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Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care

Lannese Purtell
South Dakota State University, lannese.purtell@gmail.com

Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care: Review of Literature

BY

Lannese Purtell

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This Doctor of Nursing Practice (DNP) Project is approved as a credible and independent investigation by a candidate for the DNP degree and is acceptable for meeting the project requirements for this degree. Acceptance of this DNP Project does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Dannica Callies, DNP, CNP, FNP-C, CNE Date

DNP Project Advisor

Heidi Mennenga, PhD, RN, CNE Date

Associate Dean for Academic Programs

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Abstract

Introduction: Chronic pain is an epidemic facing the United States health care system. Chronic pain is widespread and often undertreated by health care providers. A variety of survey and literature review techniques have pointed to inadequate education, negative beliefs, and lack of protocols on pain management as the cause.

Methods: Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, OVID, and Google Scholar were searched using the key terms: 'pain management AND nursing AND protocol,' 'chronic pain AND protocol AND nursing,' 'pain management AND home healthcare,' 'pain management OR pain protocol AND home healthcare AND nursing,' 'nursing protocol AND pain,' and 'nursing protocol AND pain AND randomized control trial.' Articles were limited to those available in full text, published in scholarly peer reviewed journals, and written in the English language. A total of 14 articles was selected for the literature review.

Gaps: Small sample sizes, perceived barriers, and poor generalizability have made implementing protocols based on the current research problematic. Additionally, there is a lack of available data on how these protocols translate into home health care.

Recommendations: Pain management protocols are recommended to be in place for all areas of health care. Protocols can be used to improve knowledge, attitudes, and comfort of nurses caring for chronic pain patients. More evidence is needed on translating protocols into home health care.

Keywords: chronic pain, protocol, home health, pain management

Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care: Review of Literature

Pain has often been referred to as “the fifth vital sign” yet management of pain has been suboptimal (Drake & Williams, 2017). Chronic pain affects nearly 100 million Americans (Martorella et al., 2018). Chronic pain has been known to cause sleep disturbances, mental health disorders, and impair functionality and quality of life. Poor pain management leads to increased use of health care resources and increased health care costs (Drake & Williams, 2017). Negative beliefs as well as lack of education on treatment have been identified as barriers to receiving effective treatment and management of chronic pain (Hamdan et al., 2022). It is imperative that proper pain management protocols address both negative beliefs of pain and provide pain education to improve patient outcomes (Kahsay & Pitkajarvi, 2019).

Samarkandi (2018) reported that nearly half of all health care providers feel they lack knowledge in pain assessment and management. In addition, negative attitudes and beliefs held by nurses about patients with chronic pain lead to patients being dissatisfied with the health care they receive. Furthermore, nurses feel reluctant to implement policies and protocols to address the needs of patients with chronic pain. The review of literature conducted supports the need for chronic pain management education and protocols to be used in a variety of health care settings (Admassie et al, 2022). This is supported by the American Association of Critical Care Nurses (AACN, 2018). Egnatios (2015) noted that the use of pain management education is useful not only for home health care providers to better understand their patient’s disease process, but also to help educate and empower patients to better manage their condition.

The number of Americans receiving Medicare funded home health care in 2018 totaled 5 million people. This number is expected to grow exponentially due to an aging population. By the year 2030, one in five Americans will be over the age of 65, and with nearly 50% of older adults reporting they have pain, education on pain management and use of pain management protocols is paramount (Egnatios, 2015). This statistic highlights the need for holistic patient care including management of chronic pain (Chimenti et al., 2021). For these reasons, the following PICOT question was developed: In home health care nurses working with patients who have chronic pain (P), how does the implementation of a chronic pain protocol (I) compare with no current chronic pain protocol (C) impact nurses' knowledge, attitudes, and comfort of chronic pain care (O) over 5 months (T)?

Methods

This literature review consisted of searching the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, OVID, and Google Scholar. Keywords and phrases used to search the literature included 'pain management AND nursing AND protocol,' 'chronic pain AND protocol AND nursing,' 'pain management AND home healthcare,' 'pain management OR pain protocol AND home healthcare AND nursing,' 'nursing protocol AND pain,' and 'nursing protocol AND pain AND randomized control trial.' Articles were limited to those available in full text, published in scholarly peer reviewed journals, and written in the English language. A total of 14 articles were selected for the literature review (Appendix A).

Articles were graded using the Johns Hopkin's Nursing Evidence-Based Practice Evidence Level and Quality Guide and can be found in Appendix B. Permission granted

for use of the model can be found in Appendix C. Studies reviewed include: two cross sectional; one cross sectional qualitative review; one scoping review; one multi-center cross sectional; one literature review; three quasi-experimental; one comparative, single center, retrospective study; one survey; one quality improvement; one randomized control trial; and one cross-sectional web-based survey.

Evidence Findings

The review of literature conducted supported the education of health care staff on chronic pain assessment, treatment, and documentation. Currently, most nurses report they have not received specialized pain management education both at college and professional levels (Chen et al., 2018; Kahsay & Pitkajarvi, 2019; Samarkandi, 2018). Nurses have reported negative attitudes and beliefs towards patients with chronic pain and feel reluctant to implement pain management protocols because of these misconceptions (Thompson et al., 2018). Nurses report improved ability to care for chronic pain patients when protocols are in place (Hamdan et al., 2022).

Barrier to Pain Management

Lack of Knowledge

Use of surveys as a method of assessing both pre and post intervention knowledge is a common theme noted in this literature review. Survey methods included in this literature review ranged from 38 to 112 questions assessing the knowledge, attitudes, and barriers to implementation of pain management interventions. The results of these surveys consistently noted lack of knowledge and poor attitudes about chronic pain in pre-intervention testing. Kahsay and Pitkajarvi (2019) conducted a cross sectional qualitive review using a 112-question knowledge, attitude, and barrier to pain

management survey administered to 126 nurses. A validated assessment tool, Nursing Knowledge and Attitudes Survey Regarding Pain (NKASRP), was used when conducting this survey. This study showed poor attitudes and lack of education on pain management. This lack of knowledge results in more negative attitudes held about patients with chronic pain (Thompson et al., 2018).

Poor Attitudes

Poor attitudes by nurses and health care staff towards patients with chronic pain continue to be a well-documented occurrence. Martorella et al. (2019) surveyed 571 emergency room nurses and noted that 64.4% believed patients are addicted to their medications, 29.5% believed patients exaggerate their condition, and 24.7% felt that if patients could continue their normal daily activities, their pain must not be that bad. Chen et al. (2018) noted similar findings when surveying 201 emergency department workers. They found that 61 respondents reported negative perceptions of chronic pain, and 16 respondents reported that pain is not a medical emergency. Samarkandi (2018) found lack of education results in poor attitudes towards chronic pain management. Pain management education should begin in undergraduate studies and continue while in the health care work force (Kahsay & Pitkajarvi, 2019; Samarkandi, 2018; Thompson et al., 2019).

Lack of Chronic Pain Education

Continuing education for health care professionals on pain management continues to be lacking. Samarkani (2018) used a cross sectional study design consisting of a 38-question knowledge and attitudes survey administered to hospital nurses and found that half (50.6%) reported no pain management education within the last five years. Admassie

et al. (2022) noted that lack of pain education and decreased frequency of pain education were perceived as barriers to effective pain management by nurses. Thompson et al. (2018) performed a scoping review of 35 years worth of literature (sum of 53 articles dated 1992-2017) and noted similar findings to the above referenced article that pain management education is lacking in healthcare. Chen et al. (2018), Drake and Williams (2017), and Martorella et al. (2019) all emphasize the importance of proper pain management education due to lack of knowledge and perceived negative assumptions of patients with chronic pain. Hamdan et al. (2022) recommend the use of continuing education on pain management.

Pain Management Protocols

This literature review highlights the importance of pain management protocols for the proper management and care of patients with chronic pain. Evidenced-based protocols are essential to ensure proper evaluation and care of chronic pain patients (Kahsay & Pitkajarvi, 2019). Use of chronic pain management protocols has been shown to decrease stigmatization by nurses and health care staff and improve patient satisfaction with pain management.

Protocol implementation ensures that knowledge gained translates into practice. Successful pain management protocols include identifying education barriers among staff, education on the identified barriers as well as proper assessment of and documentation on pain, overcoming negative perceptions and discomfort, and implementation of guidelines on how to appropriately treat chronic pain. Cui et al. (2018) implemented a pain management protocol for nurses to use in orthopedic post operative patients and used a validated pre and post assessment tool to determine the effectiveness

of training. This study noted that protocol implementation improved nurses' knowledge and attitudes regarding chronic pain as well as improved treatment. Patients included in this study had undergone elective orthopedic surgery. It was unclear if they had chronic pain prior to surgery or if the surgery was related to chronic pain. Patients reported improvement in pain, increased ability to perform activities of daily living (ADLs), and improved sleep after protocol implementation. Additionally, patients reported improved satisfaction with care of their pain (Cui et al., 2018).

Patient Assessment

The American Association of Critical Care Nurses [AACN] (2018) recommends that all areas of healthcare have a pain assessment policy in place and that assessment of pain be performed using a validated assessment tool. Patient self-report is still the gold standard for pain assessment in adults. Nurses can elicit patient self-report by use of numeric pain rating scales and simple questions. Patients should be taught on the use of verbal and nonverbal communication such as numeric scales, pointing, and head nodding to communicate pain to health care professionals (AACN, 2018).

Numeric 0 to 10 format scales are commonly used in health care, are easily accessible, and can be used in a wide variety of health care settings. Use of a numeric 0 to 10 scale in visual format has been shown to be the best discriminative tool for adult intensive care unit (ICU) patients (AACN, 2018). Other pain assessment options exist if a patient is unable to rate their pain numerically. In adults unable to communicate pain effectively, yes or no questions should be considered a self-report of pain. In patients who are critically ill or still struggle to communicate about their pain, self-report should focus on the presence of pain rather than its intensity (AACN, 2018).

Pain assessment tools are readily available in health care settings. Wong Baker allows for free access of both the FACES and numerical pain rating scales via internet download. This scale uses both numbers and facial expressions to allow patients to communicate their pain. The Abbey pain scale is useful in patients with dementia and those unable to communicate pain effectively. This pain rating scale uses nonverbal cues to assess pain using a 0 to 14 scale with 0 being no pain and 14 being severe pain. This scale is widely used in dementia and nonverbal patients due to its exceptional psychometric properties and is easily accessible online (Atee et al., 2017). Other scales available for use with nonverbal patients include the Behavioral Pain Scale which assesses pain in ventilator dependent patients, and the FLACC scale which is used with infants and young children who cannot verbalize discomfort (Atee et al., 2017). These scales supply useful information, however, their use in home health care has been extremely limited.

Documentation

Providing education on chronic pain has shown to improve documentation of chronic pain and increase consistency of documentation between health care providers (Drake & Williams, 2017). A literature review conducted by Drake and Williams (2017) found that seven of eight reviewed papers noted improved documentation after education and implementation of pain management protocols. Documentation among staff was more comprehensive and included a detailed description of the patient's pain including the patient's description of their pain, their numerical rating of pain using a validated assessment tool, and a description of pain management methods and resources used. The

literature review noted that implementation of pain management protocols increased the accuracy of documentation (Drake & Williams, 2017).

The American Association of Critical Care Nurses (2018) has set forth rules for pain management documentation. They note that assessment of pain should be conducted and documented at a minimum at the beginning of a shift, when giving report to another health care provider, and at the end of a shift. Documentation should include pain rating and vital signs at a minimum. It is important for nurses to understand that while changes in vital signs can be an indicator of pain, they should not be relied upon as the sole indicator of pain. Significant changes in vital signs such as tachycardia, bradycardia, hypertension, hypotension, desaturation, and bradypnea should be considered an adverse event of severe pain. Increasing documentation accuracy leads to increased efficiency and the ability of providers to use universal language for easier communication.

The use of the OPQRST (onset of event, provocation or palliation of symptoms, quality, region and radiation, severity, timing) tool provides the components of proper documentation in a concise and easy to understand format. This tool is useful for health care providers in that it allows for complete and consistent documentation of chronic pain. This tool was created by the University of Florida College of Medicine-Jacksonville as part of the Pain Assessment and Management Initiative. The overall goal of this initiative is to provide safe pain management options in health care systems through patient education, quality improvement, and research (University of Florida Health, 2022).

Nurse Knowledge, Attitudes, & Comfort

Knowledge

Lack of education, poor perceptions, and feelings of inadequacy translate into poorer quality of care and negative attitudes when dealing with patients with chronic pain. Samarkandi (2018) found that of nurses surveyed, 15.4% of nurses did not recognize the presence of pain because vital signs were normal, 20% reported that patients can sleep despite pain, and 55.9% would encourage patients to tolerate pain before treating it.

Chimenti et al. (2021) and Egnatios (2015) used quasi-experimental and quality improvement study methods, respectively. Both studies consisted of a pretest education on pain management and a post test. Both studies found significantly higher scores on the knowledge and treatment of pain post education as well as improved patient outcomes. Chimenti et al. (2021) specifically noted improvement in nurses' knowledge of pain management post intervention with a pretest score of 50.7% and post test score of 58.7% (n=54, T=3.08, & $p = 0.003$). In addition, 64.5% of health care professionals reported the education module would have at least a moderate impact on their practice (Chimenti et al., 2021). Egnatios (2015) reported most health care providers included in their survey said they would readily implement an evidence-based pain management intervention into practice.

The literature reviewed has clearly shown that use of chronic pain protocols results in increased knowledge by nursing staff versus having no protocol in place. Severe knowledge and attitude deficits occur with a lack of training and education, both of which are encompassed in pain management protocols (Kahsay & Pitkajarvi, 2019).

Improving nursing pain management requires more than just education. Behavioral change must occur and be sustained for the intervention to be successful (Drake & Williams, 2017). Pain management protocols include the aspects neglected by education alone. They provide intrinsic motivation, professional identity, and emotional attachment to the subject matter (Drake & Williams, 2017). When protocols are used, nurses are more likely to offer pain relief measures, both pharmacologic and nonpharmacologic, to patients in their care (Uysal & Yilmazer, 2021). Health care staff trained in proper pain relief techniques reported that they felt these techniques would be beneficial to use in practice.

Uysal et al. (2021) noted an improvement in knowledge allowed nurses to understand their role in pain management, increased the use of proper assessment tools, and increased the use of appropriate treatment. The increased knowledge led to increased patient and provider satisfaction, significant improvement in nurses' self-efficacy, positive changes in pain assessment and documentation, and respect for each team members' role in pain management.

Attitudes

Negative attitudes and perceptions of chronic pain can lead to misconceptions being held by nurses on pain management and pain management protocols. These misconceptions include the belief that patients exaggerate their pain to seek attention or gain access to analgesics (Samarkandi, 2018). It is important for health care providers to recognize the misconceptions they hold as well as understand how their beliefs and attitudes towards chronic pain impact their ability to provide care. Failing to know and overcome implicit biases can lead to under or over treatment of pain (Muscat et al.,

2021). Myths and misinformation held about opioid use have led to providers feeling reluctant to prescribe opioids as well as families and health care staff being reluctant to give prescribed opioids (Chen et al., 2018; Chimenti et al., 2020).

Negative beliefs of chronic pain by nurses and health care staff improve with the use of education and pain management protocols. Muscat et al. (2021) noted that when nurses were properly educated and nurse-led analgesic protocols were in place, attitudes towards patients with chronic pain improved. Additionally, patients with chronic pain reported increased satisfaction with care, and analgesic administration time improved. Muscat et al. (2021) noted that nurse led pain management protocols increased analgesic administration from 44.3% to 57.8% with protocol implementation. Similarly, when nurses were educated on chronic pain and had pain management protocols in place, fewer negative beliefs were held, and the increased knowledge led to improvements in patient care.

Comfort

In addition to inadequate knowledge and poor perceptions, nurses often lack comfort in adequately caring for patients with chronic pain without proper education and protocols. Chen et al. (2018) found that 35% of nurses surveyed reported feeling inadequately prepared to deal with chronic pain. Feelings of inadequacy and negativity improved with the use of pain management protocols. When nurses are properly educated and have the proper tools in place, comfort levels increase. This finding is consistent with those of Muscat et al. (2021) and Uysal and Yilmazer (2021). Both articles highlight the importance of increasing knowledge of pain management and improving nurse comfort through education and protocol implementation.

Patient Benefits

High functioning teamwork improves quality of care. Interprofessional communication between practitioners, nurses, patients, and caregivers aids in the development of strong interpersonal relationships, which enable optimal health outcomes to occur (Gordon et al., 2019). With the use of chronic pain protocols, health care providers are equipped to educate patients on how to manage their chronic condition and ultimately improve their quality of life and satisfaction with care. This is an added benefit of improving the knowledge, attitudes, and comfort level of nurses.

Egnatios (2015) noted that providing an evidence-based bundle to home health staff improved patient mobility. This evidenced-based bundle included the following components: combining pharmacologic and nonpharmacologic interventions for pain relief (grade C recommendation), instituting psychopharmacologic interventions as part of the plan of treatment for pain (grade A recommendation), and cognitive-behavioral strategies used in a multidisciplinary approach for treatment of chronic pain (grade A recommendation). These interventions were successful in reducing pain with movement. A total of 78.1% of patients in the experimental group whose home health staff received access to evidence-based pain management bundle reported significant improvement in pain with activity ($p = 0.007$.) Only 48.1% of patients in the control group, who received no bundle, reported improvement in pain with activity (Egnatios, 2015). Patient outcomes have been shown to improve with the use of evidence-based pain assessments and use of comprehensive pain management (Ersek et al., 2012).

Gaps in the Literature

Throughout the literature, pain management protocols were found to be useful in the assessment and treatment of chronic pain, however literature discussing translating pain management protocols into home health care is lacking. The articles reviewed did not offer insight on how implementation of pain management education was sustained over time or how the education translated into the desired practice area. It is unclear how well the material presented was retained or if the protocols implemented were sustainable. Information is lacking on how often reeducation should occur when implementing a pain management protocol as none of the literature reviews provided follow up post implementation.

Recommendations for Practice

All articles reviewed recommend the use of chronic pain education for health care providers. Increasing contact hours on pain management allows students to gain education on pain and modern pain management (Kahsay & Pitkajarvi, 2019). Moreover, pain management education and protocols should continue in the workforce. Current literature suggests that nurses and health care personnel who lack pain management education tend to have negative views of patients with chronic pain (Martorella et al., 2019). Nurses and health care professionals who take part in pain management education report improved knowledge of pain and more favorable attitudes towards patients with chronic pain (Chimenti et al, 2021; Muscat et al., 2021; Thompson et al., 2018; Uysal & Yilmazer, 2021). Additionally, improved knowledge about chronic pain enables health care providers to provide patients with the tools necessary to better manage their

condition and provide information on lifestyle changes that can lessen pain (Egnatios, 2015).

Chronic pain management protocols encompass the key aspects to improving chronic pain management by identifying perceived barriers to effective pain management by health care workers, identifying gaps in knowledge, providing education to overcome knowledge gaps, improving attitudes about patients with chronic pain, and increasing comfort in the ability to care for patients with chronic pain. Protocols improve the ability of health care workers to provide a comprehensive pain assessment and improves documentation of chronic pain to allow for consistent communication between health care providers. Pain management protocols bring together the necessary components of successful pain management, improve nurse comfort, and improve patient care.

Conclusion

It is imperative that chronic pain assessment and documentation protocols become a standard of practice in all aspects of health care. This literature review has uncovered barriers to effective pain management which are largely cause by lack of knowledge, poor attitudes, and lack of comfort with chronic pain, improper assessment and documentation, and perceived barriers to implementation of interventions to reduce chronic pain. Research has shown that education on chronic pain improves nurses' knowledge, attitudes, and comfort in dealing with chronic pain. Additionally, patients report improvements in the severity of pain and their ability to manage their pain when nurses are educated on how to effectively manage pain and are knowledgeable about the disease process. Improvements in documentation increase efficiency and communication amongst health care providers and allow for better tracking of pain management

interventions. It is recommended that pain management protocols become the standard of practice in all health care settings (AACN, 2018).

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Appendix A

Evidence Table

Author(s) & Date	Study Design	Participants, Sample Size & Setting	Intervention	Results	Comments (Strengths and Weaknesses)	Gaps	Recommendations for Practice	Evidence Level, Quality
Admassie et al. (2022)	Multi-center cross sectional	153 emergency room nurses from 8 emergency departments	30 item self-administered questionnaire with 10 questions on sociodemographic and work-related variable and 20 on nurses perceived barriers	Overcrowding, nurses' workload, absence of pain management tool, year of experience as emergency nurse, and frequency of training were the perceived barriers to pain management in the emergency department	Strength: Assessed work related and perceived barriers Weakness: Smaller sample size, used emergency department nurses only	Utilized emergency department staff only.	Increase the ratio of nurses to emergency room patients. Development of a pain assessment and management protocol. Training should be given regularly, and the opportunity of education should be maximized	III, B
Chen et al. (2018)	Survey	201 emergency room health care providers including nurses, physicians, EMTs, and their trainees from 13 different countries	26 item questioners administered through social media	81% of survey respondents reported no specialized pain management training and 35% reported they do not feel adequately prepared to treat chronic pain. 83% of respondents report they do not utilize guidelines when treating chronic pain. 50% of respondents reported they do not think ED providers should provide pain medication to non-cancer chronic pain patients in the ED.	Strength: Assessed beliefs and attitudes towards chronic pain. Weakness: Convenience sample, small sample size, potential conflict of interest as participants were compensated for time with an entry to win a $250 gift card	Utilized emergency department staff only.	Chronic pain management training by all providers to increase confidence in the ability to care for patients with chronic pain.	III, B

				When asked to rate their agreement with the statement 'Physicians should prescribe analgesics, including opioids, for chronic non-cancer pain' on a one to five scale with one being completely disagree and five being completely agree, prescribers had a mean score of 2.4 while non-prescribers such as nurses had a mean score of 2.9. Respondents reported the following barriers to treatment of chronic pain: negative beliefs of chronic pain (61 respondents), opioid dependency/drug seeking behaviors (31 respondents), inappropriate treatment in primary care (27 respondents), and frustration with lack of a primary care provider/pain is not an emergency (16 respondents).				
Chimenti et al. (2020)	Quasi-experimental	94 home health professionals (57 nurses, 26 physical therapists, & 11 occupational therapists.) Case load for all disciplines totaled	Pretest, two-part educational model designed by a local gerontologic nurse practitioner, and post-test.	Of the 94 home health professionals, 54 completed all phases of the project (57% completion rate).	Strength: Used among home health professionals, participation voluntary. Weakness: Small sample size	Small sample size reduces generalizability.	Comprehensive online pain management training can increase knowledge of pain management.	II, B

		approximately 1,050 patients per day. 54 participants completed training.		Mean post-test scores significantly higher than pretest scores (50.7% pretest and 58.7% posttest) showing increase knowledge of pain among all disciplines. Nurses scored higher in post-test scores than physical and occupational therapists. 31 professionals completed an optional survey. 64.5% reported the pain management intervention would have at least a moderate impact on their practice. 64.5% reported at least moderate satisfaction with the training module.				
Cui et al. (2018)	Quasi-experimental	16 registered nurses pretest/15 registered nurses posttest and 77 patients preintervention/71 patients post intervention. Intervention occurred on an orthopedic post operative unit.	Preintervention testing using two validated tools (KASRP & IPO-Q questioner.) Implementation of a pain management nursing protocol and posttest (KASRP & IPO-Q) at three- and eight-months post intervention respectively	Of the 40 items in the KASRP, nurses answered 13–26 items correctly with an average score of 53.6% ± 10.7% pre-intervention, and 20–35 items correctly with an average score of 74.0% ± 12.3% postintervention. The proportion of nurses' self-report of using standardized	Strength: Utilized validated pre and post intervention testing. Protocol implemented and knowledge and patient satisfaction measured after. Weakness: Small sample size	Small sample size reduces generalizability. Only done on an orthopedic aftercare unit.	Implementation of pain management protocols combined with education increases nurses' knowledge and attitudes regarding pain and improves patient outcomes. These should be more widely used.	II, B

				pain assessment tools for all patients pre- and postintervention were 68.8% and 73.3%, respectively. After the intervention, a smaller proportion of patients wished more pain treatment than they received compared to baseline, 21% (*n* = 15/71) vs. 5% (*n* = 4/77); and a higher proportion of patients reported receiving information about pain treatment options, 26% (*n* = 19/71) vs. 85% (*n* = 66/77) (*p* < .001). There was no change in the proportion of patients reporting they had been out of bed in the first 24 hr since surgery 14% (*n* = 10/71) vs. 16% (*n* = 13/77). After the intervention, a larger proportion of patients reported use or receipt of nondrug methods to relieve pain, compared to baseline of 60% (*n* = 43/71) vs. 96% (*n* = 74/77).				

Drake & Williams (2017)	Literature Review	12 studies reviewed consisting of quasi-experimental, experimental, and observational studies	All studies reviewed included didactic teaching and a skills component; ten included small group discussion and interactive teaching; five included role playing.	Seven of eight papers assessing pain documentation found significant improvement in documentation post intervention. Four studies documented patient satisfaction with pain management. One found significant improvement when specifically asking about nursing pain management but no improvement in overall patient satisfaction with the way their pain was managed. Two studies reported improvement in patient satisfaction with pain management post intervention. One reported no change in patient satisfaction. One study found that nurses trained to offer relaxation techniques were more inclined to do so.	Strength: Studies ranked based on quality. Higher quality evidence used. Weakness: Small sample size, focused on acute pain as well as chronic	Small sample size caused by use of only one data base and large exclusion criteria limited data collected.	Use behavioral change theory to change health care workers attitudes about pain. Overcome factors leading to ineffective pain management including workload or job-related barriers and emotional barriers.	III, B
Egnatios (2015)	Quality Improvement	Home health professionals serving 91 Medicare funded home health patients for a hospital-based home health agency	Mandatory education bundle by home care professionals including a pre and posttest. The	Of the 91 patients seen with Medicare funded home health care, the education bundle was	Strength: Used among home health professionals Weakness: Small sample size.	No way to know if clinicians used education bundle in practice.	Use of a pain management education bundle is helpful for improving patient reported pain and improves	III, C

		in Arizona from Jan. 1 to April 30, 2014.	education bundle included evidence-based interventions including combining pharmacologic and nonpharmacologic interventions for pain relief (grade C recommendation), instituting psychopharmacologic interventions as part of the plan of treatment for pain (grade A recommendation), and recognizing that cognitive-behavioral strategies used in a multidisciplinary approach are important for treatment of chronic pain (grade A recommendation.)	utilized on 64 of them (70.3%). 50 of the 64 patients (78.1%) reported an improvement in pain interfering with activity. 27 of the 91 patients did not have the bundle used during their care. 13 of the 27 (48.1%) saw an improvement in pain interfering with activity. Feedback from staff showed that they understood the educational bundle and were readily able to incorporate it into practice. Barriers to bundle implementation by staff were that the staff forgot or perceived the patients' other needs (such as IV infusion and wound care) as more urgent.			documentation of pain.	
Ersek et al. (2012)	Randomized Control Trial	485 nursing home residents from 27 nursing homes.	Use of Diffusion of Innovations Theory to implement clinical algorithm and comprehensive evidence-based pain assessment and management program.	Adaptive randomization procedures were successful in balancing intervention and control sites on key nursing home (NH) characteristics. Several strategies	Strength: Large sample size. High quality study Weakness: Utilized only in nursing homes.	Utilized only in nursing homes	Improving the quality of pain management delivered to NH residents is an urgent health-care need.	I, A

				were successfully implemented to enhance the adoption of the algorithm.				
Hamdan et al. (2022)	Cross Sectional	300 nurses from 22 intensive care units in Jordan	Pain Assessment and Management for Critically Ill Adults Survey	42.3% of nurses reported moderate to extreme satisfaction about receiving professional development pain education regarding critically ill patients. Nurse workload (65.3%), patient instability (54.4%), patient inability to communicate (53.3%), and sedation interfering with pain assessment (50%) were reported by nurses as the most frequent barriers impacting pain assessment and management. Enablers of pain assessment and management reported most frequently were "pain assessment and management is a unit priority" (63.7%), "enthusiastic and motivated staff" (61.3%), "protocols and guidelines are in use" (57.4%), and "standardized assessment tools are in use" (57%)	Strength: Large sample size Weakness: Utilized only in intensive care units.	The use of a self-reported question-naire limits the in-depth understanding of the study variables. No pretest survey for comparison. The use of a self-reported questionnaire can increase the risk for socially desirable response bias.	Pain education should be included as part of hospitals continuing education	III, B

Kahsay & Pitkajarvi (2019)	Cross Sectional Quantitative Study	126 emergency department nurses in Eritrea	Knowledge, attitude, and barrier to pain management survey consisting of 112 questions	37.1% of nurses reported some prior training on pain assessment and management. The mean score for knowledge and attitude was 49.5%. Perceived barriers include overcrowding of ED, lack of protocol for pain assessment, workload, and lack of a pain assessment tool.	Strength: Validated assessment tool used (NKASRP tool has known validity and reliability) Weakness: small sample size, convenience sample	Utilizes only ED nurses in Eritrea	Revision of nursing curriculums to include pain management education, continuing education for nursing workforce, and implement evidenced-based protocols and guidelines for pain management care	III, B
Martorella et al. (2019)	Cross-Sectional Web Based Survey	571 emergency department nurses in 20 states were recruited. 482 completed the survey.	Electronic survey taking approximately 20 minutes to complete. The survey included a demographic survey, KnowPain-12 questioner, and Chronic Myth Pain Scale.	Negative beliefs on pain noted by the fact that 64.4% believe patients are addicted to their medications, 29.5% believe patients exaggerate their condition, and 24.7% continue their daily activities so their pain must not be that bad.	Strength: large sample size Weakness: voluntary convenience sample, participants compensated for time which can skew results	Consists of a survey only and no intervention or post intervention testing.	Continuing education on pain medication is important for nurses to reduce misconceptions.	III, B
Muscat et al. (2021)	Comparative, Single Center, Retrospective Study	756 patients at least 16 years-old and no contraindications to receiving oral pain relief (377 preintervention and 379 post intervention)	Pain management training for new nurses which included nurse-initiated analgesic administration	Increased knowledge of pain management for nurses. Faster administration of acetaminophen or oxycodone and acetaminophen to combat pain using nurse-initiated protocol. Average administration time decreased from 18 minutes to 16 minutes.	Strength: Large sample size including a pre and post intervention group. Increased pain control using new protocol. Nurse-initiated protocol resulted in faster administration. Weakness: Protocol used in emergency department only	Utilized in emergency department only. Training only provided to new nurses.	Increased analgesic administration among new nurses who receive training on pain management. Increased oral analgesic for patients with moderate to severe pain.	III, B

				Nurse initiated analgesic administration increase from 44.3% to 57.8% with protocol implementation. Analgesic administration significantly improved for patients with severe pain.				
Samarkandi (2018)	Cross Sectional	247 nurses in Saudi Arabia	Knowledge and attitude survey on pain consisting of 38 questions	50.6% of nurses reported no pain education in the past 5 years. The mean total of correct answers on the knowledge and attitudes survey was 18.5 out of 40 with a range of 3-37. 15.4% of nurses did not recognize the presence of pain because vital signs were normal. 20% reported that patients can sleep despite pain. 78.9% believe the patient is the only reliable source of pain but 55.9% would encourage patients to tolerate pain before treating it. 44.5% of nurses acknowledged that patients can be distracted despite severe pain.	Strength: shows lack of education on pain Weakness: small sample size, convenience sample, substantial number of unreturned surveys (original sample size was 300)	Utilizes only hospital nurses in Saudi Arabia	Consider pain management education in undergraduate education and continue while in practice	III, B

Thompson et al. (2018)	Scoping review	56 articles from 29 countries from dates 1992-2017. (23/56 studies found with in the United States)	Survey methodology was the most frequent approach. Other studies included were observational/cohort studies, experimental design, course evaluations, qualitative approaches, and document analysis	Pain knowledge, skills, attitudes, and beliefs improve with pain education. Lack of education was associated with negative attitudes and beliefs about pain. There has been considerable research in conducting pain education with health care professionals, however, implementation of protocols has been poor.	Strength: Review of 35 years of literature Weakness: small sample size	Quality of literature reviewed not identified.	Greater implementation of core competencies for pain education and for organizations to accredit/regulate education health professionals and ensure standards for pain education	III, B
Uysal & Yilmazer (2021)	Quasi Experimental	50 inpatients who have been hospitalized 1 week or longer and 100 nurses in internal medicine	Pretest and posttest design. Nurses completed an introductory form, brief pain inventory, and pain knowledge and practice questioner. Educational meetings were given on guidelines for pain management. Pain knowledge and practice questioner was given at end of training and 3 months post training. Data obtained from inpatient patients was shared with nurses.	Increase in knowledge of pain management by nursing staff. Pre and posttest scores were 0.67 ±0.15 and 0.81 ±0.13, respectively. Informing the patient about pain significantly increased. Use of nonpharmacological interventions increased slightly. Nurses' knowledge levels increased after training; however, any significant difference was not found in nursing practice.	Strength: Intervention is of sound quality Weakness: Small inpatient sample size. 33 patients were excluded as they had no pain in the past week. Unknown if pain management education translated into practice.	Small known sample size limits generalizability. Nurses limited to those only working in internal medicine.	Health care providers should be educated on pain management procedures. Patients and families should be included in pain management. Open communication between health care staff, patients, and families encouraged.	II, A

Appendix B

Evidence Level and Quality: Grading Evidence by Individual Source

Quality ratings → Evidence Levels ↓	**A (high quality)**	**B (Good quality)**	**C (Low quality or major flaws)**
Level I	1 article		
Level II	1 article	2 articles	
Level III		9 articles	1 article

Appendix C

Johns Hopkin's EBP Model Permission

JOHNS HOPKINS EBP MODEL AND TOOLS-PERMISSION

Thank you for your submission. We are happy to give you permission to use the Johns Hopkins Evidence-Based Practice model and tools in adherence of our legal terms noted below:

- You may not modify the model or the tools without written approval from Johns Hopkins.
- All reference to source forms should include "©The Johns Hopkins Hospital/The Johns Hopkins University."
- The tools may not be used for commercial purposes without special permission.

Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care: Methodology

BY

Lannese Purtell

A paper submitted in partial fulfillment of the requirements for the degree

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Abstract

Background/Purpose: Chronic pain management protocols are necessary in all aspects of health care to reduce negative perceptions and improve knowledge and comfort when caring for patients with chronic pain.

Methods: A pre-implementation Simplified Knowledge and Attitude Survey Regarding Pain (KASRP) and Comfort Survey were administered to rural Midwest home health nursing staff followed by implementation of a chronic pain management protocol. The protocol included an educational session on understanding and managing chronic pain, the use of the OPQRST handout to guide proper documentation, Pain Risk Factors Assessment Form, and a Managing Chronic Pain handout. The Simplified KASRP and Comfort Surveys were readministered 3.5 months after implementation for a total timeline of 5 months.

Results: The overall mean scores of pre and post implementation Simplified KASRP Surveys were 0.74 and 0.73, respectively with a p-value of 0.95. The overall mean scores of pre and post implementation Comfort Surveys were 0.83 and 0.84, respectively with a p-value of 0.42. Clinically, the project stakeholder reported improved documentation.

Discussion: Despite the lack of significant change in pre and post-implementation surveys, improvements in documentation and improved ability to care for chronic pain patients were reported.

Implications for Practice: A chronic pain assessment and documentation protocol has the potential to increase the knowledge, attitudes, and comfort level of home health nurses caring for patients with chronic pain.

Keywords: chronic pain, protocol, home health, pain management

Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care: Methodology

Background/Purpose

Despite pain being referred to as the "fifth vital sign," treatment is variable and often management is suboptimal. This leads to increased use of health care resources including prolonged hospital stays, increased health care costs, and increased patient hardship. Chronic pain can impair the affected individual's ability to sleep and function leading to mental health disorders and poorer quality of life (Drake & Williams, 2017). Patient outcomes improve when nurses have a foundational knowledge of chronic pain, and the inverse is true when nurses lack knowledge on chronic pain (Kahsay & Pitkajarvi, 2019). Development of chronic pain curriculums and protocols have been shown to be instrumental in increasing knowledge, attitudes, and comfort in the assessment and management of chronic pain (Kahsay & Pitkajarvi, 2019).

Home health clinicians play a vital role in chronic pain evaluation and treatment (Chimenti et al., 2020). The Centers for Medicare and Medicaid Services (CMS) has tasked home health agencies with developing quality improvement projects and implementing protocols that address barriers such as inadequate pain management in their patient population (CMS, 2022). The literature shows that improving clinicians' knowledge, attitudes, and comfort improves practice performance and patient outcomes (Chimenti et al., 2020).

PICOT Question

The reasons above led to the development of the following PICOT question: In home health care nurses working with patients who have chronic pain (P), how does the

implementation of a chronic pain protocol (I) compared to no current chronic pain protocol (C) impact nurses' knowledge, attitudes, and comfort of chronic pain care (O) over 5 months (T)?

Recommendations for Practice

The current practice recommendation is for nurses and health care providers to receive education specific to pain management which should begin in undergraduate studies and continue while in the workforce (Kahsay & Pitkajarvi, 2019). Improvements in knowledge result in improved patient care as nurses can provide patients with the tools needed to manage their pain and provide information on lifestyle modifications to lessen pain (Egnatios, 2015). Chronic pain protocols work to overcome gaps in knowledge and barriers to successful pain management as well as improve the knowledge, attitudes, and comfort levels of health care providers. It is vital that protocols extend beyond improving knowledge and seek to change negative attitudes regarding care of patients with chronic pain (Uysal & Yilmazer, 2021). In this way, protocols become a sustainable tool an organization can continue to utilize long term.

A literature review by Drake and Williams (2017) found that chronic pain protocols improve documentation. They noted documentation was more consistent, and pain was documented in greater detail including a thorough description of the pain and of non-pharmacologic and pharmacologic methods used to alleviate pain. The use of protocols provides health care workers with the necessary tools to perform comprehensive pain assessments, improve the quality of documentation, and allow for consistency in documentation among health care providers.

Gaps

The gaps identified through literature review included the lack of available information on pain management protocols in home health care and the sustainability of chronic pain management protocols in this population. Additionally, there was a lack of information on how often re-education on chronic pain management should occur. None of the articles reviewed provided information on post implementation follow up.

Methods

Framework, Theories, and Models

The Johns Hopkins Evidence-Based Practice Model was used to guide this Doctor of Nursing Practice (DNP) Project. The theory that guided this project is Rogers' Diffusion of Innovations Theory. The framework that was utilized for this project is the Theoretical Domains Framework.

Setting

This project took place at a home health care agency in a rural Midwestern town. The population was 74,703 as of the 2020 census (United States Census Bureau, 2021). The ethnic makeup is predominantly Caucasian (78.9%) and Native American/Alaska Native (9.9%) with the remainder identifying as another race or more than one race (United States Census Bureau, 2021). Patients served by this agency include adults 18 years of age and older that live within a 125-mile radius. These patients have a variety of physical, mental, and cognitive illnesses. Payor sources serviced by this home health agency include Medicare, Medicaid, Department of Veteran’s Affairs, private insurance, and Department of Health and Human Services.

Sample

The sample for this project included a convenience sample of 15 registered nurses and licensed practical nurses working for the rural Midwest home health care agency. All eligible participants in this project held a current South Dakota nursing license, Basic Life Support certification, and had worked as a nurse for a minimum of 1 month.

Intervention Tools

Chronic Pain Protocol. Evidence gathered from a literature review was utilized to create an evidence-based chronic pain management protocol. This chronic pain management protocol included an educational session on understanding and managing chronic pain; the OPQRST (onset of event, provocation or palliation of symptoms, quality, region and radiation, severity, and timing) handout to guide proper documentation; Pain Risk Factors Assessment Form to determine causes of pain and the patient's limitations due to pain; and Managing Chronic Pain handout.

***Education*.** The education session used for this DNP Project was titled Understanding and Managing Chronic Pain. This education program was approved by the Florida Board of Nursing for 2.0 contact hours of continuing education. The education program was designed for use with registered nurses and licensed practical nurses. After completion of this course, participants were expected to understand the physiological process of pain, how to accurately assess pain, understand the role of non-pharmacologic and non-opioid therapies in relieving pain, and identify interventional pain management procedures. Staff at this agency are required to complete mandatory monthly training. This educational session fulfilled one monthly requirement.

***Assessment and Documentation Handouts*.** The OPQRST pain assessment tool was implemented to guide nurse assessment and documentation (see Appendix C). This tool contains key components that should be included in pain documentation. Two handouts, the Pain Risk Factors Assessment Form (Appendix D) and Managing Pain Handout (Appendix E), were chosen as they guide proper assessment of pain and aid nurses in identifying barriers to inadequate pain control as well as provide patients with tools to be successful in pain management.

KASRP and Comfort Survey. The "Knowledge and Attitudes Survey Regarding Pain" (KASRP) is a validated assessment tool consisting of 39 questions. These questions are in a true false and multiple-choice format (Appendix F). The survey was originally developed in 1987 and has been modified as needed since this date to reflect changes in pain management practice. The most recent modification occurred in 2014. This tool utilizes content derived from the American Pain Society, World Health Organization, and the National Comprehensive Cancer Network Pain Guidelines. The content validity has been established by review of pain experts. This tool is suitable for use in a variety of populations from students to senior pain experts (Ferrell & McCaffery, 2014).

This tool was designed to evaluate the success of pain management education programs and is available for use in whole or in part through City of Hope at no cost. The survey authors do not require permission to use the tool but ask that they are cited as a reference (Ferrell & McCaffery, 2014). A copy of the terms of use is found in Appendix G. A total of 17 questions were utilized from this survey as they most closely align with the population being served by the home health agency. Nurses at this home health agency do not work with pediatric patients, nor do they administer pain management

medications through IVs or provide around the clock monitoring of pain management medications. The additional 22 questions contained in the KASRP Survey were not discussed during the education session, in hand outs, in practice, or included in the chronic pain management protocol. Administration of the 22 additional questions had the potential to negatively impact the pre and post testing KASRP Survey results. Simplifying this survey allowed participants to complete the survey in a timely manner. Simplification of this survey may have unintentionally affected the reliability and validity of the survey.

In addition to administration of a Simplified KASRP Survey, comfort levels of the nurses were assessed pre and post intervention using a survey created by the DNP Project Manager. Content validity was performed by the Director of Health Care Services at the home health agency where this project was implemented. A copy of the Comfort Survey and proof of validation are available in Appendix H. The combined version of the Simplified KASRP and Comfort Surveys can be found in Appendix I. A Demographic Survey was administered pre-implementation and can be found in Appendix J.

Project Procedure

This project was approved by the facility stakeholder prior to implementation (Appendix B). Phase one began with administration of the Demographic Survey and Simplified KASRP and Comfort Surveys to all nurses at a rural home health agency. Completion of these surveys was voluntary. The DNP Project Manager placed surveys in all the nurses' mailboxes located at the agency's main office, and the office manager was responsible for placing surveys in mailboxes at the agency's satellite office. Instructions on how to complete the surveys were provided by the DNP Project Manager as well as a

request to contact the DNP Project Manager with any questions regarding the surveys. Participants contacted the DNP Project Manager asking for an extended time to complete surveys. The timeline from survey distribution to completion and return was originally 2 weeks but was extended at the request of project participants. Reminders to complete the surveys were given at 7 and 10 days. A total timeline of 1 month was utilized for phase one.

The second phase of project implementation included a recorded PowerPoint explaining the project and tools, copies of the Managing Chronic Pain, OPQRST, and Pain Risk Factors Assessment Form handouts, and an educational session on chronic pain. The recorded PowerPoint was emailed to each participant by the DNP Project Manager. This PowerPoint session discussed the purpose of the selected tools, how to effectively use them, and the timeframe for administration to patients. All questions regarding these tools were to be directed to the DNP Project Manager. Nurses were instructed to use these tools during home health visits conducted with a patient who reports chronic pain. Documentation was completed in the patient's electronic medical record.

It was the expectation that these handouts would be given to and reviewed with existing patients within 2 weeks of protocol implementation and reviewed with newly admitted patients within 2 weeks of admission. A 2-week timeframe was selected to ensure timely implementation of pain management interventions with patients while also allowing nurses to address more critical needs prior to the discussion of chronic pain management goals.

The Understanding and Managing Chronic pain education session was assigned to all nursing staff after handouts were given. Due to an error in communication between the agency's human resources office and the DNP Project Manager, nursing staff completed the education session prior to administration of pre-implementation surveys. This may have unintentionally affected the pre-implementation survey results. The requested timeframe for completing the education session was 1 month. There was a 3-month gap between the administration of the first and second chronic pain educational sessions. Nurses completed the education at their convenience. The human resources officer tracked completion of the required educational session and notified the DNP Project Manager of successful completion. No concerns with nurses completing the educations session were reported. The chronic pain protocol was implemented after administration of and education on handouts and the Understanding and Managing Chronic Pain education. The total timeline for phase two was 3.5 months.

The third phase of the project consisted of re-administration of the Simplified KASRP and Comfort Surveys. The requested timeline for completion of these surveys was 2 weeks. Nurses were informed of the expected timeline for post intervention survey administration via email during phase two and one week prior to survey administration. Reminders to complete surveys were given weekly via text message during phase three.

Data Collection

Participants were asked to create their own unique survey code to aid in pairing pre and post implementation surveys. Creation of a code unique to the individual allowed for participants to complete surveys while also remaining anonymous. All surveys received were completed in their entirety.

Ethical Considerations

The university institutional review board (IRB) deemed this project not human subjects research (Appendix A). The facility had no project research council or IRB. Surveys were returned to the DNP Project Manager and will be kept in the DNP Project Manager's home in a locked safe for 7 years after completion. Data will then be destroyed.

Results

Demographics

A total of 15 registered nurses and licensed practical nurses were eligible to complete this project, however one nurse left the agency during project implementation and was unable to complete the protocol implementation. Four nurses completed the Demographic Survey. This number could have been increased by presenting this survey at a mandatory meeting or by contacting individual participants to garner participation. This data was analyzed using descriptive statistics (Appendix K).

Statistical Testing

Analysis of data was done by the DNP Project Manager. Data analysis was completed using Microsoft Excel with $\alpha \leq 0.05$. The mean scores for participants pre and post implementation were analyzed (Appendix L). The Simplified KASRP was coded with a 0 for incorrect answers and a 1 for correct answers. No partial points were given. A total of 17 points were possible. The Comfort Survey was coded as follows: strongly agree 5, agree 4, neither agree or disagree 3, disagree 2, and strongly disagree 1. The Comfort Survey consisted of four questions with a total possible score of 20 points. In addition to analyzing the change in overall scores among all nurses, changes in individual

surveys pre and post protocol implementation were gathered for individuals completing both surveys. A total of four pre-implementation and five post implementation surveys were completed. Of the surveys completed, two participants completed both the pre and post implementation Simplified KASRP and Comfort Surveys.

Simplified KASRP. The overall mean scores of the pre and post intervention surveys were 0.74 and 0.73, respectively. A p-value of 0.95 was obtained indicating no statistical significance. Of the two paired surveys, one participant had no change between survey scores, and the other had a 6% increase in their post implementation Simplified KASRP score.

Comfort Survey. The overall mean scores of the pre and post intervention Comfort Surveys were 0.83 (16.5/20) and 0.84 (16.8/20), respectively. A p-value of 0.42 was obtained indicating no statistical significance. Of the two paired surveys, one participant had no change between surveys, and the other had a two-point increase in their post intervention score.

Discussion

This project focused on improving the knowledge, attitudes, and comfort of home health care nurses regarding chronic pain. In a study of 16 registered nurses preintervention and 15 registered nurses post intervention, Cui et al. (2018) noted an average score of 53.6% ± 10.7% pre-intervention, and an average score of 74.0% ± 12.3% postintervention on the KASRP survey showing improvements in nurses' knowledge and attitudes of chronic pain. The results of this DNP Project mimicked the postintervention survey scores obtained in this study but not the preintervention. This could be due, in part, to nurses receiving education prior to survey administration.

The results of this DNP project showed a slight improvement in the comfort level of nurses when caring for patients with chronic pain. This is consistent with the findings of Muscat et al. (2021) and Uysal and Yilmazer (2021) which found that increasing knowledge of pain management and pain protocols resulted in improved comfort levels of nurses.

The smaller sample size was beneficial in that it allowed the DNP Project Manager to have discussions with project participants and the stakeholder regarding the protocol post implementation. This allowed for feedback from individual nurses about the protocol as well as perceived benefits and barriers from the stakeholder. Nurses shared the handouts were easy to understand and use. The stakeholder reported that overall documentation is improving, however she feels there is room for nurses to provide more comprehensive charting. She did not share any specific areas that improved or need improvement.

Barriers and Limitations

The barriers and limitations to this project include a small sample size, inability to verify if protocol tools are being utilized in the patients' home, and inability to verify if participants viewed the recorded PowerPoint. Of the 15 nurses available to participate in pre implementation surveys and 14 nurses available to participate in the post implementation surveys, a total of seven completed at least one survey. Increased participation could have been garnered by presenting surveys at a mandatory meeting or by offering a gift card for survey participation. Participants reported that they did not feel they had the time to complete surveys, citing a busy work and home life as the main reason. Participants were encouraged by the DNP Project Manager to complete surveys

during pre-implementation and post implementation phases. The theoretical domains framework was used to address the lack of survey responses. The DNP Project Manager utilized a different method of communication for post implementation surveys in an attempt to increase survey response. Reaching out to individual participants may have been useful versus sending mass emails and text messages to increase survey participation. Contacting individual participants to discuss the PowerPoint, address any questions on the PowerPoint or the handouts presented, and discussing if and how the protocol handouts were being utilized in patient homes could have helped to ensure their use. The DNP Project manager reviewing charts with individual nurses and offering constructive feedback may have been beneficial in achieving the secondary goal of protocol implementation, which was improved documentation.

Patient outcomes could be measured in future projects such as comparing pain at start of care with pain at discharge or through patient interview. Drake and Williams (2017) noted that patient satisfaction can increase with pain management interventions and measurement of this could be done in future DNP or research projects. This project utilized handouts to help both nurses and patients understand and better manage chronic pain, however patient's perceptions of these tools were not measured.

Despite the small sample size and limited generalizability in practice, this project may serve to benefit smaller home health agencies and could be completed in a larger scale setting. Protocols have been found to be beneficial by providing improved patient care and documentation (Admassie et al., 2022). Increasing knowledge, attitudes and comfort of chronic pain helps nurses to feel more confident in their role of caring for chronic pain patients (Chen et al., 2018). The results obtained through this project mirror

similar projects in other home health agencies as participants provided feedback that they knew and understood the materials being used, but it was unclear as to how often these tools were used in the home (Egnatios, 2015).

Implications for Practice

Organizational Impact

This DNP Project was designed as a quality improvement project for the facility it was implemented in which serves rural, underserved, and economically diverse populations. By addressing the concern of pain management and documentation through implementation of this chronic pain management protocol, the organization was able to benefit by providing proof of a quality improvement project to CMS, increasing the consistency of documentation, and decreasing the time needed by the quality improvement specialist to review charting.

Facility Cost and Project Support

The stakeholder fully supported this project and all costs incurred including but not limited to employee pay for time spent on education; ink, paper, and printing of materials; and time spent in patient's homes discussing materials. The stakeholder was responsible for employee pay for visits that may have been prolonged due to patient education. The educational session was provided to the agency at no cost. The DNP Project Manager was responsible for garnering participation, distributing surveys, answering questions on the protocol and surveys, providing a narrated PowerPoint discussing protocol tools, and collecting and analyzing data.

Sustainability and Recommendations for Practice

The organization intends to utilize this pain management protocol long term. This protocol is subject to modification based upon the rules set forth by CMS and the needs of the organization. It is recommended for practice that pain management education and pain management protocols be standard in all aspects of health care. Possible changes that could be made to this project to produce meaningful results include presenting materials at mandatory in-person meetings and tracking the use of materials among all patients with chronic pain regardless of payor source. The framework of this project could be used by other home health agencies to implement a pain management protocol.

Limitations

The limitations of this project are the low return rate of surveys and the inability to pair more than two surveys and show change between those participants. Participants receiving chronic pain education prior to pre-implementation surveys being administered may have skewed pre-implementation survey results.

Conclusion

The implementation of this DNP Project highlighted the lack of knowledge, poor attitudes, and lack of comfort in caring for patients with chronic pain could potentially be overcome through protocol implementation. The stakeholder reported improvements in documentation, and nurses reported improvements in their ability to care for patients with chronic pain. This project has the potential to help home health agencies improve the knowledge, attitudes, and comfort level of nurses caring for patients with chronic pain as well as improve documentation on chronic pain.

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Appendix A

University IRB Approval

Hello Lannese Purtell,

Your application **Chronic Pain Assessment and Documentation Protocol in Home Health Care** and submitted materials have been reviewed and determined exempt by the SDSU Institutional Review Board. Exemption is claimed under 45 CFR 46, section 104(d)(2)(i).

Note: As Principal Investigator, you are responsible for the ethical conduct of your research project.

If you decide to make changes to your project and/or project materials, you will need to submit an amendment and receive an IRB determination prior to implementation. For assistance or for questions relating to IRB, please contact us at sdsu.irb@sdstate.edu.

Your approval number is:IRB-2210002-EXM.

We wish you the best in your study.

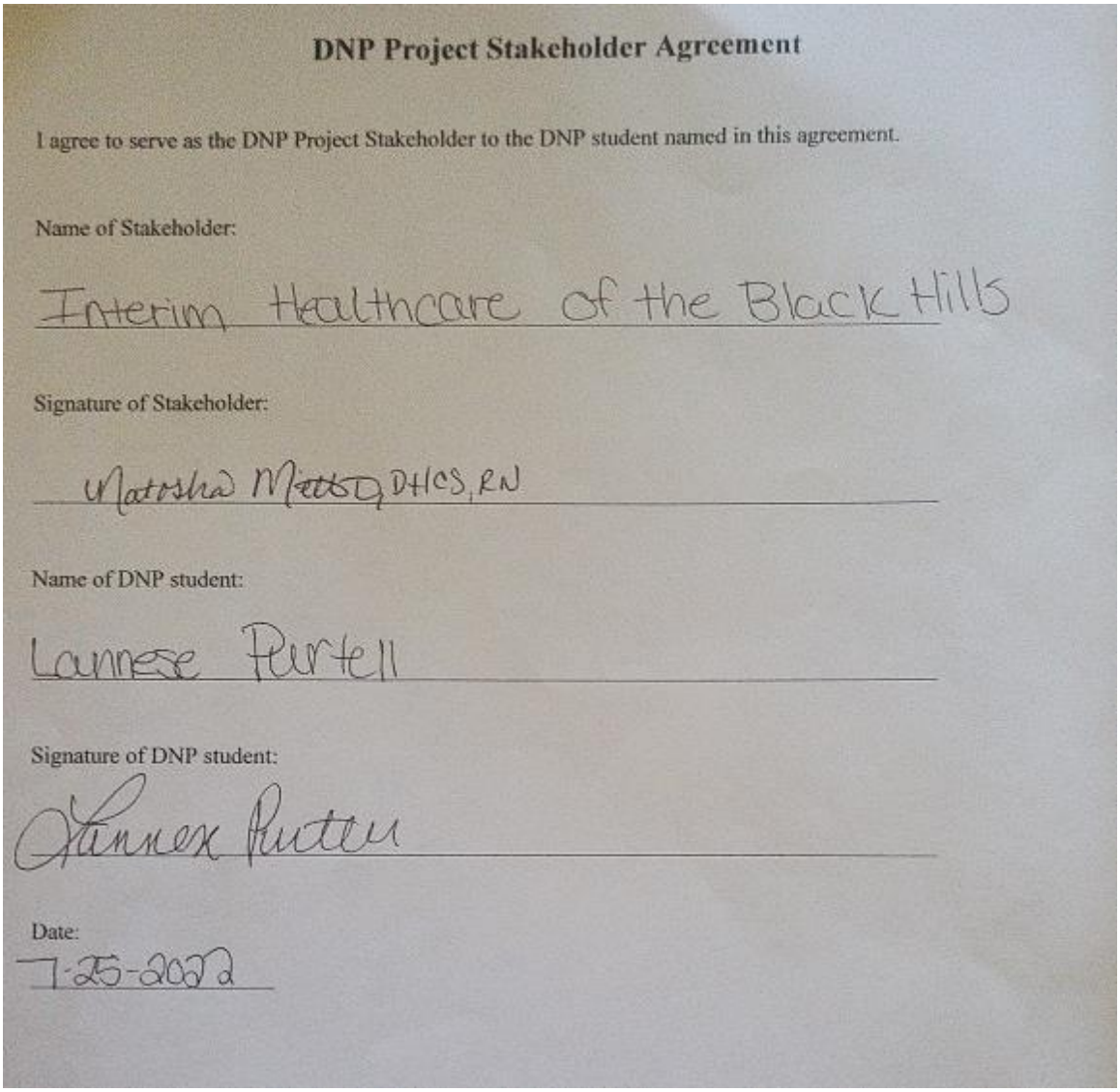
Sincerely,

Jayne Valnes

IRB Administrator

Appendix B

Facility Approval



DNP Project Stakeholder Agreement

I agree to serve as the DNP Project Stakeholder to the DNP student named in this agreement.

Name of Stakeholder:

Interim Healthcare of the Black Hills

Signature of Stakeholder:

Natasha Mills, DHCS, RN

Name of DNP student:

Lanese Purtell

Signature of DNP student:

Lanese Purtell

Date:

7-25-2022

DNP Project Site Agreement

Date: 7-25-2022

This letter is in support of Lannese Purtell's DNP Project Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care at Interim Health care of the Black Hills. This project seeks to improve nurses' knowledge, attitudes, and comfort in caring for patients with chronic pain and improve the assessment of chronic pain. The overall goal of this project is to improve the documentation of chronic pain.

We look forward to the results of the project.

Natosha Mettler, RN, DHCS

(Signature of Manager or Director)

Natosha Mettler RN, BSN, DHCS

Appendix C

OPQRST Assessment Tool

OPQRST

O	**O**nset of event	• What was the patient doing when it started? Were they active, inactive, and or stressed? • Did that specific activity prompt or start the onset of pain? • Was onset of pain sudden, gradual or part of an ongoing chronic problem

P	**P**rovocation and palliation of symptoms	• Is the pain better or worse with:
		  • **Activity**. Does walking, standing, lifting, twisting, reading, etc… have any effect of the pain?
		  • **Position**. Which position causes or relieves pain? Provide examples to the patient-- sitting, standing, supine, lateral, etc…
		  • **Adjuvant**. Which type of medication relieves the pain (Tylenol, Ibuprofen, etc..)? Does the use of heat or ice packs alleviate pain? What type of alternative therapy (massage, acupuncture) have you used before?
		  • Does any movement, pressure (such as palpation) or other external factor make the problem better or worse? This can also include whether the symptoms relieve with rest.

Q	**Q**uality	• Ask the patient to describe the quality of pain – is it throbbing, dull, aching, burning, sharp, crushing, shooting, etc…? • Questions can be open ended "Can you describe it for me?" or leading • Ideally, this will elicit descriptions of the patient's pain: whether it is sharp, dull, crushing, burning, tearing, or some other feeling, along with the pattern, such as intermittent, constant, or throbbing.

1

OPQRST

R	**R**egion and radiation	• Where pain is on the body and whether it radiates (extends) or moves to any other area? Referred pain can provide clues to underlying medical causes. • *Location*: body diagrams may help patients illustrate the distribution of their pain. • *Dermatome map* – may help determine the relationship between sensory location of pain and spinal nerve segment (see figure next slide). • *Referred vs Localized*: **referred pain** (also known as reflective pain) is feeling pain in a location other than the original site of the painful stimulus. **Localized pain** is when pain typically stays in one location and does not spread.
S	**S**everity	• Ask the patient to describe the intensity of pain at baseline and during acute exacerbations. • The pain score (usually on a scale of 0 to 10) where 0 is no pain and 10 is the worst possible pain. This can be comparative (such as "... compared to the worst pain you have ever experienced") or imaginative ("... compared to having your arm ripped off by a bear"). If the pain is compared to a prior event, the nature of that event may be a follow-up question.
T	**T**iming	• Identify when the pain started, under what circumstances, duration, onset (sudden/gradual), frequency, whether acute/chronic. • How long the condition has been going on and how it has changed since onset (better, worse, different symptoms)? • Whether it has ever happened before, and how it may have changed since onset, and when the pain stopped if it is no longer currently being felt?

2

From Pain Assessment and Management Initiative, by University of Florida College of Medicine -Jacksonville, 2022 (https://pami.emergency.med.jax.ufl.edu/resources/). In the public domain

Appendix D

Pain Risk Factor Assessment Form

Pain Risk Factors Assessment Form

Updated October 2019

What are **YOUR** "Pain Risk Factors"?

Did you know that all of the items listed below can worsen your pain?

Habits

- ☐ Smoking?
- ☐ Alcohol?
- ☐ Diet?

Sleep

- ☐ Poor
- ☐ Not refreshing
- ☐ Good

Exercise

- ☐ Not enough
- ☐ Too much
- ☐ Just right

Ergonomics

- ☐ Do you get pain while at work?
- ☐ Are you wearing comfortable shoes while at work?
- ☐ Do you do a lot of typing at work?

Other

- ☐ Money problems
- ☐ Stress/anger/fear
- ☐ History of physical or sexual abuse
- ☐ Alcoholism or drug addiction (you or your family)

How to be SAFE while taking your pain medications

- ☐ Take medications as prescribed
- ☐ Watch out for constipation
- ☐ Do NOT take pain medications with alcohol or sleep aids
- ☐ Watch out for signs of allergic reaction like rash and difficulty breathing

Adapted from the Pain Explanation and Treatment Diagram developed by Hillel M. Finestone
Finestone HM et al. The Pain Explanation and Treatment Diagram: A Tool to Enhance Patient Self-Management of Persistent Pain. PM&R 2012(4):456–458.

For more information on **PAMI** visit:
http://pami.emergency.med.jax.ufl.edu/
Email: emresearch@jax.ufl.edu
or scan the QR Code

As part of our goal to develop and disseminate educational materials on safe pain management practices for clinicians and patients, we provide free online access to all PAMI products. Materials are available for download and reproduction for educational and reference purposes. If you have any feedback (experiences, stories, comments, suggestions, or corrections), please email us at pami@jax.ufl.edu.

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Appendix E

Managing Pain Handout

IDENTIFY PAIN TRIGGERS

PAIN triggers are things that make your pain worse or stop your pain from getter better. Examples of pain triggers include:

Stress
Pressure from work, family, money, or your community

Poor Diet
Too much sugar, fat or unhealthy foods

Lack of Sleep
Getting less than 7 hours of sleep per night

Taking medication improperly
Not taking medication as prescribed

Being overwhelmed
Taking care of too many things at one time or not asking for help

Watch this video for more on how to help manage your chronic pain!

Scan the QR code with your phone or visit https://goo.gl/2T5MYo

Ways to Manage Chronic Pain

CONTACT US

For more information on PAMI visit:
http://pami.emergency.med.jax.ufl.edu/

Email: emresearchejax.ufl.edu

Content adapted from:
CHAMPS online.org
The American Cancer Society Daily Pain Diary:
https://www.cancer.org/content/dam/cancer-org/cancer-control/en/worksheets/pain-diary.pdf
American Chronic Pain Association: www.theacpa.org

Revised 08/04/19

MANAGING PAIN

ACUTE PAIN

- Acute pain is a normal response which alerts the body something is hurt or there is an illness that needs attention. Acute pain can be caused by a break or infection and usually requires immediate treatment like a bandage, a cast or medication.
- Once the injury or illness is healed the acute pain stops.

CHRONIC PAIN

- Chronic pain continues after the injury or illness has healed (usually over 90 days) or develops for an unknown reason.
- Pain signals continue being sent from the nervous system in your brain like a recording or CD that is scratched and keeps skipping in the same spot.

CHRONIC PAIN SYNDROME

- As chronic pain continues, other symptoms or problems can develop.
- Patients with chronic pain syndrome often find that normal, daily activities become difficult.
- Inactivity can lead to muscle atrophy (weakness), change in posture, pain in other areas of the body, anger, depression, or change in self-esteem.

MANAGING PAIN

- Proper pain management usually involves multiple approaches, which means using different treatments together.
- Your health care provider can help you figure out the best combination of treatments for you.

Having pain is like having a car with four flat tires. Medication alone will only "pump" one of our tires. For each person a different combination of therapies will be needed to fill your other three tires.The following are treatments that may help:

- Virtual reality
- Physical therapy
- Healthy diet and nutrition
- Stress management or relaxation techniques
- Exercise
- Heat and/or ice
- Massage or acupuncture
- Yoga or movement classes
- Music
- Self-hypnosis and/or biofeedback
- Medication(s)
- Interventional pain management (nerve blocks)
- Pain support group
- Breathing exercises

- Pain may not go away completely, but these tools may be helpful in reducing your pain and keeping you functional.
- Partner with your healthcare provider to find ways to live a full life in spite of your pain.

KEEP A DAILY PAIN DIARY

- Keeping a diary of your pain helps to identify possible triggers.
- Once you have identified possible pain triggers, you can develop a plan to keep your pain levels down and improve function.

In your pain diary document:

- Where you feel pain
- What your pain feels like
  - Burning, stabbing, tingling, throbbing, aching
- Severity of pain
  - On a scale of 0-10 with 0 being no pain and 10 being the worst pain imaginable
- Duration of pain
  - Minutes, hours, days
- What makes the pain better or worse
  - Hot, cold, elevation, changing position
- How do medications or other therapies help your pain

To watch the video scan the QR code
https://theacpa.org/a-car-with-four-flat-tires

As part of our goal to develop and disseminate educational materials on safe pain management practices for clinicians and patients, we provide free online access to all PAMI products. Materials are available for download and reproduction for educational and reference purposes. If you have any feedback (experiences, stories, comments, suggestions, or corrections), please email us at pami@jax.ufl.edu.

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Appendix F

Knowledge and Attitudes Survey Regarding Pain Survey with Answer Key

Knowledge and Attitudes Survey Regarding Pain

True/False – Circle the correct answer.

T **F** 1. Vital signs are always reliable indicators of the intensity of a patient's pain.

T **F** 2. Because their nervous system is underdeveloped, children under two years of age have decreased pain sensitivity and limited memory of painful experiences.

T **F** 3. Patients who can be distracted from pain usually do not have severe pain.

T **F** 4. Patients may sleep in spite of severe pain.

T **F** 5. Aspirin and other nonsteroidal anti-inflammatory agents are NOT effective analgesics for painful bone metastases.

T **F** 6. Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months.

T **F** 7. Combining analgesics that work by different mechanisms (e.g., combining an NSAID with an opioid) may result in better pain control with fewer side effects than using a single analgesic agent.

T **F** 8. The usual duration of analgesia of 1-2 mg morphine IV is 4-5 hours.

T **F** 9. Opioids should not be used in patients with a history of substance abuse.

T **F** 10. Elderly patients cannot tolerate opioids for pain relief.

T **F** 11. Patients should be encouraged to endure as much pain as possible before using an opioid.

T **F** 12. Children less than 11 years old cannot reliably report pain so clinicians should rely solely on the parent's assessment of the child's pain intensity.

T **F** 13. Patients' spiritual beliefs may lead them to think pain and suffering are necessary.

T **F** 14. After an initial dose of opioid analgesic is given, subsequent doses should be adjusted in accordance with the individual patient's response.

T **F** 15. Giving patients sterile water by injection (placebo) is a useful test to determine if the pain is real.

T **F** 16. Vicodin (hydrocodone 5 mg + acetaminophen 300 mg) PO is approximately equal to 5-10 mg of morphine PO.

T **F** 17. If the source of the patient's pain is unknown, opioids should not be used during the pain evaluation period, as this could mask the ability to correctly diagnose the cause of pain.

T **F** 18. Anticonvulsant drugs such as gabapentin (Neurontin) produce optimal pain relief after a single dose.

T **F** 19. Benzodiazepines are not effective pain relievers and are rarely recommended as part of an analgesic regiment.

T **F** 20. Narcotic/opioid addiction is defined as a chronic neurobiologic disease, characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

T **F** 21. The term 'equianalgesia' means approximately equal analgesia and is used when referring to the doses of various analgesics that provide approximately the same amount of pain relief.

T **F** 22. Sedation assessment is recommended during opioid pain management because excessive sedation precedes opioid-induced respiratory depression.

Multiple Choice – Place a check by the correct answer.

23. The recommended route of administration of opioid analgesics for patients with persistent cancer-related pain is
    ____ a. intravenous
    _____ b. intramuscular
    _____ c. subcutaneous
    _____ d. oral
    _____ e. rectal

24. The recommended route administration of opioid analgesics for patients with brief, severe pain of sudden onset such as trauma or postoperative pain is
    _____ a. intravenous
    _____ b. intramuscular
    _____ c. subcutaneous
    _____ d. oral
    _____ e. rectal

25. Which of the following analgesic medications is considered the drug of choice for the treatment of prolonged moderate to severe pain for cancer patients?
    _____ a. codeine
    _____ b. morphine
    _____ c. meperidine
    _____ d. tramadol

26. A 30 mg dose of oral morphine is approximately equivalent to:
    _____ a. Morphine 5 mg IV
    _____ b. Morphine 10 mg IV
    _____ c. Morphine 30 mg IV
    _____ d. Morphine 60 mg IV

27. Analgesics for post-operative pain should initially be given
    _____ a. around the clock on a fixed schedule
    _____ b. only when the patient asks for the medication
    _____ c. only when the nurse determines that the patient has moderate or greater discomfort

28. A patient with persistent cancer pain has been receiving daily opioid analgesics for 2 months. Yesterday the patient was receiving morphine 200 mg/hour intravenously. Today he has been receiving 250 mg/hour intravenously. The likelihood of the patient developing clinically significant respiratory depression in the absence of new comorbidity is
_____ a. less than 1%
_____ b. 1-10%
_____ c. 11-20%
_____ d. 21-40%
_____ e. > 41%

29. The most likely reason a patient with pain would request increased doses of pain medication is
_____ a. The patient is experiencing increased pain.
_____ b. The patient is experiencing increased anxiety or depression.
_____ c. The patient is requesting more staff attention.
_____ d. The patient's requests are related to addiction.

30. Which of the following is useful for treatment of cancer pain?
_____ a. Ibuprofen (Motrin)
_____ b. Hydromorphone (Dilaudid)
_____ c. Gabapentin (Neurontin)
_____ d. All of the above

31. The most accurate judge of the intensity of the patient's pain is
_____ a. the treating physician
_____ b. the patient's primary nurse
_____ c. the patient
_____ d. the pharmacist
_____ e. the patient's spouse or family

32. Which of the following describes the best approach for cultural considerations in caring for patients in pain:
_____ a. There are no longer cultural influences in the U.S. due to the diversity of the population.
_____ b. Cultural influences can be determined by an individual's ethnicity (e.g., Asians are stoic, Italians are expressive, etc).
_____ c. Patients should be individually assessed to determine cultural influences.
_____ d. Cultural influences can be determined by an individual's socioeconomic status (e.g., blue collar workers report more pain than white collar workers).

33. How likely is it that patients who develop pain already have an alcohol and/or drug abuse problem?

< 1% 5 – 15% 25 - 50% 75 - 100%

34. The time to peak effect for morphine given IV is
_____a. 15 min.
_____b. 45 min.
_____c. 1 hour
_____d. 2 hours

35. The time to peak effect for morphine given orally is
_____a. 5 min.
_____b. 30 min.
_____c. 1 – 2 hours
_____d. 3 hours

36. Following abrupt discontinuation of an opioid, physical dependence is manifested by the following:
_____ a. sweating, yawning, diarrhea and agitation with patients when the opioid is abruptly discontinued.
_____ b. Impaired control over drug use, compulsive use, and craving.
_____ c. The need for higher doses to achieve the same effect.
_____ d. a and b

37. Which statement is true regarding opioid induced respiratory depression:
_____ a. More common several nights after surgery due to accumulation of opioid.
_____ b. Obstructive sleep apnea is an important risk factor.
_____ c. Occurs more frequently in those already on higher doses of opioids before surgery.
_____ d. Can be easily assessed using intermittent pulse oximetry.

Case Studies

Two patient case studies are presented. For each patient you are asked to make decisions about pain and medication.

Directions: Please select one answer for each question.

38. Patient A: Andrew is 25 years old and this is his first day following abdominal surgery. As you enter his room, he smiles at you and continues talking and joking with his visitor. Your assessment reveals the following information: BP = 120/80; HR = 80; R = 18; on a scale of 0 to 10 (0 = no pain/discomfort, 10 = worst pain/discomfort) he rates his pain as 8.

A. On the patient's record you must mark his pain on the scale below. Circle the number that represents your assessment of Andrew's pain.

0 1 2 3 4 5 6 7 8 9 10

No pain/discomfort Worst Pain/discomfort

B. Your assessment, above, is made two hours after he received morphine 2 mg IV. Half hourly pain ratings following the injection ranged from 6 to 8 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. He has identified 2/10 as an acceptable level of pain relief. His physician's order for analgesia is "morphine IV 1-3 mg q1h PRN pain relief." Check the action you will take at this time.
_____ 1. Administer no morphine at this time.
_____ 2. Administer morphine 1 mg IV now.
_____ 3. Administer morphine 2 mg IV now.
_____ 4. Administer morphine 3 mg IV now.

39. Patient B: Robert is 25 years old and this is his first day following abdominal surgery. As you enter his room, he is lying quietly in bed and grimaces as he turns in bed. Your assessment reveals the following information: BP = 120/80; HR = 80; R = 18; on a scale of 0 to 10 (0 = no pain/discomfort, 10 = worst pain/discomfort) he rates his pain as 8.

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A. On the patient's record you must mark his pain on the scale below. Circle the number that represents your assessment of Andrew's pain.

0 1 2 3 4 5 6 7 **8** 9 10

No pain/discomfort Worst Pain/discomfort

B. Your assessment, above, is made two hours after he received morphine 2 mg IV. Half hourly pain ratings following the injection ranged from 6 to 8 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. He has identified 2/10 as an acceptable level of pain relief. His physician's order for analgesia is "morphine IV 1-3 mg q1h PRN pain relief." Check the action you will take at this time.

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0 1 2 3 4 5 6 7 **8** 9 10

No pain/discomfort Worst Pain/discomfort

B. Your assessment, above, is made two hours after he received morphine 2 mg IV. Half hourly pain ratings following the injection ranged from 6 to 8 and he had no clinically significant respiratory depression, sedation, or other untoward side effects. He has identified 2/10 as an acceptable level of pain relief. His physician's order for analgesia is "morphine IV 1-3 mg q1h PRN pain relief." Check the action you will take at this time:

_____ 1. Administer no morphine at this time.
_____ 2. Administer morphine 1 mg IV now.
_____ 3. Administer morphine 2 mg IV now.
__X__ 4. Administer morphine 3 mg IV now.

Appendix G

Permission for Use of Survey Tool

July 2014

The "Knowledge and Attitudes Survey Regarding Pain" tool can be used to assess nurses and other professionals in your setting and as a pre and post test evaluation measure for educational programs. The tool was developed in 1987 and has been used extensively from 1987 - present. The tool has been revised over the years to reflect changes in pain management practice.

Regarding issues of reliability and validity: This tool has been developed over several years. Content validity has been established by review of pain experts. The content of the tool is derived from current standards of pain management such as the American Pain Society, the World Health Organization, and the National Comprehensive Cancer Network Pain Guidelines. Construct validity has been established by comparing scores of nurses at various levels of expertise such as students, new graduates, oncology nurses, graduate students, and senior pain experts. The tool was identified as discriminating between levels of expertise. Test-retest reliability was established ($r>.80$) by repeat testing in a continuing education class of staff nurses ($N=60$). Internal consistency reliability was established (alpha $r>.70$) with items reflecting both knowledge and attitude domains.

Regarding analysis of data: We have found that it is most helpful to avoid distinguishing items as measuring either knowledge or attitudes. Many items such as one measuring the incidence of addiction really measures both knowledge of addiction and attitude about addiction. Therefore, we have found the most benefit to be gained from analyzing the data in terms of the percentage of complete scores as well as in analyzing individual items. For example, we have found it very helpful to isolate those items with the least number of correct responses and those items with the best scores to guide your educational needs.

Enclosed for your use is a copy of our instrument and an answer key. You may use and duplicate the tool for any purpose you desire in whole or in part. References to some of our studies which have included this tool or similar versions are included below. We have received hundreds of requests for the tool and additional use of the tool can be found in other published literature. We also acknowledge the assistance of several of our pain colleagues including Judy Paice, Chris Pasero, and Nessa Coyle in the revisions over the years. If using or publishing the tool results please cite the reference as **"Knowledge and Attitudes Survey Regarding Pain" developed by Betty Ferrell, RN, PhD, FAAN and Margo McCaffery, RN, MS, FAAN, (http://prc.coh.org), revised 2014.**

We hope that our tool will be a useful aid in your efforts to improve pain management in your setting.

Sincerely,

Betty R. Ferrell, RN, PhD, FAAN
Research Scientist

Margo McCaffery, RN, MS, FAAN
Lecturer and Consultant

Appendix H

Comfort Survey and Proof of Validation

Directions: Please select the response that most accurately describes your feelings on chronic pain.

1. I am comfortable with my level of knowledge in caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

2. I am comfortable with my chronic pain assessment and documentation skills.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

3. I am comfortable discussing both pharmacologic and non-pharmacologic pain relief measures with patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

4. I am comfortable with caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

Comfort Survey and Proof of Validation

Directions: Please select the response that most accurately describes your feelings on chronic pain.

1. I am comfortable with my level of knowledge in caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

2. I am comfortable with my chronic pain assessment and documentation skills.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

3. I am comfortable discussing both pharmacologic and non-pharmacologic pain relief measures with patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

4. I am comfortable with caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

X These questions are applicable to the nurse population surveyed and valid survey questions. No changes have been made to these questions.

____ I have modified the above questions to increase the applicability and validity of these questions.

Comments:

[redacted]

Printed Name and Title

[redacted]

Signature and Date

Appendix I

Simplified KASRP and Comfort Survey Combination

Please select a survey ID number that is easy for you to remember as this will be used on the post intervention survey should you complete it. Please avoid the use of identifying information such as names, birth dates, social security numbers, or phone numbers. Please complete the questions below, skipping any questions that you do not feel comfortable answering. Please complete the surveys individually. By completing these surveys, you are consenting to participate in the Chronic Pain Assessment and Documentation Protocol Implementation in Home Health Care research project conducted by Lannese Purtell in fulfillment of the requirement set forth to obtain a Doctor of Nursing Practice degree. Any questions can be directed to the project manager, Lannese Purtell, by calling 605-391-7834 or via email lannese.purtell@jacks.sdstate.edu

Survey ID number: _____

Date Completed: _____

Knowledge and Attitudes Survey Regarding Pain

Circle T for true or F for false

T F 1. Vital signs are always reliable indicators of the intensity of a patient's pain.

T F 2. Patients who can be distracted from pain usually do not have severe pain.

T F 3. Patients may sleep in spite of severe pain.

T F 4. Aspirin and other nonsteroidal anti-inflammatory agents are NOT effective analgesics for pain bone metastases.

T F 5. Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months.

T F 6. Combining analgesics that work by different mechanisms (e.g., combining an NSAID with an opioid) may result in better pain control with fewer side effects than using a single analgesic agent.

T F 7. Opioids should not be used in patients with a history of substance abuse.

T F 8. Elderly patients cannot tolerate opioids for pain relief

T F 9. Patients should be encouraged to endure as much pain as possible before using an opioid.

T F 10. Patient's spiritual beliefs may lead them to think pain and suffering are necessary.

T F 11. Anticonvulsant drugs such as gabapentin (Neurontin) produce optimal pain relief after a single dose

T F 12. Benzodiazepines are not effective pain relievers and are rarely recommended as part of an analgesic regiment.

T F 13. Narcotic/opioid addiction is defined as a chronic neurobiologic disease, characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Please mark the correct answer.

14. The most accurate judge of the intensity of the patient's pain is:

___a. the treating physician

___b. the patient's primary nurse

___c. the patient

___d. the pharmacist

___e. the patient's spouse or family

15. Which of the following describes the best approach for cultural considerations in caring for patients in pain:

___a. There are no longer cultural influences in the U.S. due to the diversity of population.

___b. Cultural influences can be determined by an individual's ethnicity (e.g., Asians are stoic, Italians are expressive, etc.)

___c. Patients should be individually assessed to determine cultural influences.

___d. Cultural influences can be determined by an individual's socioeconomic status (e.g., blue collar workers report more pain than white collar workers).

16. How likely is it that patients who develop pain already have an alcohol and/or drug abuse problem?

___< 1%

___5 - 15%

___25 - 50%

___75 - 100%

17. Following abrupt discontinuation of an opioid, physical dependence is manifested by the following:

___a. sweating, yawning, diarrhea and agitation with patients when the opioid is abruptly discontinued

___b. Impaired control over drug use, compulsive use, and craving

___c. The need for higher doses to achieve the same effect.

___d. a and b

Comfort Survey

Directions: Please select the response that most accurately describes your feelings on chronic pain.

1. I am comfortable with my level of knowledge in caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

2. I am comfortable with my chronic pain assessment and documentation skills.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

3. I am comfortable discussing both pharmacologic and non-pharmacologic pain relief measures with patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

4. I am comfortable with caring for patients with chronic pain.

Strongly Agree Agree Neither agree nor disagree Disagree Strongly Disagree

Appendix J

Demographic Survey

Date Completed: _____

Age: ___18-30 ___31-40 ___41-50 ___51-60 ___60 or older

___Prefer not to disclose

Please check the appropriate box for the following questions

Gender: ___ Male ___ Female ___Other ___Prefer not to disclose

Current license held:

___ Registered Nurse (RN) ___ Licensed Practical Nurse (LPN)

___Prefer not to disclose

Level of education:

___ Diploma Program ___ Associates Degree ___ Bachelor's Degree

___ Other Please specify: _____

___Prefer not to disclose

Years of nursing experience:

___ Less than 1 year ___ 1-5 years ___ 6-10 years ___ 10 years or greater

___Prefer not to disclose

Have you completed pain management education or training?

___No ___Yes ___Prefer not to disclose

If yes, please describe below:

___In undergraduate studies ___In graduate studies

___As part of workforce education __Other (please describe below):

_____

Appendix K

Demographic Survey

Age	Sex	License Held	Education	Years of experience	Prior education on pain	If so where
2 18-30 years	1 male	1 LPN	1 Diploma	1 less than 1 year	1 no	1 N/A
1 31-40 years	3 female	3 RN	3 BSN	1 1-5 years	3 yes	3 at work
1 41-50 years				2 10 years or greater		

Appendix L

KASRP and Comfort Survey Analysis

t-Test: Two-Sample Assuming Equal Variances

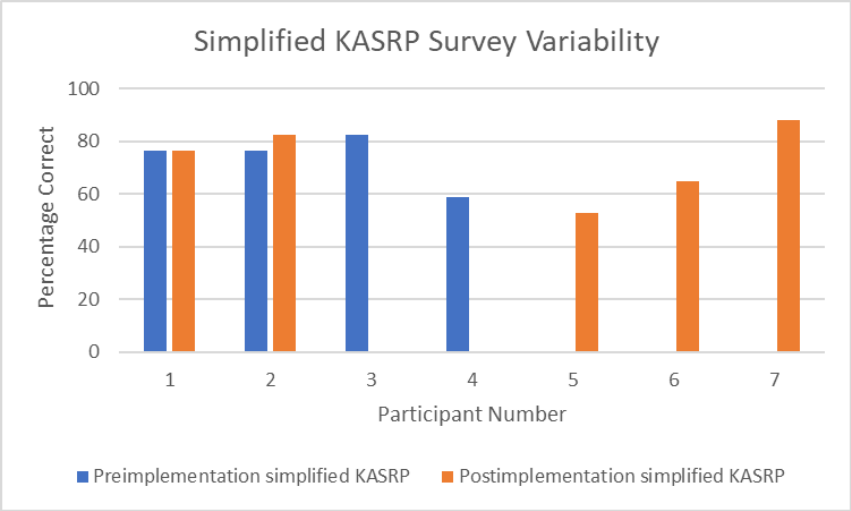
	Preintervetion modified KASRP	*Postintervention modified KASRP*
Mean	0.735275	0.72942
Standard Deviation	0.101892701	0.14167144
Observations	4	5
P(T<=t) two-tail	0.946782448	

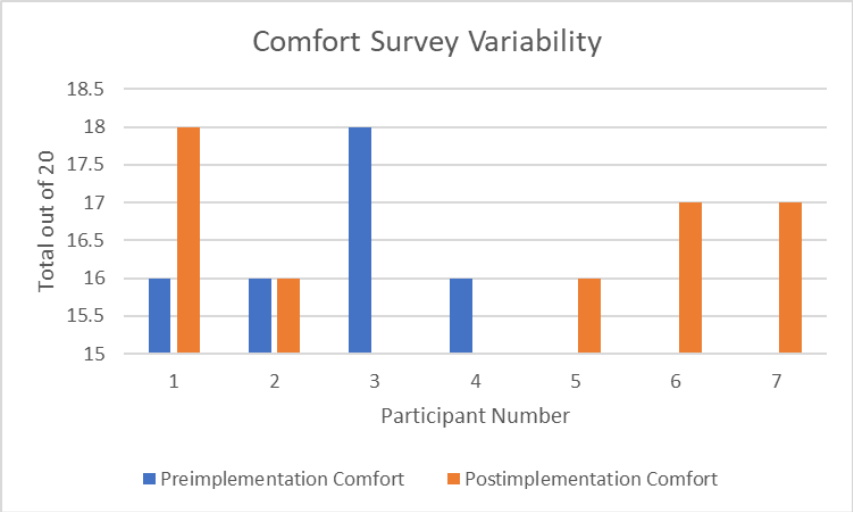
t-Test: Two-Sample Assuming Equal Variances

	COMFORT pre	*COMFORT post*
Mean	0.8	0.85
Standard Deviation	1	0.836660027
Observations	2	2
P(T<=t) two-tail	0.422649731	

	Paired Surveys	
	Percent correct	Percent correct
ID	Preintervention simplifed KASRP	Postintervention simplified KASRP
1	76.47%	76.47%
2	76.47%	82.35%
ID	Comfort preintervention LIKERT	Comfort Postintervention LIKERT
1	16/20	18/20
2	16/20	16/20

	Simplifed KASRP	Comfort Survey
LPN	0.59	0.8
RN	0.76	0.8
RN	0.76	0.8
RN	0.83	0.9
RN average score	0.78	0.83
LPN average score	0.59	0.8


Simplified KASRP Survey Variability
Percentage Correct
100
80
60
40
20
0
1
2
3
4
5
6
7
Participant Number
Preimplementation simplified KASRP
Postimplementation simplified KASRP


Comfort Survey Variability
Total out of 20
18.5
18
17.5
17
16.5
16
15.5
15
1
2
3
4
5
6
7
Participant Number
Preimplementation Comfort
Postimplementation Comfort