's medical record underwent assessment utilizing the Palliative Care Screening Tool (PCST). Records that received a score of four or higher were officially noted as meeting the criteria for a palliative care consultation. This data was then organized in an electronic spreadsheet using Excel. The demographic variables studied in this research are listed in Appendix B. A data collection dictionary is also included (Appendix B). The data underwent statistical analysis using IBM SPSS software to assess the current utilization of palliative care services within this population and to evaluate the possibility of identifying patients with unmet palliative care needs through a screening protocol.

Evaluation

The evaluation examined the number of patients who obtained a positive score of five or higher on the PCST in contrast to the chart information indicating a palliative care consultation was requested between May 1, 2023, and July 31, 2024. Furthermore, demographics were examined to identify any similarities or differences with the PCST score and whether a PC consult had been conducted.

Summary

The project proposal conducted research through retrospective data collection utilizing the known Palliative Care Screening Tool. The study was carried out with ethical considerations and stakeholder buy-in.

Chapter IV: Results

The objective of this project was to evaluate the effectiveness of the Palliative Care Screening Tool (PCST) in identifying patients admitted to the Medical Intensive Care Unit (MICU) at Morristown Medical Center who have unmet palliative care needs, and to enhance the timeliness of Palliative Care Consultations (PCC). This involved comparing patients who received a PCC during their hospitalization with those who qualified for a PCC based on their PCST scores throughout the study period.

This chapter details the findings from a comprehensive retrospective chart review, during which data was extracted from the EPIC system for patients admitted or transferred to the MICU between May 31, 2023, and July 31, 2024. 170 patient charts were identified; however, eight were excluded due to duplicate records or incorrect identification of admission or transfer to the MICU. Each remaining chart was meticulously reviewed, and the PCST was utilized to assess scores and determine eligibility for a PCC during the patients' hospital stays.

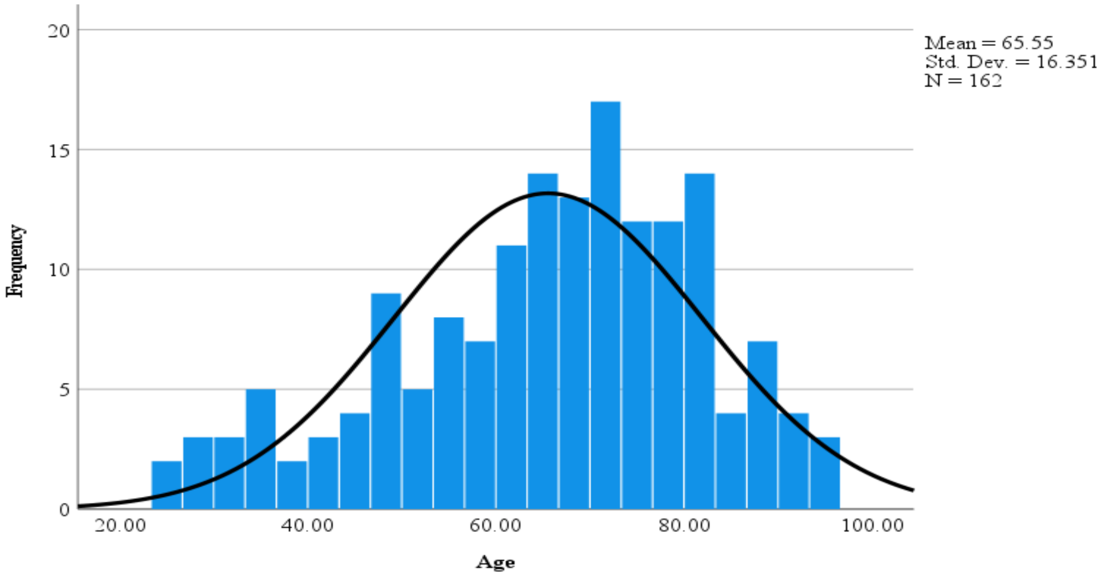
Descriptive Statistics

Demographics

Descriptive statistics are presented to address the project aim. The project included N = 162 patients. Demographics for age, gender, religion, race/ethnicity were collected. Descriptive statistics were conducted for demographics, including mean and standard deviation for age and frequencies and percentages for gender, religion, and race/ethnicity. The mean age was 65.55 years *(SD* = 16.35), and the range was 24 to 94. Figure 1 displays a histogram for age.

Figure 1

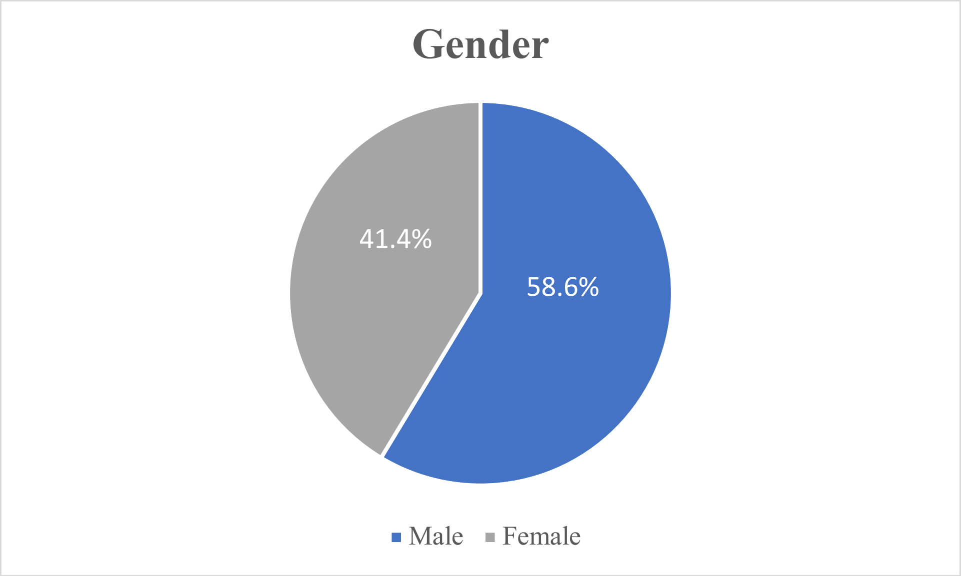
Histogram for Patient Age



Gender was majority male (n = 95, 58.6%), with 67 females (41.4%; see Figure 2).

Figure 2

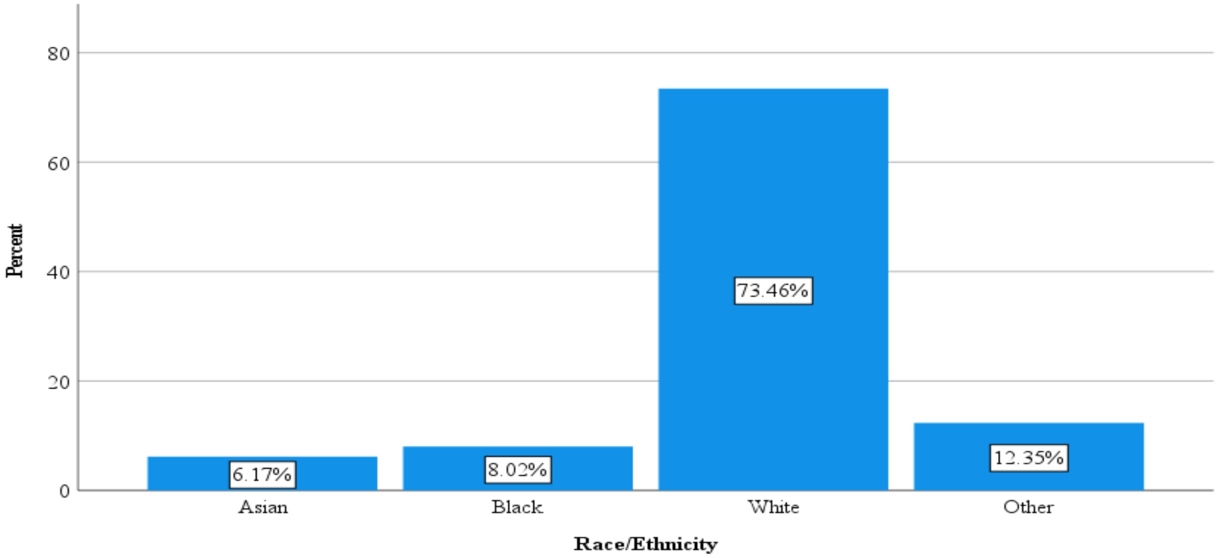
Descriptive Summary for Gender



Four different race/ethnicity categories were reported. The sample was mostly White (*n* = 119. 73.46%), with 10 Asians (6.17%), 13 Black patients (8.02%), and 20 listed as "Other" (12.35%). Figure 3 displays the descriptive data for race/ethnicity.

Figure 3

Descriptive Data for Race/Ethnicity



The most common religion reported was "none" (*n* = 59, 36.4%), and the second most reported was Catholic (*n* = 53, 32.7%; see Table 1).

Table 1

Descriptive Data for Religion

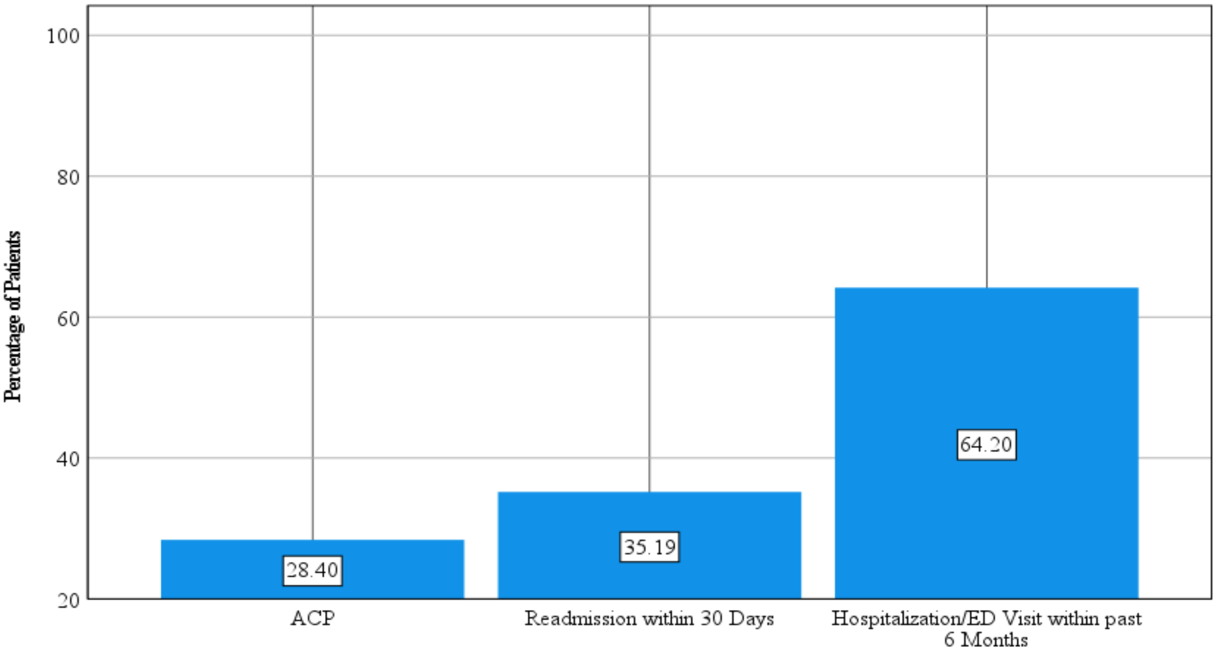
Religion	*n*	%
Catholic	53	32.7
Christian	7	4.3
Hindu	3	1.9
Jewish	8	4.9
Muslim	6	3.7
Protestant	25	15.4
Jehovah	1	0.6
None	59	36.4

Note. n = count; % = percentage

Clinical variables collected include advance care plan (yes/no), readmission within 30 days, hospitalization within six months, comorbidities, disposition to MICU, discharge disposition, day in MICU, and length of stay (LOS). Descriptive data for ACP, readmission, and hospitalization is displayed in Figure 4. There were 46 (28.40%) patients with an ACP, 57 (35.19%) were readmitted within 30 days, and 104 (64.2%) had a hospitalization or ED visit within the last 6 months.

Figure 4

Percentage of patients with an ACP, readmission within 30 days, and hospitalization or ED visit within the last 6 months



Several patients had at least one comorbidity (see Table 2). The most common was Cancer (*n* = 51, 15.6%) followed by cardiac (*n* = 46, 14.1%). Twenty-four patients (7.3%) did not have any comorbidities.

Table 2

Patient Admitting Diagnosis and Comorbidities

Variable	*n*	%
Admitting Diagnosis		
Cardiac	17	10.5
Pulmonary	33	20.4
CVA	11	6.8
GI Bleed	10	6.2
Sepsis/Shock	25	15.4
Other	66	40.7
Comorbidities		
Cancer	51	15.6
Cardiac	46	14.1
COPD	33	10.1
CVA	20	6.1
FTT	23	7.0
GI Bleed	7	2.1
Liver Disease	10	3.1
Neurological Disease	13	4.0
Renal Disease	33	10.1
Sepsis	25	7.6
Shock	18	5.5
Other	24	7.3
None	24	7.3

Note. n = count; % = percentage; patients could have more than one comorbidity thus the counts sum is greater than the number of patients.

Disposition to MICU (Table 3) was mostly the Emergency Department (*n* = 94, 58.0%). The discharge disposition analysis indicated 34 (21.0%) were discharged to home for self-care and 40% expired (*n* = 66), representing a 40% Mortality Rate for the population.

Table 3

Descriptive Data for Disposition to MICU and Discharge Disposition

Disposition to MICU	*n*	*%*
Emergency Department	94	58.0
Inpatient	61	37.7
Direct Admit	7	4.3
Discharge Disposition	n	%
Home Care	15	9.3
Against Medical Advice	2	1.2
Custodial Care	1	0.6
Expired	66	40.7
GIP/Expired	13	8.0
Home/Self Care	34	21.0
Psychiatric Hospital	4	2.5
Rehabilitation	8	4.9
Skilled Nursing Facility or Long-Term Care Facility	19	11.7

Note. n = count; % = percentage

Figure 5 displays a histogram for the days in MICU. The mean was 4.75 days (*SD* = 3.95) with a range from one to 23.

Figure 5

Descriptive Data for Days in MICU

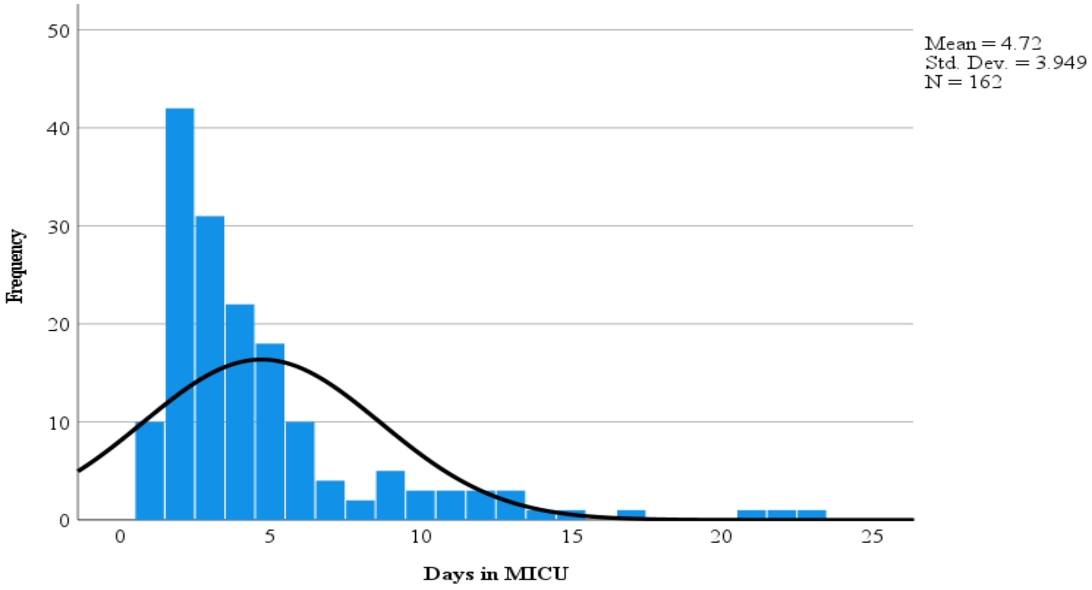
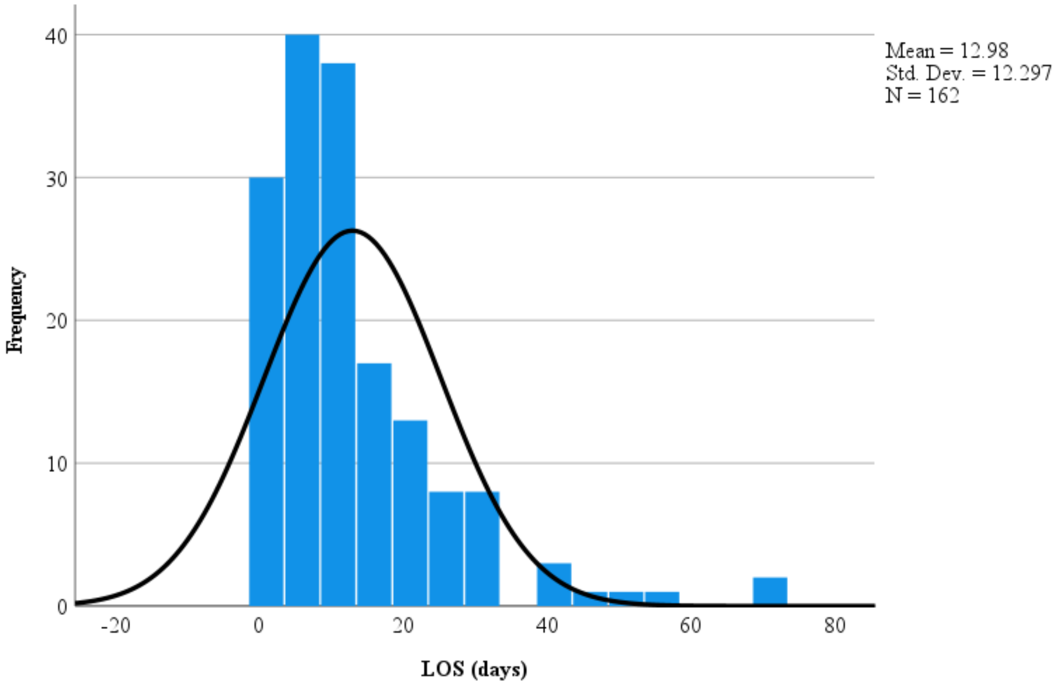


Figure 6 displays a histogram for the length of stay. The mean was 12.98 days (*SD* = 12.29) with a range from one to 71.

Figure 6

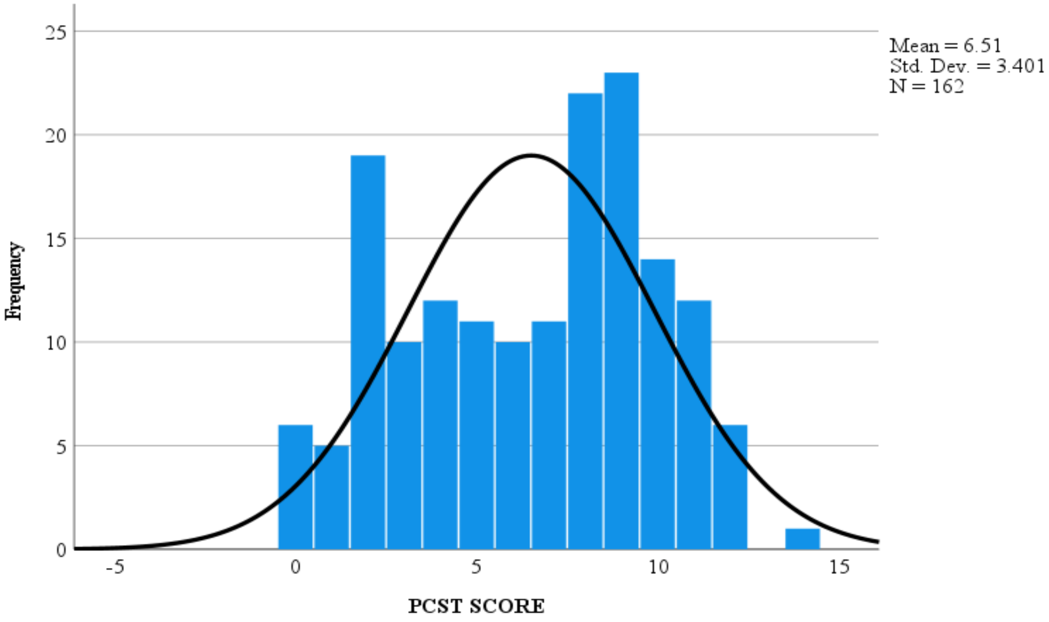
Descriptive Data for Length of Stay



The outcome variables included palliative care consult (PCC), days to palliative care consult, and PCST score. A PCST score of 5 or more indicates eligibility for a PCC. Of the 162 patients, the mean PCST score was 6.51 (SD = 3.40) with a range from 0 to 14 (see Figure 7).

Figure 7

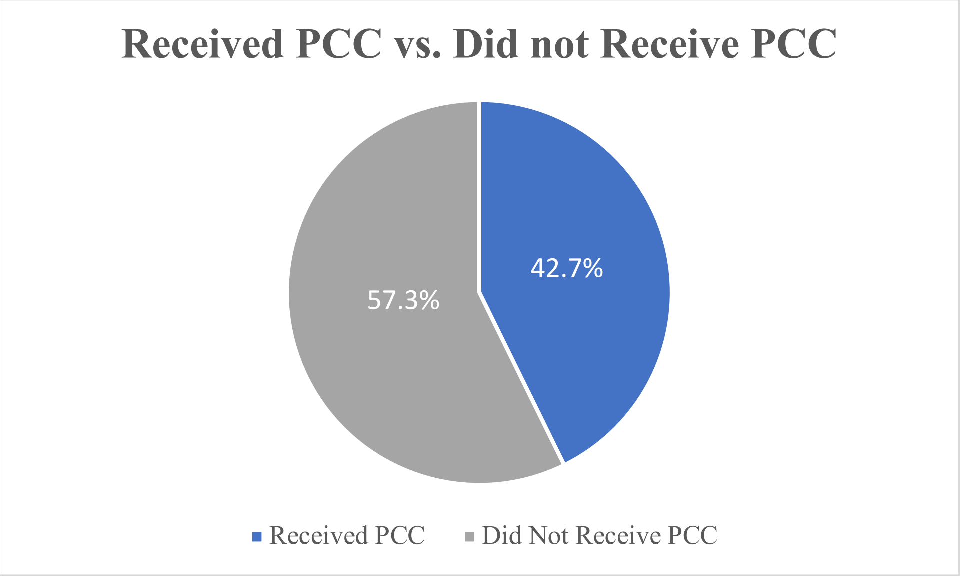
Descriptive Data for PCST Scores



110 patients (67.9%) had a score of 5 or more, indicating eligibility for a PCC. Of those eligible, only 47 (42.7%) received a PCC, and 63 (57.3%) did not (see Figure 8).

Figure 8

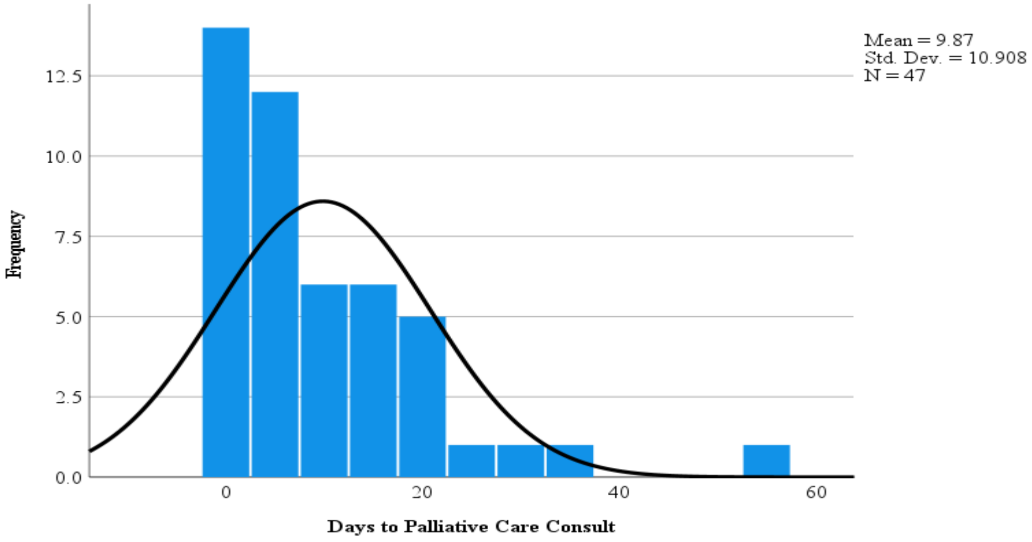
Descriptive Data for Eligible Patients who did not Receive a PCC



For those 47 patients, the average days to the PCC was 9.87 (*SD* = 10.91) (see Figure 9).

Figure 9

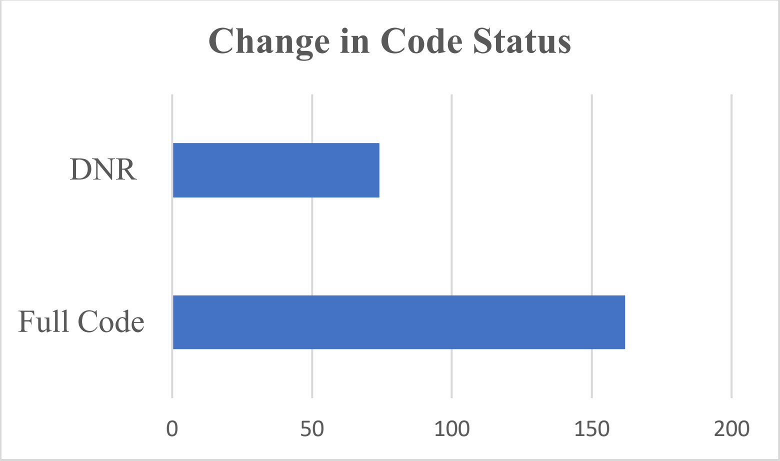
Descriptive Data for Days to PCC



There are 74 patients (45.6%) who were admitted to the hospital with Full Code status and changed to DNR status before their discharge (see Figure 10).

Figure 10

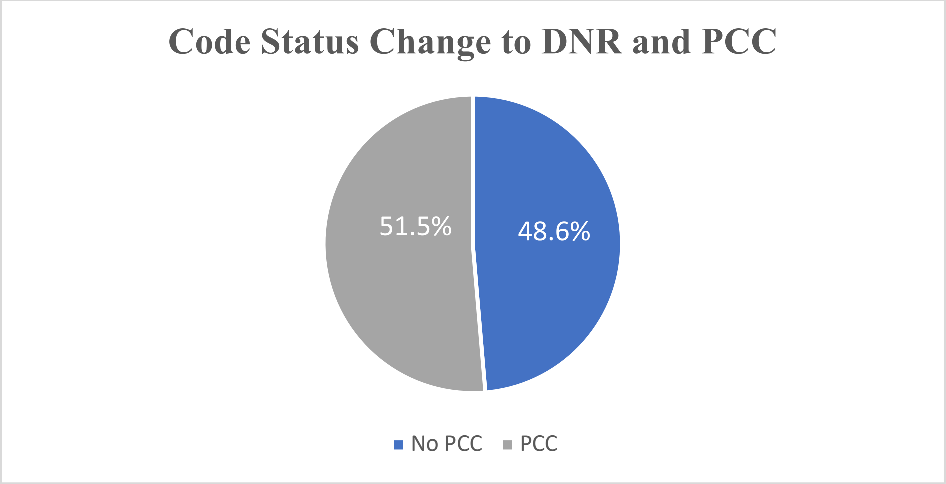
Descriptive Data for change in Code Status



A total of 36 patients (48.6%) who changed their code status during their hospitalization did not receive a Palliative Care Consult (PCC) (see Figure 11).

Figure 11

Descriptive Data for patients who changed their Code Status to DNR and whether they received a Palliative Care Consult (PCC)

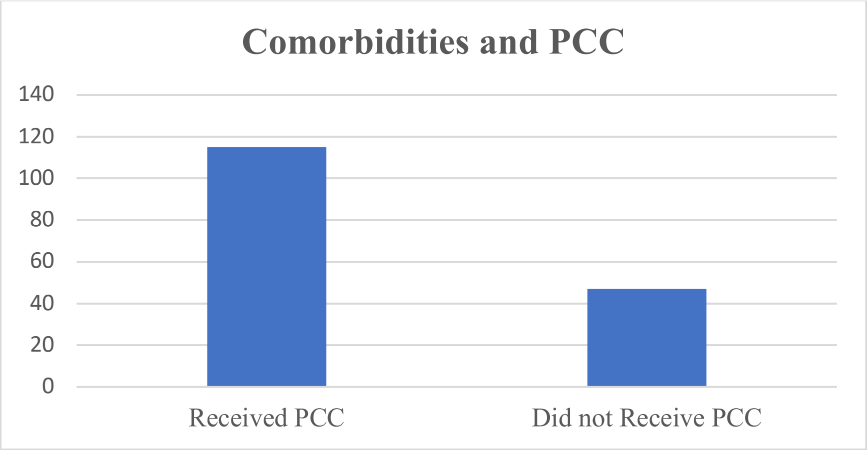


Bivariant Statistical Analysis

Bivariate statistics are provided to explore any statistically significant relationships between the collected demographic data and the likelihood of receiving a palliative care consult. Patients with multiple co-morbidities (n=115) were more likely to receive a palliative care consult compared to those without co-morbidities (n=47) (see Figure 12). An independent t-test showed those who had a PCC had mean total comorbidities .781 higher than those who did not have a PCCX (t=3.471; p<.001).

Figure 12

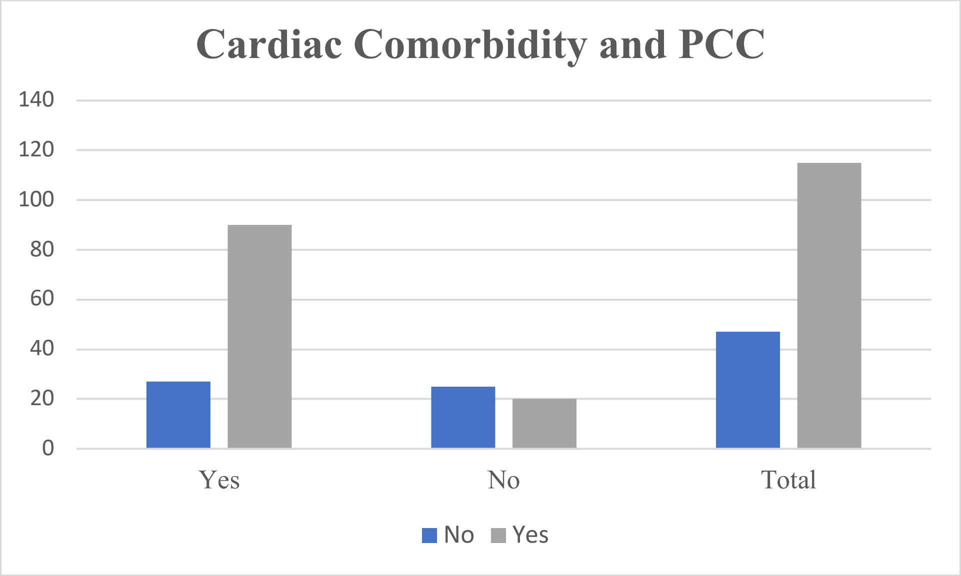
Multiple Comorbidities and Palliative Care Consult (PCC)



Among the various co-morbidities assessed, only cardiac conditions exhibited a statistically significant association with the likelihood of a patient receiving a palliative care consult A crosstabulation shows that 44% of those with cardiac comorbidities were noted as having a PC meeting vs 23% who did not (X^2 = 7.205, p=.007, see Figure 13).

Figure 13

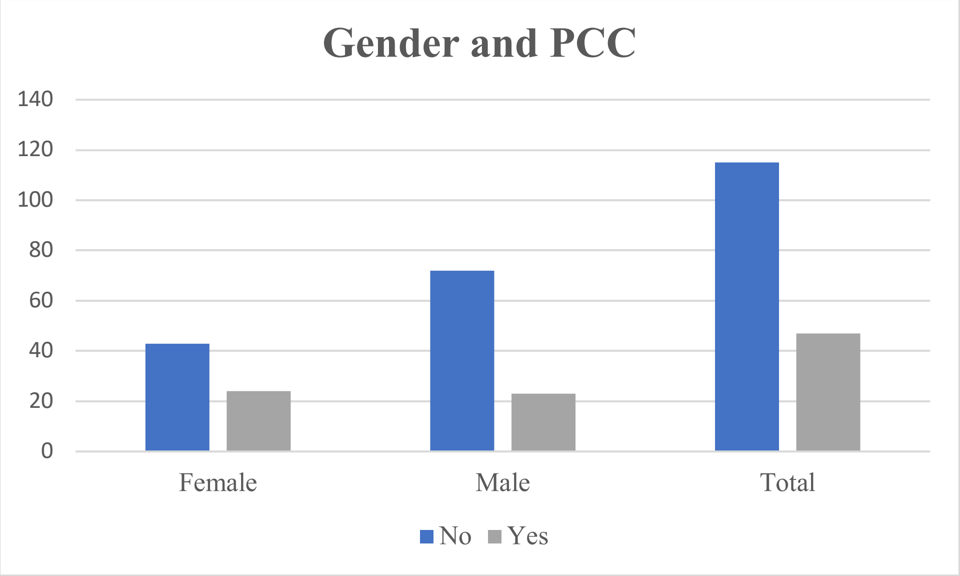
Cardiac Comorbidities and Palliative Care Consult (PCC)



While the differences observed were not statistically significant (X^2=.100), there was a notable trend indicating that a higher number of men received a Palliative Care Consult compared to women. A crosstabulation showed that 36% of eligible females received PCC while only 24% of eligible males had a PCC (see Figure 14).

Figure 14

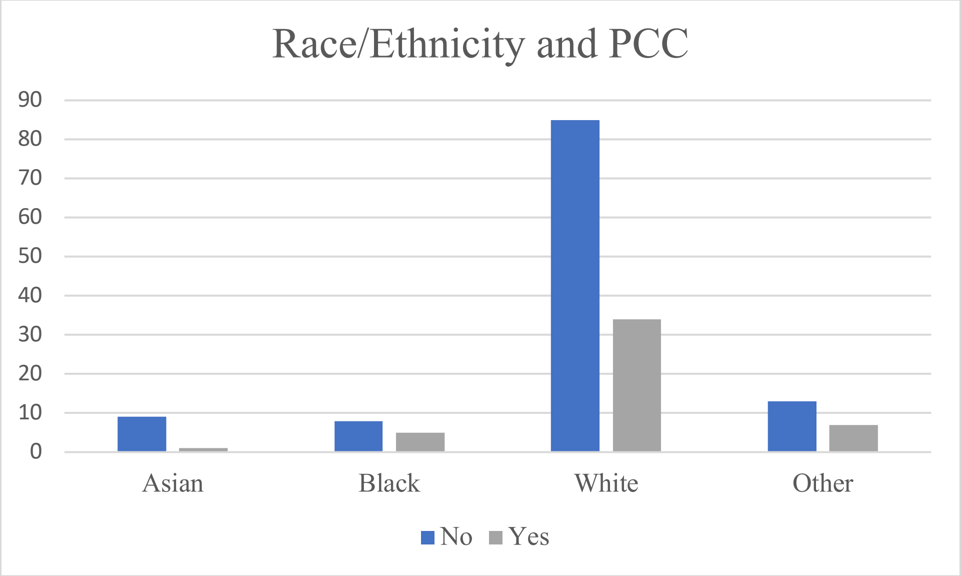
Gender and Palliative Care Consult



In addition, race/ethnicity was analyzed to determine if there was a correlation with receiving a PCC when eligible. A crosstabulation showed that Asians represented the lowest consultation rate (10%), while Black/Other demonstrated the highest (38.5% and 35% respectively) (X^2 = .444; see Figure 15).

Figure 15

Race and Palliative Care Consult



Summary

Table 4

Comparison of Demographic and Clinical Characteristics for Patients with a Consult and Patients that did not receive a Consult (N =110)

Variable	Eligible and received a PCC (*n* = 47)		Eligible but did not receive a PCC (*n* = 63)	
	M	*SD*	*M*	*SD*
Age	**72.22**	**14.18**	**69.34**	**14.25**
	n	%	*n*	%
Gender				
Female	24	51.1	25	39.7
Male	**23**	**48.9**	**38**	**60.3**
Race/Ethnicity				
Asian	1	2.1	6	9.5
Black	5	10.6	4	6.3
White	34	72.3	50	79.4
Other	7	14.9	3	4.8
Religion				
Catholic	20	42.6	22	34.9
None	11	23.4	23	36.5
ACP	16	34.0	24	38.1
Readmission within 30 Days	20	42.6	26	41.3
Hospitalization/ED within past 6 months	33	70.2	45	71.4
Comorbidity				
Cancer	20	42.6	25	39.7
Cardiac	21	44.7	19	30.2
Disposition to MICU				
Emergency Department	23	48.9	34	54.0
Inpatient	24	51.1	26	41.3
Direct Admit	0	0.0	3	4.8

Note. n =count; % = percentage; *M* = mean; *SD* = standard deviation; Bolded items indicate areas of distinction between the groups

The Palliative Care Screening Tool (PCST) was utilized to assess each patient's eligibility for a palliative care consultation. The results revealed that a significant proportion of patients who received a positive score on the PCST did not obtain a palliative care consultation before their discharge or passing. Additionally, it was found that a notable number of patients who entered the hospital with a full code status had their code status changed to Do Not Resuscitate (DNR) prior to discharge or expiration. Many of these patients did not receive a palliative care consult after altering their code status.

A positive score on the Palliative Care Screening Tool (PCST) signifies that the patient has unmet palliative care needs and would greatly benefit from the specialized expertise of the palliative care team. Implementing the PCST consistently throughout the Medical Intensive Care Unit (MICU) is likely to increase the number of palliative care consultations, ultimately resulting in enhanced patient outcomes. Therefore, the findings of this study support the initial hypothesis.

Chapter V: Conclusions

Discussion

This study investigated the effectiveness of employing a Palliative Care Screening Tool (PCST) to identify patients eligible for a Palliative Care Consult during their admission or transfer to the Medical Intensive Care Unit (MICU). The primary objective was to contribute to the existing literature on this subject and enhance the quality of care provided to this distinct patient population.

This chapter presents a comprehensive discussion of the findings within both theoretical and methodological frameworks. It also explores the implications for the Doctor of Nursing Practice Essentials, addresses nursing implications, acknowledges the study's limitations, offers recommendations for future research, and concludes with key insights drawn from the study.

According to the Society of Critical Care Medicine (2023), over 5,000 patients receive care in intensive care units (ICUs) across the United States each year. There has been a significant shift from the traditional binary model of prioritizing critical care over palliative care, leading to a more integrated approach to ICU-based palliative care (Wiencek, 2024). Early identification of patients who would benefit from palliative care discussions plays a crucial role in enhancing the understanding of palliative care services and clarifying the differences between hospice and palliative care for both patients and their families (Phillips et al., 2024). Implementing a palliative care screening tool can optimize the advantages of palliative care services by facilitating early patient identification, improving the efficiency of consultations, reducing the utilization of critical care resources, and lowering readmission rates (Phillips et al., 2024).

Palliative Care Screening Tool and Consults

There were 63 patients who were eligible for a PCC but did not receive one. Demographics and clinical characteristics of these missed opportunity patients were examined. The mean age was 69.34 (SD = 14.25), with a range from 30 to 94. This is younger than the 47 patients who did receive a PCC, who had a mean age of 72.22 (SD = 14.18).

Most of these missed opportunity patients were males (n = 38, 60.3%), which is higher than those who received a PCC, as males made up only 48.9% of those who received a PCC. The race/ethnicity of whites for those not receiving a PCC (n = 50, 79.4%) is similar to those who did receive a PCC (n = 34, 72.3%). Additionally, it is important to highlight that Asian patients who qualified for a palliative care consult did not receive one at all, whereas Black patients who met the eligibility criteria did receive a consult. These findings suggest potential disparities in access to palliative care services that warrant further investigation to ensure equitable care for all patient demographics.

The most common religion of those that did not receive a PCC was no religion (n = 23, 36.5%), Catholic (n = 22, 34.9%), again reflecting similarity to those that did receive a PCC, which had 42.6% as Catholic and 23.4% reporting no religion.

Of the 47 that received a PCC, 16 (34.0%) came into the hospital with a documented ACP, like the 24 of 63 (38.1%) who did not receive a PCC but had an ACP. Thirty-day readmission rates and hospitalizations within the past 6 months were similar for those with and without a PCC. The top two comorbidities for both groups were cancer and cardiac. Admitting diagnosis was also similar among the patients with and without a PCC, with no statistically significant differences between groups for any of the diagnoses.

Overall, the demographic and clinical variables comparison between those who did receive a PCC and those who did not receive a PCC but were eligible shows that gender might be an influential factor, as those who did not receive a PCC were mostly males. While the differences observed were not statistically significant (X^2=.109), there was a notable trend indicating that a higher number of men were eligible for a Palliative Care Consult compared to women. However, those who did receive a PCC were primarily female. These findings suggest potential disparities in access to palliative care services that warrant further investigation to ensure equitable care for all patient demographics.

Additionally, those who were, on average, younger did not receive a PCC even when eligible, given that the mean age was about three years younger for those who did not receive a PCC compared to those who did receive a consult. All other demographic and clinical variables were similar in distribution for eligible patients with and without a PCC.

Another significant finding revealed that 74 patients (45.7%) initially admitted to the hospital with a full code status had their designation changed to Do Not Resuscitate (DNR) before their discharge or passing. Alarmingly, 36 of these patients (48.6%) did not receive a palliative care consultation despite the alteration in their code status to DNR. This highlights a critical gap in providing palliative care services for patients undergoing significant changes in their clinical status.

Additionally, 66 patients (40.7%) died during hospitalization, and only 26 of the 63 eligible patients received a consult. This underscores the importance of initiating a PCST at admission or transfer to address palliative care needs.

The data further revealed that patients with comorbidities were more likely to receive a palliative care consultation, consistent with existing research indicating that many individuals requiring palliative care have multiple chronic conditions. A study by Alnajar et al. (2025)

emphasizes the widespread need for comprehensive palliative care for patients with both cancerous and non-cancerous chronic diseases, highlighting the necessity for improved palliative care services, particularly for those with multiple comorbidities. Among the comorbidities examined, only cardiac conditions demonstrated a statistically significant correlation with receiving a palliative care consultation, with 44% of patients with cardiac comorbidities receiving a consult compared to 23% of those without. This finding underscores the importance of considering specific health conditions when assessing the need for palliative care interventions. It might also suggest that attending medical personnel with cardiac specialties might be more aware of palliative care benefits. A broader discussion with other specialties might increase awareness.

Relationship of the Research Study to the DNP Essentials

Doctor of Nursing Practice (DNP) experts ensure high-quality care and patient well-being. Through developing and evaluating new approaches in care delivery, DNPs can effectively cater to the requirements of patient populations, which is indispensable for healthcare organizations. This study assesses the effectiveness of implementing a nurse-driven Palliative Care Screening Tool (PCST) by identifying MICU patients with unmet palliative care needs and increasing palliative care consultations. It also seeks to evaluate the current utilization of palliative care services within this population and explore potential strategies for improving access to such services using a PCST.

Essential I: Scientific Underpinning for Practice

The scientific underpinning for practice emphasizes the importance of utilizing innovative approaches to enhance healthcare delivery. This research and quality improvement project focused on the implementation of screening tools designed to swiftly identify patients who qualify for a palliative care consult. By facilitating early identification of unmet palliative care needs, the project aimed to streamline the transition to home or inpatient hospice care and promote comprehensive discussions regarding goals of care. The findings suggest that these proactive measures significantly improve patient outcomes and contribute to a more positive end-of-life experience, ultimately highlighting the critical role of timely palliative interventions in enhancing the quality of care for patients facing serious illnesses.

Essential II: Organizational and System Leadership for Quality Improvement and Systems Thinking

To effectively implement this project, it is necessary to thoroughly assess and comprehend the scientific basis of the screening tool and effectively communicate its significance to all relevant stakeholders. Additionally, a thorough analysis of the financial implications of adopting the tool and navigating relevant policies and regulations is crucial. The tool's impact on patient outcomes and healthcare delivery should also be evaluated. Ultimately, the successful implementation of this initiative has the potential to identify MICU patients with unmet palliative care needs, increase palliative care consultations, and bring about numerous benefits, including improved patient and caregiver satisfaction, better patient assessment and symptom management, shorter ICU and hospital stays, reduced duration of ventilation, and decreased anxiety and depression among family members.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

Clinical scholarship and analytical methods are essential for evaluating the effectiveness and feasibility of implementing the screening tool. This involves critically analyzing the existing research on the tool, assessing its applicability to the specific MICU setting, and determining its impact on patient outcomes. The results obtained from this study can be shared through educational seminars to increase awareness among healthcare practitioners about the advantages of utilizing a PCST. Utilizing clinical scholarship and analytical techniques can solidify evidence-based practice and facilitate advancements in palliative care, both in the MICU and beyond.

DNPs can assess the alignment of current policies to improve palliative care in the MICU and identify any barriers or opportunities for policy change. DNPs can advocate for adopting and integrating a PCST into clinical practice by analyzing and influencing health policies. This may involve engaging with policymakers, healthcare administrators, and other stakeholders to highlight the importance of palliative care and the potential benefits of using the screening tool.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

DNPs collaborate with physicians, nurses, social workers, and other healthcare professionals to evaluate the screening tool and to gather diverse perspectives and expertise. This collaboration can help assess the feasibility, acceptability, and effectiveness of implementing the tool in the MICU. By fostering effective communication and collaboration, DNPs can ensure all stakeholders (nurses, Intensivists, and PC team members) are engaged in the evaluation process. This cooperative method thoroughly comprehends the possible advantages and obstacles associated with implementing the PCST.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

Nurses are crucial in health promotion, illness prevention, and risk reduction. By evaluating the use of the screening tool, nurses can contribute to improving the health outcomes of patient populations in the MICU and other units throughout the hospital. By implementing the screening tool, nurses can identify high-risk patients for unmet palliative care needs and quality of life issues. This proactive approach enables timely intervention and facilitates consultations for suitable palliative care, resulting in better patient outcomes and a heightened quality of life.

In addition, nurses can work with other healthcare professionals to devise and execute plans that target the specific needs of this patient population. This may involve developing care plans, providing education and support to patients and their families, and advocating for integrating palliative care services in the MICU. By leveraging their expertise in clinical prevention and population health, nurses can improve the nation's health outcomes by ensuring that patients in the MICU receive timely and appropriate palliative care interventions as identified by the PCST.

Implications for Practice

The study offers valuable insights into the effectiveness of using a Palliative Care Screening Tool (PCST) to identify patients who may benefit from a Palliative Care Consult. Access to such screening tools is vital for nurses, as it provides them with essential resources to improve patient care and delivers critical data to guide their clinical decision-making. By utilizing these tools, nurses can more effectively assess patient needs and ensure that appropriate palliative care interventions are implemented in a timely manner.

Moreover, nurses working in intensive care units often face significant emotional and psychological challenges when caring for critically ill patients nearing the end of their lives. These challenges frequently arise from difficult decisions regarding life-sustaining treatments, managing family expectations, and the emotional burden of witnessing suffering and death, which can lead to feelings of moral distress and potential burnout. The use of a PCST can help nurses easily identify these patients and facilitate collaboration with physicians to initiate a palliative care consult.

The researcher found that more than half of the patients admitted to or transferred to the Medical Intensive Care Unit (MICU) met the criteria for a palliative care consult. However, it was noted that many of these eligible patients did not receive a consult. Additionally, the study revealed instances where patients' code status changed from full code upon admission to Do Not Resuscitate (DNR) during their hospital stay, yet a palliative care consult was not initiated.

Involving a palliative care specialist is essential, as they bring specialized knowledge and expertise in navigating complex medical decisions, effective communication, and symptom management for critically ill patients. This unique skill set enables them to create more targeted and effective treatment plans that may not be fully addressed by a general practitioner. Ultimately, this collaboration can enhance patient outcomes and facilitate more informed decision-making for both patients and their families.

Limitations

The study faced several limitations that should be acknowledged. Firstly, all participants were drawn from a single unit—the Medical Intensive Care Unit at Morristown Medical Center—limiting the generalizability of the findings to other units within the hospital and patients in different healthcare systems. Additionally, the research was conducted as a retrospective chart review, which would have benefited from direct access to patients and their families to gather more comprehensive data and insights. Changing the workflow to include completing the screening tool during the transfer or admission process could remedy this issue.

Furthermore, the Palliative Care Screening Tool (PCST) is relatively lengthy, which may challenge nurses to complete it during patient admissions or transfers. To enhance its usability, it is recommended that the tool be reviewed and modified to make it more user-friendly. Such adjustments could improve the tool's practicality and, consequently, its validity in clinical settings.

Future Research

Building on the findings of this study, further research across the hospital, including non-ICU units, would enhance our understanding of how to effectively implement the screening tool for all patients during the admission or transfer process to ensure unmet palliative care needs are realized. Establishing a pilot program in the MICU to assess the tool's effectiveness, along with educational initiatives and resources designed to equip ICU nurses with primary palliative care skills, would be essential in integrating a Palliative Care Screening Tool (PCST) into their workflow.

Furthermore, integrating a nurse-driven tool into the EPIC Electronic Medical Record or employing Artificial Intelligence (AI) to identify patients with unmet palliative care needs represents a promising avenue for investigation. Wilson et al. (2023) found that a clinical decision support tool utilizing an AI algorithm was linked to an increased rate of specialty palliative care consultations and reduced 60- and 90-day rehospitalizations. Additionally, future research should aim to elucidate the factors influencing providers' decisions to either initiate or defer specialty palliative care consultations, especially when there are changes in patients' code status during hospitalization. Understanding these dynamics is essential for enhancing palliative care access and ensuring patients receive appropriate support throughout their treatment journey.

Summary

The study examined the effectiveness of a Palliative Care Screening Tool (PCST) in identifying patients eligible for Palliative Care consultations (PCC) during their admission or transfer to the Medical Intensive Care Unit (MICU). The aim was to enhance the quality of care for this patient population and contribute to existing literature. The discussion highlights findings within theoretical and methodological frameworks, implications for Doctor of Nursing Practice (DNP) Essentials, nursing implications, study limitations, and recommendations for future research.

Key findings indicate that many patients eligible for PCC did not receive one, with 63 eligible patients missing out on consultations. The demographic analysis revealed that these patients were predominantly male and younger on average compared to those who received a PCC. Notably, many patients had their code status changed to Do Not Resuscitate (DNR) without receiving a PCC, indicating a critical gap in palliative care services.

The study emphasizes the importance of integrating palliative care into ICU settings, advocating for using the PCST to facilitate early identification of patients needing palliative care. This tool can help nurses improve patient care, guide clinical decision-making, and address ICU nurses' emotional challenges.

The study's limitations include its focus on a single unit, which may affect the generalizability of the findings, and its retrospective nature, which could benefit from direct patient and family engagement. The PCST's length may also hinder its practical application, suggesting a need for modifications to enhance usability.

Future research should explore the implementation of the PCST across various hospital units, assess educational initiatives for ICU nurses, explore the integration of the tool into EPIC, and investigate factors influencing the decision-making process regarding palliative care consultations, particularly in light of changes in patient code status. This research is essential for improving access to palliative care and ensuring patients receive appropriate support throughout their treatment.

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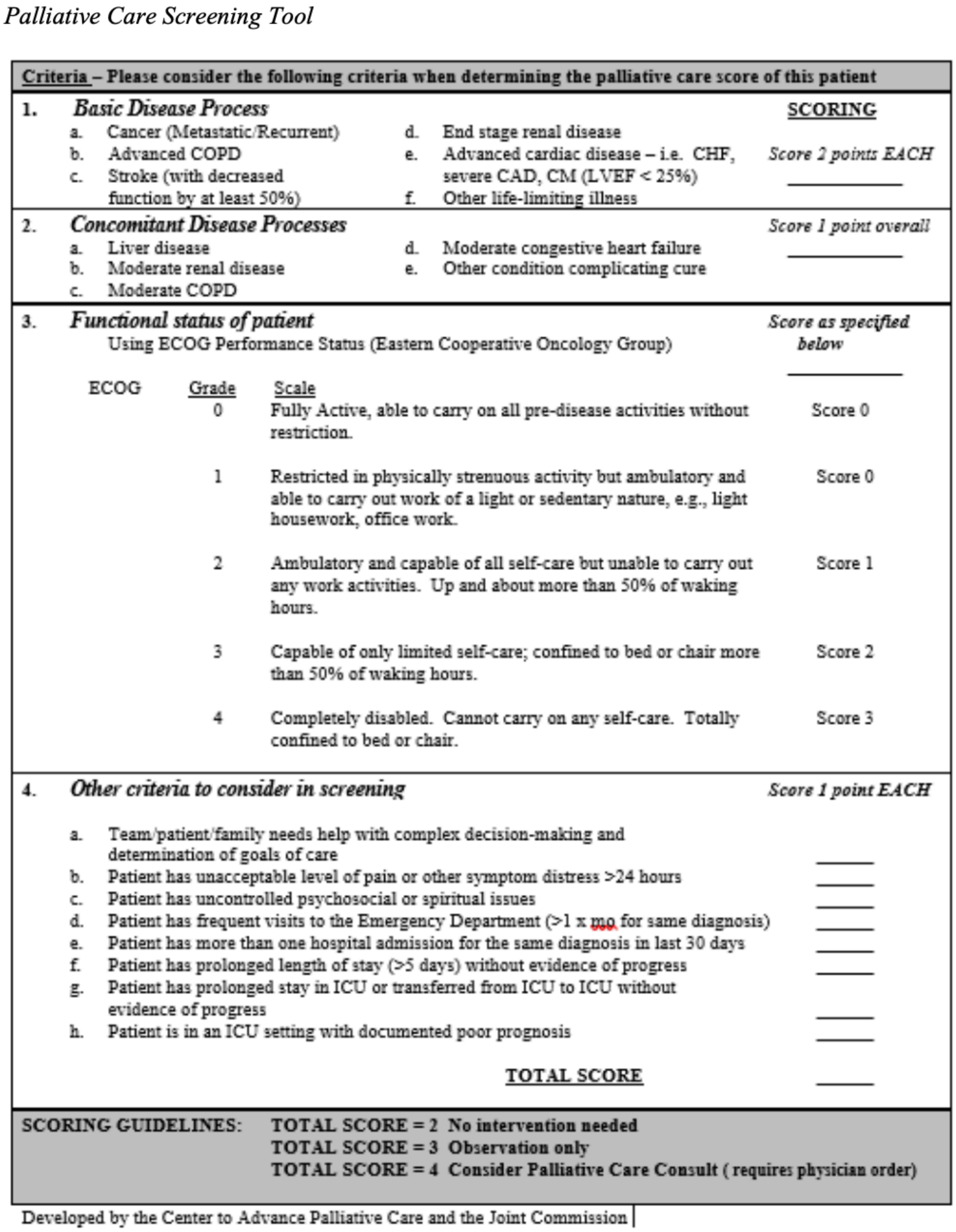
APPENDICES

APPENDIX A: Center to Advance Palliative Care (CAPC) Palliative Care Screening Tool (PCST)



Palliative Care Screening Tool

Criteria – Please consider the following criteria when determining the palliative care score of this patient

1. *Basic Disease Process* — **SCORING**: *Score 2 points EACH* ____________

- a. Cancer (Metastatic/Recurrent)
- b. Advanced COPD
- c. Stroke (with decreased function by at least 50%)
- d. End stage renal disease
- e. Advanced cardiac disease – i.e. CHF, severe CAD, CM (LVEF < 25%)
- f. Other life-limiting illness

2. *Concomitant Disease Processes* — *Score 1 point overall* ____________

- a. Liver disease
- b. Moderate renal disease
- c. Moderate COPD
- d. Moderate congestive heart failure
- e. Other condition complicating cure

3. *Functional status of patient* — *Score as specified below* ____________

Using ECOG Performance Status (Eastern Cooperative Oncology Group)

ECOG Grade	Scale	
0	Fully Active, able to carry on all pre-disease activities without restriction.	Score 0
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light housework, office work.	Score 0
2	Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours.	Score 1
3	Capable of only limited self-care; confined to bed or chair more than 50% of waking hours.	Score 2
4	Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair.	Score 3

4. *Other criteria to consider in screening* — *Score 1 point EACH*

- a. Team/patient/family needs help with complex decision-making and determination of goals of care ______
- b. Patient has unacceptable level of pain or other symptom distress >24 hours ______
- c. Patient has uncontrolled psychosocial or spiritual issues ______
- d. Patient has frequent visits to the Emergency Department (>1 x mo for same diagnosis) ______
- e. Patient has more than one hospital admission for the same diagnosis in last 30 days ______
- f. Patient has prolonged length of stay (>5 days) without evidence of progress ______
- g. Patient has prolonged stay in ICU or transferred from ICU to ICU without evidence of progress ______
- h. Patient is in an ICU setting with documented poor prognosis ______

TOTAL SCORE ______

SCORING GUIDELINES:
TOTAL SCORE = 2 No intervention needed
TOTAL SCORE = 3 Observation only
TOTAL SCORE = 4 Consider Palliative Care Consult (requires physician order)

Developed by the Center to Advance Palliative Care and the Joint Commission

Source: Center to Advance Palliative Care (CAPC), Palliative Care Tool Kit, 2020

APPENDIX B: Demographics of Sampled Population/Data Collection Dictionary

	TITLE	EXPLANATION OF COLUMN	CODE FOR ANSWERS
A	STUDY PARTICIPANT #	STUDY PARTICIPANT NUMBER	ACTUAL NUMBER
B	MRN #	MRN NUMBER	ACTUAL NUMBER
C	ADMIT DATE	DATE OF ADMISSION	DATE
D	DISCHARGE DATE	DATE OF DISCHARGE (TO ANOTHER LOCATION OR EXPIRATION)	DATE
E	EXPIRATION DATE	WHEN PATIENT EXPIRED IF APPLICABLE	DATE
F	DOB	DATE OF BIRTH	DATE
G	GENDER	GENDER	1 = FEMALE, 2 = MALE
H	RACE/ETHNCITY	RACE/ETHNICITY	1 = ASIAN, 2 = BLACK, 3 = WHITE, 4 = OTHER
I	RELIGION	RELIGION	1 = CATHOLIC, 2 = CHRISTIAN, 3 = HINDU, 4 = JEWISH, 5 = MUSLIM, 6 = PROTESTANT, 7 = JEHOVAH, 8 = NONE
J	CODE STATUS ON ADMISSION	CODE STATUS ON ADMISSION	1 = DNR-A, 2 = DNR-B, 3 = FULL CODE, 4 = POLST
K	CODE STATUS ON DISCHARGE	CODE STATUS ON DISCHARGE	1 = DNR-A, 2 = DNR-B, 3 = FULL CODE, 4 = POLST
L	ACP	ADVANCE DIRECTIVE ON ADMISSION	0 = NO, 1 = YES
M	ADM DX	ADMITTING DIAGNOSIS	1 =CARDIAC, 2 = PULMONARY, 3 = CVA, 4 = GI BLEED, 5 = SEPSIS/SHOCK, 6 = OTHER
O	COMORBID = CANCER	CANCER	0 = NO, 1 = YES
P	COMORBID = CARDIAC	MI, HF, CARDIOMYOPATHY, CAD	0 = NO, 1 = YES
Q	COMORBID = PULMONARY	COPD, RESPIRATORY FAILURE, EMPHYSEMA	0 = NO, 1 = YES
R	COMORBID = CVA	CVA, STROKE, TIA	0 = NO, 1 = YES
S	COMORBID = FTT	FAILURE TO THRIVE	0 = NO, 1 = YES
T	COMORBID = GI BLEED	GI BLEED, HEMORRHAGE	0 = NO, 1 = YES
U	COMORBID = LIVER		0 = NO, 1 = YES
V	COMORBID = NEURO	MS, PARKINSON'S, SCI, SEIZURES	0 = NO, 1 = YES
W	COMORBID = RENAL	RENAL FAILURE, HEMODIALYSIS PATIENT	0 = NO, 1 = YES
X	COMORBID = SEPSIS	SEPSIS	0 = NO, 1 = YES
Y	COMORBID = SHOCK	SHOCK	0 = NO, 1 = YES
Z	COMORBID = OTHER	ETOH, WOUNDS, DM, DEPRESSION	0 = NO, 1 = YES
AA	COMORBID = NONE	NONE	0 = NO, 1 = YES
AB	DISPO TO MICU	DISPOSITION TO MICU (ED, INPATIENT TRANSFER, DIRECT ADMIT)	1 = ED, 2 = IP, 3 = DA

AC	DAYS IN MICU	TOTAL NUMBER OF DAYS SPENT IN THE MICU	ACTUAL NUMBER
AD	LOS	LENGTH OF HOSPITAL STAY	ACTUAL NUMBER
AE	READMIT (<30 DAYS)	READMISSION WITHIN 30 DAYS? (YES, NO)	0 = NO, 1 = YES
AF	HOSP IN 6 MOS	DID PATIENT HAVE A HOSPITALIZATION/ED VISIT WITHIN LAST 6 MONTHS	0 = NO, 1 = YES
AG	PCC	DID PALLIATIVE CARE MEET WITH PATIENT/FAMILY AND WRITE NOTE	0 = NO, 1 = YES
AH	DAYS TO PCC	NUMBER OF DAYS FROM ADMISSION TO PC CONSULT?	ACTUAL NUMBER
AI	PC CONSULT OUTCOME	RESULT OF PC CONSULT/MEETING	1= EXPIRED, HOSP EVAL MADE, 2 = EXPIRED PRIOR TO PC CONSULT, FAMILY DECLINED SERVICES, 4 = GIP, 5 = IMMINENT CRITERIA, 6 = F/U NEEDED, 7 = OTHER, 8 = N/A (NO PCC)
AJ	D/C DISP	DISCHARGE DISPOSITION (EXPIRED, GIP, HOME, HOME HOSPICE)	1 = AHC (HOME CARE), 2 = AMA (AGAINST MEDICAL ADVICE), 3 = CUSTODIAL CARE, 4 = EXPIRED, 5 = GIP/EXPIRED, 6 = HOME/SELF CARE, 7 = PSY HOSP, 8 = REHAB, 9 = SKILLED NURSING OR LONG-TERM CARE FACILITY)
AK	PCST SCORE	PCST SCORE	ACTUAL NUMBER
AL	PCST OUTCOME	RECOMMENDATION BASED ON SCORE	1= 0-2:NO INDICATION, 2 = 3:OBSERVE, 3 = 4+:CONSIDER PCC

All data gathered from EPIC chart except PCST Score

Palliative Care Screening Tool (PCST) score
- 0-2 = no indication of palliative care needs
- 3 = keep under clinical observation
- 4+ = indication of palliative care needs

APPENDIX C: William Paterson University IRB Approval

THE WILLIAM PATERSON UNIVERSITY OF NEW JERSEY
INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECT RESEARCH

c/o Office of Sponsored Programs
1800 Valley Road, Room 222
973-720-2852 (Phone)
973-720-3573 (Fax)
http://www.wpunj.edu/osp/

Chair: Professor Michelle Gonzalez (GonzalezM77@wpunj.edu)
College of Education
Contact: Kate Boschert (irbadministrator@wpunj.edu)
Office of Sponsored Programs

To: Jacqueline Tierney
Doctoral Candidate of Nursing

From: Michelle Gonzalez

Subject: IRB Determination: Exempt Review

Study: Protocol # 2024-351: EVALUATION OF A PALLIATIVE CARE SCREENING TOOL (PCST) TO IDENTIFY AND INCREASE PALLIATIVE CARE CONSULTS IN THE MEDICAL INTENSIVE CARE UNIT (MICU).

Date: June 12, 2024

The IRB has reviewed the above study involving humans as research subjects. **This study was determined to be Exempt from further review under Category: Exempt 45 CFR 46.104(d)(4)(iii);** special class of subjects: None. However, you must still submit protocol modifications to the IRB.

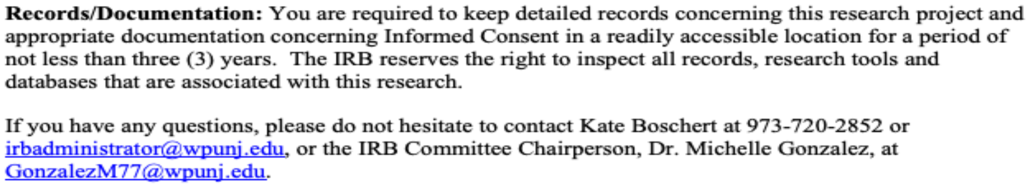
IRB Number: This number is WPU's IRB identification that should be used on all consent forms and correspondence.

Review Date: 06/12/2024

Revisions/Modifications: You are required to carry out this research as described in the protocol. All amendments/modifications of protocols involving human subjects, must have prior IRB approval, except those involving the prevention of immediate harm to a subject. Revisions/Modifications are to be submitted through InfoReady at https://wpunj.infoready4.com/.

Adverse Effects/Unanticipated Problems: The principal investigator must report immediately any serious problem, adverse effect, or outcomes that are encountered while using human subjects or any complaints from your subjects. In addition, the principal investigator must report any event or series of events that prompt the temporary or permanent suspension of a research project involving human subjects or any deviations from the approved protocol using the Adverse Effects Form. Adverse Effects, Unanticipated Problems, and Modifications for the prevention of immediate harm to subjects must be reported within 24 hours to the IRB using the Adverse Effects Form: https://www.wpunj.edu/osp/irb/irb-forms.html.

Consent Form: All research subjects must use the approved Informed Consent Form. You are responsible for maintaining signed consent forms (if approved for Active Consent format) for each research subject for a period of at least three years after study completion.



Records/Documentation: You are required to keep detailed records concerning this research project and appropriate documentation concerning Informed Consent in a readily accessible location for a period of not less than three (3) years. The IRB reserves the right to inspect all records, research tools and databases that are associated with this research.

If you have any questions, please do not hesitate to contact Kate Boschert at 973-720-2852 or irbadministrator@wpunj.edu, or the IRB Committee Chairperson, Dr. Michelle Gonzalez, at GonzalezM77@wpunj.edu.

APPENDIX D: Atlantic Health Systems IRB Approval

From: Anita Richards <no-reply@irbnet.org>
Sent: Tuesday, July 23, 2024 10:50
To: Jameson, Beth <beth.jameson@atlantichealth.org>; Tierney, Jacqueline <jacqueline.tierney@atlantichealth.org>; Cooper, Lise <lise.cooper@atlantichealth.org>
Subject: IRBNet Board Action

WARNING: This message originated from outside of Atlantic Health System. Any attachments or links should be carefully considered before proceeding. Messages from our business partners still need to be reviewed and should not be opened if suspicious.

Please use the report phishing button to report a questionable email.

Please note that Atlantic Health System IRB has taken the following action on IRBNet:

Project Title: [2212409-1] Evaluation of a Palliative Care Screening Tool (PCST) to identify and increased palliative care consults in the Medical Intensive Care Unit
Principal Investigator: Jacqueline Tierney

Submission Type: New Project
Date Submitted: July 22, 2024

Action: NOT RESEARCH
Effective Date: July 23, 2024
Review Type: Administrative Review

Should you have any questions you may contact Anita Richards at anita.bond@atlantichealth.org.

Thank you,
The IRBNet Support Team

https://nam02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.irbnet.org%2F&data=05%7C02%7Cjacqueline.tierney%40atlantichealth.org%7Cfd76af321fb04d21e87608dcab26bb7c%7Cf6f442bea6a04cbebc321f76a10f316b%7C0%7C0%7C638573430053810970%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=w4%2FdaR%2Bk%2FSFRw0dE12mnJ0cHMXaZp0tgWRM6ygzsJj0%3D&reserved=0

APPENDIX E: Permission to use Center to Advance Palliative Care (CAPC) Palliative Care Screening Tool (PCST)

From: Tierney, Jacqueline <Jacqueline.Tierney@atlantichealth.org>
Sent: Thursday, January 4, 2024 12:49 PM
To: Cirilo, Sherry sherry.cirilo@mssm.edu
Subject: Request for Screening Tool

Sherry:

Happy New Year. As we discussed a few months back, I am a DNP student and will be evaluating the use of a Palliative Care Screening Tool to identify patients with unmet palliative care needs. Can you please identify any screening tools that are recommended by the CAPC. In addition, if you have any validity and reliability data, that would be greatly appreciated.

I look forward to your response. Thank you.

Jackie

Jacqueline Tierney, MSN, RN, CHPN
Staff Nurse
Morristown Medical Center
Simon 3, Hospice & Palliative Inpatient Care Unit
Unit: 973-971-8380
Cell: 973-885-4337

From: Cirilo, Sherry <sherry.cirilo@mssm.edu>
Sent: Monday, January 8, 2024 11:22 AM
To: Tierney, Jacqueline <jacqueline.tierney@atlantichealth.org>
Subject: Request for Screening Tool

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Hello Jaqueline,

Thank you for contacting CAPC. Here are a couple of screening tool resources from capc.org. These have been used by many organizations with great success. CAPC does not track any data on the use of the tools.

- Palliative Care Screening Tool (PCST) | Center to Advance Palliative Care
- Patient Identification and Assessment | Center to Advance Palliative Care
- You can also post your request on CAPC Circles is your space to ask questions, and connect over shared experiences. There are suggested topics in each Circle, but feel free to create a new topic!

All these tools can be accessed on the CAPC website.

Please let me know if you have questions.

Best regards,

Sherry Cirilo, MPA
Member Relations Associate

CENTER TO ADVANCE
PALLIATIVE CARE
55 West 125th Street, Suite 1302
New York, NY 10027
(347) 835-2750
capc.org
getpalliativecare.org
Ref: 001G000001YMYtAIAX, 500Rn00000N82ijIAB

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From: Tierney, Jacqueline <Jacqueline.Tierney@atlantichealth.org>
Sent: Thursday, January 11, 2024 9:18 AM
To: Cirilo, Sherry sherry.cirilo@mssm.edu
Subject: Request for Screening Tool

Dear Sherry,

Thank you for your prompt response. After conducting a thorough literature review, I have come across the Palliative Care Screening Tool from the CAPC in several studies. I have shared this tool with my colleagues, and they concur that it will provide the most valuable data for my research.

Could you please guide me on how to obtain permission to utilize this tool in my study?

Wishing you a wonderful day. Thank you for your assistance.

Best regards,

Jackie

Jacqueline Tierney, MSN, RN, CHPN
Staff Nurse
Morristown Medical Center
Simon 3, Hospice & Palliative Inpatient Care Unit
Unit: 973-971-8380
Cell: 973-885-4337

From: Cirilo, Sherry <sherry.cirilo@mssm.edu>
Sent: Thursday, January 11, 2024 3:45 PM
To: Tierney, Jacqueline <jacqueline.tierney@atlantichealth.org>
Subject: Request for Screening Tool

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Jaqueline,

That's great news! As Morristown Medical Center is an active member of the CAPC, you do not need to seek permission. You can access and utilize all the resources by simply logging into the site.

If you have any questions, feel free to reach out. Best of luck with your project, and please remember to share your findings with CAPC.

Sherry Cirilo, MPA
Member Relations Associate

CENTER TO ADVANCE
PALLIATIVE CARE
55 West 125th Street, Suite 1302
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Ref: 001G000001YMYtAIAX, 500Rn00000N82ijIAB

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