

EARLY PALLIATIVE CARE IN PATIENTS WITH CHRONIC OBSTRUCTIVE
PULMONARY DISEASE

by

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Abstract

Background: There are over 300 million people living with COPD and over 2.9 million people die annually from the disease. Palliative care is an underused resource for this population as it can help establish goals of care, manage disease symptoms, and improve patient's quality of life. Unfortunately, patients diagnosed with COPD have many effective treatments for their illness but none of them are curative. Therefore, the concept of early use of palliative care is urgently needed to be more widely utilized and understood

Purpose: The purpose of this project was to generate a tool to identify patients appropriate for a palliative care consult based on a COPD diagnosis, risk scores, demographics, and hospital admissions.

Methods: This quality improvement project examined provider practices to determine if palliative care consults had been made in the past 18 months before project initiation. A tool was developed to identify patients diagnosed with COPD who were appropriate for palliative care consults based on inclusion criteria. The medical assistants were educated on how to identify patients through the tool. Providers ordered consults based on tool results.

Results: The chart audit revealed a 100% increase in providers ordering palliative care consults for patients with COPD who were identified by the tool as appropriate.

Implications for Practice: Research shows encouraging results with palliative care introduction early in the COPD. This project's findings further reinforce and support the importance and impact palliative care and COPD have on each other through evidence-based practices, research, and theory; which will hopefully improve patient's lives now and in the future.

Key words: Palliative Care, Chronic Disease, Hospital Admissions, Consult, End of life, Chronic Obstructive Pulmonary Disease

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Chapter One: Overview of the Problem of Interest

Chronic Obstructive Pulmonary Disease (COPD) is a chronic illness that affects over 328 million people according to the 2010 update of the Global Burden of Disease (Vos et al., 2013). Out of those 328 million people diagnosed with COPD, at least 2.9 million people die from this disease every year (Lopez-Campos, Tan & Soriano, 2015). Late activation of palliative care in patients diagnosed with COPD is prominent and unfortunate for patients and families dealing with an end of life circumstance. The focus in this Doctor of Nursing (DNP) Quality Improvement project is early activation of palliative care in patients diagnosed with COPD. Ideally this will allow patients to understand their disease trajectory and process and allow them the ability to make the best decisions for their care utilizing the knowledge and understanding they have acquired from palliative care. The purpose of this chapter is to show the background of the problem, the reason the problem is significant, the population who will be affected best by this practice, and how the project implementation will be conducted.

Background Information

Patients with COPD have exacerbations of this disease. When a patient experiences an exacerbation of COPD, there are negative effects on health status and their overall pulmonary function (Pavord, Jones, Burgel & Rabe, 2016). Patients and their family members do not understand the severity of their disease and that it is ultimately terminal. Their lack of understanding may come from their provider's neglect to explain the severity of the disease, the patient's misunderstanding of their disease process as it was presented to them, or lack of interdisciplinary teams such as palliative care involvement. Taking care of patients with COPD is difficult. When patients are in the hospital for an exacerbation from which they cannot recover, they are often approached by palliative care. Many times, patients are overwhelmed when told

they will not be able to leave the hospital on the amount of oxygen they are requiring, or they are unable to come off lifesaving drugs that cannot be administered at home. Unfortunately, patients diagnosed with COPD have many effective treatments for their illness but none of them are curative (Meffert, Hatami, Xander & Becker, 2015). Therefore, the concept of early use of palliative care is urgently needed to be more widely utilized and understood.

Palliative care should be initiated early in patients with COPD. Carlucci, Guerrieri, and Nava (2012), studied patients with COPD. The objective of the study was to determine whether palliative care was an end of life issue, or if it should be initiated sooner such as at diagnosis. Carlucci et al. (2012) discusses that intubation or noninvasive intubation measures can achieve an acceptable survival rate, however, for those patients experiencing the exacerbations, most patients describe their quality of life as less than it was prior to admission. Additionally, 20% of these patients will spend their last six months alive in the hospital, unable to wean from oxygen and likely die in a hospital room as opposed to being in their home (Carlucci et al., 2012). Criteria for the study found that patients should meet for an introduction of palliative care if they had oxygen dependence, one or more hospitalizations in the previous year for a COPD exacerbation, left heart failure or other co-morbidities, weight loss, decreased ability to complete daily activities of living, and age greater than 70 (Carlucci et al., 2012). The findings suggest that palliative care should be initiated early along with curative and restorative care when a patient has the afore mentioned symptoms and should also be available for any chronic respiratory disease when a patient becomes symptomatic (Carlucci et al., 2012).

Palliative care has multiple misconceptions about what it means to utilize it as an aid in care and participate in it as a patient. Palliative care is an approach that aims to improve the quality of a patient's life, along with their families, when they face a life-threatening illness

(Dobrina, Tenze, & Palese, 2014). This is achieved by preventing and relieving suffering through early identification and the correct assessment and treatment of pain and other problems including physical, psychosocial, or spiritual needs (Dobrina et al., 2014). Palliative care is not restricted to just symptom relief. To determine the specific needs and desires of a patient, early palliative care initiation in COPD will meet this goal. Using a framework that supports a patient's desires regarding their care prevents problems and repeated admissions, thus consequently the patient's quality of life improves (Dobrina et al., 2014).

According to Patel, Janssen and Curtis (2012), there are three requirements for palliative care; 1) it should consist of an inventory of current and future needs of a patient, 2) advanced care planning involving the patient with or without family, and 3) clinician communication about end of life care and completion of advanced directives. The three requirements bring advanced directives and clinician communication into the palliative care process. The three requirements for are subcomponents of palliative care and each are instrumental in successful treatment of patients.

Significance of Clinical Problem

The specific issue that will be addressed by this project is determining if early initiation of palliative care in patients with COPD will ease patients transition into understanding their illness, allowing time for adjustment of self-care and determining goals of care. One aspect of the current problem has shown that discussions of palliative care are being initiated during hospitalization for an acute exacerbation of COPD, which is an inappropriate time to discuss such issues (Carlucci et al., 2012). If an early palliative care referral is not sent for these patients, they have not received the highest quality of care. To receive the type of quality of life they may wish to have, a palliative care consult must be achieved. Unfortunately, if the consult is not done,

patients are unable to get the support needed during the continued trajectory of the disease. At the project site in Wilmington, North Carolina, palliative care referrals are not currently generated, unlike the office's hospice referrals. The providers at the project site desire to generate a tool to identify patients appropriate for a palliative care consult based on a COPD diagnosis, cumulative risk scores, demographics, and hospital admissions.

Question Guiding Inquiry (PICO)

Population. The populations affected by this project will include healthcare providers (i.e. two Medical Physicians and two Nurse Practitioners) and patients age 65 and above with COPD. The target population is limited specifically to the patients who receive care at an internal medicine office in southeastern North Carolina who have Medicare insurance coverage.

Intervention. A process for palliative care considerations will be developed to implement change in the practice to overcome the barriers associated with palliative care such as misconception, under usage of the service, and to benefit the patients by aiding in their quality of life. Education will be provided to staff on the new tool developed used to identify the appropriate patients for palliative care consideration and the benefits of the implementation process (Aldridge et al., 2016). A project review will also be provided to staff regarding potential barriers that arise, how to overcome them, and how best to proceed with specific patients.

Comparison. The new process implementation will allow for examination of previous palliative care consults in the 65 and older population with COPD. Once the palliative care identification tool is implemented, patients will be identified using a COPD diagnosis, cumulative risk scores, demographics, and hospital admissions in the past three

years. The policy will stay in effect; however, the data analysis will be complete at the end of 12 weeks. The results will be communicated to the providers and staff.

Outcome(s). Specific outcomes for this project are to explore with evaluation of the appropriate patient for a palliative care referral based on the tool generated, does this generate more referrals for the appropriate patient population and is it beneficial for the patient. Patients who meet these criteria will be educated on the benefits of this service and a referral will be made pending provider and patient input and appropriateness. The goal of this project is to see if rapid identification of patients who are deemed appropriate for a palliative care consult, benefit from the consult by patients understanding and having the ability to manage their goals of care for their COPD diagnosis and quality of life.

Summary

Allowing patients to understand their illness and disease process, gives patients the right information to make the correct decision for their medical care. Informing patients of their options in their medical treatment can promote confidence and autonomy in their medical decisions. Utilizing an early palliative care consult in patients 65 years old and older with COPD, will focus on the patients whose quality of life may be diminishing in the short future and will be a tool for them to use to aide in decision making. Now that the problem has been identified, Evidence-based Practice (EBP) and theory are needed to support the projected solution.

Chapter Two: Review of the Literature

To address the importance of early palliative care initiation associations between a better quality of life for patients and patient empowerment, studies and surveys needed to be inspected. Early introduction of palliative care in COPD patients is still a new concept, however, there has been enough evidence to support this idea. Studies have shown the benefit of early palliative care in COPD and have shown the positive outcomes palliative care can have on a patient and their families (Dobrina et al., 2014). The literature review process employed to find the best evidence for and to support this project is presented in this section.

Methodology

Sampling strategies. A review of literature dating no later than five years (2012-2018) was conducted in January 2018 using online databases and search engines of the United States National Library of Medicine (PubMed), Cumulative Index of Nursing and Allied Health Literature (CINHAL) and Google Scholar. An initial search was performed in PubMed using the mesh terms “palliative care,” “early palliative care,” and “COPD.” This search yielded 38 articles; a total of five articles that met the inclusion criteria. The search (CINHAL) was performed using different combinations of Mesh terms including ‘COPD’, ‘palliative care’, ‘early palliative care’, ‘referral’, ‘chronic lung disease’, and ‘end of life care’. Filters included ‘systematic review,’ ‘randomized controlled trial,’ ‘meta-analysis’, ‘English language’ and ‘human subjects’ Using these search terms, 40 articles and studies were listed with two meeting inclusion criteria. Finally, an exhaustive search in Google Scholar was performed using combinations of the search terms ‘early palliative care’, ‘palliative care’, ‘COPD’, ‘plan do study act,’ ‘barriers’, and ‘physician knowledge.’ This search yielded 58 articles and four articles met the inclusion criteria. The literature was reviewed and selected focusing on early palliative care

in COPD, the provider's knowledge on the topic, and promotion of quality of care and life for the patient. See Appendix A for literature review matrix.

Evaluation criteria. Using the search terms discussed above, a total of 11 articles met the inclusion criteria related to early palliative care referral in COPD patients. In all searches, the only results directly related to the topic of early palliative care initiation in COPD were cited and other articles were excluded due to reiteration and lack of significance. Many articles found were excluded due to finding they were of quality improvement studies and had no level of research, however some were included as they included a thorough review of the literature. Articles were excluded based on the year of publication and direct article content. Many articles were excluded due to the main topic of cancer associated to palliative care versus COPD. These articles were specifically based on patients with cancer and either had a minimal section on COPD palliative care needs or none. Articles were kept with pertinent current studies on the utilization of early palliative care in COPD. Articles were also kept that referred to patient and provider education on the topic. Some articles were dismissed due to study location in hospitals or education promotion in hospitals and the current project is based on an outpatient setting.

Literature Review Findings

The literature review revealed several studies supporting the importance of early palliative care initiation in chronic disease. When COPD was added and was specifically addressed, the article search was limited. The articles and meta-analyses that were found, were pertinent to supporting early palliative care in COPD patients. Most mentioned palliative care began with cancer patients and not as a generalized resource for patients with chronic disease (Joshi, Joshi, & Bartter, 2012). With the expanding need for palliative care not only in cancer,

but in chronic disease, it is important to continue studies and research to show the benefit palliative care has on the quality of life for patients and families.

Palliative Care in COPD. The findings in this literature review determined the need for palliative care in patients with COPD as it is an under studied benefit for society. Meffert, Hatami, Zander, and Becker (2015), performed an epidemiological study and collected data from patients at the University Medical Centre Freiburg (UMCF) in Germany for improving discharge management for COPD patients by asking the physician at time of discharge whether the patient had palliative care needs to follow up on. Data was collected from 39 849 records from January 2004 to May 2005 and COPD was the discharge diagnosis in 1455 of these patients (Meffert, Hatami, Zander, & Becker, 2015). Out of the 1455 patient records studied, 9.1% of them had palliative care needs at time of discharge (Meffert et al., 2015). The patients needing palliative care at time of discharge had a significantly longer hospital stay than the patients without palliative care needs and more of them died during their hospital stay (Meffert et al., 2015). These results show the significant need for palliative care to be utilized in COPD patients.

In a qualitative study conducted by Hayle, Coventry, Gomm, and Caress (2013), the goal was to evaluate patients with COPD firsthand experiences with the use of specialist palliative care access. The study was performed in North West England and included patients that had a primary diagnosis of COPD (Hayle, Coventry, Gomm, & Caress 2013). There was a total of 18 patients interviewed (Hayle et al., 2013). These patients had accessed specialist palliative care within one city in North West England for greater than 1 week with inpatient service or 1 month with outpatient service. Interviews were carried out by Hayle and then recorded for the other authors to listen and analyze equality for all participants. The results showed an increased sense

of self-worth, improvement in psychological wellbeing, and confidence were improved after receiving palliative care (Hayle et al., 2013).

Duenk et al., (2017), created a national survey for pulmonologists in the Netherlands to take to obtain their view on the use of palliative care for patients with COPD. Pulmonologists are experts in COPD and their assessment of the importance of palliative care involvement for those patients is essential. Out of 804 pulmonologists that received the survey, 254 completed it and their results all indicated palliative care for patients with COPD is needed (Duenk et al., 2017). This survey not only emphasizes the importance of palliative care in COPD, it also shows evidence of support from the pulmonology community.

Early Identification. There is support for COPD patients to receive palliative care, however, there is a specific need to quantify when those services should be utilized in this population. Palliative care should be initiated early and not at the end of a fatal disease especially for COPD patients because the involvement of palliative care can significantly improve symptoms and patient wellbeing. In a qualitative study by Beernaert et al. (2014), barriers and facilitators of early identification of palliative care practice in family physician arenas were studied to improve this functionality. Six focus groups composed of four family physicians and two with community nurses lead 18 interviews with patients diagnosed with chronic disease (Beernaert et al, 2014). The results of the study included identifying specific barriers and facilitators relating to patient and provider communication, the apparent role of a family provider, and levels of continuing care. This study showed that family physicians do not focus primarily on end of life or comfort care for people with chronic disease. It highlighted the need for family physicians to address Family Physicians also seemed to pay more often attention to

palliative care needs of patients in a terminal phase. Conclusion: The palliative care needs of the patient before the patient is at the terminal phase of an illness (Beernaert et al., 2014).

Snyder, Hazelett, Allen and Radwany (2012) developed an investigator-generated survey to evaluate knowledge, attitudes, experience of primary care physicians (PCPs) and the utilization of advanced care planning. PCPs in community outpatient offices in Northeastern Ohio were the study group using internal medicine and family medicine physicians. 372 surveys were sent statistical analyses were performed on 123 surveys who met the inclusion criteria (Snyder, Hazelett, Allen and Radwany, 2012). In conclusion, 97.5% of physicians expressed comfort in discussing advanced care planning, however there was significant decrease in the number of patients that received this communication (Snyder et al., 2014). Physicians having this knowledge embraced the results and felt the need to increase their ability to communicate about advanced care planning with their patients (Snyder et al., 2014).

Houben, Spruit, Groenen, Wouters and Janssen (2014), performed a systematic review and meta-analysis on the efficacy of advance care planning in the adult population. There was a total of 26,628 articles found in their literature review search with 56 articles being identified as qualifying for their research of patients with different chronic diseases (Houben, Spruit, Groenen, Wouters & Janssen, 2014). The results showed providers that discussed advanced care planning for patients with chronic disease, such as COPD, had a higher increase in advanced directive completion, discussions about advanced care planning, preference of care levels for patients and improvement on patient and family outcomes (Houben et al., 2014). This study shows the benefits of early identification of palliative care for patients with chronic illness.

Thoonsen et al., (2012) performed a study that was used to develop a tool for general practitioners to use to help identify their patients with chronic disease such as COPD. The tool

was developed using a literature review, focus group interviews with palliative care professionals, and modified Rand Delphi process with general practitioners (Thoonsen et al., 2012). Using these three steps, indicators were developed to make the early identification of COPD patients who would benefit from palliative care (Thoonsen et al., 2012). These indicators developed the RADPAC tool (RADboud indicators for Palliative Care Needs) which uses general practitioner personal practice experience and scientific evidence (Thoonsen et al., 2012).

Symptom and Disease Management. In addition to early identification and use of palliative care management, symptoms management is just as important. Weingaertner et al. (2014), developed a cohort study of patients with stage three or four COPD to describe and compare the effects of breathlessness, functional status, distress, and palliative care needs in these patients versus patients with lung cancer. Telephone interviews were conducted monthly using data from scores from different quality measure outcome scales for one year (Weingaertner et al., 2014). A total of 82 patients (50 COPD and 32 lung cancer) were included and patients with COPD perceived had higher levels of distress and breathlessness that steadily worsened of time versus the lung cancer patients experiencing this phenomenon when they were closer to death (Weingaertner et al., 2014). This study concludes that palliative care needs of patients with COPD are like those with lung cancer and even more indicated due to the higher severity of breathlessness and distress compared to patients with lung cancer (Weingaertner et al., 2014).

MacPherson, Walshe, O'Donnell and Vyas (2013) performed a qualitative study looking at the views of patients regarding advanced care planning who have severe COPD. The goal was to integrate improved communication and management of treatment for these patients. The form of data collections was incorporating audio recorded semi-structured interviews (MacPherson, Walshe, O'Donnell & Vyas, 2013). The participants were patients with severe COPD from

primary and secondary care settings (MacPherson et al., 2013). The results revealed that patients did not feel they knew enough information about their disease and its prognosis to know what questions for further discussion were warranted with their providers (MacPherson et al., 2013). Using this information gathered in this study, further discussion and education for providers is warranted to ensure patient satisfaction.

In a literature review by Aldridge et al., (2016), early palliative care incorporation into patients with serious illness, such as COPD, was studied to determine if quality of life for patients and decreased costs were beneficial to the patient and healthcare goals. This study identified several barriers to these benefits and their aim was to provide an overview of this topic (Aldridge et al., 2016). A literature review using PubMed from 2005 to March 2015 amplified by primary data collected from 405 hospitals included in the Center to Advance Palliative Care's National Palliative Care Registry for years 2012 and 2013 (Aldridge et al., 2016). The literature review identified lack of adequate education regarding palliative care discussion, having the ability to correctly identify patients appropriate for palliative care referral, and the lack of adequate reimbursement for palliative care amongst other barriers (Aldridge et al., 2016). The results of this literature review outlined several educational opportunities and policy changes to help overcome the barriers associated with integration of palliative care which would benefit the growing population and increased prevalence of chronic disease.

Limitations of Literature Review Process

Early use of palliative care in COPD is a new concept for providers to discern. Most patients who need this care do not receive it in time. Ultimately hospice care is needed, and medical decisions have not been addressed with the patient causing potential turmoil and surprise on how they got to their current position. Additionally, much of the literature focuses on Jecker,

and Curtis (2016), despite most studies being focused on cancer, patients diagnosed with COPD have a worse quality of life, an increased symptom burden and more social isolation. In studies that discussed early palliative care initiation in COPD or chronic disease, the authors recommended future studies need to be conducted to learn more about the benefits of early palliative care involvement. Meffert et al. (2015), acknowledges this specific topic is under researched. Due to COPD having differing disease trajectories based on an individual's symptoms and other comorbidities, limitation on exact recommendations for patients varies which can skew study results and does not allow for a blanket treatment plan.

Discussion

Brown et al. (2016) identifies palliative care as a justice issue for the COPD population. The principle of sufficiency in healthcare is described as providing experienced care and requires meeting the basic needs of a patient (Brown et al., 2016). Justice is an underserved issue and is a problem in that palliative care is not standardized, is based on a physician to physician opinion which leads to inconsistent and at time incompetent levels of care (Brown et al., 2016). The current amount of literature on this subject and the positive results seen from early initiation of palliative care in COPD should allow for continued studies and continued improvements on addressing the issues patients with COPD have and standardizing care.

Conclusion of findings. After a thorough literature search, early palliative care utilization in COPD is important to implement in Primary Care Practice. Early intervention for patient's aides in providing relief from pain and distress, incorporating spiritual and psychological care that may be needed, offering a support system to patients to live their best quality of life as possible, and offering a support system to families (World Health Organization, 2018). COPD has great effects on a patient's morbidity and mortality, unfortunately, these

patients are not receiving care in time to benefit the patient. Therefore, early palliative care is an underutilized resource and greatly affects patients who need this service.

Advantages and disadvantages of findings. The advantages of the findings during this research provides support for this quality improvement project and its success. Having support through evidence-based literature to a quality improvement project is vital. Hayle, Coventry, Gomm, and Carres (2013), performed a study with palliative care and COPD and found many participants in the study reported having palliative care on board was a benefit and had reduced physical constraint, which subsequently aided in increasing patient's self-worth. Another advantage is the concept of early palliative care in patients with COPD is new, consequently allowing for practice change at an early stage. With education and support for this topic, patients currently diagnosed and potentially diagnosed in the future will reap the benefits.

One of the disadvantages to these findings, is the concept of early palliative care in COPD is new thus leaving a lack of evidence-based practice articles. There were also findings with mixed results in studies. Some studies found that early palliative care in COPD was warranted and other studies results were inconclusive as to whether early palliative care initiation had a positive benefit to the patient. Another disadvantage was the lack of provider education on the topic of palliative care. This is partly from a provider's medical education. Providers are often do not have the knowledge or skills to determine where a palliative care consult should be made or how to deliver such information (Brown et al., 2016). Aldridge et al. (2016), suggests that along with curative and restorative care for patients diagnosed with COPD, palliative care and treatments should be offered as well. These disadvantages will gradually decrease as further research is done and education is provided to providers and patients.

Utilization of findings in practice. Providers in practice should acknowledge the gap of education on early palliative care in patients with COPD. Barriers exist causing potential increases in the gap. Barriers such as potential perceived bias based on the idea that a person acquired COPD because of their own wrongdoing, such as smoking for many years (Brown et al., 2016). Another barrier is the possibility of diminishing hope in a patient diagnosed with COPD. The provider does not want to be the cause of a patient's zest for life. These barriers can be broken down using education and exposure to this rapidly growing population of patients with COPD.

Quill and Abernathy (2013), created a table (See Appendix B) to distinguish what a general physician skill set related to palliative care should be and what a specialty palliative care skill is. The generalist physician was taught and should be able to provide basic needs such as management of pain, illness, code status, and goals of treatment (Quill & Abernathy, 2013). The specialist palliative physician should be able to address more specific and complicated issues such as refractory pain, depression, anxiety, work with families, and with multiple treatment teams (Quill & Abernathy, 2013). Providers need to update themselves with the newest evidence-based practice available to provide the best possible service to their patients.

Summary

This literature review provided education and enlightenment on the concept of early palliative care use in patients with COPD. The studies identified above were quality studies that showed data consistent with the results of their studies. The levels of evidence were mediocre and higher levels of evidence-based articles were not pertinent to the topic of this project or were not available based on the lack of research in this area. Further studies need to be conducted to exhaust the subject matter and layout a plan for early palliative care. The review also yielded

Nursing Theory support for the topic. The following chapter will discuss Dorthea Orem's Theory of Self Care Deficit and how it relates and supports this quality improvement project.

Chapter Three: Theory and Concept Model for Evidence-based Practice

The basis of theory and concepts regarding palliative care are important because there needs to be support behind the proposed idea. Finding theories that relate to your project are Evidence-based Practice (EBP) that can be used to expand knowledge of the topic and to see how the theorists discovered their theory. EBP is a problem-solving approach to healthcare that integrates a patients' preferences of care, a provider's expertise on the subject, and evidence from studies (Melnyk, Gallagher-Ford, Long & Fineout-Overholt, 2014). When a provider uses EBP when seeing a patient, it must be used in a caring, culturally aware, and appropriate environment. Using this setting, patients will be able to make the best clinical decisions for themselves to promote a positive outcome (Melnyk et al., 2014). The purpose of this chapter is to expand on the concept of palliative care, explore theories that support palliative care use through EBP. There will be two theories identified for this project.

Concept Analysis

According to the World Health Organization (WHO) (2015), palliative care provides relief from painful symptoms and enhances a positive quality of life for individuals with chronic disease. It also provides a support system for patients and family members affected by their loved one's or personal illness. Palliative care also recognizes dying is a natural process of illness and works with patients and families to neither accelerate or suspend death (WHO, 2015). Palliative care is an integral part of care for patients with chronic disease. The focus of palliative care is patient-centered, aiding to provide the best quality of life a person may have, managing comfort; and patient's desires and goals for their care during their disease process. Palliative care is different for each patient and is focused on the person.

Hospice and Palliative Care. The concepts of hospice and palliative care are widely misconstrued, often using the terms interchangeably despite having two different meanings. Hospice is a designated type of care for patients diagnosed with a terminal illness that have been given a life expectancy of six months or less to live. Hospice care emphasizes comfort and relief from aggravating symptoms and suffering. It also concerns the patients psychological, social, and spiritual needs. Moreover, hospice care is for patients who no longer wish to receive curative treatments or interventions as they wish to focus on comfort and quality of life (Snyder, Hazelett, Allen, & Radwany, 2012). The results from a primary care survey by Snyder, Hazelett, Allen, & Radwany (2012), indicate that advanced care planning, palliative care, and hospice services are being underutilized due to misunderstanding of the terminology, lack of training and knowledge regarding end of life care. Given these results and common misconceptions by the public as evidenced by studies and patient interaction, it is important to fully explain to patients the introduction of palliative care into their care plan is not the same thing as hospice as palliative care continues to provide curative treatment while hospice does not.

Palliative Care Terms. There are several related cases using similar but different concepts connected to palliative care. Some of the terms used interchangeably with palliative care are “supportive care,” “best supportive care,” “palliative care,” “end of life care,” “hospice care,” etc. (Hui et al., 2013). For this section, the focus will be on the related case of “end of life care”. Although there is not a specific definition of end of life care, there are components to the concept. For example, the presence of chronic disease, symptoms or impairments resulting from the chronic disease that require care, older age, co-morbidities all contribute to someone needing end of life care (Izumi, Nagae, Sakurai & Imamura, 2012). End of life care may also refer to the last few hours or days that someone is alive (Izumi et al., 2012). According to Izumi, Nagae,

Sakurai, & Imamura (2012), if people assume end of life care is framed by the last few days of a person's life, most patients would not receive adequate care due to lack of time. Additionally, the end of life care definition could be based on institutions, policies, or administrative guidelines (Izumi et al., 2012). Perhaps since there is not an exact definition for the term end of life care, that could be the reason for the term being used interchangeably for palliative care. The purpose of this project is for patients to understand specifically what the concept of palliative care means and how it relates to COPD.

Palliative Care Tool. The Radboud indicators for Palliative Care needs (RADPAC) is one resource available for palliative care (See Appendix C). The RADPAC came from a study whose aim was to develop a tool intended to identify patients who would benefit from palliative care involvement who had Chronic Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), and cancer. The tool was intended to be used during regular patient visits to help identify those patients who needed palliative care involvement (Thoosen et al., 2012). A three-step procedure was developed to create identification of patients in need of early palliative care; first a literature review was performed, secondly, based on the literature review, three focus groups were formed with patients diagnosed with CHF, COPD, and cancer (Thoosen et al., 2012). The RADPAC application is an opportunity to initiate proactive care and improve the quality of primary palliative care (Thoosen et al., 2012). The tool also utilizes the Karnofsky score during patient evaluation which determines the level of care a patient may need (See Appendix D). This tool is being used as a reference to create inclusion criteria for the project population of COPD patients at the proposed site.

Theoretical Framework

Dorothea Orem's Self-Care Deficit Nursing Theory (SCDNT) was developed by Orem between 1959 and 2001. The theory covers a wide range of concepts that can be applied to multiple areas of nursing, making it classified as a grand theory (McEwen & Wills, 2017). Orem developed the theory to improve the quality of nursing practice in general hospitals in her state. Her primary source of information used to create the theory was from her own firsthand experiences in nursing (Alligood, 2014). The question that Orem posed was, "What condition exists in a person when judgements are made that a nurse(s) should be brought into the situation?" (Alligood, 2014 p.198). Nursing assistance is needed when "the inability of persons to provide continuously for themselves the amount and quality of required self-care because of situations of personal health" (Alligood, 2014 p.198). Therefore, Orem developed her theory of SCDNT. The concept of self-care is linked with the desire to empower and allow people to take initiative for their own needs when possible (Parissopoulos & Kotzabassaki, 2004). The central philosophy of the SCDNT is that all patients want to care for themselves, and they can recover more quickly and holistically by performing their own self-care when they are able (Parissopoulos & Kotzabassaki, 2004).

Orem's Theory is composed of three parts; theory of self-care, theory of self-care deficit, and theory of nursing system (Berbiglia & Banfield, 2013). Specifically, SCDNT's assumptions are that people should be able to take care of themselves and be responsible for their own care. Self-care is something that must be learned. Self-care relates to a person's state of health, their growth and development, and energy expenditure (Berbiglia & Banfield, 2013). Understanding self-care and what it means can allow for individuals to understand their limitations and how they can benefit from nursing (Berbiglia & Banfield, 2013).

Additionally, the SCDNT identifies five methods of helping to provide self-care; acting for and doing for others guiding others, supporting one another, providing an environment promoting personal development in relation to meet future demands, and teaching one another (Berbiglia & Banfield (2013). When a patient is unable to meet their self-care needs, the SCDNT can be applied and a nurse or caregiver would step in and be support for that person. Within the SCDNT, self-care is referred to as self-care agency. Self-care agency is the ability of matured people to know and continue to investigate their requirements for personal action to be taken to manage their own functioning and future development (White, 2012). Self-care agency allows individuals to take care of themselves and ability refers to a person's knowledge of what actions to take regarding their health and treatment. In Orem's conceptual model, the core concept is self-care which corresponds to health-related activities performed by individuals to maintain their health and well-being (Desbiens, Gagnon, & Fillion, 2012). Orem composed seven groups with different health focuses and one group had the focus of life limiting illness (Desbiens et al., 2012). Orem's focus turned to nursing who should enable people whose quality of life is diminished and those facing end of life care to live as themselves, understand their illness and how to participate in their care, approach death in their own way, and to be with family, friends, and their healthcare team in an environment of safety and trust (Desbiens et al., 2012).

In addition to using with palliative care, Orem believed the SCDNT was an important part of treating chronic illness (White, 2012). Using SCDNT and including spiritual care would allow for better management of chronic illness and allow patients another outlet to deal with their illness. Self-care embodies the whole patient, physically, emotionally, and spiritually so incorporating SCDNT and spiritual care would aid medical professionals and patients to better cope with their disease (White, 2012).

Application to practice change. One of the benefits of the SCDNT is that it can be applied to a variety of nursing situations and patients. This allows the theory to be used not only in palliative care and chronic illness, but in other patient and population settings. Being able to use this theory in other settings essential leads to endless future possibilities for research and utilization in diverse types of nursing care. Nurses and patients can work together to ensure that the patients receive the best care possible, but are also able to care for themselves. This leads to patient and nurse satisfaction and nurse retention.

EBP Change Theory

An example of a quality improvement tool is the Plan, Do, Study, Act (PDSA) model. This model is primarily focused on quality improvement projects and is intended to adapt new changed that will benefit the practice and its patients (Tayler et al., 2013). This tool is broken down into four stages. The ‘plan’ stage is used to determine what change is needed for improvement (Tayler et al., 2013). The ‘do’ stage is where implementation of the improvement has been activated (Tayler et al., 2013). Looking at the achievement results from the implementation and improvement seen encompasses the ‘study’ stage (Tayler et al., 2013). The final stage is ‘act’. Take the results from the study and make advances to areas that need an improvement and develop a new plan to improve the current results (Tayler et al., 2013). This model mimics DNP projects as they consist of coming up with a quality improvement, planning for a practice change, implementing that change and examining results of the implementation. PDSA’s should not be controversial, have an objective view, and can be easily changed or modified to support success (Morelli, 2016). Being able to compare results of a PDSA to accredited guidelines such as the Agency for Healthcare Research and Quality will ensure quality measures are maintained (Morelli, 2016).

Application to practice change. Implementing more PDSA quality improvement measures can positively benefit clinic practice and patient outcomes. Determining areas that need to be changed or updated are critical in performing the most quality and up to date care for patients. PDSAs are quick and therefore results can be seen rapidly. The rapid recognizable outcomes can also be a benefit due to an intervention or improvement measure can be stopped if negative or unwanted outcomes occur. Healthcare, new EBP guidelines and screening recommendations are constantly changing. PDSAs keep practices current and up to date on the latest information.

Summary

The process of a concept analysis allows for methods to determine the definition, use, and misconceptions of a concept. It provides clarity to a concept and the reader can discern the best way to utilize it. The literature review of palliative care shows the importance of early identification of the need for palliative care involvement in patients with a chronic illness. Ultimately, comfort and lack of suffering at the end of one's life is the goal and palliative care involvement can greatly impact this for patients.

Utilizing Dorothea Orem's SCDNT in this DNP QI Project will support my idea that early initiation of palliative care in patients with chronic disease will ease patients transition into understanding their illness, allowing time for adjustment of self-care and determining goals of care. Employing this theory also gives nurses a model to use to help gain education for themselves, thus improving knowledge bases for caregivers. Enhanced ability to care for others enriches nursing management and patient outcomes.

Chapter Four: Pre-implementation Planning

Patients diagnosed with Chronic Obstructive Pulmonary Disease (COPD) have a multitude of burdening symptoms such as breathlessness, cough, pain, and weakness. Introducing palliative care at the correct time for these patients will allow them to have less incumbering side effects and a better quality of life. This chapter will discuss the plan for the DNP project and how it was carried out at the proposed site.

Project Purpose

No one can predict when a patient with COPD will progress in their symptoms or when the terminal disease will take over their life. Utilizing palliative care not only in the terminal phase, but also in the last stages of the disease will alleviate many of the problems as the disease advances (Vermylen, Szmuilowicz & Kalhan, 2015). The purpose of this project is to utilize early palliative care referrals in patients who have COPD. The design for this project will be quality and performance improvement. Quality and performance improvement goals match the National Quality Strategy's three aims. This includes Better Care, Healthy People/Healthy Community and Affordable Care (U.S. Departments of Health and Human Services, 2015). All these goals relate to improved patient experience, a healthier community and ultimately reducing the cost of healthcare. To accomplish these goals, coordination of care and patient safety are needed along with increased access to healthcare and increased access to preventable health management services (Weston & Roberts, 2013). Additionally, heightened caregiver and patient perception of care and improved care for at risk populations, such as the 65-year-old population with chronic disease (Weston & Roberts, 2013).

The measurements of achievements in those areas mentioned above are monitored by Accountable Care Organizations (ACO). ACO's have implemented projects to gain the supreme

use of informatics and health technology to improve the efficacy of a provider's care (Weston & Roberts, 2013). For quality improvement projects to be successful, they need to be easy to work into regular clinical practice and workflow (Conway, Mostashari, & Clancy, 2013). They also need to show positive outcomes with use and increased patient benefit.

Project Management

Organizational readiness for change. The DNP project site is ready for early palliative care referrals for patients diagnosed with COPD. Currently a hospital referral is automatically generated for patients that meet the ACO's criteria for a consult. Upon presentation of this topic to the team lead provider at the office site, he was very interested in having the same ability to generate palliative care referrals as well. The increasing number of patients over 65 and the increase in chronic disease along with this aging process at this office has deemed this project appropriate and desired. Previous data from the past year and a half, there was one referral to hospice for this patient population and none for palliative care.

Inter-professional collaboration. Resources that will be available and used during this project will be all providers at the project site; two Medical Doctors and two Nurse Practitioners. Their role will be to acknowledge what patients have been determined to need a palliative care referral, explain the purpose of the referral and answer any questions the patient may have. The medical assistants at the project site will be taught using a PowerPoint showing them how to use the RADPAC tool to determine which patients are appropriate to flag for the providers for a potential palliative care referral. See Appendix F. An ACO coordinator is involved in this project to help outline what specific criteria are looked at to deem a patient appropriate for a palliative care referral. Lastly, a DNP with expertise in palliative care is involved and highly supportive of the project and will serve as the expert of the topic palliative care.

Risk management assessment. To determine the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of a community of practice (CoP), a SWOT analysis is a method that can be used (CDC, 2015). The strengths associated with this project are strong stakeholder belief and involvement for this project's success, quality improvement for patients in this office setting, and a clear outline goal for achievement. A weakness this project has is a limited patient population as this project was implemented at a single office. This project was implemented in a private internal medicine office instead of an entire medical system such as the local hospital. The opportunities this project employs are the topic of palliative care use in COPD patients is an under explored avenue as a benefit for this patient population. Therefore, this projects success can lead others to profit from its example and applied to other populations or diseases. A potential threat for this project was other possible researchers or surveyors interested in the same idea for the DNP project. This project is focused on palliative care in COPD, however, it could be turned to focus on all chronic disease. This topic is new and unexplored and has a significant chance to make a positive change on how terminal illness is managed and patient satisfaction is improved.

Organizational approval process. The organizational leaders of this site were approached about this topic for project implementation due to knowledge there was a need for this intervention for their patient population. A presentation was developed (see Appendix G) and presented to each provider outlining the reasoning behind choosing the site, the benefits the site and patient population would reap and the potential cost reduction for the site and its patients. The leaders asked appropriate questions pertaining to the project and their specific involvement, and all agreed this project would be beneficial and would like to proceed with project development and implementation.

Information technology. The system the site uses is eClinicalWorks, a computer program for patient's electronic medical records. This program will be utilized to collect data from ACO recommendations based on previous consults and hospice referrals. It will also be used to determine patient's inclusion criteria for the project. This system will identify the patients in potential need for a palliative care referral for the providers and allow them the opportunity to discuss what would best benefit the patient for the future of their care. There is a contact from the local ACO that will be utilized for this project.

Cost Analysis of Materials Needed for Project

The budget includes direct costs and indirect costs. Direct costs are limited based on the readily availability of the eClinicalWorks computer program for patient's electronic medical record used at the site. Direct costs also include the time spent learning the computer program, researching the topic, educating about the project and its usefulness for the future. The clinic is providing the printing of education materials, thus, there was not a printing cost. There were no anticipated indirect costs for the project.

Plans for Institutional Review Board Approval

The letter of support from the East Carolina University's IRB approved this project as quality improvement, therefore, waiving a full IRB review. The process for the ECU Institutional Review Board (IRB) review began in May 2018 and the project received an IRB waiver in July 2018. See Appendix H. The tool kit was provided to the ECU IRB. The ECU IRB reviewed the tool kit and determined this project would be waived from IRB review.

Plan for Project Evaluation

Demographics. The population affected by this project will be patients age 65 and above with COPD. The population is limited to specifically the patients who go to the project

site for primary care. Medicare receiving patients with will be specifically targeted. Other criteria being used includes information identified by the RADPAC tool. This data will be presented in a table. See Appendix E.

Outcome measurement. Patients who meet the criteria for this project were educated on the benefits of this service and a referral will be made by the provider. The goal is to develop a process for early referral to palliative care in the practice and help the providers readily identify patients appropriate for this service. Outcomes will be measured by the number of patients who receive a palliative care referral and followed up with palliative care made on the providers recommendation. This process using the RADPAC tool identified 19 patients who met the criteria for a palliative care consult.

Outcome measurement. Another specific outcome for this project is to explore with implementation of early palliative care referrals. Does the use of the RADPAC and a process generate more referrals for the appropriate patient population? This project was successful by patients receiving referrals when they were deemed appropriate by the project tool.

Evaluation tool. Information gathered from the tool use (see Appendix E) will determine who needs a palliative care referral and if it has been deemed appropriate by the provider. A chart audit was performed to identify patients appropriate for a palliative care referral. Subsequent chart audits were performed every three weeks to check the status of current patient inclusion criteria and to see if over the implementation period of the project, a patient's inclusion criteria changed. Prior to this project no consults for palliative care had been provided in the 18 months.

Evaluation tool. Information gathered from the tool use (see Appendix E) will determine who needs a palliative care referral and if it has been deemed appropriate by the provider.

Data analysis. The analysis plan for this outcome is to evaluate if the providers are using the RADPAC, the process for evaluation, the referrals made, and the referrals completed if the inclusion criteria was appropriate for the population identified based on number of referrals and number of referrals acted upon. The goal is to see a 75% increase in rates of palliative care referrals.

Data analysis. The analysis of this goal is based on how many referrals were sent for this patient population based on the number of referrals sent in the preimplementation period.

Data management. Data was provided by the team leader at the project site via secured EMR system and on a flash drive. When the flash drive or EMR system was not in use, the flash drive was stored in a locked box in the office and the computer for EMR information as shut down. There was coding for patient data on the criteria tool used for this project. A key was developed and placed in the lock box when not in use. This data was stored from May 2018 until project completion in May 2019. The project flash drive had all information deleted from the drive and the drive was placed in the incineration box. The EMR is for clinic use, the specific information provided for the project that was printed out was also placed in the incineration box and destroyed.

Summary

The preimplementation plan for this project has been successful and has proven to warrant positive change in the project site. Patients will see improvements in their decision-making abilities and feel confident in their goals of care with the implementation of this project. The following chapter will explain the implementation process of this project.

Chapter Five: Implementation Process

Project management and implementation are essential functions of project success. The implementation of palliative care consults for patients with COPD identified by the RADPAC tool at the project site identified patients appropriate for a referral and allowed for feedback post referral for the provider. The project objectives were completed in the given amount of time allotted for project completion. The staff at the clinical site supported the project and this chapter discusses the DNP project implementation.

Setting

This project was conducted at an internal medicine private office in an urban location in southeastern North Carolina. The office had a total of 11,420 patients registered. In the past year from July 2017 to July 2018, the office had 6,957 patient visits. There are 3,226 patients aged 65 and above which is 28% of their total patient population. There are 55 patients in this population diagnosed with Chronic Obstructive Pulmonary Disease (COPD). The primary care providers at this office are front line resources that can focus on advanced care planning and symptom management (Vermylen et al., 2015).

Participants

Inclusion criteria for this project included patients aged 65 and older who are patients at the project site diagnosed with COPD. Criteria for inclusion was based off the RADPAC tool (See Appendix C). Based on the inclusion criteria of the tool, the following qualifiers include; measuring frequency of care, visits to the office every three to four months; measuring weight from a patient's baseline to the current weight and determining if it is more than 10 percent of a loss; having a concurrent diagnosis of CHF; having 1 or more hospitalizations from COPD or CHF complications; having objective signs of dyspnea, shortness of breath, or orthopnea, etc.

charted. These five categories of inclusion criteria give each category a percentage of 20 percent. Each category percentage was added together to identify those patients who would be an ideal candidate for a palliative care consult.

Recruitment

The project tool created for early palliative care referral for patients with COPD was approved by each provider at the office. The medical assistants in the office were trained on how to use the Early Palliative Care Referral Tool and once patients were identified as appropriate for a referral using the tool, the medical assistant emailed the provider to whom the patient belongs identifying them with a chart number. Providers received the email and discussed the referral with their patients that were appropriate and gave a referral based on the patients desires and the providers recommendation. Participants were not required to fulfill the referral; however, they were required to receive it based on provider discretion.

Implementation Process

This early palliative care consult project consisted of a retrospective chart review of 18 months of the providers at the internal medicine office documentation in the medical record to determine how many palliative care consults were generated prior to initiation of the early palliative care referral in COPD. The prospective chart review included records during the period of January 1st, 2017 until July 28th, 2018. The tool was also generated during this time. Education about the new tool was given to the providers August 1st, 2018 to allow for final review and support of the tool usage into their practice. The following steps are outlined to describe the implementation of this project. See Appendix I for the flowchart algorithm of project implementation. Initially, this project idea was presented to the providers at the clinic for site approval. The providers granted the project approval and provided the data for the Early

Palliative Care Referral Tool. The tool was developed based on the RADPAC tool for the implication of palliative care in patients aged 65 and older with COPD within this clinic only. A PowerPoint presentation was developed for the medical assistants along with use of the teach back method to ensure knowledge of how the tool should be used. Implementation of the tool and current chart review began August 20th, 2018 and continued until December 1st, 2018. Review of the data collected by the medical assistant's determination of the patients deemed appropriate for referrals was reviewed with the team lead every three weeks during this time frame. The medical assistants emailed the providers the patient chart number of the patients who have been identified by the Early Palliative Care Referral Tool. A discussion between the provider and patient took place and if warranted, a referral was placed to palliative care. After the initial project was piloted, a PDSA meeting was held with the team lead. Barriers seen with the initial consults and discussions with patients were largely language and terminology based. A lack of education based on terminology differences in patients was identified as the main barrier. Continuation of the project was the plan and further education and conversation with the appropriate patients would be continued to help bridge the gap in understanding the purpose of palliative care. An assessment of the number of referrals generated was conducted throughout the 12 weeks of the project duration and results were presented to providers and staff of the clinic. The project became part of regular practice in the clinic and was followed through by the medical assistants and providers. Evaluation of the project began January 7th, 2019 until April 28th, 2019.

Summary

Project implementations are a success when stakeholders are present, resources are being used efficiently and effectively, technology is used at its highest capacity, and positive impacts

from the results are present (Kerzner & Kerzner, 2017). This project has all the above-mentioned keys for success. The success of this project implementation for COPD patients will hopefully drive further projects to be completed for other chronic illnesses and their relation to palliative care.

Chapter Six: Evaluation of the Practice Change Initiative

The following data represents the participants in the project initiative, the intended outcomes of the project and the participation rates of participant completion. The participants are described through patient demographics using percentages and frequency distributions.

Participation rates in the palliative care referrals are also demonstrated as frequency distributions and percentages. The results will be discussed and what was learned from the project will be outlined.

Participant Demographics

A total of nineteen patients were identified as suitable for this project and all were appropriately evaluated and deemed appropriate. There were seven female participants (36%) and twelve male participants (64%). The mean age of the participants was 80 years with a standard deviation of 13. The ages are represented with a frequency distribution in Table 1 below.

Ages of the Participants

Age	Frequency (f)	Percentage of Total
60-69	4	21%
70-79	5	26.0%
80-89	9	47%
≥ 90	1	6%
Total	19	100%

All participants had a diagnosis of COPD. Participants were categorized based on frequency of care, weight loss, concurrent diagnosis of CHF, disease related hospitalizations and documented objective signs of COPD.

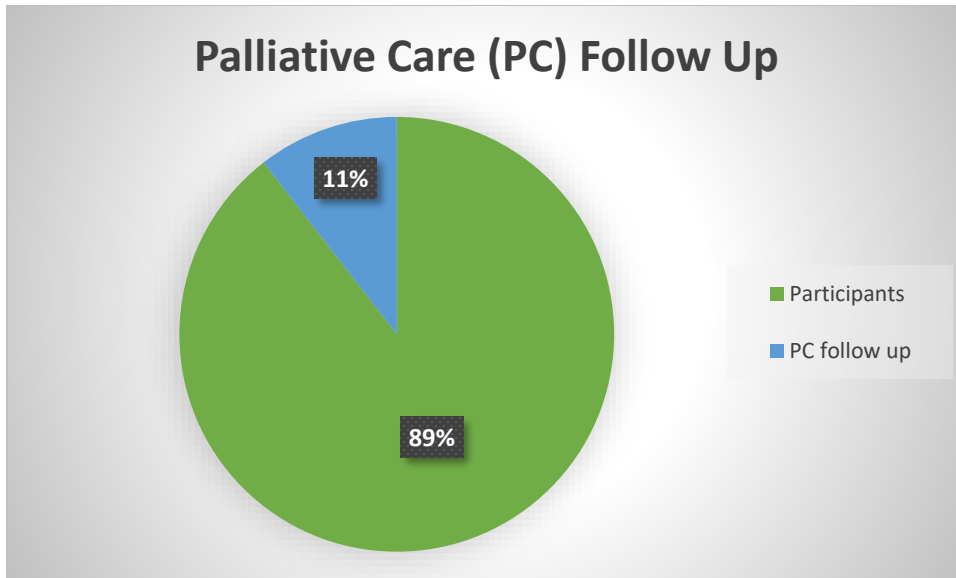
Intended outcomes

The project was developed to determine if patients with COPD met the criteria to receive a palliative care consult. Providers were educated on the benefits of palliative care and the potential outcomes it can have on patient quality of life. By increasing provider knowledge about the benefit of the service and how patients would benefit, consults and interprofessional collaboration between professionals were developed. By increasing patient knowledge about their illness and what palliative care could provide, patients are empowered to make informed decisions about their current and future healthcare options. Quality of life improvement, potential financial reduction for patient, decreased hospital admission rates, and overall better patient care were affected by the implementation of this project.

Findings

In the 18 months prior to the project's implementation, the site had not made any palliative care referrals for patients with COPD. Post implementation, nineteen patients were identified as appropriate recipients for referrals. At the providers discretion after review of the diagnostic criteria identifying those participants, all received a palliative care referral. The project was a 100% success with referrals made based on inclusion criteria. After referral, two out of the nineteen referrals were completed by meeting with palliative care and developing a plan of action for patient care. The result is shown below in a pie chart.

Completion rates



When participants were asked why palliative care follow up was not completed, the result was a gap in education based on terminology. Participants felt palliative care was hospice and their diseases were not severe enough to seek palliative or hospice care. Some participants felt they were not ready to explore their illness with another provider and were happy being managed as they were.

Provider feedback was positive. Despite only two of the nineteen referrals following up with palliative care, seventeen participants received information as to potential provider collaboration with patient care. Patient's needs and levels of care change throughout disease processes, and those patients may decide on a need for treatment change in the future.

Summary

The demographic information gathered at the beginning of this project allowed for a diverse patient population to be identified that would benefit from the program. The completion of referrals was significant from 0% to 100% and two participants had successful palliative care follow ups. All the data collected has given valuable information regarding which participants are eligible for palliative care referrals and the success of referral completion.

Chapter Seven: Implications for Nursing Practice

The following chapter discusses the practice implications from this quality improvement project. The American Association of Colleges of Nursing (AACN) has assigned eight foundational essentials to the Doctor of Nursing Practice (DNP) program and in this chapter, they are outlined and explained upon. Provider and patient education relating to early palliative care in patients with COPD and implications for nursing practice are associated with each DNP essential and discussed accordingly in this chapter.

Practice Implications

The AACN Essentials of the Doctoral Education for Advanced Nursing Practice provide outlines and competencies that must be present in all DNP programs and DNP projects. Practice implications are the outcomes these essentials have on this quality improvement (QI) project. For this project, they include education on the importance of early palliative care referrals in patients with COPD to improve patient care of their disease. The practice implications also include the potential for improved patient quality of life, decreased hospital admission rates, and possible financial benefits. The eight AACN DNP Essentials outlined below are the guidelines for discussing the impact of this project at the project site and the potential future benefit by other patient organizations.

Essential I: Scientific underpinnings for practice. The first essential details the importance of using science-based knowledge and concepts to evaluate and deliver the highest level of nursing practice, thus improving patient outcomes. (American Association of Colleges of Nursing (AACN), 2006). Through a thorough literature review, the patient identification tool developed through this QI project used current guidelines as its basis for identifying patients appropriate for palliative care referrals based on their disease and comorbidity severity. The tool

developed during this QI project used scientific concepts and evidence-based guidelines. Given this topic is of new research, there are certainly implications in the future for further development of this project.

Essential II: Organization and systems leadership for quality improvement and systems thinking. The second essential accounts for the ability to evaluate, disseminate, and explore current research into current and future practice for the patient population while also focusing on financially sound ways to deliver care (AACN, 2006). This QI project utilized a tool that as already developed, however, was not being used at the project site to identify patients who would potentially benefit from a palliative care consult. Identifying these patients would not only benefit their goals of care with disease treatment; it would also suggest financial savings based on decrease of hospital admission and provider visits. The gaps identified in this patient population studied were lack of service offered at project site prior to QI project and knowledge limitation on how services could benefit patients.

Recommendations for sustaining this project's strategies at a micro level include improving provider education and time with provider and patient to fully explore the benefits of palliative care with a COPD diagnosis. For the meso level, to sustain these strategies, further research, literature review and studies in communities affected by this disease is critical. For the macro level, knowledge about palliative care needs [to be expanded not only to patients, but also to providers as part of their formal education.

Essential III: Clinical scholarship and analytical methods for EBP. The third essential focuses on examining and analyzing processes using current evidence-based practice and making changes if needed. It also focuses on ethical dilemmas in patient care, which also leads back to focusing on evidenced based practice for best patient outcomes (AACN, 2006).

This QI project was based upon personal experience and supported by literature reviews that reinforced evidence of positive patient outcomes who had COPD and who were being treated concurrently with primary care and palliative care to manage their disease. The project allowed for information to be delivered to a patient, give the patient the opportunity to explore a new type of patient care, and see the possible benefits for patient quality of life. This project tool can be used in the future to continue to improve upon the delivery of palliative care information and the potential benefit to patients who meet the criteria of referral.

Essential IV: Information systems/technology and patient care technology for the improvement and transformation of healthcare. The fourth essential focuses on the use of information systems and technology to support patient care management and practice leadership. (AACN, 2006). The use of technology was available during this project by doing pre and post chart audits to discern the number of palliative care consults prior to project implementation and post implementation. Other technology used was the PowerPoint presentation used to educate staff on the project at the project site and a poster was developed to display all aspects of the project and its outcomes.

Essential V: Healthcare policy for advocacy in healthcare. Essential five includes involvement in healthcare policy through analyzing policymaking and implementation with the goal of improving overall healthcare and the nursing profession (AACN, 2006). There is not a specific national recognized policy related to palliative care, however, there are many platforms and supporters of palliative care that have identified many needs for a policy development. The lack of palliative care policy in the United States leaves a large gap where providers are not sufficiently taking care of the patients to their best ability. Policy supporting palliative care will ensure equal access to affordable medications, treatments, and lessen suffering (Stjernswärd,

Foley & Ferris, 2007). In order to showcase palliative care as a basic human right and benefit to patients, supporters of this topic need to come together to governmental leaders with research and stakeholder support to create a policy ensuring all patients are afforded the right to access palliative care.

Essential VI: Interprofessional collaboration for improving patient and population health outcomes. Essential six focuses upon the importance of an interprofessional team to provide collaborative total care to patients and healthcare (AACN, 2006). An interprofessional team was organized at the project site to provide the best possible patient outcomes for the palliative care evaluation tool and referral generation. The continuation of this team will allow for better patient quality of life. For future development, it would be potentially beneficial to collaborate with a palliative care team of advanced nurse practitioners that could come to the project site to give an educational presentation on the benefits their service could provide with this specific patient population.

Essential VII: Clinical prevention and population health for improving the nation's health. The seventh essential focuses on health promotion in different patient populations through preventive healthcare measures (AACN, 2006). Two of the goals from the COPD National Action Plan are to empower people, families, and caregivers of those with COPD and work with all parties to acknowledge and decrease the burden of COPD (National Heart, Lung, and Blood Institute (NIH), 2018). Another goal is to improve the quality of care COPD patients receive regarding treatment and management of the disease (NIH, 2018). Using a framework such as palliative care that supports a patient's desires regarding their care prevents problems and repeated admissions, thus consequently the patient's quality of life improves (Dobrina, Tenze, & Palese, 2014). Workable solutions that can help the population reach these goals are increased

education in healthcare for patients and providers regarding palliative care and what it is.

Aldridge et al. (2016), suggests that along with curative and restorative care for patients diagnosed with COPD, palliative care and treatments should be offered as well during physician evaluation.

Essential VIII: Advanced nursing practice. Essential eight focuses on improving patient outcomes by demonstrating the advanced levels of clinical knowledge and experience with APRNs and the DNP. The use of APRNs and DNPs who are experienced in quality improvement can help expand this project in the future and explore potential further benefits associated with better patient quality of life with COPD and chronic disease. Further research, development, and QI projects give support to better patient care and advancement.

Summary

There are many implications for nursing practice that can be accomplished from the findings of this QI project. These implications can all be related or referenced to the eight AACN essentials for DNPs. These implications are valuable for the evaluation of this QI project and generating more projects with similar patient value and positive outcomes.

Chapter Eight: Final Conclusions

With a constant growing and aging population, patients dying with COPD without access to palliative care is a rising problem. This project has outlined the importance of this issue and possible ways to combat patient suffering. Final findings and conclusions from this project are outlined in this chapter.

Significance of Findings

This project has shown clinical significance in improving patient care by using evidenced based resources. Participants affected were given the opportunity to experience palliative care and explore what potential benefits it has to offer patients. This benefit has a significant impact on improving a patient's quality of life and allowing them to feel empowered about their healthcare decisions. Staff and providers benefited from this project by providing them with education about palliative care and the positive affect it has on patients living with COPD. This education can be useful not only for their future interactions with patients by helping to identify patients who may need this service, but also within their interaction in the community and families who may also be affected by COPD. The practice benefits from this project by having increased interprofessional collaboration with palliative care team members and increasing patient satisfaction with team centered care.

Project Strength and Limitations

The staff's readiness for adaptation of a new initiative is a primary strength for the practice. Current research has shown positive impacts on utilizing palliative care in patients with COPD to better manage their disease, improve patient quality of life and decrease unnecessary doctors' visits and hospitalizations. The new idea of palliative care for conditions beyond cancer including COPD is a newly explored topic that has initially shown benefit and warrants

continued research and exploration. This same new idea is also a barrier. There is minimal research on the topic, thus allowing for a limited literature review. This project also has highlighted barriers associated with provider knowledge, patient knowledge, terminology misconception, and misperception of what palliative care is. Education is key. Future knowledge development and educational opportunities will allow this project and concept to soar to new heights in the future.

Project Benefits

A quality improvement project is used to change a current practice to benefit the population for the better. Many QI projects focus on patient care and satisfaction. Patient satisfaction is a core reason for evidenced based practice updates and project expansion. This project benefits patient's quality of life, which ultimately is a provider main goal. This project has benefited providers by increasing their education on the issue of chronic disease management and how they can utilize interdisciplinary teams to focus on the total health of a patient and not one specific aspect. The provider's and staff verbalized the benefit of increasing interprofessional collaboration with palliative care with the COPD population based on the project outcomes and discussions with patients. A financial benefit is an upcoming topic that needs to be explored further based on the continuation of this project. Ideally, patient cost would be reduced based on avoidance of hospital admissions with the reduction of COPD exacerbation with the team approach of primary care and palliative care for disease management.

Recommendations for Practice

Future recommendations include further research and topic exploration. More research is necessary to continue to advance COPD and palliative care. Data needs to be collected on how patients benefit from this service. How much money can be saved by utilizing an

interprofessional team for patient care versus a single practitioner? Analyzing cost savings is a future project that could certainly have a large impact on how healthcare is delivered.

Final Summary

COPD is an incurable disease that affects millions of people annually. As our population ages, more and more people will develop COPD and become negatively affected by its disease process and trajectory. Palliative care is not a cure; however, it is an underused resource that can make a positive impact on a patient living with COPD. It can ease disease progression, symptoms, and improve patient's quality of life. Introducing palliative care at a primary care level early in the disease process will provide the patient with access to interprofessional team collaboration for disease management. Research shows encouraging development and results with palliative care introduction early in the disease process of COPD. Continued research is needed to optimize outcomes and provide support for provider education. This project's findings further reinforce and support the importance and impact palliative care and COPD have on each other through evidence based practices, research, and theory; which will hopefully improve patient's lives now and in the future.

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Appendix A. Literature Review Matrix

Purple: Palliative Care in COPD

Blue: Early Identification

Green: Symptom and Disease Management

Article (APA Citation)	Study Design	Level of Evidence (I to VII)	Data/Findings	Conclusion	Use of Evidence in EBP Project Plan
Meffert, C., Hatami, I., Xander, C., & Becker, G. (2015). Palliative care needs in COPD patients with or without cancer: An epidemiological study. <i>European Respiratory Journal</i> , 46(3), 663-670. doi: 10.1183/13993003.00987-2015	Epidemiological Study	Level VI	The findings in this literature review determined the need for palliative care in patients with COPD as it is an under studied benefit for society. Data was collected from 39 849 records from January 2004 to May 2005 and COPD was the discharge diagnosis in 1455 of these patients	Out of the 1455 patient records studied, 9.1% of them had palliative care needs at time of discharge. The patients needing palliative care at time of discharge had a significantly longer hospital stay than the patients without palliative care needs and more of them died during their hospital stay. These results show the significant need for palliative care to be utilized in COPD patients	This study shows the importance of implementing palliative care at an early stage of COPD.
Hayle, C., Coventry, P. A., Gomm, S., & Caress, A. L. (2013). Understanding the experience of patients with chronic obstructive pulmonary disease who access specialist	Qualitative Study	Level VI	The goal of this study was to evaluate patients with COPD firsthand experiences with the use of specialist palliative care access. The study was performed in North West England and included patients that had a primary diagnosis of COPD. There was a total of 18 patients interviewed. These patients had accessed specialist palliative care within one city in North West England for greater than 1 week with inpatient	The results showed an increased sense of self-worth, improvement in psychological wellbeing, and confidence were improved after receiving palliative care.	This study used interviews to gain access to how patient's felt after having the ability to experience palliative care. Increased patient wellbeing provides positive feedback for providers.

<p>palliative care: A qualitative study. <i>Palliative Medicine</i>, 27(9), 861-868. doi: 10.1177/0269216313486719</p>			<p>service or 1 month with outpatient service.</p>		
<p>Duenk, R. G., Verhagen, C., Dekhuijzen, P. N. R., Vissers, K. C. P., Engels, Y., & Heijdra, Y. (2017). The view of pulmonologists on palliative care for patients with COPD: A survey study. <i>International Journal of Chronic Obstructive Pulmonary Disease</i>, 12, 299. doi: 10.2147/COPD.S121294</p>	<p>Survey</p>	<p>Level VI</p>	<p>A national survey for pulmonologists in the Netherlands to take to obtain their view on the use of palliative care for patients with COPD. Out of 804 pulmonologists that received the survey, 254 completed it and their results all indicated palliative care for patients with COPD is needed.</p>	<p>To encourage pulmonologists to timely initiate palliative care in COPD, we recommend conducting further research into more specific identification criteria. Furthermore, pulmonologists should improve their skills of palliative care, and the members of the SPCT should be better informed about the management of COPD to improve care during hospitalization. Communication between pulmonologist and general practitioner should be emphasized in training to improve palliative care in the ambulatory setting.</p>	<p>This survey not only emphasizes the importance of palliative care in COPD, it also shows evidence of support from the pulmonology community.</p>
<p>Beernaert, K., Deliens, L., De Vleminck, A., Devroey, D., Pardon, K., Van den Block, L., &</p>	<p>Qualitative Study</p>	<p>Level VI</p>	<p>This study was designed to explore the barriers to and facilitators of the early identification by family physicians of the palliative care needs. There were six focus groups (four with family physicians and two with community nurses and 18 interviews with patients</p>	<p>Key barriers and facilitators found relate to communication styles, the perceived role of a family physician, and continuity of care. Family physicians do not systematically assess non-acute care needs, and patients do not mention them or try to mask them from the</p>	<p>This study outlines the importance of changing primary care physicians' perceptions and usage of palliative care and the importance of palliative care consults in the forefront of chronic illness, not in the terminal phase.</p>

<p>Cohen, J. (2014). Early identification of palliative care needs by family physicians: a qualitative study of barriers and facilitators from the perspective of family physicians, community nurses, and patients. <i>Palliative Medicine</i>, 28(6), 480-490. doi: 10.1177/0269216314522318</p>			<p>with cancer, chronic obstructive pulmonary disease, heart failure, and dementia were held.</p>	<p>family physician. This is embedded within a predominant perception among patients, nurses, and family physicians of the family physician as the person to appeal to in acute and standard follow-up situations rather than for palliative care needs. Family physicians also seemed to pay more often attention to palliative care needs of patients in a terminal phase.</p>	
<p>Snyder, S., Hazelett, S., Allen, K., & Radwany, S. (2012). Physician knowledge, attitude, and experience with advance care planning, palliative care, and hospice: Results of a primary care survey. <i>American Journal of Hospice & Palliative</i></p>	<p>Survey</p>	<p>Level VI</p>	<p>An investigator-generated survey to evaluate knowledge, attitudes, experience of primary care physicians (PCPs) and the utilization of advanced care planning. PCPs in community outpatient offices in Northeastern Ohio were the study group using internal medicine and family medicine physicians. 372 surveys were sent statistical analyses were performed on 123 surveys who met the inclusion criteria.</p>	<p>97.5% of physicians expressed comfort in discussing advanced care planning, however there was significant decrease in the number of patients that received this communication. Physicians having this knowledge embraced the results and felt the need to increase their ability to communicate about advanced care planning with their patients.</p>	<p>A positive impact survey to show physician willingness to support and discuss palliative care with their patients and recognizing the importance of those conversations.</p>

<p><i>Medicine</i>, 30(5), 419-424. doi: 10.1177/1049909112452467</p>					
<p>Houben, C. H., Spruit, M. A., Groenen, M. T., Wouters, E. F., & Janssen, D. J. (2014). Efficacy of advance care planning: A systematic review and meta-analysis. <i>Journal of the American Medical Association</i>, 311(7), 477-489. doi: 10.1016/j.jama.2014.01.008</p>	<p>Systematic Review Meta-Analysis</p>	<p>Level I</p>	<p>A systematic review and meta-analysis on the efficacy of advance care planning in the adult population. There was a total of 26,628 articles found in their literature review search with 56 articles being identified as qualifying for their research of patients with different chronic diseases.</p>	<p>The results showed providers that discussed advanced care planning for patients with chronic disease, such as COPD, had a higher increase in advanced directive completion, discussions about advanced care planning, preference of care levels for patients and improvement on patient and family outcomes.</p>	<p>This study shows the benefits of early identification of palliative care for patients with chronic illness.</p>
<p>Thoonsen, B., Engles, Y., Rijswijk, E. V., Verhagen, S., Weel, C. V., Groot, M., & Vissers, K., (2012). Early</p>	<p>Literature Review</p>	<p>Level V</p>	<p>The aim of this study was to systematically develop a tool for primary care physicians with which they can identify patients with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and cancer respectively, who could benefit from proactive palliative care.</p>	<p>The three-step procedure was used to develop sets of indicators for the early identification of CHF, COPD, and cancer patients who could benefit from palliative care. The RADboud indicators for Palliative Care Needs (RADPAC) is the first tool developed from a combination of scientific evidence and practice</p>	<p>This study provides the tool utilized for this project and shows its validity and process of development.</p>

<p>identification of palliative care patients in general practice. <i>British Journal of General Practice</i>, 62(602). doi: 10.3399/bjgp12X654597</p>			<p>A three-step procedure, including a literature review, focus group interviews with input from the multidisciplinary field of palliative healthcare professionals.</p>	<p>experience that can help GPs in the identification of patients with CHF, COPD, or cancer, in need of palliative care. Applying the RADPAC facilitates the start of proactive palliative care and aims to improve the quality of palliative care in general practice.</p>	
<p>Weingaertner, V., Scheve, C., Gerdes, V., Schwarz-Eywill, M., Prenzel, R., Bausewein, C., ... & Kannenberg-Otremba, B. (2014). Breathlessness, functional status, distress, and palliative care needs over time in patients with advanced chronic obstructive pulmonary disease or lung cancer: A cohort study. <i>Journal of Pain and Symptom Management</i>, 48(4),</p>	<p>Cohort study</p>	<p>Level III</p>	<p>A cohort study of patients with stage three or four COPD to describe and compare the effects of breathlessness, functional status, distress, and palliative care needs in these patients versus patients with lung cancer. Telephone interviews were conducted monthly using data from scores from different quality measure outcome scales for one year. A total of 82 patients (50 COPD and 32 lung cancer) were included.</p>	<p>Patients with COPD perceived had higher levels of distress and breathlessness that steadily worsened over time versus the lung cancer patients experiencing this phenomenon when they were closer to death. Palliative care needs of patients with COPD are like those with lung cancer and even more indicated due to the higher severity of breathlessness and distress compared to patients with lung cancer</p>	<p>This study shows the need for palliative care in other areas than cancer. Palliative care was first designed for cancer patients and this study highlights other areas that would benefit from palliative care.</p>

569-581. doi: 10.1016/j.j painsymma n.2013.11.0 11					
MacPherson, A., Walshe, C., O'Donnell, V., & Vyas, A. (2013). The views of patients with severe chronic obstructive pulmonary disease on advance care planning: A qualitative study. <i>Palliative Medicine</i> , 27(3), 265-272.	Qualitative Study	Level VI	A qualitative study looking at the views of patients regarding advanced care planning who have severe COPD. The goal was to integrate improved communication and management of treatment for these patients. The form of data collections was incorporating audio recorded semi-structured interviews. The participants were patients with severe COPD from primary and secondary care settings	Patients did not feel they knew enough information about their disease and its prognosis to know what questions for further discussion were warranted with their providers	This study shows the importance of knowledge from patients regarding their illness and knowing all the options available for treatment of the disease.
Aldridge, M. D., Hasselaar, J., Garralda, E., Van der Eerden, M., Stevenson, D., McKendrick, K., ... & Meier, D. E. (2016). Education, implementation, and policy barriers to greater integration of palliative care: a	Literature Review	Level V	A literature review using PubMed from 2005 to March 2015 amplified by primary data collected from 405 hospitals included in the Center to Advance Palliative Care's National Palliative Care Registry for years 2012 and 2013 (Aldridge et al., 2016). The literature review identified lack of adequate education regarding palliative care discussion, having the ability to correctly identify patients appropriate for palliative care referral, and the lack of adequate reimbursement for palliative care amongst other barriers.	The results of this literature review outlined several educational opportunities and policy changes to help overcome the barriers associated with integration of palliative care which would benefit the growing population and increased prevalence of chronic disease.	This study outlined the barriers expected to be faced during project implementation and how to be educate the population about palliative care.

literature review. <i>Palliative Medicine</i> , 30(3), 224-239					
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Appendix B.

Representative Skill Sets for Primary and Specialty Palliative Care.

Primary Palliative Care

- Basic management of pain and symptoms
- Basic management of depression and anxiety
- Basic discussions about
 - Prognosis
 - Goals of treatment
 - Suffering
 - Code status

Specialty Palliative Care

- Management of refractory pain or other symptoms
- Management of more complex depression, anxiety, grief, and existential distress
- Assistance with conflict resolution regarding goals or methods of treatment
 - Within families
 - Between staff and families
 - Among treatment teams
- Assistance in addressing cases of near futility

Appendix C.

Box 2. The RADboud indicators for Palliative Care needs (RADPAC)**Congestive heart failure**

1. The patient has severe limitations, experiences symptoms even while at rest; mostly bedbound patients (NYHAa IV)
2. There are frequent hospital admissions (>3 per year)
3. The patient has frequent exacerbations of severe heart failure (>3 per year)
4. The patient is moderately disabled; dependent; requires considerable assistance and frequent care (Karnofsky score $\leq 50\%$)
5. The patient's weight increases and fails to respond to increased dose of diuretics
6. A general deterioration of the clinical situation (oedema, orthopnoea, nycturia, dyspnoea)
7. The patient mentions 'end of life approaching'

Chronic obstructive pulmonary disease

1. The patient is moderately disabled; dependent; requires considerable assistance and frequent care (Karnofsky score $\leq 50\%$)
2. The patient has substantial weight loss ($\pm 10\%$ loss of body weight in 6 months)
3. The presence of congestive heart failure
4. The patient has orthopnoea
5. The patient mentions 'end of life approaching'
6. There are objective signs of serious dyspnoea (shortness of breath, dyspnoea with speaking, use of respiratory assistant muscles and orthopnoea)

Cancer

1. Patient has a primary tumour with a poor prognosis
2. Patient is moderately disabled; dependent; requires considerable assistance and frequent care (Karnofsky score $\leq 50\%$)
3. There is a progressive decline in physical functioning
4. The patient is progressively bedridden
5. The patient has a diminished food intake
6. The presence of progressive weight loss
7. The presence of the anorexia-cachexia syndrome (lack of appetite, general weakness, emaciating, muscular atrophy)
8. The patient has a diminished 'drive to live'

*NYHA = New York Heart Association.

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Appendix D.

No. 9

THE KARNOFSKY PERFORMANCE STATUS SCALE • *Mor et al.*

2003

TABLE 1. Karnofsky Performance Status Index

General category	Index	Specific criteria
Able to carry on normal activity; no special care needed.	100	Normal, no complaints, no evidence of disease.
	90	Able to carry on normal activity, minor signs or symptoms of disease.
	80	Normal activity with effort, some signs or symptoms of disease.
Unable to work, able to live at home and care for most personal needs, varying amount of assistance needed.	70	Cares for self, unable to carry on normal activity or to do work.
	60	Requires occasional assistance from others but able to care for most needs.
	50	Requires considerable assistance from others and frequent medical care.
Unable to care for self, requires institutional or hospital care or equivalent, disease may be rapidly progressing.	40	Disabled, requires special care and assistance.
	30	Severely disabled, hospitalization indicated, death not imminent.
	20	Very sick, hospitalization necessary, active supportive treatment necessary.
	10	Moribund.
	0	Dead.

7/18/2018

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Author: Vincent Mor, Linda Laliberte, John N. Morris, et al

Publication: Cancer

Publisher: John Wiley and Sons

Date: Jun 28, 2006

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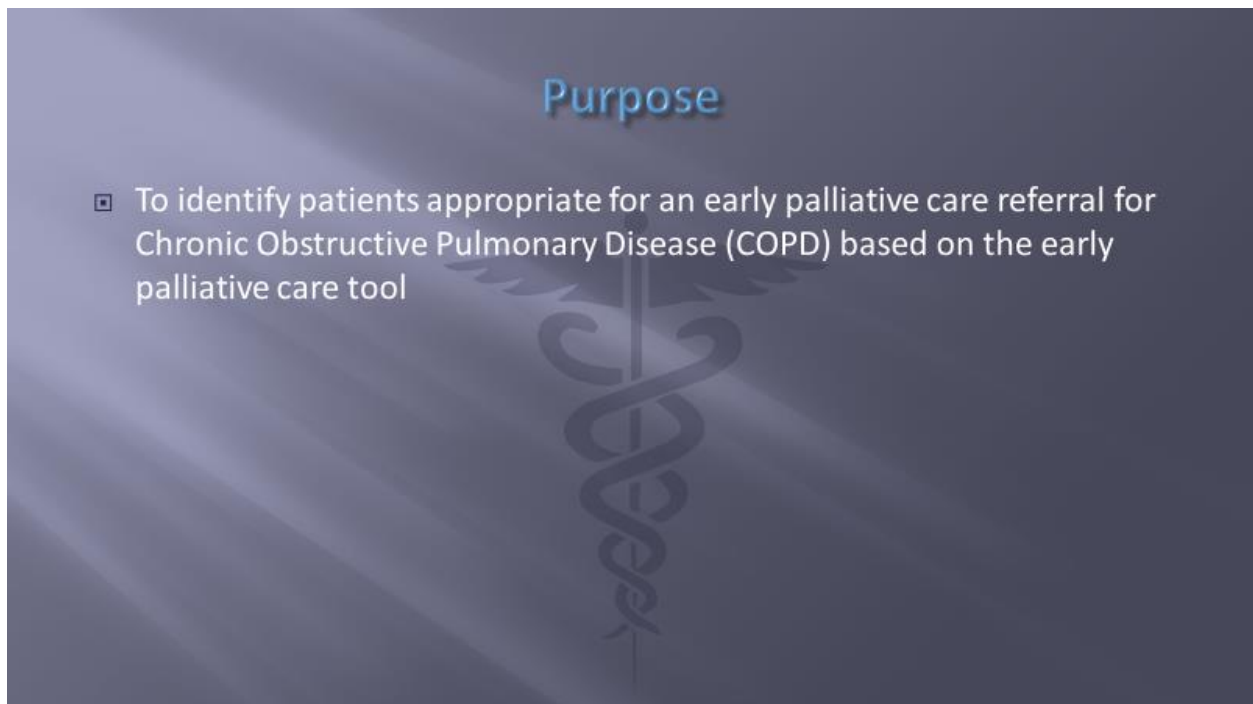
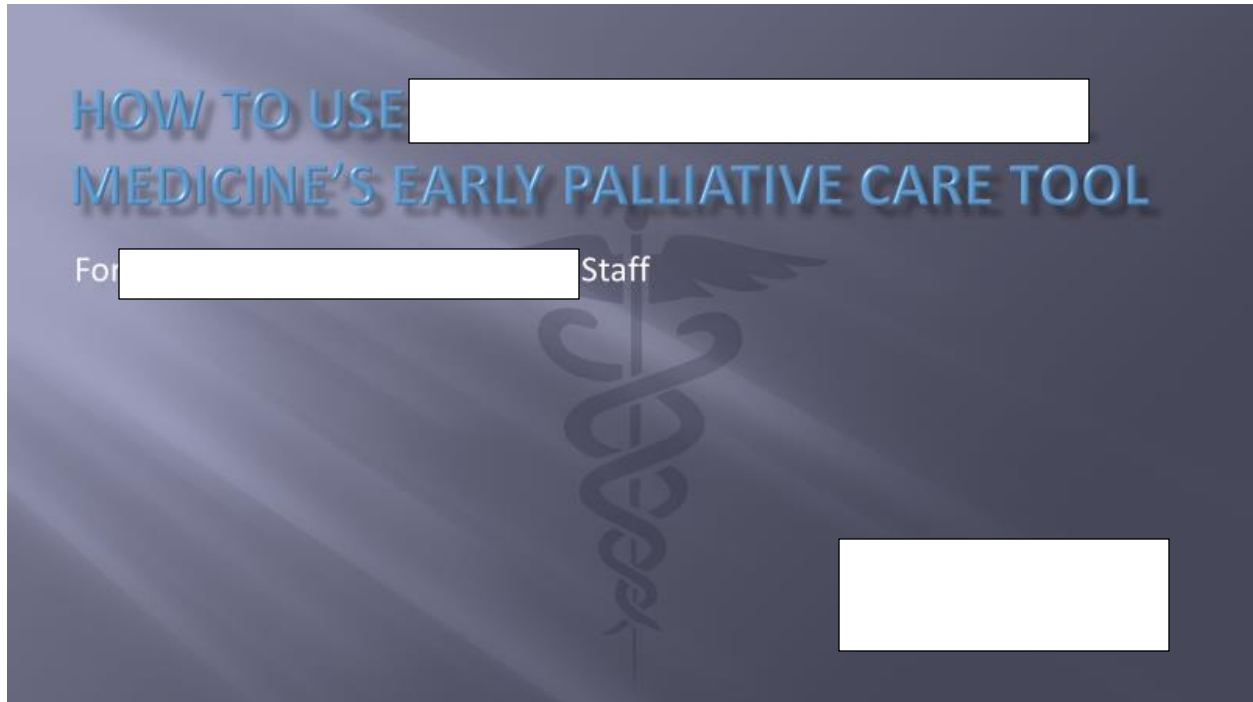
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Appendix E.

Patient	COPD Dx	Frequency of Care (ie. every 3-4 month visits)	10% weight loss from baseline weight	Diagnosis of CHF, 1 or more Pulmonary/CHF Hospitalizations	Objective signs documented (SOB, Dyspnea, Orthopnea, etc.)	Percentage of Criteria Met
1	Y	Yes	No	Yes	Yes	80%
2	Y	No	No	No	Yes	40%
3	Y	Yes	Yes	No	Yes	60%
4	Y	No	No	No	Yes	20%
5	Y	No	No	No	Yes	40%
6	Y	Yes	Yes	Yes	Yes	100%
7	Y	Yes	No	Yes	No	60%
8	Y	No	No	No	No	0%
9	Y	Yes	No	No	Yes	60%
10	Y	Yes	No	Yes	Yes	80%
11	Y	Yes	No	No	Yes	60%
12	Y	Yes	No	No	No	20%
13	Y	Yes	Yes	Yes	Yes	100%
14	Y	Yes	No	Yes	Yes	80%
15	Y	Yes	No	No	Yes	40%
16	Y	No	No	No	No	0%
17	Y	Yes	No	No	Yes	60%
18	Y	No	No	No	No	0%
19	Y	Yes	Yes	No	Yes	80%

Appendix F.



Process Steps

- ▣ Identify patients diagnosed with COPD in the EMR
- ▣ Out of that set of patients, identify which patients have frequent scheduled office visits for chronic disease management (ie. Every 3-4 months)
- ▣ Compare baseline weight to current weight and identify patients who have a 10% or more weight loss documented.
- ▣ Identify whether these patients are diagnosed with Congestive Heart Failure (CHF)

Process Steps

- ▣ Identify whether that patient has had a hospitalization related to COPD or CHF
- ▣ Identify if there are objective signs of shortness of breath, shortness of breath while speaking (dyspnea), use of accessory muscles, or inability to lay down flat (orthopnea)

Appendix G.

Early Palliative Care Initiation in Patients with COPD

- **Why COPD?** Many times, patients come into the hospital with a COPD exacerbation who are ultimately unable to wean off the level of oxygen required and likely will be unable to leave the hospital. I have found that many of these patients are in Stage 3 or 4 of the disease and have not received a palliative care consult as an outpatient. When a consult is finally made within the hospital, it's too late. Patients and families are shocked to learn about their disease trajectory and how it ultimately will be the cause of their mortality.
- **How are we going to do this?** have identified 55 patients within your office who are 65 and older and have a COPD diagnosis. In the search criteria, we added the CPT for transition of care and found 19 patients who would qualify for a palliative care consult based on their change in level of care and progression of illness. I will develop a policy to generate a palliative care consult for these patients. I am still in the process of figuring out how we can flag these patients on their chart to alert the provider of the need for an appropriate referral.
- **What I need from you?** I need your permission to utilize your patient base for data and research to see how many palliative care consults have been initiated before and after the policy implementation. I would also need your willingness to discuss this with your patients when a consult has been deemed appropriate. I would appreciate any anticipatory guidance you feel could be relevant and contributive to this project.
- **Questions?**

Appendix H.



Projects Requiring IRB Review vs. Quality Improvement, Quality Assessment, or Quality Assurance: A Worksheet to Assist in Determining When IRB Review is Required

Use this worksheet to help determine whether a proposed activity or project involving humans or their individually identifiable information is considered research needing IRB review or a quality related activity that would not require IRB approval.

Melissa Peeler, DNP 11 Student

	True	False
The PRIMARY purpose of the proposed activity or project is to learn about or learn from existing care to IMPROVE what is done here at the local institution with regard to patient outcomes, efficiency, cost, patient/ staff satisfaction, etc.		
The activity or project would be carried out even if there was possibility of publication in a journal or presentation at an academic meeting. (**Please note that answering "True" to this statement does not preclude publication of a quality activity.)		
The activity or project falls under well-accepted care practices/ guidelines.		
The activity or project involves no more than minimal risk procedures meaning the probability and magnitude of harm or discomfort anticipated are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.		

If any of the above answers is "False", a submission for IRB approval is most likely needed. If all contact the Office of Research Integrity and Compliance (ORIC) with any

questions at 252-7442914 or umcirb@ecu.edu. If you would like the ORIC to verify that an activity or project is not human subject research, please provide this form along with a summary of your activity to the ORIC at umcirb@ecu.edu and the following page will be completed and returned to you for your records.

Project title: Early Palliative Care Initiation in COPD Patients

Summary of activity including information about project aims/ objectives, methods for carrying out the project and information about data to be collected (you may instead attach documentation describing your proposal):

See attached proposal

*** The ORIC will contact you if any further information is needed to make this determination. Please note that if the ORIC determines the activity is not human subject research, then any presentation, publication, etc. should not refer to the activity as "human subject research", "exempt research" or "expedited research".

ORIC determination:

Not Human Research: The ORIC has determined that based on the description of the project, approval by the IRB is not necessary. Any changes or modifications to this project may be discussed with the ORIC at that time to ensure those changes do not elevate the project to human research that would need IRB approval.

[3 Human Research: This project requires review by the IRB prior to initiation. An application in the electronic IRB submission system should be submitted.

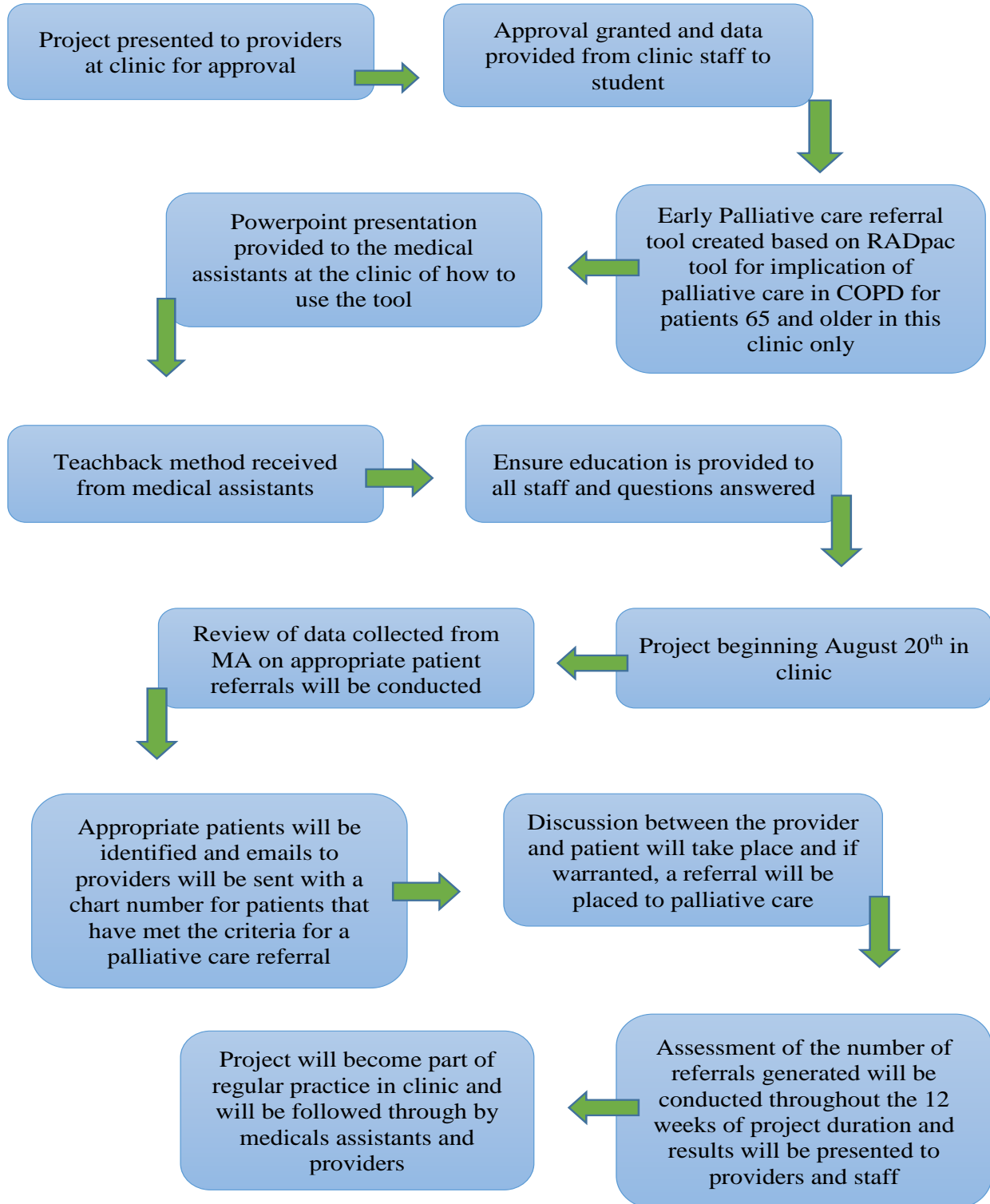
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Date:

Appendix I.

Algorithm for Early Palliative Care Referral for Patients with COPD Project

Implementation



Appendix J.

Director signature of approval

1/1

11. Does the project provide a foundation for future practice scholarship and interprofessional leadership?				Yes, having the ability to provide patients the opportunity to understand their illnesses and goals of care will allow for future practice scholarship and interprofessional leadership within and outside of the proposed clinical site.
---	--	--	--	---

DNP I Faculty comments/discussion: Met 100% OR Did not meet 100%. Explain:

Action Plan: What does the student need to do to meet the unmet needs? Student action plan should include the specific areas needing additional development with specific dates of completion. Student will continue to refine the project proposal until approved:

Faculty Reviewer Signature: _____ Signature: _____ Date: _____

As the DNP Program Director, I have reviewed this project and Approve OR Do not approve this project.

Comments:

Program Director Signature

Updated March 2017/mts/BS

Peeler_approval.jpg

6/18/2018

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Appendix K.

Site Letter of Approval



Date: 04/16/2018

To Whom It May Concern,

We a  DNP Project titled ("Early Palliative Care Referral for Patients with Chronic Obstructive Pulmonary Disease"). Mrs. Peeler has our organizational support and approval to conduct her project within our institution. We understand that for Mrs. Peeler to achieve completion of the DNP program, dissemination of the project will be required by the University, which will include a public presentation related to the project and a manuscript submission will be encouraged. Our organization has deemed this project as a quality improvement initiative and not requiring institutional IRB review.

