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Creating a Pain Management Clinical Practice Guideline for Hospice Patients

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Walden University

College of Nursing

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Tiffany Bowland

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Walden University
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Abstract

Creating a Pain Management Clinical Practice Guideline for Hospice Patients

by

Tiffany Bowland

MS, Walden University 2018

BS, Walden University 2016

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

November, 2021

Abstract

Current evidence-based research shows that pain in hospice patients is a growing problem. A gap in practice was identified as the current clinical practice guideline (CPG) in a hospice center in South Carolina was outdated and not being employed. A literature review revealed that updated CPGs provide better outcomes in pain management for end-of-life care. The project answered the practice-focused question: In the context of hospice, what are current evidence-based strategies for managing pain. The Stettler model and Kolcaba's comfort theory guided the development of the CPG. Three nurse case managers and two physicians participated in the creation of CPG. The Grading of Recommendations, Assessment, Development and Evaluation (GRADE) was used to critically appraise the evidence selected for inclusion in the CPG. Only articles which scored a high or moderate on the GRADE scale were used in the final determination. Twenty scholarly articles were originally reviewed, and ten of those met the inclusion criteria. The updated CPG was developed using the Appraisal of Guidelines and Evaluation (AGREE) II tool consisting of six domains. Using the AGREE II Instrument and the scoring checklist, the CPG was reviewed by an expert panel of hospice physicians. Of the six domains, all domains exceeded the threshold of 70%, indicating acceptance of the domain. In addition, the final domain scored a 100%, which also indicated acceptance of the content of the CPG. It is recommended that the hospice nurses, clinicians, and practitioners implement this updated evidence-based pain management guideline to prescribe pain medications. This CPG has the potential to influence social change by providing adequate pain management for patients at end of life.

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Section 1: Nature of the Project

Introduction

According to current evidence-based research, pain in hospice patients is a growing problem. According to the National Institute of Health (2021), more than 1.6 million Americans received hospice services in 2014, and approximately 60% of them received these services at home. Hospice care emphasizes the deployment of an interdisciplinary care team to support patients and their family in comfort care, pain control, symptom management, and spiritual needs. Chi et al (2018) has found that the patients' pain was undertreated in end-of-life care. For my project, I have updated the clinical practice guidelines (CPG) for pain management in a hospice center in South Carolina. The reason for this choice was that I have seen firsthand that not all patients receive adequate pain management that they deserve at end of life. By creating an updated CPG, I was able to assist physicians, nurse practitioners, and nurses in providing effective care for their patients. This guideline can serve as a means for all hospice facilities, home care services and in-patient units to follow the same practices for end-of-life pain control.

This CPG has the potential to influence social change by providing adequate pain management for patients at end of life. The CPG may generate a positive impact in the health care community that oversees hospice patients in the community. Stakeholders, which include physicians, nurse practitioners and clinical staff, will see positive improvements in their clinical practice when this CPG is implemented. Awareness of

basic tenets of pain management and access to practical references will now allow physicians and nurses to care effectively for their patients at the end of life.

Problem Statement

Statistics have shown that more than 50% of patients with terminal illness experience pain in the end-of-life stage (Hospice and Palliative Nurses Association, 2011). In this practice setting, most patients are treated with the same pain management regimen when they are admitted for hospice service instead of being given orders based on their diagnosis. According to Booker and Haedtke (2016), evidence-based practice (EBP) is not widely used in hospice. Not only is this not patient-centered care, but for a patient to sit in pain waiting for new orders is unethical. There are many patients that are admitted to hospice every week. Some of these patients are dying from natural causes while some of them are suffering from other chronic diseases. Some of these diseases, such as metastatic cancers, can be debilitating.

Pain in hospice patients is a growing problem. At a hospice center located in South Carolina, during the admission process, the same pain management regimen is prescribed for each patient regardless of diagnosis. CPG and EBP in this setting have not been employed for pain management. Thus, the practice problem that was the focus of this project was inadequate pain management at the end of life for patients receiving hospice service. The gap in nursing practice is evident at a hospice center in South Carolina where the CPG is outdated and not consistently followed. There is also no current CPG being used at this facility. EBP is also not being used for pain management in this setting. Professional care providers have identified that effective pain management

is an essential goal in providing end-of-life care (Chi et al, 2018). Despite this universally acknowledged goal, studies of terminally ill patient's pain experiences consistently demonstrate that pain is not adequately managed (Herr, 2015).

This doctoral project holds significance in nursing practice because it is the duty of clinicians to provide seamless pain management to all patients. . An evidence-based CPG is significant to increase the quality of life and pain management for patients who are transitioning into and currently receiving hospice care.

Purpose

There are multiple benefits that could be realized from a Doctor of Nursing Practice (DNP) scholar updating CPG for pain management. An updated CPG has the potential to improve the patient's clinical course, improve patients' quality of life, ease caregiver stress, and improve overall satisfaction. When a person is entering the last stages of life on hospice care, communication and shared decision-making with the dying person and those important to them should not have to be about pain management. Pain should be controlled from the day of admission to hospice care. The DNP prepared nurse, along with the clinical team, can use updated CPG to allow effective pain management to conform to their clinical diagnosis information assessed during admission, instead of using standing orders. Adequate pain management requires the intervention of all disciplines in a holistic approach. Unrelieved pain affects the patient's physical, psychological, social, and spiritual well-being (Chi et al, 2018)

The gap in nursing practice was evident as the current CPG in a hospice office in South Carolina was outdated and not consistently followed. The updated CPG has

assisted in creating an evidence-based source to serve all providers and allow for more standardized pain management for the patients.

This project answered the following practice focused question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?’

The updated CPG has the potential to impact social change by promoting positive patient outcomes. The overall goal was that patients will be more satisfied with pain management resulting in an increased quality of life. An updated CPG for patients has the potential to result in better outcomes, greater quality of life, and a smoother transition allowing for a more peaceful death. The benefit of providing pain medication based on the patient’s need will become apparent and more hospice and home health facilities may adopt this protocol. These changes have the potential for improving the quality of life for many patients and families. This updated CPG can help more than just one hospice facility. Should this CPG prove successful, by increasing patient pain management, this CPG can be shared with other facilities, promoting change in the hospice industry over time.

The gap in nursing practice is evident as the current CPG in a hospice office in South Carolina, was outdated and not consistently followed. The challenge is to assist in adequate pain management for these patients at the end of life and ensure that they are all receiving adequate pain control. This updated CPG is the bridge that answers the practice question and narrows the gap in practice.

Nature of the Doctoral Project

The literature suggested that updated CPG will provide better outcomes in pain management for end-of-life care (Max et al., 2011). The databases that I utilized for this CPG update included Google Scholar, the *New England Journal of Medicine*, CINAHL, PubMed, and Scopus. The year range that I searched was in the last 10 years, 2010-2020, because that provided the most up to date information. The keywords that I utilized in my search included *pain management, hospice, end of life, pain control, and clinical practice guidelines*.

To research and produce this updated CPG, I referred to the Walden University Manual for clinical practice guideline development. This updated CPG was created for a local hospice office in South Carolina. This facility did not have updated CPG for pain management in place. I secured the approval of the facility administrator to use this facility and obtained approval from Walden's Institutional Review Board (IRB). The facility medical director was interested in my clinical practice guideline ideas. There were three nurse case managers, two nurse practitioners and two physicians who had input for this CPG. This facility is currently undergoing policy and procedure changes related to implementing new electronic medical records, and this initiative serves as an opportunity to update the guidelines being used. The facility and implementation of the new medical records system can be defined as resources to support the practice problem.

I developed the updated CPG using the Appraisal of Guidelines and Evaluation (AGREE) II tool. I obtained permission from the facility to collect input from the physicians, nurses, nurse practitioners, administrator, nurse managers, and other clinical

leaders and gain access to the current policies, data, and admission guidelines. I reviewed how the policies of the facility are developed and reviewed literature on the most current clinical trials, evidence-based articles, and other literature sources that could help in updating the hospice agency policy. This updated CPG is the bridge that answers the practice question and fills in the gap in practice.

Significance

The stakeholders for this updated CPG are the health care workers and health care providers. They are the nurses, physicians, nurse practitioners, physician assistants, and all other clinical staff who work in patient care. Additional stakeholders are the patients and family members. The effective management of pain is a time-honored goal of healthcare. From the time of Hippocrates to the present-day Code of Medical Ethics of the American Medical and Nursing Association, the assessment and management of a patient's pain has been the primary responsibility of every practitioner (Brockis,2011). According to Brockis (2011), effective pain management for a terminal patient population is possible according to medical experts, but there are several misconceptions about hospice and end-of-life care that persist in the medical field. Until these misconceptions and myths are refuted and physicians, nurses, patients, and their families are aware of the facts surrounding pain management in hospice, many patients will continue to experience end-of-life pain. Pain relief should always be the top priority in the treatment of hospice patients. Too much emphasis on treating other symptoms or trying to medically manage the underlying disease in hospice care can mean that terminally ill patients will have to wait needlessly to receive adequate pain management.

Allowing a person to endure pain when their pain can be managed and relieved violates the principle of beneficence because the provider is not preventing pain and therefore not acting in the best interest of the patient. It also violates the principle of nonmaleficence because it is causing harm and sometimes injury to the person.

This project contributes to nursing practice. Despite advances in understanding pain physiology and available pharmacotherapies, many patients with terminal illnesses such as cancer report untreated or undertreated pain (Carlson, 2017). Hospice programs are geared towards providing relief from pain, both physical and emotional for the patient and their family. The purpose behind hospice care is to make the time that hospice patients have left as comfortable, dignified, and enjoyable as possible and to allow them the comfort they need to die with dignity. The goal of hospice care is not to prolong life or to medically manage patients' chronic conditions, the goal is to provide patients with a high-quality end of life.

Other stakeholders are the patients and their families as pain management affects them just as it affects the clinician. Pain management should remain a high priority so that higher quality of life can be enjoyed by the patients on hospice services. Although death is inevitable for everyone, it should not have to be painful when there is relief available. Many patients experience significant pain in the final months of life. In addition to wanting to preserve as much quality of life as possible, most patients express a preference to die outside of acute care settings, and a key element to achieving these goals is adequate pain management and being at home with their families.

This updated CPG has transferability to many other locations, not just the facility for which it was created. This updated CPG can be used as a guide in other hospice offices, home health agencies, inpatient hospice units, and in physician offices. This CPG has the potential to influence social change by providing effective pain management to patients at the end of life. The CPG has the potential to generate a positive impact to the health care community that oversees hospice patients in the community. Stakeholders, who are patients, families, and staff, have seen positive improvements in their care since this CPG has been implemented.

Summary

In Section 1, I discussed the problem statement, project purpose, nature of the problem, gap in practice, and significance of the project. I showed which stakeholders have benefited from an updated CPG and how it has impacted social change. In Section 2, I discuss potential models and theories, as well as the relevance to nursing practice and my role as the DNP student. I also introduce the project team and discuss their role in this DNP project.

Section 2: Background and Context

Introduction

The gap in nursing practice at this hospice office in South Carolina is the lack of a CPG addressing pain management in patients admitted for end-of-life care. More specifically, there is no CPG used in this facility. EBP is also not being used for pain management in this setting. Thus, this project answered the following practice focused question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?

The updated CPG has the potential to impact social change by promoting positive patient outcomes. The purpose of this DNP project was to develop a clinical practice guideline update for controlling pain in hospice patients receiving end-of-life care. The goal of this project was to provide the clinical site with a clinical practice guideline that would support the clinical teams' efforts to manage pain effectively based on the diagnosis of the patient. In this section, I discuss the Stettler model, relevance of the project to nursing practice, the local background and context, and my role as the DNP student.

Concepts, Models, and Theories

This project utilized the Stettler model (Coyne et al., 2018). The Stettler model enables practitioners to assess how research findings and other needed evidence are implemented into clinical practice. This model aids examination of how to utilize evidence to create the change needed to foster patient-centered care. This model has five phases to follow. Phase 1 consists of identifying the need for change. Phase 2 validates

the evidence and quality of the evidence to deem whether there is a good fit in relation to the project. In Phase 3, the evidence for change is summarized and evaluated. The project team determined whether the evidence was acceptable to be applied practice. In Phase 4, The project team developed the “how to” for implementation and identified the practice implications to justify creating the change. Finally, in Phase 5, the team identified the expected outcomes of implementing the project and will then determine whether the goals of the EBP were achieved (see Coyne et al, 2018). The team used all four of the following nursing concepts for this CPG update: the person, environment, health, and nursing (Nikfarid et al, 2018).

The National Institute of Health (2021) surveyed 348 patients in 16 hospice settings. The researchers found that 76% of these patients experienced pain, with frequent and severe symptoms more prominent in patients with less than 15-day stays. This is a concern given reports that suggest 70%–90% of all hospice patients both at home and in facilities could achieve pain relief with the implementation of existing evidence and CPG (Chi et al., 2018).

Next, I define some of the terminology used in this DNP project:

Hospice patient: A patient who is in the last 6 months of life and is admitted to hospice care for end-of-life management (Carlson et al., 2017).

Nurse case manager: A registered nurse who cares for admitted hospice patients in their home or at a facility (Scott-Findlay, 2006).

End of life: The last 6 months of a patient’s life. A patient is in end of life when their prognosis is less than 6 months (Carlson et al., 2017).

Admission standing orders: Blanket standing orders used during a patient admission to start care (Munasinghe et al., 2011).

Palliative care: Patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering (Carlson et al, 2017).

End-of-life care: The term used to describe the support and health care given during the time surrounding death (Brockis, 2011).

The Appraisal of Guidelines for Research and Evaluation (AGREE) II instrument (Appendix A) is a widely used standard for assessing the methodological quality of practice guidelines (www.agreetrust.org) This tool was used in this CPG update to assess and evaluate the quality of the evidence. The AGREE instrument, developed by the AGREE Enterprise, is a quantitative method for evaluating CPGs. The AGREE instrument is a tool designed primarily to help guide developers and users in assessing the methodological quality of guidelines.

Kolcaba's comfort theory was used to guide the development of the CPG for the DNP-prepared nurse (Coelho et al., 2016). The theory is considered a middle range theory that has the potential to direct the work and thinking of all healthcare providers. According to Kolcaba's theory, patients can be defined as individuals, families, institutions, or communities in need of health care. (Krinsky et al, 2014). The environment is any aspect of the patient, family, or institutional surroundings that can be manipulated by a nurse or loved one to enhance comfort. Health is optimal functioning in the patient, as defined by the patient, group, family, or community (Krinsky et al., 2014).

Relevance to Nursing Practice

The broader issue in nursing practice is that not all patients are getting the same level of pain relief in hospice care. Patients deserve ethical treatment, and this includes pain relief. The treatment of pain is an ethical obligation. Health science schools, especially medical training institutions such as medical schools and nursing schools, have the duty to teach pain management in a comprehensive fashion. The regulatory measures taught in these schools, which limit access for patients to opioid treatments, are unethical and should be reconsidered (Chi et al, 2018).

According to Carvalho et al. (2018), there is evidence that patients often suffer from uncontrolled and unnecessary pain. This is inconsistent with the *leges artis*, and its practical implications merit a bioethical analysis. A research article written by Herr et al. (2010) stated that one of the goals of hospice care is a pain-free death, which is important to everyone involved in the experience. Although pain outcomes are better in hospice care patients than nonhospice settings, there are gaps and inconsistencies in hospice practices of effective assessment and management of pain, which was the basis for updating the CPG (Chi, 2018).

The CPG that most hospice facilities use was last published in 2018, and it was published by the National Coalition for Hospice and Palliative Care National Consensus Project for Quality Palliative Care. In that CPG, the authors stated that pain and practical needs are systematically addressed with the patient and family throughout the continuum of care. If present, any conditions are treated based upon current evidence and with consideration of cultural aspects of care. However, the CPG fails to address the gap in

pain management between patients with different diagnoses (National Coalition for Hospice and Palliative Care National Consensus Project for Quality Palliative Care, 2018).

According to current evidence-based research, pain in hospice patients is a growing problem. As reported by the National Institute of Health (2019), more than 1.6 million Americans received hospice services in 2014, and approximately 60% of them received these services at home. Hospice care emphasizes the deployment of an interdisciplinary care team to support patients and their family with comfort care, pain control, symptom management, and spiritual needs. Chi et al (2018) has found that the patients' pain was undertreated in end-of-life care.

The National Hospice and Palliative Care Association (Hospice and Palliative Nurses Association, 2011) surveyed 348 patients in 16 hospice settings. The researchers found that 76% of these patients experienced pain, with frequent and severe symptoms more prominent in patients with less than 15-day stays. This is a concern given reports that suggest 70%–90% of all hospice patients both at home and in facilities could achieve pain relief with the implementation of existing evidence and CPG (Chi et al., 2018).

In October 2015, the American Society for Pain Management created a guide for end-of-life pain management in hospice (Herr, 2015). Herr (2015) noted that in a study of elderly nursing home residents who were enrolled in hospice care, the prevalence of pain was close to 60%. Based on findings of a meta-analysis of 52 studies spanning 40 years, Brockis (2011) also found that 64% of patients with advanced cancer have pain. One-third of all patients who were reviewed in these studies rated their pain as moderate or

severe on a pain scale. This finding should be found as unacceptable (Hospice and Palliative Nurses Association, 2011). Despite these findings, this clinical update did not address the gap in pain management between patients who had different diagnoses, and at this facility patients were still being admitted with the recommendation of pain management standing orders on admission.

Local Background and Context

This updated CPG has the potential to impact social change by promoting positive patient outcomes. Families will be more satisfied with the care their loved ones received. Hospitals will be more willing to send referrals to a facility by knowing there is more focus on end-of-life pain management. Patients will have better outcomes, greater quality of life and a smoother transition allowing for a more peaceful death. The benefit has the potential to provide pain medication based on diagnosis, and as the success of the CPG becomes apparent, more hospice and home health facilities will adopt this protocol. This can increase the quality of life for many patients and families. A current clinical guideline can help more than just one hospice facility. Once this CPG has proven successful, this CPG can be shared with other facilities, promoting change in the hospice industry.

This updated CPG was created using a local hospice office in South Carolina. This office does not currently follow any CPG for its pain management protocols. I secured the approval of the facility administrator to use this facility. The facility medical director was very interested in my clinical practice guideline ideas. There were three nurse case managers, two nurse practitioners, and two physicians who had input for this CPG. This facility provided an opportunity to implement my DNP project and to create a

CPG. This facility was undergoing policy and procedure changes related to implementing new electronic medical records, and thus this was a perfect time to update the guidelines being used. This facility was a perfect match to plan the CPG guidelines. The updated CPG aligns with the facility's mission statement: "Our goal is to offer comfort and loving care that allows a patient to feel like family and have the best last days of their life possible." Updating the CPG has allowed the facility's mission to come alive through reducing the burden of pain and increasing the quality of life.

Federal regulations Condition of participation: Initial and comprehensive assessment of the patient, 42 CFR Section 418.54 states that: "The medical director ... assumes overall responsibility for the medical component of the hospice's patient care program." This would include adequate pain management for all patients admitted to service. Federal article 42 CFR Section 418.50 (2015) states: "A hospice must make drugs routinely available on a 24-hour basis, to include pain management medications." This updated CPG would assist in ensuring the facilities are federally compliant with these regulations. Currently there are no state regulations that would apply to this updated CPG.

Role of the Doctor of Nursing Practice Student

The DNP nurse has a vested interest in the clinical course of each patient. In hospice care, this includes adequate and timely pain control for all. Being a major contributor to the clinical team, the DNP nurse oversees the advanced planning and implementation of guidelines and policy, for each patient under their care. The DNP student nurse has created an updated clinical guideline, using EBP, new clinical models

for pain management in the hospice patient. The DNP practice prepared nurse has changed the clinical guideline to allow prescription pain medication to be based on clinical diagnosis information on admission instead of standing orders. Good pain and symptom management require the intervention of all disciplines in a holistic approach. Unrelieved pain affects the patient's physical, psychological, social, and spiritual well-being. The DNP student has created, from the best evidence-based articles, newly updated guideline which can assist the care team in bridging the gap in pain management for hospice patients. With the assistance of the facility medical director, nurse practitioners, nursing staff and support staff, the updated CPG was made possible through collaboration, and development.

This updated CPG has the potential for transferability as, this updated CPG may be utilized in many other hospice facilities, not just the facility where it was created. This updated CPG can be used in other hospice offices, home health locations, inpatient hospice units and in physician offices as a guide. Despite advances in understanding pain physiology and available pharmacotherapies, many patients with terminal illnesses, such as cancer, report untreated or undertreated pain, therefore this is the basis for this updated CPG (Booker & Haedtke, 2016).

Role of the Project Team

The health care staff that are responsible for assisting this nurse in the creation of this updated CPG were the physicians at the local hospice office, the nurse case managers, the nurse practitioners, the facility educators, my clinical mentor, and my preceptor for my clinical courses. The facility medical director served as the expert on

this panel. The staff are a part of the project team by means of assisting with evidence-based clinical research, providing input on current policy and procedures for hospice patients, and by providing the current guidelines that the office follows for pain management. The DNP student has utilized the DNP essentials to assist in these change actions and implementations (Zaccagnini & White, 2015).

The team was provided with the background information, including current CPG, evidence-based methods and literature associated with the project, to review. They then had the opportunity to share their experiences, knowledge, expertise, and relevant information on how it may pertain to the CPG. The timeline between presenting the materials and gathering the data from the team was 14 days. This timeline gave each member time to process the data, review all the literature and provide feedback.

The medical director at this hospice facility has been a hospice medical director for twenty years and has extensive knowledge in pain management, EBP implementation and clinical guidelines. The registered nurse case managers have been caring for hospice patients for multiple years and have seen the guidelines in use in the field and can attest to the fact that they do not satisfy the need for pain management for the patients we serve. The nurse practitioners in the office are hospice certified and have the highest level of education and training in the art of hospice care. They understood the need for updated CPG firsthand and provided information on how and when the changes should be made.

The role of these essential staff was for support, information, policy and procedure development, evidence-based clinical needs assessment and implementation of current CPG in the line of duty. By working with the previous CPGs, these staff members

were aware of the changes that need to be made for the best care for a patient's pain. All these team members were excited to have been a part of the change that can occur from an updated CPG.

Summary

In section two, we have discussed the concepts, models, and theories guiding the project, relevance of the practice problem to nursing practice, local background and context, role of the DNP student and the project team. This was a critical component of the CPG, as the input from the clinical team, who has the hands-on experience, was extremely beneficial when reviewing EBP guidelines. In section three, we focus on the practice- focused question, sources of evidence, evidence generated for the doctoral project and procedures that were used for the collection and analysis of evidence.

Section 3: Collection and Analysis of Evidence

Introduction

At a hospice office located in South Carolina, during the admission process, the same pain management treatments are prescribed for everyone, regardless of diagnosis. CPG and EBP in this setting have not been employed for pain management. This project answered the following practice-focused question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?

In Section 3, I focus on the practice focused question, sources of evidence, evidence generated for the doctorate project, and procedures that I used for the collection and analysis of evidence. In hospice care, most patients are treated with the same pain management regimen, and their pain is not effectively controlled (Booker & Haedtke, 2016). According to Booker and Haedtke (2016), EBP is not widely used in hospice. Not only is this not patient-centered, but for a patient to be in pain at the end of life is unethical. According to current evidence-based research, pain in hospice patients is a growing problem (Chi et al., 2018).

Practice-Focused Question

This project answered the question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?

The gap in nursing practice was evident as current clinical guidelines and EBP had not been updated properly for pain management in this setting. More specifically, the

gap in practice that this CPG will correct is that not all patients are receiving adequate end-of-life pain management. The challenge is to assist in achieving adequate pain management for patients at the end of life to ensure that they are receiving effective pain management based on individual need. This updated CPG improves the patient's clinical course, improves patient quality of life, eases caregiver stress, and improves overall satisfaction in providing services for the patient and family. This will be done by filling a void in the current practice for addressing pain management in this facility. When a person is entering the last days of life in hospice care, communication, and shared decision-making with the dying person and those important to them should not have to be about pain management. Pain management, pain medicine, pain control or alleviation is a branch of medicine that uses an interdisciplinary approach for easing suffering and improving the quality of life of those living with pain (Raffaeli & Arnaudo, 2017).

I collaborated in developing updated CPG using evidence-based research and helped create new clinical models for pain management in the hospice patient population. I updated the clinical guidelines to allow prescription pain medication to be based on the clinical diagnosis information from admission instead of using standing orders. Effective pain management requires the intervention of all disciplines in a holistic approach. Unrelieved pain affects the patient's physical, psychological, social, and spiritual well-being. According to the National Institute of Health (2021), more than 1.6 million Americans received hospice services in 2014, and approximately 60% of them received these services at home. Hospice care emphasizes the deployment of an interdisciplinary care team to support patients and their family in comfort care, pain control, symptom

management, and spiritual needs. Chi et al (2018) has found that the patients' pain was undertreated in end-of-life care.

Sources of Evidence

The literature suggested that updated CPG will provide better outcomes in pain management for end-of-life care (Herr et al., 2015). An updated CPG was produced by accessing major databases including Google Scholar, the *New England Journal of Medicine*, PubMed, CINAHL, and Scopus. Specific sources of evidence that were searched included books, dissertations, theses, peer-reviewed journals, and random controlled trials. The year range that I researched were the last 10 years, 2010-2020. The reason I used this time frame is that it provided the most up to date evidence-based information. The keywords that I utilized in my search included *pain management*, *hospice*, *end of life*, *pain control*, and *clinical practice guidelines*. Along with a thorough literature review, I also reviewed and analyzed past CPGs in the hospice pain management setting.

In the past 10 years, there have been no solid foundational updates in pain management for end-of-life care. While there are many articles and sources that address the need for pain management at end of life, there have been few published guidelines. An article published by Herr et al. (2015) states that the most important goal of hospice care is a pain-free death. Although pain outcomes are managed more effectively in hospice than nonhospice settings, there are gaps and inconsistencies in hospice practices of effective assessment and management of pain (Raffaeli & Arnaudo, 2017). These inconsistencies are associated with facilities not using CPG in managing pain.

Implementation of CPG would help update health care providers on effective pain management strategies in the hospice population. Even high-quality hospice care fails to eliminate pain in up to 75% of cases (Chi et al., 2018). This lapse in practice is due to outdated EBP and inconsistencies in using clinical guidelines. For older adults with cancer, the percent of patients receiving effective pain management without a diagnosis of cancer remains low (Chi et al., 2018). The degree of variability in pain management practices are evidenced by low adherence to some pain related EBPs. Those variabilities encountered among the research suggest other processes of care may lack uniformity.

The relationship between the evidence and the need for updated CPGs are shown in the most recent 10 years. Medical science is forever changing; this means that an article published more than 10 years ago may now be obsolete. I wanted to keep this literature review current by using the most up to date science and evidence. The purpose of this evidence was to view where the gap in practice was in pain management so that I could create the most current CPG, one that addressed the practice question. By collecting data, the project team able to see the exact methodology of pain management currently in use, how pain regimens are determined based on standing orders, and how best to implement changes to increase pain control for hospice patients. Collecting and analyzing this evidence was critical in providing the best up to date information available for current EBP. Utilizing this evidence was paramount in creating an effective CPG that addressed the practice problem.

Approval was received from the facility and from Walden's IRB (approval number 08-11-21-024132), and evidence-based findings on current approaches for

managing pain at end of life were collected and analyzed from the medical directors, nurse practitioners, and other members of the health care team. Collection and analysis of this evidence provided the most appropriate strategy to address the practice focused question.

Analysis and Synthesis

As stated previously, the practice problem occurring in this clinical setting is pain management orders that are outdated and underemployed for terminally ill patients admitted for hospice care. Adopting a CPG as an approach, this DNP project was designed to answer the following practice-focused question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?

Major steps for developing the CPG included selection of current evidence, searching the literature, critically appraising and synthesizing the literature, and developing the CPG. Following development of the CPG, an expert panel was asked to review and score the CPG. Using feedback from the panel, the CPG was revised as needed. The final steps in developing the CPG included seeking key stakeholder input and finalization of the CPG. The content that follows provides details of the procedure that was used to analyze and synthesize evidence that was utilized to answer the practice-focus question.

Collected data was tracked, organized, recorded, and analyzed using Microsoft Word, Microsoft Excel, Fulcrum, GRADE , AGREE II, and Mum's Hummingbird software. Maintaining the integrity and safety of the evidence was paramount to the investigation. By precisely using the data integrity software suite Fulcrum, the team was

sure that the integrity of the evidence collected was thoroughly examined for outliers and missing information. These systems were double and triple checked for accuracy, integrity, and completeness. Data analysis was conducted using the AGREE II instrument (<http://www.agreetrust.org>); I analyzed each of the six domain scores and overall assessment of the clinical practice guideline. After this step was completed, the final score was calculated and reported.

The AGREE instrument evaluates the process of practice guideline development and the quality of reporting. The AGREE tool (Appendix A) comprises 23 items (each with specific reporting criteria) in six domains: Scope and Purpose (Items 1-3), Stakeholder Involvement (Items 4-6), Rigor of Development (Items 7-14), Clarity of Presentation (Items 15-17), Applicability (Items 18-21), and Editorial Independence (Items 22-23). An additional two-question “overall guideline assessment” asks the expert panelist to judge the overall quality of the guideline and indicate whether the guideline should be recommended for clinical practice. The original AGREE instrument was developed in 2003 and refined resulting in the AGREE II instrument. Authors of practice guidelines can use the AGREE Reporting Checklist prospectively during the drafting and final editing stage to ensure that all necessary information is included and retrospectively after the guideline is completed as a quality assurance step. The AGREE Reporting Checklist (Appendix C) is sufficiently universal that it can be used by practice guideline stakeholders regardless of the more specific protocols or methods used to support the development of the guidelines.

GRADE is a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations (Guyatt et al, 2008). It is the most widely adopted tool for grading the quality of evidence and for making recommendations, with over 100 educational organizations worldwide officially endorsing GRADE. GRADE has four levels of evidence, also known as certainty in evidence or quality of evidence: very low, low, moderate, and high (Table 1).

Table 1

Grade Certainty Ratings

Very low	The true effect is probably markedly different from the estimated effect
Low	The true effect might be markedly different from the estimated effect
Moderate	The authors believe that the true effect is probably close to the estimated effect
High	The authors have a lot of confidence that the true effect is similar to the estimated effect

Evidence from randomized controlled trials starts at high quality and, because of residual confounding, evidence that includes observational data starts at low quality. The Grade of the evidence is included in the literature review in Appendix D.

There are different ways to classify studies that evaluate health care services. One such scheme distinguishes between process and outcomes studies (Chi,2018). Process studies are what science uses to assess whether the medical care encounters constitute quality care. Analysis will be performed on all the data, to track and trend all the information. This analysis helped us determine where current CPGs have failed, and how

an updated CPG can be more beneficial, which will answer the practice focused question. The DNP student has updated the CPG based on current evidence. After the clinical practice guideline was updated, the student sought consent from panelists. The consent asked for them to participate on the expert panel to provide feedback and recommendations. These experts included the facility medical director and nurse practitioners, who will be the most involved in the hospice patient's pain management protocols.

Selection of Evidence and Searching the Literature

A literature search was conducted to locate current evidence for managing pain in the hospice population. Using the assistance of the university library liaison, major databases were searched including Google Scholar, PubMed, CINAHL, EMBASE, TOXNET and Cochrane Library. Evidence selected for the CPG was analyzed, organized, and recorded using a literature summary table (Table 2, Appendix D)

Table 2

Literature Summary Table Example

Author / publication year	Type of source	Population / sample	Intervention	Findings

Critical Appraisal of the Evidence from the Literature

GRADE was used to critically appraise the evidence selected for inclusion in the CPG. GRADE is a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations. It is the most widely adopted tool for grading the quality of evidence and for making recommendations. I have also followed Walden Universities guideline for CPG development.

Synthesis of Evidence from the Literature

Synthesis of the evidence was presented to expert panelists using a concept map, literature table and narrative summary explaining current evidence in managing pain in the hospice population.

Development of the Clinical Practice Guideline

The CPG includes recommendations that were based on evidence from a rigorous systematic review and synthesis of the published medical literature found for this topic. The clinical practice guideline was developed based on an analysis and synthesis of the literature on current practices for managing pain in the hospice population. Once all the literature had been reviewed, and the expert panel consulted, the updated CPG was created and then evaluated and approved by the experts and the stakeholders.

Expert Panel Review

Using the AGREE II Instrument (Appendix A), and the AGREE II scoring checklist (Appendix C) the CPG was reviewed by an expert panel. The panel scored the CPG by reviewing all the data and giving a rating of very low, low, moderate, or high on

the usefulness and completeness of the CPG via GRADE. The expert panel was asked if the CPG meets their expectations, does not meet expectations, or exceeds expectations. The expert panel was then be asked if they will be comfortable or not comfortable implementing the CPG into their practice. This process helped the writer determine if the CPG meets the needs and expectations of the stakeholders and expert panelists. At the completion of the DNP project, an evaluation was performed. The summary of the evaluation consisted of the AGREE II scores, and recommendations for use and implementation. This data was presented to the content experts for evaluation and provided to the facility stakeholders for review and implementation consideration.

Stakeholder Input

The stakeholders for this updated CPG were the health care workers and health care providers. These individuals were the nurses, physicians, nurse practitioners, physician assistants and all other clinical staff that work in patient care. Input on this updated CPG was obtained from the clinical team, (nurses, nurse practitioners, aids, and support staff) who assisted in advising on the necessity and usefulness of the proposed update. These front-line staff are the individuals who are hands on with the patients and see the need for change daily. The input from these staff members was paramount to the success of the updated CPG. Input and recommendations by these teams provided assurance that patient needs are met. These staff members know from personal experience, clinical practice and from patient and family input, exactly what is needed to provide effective pain management.

Protection of Participants

After I obtained proposal approval, I submitted the project to Walden's IRB for review and approved. The Walden IRB role was to review the project for any potential human subject violations or any breaches in data collection in accordance with Walden's regulations. Following the approval from Walden's IRB, the project was submitted to the project site for review and approval. The role of the project site was to ensure the project complies with the organization's research requirements and human subject protections.

Finalization of Clinical Practice Guideline

This section summarizes the development process by reviewing key literature from other CPG developers. It focused on key methods and challenges specific to CPGs for integration by using analysis and synthesis to provide a powerful update to this CPG development. The guideline development process identified, together with new approaches, incorporated evidence-based methodology and provided more up to date information for hospice patients. It is also believed that quality of life issues based on pain levels were not fully addressed in prior guidelines. Information to finalize the CPG was used from shared experiences and coping strategies that empower nurses to take charge of their patient's pain management and become equal partners with other care providers.

Summary

In section three, we reviewed the practice focused question and sources of evidence. We described the procedures we will be using for tracking and processing the data, protecting the integrity of the evidence, and processing the data. We talked about

analysis procedures and how they helped to answer the practice focused question. Section three also included details of the systems for data analysis and synthesis. Procedures for collection and analysis of evidence to answer the practice focused question were discussed. Section three also presented plans to address human subject protection. In section four, we will discuss findings and implications, contributions of the doctoral team, strengths and limitations, recommendations, and contributions of this project.

Section 4: Findings and Recommendations

Introduction

The local problem that was addressed in this project was that hospice patients' pain management was not being met using the previous protocols. This was prohibiting the clinical staff from providing the best end-of-life care possible. Updated standardized guidelines on end-of-life pain management will bridge the gap to improve pain control. The newly updated CPG serves to answer the practice focused question:

PFQ: In the context of hospice, what are current evidence-based strategies for managing pain?

The gap in nursing practice was addressed by creating an updated CPG for hospice clinicians to use for better pain management during hospice care. This updated CPG will provide prescribing information to providers so they can provide quality pain management and treatment to hospice patients. This will provide a better standard of care as well as increased quality of life and improved patient outcomes.

Using Walden's library, I utilized peer reviewed articles from Cochrane Database, PubMed, Google Scholar, PubMed, CINAHL, EMBASE, and Medline to address the gap in practice and update the CPG. This review was exhaustive and critical for organizing the evidence for the updated CPG. Following the AGREE II guidelines, I was able to create the updated CPG for end-of-life pain management for hospice patients. The CPG was assessed by an expert panel consisting of five clinicians, who used the AGREE II website. The data was then scored for each of the domains. These numbers were then imported confidentially, hiding any identifying characteristics and maintaining the

experts' confidentiality. In section 4, I discuss the findings, strengths, and limitations of this project.

Findings and Implications

The literature that were applicable were all graded using the GRADE methodology (Table 1) to evaluate the strength and quality of support to the recommendations in the guideline. The GRADE methodology applies a cohesive and organized approach, which is used to determine the strength and direction of recommendations. The strength of each piece of evidence was assigned a grading level of very low, low, moderate, and high. Each piece of evidence was synthesized into an evidence table to manage the evidence. The guideline was created using the graded evidence that supported the recommendations. Only articles that scored as high or moderate on the GRADE scale were used in the final determination for this updated CPG. Articles that scored a level of low or very low were excluded. A literature table with a GRADE score for each article is in Appendix D.

Five expert panelists used the AGREE II tool to provide me with an evaluation of the updated CPG (Appendix E). The results of the tool showed data from each of the 23 items, as well as six individual domains with a tabulated percentage within each of the domains. Per the AGREE II tool, Any of the domains that scored higher than 50% were considered to be acceptable; however any of the domains that scored below 75% should be further reviewed.

- Domain I, Scope and Practice, scored a 97%. Domain 1 addressed the CPG scope and overall focus. The population for this area was admitted hospice

patients. Evaluator 2 suggested changing the verbiage to include patients being evaluated for admission and include them in the scope as well. This was fitting as most of the orders are used on admission.

- Domain II, Stakeholder Involvement, scored a 98%. The expert panel was pleased that the guidelines utilized all the appropriate disciplines, such as physicians, nurse practitioners, physician assistants, and advanced practice nurses who can prescribe medications. The panel agreed that the stakeholder involvement domain was clearly defined and that the criteria were met.
- Domain III, Rigor of Development, scored a 97%. This domain focused on the methods that were utilized to search for evidence, the criteria for including evidence, strengths and limitations of the evidence, and the procedures used to update the guideline. The expert panel agreed that there was enough supporting evidence and that the literature review was adequate.
- Domain IV, Clarity of Presentation, scored a 94%. This domain addressed the clarity of the presentation, which included recommendations and management of the health issue.
- Domain V, Applicability, scored a 100%. This domain addressed the applicability of the guideline, which focused on adequate pain management for hospice patients using the patient's diagnosis as a guide instead of standing orders. The expert panel agreed that this is a very important issue, which needed to be addressed. The expert panel commented that by using this

guideline for starts of care, pain management can be controlled from the beginning and the patient's quality of life improved overall.

- Domain VI, Editorial Independence, scored a 95%. There were no funding requirements for this project. This showed that there were no other views that would have had competing interest in this guideline. The expert panel agreed that “funding bodies should not have any influence on guideline developments.”
- The overall domain scored was 100%, a usable CPG. In the overall guideline assessment portion, the expert panel agreed across the board, with all evaluators agreeing that they would recommend this CPG. Panelists noted that the guidelines were of “high quality” and come at a time where they could not be more needed in the hospice community. The panel agreed that these guidelines would increase patients' quality of life, improve pain management, advance positive patient and family outcomes, and reduce the stress on the clinical team. Considering that these guidelines come with no additional cost to the facilities or community, there are no financial burdens to deter the guidelines from use.

Table 3*AGREE II Scores Compilation*

Evaluator	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Overall guideline assessment
1	21	20	56	21	28	14	7
2	21	21	54	20	28	13	7
3	20	21	55	19	28	13	7
4	20	21	54	19	28	13	7
5	20	20	55	20	28	14	7
Percentage	97%	98%	97%	94%	100%	95%	100%

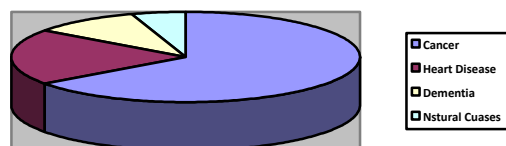
Note. Threshold for guideline quality is 70% or above.

I was gratified to see such high scoring results for this updated CPG from the expert panel. None of the expert panelists asked for additional information or clarification. All commented that it was a well thought out and presented CPG and very usable in the practice setting. When presenting the results and discussing all the scores with the experts, they were impressed with the thoroughness, thoughtfulness, ethical consideration, and quality of life improvement that would render the updated CPG beneficial. No changes or updates were recommended by any of the experts during the review. All expert panelists strongly encouraged that the updated CPG be implemented as soon as possible and shared with the other facilities in the community and throughout the company. They are hopeful for a streamlined implementation with continuity of care

throughout the different levels of the health system. The feedback from all other end users of the CPG were that overall, this was a very well written and beneficial CPG and will indeed assist in an increased quality of life for the hospice patient due to improved pain management. The updated CPG will give the clinicians the tools to ensure that correct pain medications are ordered on admission based on clinical diagnosis and not standing orders. Admissions of different diagnoses require different care. As shown in the chart below, cancer patients make up 65% of admissions, heart disease 20%, dementia 10%, and other natural causes 5%. Each of these different types of patients needs a different care plan and requires different pain management techniques.

Figure 1

[Provide a figure caption here in italics and title case, and add it to the List of Figures]



Recommendations

The gap in nursing practice was addressed by creating an updated CPG for hospice clinicians to use for better pain management during hospice care. This CPG directs the hospice practitioners to utilize the patient's diagnosis instead of standing orders for pain control, which will result in better pain management at admission. The expert panel and I recommend that the hospice nurses, clinicians, and practitioners use this updated evidence-based pain management guideline to prescribe pain medications. The expert panel and I recommend that the guideline move forward for review for the

specific approvals required by the facility at the corporate level, that the nurses be adequately educated and trained in the updated CPG, and that the results be monitored to determine the effectiveness of the guideline on quality of life and pain control. This updated CPG will provide prescribing information to providers so they can provide quality pain management and treatment to hospice patients. This will provide a better standard of care as well as increased quality of life and improved patient outcomes. The expert panel recommended that the updated CPG be incorporated into policy and added to the clinician's admission packet under pain management guidelines. Implementing this updated CPG will constitute an innovative approach using the multidisciplinary team, which will create a culture of improved quality of care and social change.

This CPG adoption will help nurse practitioners and physicians provide early adequate pain management that will address the patients' needs by using their diagnosis as a guide, incorporated with standard pain scales. The project plan is for the proposed CPG update to be introduced to the facility administration for implementation to the local facility, as well as, potentially, other hospice facilities.

Strengths and Limitations of the Project

This updated CPG's positive aspects include that the expert panel of hospice clinicians were already familiar with the need for updated pain guidelines. This gave the clinicians a chance to incorporate their research findings into recommendations for the CPG update. Having the expert panel of devoted and qualified professionals ready to participate made the transitions from research to creation smooth. These recommendations strengthened the updated CPG and incorporated these suggestions into

a strong clinical guide. Another strength of this project is the opportunity for it to be applied to any clinical environment that care for hospice patients. There are many hospices in each state. Some of these are incorporated into home care, hospitals, and nursing homes. If these facilities adopt this updated CPG, the continuity of care across the spectrum for these patients would be seamless. Many times, hospice patients are moved to different facilities outside of their home area. By getting this updated CPG adopted in multiple areas, or potentially multiple states, this would make for a pain free transition. There is always a need for better pain management, especially at the end of life. This updated CPG would benefit any hospice location and provide much needed guidance for the patients we serve. This updated CPG provides a pathway of appropriate pain management for any provider in any location. An additional strength to the project is its alignment to the current changes in the healthcare delivery system. The worldwide interest in the development and implementation of patient-centered model of care, management of pain, and incorporation of evidence into practice to improve patient care outcomes and quality of life in hospice.

Limitations I faced while preparing this updated CPG were the facility COVID restrictions. This made it difficult to meet with the clinical team and expert panels at the same time. Many work arounds had to be made to facilitate the meetings, suggestions, questions, and concerns about the CPG. It also made it difficult to gain access to the facility at times, to perform research in a timely manner. Another limitation was that since the patients are hospice patients, and most are at the end of life, supporting documentation for pain management was found to be lacking. This is mainly due to the

patient's life expectancy was shorter than traditional patients due to the nature of the specialty. There was also no CPG that clearly addressed pain management based on patients' diagnosis at admission, that I could refer to. Further, misuse of techniques by nursing staff due to inadequate monitoring and training in pain assessments can negatively affect the outcomes of the project. This happens when you have new staff or temporary staff nurses who are not consistent with their assessment or reporting techniques, such as travel nurses in nursing facilities.

Contribution of the Doctoral Project Team

An expert panel was assembled for review and assessment of the updated CPG. This panel included experts in the hospice industry and include two hospice medical directors, two hospice nurse practitioners and one clinical nurse specialist. These panelists are responsible for monitoring and prescribing the pain management regimens in the hospice population. The purpose of this project was to develop an evidence-based pain management updated clinical practice guideline to be used in the hospice setting. The expert panel reviewed the CPG using the Agree II tool. Domains 1 through 6 were reviewed and applied to the tool. Under each domain, all members of the team strongly agreed with the recommendations. This project was fully supported by the five members of the panel. The nursing staff and other clinical staff including the nursing director and supervisors, also reviewed the project and are fully supportive of the project and are awaiting approval to implement the updated CPG.

Summary

The updated CPG development for pain management was addressed in this section. The main strength of this project was an ability to research and define relevant, up to date, peer reviewed literature which was utilized to update the CPG. These research findings were provided by the expert panelists who are one of the main stakeholders in this CPG. The main limitation of this study was a lack of previous CPG's which addressed the need of pain management guidelines based on diagnosis. The expert panel's AGREE II evaluation recognized the quality and appropriateness of the updated CPG, which was recommended for implementation at the facility and regional level. Besides a reduction in the health care costs, proper pain management programs assist with decreasing demand on healthcare services. Effectiveness in pain management can promote quality of life, improved understanding of pain mechanisms, and exposure to different treatment options available for managing end-of-life pain. In section 5, I will address my plan for dissemination as well as the analysis of myself.

Section 5: Dissemination Plan

The plan is for the newly updated CPG for pain management for hospice patients to be introduced to facility administration for review and implementation. There is more than one location that could benefit from implementing this CPG. Once it proves successful at the pilot location; it can be transferred for use to the other locations in and out of the state. My hope is that once it shows success, this updated CPG will be adopted by other hospice offices, nursing homes, and hospice in-patient facilities. This will provide seamless care for all patients, regardless of their acuity level, state of residence, or diagnosis. My plan for dissemination beyond the target location is to have the updated CPG published to a respectable journal such as Walden University's *Journal of Excellence in Nursing Healthcare Practice* or the *American Journal of Hospice and Palliative Medicine*. The American Hospice journal has a robust platform with a population of professional nurses, advanced practice nurses, and hospice physicians who work in the field of hospice care where pain management is priority.

Analysis of Self

I started my nursing career as a licensed practical nurse in Pittsburgh, Pennsylvania. I found my passion in geriatric care almost immediately. Most of my tenure as a new nurse was on the front lines in skilled nursing, where I had many hospice patients. I found it my obligation to learn more about managing elderly patients so I could provide the best care possible. This sense of duty led to the completion of registered nursing education as an associate degree nurse (ADN). I knew if I were to continue my pursuit of being an advanced practice nurse, I needed to have more education and a better

foundation. I then decided to go on for my bachelor's in nursing. I found this was still not enough to be in a position of advanced leadership where I could make a difference in nursing practice and patient care. I worked my way up in the clinical setting from a bedside nurse to a nurse manager to a director of clinical care to director of nursing. I had my sights set on being a chief nursing officer and knew I again needed to advance my nursing education. To teach one day, I started the Master of Nursing Education program and graduated from Walden University. I immediately enrolled in the DNP program where I am today. I have completed my lifelong dream of having a terminal degree in nursing and am the first nurse in my family to have such a title. Nursing is my passion; I love being a leader, a clinician, and a patient advocate. I love being in a position where I can make a difference in patient care by having influence in policy. Working toward a DNP taught me how to research and apply evidence into policy creation for staff, patients, and practitioners. Choosing to update a CPG, I found that I could give the art of evidence-based pain management back to the field and patient population I love.

As a Practitioner

As an advanced practice nurse working both at the bedside and as a nursing director, I was able to see firsthand the practice problem and gap in nursing practice. My drive to continue bedside clinical practice has allowed me to understand the issues needing attention in the practice specialty. As an advanced practice nurse, I have worked with diverse hospice patient populations with different diagnoses requiring pain management. Early pain management techniques enable the patient and family to have an increased quality of life and better outcomes. After the experiences that this CPG has

provided, it is very clear that nurse and physician education in the art of pain management is essential. There is a lack of DNP prepared hospice nurses in this specialty, and most of those do not work directly in patient care. By utilizing the education that my DNP has provided me, I will be able to serve my patients firsthand both at the bedside and at the policy level.

As a Scholar

The DNP project has provided to me the tools and insight to provide demonstrated knowledge focused on a particular field. The DNP project plays a very important role in terminal education and encourages the student to be involved in academic and clinical practice through research. This project set a path for me to continue to contribute to the nursing profession through research and development. I intend to continue scholarly contributions to the nursing profession as my career grows so that I can share my knowledge of clinical and academia practices with my health care team. The DNP essentials that provided my platform and knowledge base for the DNP project will continue to mold my scholarly thinking and future contributions to nursing practice.

As a Project Manager

As the project manager for the updated CPG, I was fortunate to be able to collaborate with a dedicated and compassionate group of experts who offered their invaluable insight and expertise. Their recommendations on the CPG helped to guide me in the right direction and provide a more detailed and focused update for hospice pain management. I found that this expert panel was excited to assist and complete the AGREE II tool. It was my responsibility for providing the expert panel with the tools to

complete this task, such as the AGREE II instrument, the CPG, the Literature review matrix, and the panelist disclosure form. As the project manager, I was able to successfully manage these tasks. The expert panelists, who are all hospice clinicians, were excited to have an updated CPG tailored to their specialty. This project had its stressful points, but I have found it very rewarding. Knowing that the end results will be implemented to reduce pain in fragile hospice patients and increase their remaining quality of life made everything worthwhile.

Challenges, Solutions, and Insights Gained

During this project, I faced both personal and academic challenges. Time management and procrastination seemed to always be an issue, especially with the added challenge of COVID to my practicum setting. Challenges were further exaggerated with a full-time nursing manager position and a family with a very active schedule. The academic trials I faced were using the research tools that were new to me. AGREE II was also a new tool that I had to learn to use and score based on its design. My mentor was very helpful in motivating me in the right direction and pushing me to completion. I knew when I was at a crossroads that she would be my guide. The project development process has increased my understanding of research and helped to mold my competency in translating theory into research and evidence. It was through being mentored for this guideline that I also learned how to mentor others who were new to EBP theory. With my educational advancements, I can continue to be an agent for social change in the nursing field. By creating an updated CPG, I have also learned how invested a person must remain and how many steps are involved in achieving organizational change.

Summary

For this DNP scholarly project, I developed an updated clinical practice guideline that addresses pain with hospice patients. This addresses the gap in practice identified in Section 1, which states that hospice patients are all receiving the same standing orders for pain management despite their different diagnoses. This project promotes positive social change by allowing patients and families to focus on improving their quality of life during their remaining time together and not having to worry about the patient's pain being managed appropriately. Because patient centered care is a priority in clinical practice, it is the duty of a nursing professional is to provide the best care possible for the patient's condition. This updated CPG should improve quality patient care, reduce patients' end-of-life pain, increase quality of life, and provide patient-centered care to this vulnerable population. By having this updated CPG as a guide, clinicians will be able to prescribe pain management on admission that is appropriate based on the diagnosis of the patient. This updated CPG will also serve to increase the clinical staff's knowledge, increase overall satisfaction with hospice care, and improve the quality of the services provided.

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Appendix A: AGREE II Score Sheet

Domain	Item	AGREE II Rating						
		1 <i>Strongly Disagree</i>	2	3	4	5	6	7 <i>Strongly Agree</i>
Scope and purpose	1. The overall objective(s) of the guideline is (are) specifically described.							
	2. The health question(s) covered by the guideline is (are) specifically described.							
	3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.							
Stakeholder involvement	4. The guideline development group includes individuals from all the relevant professional groups.							
	5. The views and preferences of the target population (patients, public, etc.) have been sought.							
	6. The target users of the guideline are clearly defined.							
Rigor of development	7. Systematic methods were used to search for evidence.							
	8. The criteria for selecting the evidence are clearly described.							
	9. The strengths and limitations of the body of evidence are clearly described.							
	10. The methods for formulating the recommendations are clearly described.							
	11. The health benefits, side effects and risks have been considered in formulating the recommendations.							
	12. There is an explicit link between the recommendations and the supporting evidence.							
	13. The guideline has been externally reviewed by experts prior to its publication.							
	14. A procedure for updating the guideline							

Domain	Item	AGREE II Rating						
		1 <i>Strongly Disagree</i>	2	3	4	5	6	7 <i>Strongly Agree</i>
	is provided.							
Clarity of presentation	15. The recommendations are specific and unambiguous.							
	16. The different options for management of the condition or health issue are clearly presented.							
	17. Key recommendations are easily identifiable.							
Applicability	18. The guideline describes facilitators and barriers to its application.							
	19. The guideline provides advice and/or tools on how the recommendations can be put into practice.							
	20. The potential resource implications of applying the recommendations have been considered.							
	21. The guideline presents monitoring and/or auditing criteria.							
Editorial independence	22. The views of the funding body have not influenced the content of the guideline.							
	23. Competing interests of guideline development group members have been recorded and addressed.							
Overall Guideline Assessment	1. Rate the overall quality of this guideline.	1 <i>Lowest possible quality</i>	2	3	4	5	6	7 <i>Highest possible quality</i>
Overall Guideline Assessment	2. I would recommend this guideline for use.	Yes				Yes, with modifications		No

Appendix B: Levels of Evidence

Level 1 - Systematic review & meta-analysis of randomized controlled trials; clinical guidelines based on systematic reviews or meta-analyses

Level 2 - One or more randomized controlled trials

Level 3 - Controlled trial (no randomization)

Level 4 - Case-control or cohort study

Level 5 - Systematic review of descriptive & qualitative studies

Level 6 - Single descriptive or qualitative study

Level 7 - Expert opinion



Modified from:

Melnyk, B.M. & Fineout-Overholt, E. (2015). "Box 1.3: Rating system for the hierarchy of evidence for intervention/treatment questions" in *Evidence-based practice in nursing & healthcare: A guide to best practice* (3rd ed., p. 11). Wolters Kluwer Health.

Appendix C: Agree Reporting Checklist

AGREE Reporting Checklist 2016

This checklist is intended to guide the reporting of clinical practice guidelines.

CHECKLIST ITEM AND DESCRIPTION	REPORTING CRITERIA	Page #
DOMAIN 1: SCOPE AND PURPOSE		
1. OBJECTIVES <i>Report the overall objective(s) of the guideline. The expected health benefits from the guideline are to be specific to the clinical problem or health topic.</i>	<input type="checkbox"/> Health intent(s) (i.e., prevention, screening, diagnosis, treatment, etc.) <input type="checkbox"/> Expected benefit(s) or outcome(s) <input type="checkbox"/> Target(s) (e.g., patient population, society)	
2. QUESTIONS <i>Report the health question(s) covered by the guideline, particularly for the key recommendations.</i>	<input type="checkbox"/> Target population <input type="checkbox"/> Intervention(s) or exposure(s) <input type="checkbox"/> Comparisons (if appropriate) <input type="checkbox"/> Outcome(s) <input type="checkbox"/> Health care setting or context	
3. POPULATION <i>Describe the population (i.e., patients, public, etc.) to whom the guideline is meant to apply.</i>	<input type="checkbox"/> Target population, sex, and age <input type="checkbox"/> Clinical condition (if relevant) <input type="checkbox"/> Severity/stage of disease (if relevant) <input type="checkbox"/> Comorbidities (if relevant) <input type="checkbox"/> Excluded populations (if relevant)	
DOMAIN 2: STAKEHOLDER INVOLVEMENT		
4. GROUP MEMBERSHIP <i>Report all individuals who were involved in the development process. This may include members of the steering group, the research team involved in selecting and reviewing/rating the evidence and individuals involved in formulating the final recommendations.</i>	<input type="checkbox"/> Name of participant <input type="checkbox"/> Discipline/content expertise (e.g., neurosurgeon, methodologist) <input type="checkbox"/> Institution (e.g., St. Peter's hospital) <input type="checkbox"/> Geographical location (e.g., Seattle, WA) <input type="checkbox"/> A description of the member's role in the guideline development group	
5. TARGET POPULATION PREFERENCES AND VIEWS <i>Report how the views and preferences of the target population were sought/considered and what</i>	<input type="checkbox"/> Statement of type of strategy used to capture patients'/publics' views and preferences (e.g., participation in the guideline development group, literature review of values and preferences)	

<p><i>the resulting outcomes were.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Methods by which preferences and views were sought (e.g., evidence from literature, surveys, focus groups) <input type="checkbox"/> Outcomes/information gathered on patient/public information <input type="checkbox"/> How the information gathered was used to inform the guideline development process and/or formation of the recommendations 	
<p>6. TARGET USERS <i>Report the target (or intended) users of the guideline.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> The intended guideline audience (e.g., specialists, family physicians, patients, clinical or institutional leaders/administrators) <input type="checkbox"/> How the guideline may be used by its target audience (e.g., to inform clinical decisions, to inform policy, to inform standards of care) 	
DOMAIN 3: RIGOUR OF DEVELOPMENT		
<p>7. SEARCH METHODS <i>Report details of the strategy used to search for evidence.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Named electronic database(s) or evidence source(s) where the search was performed (e.g., MEDLINE, EMBASE, PsychINFO, CINAHL) <input type="checkbox"/> Time periods searched (e.g., January 1, 2004, to March 31, 2008) <input type="checkbox"/> Search terms used (e.g., text words, indexing terms, subheadings) <input type="checkbox"/> Full search strategy included (e.g., possibly located in appendix) 	
<p>8. EVIDENCE SELECTION CRITERIA <i>Report the criteria used to select (i.e., include and exclude) the evidence. Provide rationale, where appropriate.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Target population (patient, public, etc.) characteristics <input type="checkbox"/> Study design <input type="checkbox"/> Comparisons (if relevant) <input type="checkbox"/> Outcomes <input type="checkbox"/> Language (if relevant) <input type="checkbox"/> Context (if relevant) 	
<p>9. STRENGTHS & LIMITATIONS OF THE EVIDENCE <i>Describe the strengths and limitations of the evidence. Consider from the perspective of the individual studies and the body of evidence aggregated across all the studies. Tools exist that can facilitate the reporting of this concept.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Study design(s) included in body of evidence <input type="checkbox"/> Study methodology limitations (sampling, blinding, allocation concealment, analytical methods) <input type="checkbox"/> Appropriateness/relevance of primary and secondary outcomes considered <input type="checkbox"/> Consistency of results across studies <input type="checkbox"/> Direction of results across studies <input type="checkbox"/> Magnitude of benefit versus magnitude of harm <input type="checkbox"/> Applicability to practice context 	

<p>10. FORMULATION OF RECOMMENDATIONS <i>Describe the methods used to formulate the recommendations and how final decisions were reached. Specify any areas of disagreement and the methods used to resolve them.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Recommendation development process (e.g., steps used in modified Delphi technique, voting procedures that were considered) <input type="checkbox"/> Outcomes of the recommendation development process (e.g., extent to which consensus was reached using modified Delphi technique, outcome of voting procedures) <input type="checkbox"/> How the process influenced the recommendations (e.g., results of Delphi technique influence final recommendation, alignment with recommendations and the final vote) 	
<p>11. CONSIDERATION OF BENEFITS AND HARMS <i>Report the health benefits, side effects, and risks that were considered when formulating the recommendations.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Supporting data and report of benefits <input type="checkbox"/> Supporting data and report of harms/side effects/risks <input type="checkbox"/> Reporting of the balance/trade-off between benefits and harms/side effects/risks <input type="checkbox"/> Recommendations reflect considerations of both benefits and harms/side effects/risks 	
<p>12. LINK BETWEEN RECOMMENDATIONS AND EVIDENCE <i>Describe the explicit link between the recommendations and the evidence on which they are based.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> How the guideline development group linked and used the evidence to inform recommendations <input type="checkbox"/> Link between each recommendation and key evidence (text description and/or reference list) <input type="checkbox"/> Link between recommendations and evidence summaries and/or evidence tables in the results section of the guideline 	
<p>13. EXTERNAL REVIEW <i>Report the methodology used to conduct the external review.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Purpose and intent of the external review (e.g., to improve quality, gather feedback on draft recommendations, assess applicability and feasibility, disseminate evidence) <input type="checkbox"/> Methods taken to undertake the external review (e.g., rating scale, open-ended questions) <input type="checkbox"/> Description of the external reviewers (e.g., number, type of reviewers, affiliations) <input type="checkbox"/> Outcomes/information gathered from the external review (e.g., summary of key findings) <input type="checkbox"/> How the information gathered was 	

	used to inform the guideline development process and/or formation of the recommendations (e.g., guideline panel considered results of review in forming final recommendations)	
14. UPDATING PROCEDURE <i>Describe the procedure for updating the guideline.</i>	<input type="checkbox"/> A statement that the guideline will be updated <input type="checkbox"/> Explicit time interval or explicit criteria to guide decisions about when an update will occur <input type="checkbox"/> Methodology for the updating procedure	
DOMAIN 4: CLARITY OF PRESENTATION		
15. SPECIFIC AND UNAMBIGUOUS RECOMMENDATIONS <i>Describe which options are appropriate in which situations and in which population groups, as informed by the body of evidence.</i>	<input type="checkbox"/> A statement of the recommended action <input type="checkbox"/> Intent or purpose of the recommended action (e.g., to improve quality of life, to decrease side effects) <input type="checkbox"/> Relevant population (e.g., patients, public) <input type="checkbox"/> Caveats or qualifying statements, if relevant (e.g., patients or conditions for whom the recommendations would not apply) <input type="checkbox"/> If there is uncertainty about the best care option(s), the uncertainty should be stated in the guideline	
16. MANAGEMENT OPTIONS <i>Describe the different options for managing the condition or health issue.</i>	<input type="checkbox"/> Description of management options <input type="checkbox"/> Population or clinical situation most appropriate to each option	
17. IDENTIFIABLE KEY RECOMMENDATIONS <i>Present the key recommendations so that they are easy to identify.</i>	<input type="checkbox"/> Recommendations in a summarized box, typed in bold, underlined, or presented as flow charts or algorithms <input type="checkbox"/> Specific recommendations grouped together in one section	
DOMAIN 5: APPLICABILITY		
18. FACILITATORS AND BARRIERS TO APPLICATION <i>Describe the facilitators and barriers to the guideline's application.</i>	<input type="checkbox"/> Types of facilitators and barriers that were considered <input type="checkbox"/> Methods by which information regarding the facilitators and barriers to implementing recommendations were sought (e.g., feedback from key stakeholders, pilot testing of guidelines before widespread implementation)	

	<input type="checkbox"/> Information/description of the types of facilitators and barriers that emerged from the inquiry (e.g., practitioners have the skills to deliver the recommended care, sufficient equipment is not available to ensure all eligible members of the population receive mammography) <input type="checkbox"/> How the information influenced the guideline development process and/or formation of the recommendations	
<p>19. IMPLEMENTATION ADVICE/TOOLS <i>Provide advice and/or tools on how the recommendations can be applied in practice.</i></p>	<input type="checkbox"/> Additional materials to support the implementation of the guideline in practice. For example: <ul style="list-style-type: none"> ○ Guideline summary documents ○ Links to check lists, algorithms ○ Links to how-to manuals ○ Solutions linked to barrier analysis (see Item 18) ○ Tools to capitalize on guideline facilitators (see Item 18) ○ Outcome of pilot test and lessons learned 	
<p>20. RESOURCE IMPLICATIONS <i>Describe any potential resource implications of applying the recommendations.</i></p>	<input type="checkbox"/> Types of cost information that were considered (e.g., economic evaluations, drug acquisition costs) <input type="checkbox"/> Methods by which the cost information was sought (e.g., a health economist was part of the guideline development panel, use of health technology assessments for specific drugs, etc.) <input type="checkbox"/> Information/description of the cost information that emerged from the inquiry (e.g., specific drug acquisition costs per treatment course) <input type="checkbox"/> How the information gathered was used to inform the guideline development process and/or formation of the recommendations	
<p>21. MONITORING/ AUDITING CRITERIA <i>Provide monitoring and/or auditing criteria to measure the application of guideline recommendations.</i></p>	<input type="checkbox"/> Criteria to assess guideline implementation or adherence to recommendations <input type="checkbox"/> Criteria for assessing impact of implementing the recommendations <input type="checkbox"/> Advice on the frequency and interval of measurement	

	<input type="checkbox"/> Operational definitions of how the criteria should be measured	
DOMAIN 6: EDITORIAL INDEPENDENCE		
22. FUNDING BODY <i>Report the funding body's influence on the content of the guideline.</i>	<input type="checkbox"/> The name of the funding body or source of funding (or explicit statement of no funding) <input type="checkbox"/> A statement that the funding body did not influence the content of the guideline	
23. COMPETING INTERESTS <i>Provide an explicit statement that all group members have declared whether they have any competing interests.</i>	<input type="checkbox"/> Types of competing interests considered <input type="checkbox"/> Methods by which potential competing interests were sought <input type="checkbox"/> A description of the competing interests <input type="checkbox"/> How the competing interests influenced the guideline process and development of recommendations	

From:

Brouwers MC, Kerkvliet K, Spithoff K, on behalf of the AGREE Next Steps Consortium. The AGREE Reporting Checklist: a tool to improve reporting of clinical practice guidelines. *BMJ* 2016;352: i1152. doi: 10.1136/bmj. i1152.

For more information about the AGREE Reporting Checklist, please visit the AGREE Enterprise website at <http://www.agreetrust.org>.

Appendix D: Literature Review

Author/ Publication Year	Type of Source	Population/ Sample	Intervention	Findings	GRADE score
Booker, S., & Haedtke, C. (2016). Evaluating pain management in older adults. <i>Nursing</i> , 46(6), pp.66-69.	Publication in <i>Nursing 2021</i> peer reviewed journal	Older adults presenting to physician's office or emergency room	Providing pain management depending on the level of pain	Patients who were treated quickly with appropriate measures did better with pain control	Moderate
Carvalho, A., Martins Pereira, S., Jácomo, A., Magalhães, S., Araújo, J., Hernández Marrero, P., Costa Gomes, C. & Schatman, M. (2018). Ethical decision making in Pain management: a conceptual framework. <i>Journal of Pain Research</i> , Volume 11, pp.967-976.	Publication in the National Library of medicine and <i>Journal of Pain Research</i>	Patients who were seen for pain management who faced ethical issues for prescribers	describe possible ethical frameworks that can be combined and integrated to better define the ethical issues in pain management. and discuss possible directions forward to improve ethical decision making in pain management.	Developing an ethical framework for pain management will result in enhanced quality of care, linking the epistemic domains of pain management to their anthropological foundations, thereby making them ethically sound.	Moderate
Chi, N., Demiris, G., Pike, K., Washington, K., & Oliver, D. (2018). Pain Management Concerns from the Hospice Family Caregivers' Perspective. <i>American Journal of Hospice and Palliative Medicine</i> ®, 35(4), pp.601-611.	Publication in the <i>American Journal of Hospice and Palliative Medicine</i>	They included baseline interviews of 15 hospice caregivers of patients from hospice agencies in the States of Washington. Many of the participants were white and female	The study showed that "Informal Hospice Caregiver Pain Management Concerns" framework is an applicable framework and provided a comprehensive	The study identified 5 out of the 6 major themes in the original framework and confirmed that hospice family caregivers face a variety of challenges: caregiver-centric issues,	High

		caregivers. They were spouse/partner or adult child living with the patient.	investigation on hospice family caregivers' difficulties in pain management.	caregiver's medication skills and knowledge, communication and teamwork, organizational skill, and patient-centric issues	
National Consensus Project for Quality Palliative Care. Clinical Practice Guidelines for Quality Palliative Care, 4th edition. Richmond, VA: National Coalition for Hospice and Palliative Care; (2018). https://www.nationalcoalitionhpc.org/nctp .	Clinical Practice Guideline	Patients who were admitted to Palliative care in Richmond VA	Provide updated clinical practice guidelines for palliative care patients	The NCP Guidelines formalize and delineate evidence-based processes and practices for the provision of safe and reliable high-quality palliative care for adults, children, and families with serious illness in all care settings.	High
Melnyk, B. and Gallagher-Ford, L., (2015). Implementing the New Essential Evidence- Based Practice Competencies in Real-world Clinical and Academic Settings: Moving from Evidence to Action in Improving Healthcare Quality and Patient Outcomes. <i>Worldviews on Evidence-Based Nursing</i> , 12(2), pp.67-69.	Publication in <i>Worldviews on Evidence Based Nursing</i>	The healthcare systems in the United States that have already begun to implement the new EBP competencies .	There are very few validated tools that exist to measure competency in EBP. The three tools that do exist, the Berlin questionnaire, the Fresno tool, and the Assessing Competency in Evidence based medicine (ACE) tool, have focused on medical students and	The new research based EBP essential competencies provide leaders with another tool that can assist them in taking action and moving their organizations toward high quality safe care. They can be implemented in a broad range of applications	High

			graduates from medical school		
Mularski, R., White-Chu, F., Overbay, D., Miller, L., Asch, S. & Ganzini, L., (2010). Measuring pain as the 5th vital sign does not improve quality of pain management. <i>Journal of General Internal Medicine</i> , 21(6), pp.607-612.	Retrospective review of medical records	Pain management patient visits selected from all 15 primary care providers of a general medicine outpatient clinic.	retrospectively reviewed medical records at a single medical center to compare providers' pain management before and after implementing the initiative and performed a subgroup analysis of patients reporting substantial pain	Patients who reported substantial pain often did not receive recommended care: 22% had no attention to pain documented in the medical record, 27% had no further assessment documented, and 52% received no new therapy for pain at that visit.	Moderate
Raffaelli, W. & Arnaudo, E., (2017). Pain as a disease: an overview. <i>Journal of Pain Research</i> , Volume 10, pp.2003-2008.	Publication in the <i>Journal of Pain Research</i>	A literature overview of the several conceptualizations of pain as a disease since the pioneering work of John J Bonica	10% of the world's population is affected by a chronic pain condition and every year, an additional 1 in 10 people develops chronic pain. Pain should be treated as a disease and not a symptom of a disease in chronic management.	acknowledged that there is an essential difference between pain as a symptom and chronic pain. The scientific community has also recognized the specificity of Pain as a disease this condition based on the identification of several associated pathologic modifications	High

Appendix E: Clinical Practice Guidelines

Purpose

The purpose of this updated guideline is to provide pain management direction to the hospice clinical staff during the admission process.

Procedure:

- The CPG will be reviewed with all clinical staff on implementation
- The CPG will be included in new hire orientation
- The CPG will be included in the mandatory annual education for staff
- The CPG will be included in the policy and procedure manual
- The CPG will be used as a guide for prescribing pain medication to hospice patients being admitted for end-of-life care.

Question

In the context of hospice, what are current evidence-based strategies for managing pain?

Target Population

The CPG will be a tool to address pain management during the admission process for hospice patients.

Disease/Condition:

All Hospice patients

Guideline Category:

Pain assessment, Pain management, Prevention of unwarranted acute pain; Treatment of acute pain and acute/chronic pain.

General Guidance:

- Avoid using confusing language, clinical terms, medical jargon
- Make the pain assessment your priority on admissions
- Do not delegate the pain assessment
- Consider having the physician or other clinician with you, or on the phone standing by to give admission pain orders

Recommendation 1: Numeric pain scale-

The Numeric Pain Scale is to be used on all patients who can speak or respond to

questions and can count to 10, This includes sleeping patients. It is recommended to wake

a patient for a pain assessment to assess for proper pain management effectiveness.

Propper assessment and documentation on admission is important to follow any trend in increasing pain, so it can be managed quickly. The numeric pain scale should be utilized during any additional assessments if the patient remains capable of giving an appropriate response.

Recommendation 2: Nonverbal pain scale-

The Checklist of Non-verbal Pain Indicators (McGuire, 2016) should be utilized for nonverbal or non-responsive patients who cannot self-report pain. The CNPI has been incorporated into most electronic medical record systems in acute and hospice care due to its usefulness in treating patients who cannot self-report. If this pain scale is not available on the electronic medical record, a free printable copy is available online. Once this pain scale is utilized for non-responsive patients, the same scale should continue to be utilized during each subsequent pain assessment to ensure proper tracking of pain trends.

Recommendation 3: Mild pain treatment by diagnosis

Patients admitted with a diagnosis which would have a “mild” pain rating such as: End stage cardiac disease with edema less than 2+, failure to thrive, malnutrition, certain pain free cancers, mild dementia, other end stage disease with mild associated pain, and admission due to natural causes. These patients should follow pain recommendations for “mild” pain management.

Acetaminophen extra strength and/or ibuprofen are recommended for mild pain, acetaminophen is not contraindicated in patients with severe hepatic impairment or those

at risk for hepatotoxicity in hospice care. Ibuprofen is not contraindicated in hospice patients with renal disease. Pain management takes priority at end of life. Research shows that older adults with moderate-to-severe dementia, arthritis and heart disease who take acetaminophen extra strength routinely have greater levels of general activity and social interaction than those taking a placebo (McGuire, 2016). All patients should have a breakthrough gentle opioid medication on board from time of admission. These patients should also utilize holistic measures for pain management such as: heat or cold therapy, massage, reiki relaxation, music therapy, touch therapy, aromatherapy, tens therapy and family presence. An adjuvant medication, such as an antiepileptic drug, antidepressant, muscle relaxant or anti-anxiety medications could also be useful in these patients before pain progresses.

Recommendation 4: Moderate pain treatment by diagnosis

Patients admitted with a diagnosis which would carry a “moderate” pain rating such as: End stage heart disease with 2+ pitting edema or greater, vascular dementia, Alzheimer’s dementia, fall with mechanical injury and no broken bones, untreatable aneurysm, Huntington’s disease, moderately metastasized cancers, and similar end stage diseases, select short acting opioids, with or without acetaminophen and a topical analgesic (for localized pain) are an appropriate measure for moderate pain. Opioids should be chosen based on pain type; potential adverse reactions; and patient preference and comorbidities. Opioids can be safely used for pain control in the hospice population, but risk evaluation and mitigation strategies must be in place to minimize potential adverse reactions and

maximize pain relief and quality of life. These medications should always be prescribed with a bowel regimen to prevent constipation and additional pain related to the bowels. All patients should have a moderate breakthrough opioid medication on board from time of admission. In cases of increasing moderate pain, an adjunct therapy should be considered. These patients should also utilize holistic measures for pain management such as: heat or cold therapy, massage, reiki relaxation, music therapy, touch therapy, aromatherapy, tens therapy and family presence.

Recommendation 5: Severe pain treatment by diagnosis

Patients admitted with a diagnosis which would carry a “severe” pain rating such as: metastasized cancers, mechanical fall with broken bones, MVA with trauma, any trauma patient, end stage vascular dementia, untreated hemorrhagic stroke, acute MI and other similar illnesses., Use a long-acting or extended-release opioid with acetaminophen, combined with a short-acting opioid for breakthrough pain. Provide pain medication immediately before bedtime to reduce the likelihood that the patient will be awakened by pain during the night. Provide pain medication around the clock during awake hours to reduce the likelihood of severe breakthrough pain. An adjuvant medication, such as an antiepileptic drug, antidepressant, muscle relaxant or anti-anxiety medications could also be useful in these patients. All opioid pain regimens should be prescribed with a bowel regimen to prevent constipation related pain issues. These patients should also utilize holistic measures for pain management such as: heat or cold therapy, massage, reiki relaxation, music therapy, touch therapy, aromatherapy, tens therapy and family

presence. Multimodal treatments are the most effective to manage severe pain and should be utilized in all cases where appropriate.

Recommendation 6: Prevention of adverse reactions

Opioid adverse events, such as severe constipation, nausea with or without vomiting, and sentinel events such as falls with or without injury can be additional sources of pain for our patients. Clinical staff should be proactively insuring there are protocols in place to reduce these risks. The following strategies can help manage common opioid-induced adverse reactions:

- Constipation- Initiate a bowel regimen immediately following a pain regimen. This includes stool softeners, stimulants and or fiber. Increased hydration and toileting regimen to promote defecation.
- Nausea/Vomiting- Give pain medications with a meal or snack. Keep patients head of bed elevated, provide plenty of fluids, avoid noxious odors and provide antiemetics when needed.
- Sedation/respiratory depression- Monitor O₂ saturations, when possible, encourage the use of coughing and deep breathing. If the patient can comply. Encourage repositioning and keeping the head of the bed elevated more than 40 degrees. Implement safety and fall precautions, adjust medications only if absolutely needed. Know the difference between sedation, distress, and end-of-life processes.