2018

Evaluating Nursing Pain Assessment Documentation with the Pediatric Client

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
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Abstract

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MS, Walden University, 2014

BS, Adelphi University, 2008

Project Submitted in Partial Fulfillment

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Abstract

Pain is often seen as a primary complaint in the pediatric emergency department (ED). Assessment and documentation of pain are integral to effective pain management, and nurses are responsible for documenting pain assessment. Nursing documentation is essential for ensuring continuous, safe, high-quality care. Evidence shows nurses are inadequately documenting pain assessment and reassessment and not always using appropriate pain scales in a busy, cosmopolitan children's hospital ED. The practice-focused question that guided this project was: How does an educational module and change in electronic health record pain assessment flowsheet increase the nurses' compliance with initial documentation of pain? An educational module and minor change in the electronic health record was developed and implemented. Chart audits showed an improvement in pain documentation in triage from 16% to 84% with a chi-square value of 11.4, $p = .001$. Prior to the DNP project there were 24 of 71 charts (33.8%) with all 3 required elements properly documented; after the educational module, this improved to 51 of 80 charts, 63.7%. The results of the chi square 13.4, $p = < .001$ demonstrate a statistically significant improvement. In the qualitative survey data collected before and after nurses completed the educational module, they cited short-staffing, electronic health records, lack of education, nursing experience, and time management as explanatory of documentation failures. Attention to accurate and timely pain assessment and documentation using the correct tools improves the care of the pediatric patient and contributes significantly to positive social change.

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Acknowledgments

I acknowledge the love and support of my family and friends through this journey. I am thankful for the guidance and insightful feedback of Dr. Tracy Wright, Dr. Barbara Niedz and Dr. Jerry O'Leary.

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Section 1: Nature of the Project

Introduction

Assessment is an integral part of nursing practice. Every assessment finding collected and documented by a nurse is important to the management and treatment of patient care. Pediatric pain assessment and management is complex and challenging (Habich & Letizia, 2015). Adequate pain assessment and management are critical components of nursing care for children of all age groups in pediatric hospitals (Ellis et al., 2007). According to the Joint Commission (2017a), Institute of Medicine guidelines states patients have a right to pain management and resulting from initial assessment and ongoing evaluation. Nurses are responsible for assessing a patient's pain and implementing appropriate pain management in all areas including the emergency department (ED; Ramira, Instone, & Clark, 2016).

Pain assessment and documentation are significant components in pain management; however, this is challenging. The focus on pain management has become prevalent, as there are more patients with chronic illnesses experiencing pain or acute/emergent episodes. The call to improve pain management is the outcome of poorly treated situations, medication error, patient dissatisfaction, and increase in critical events (Gordon et al., 2008). This issue has alarmed and encouraged many organizations to implement new pathways to standardizing pain management.

Problem Statement

Pain experienced by children in EDs is often poorly assessed and treated (Ferrante et al., 2013). Pain assessment and documentation are key factors in managing pain.

Habich and Letizia (2015) explain that despite the presence of published standards of care specific to pain assessment and management, nurses in the ED may not know how to consistently use evidence-based research in practice. Nurses' level knowledge of assessing for pain and the appropriate use of pediatric pain scales and a lack of documentation can affect pain management or treatment (Stanley & Pollard, 2013 Ely, 2001). The importance of resolving this issue is critical to ensuring the provision of safe and effective pain treatment and management.

Based on preliminary pain audits completed by leadership in a busy pediatric emergency department at the project site and as a part of an ongoing quality improvement (QI) initiative, 58% of the nurses are not documenting initial pain assessment. Development of an educational module and improvement in the electronic health record triage pain assessment flowsheet were used to improve documentation of pain in a pediatric ED.

Purpose Statement

The management of pain is complex and challenging but important to patient safety and the quality of patient care. Nurses play a major role in identifying and screening patients who may exhibit signs or who communicate or have a history of pain. A nurses' knowledge of pain assessment and documentation is imperative to standardizing care. About one in four Americans have been reported to have pain that lasts for more than 24 hours (United States Department of Health & Human Services, 2013). In a busy pediatric emergency department of a children's hospital in urban northeastern United States, the question posed for this doctorate of nursing practice

(DNP) project was: How does an educational module and change in electronic health record pain assessment flowsheet increase the nurses' compliance with initial documentation of pain?

The DNP project provided a standardized pediatric pain assessment plan to facilitate implementation of a change in pain management for a health organization involved in innovative nursing care striving to improve upon and maintain high-quality pediatric care. Post-implementation, I planned to have a 95 % compliance of nursing pain assessment documentation. This scholarly project can assist in the children's hospital's ongoing quality of care improvement efforts and overall in meeting the challenges in pediatric healthcare.

Nature of the Doctoral Project

Education is a key factor in the improvement of pain documentation. In searching databases such as CINAHL, MEDLINE, ProQuest, Science Direct, and Cochrane Database for Systematic Reviews, the main concepts explored included *pain in the pediatric emergency department, nurse's documentation of pain, pediatric pain assessment,* and *quality improvement in pediatric pain documentation* to evaluate the evidence-based research. In addition, The Registered Nurses Association of Ontario (RNAO) established best practice guidelines for pain assessment and management (2013). The Joint Commission (2008) recognized the assessment of pain as a major concern and enforced implementation of standardized pain assessment and management approach for all healthcare facilities (Gordon et al., 2008). According to the American Academy of Pediatrics (AAP) and American Pain Society (2001), healthcare

professionals should anticipate monitoring pain in accordance with the appearance of the patient using reliable and valid assessment tools and documenting it in a systematic flowsheet.

The evidence-based model entitled The Iowa Model-Pediatric Pain Management Emergency Department was used for the quality improvement project. In addition to the literature review, national clinical guideline reviews, rating of existing evidence, the current pain policy and procedure of the project facility, an education module on pain assessment and documentation, and ongoing stakeholder involvement contributed to the development of the practice change initiative. The RNAO (2013) management and assessment of pain guidelines, the Joint Commission standards on pain (2017b), and AAP (2012) were also used to guide the evidence-based project.

The implemented DNP project utilized evidence-based research to establish new practices and enhance the knowledge of healthcare professionals. According to the RNAO (2013), the facility should be provided a recommendation for what quality improvement benchmarks should be measured to evaluate the effectiveness of this evidence-based practice change in pain assessment and documentation. It was recommended that such measures be taken by the facility to gain 6-week data collection preimplementation and postimplementation of the practice change. The postimplementation survey was compared with the results of chart auditing to evaluate whether nurses had met compliance with primary pain assessment documentation to properly manage patient care from the onset of care in the ED. Improvement in patient outcomes as measured by Hospital Consumer Assessment Healthcare Providers and

Systems (2014) survey scores and the Press Ganey (2017) patient satisfaction survey are imperative in meeting the expectations of leadership in a specialized pediatric hospital.

Significance

Pain assessment and documentation are integral components of effective pain management. Pain is defined as a subjective report of unpleasant sensory experiences, an unpleasant emotional experience and a symptom worthy of independent treatment rather than an expected consequence of disease (Conlon, 2009). A self- report given by the patient determines their level of pain. Healthcare providers find it complex and challenging. As a result, pain is inadequately managed. Inadequate pain management is due in part to healthcare providers', specifically nurses', limited or inaccurate knowledge regarding pain management along with difficulty in clinical decision making and nurses fears and misconceptions that influence decision-making (Ely, 2001).

Another significance is the satisfaction of a patient's pain level management increases their satisfaction of care. This notwithstanding, local stakeholders attracted to this DNP QI project included members of the health system, the pediatric emergency administrative staff, the pediatric ED nurses and the Anti-Pain Campaign members. Nursing pain assessment and documentation contributed to patient satisfaction of their pain being managed and to healthcare providers being able to fulfill a patient's physical and emotional needs for positive quality of life (Gordon et al., 2008). The Hospital Consumer Assessment of Healthcare Providers and Systems (2014) is the first national, standardized, publicly reported survey of patients' perspectives of hospital care. Press Ganey (2017) is a consulting company utilized by hospitals to monitor and analyze

processes, target areas of improvement in order to provide a world-class patient experience. Hospital Consumer Assessment of Healthcare Providers and Systems (2014) and Press Ganey (2017) are used by the hospitals to increase patient experience, and pain is a factor mentioned in the use of both methods.

This project was aligned with an ongoing quality improvement project started in 2015 called the Anti-Pain Campaign. The Anti-Pain Campaign focused on improving the management of pain for pediatric patients in the emergency department to control the reduction of anxiety and stress. The project involved child-life specialists, nursing staff, a chief resident, pediatric ED physician fellows, and attending physicians. Some of the strategies included identifying advocates in each profession, placing posters on collaborative care in patient rooms, organizing huddles and meetings on pain management measures, and choosing a monthly pain champion. The outcomes allowed increased Press Ganey (2017) scores referencing whether the healthcare team was sensitive to pain and how well pain was controlled. The children's hospital mission aims to promote innovative ways to improve healthcare and provide quality patient care, which the project promoted.

The Joint Commission, RNAO (2013), and AAP and American Pain Society (2001) focus on pain assessment and management aimed to provide recommendations to nurses, other health-care professionals, and administrators who lead and facilitate practice changes. As nurses are at the forefront of care, supportive efforts and resources are imperative to improving documentation in order to have better outcomes in pediatric pain management. Ramira et al. (2016) suggested that nurses' lack of knowledge about pain

assessment, and pediatric pain assessment tools and appropriate use of them for children contributes to inadequate pain management. The Joint Commission's pain standards have influenced the implementation of policies and practices to ensure routine screening and assessment of pain, but I found little published data that describes how nurses perform and communicate pain assessment in the pediatric population (Gordon et al., 2008).

Pediatric pain assessment is complex and challenging, which leads to inadequate pain assessment causing overestimation or underestimation of pain (Conlon, 2009). Acute pain is one of most common stimuli experienced in the pediatric population and causes major anxiety/distress. Healthcare providers are being held accountable for having appropriate knowledge and understanding in order to provide adequate pain management (AAP and American Pain Society, 2001). Poorly controlled pain can lead to short and long-term consequences (Conlon, 2009). Underestimation of a patient's pain can have a negative effect on patients by causing appropriate treatment to be withheld (Puntillo, Neighbor, O'Neil & Nixon, 2003). Ineffective pain management can increase the cost of health care, lessen reimbursement due to recurrent hospital visits or admissions, and increase the stress of parent responsibilities (Phillips, 2009). This project provided insight into practice changes to improve the quality of pain management in the pediatric population through documentation. Improvement in pain management can facilitate the trust in the patient-provider relationship. Reducing fear and anxiety, promoting self-reporting, developing a healthy hospital environment, and opening lines of communication between the pediatric patient, parent, and healthcare provider are potential implications for positive social change supported by this project (AAP, 2001).

Inadequate pain documentation affects pain management. Pediatric pain assessment is complex and challenging. Assessment and documentation are integral components in pain management. A review of literature and present pain guidelines and standards set forth by healthcare regulatory and accrediting agencies showed pain management continues to be a challenge, even more so in the pediatric population. Nurse's pain assessment and documentation are imperative to pain management. A nurses' knowledge, attitude, and understanding as well as use of appropriate pain scales and actual documentation are all supportive of effectively managing pain. The nurses working in a high-quality care and thriving pediatric ED have inadequately documented initial pain assessment.

The DNP QI scholarly project was focused on a pain education module and a minor change in the electronic health record pain assessment flowsheet. The pain educational tool was a 15-page computer-based learning module. Computer-based learning is a tool that the hospital uses on an ongoing basis to provide education to nurses. The module was sent to all of the nurses throughout the ED and made available for one week. Creating a permanent modification of the flowsheet pediatric tools template for all nurses provided greater availability and usage to help improve pain documentation. While the template currently existed, some nurses were unaware that they could permanently apply the flowsheet to the patient's profile and have easy access to it.

With the help of all stakeholders, the DNP quality improvement project was implemented. The significance of the project is that it enacted a standardized practice guideline to create a better relationship between the pediatric patient, parent, and

healthcare provider. The importance of improving the quality of care is that it helps to reduce costs, recurrent ED visits, and admissions to hospitals and creates a better healthcare environment (Phillips, 2009).

Section 2: Background and Context

Introduction

Approximately 25 million children in the United States, many with symptoms of pain, visit the ED annually and despite the high frequency of pain, pediatric patients are often not appropriately assessed for pain in this setting (Habich, & Letizia, 2015). Nurses play a major role in identifying and screening patients who may exhibit signs of pain or who communicate it or have a history of it. Despite the presence of published standards of care specific to pain assessment and management, nurses in the ED may not know about or consistently use these evidence-based practices (Habich & Letizia, 2015). A nurses' knowledge of pain assessment and documentation is imperative in standardizing care.

The project site was an urban nationally recognized 202-bed and growing children's hospital where about 4,500 children are seen monthly in the ED. A quality initiative project was initiated a few years ago called the Anti-Pain Campaign focused on improving the management of pain for a pediatric patient in the ED to control the reduction of anxiety and stress. As a component of a monthly managerial quality initiative, a chart audit was conducted by three assistant nurse mangers who were responsible for randomly auditing 10 charts based on specific pain criteria. A pain assessment and intervention flowsheet were used to document pain assessment and documentation during triage; initial assessment, reassessment and includes use of interventions, patient responses, and safety measures. From this information, the manager

created a spreadsheet condensing the information by the patient's medical record number, patient age, pain assessment, intervention, reassessment, and comments made by the nurse.

The mission and vision of the hospital thrives on using innovative ways to specialize care for the pediatric population. Based on preliminary pain audits completed by leadership in a busy pediatric ED at the project site over a 3-month time frame, 58% of the nurses were not documenting initial pain assessment (Nurse Manager, personal communication, September 2016). The Anti-Pain Campaign is ongoing and motivates the pain initiative to implement strategies to reduce the anxiety and stress of pain in pediatric patients. Each week an employee was chosen and recognized for advocating pain management. The DNP project is a contingent effort, supportive of the initiative and quality improvement audits.

The focus of this doctoral project was to improve nursing documentation of pain assessment. Development of an educational module and improvement in the electronic health record pain assessment flowsheet was used to improve documentation of pain in a pediatric ED. The key question that drives this DNP project was: In a busy pediatric ED of a children's hospital in urban northeastern United States, how does an educational module and change in the electronic health record pain assessment flowsheet increase nursing compliance with documentation of pain?

Concepts, Models, and Theory

Pain Assessment and Management in Children Visiting the Emergency Department

Pain assessment and management in the ED can be challenging for healthcare professionals (Ramira et al., 2016). In the United States, millions of children visit EDs with complaints of pain. Nurses are responsible for assessing patients for pain. Pain in children is a subjective experience that "has sensory, emotional, cognitive, and behavioral components that are interrelated with environmental, developmental, socio-cultural, and contextual factors," and is often considered inadequately assessed and undertreated (AAP & American Pain Society, 2001, p.793). Appropriate pain management is an important component of pediatric care; therefore, strategies including development of polices and staff educational programs should be implemented (Ferrante et al., 2013).

Pediatric patient pain levels are evaluated according to the nurse's knowledge, experience, attitude, and use of a valuable self-reporting behavioral pediatric pain assessment tool such as Neonatal, Infants Pain Scale, Face, Legs, Arms, Cry and Consoliability, Wong Baker FACES Scale, and Numeric Pain Rating scale. Pain education is an effective strategy to address the problem of inadequate pain management by improving pain documentation, prompting nurses to provide medication (Ramira et al., 2016; Ely, 2001; Tornkvist, Gardulf, & Strender, 1998). These three tools are required for use at the project by policy, and have established reliability and validity for their use in age appropriate children (AAP & American Pain Society, 2001, Conlon, 2009). Pain management education improved nurses' pain documentation and administration of analgesics (Le May et al., 2009). According to the literature, pain

education is an implied effective strategy to address the problem of inadequate pain management by improving pain documentation, prompting nurses to provide medication (Ely, 2001; Ramira et al., 2016; Tornkvist et al., 1998).

Habich and Letizia (2015) conducted a study in a community hospital ED in west Chicago, which demonstrated valid and reliable evidence-based approaches to improve pain assessment and management. The education program consisted of a pre- and posttests, narrated education module, demographic and professional characteristic, questionnaire, and program evaluation. Nonparametric descriptive statistics were used to analyze categorical variables. Paired sample *t* test was used to note differences between pre- and posttest scores. Internal consistency of a 20-item posttest was evaluated and reported a Cronbach's alpha coefficient of 0.95. The test demonstrated excellent internal consistency of each test question and its contribution to the posttest. The content of the module was found to be valuable as the internal coefficient variation was 1.00. The posttest scores ranged from 15% to 90% (M = 69.4; SD =15.9). On average, posttest scores were found to have a statistically significant increase of 12.6% higher than the pretest (Habich & Letizia, 2015).

The high percentage of patients assessed for pain using an appropriate scale demonstrates nurses' understanding of the unique developmental and cognitive implications for pediatric pain assessment (Habich & Letizia, 2015). The use of education is supportive for improving nurse's documentation of pain and enhancing their knowledge regarding pain assessment and management as demonstrated in a study by Chiang, Chen, and Huang (2006).

Barriers Affecting Documentation

Nurses' challenging work experiences affect their documentation. Initial pain assessment and documentation occurs in triage of the ED. Health care providers rely on observation and interpretation of behaviors for the assessment of pain in infants and small children, often leading to inappropriate treatment of painful conditions, minor illnesses, and injuries (Alexander & Manno, 2003; Drendel, Brousseau, & Gorelick, 2006; Kaplan, Sison, & Platt, 2008). Barriers related to work security, time constraints, inconsistencies in practice, and perceived lack of power by nurses may impact their ability to promote effective pain management (Ellis et al., 2007; Ely, 2001**).** Other limiting factors that affect the treatment of pain in children include the following: (a) myths and misconceptions, such as the thinking that children (especially infants) do not feel pain the way adults do; (b) lack of assessment and reassessment for the presence of pain and misunderstanding of how to conceptualize and quantify a subjective experience; and (c) lack of knowledge of pain treatment, the notion that addressing pain in children takes too much time and effort (AAP, 2012).

Stanley and Pollard (2013) studied the relationship between nursing knowledge and self-efficacy using a cross sectional methodology while utilizing Bandura's social cognitive learning. The theory of self-efficacy stated that a person's belief in their capability influences a successful performance of a specific task (Stanley & Pollard, 2013). The use of Pediatric Nurses' Knowledge and Attitude Survey regarding Pain resulted in an acceptable level of stability with a test-retest reliability of 0.67 and an acceptable level of internal consistency with a Cronbach's alpha of 0.72 to 0.77 (Stanley

& Pollard, 2013). The other survey was Nurses' Self-Efficacy in Managing Children's Pain (Chiang et al., 2006). The survey had high internal consistency with Cronbach's alpha 0.88 at pretest and 0.91 at posttest), and content validity was established by a panel of three pediatric experts (Decosterd et al., 2007. The Cronbach's alpha for this study was 0.81. There was no statistical significance found in the relationship between knowledge and self-efficacy. However, the relationship between knowledge and self-efficacy strengthened with more years of nursing experience (Stanley & Pollard, 2016). The researchers concluded that there was a need for continued exploration of relationship between pain management, assessment, and self-efficacy.

The Iowa Model: Evidence-Based Practice Model for Implementation

The evidence-based model called the Iowa model for pediatric pain management emergency department was used for this quality improvement, evidence-based project. The Iowa model provided a framework for the review of the literature, which supports nurses' use of various scales for children of differing age ranges to evaluate and document pain. In addition, the literature reviewed provided the underpinning for the computer-based pain management competency, that is, the educational module that will be offered in the project. The following steps are included in the model: (a) identifying the issue/problem, (b) triggers, (c) formation of a team, (d) analyzing literature data, (e) evaluating whether a change in practice should occur, (f) developing new ways of care and knowledge, (g) an evaluation, (h) dissemination of results to stakeholders and leadership, and (i) monitoring of the intervention after project process is completed. A

change in practice can improve documentation of pain assessment, patient satisfaction, and pain management outcomes.

The Iowa model validated the reasoning for the need to implement practice change to improve pain documentation in a pediatric ED. The literature reviewed using the Iowa model framework is summarized in Appendix A, and Figure 1 describes the model.

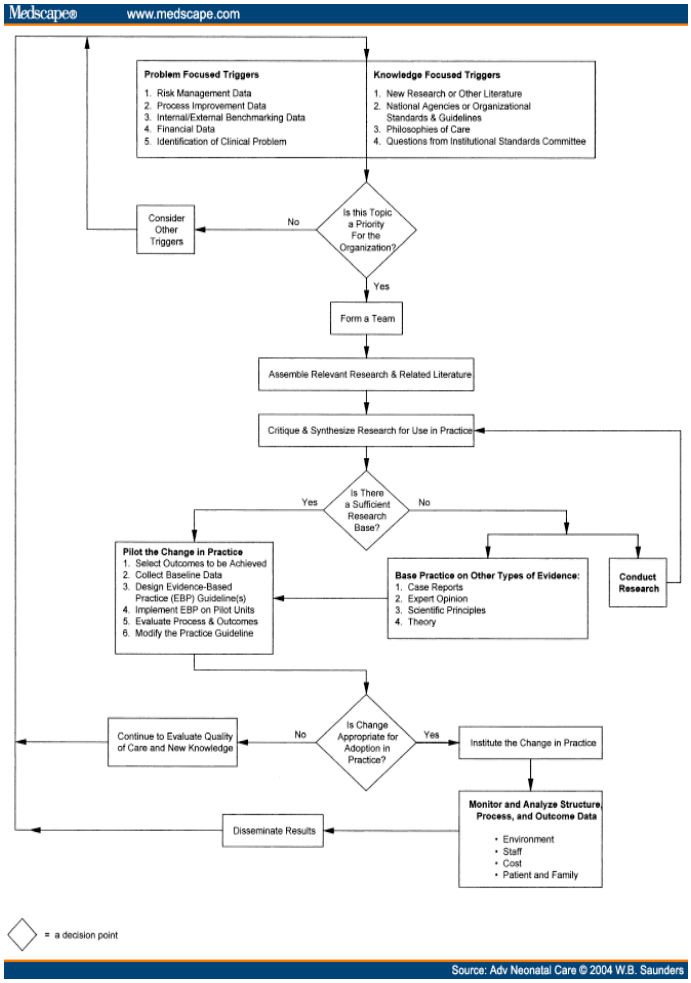

Figure 1. Pediatric Pain Management Emergency Department. Reprinted from Medscape, Tillet et al. 2011.Retrieved from URL. Copyright 2015 by the University of Iowa Hospitals and Clinics. Used/Reprinted with permission (Appendix E).

Relevance to Nursing Practice

Inappropriate pain assessment is known to be the reason for inadequate pain management in EDs (Drendel et al., 2006). The role of nurse's documentation of pain assessment is important to management and treatment of the pediatric patient. Pain assessment provides the interdisciplinary team with appropriate options in the decision-making process of quality care of the patient. A nurse's knowledge and perception are

major influences in evaluating and documenting pain in the pediatric patient. A nurse's knowledge and attitude can influence his or her ability to adequately provide pediatric pain management (Stanley & Pollard, 2013).

Ramira et al (2016) found that pain education is an effective strategy to address the problem of inadequate pain management by improving pain documentation, prompting nurses to provide medication. Twycross (2010) concluded that a multifactorial approach involving education, institutional support, and decision-making strategies improved pain management practices. Nurses are continually faced with the challenge of treating pain, and to ensure the best quality of care for patients, nurses need effective knowledge, skills, and attitudes to address pediatric pain needs (Stanley & Pollard, 2013). A study by Decosterd et al. (2007) demonstrated that providing education on pain management and guidelines led to improved pain documentation, administration of analgesia and patient satisfaction with ED services. The use of implementation strategies will increase the likelihood that guidelines will be successfully implemented (Ellis et al., 2007).

The relevance of education and intervention impacts the change in assessment and documentation of pain. Assessment and documentation influences the decisions healthcare professionals use to decide on pain treatment and further management in pain control. Education is an effective strategy to address the problem of inadequate pain management by improving pain documentation, prompting nurses to provide treatment. Education and other factors influencing documentation can be effective to nurses adhering to guidelines and ensure continued compliance.

In 2000, The Joint Commission established accreditation standards specific to the recognition, identification and treatment of pain (The Joint Commission, 2017a). The Joint Commission pain standards serve as the foundation for population-specific pain protocols. Healthcare organizations have been influenced to enforce assessment and monitoring of pain assessment in order to improve patient outcomes. According to the Joint Commission, pain is to be assessed in all patients, care is to be individualized and responsive to specific patient needs, patients and their families are to be educated about pain and its management as a part of their treatment; and discharge planning is to include plans for ongoing pain control (Gordon et al., 2008). Illinois Emergency Medical Services for Children established an education module on Pediatric Pain Management in the ED (Habich & Letizia, 2015). In addition, recent guidelines from the AAP (2012), dictate that health care professionals should anticipate painful experiences and monitor them, which includes a patient self-report, as well as behavioral and physiological responses depending on his or her age or way of communication. Pain requires an initial and ongoing assessment with severity using reliable, valid assessment tools valuable for neonates through adolescence (AAP & American Pain Society, 2001)

The Registered Nurses' Association of Ontario supports the best clinical guidelines for assessment and management of pain as evidence-based practice supports excellence in service that health professionals are committed to delivering every day (RNAO, 2013). A part of a recent recommendation revision, included the following topics: pain planning implementation, evaluation, education, and suggestions for an organization's pain policy. In the planning phase, it is suggested that health care

providers screen for pain upon initial admission, ongoing assessment and reassessment. The pain assessment should be comprehensive and validated by pain tools if the patient is unable to communicate (RNAO, 2013). Secondly, implementation of pain assessment and management should be managed by an interdisciplinary plan of care, teachings to patients about pain and areas associated and an evaluation by pain reassessment and use of therapies. Documentation is important to validate pain assessment and management. Another recommendation is that educational institutions should incorporate assessment and management of pain guidelines into basic and inter-professional curricula for registered nurses, registered practical nurses and doctor of medicine programs to promote evidence-based practice (RNAO, 2013). There should be continued education provided with educational programs and administrative support representation to facilitate the process. The final recommendation is for the organization to establish a policy on pain assessment and management as a strategic clinical priority (RNAO, 2013).

The importance of nursing documentation is a priority in establishing best guidelines of care for pain assessment and management. The project site is an organization that prides itself on use of innovative, evidence-based methods in improving patient care as they thrive to achieve high-quality care for the pediatric population. With this collaborative effort, the DNP scholar achieved this goal through the use of this project. The project bridged the gap of previous research, which has limited mention of the influence of the AAP and the RNAO best practice guidelines supporting their problem. The RNAO recommendations are reflected in the Iowa model: Pediatric Pain

Management Emergency Department structure, and the overall quality improvement for nursing documentation of pain.

The project provided an opportunity for an organization to provide safe and effective strategies for managing and assessing pain through nursing documentation. As mentioned previously, the use of educational programs influence improvements in pain assessment, patient satisfaction and pain management

The project discussed the influence on the nurse's inadequate documentation of pain; what is influencing this action? The project placed the focus on how to support the nurse's ability to document efficiently, accessibly and convenient. Effective prevention and management of pain depends on coordinated inter-professional care that emphasizes ongoing communication among professionals and the people seeking their services (RNAO, 2013). This communication occurs through nursing documentation, which provides validation that the assessment was completed.

Local Background and Context

Nursing documentation of pain is an ongoing issue for an urban eastern region pediatric ED of a children's hospital. The children's hospital is a 202-bedded facility, specializing in state-of-the-art care for children with medical, surgical, psychiatric and dental needs for inpatient and outpatient settings. It services 1.8 million children annually from several neighboring boroughs. The pediatric ED provides care to about 4,500 patients monthly. The DNP student is familiar with the project site due to past work experience, which helped establishing trust and a collaborative environment for this evidence-based project.

In 1995, the Anti-Pain Campaign was a quality initiative, established to focus on improving the management of pain for a pediatric patient in the ED to control the reduction of anxiety and stress. In an ongoing effort to uphold the quality initiative, three assistant nurse managers were designated to randomly audit ten patient charts based on specific pain criteria. A pain assessment and intervention tool was used to document pain assessment and documentation in triage, at the bedside in the pediatric ED, pain reassessment, intervention, responses, and if safety measures were used. From this information, the manager created a spreadsheet condensing the information by patient age, pain assessment, intervention, reassessment and comments made by the nurse.

Members of the administrative staff identified this issue and the need for further understanding as to why nurses are not documenting pain assessment. Based on the hospital system in which encompasses the children's hospital protocol, all patients will be screened by a health care provider for the presence or absence of pain, and if the response is indicative of pain, then a detailed assessment is completed with a reassessment every four hours. The policy was created in 2006, reviewed and revised twice and updated with an effective date of January 2011.

The mission and vision of the children's hospital is to be a national leader in pediatric care, committed to highest quality clinical care; educating the current and future generations of health care professionals; searching for new advances in medicine through the conduct of bio-medical research; promoting health education. The project incorporated the mission and vision of the children's hospital. The project incorporated the present standardized guidelines and evidence-based recommendations deemed

reliable to making improvements to pain assessment and management. Becoming a leader in healthcare requires that an organization utilize evidence-based strategies for implementing guidelines and recommendations for improving in changes in care (RNAO, 2013). This project supported this effort to continue this thrive in healthcare.

The New York State Health Department states that pain impacts the quality of life (New York State Department of Health, 2012). Business and industry incur significant losses due to employee absenteeism, reduced productivity and increased health care costs (New York State Department of Health, 2012). Pain should be evaluated individually and receive appropriate assessment and management. Ineffective pain management affects pediatric patients as they are impacted by missing days of school, inability to socialize, increased anxiety and fear when visiting EDs, urgent care centers or recurrent admissions to hospitals. Documentation affects whether physician offices, facilities or hospitals are reimbursed for services.

Role of the DNP student

About two years ago, I determined I needed a change in my career and decided to accept a travel position in the pediatric ED. I feared the challenge because the children's hospital was different than my previous experience of working in an ED, specializing in adult and pediatric emergency care. However, I accepted the 13-week travel nurse contract and formed a great rapport with the manager and staff. Upon completion of my assignment, I was offered a per diem position. In accepting this position, I have worked steady 8 or 12-hour shifts at times and felt like a full-time staff member. Short staffing

and high acuity have been major changes for the administrative and nursing staff. Over these two years, I have established and attained a positive rapport with the staff.

From my perspective, the doctoral prepared nurse is the change agent. A DNP scholar is a person who has a vision for making a difference and transforming the clinical practice setting based on evidence and research. According to the American Association of Colleges of Nursing (2006), the DNP scholar calls for a transformational change in the education required for professional nurses who will practice at the most advanced level of nursing. My pursuit of the DNP is to educate future nurses through my creative eye with use of my clinical experiences, skill and use of different teaching approaches to promote better learning outcomes. As stated by AACN (2006), the DNP will seek to fill roles as educators and will use their considerable practice expertise to educate the next generation of nurses. This project supported my continued goal in using evidence-based research to educate the improvement of nursing practice issues.

Role of the Project Team

ED nurses were identified as being non-compliant with pain assessment documentation in the pediatric ED by the nurse manager. The initial step of the Iowa model states to identify a problem focus trigger for use of the model, which is inadequate pain assessment. See Figure 1 The Iowa Model: Pediatric Pain Management Emergency Department. A team of the DNP scholar, ED nurse manager, ED nurses –assistant nurse managers, DNP prepared ED educator and the mastered-prepared clinical nurse specialist was formed to assist with the project.

Team involvement was utilized to create the plan of change. The nurse manager supplied the retrospective patient pain chart audits for pre-implementation phase of 100 charts in a 3-month time. The manager, DNP prepared ED educator and the mastered prepared clinical nurse specialist helped to create the structure of the pre and post assessment survey and the targeted content for pain educational tool. The timeline of the project utilized the review of the charts from for a four-month period of time. The nurses were provided one week to complete the pre assessment survey, another week to review the educational tool and change in the electronic health record. The post survey was given one-week post-implementation. Pain assessment audits were reviewed two months after implementation. The results of the project were disseminated to the ED leadership team.

I had an open approach to the successful completion of my project. Having worked for the site per diem, I was aware of the short staffing, high acuity, increased wait times and other challenges nurses' face that place a strain on their ability to maintain their expected responsibilities. In my experience as a pediatric nursing theory instructor and having had years of experience with patients with pain and care of pediatric patients, I was aware of the use of valuable pediatric pain assessment tools and how to document pain assessment and management. The consistency of documenting in triage places a major role in pain management, as this is when the initial assessment of pain occurs, which is where many nurses are not compliant. Within recent guidelines, recommendations and the health system policy on pain assessment and management, pain should be documented in triage, as it is the first encounter (RNAO, 2013). Some nurses

stated that due to the emergency triage index pain was not addressed especially if the patient does not complain of it. However, pain is a component of vital signs and should be initiated in the primary assessment of the patient. I was motivated to finding out what was influencing the nurse's ability to document. The pre-assessment survey asked open-ended questions on what are three barriers affecting their actual ability to physically document their assessment findings.

Documentation is imperative to nurses providing care as if you don't do it then it was not done regardless of anyone's knowledge of doing so. By documenting care, nurses can prove the completion of their responsibilities involved in the patient's care. The project has helped this pediatric ED implement better practices and a healthcare system's mission to lead the best pediatric efforts, which is what I want to continue to support as nurse educator. I want nurses to continue to be the voices in patient care, advocating for more support in clinical practice and promotion of quality care for improving patient safety and health.

Summary

Nursing documentation is important to the assessment and management of pain. Nurses expressed knowing how to assess pain in the pediatric patient but not actually performing the action. Within the clinical setting of a pediatric ED in an urban national leading children's hospital, embedded in a healthcare system, nurses are assessing their patients with documentation that does not meet current evidence-base standards. From a review of relevant literature, implementing an educational program was an effective strategy for implementing change in nursing practice. The DNP scholar proposed the use

of an educational model, change in the electronic health record pain assessment flowsheet and development of a pain assessment policy specific to the ED to bridge the gap in practice.

The Iowa model for pediatric pain assessment was used as a structured implementation model in identifying the steps needed to effect a change in practice, specifically: pediatric pain assessment and documentation. Under recent guidelines and recommendations from The Joint Commission, Academy of Pediatrics and Registered Nurses of Ontario: Assessment and Management of Pain, the change in practice will standardize practice for nurses in documentation of pain assessment (RNAO, 2013). The DNP scholar aims to continue implementing educational initiatives to keep nurses afloat in making changes in practice to improve quality of care. The project is consistent with the children's hospital mission to become the national leader in pediatric care. Having used this evidence-based project to implement new practices, it reflects the practice site's vision and mission and helps the staff 's continued thriving effort in healthcare. With the use of the background and context to support the project, the collection of evidence followed.

Section 3: Collection and Analysis of Evidence

Pain management is complex and challenging and even more so in the pediatric population. Pain experienced by children in EDs is often poorly assessed and treated (Ferrante et al., 2013). Pain assessment and documentation are key factors in managing pain. According to Ely (2001), one of the barriers affecting complete pain documentation is the actual act of handwriting or electronically typing the assessment into the electronic medical record (EMR). Nursing documentation is important to the assessment and management of pain. Pain assessment provides the interdisciplinary team with appropriate options in the decision-making process of quality care of the patient. A nurse's knowledge and perception are major influences in evaluating and documenting pain in the pediatric patient. A nurse's knowledge and attitude can influence the nurse's ability to adequately provide pediatric pain management (Stanley & Pollard, 2013).

Nursing documentation of pain is an ongoing issue for an urban northeastern region pediatric ED. Members of the administrative staff had identified this issue and the need for further understanding as to why nurses were not documenting pain assessment. ED leadership believed the nurses were physically assessing the patient's pain, however, they were not documenting into the electronic health documentation system. Based on the hospital system, which encompasses the children's hospital protocol, all patients are be screened by a health care provider for the presence or absence of pain, and if the response is indicative of pain, then a detailed assessment is completed with reassessment every four hours. In a busy pediatric ED of a children's hospital in urban northeastern United States, how does an educational module and change in the electronic health record pain

assessment flowsheet and policy increase the nurses' compliance with documentation of pain?

With recent recommendations, the implementation of the DNP project helped to standardize pain assessment documentation. The health system in which the children's hospital is located has a pain assessment policy; however, a policy specific to the pediatric ED does not exist. As the ED provides the initial patient evaluation, documentation of pain assessment and management should be initiated and completed. The project will help the nurses remain in compliance with the local health department, AAP, and RNAO guidelines. Changes in pain assessment and management implementing the most recent guidelines and recommendations is important. The site for this project has demonstrated inadequate pain assessment documentation. The project showed improved nurse compliance for documenting initial and ongoing pain assessment through evidence-based strategies. In addition, the evidence-based project aligns with the hospital's mission and vision to be the leading health system in providing quality pediatric healthcare.

Sources of Evidence

Pain assessment and management has been an evident issue among many health regulatory bodies that have implemented continuous guidelines and recommendations. In 2000, the Joint Commission established accreditation standards specific to the recognition, identification, and treatment of pain (Joint Commission, 2017a). The Joint Commission pain standards serve as the foundation for population-specific pain protocols. Healthcare organizations have been influenced to enforce assessment and monitoring of pain assessment in order to improve patient outcomes. According to the

AAP & American Pain Society (2001), numerous myths, insufficient knowledge among caregivers, and inadequate application of knowledge contribute to the lack of effective pain management. In addition, the RNAO (2013) established guidelines specifically addressing pain assessment and management. This guideline has useful recommendations for healthcare organizations facing challenges with pain assessment and management and in establishing change with regard to practice, policy and protocol. In an effort to address the ongoing changes in pain assessment and management affecting patient outcomes, the increase in the compliance of nursing pain assessment documentation is imperative.

Published Outcomes and Research

I conducted literature review by searching databases CINAHL, MEDLINE, ProQuest, Science Direct, and Cochrane Database for Systematic Reviews (see Appendix A, Literature Matrix). The main concepts explored included (a) pain in the pediatric ED, (b) nurse's documentation of pain/or pediatric pain assessment, (c) quality improvement in pediatric pain documentation, (d) nursing knowledge, (e) nurse documentation in the ED, (f) pain assessment in ED, and (g) pain assessment and management. This populated peer and systemic review articles that discussed pain management, pediatric assessment and pain management, and pediatric EDs. The time frame used in selecting the articles was those published in the past eight to ten years. The cohesive search was narrowed down by the validity of their results, large study sample size, use of pre- and postevaluations, outcomes, and the main use of education as a strategy to making a change in clinical practice. Nurses are continually faced with the challenge of treating

pain, and to ensure the best quality of care for patients, nurses need effective knowledge, skills, and attitudes to address pediatric pain needs (Stanley & Pollard, 2013). In addition to a literature review, I conducted a search involving regulatory bodies contributing to recommendations and guidelines on pain assessment, pain management, management of pain in children's hospital, and management of acute pain in children.

The RNAO established best practice guidelines for pain assessment and management (RNAO, 2013). This document provides assessment and management on building the general core competencies (the skills and practices) of nurses for effective assessment and management of pain, without focusing on either the type or origin of pain (RNAO, 2013). The recommendations are classified according to assessment, planning, implementation, evaluation, and education. Each of these areas explained what guidelines should be assumed by the organization to facilitate improvement in pain assessment and management.

The Joint Commission recognized the assessment of pain as a major concern. The Joint Commission standards require that all accredited facilities recognize the right of all patients to appropriate pain assessment and management, to record the assessment, and to follow-up and collect data to monitor the appropriateness and effectiveness of pain management (Gordon et al., 2008). The Joint Commission (2017) pain standards are as follows: the hospital should educate all licensed independent practitioners on assessing and managing pain, respect the patient's right to pain management, and assess and manage the patient's pain. Hospitals are required to complete a comprehensive pain assessment in the initial encounter, which is consistent with the age, condition, scope, and

treatment and services, which, following assessment, should dovetail with use of the right treatment (Dyrda, 2016).

Another reliable resource is provided by the guidelines of the AAP (2012), which define pain assessment and management for the pediatric patient. Pain should be addressed early in order to manage it effectively (AAP, 2012). This statement reflects the importance of pain assessment being documented in triage as it is the first encounter a nurse has with a patient. AAP recommends that healthcare professionals anticipate monitoring and documenting pain in accordance with the appearance of the patient using reliable and valid assessment tools and documentation in a systematic flowsheet.

The Iowa model for pediatric pain management emergency department was used for this quality improvement evidence-based project. Problem triggers are the key factors in identifying the use of this model. Inadequate pain documentation is priority of this model, which was the reason it was chosen. I researched different sources of evidence to gain insight on evaluating pain in the pediatric client and nursing documentation. This included a literature review, national clinical guidelines review, ratings of existing evidence, current pain policies/procedures, review of the site, education module on pain development, stakeholder meetings and gathering of input, and stakeholder satisfaction with DNP student's leadership/project management of the practice-change initiative. The RNAO (2013) management and assessment of pain guidelines, the Joint Commission standards on pain (2017b), and AAP (2012) were used to guide the evidence-based project.

Archived and Operational Data

As part of the existing QI initiative at the project site, the manager and assistant nurse managers (ANM) were responsible for performing ten randomized monthly pain audits and reporting results during their monthly leadership meetings. The cumulative pain audits are filed based on the month they were completed by the individual ANMs. The manager, ANMs and the quality improvement team established an auditing checklist with a comment section that consists of the following: the nurse's name who cared for the patient that day; patient arrival date; patient medical record number; patient age; chief complaint; whether was pain documented in triage, at the bedside, and at discharge; valid pain assessment tool used; and whether interventions or comfort measures were used. The collection of data for the evidence-based project was retrieved from the computerized archived reports created by the manager after they were de-identified. The data was provided to me in a de-identified way for secondary analyses.

A QI project being conducted by any person or department in the pediatric ED must seek approval from the QI team, which consists of the ED physician leadership. I and the practicum preceptor submitted an academic/administrative project form (see in Appendix C), and were granted approval.

Evidence Generated for the Doctoral Project

The project took place in a pediatric ED. The ED is a level I trauma center located within a nationally recognized children's hospital. The ED provides care to about 4,500 patients monthly.

Participants. About 100 nurses staff the ED working varied shifts. The nurses work full-time, part-time, or as a per diem staff member. The educational module was made available to all nursing staff. The implementation of the pre- and postsurvey pain educational tool and change in access to pain assessment flowsheet required ED nurses' involvement as it directly affected all the nurses working in the ED. During the presurvey, 36 nurses participated, and 35 for postsurvey. The involvement required constant reminders and encouragement of the unit educators and myself to gain nurses' completion of the online surveys. There was a 78% completion rate of the pain education module. The need for re-education on pain assessment and documentation was identified and created awareness and enhanced knowledge and understanding about the importance of pain assessment and documentation.

Procedures.

The DNP project required implementation of minor change to the electronic health record, pre and postimplementation surveys, a pain education computer-based module and suggestions for improving present hospital's pain policy.

Changes to the EMR. Prior to the start of the project, an update was made to the electronic health documentation system, which made it easier for nurses to access the pain assessment tools. The nurses were responsible for modifying and setting the appropriate pain tool template to be saved to their pain assessment flowsheet patient profile or personal nurse profile, which would populate each time pain assessment or reassessment was recorded. This would eliminate the action of having to physically remember to choose the appropriate pain tool each time the nurse needs to document the

patient's pain assessment. However, the majority of the nurses are either unaware of choosing the feature or simply unsure of how to do it. Creating a permanent modification of the flowsheet pediatric tools template for all nurses had not significantly increased the nurses use of appropriate pain assessment tools. The template exists, but every nurse had not permanently applied the flowsheet to their profile.

Education module: Pre- and posttest data collection. An educational tool was created from the recommendations of The Joint Commission, Registered Nurses Association of Ontario, the Academy of Pediatrics and the project's site pain assessment and management policy. In addition to the mentioned regulatory bodies, expert insight from the project team was utilized in choosing the content for the educational tool. The education module was provided as a computer-based program delivered through the hospital's system online learning application. See Appendix D, Pain Assessment and Management in the Pediatric client. Defining pain, purpose of pain, pain assessment and reassessment, valid pain assessment tools, and documentation were focused topics discussed throughout the module. The tool will provide a thorough explanation of the actual pain assessment tools and the observations and behaviors that should be considered when choosing and using them. Also, it explained the steps the nurses will implement in making a permanent addition of access to the appropriate pain scale to be used on every encounter to document the patient's pain. The DNP scholar wanted to provide an incentive and was granted approval for nurses to receive 0.5hrs of continuing education credit upon completion.

To evaluate the effectiveness of the educational module, a 10-item questionnaire was developed which included basic knowledge of pain and 4 case scenarios. See Appendix C, Pre and Post assessment survey questions. The survey was used before and after the ED RN completed the educational module. The structure of and content validity of this questionnaire was established by an expert panel at the project site, consisting of a DNP nurse educator, the nurse manager, and the masters prepared educator. The survey questions were developed using relevant recent research on pain management in children. and the health system's current pain policy. Assessment of knowledge was demonstrated by comparing the differences in the scores between the pre and post survey. The survey was delivered using an online survey system which uses data analysis, sample selection, bias elimination, and data representation tools. The system matched the results of the nurses taking the pre and post assessment surveys. The questions remained the same to compare acquired knowledge and note any changes.

Changes to the pediatric ED pain policy. The final stage of this project took place by gaining feedback of the overall project from the stakeholders and use of the results from the project to help the ED create a plan for a unit specific pain policy. The input of the administrative staff, nurse educator and Anti-Pain Campaign Committee were essential in planning included standards and guidelines. The implementation of this proposed plan is contingent upon approval of the Institutional Review Board (IRB) of Walden University (IRB approval no. 08-01-170-37299) and the children's hospital health system, quality improvement department.

Evaluating the impact on pain assessment documentation. As a part of an ongoing pain quality initiative, three designated assistant nurse managers audited ten patient charts monthly, evaluating a specific pain criteria created by the quality improvement department for the health system. The Anti-pain campaign was sparked by a national level benchmark number of 81% for patient satisfaction scores related to pain control and staff sensitivity (personal communicator, September 2017). The campaign utilized evidence-based information to support the interventions that can be implemented when patients experience pain or display anxiety. The manager, ANM's and the quality improvement team established an auditing checklist; with a comment section, that consists of the following: the nurse's name who cared for the patient that day, patient arrival date, patient medical record number, age, chief complaint, the presence or absence of pain documentation in triage, at the bedside and discharge, was a valid pain assessment tool used, and were interventions or comfort measures utilized. The collection of data for the evidence-based project was retrieved from the computerized archived reports created by the manager.

According to the project site policy, all patients should be assessed for pain upon admission. Triage is the initial encounter with the patient and where pain is assessed and documented, unless patient's presentation supersedes that process, then a nurse can assess pain in an assigned room. The organization of data was collected using the archived pain assessment audits created into an Excel spreadsheet by the ED manager. The ED manager provided the data to the DNP scholar in a separate Excel spreadsheet which included the following information: use of a consistent numeric to decode the identity of

the patient's medical record number, checklist indicating: did the nurse document pain in triage, or during primary nurse encounter and did the nurse use a valid pediatric pain assessment tool. Chart audit data were collected two months prior to implementation of the educational module and change to the electronic pain assessment flowsheet and two months after completion. Descriptive and inferential statistics were used to compare and evaluate the intervention with percentage of documentation before and after the intervention as well as nurses' self reported knowledge before and after completing the educational module.

Protections

To protect the participants, policy and electronic health record documentation of the children's hospital, the quality improvement project was approved by the quality improvement team of the ED (see Appendix B, approval from QI Department at project site). This action was carried out by the DNP scholar and preceptor. The execution of this project was contingent upon Walden University's IRB department. As I have had previous work experience with the nurses of the ED, this DNP scholar built a positive rapport with the leadership and nurses throughout the project. The relationship remains intact through work experience, presentation of the project and ongoing practicum experiences.

The participants of the quality improvement project received an email informing them about the initiation of the project, with instructions to complete the pre-assessment survey, pain educational module, post-assessment survey and complete change in pain assessment flowsheet. A poster was displayed throughout the ED to attract participant

involvement. The assistant nurse managers announced the project and the instructions on how to participate in shift change huddles daily. Upon completion of the pain computer-based module through the hospital's staff learning system, nurses achieved 0.5 hrs continuing education credits.

To collect data for the quality improvement project, archived data was used from managerial audits of pain from the patient's chart. A consistent numeric code was used to replace the patient medical record number to keep track of the number of chart audits used for the project. This maintained the privacy of the patient's identity.

The Iowa Model-Pediatric Pain Management Emergency Department was the evidence-based tool utilized to develop the pain educational module and change in the electronic health documentation record pain flowsheet. Permission to use the model was granted, Figure 1, The Iowa Model: Pediatric Pain Management ED

Analysis and Synthesis

Pain Chart Audits

Data from the patient pain chart audits were de-identified and placed into Excel spreadsheets from the ongoing monthly collection by the ED manager. In the ED, three assistant nurse managers were responsible for auditing ten patient charts. This information was provided to the DNP scholar to evaluate the percentage of nurse compliance documenting pain assessment two months prior to implementation of the project compared to two months after. Data were summarized using descriptive statistics, and inferential statistics were used to analyze the impact of the use of the pain educational tool and change in the electronic health record pain assessment flowsheet.

Preassessment and Postassessment Surveys

Pre and post assessment surveys were used to evaluate the knowledge of the nurses before and after they completed the educational module. A group of 70 ED nurses were surveyed for this project. Descriptive statistics were used to summarize the data. The webinar-based educational module had within it the pre and post surveys. The application generated real-time analysis of the questions used to evaluate the nurse's knowledge.

Section 4: Findings and Recommendations

Pediatric pain management can be complex and challenging. Pain assessment and documentation are integral components of pain management. Pain experienced by children in EDs is often poorly assessed and treated (Ferrante et al., 2013). The nurse is responsible for assessing the pediatric client with inclusion of a valid pediatric pain assessment scale and documentation of the findings. The data documented influences the healthcare team's decision on the plan of care for managing the client's pain. Resolving this issue is critical to ensuring the provision of safe and effective pain treatment and management.

Based on preliminary pain audits completed by leadership in a busy pediatric emergency room at the project site, 58% of the nurses were not documenting initial pain assessment at least somewhere in the chart during the ED visit. In a busy pediatric emergency room of a children's hospital in a pediatric emergency room of a children's hospital in urban Northeastern United States, the question posed for this DNP project was: How does an educational module and change in electronic health record pain assessment flow-sheet increase the nurses' compliance with initial documentation of pain?

The steps of the Iowa model of pediatric pain assessment in the emergency department created the structure for the sources of evidence. Identification and review of the essential data is needed to establish the plan for healthcare organizations that have been impelled to enforce assessment and monitoring of pain to improve patient outcomes. Data from the patient pain chart audits were de-identified and placed into an Excel

spreadsheet for secondary analyses. I created an informative pain assessment computer-based learning tool that was provided to the nursing staff through the hospital's online computer learning application. Pre- and postassessment surveys were used to gain insight into the nurse's perspective of their role in pain assessment and the challenges they faced and to assess knowledge on pain, use of the electronic health record, and documentation of pain before and after the implementation phase. Quantitative statistics were collected from the information of pre- and postaudits and pre- and postsurvey assessments.

Findings and Implications

Data collected from pre- and postimplementation patient chart audits were decoded and information extracted from an Excel spreadsheet created by the ED manager. There were 71 patient charts audited from 6 weeks prior to the educational tool implementation and an additional 80 charts audited 6 weeks after the educational campaign.

Education was identified as an intervention to facilitate a change in nurses' practice in documenting pain assessment on three key components: (a) was there pain assessment documentation in triage, when the patient first presented; (b) was pain assessment documented anywhere else in the ED visit; and (c) was the correct age-appropriate tool used in assessment. An online computer-based educational tool was created entitled "pain assessment and management" that was sent to all the ED nursing staff through the hospital's online learning application. The tool was made available for nurses to complete for one week. Of the total number of nurses who were sent the educational package, 78% completed the computer-based educational module.

Three Components Audited

Patient chart audits were used to compare pain assessment documentation to prior to and after implementation of the educational tool and change in electronic health record. De-identified patient charts were used to evaluate nursing pain assessment documentation (a) in triage, (b) elsewhere in the chart during the ED visit, and (c) regarding whether or not the appropriate pain assessment tool was used. SPSS statistical software was used to analyze the data.

The preaudit showed that in 40.8% of the charts there was no documentation of pain in triage and 59.2% did have evidence of proper documentation in triage. The postaudit showed that 16% did not have proper documentation in triage and 84% did provide proper documentation. This was a significant result, with chi-square value of 11.4 with df = 1, *p*-value of 0.001, which provides evidence of a statistically significant improvement in pediatric pain assessment documentation in the triage area. The charts in the group audited prior to the educational module were 3.6 times more likely to be missing pediatric pain documentation than the postgroup (95% CI 1.7 to 7.8). After the educational module, charts audited in the postgroup were 3.6 times less likely to be missing pediatric pain documentation than the pre-group. The charts audited after the educational module were 3.6 times more likely to contain proper documentation in triage than the pregroup.

In addition to auditing patient charts for nurses' documentation of pain assessment in triage, documentation of pain elsewhere in the chart during the ED visit was done as well. Preaudits showed that in 36.8% of the charts there was no

documentation of pain and 63.2% did have evidence of proper documentation of pain in another area of the ED chart. Postaudits showed that in 18.7% there was no pain assessment documented in another area of the chart, with 81.3% showing appropriate documentation in another area of the chart. There was a significant result, with a chi-square value of 6.2 with df= 1, *p*-value of 0.013, which provides evidence of statistically significant improvement in documentation of pain in another are of chart than triage. Nurses' documentation in the charts audited prior to the educational module was 2.5 times more likely to omit documentation in another area of chart when compared to the postgroup (95% CI 1.2 to 5.3). The charts audited after the educational modules were 2.5 times more likely to chart appropriate documentation then the preaudits

The use of an appropriate pediatric pain assessment tool is imperative in managing patient's pain. Nurses' use of these tools demonstrates their understanding of the patient's behavioral and observational assessment of pain. However, when charts were compared on this individual component, audits prior to the education showed that 36.8% did not document the use of the age appropriate tool and 63.2% did indicate that they used the age appropriate tool. Chart audits collected after the education (29.3%) did not have documentation using the proper tool, and 70.7% did have documentation using the correct scale. Though there was an improvement, it was slight and was not statistically significant with a chi-square value of 0.961 with df =1, *p*-value 0.327. This disappointing result indicates the need for additional problem solving with the staff. It may be related to staff nurses' inability to add the proper pain assessment template to

their profile in the EHR, but this is a bit speculative and will need more evaluation and insight.

All or Nothing

When all three components of the pediatric pain assessment audit were compared as a group, the results from before and after the educational module show statistical significance. That is, compliance is noted only if all three components were properly documented: (a) pain documented in triage, (b) pain documented elsewhere in the chart, (c) an age-specific tool appropriately used to assess the patient's pain. If only one or two of the required three components were present, the chart failed the audit. Only if all three components were present did the chart pass the audit with a positive result.

Prior to the DNP project there were 24 of 71 charts (33.8%) with all three elements properly documented; after the educational module, this improved to 51 of 80 charts, 63.7%. The results of the chi square 13.4, df = 1 and *p*-value 0.000 demonstrate a statistically significant result when charts from 6 weeks before the nurses completed the educational module were compared to the 6-week period after the education. This demonstrates improvement in pain assessment and documentation as a result of the DNP project.

Pre- and Postassessment Surveys

Pre- and postpain assessment surveys were used to analyze the knowledge of the nurses before and after the implementation phase. There were 35 paired responses to the pre- and postsurveys. When asked if the nurses document pain assessment at every opportunity, 83.33% of the nurses responded in the affirmative on the pretest; 91.3%

responded in the affirmative on the postsurvey. Those who acknowledged that they did not consistently document pain using the correct tool mentioned reasons that included: "not enough time," "I forget," "I didn't have the right tool open," "pain is not in the complaint, so it gets missed." This is important insight as these qualitative comments emerged both at the presurvey and at the postsurvey.

Nurses acknowledged using pain assessment tools about 55.88% in the presurvey, and an improvement to 81.43% was demonstrated in the postsurvey. Time was identified as a major barrier in documenting pain, with secondary barriers indicated in both pre- and postassessment surveys, including (a) patient's behavior during assessment, (b) acuity on arrival in the ED), and (c) nonverbal patients. Again, these barriers were consistently reported in both the presurvey and the postsurvey. Charts of patients whose care was of the highest acuity (unconscious trauma victims, children in a pediatric code, etc.) were omitted as outliers from the audits in this project. A majority of the nursing staff were aware of how to access the various pain assessment tools; however, several nurses mentioned "it takes too many clicks to add the feature."

The knowledge section of the survey provided nurses with four case scenarios. Based on the given information about the patient, the nurses had to choose an appropriate pain scale for the pediatric patient. In the first scenario question, there were 75% correct responses in the presurvey and 100% correct in the postsurvey. The second and third case scenarios resulted in 100% correct responses in both the pre- and postsurveys. For the final question, which instructed the nurse to use a valid pediatric scale to determine a

patient's pain level, there was also an improvement. Scores increased from 74% on the presurvey and 95% on the postsurvey.

Implications

Nurses' pain assessment and documentation were identified as issues needing resolution. During daily start of shift huddles, nurses learned about the lack of completion of pain assessment and documentation in their everyday practice. With the initiation of the DNP project, nurses became more conscious of the problem as they were constantly being reminded and were provided with education to improve their practice.

Nurses' awareness and need for continuous reminding of completion of pain assessment documentation signifies the need for frequent ongoing pain education throughout the year and continued pain audit monitoring to evaluate pain documentation. The project provided the nurses with education on what pain is, how is it identified, valuable pain assessment tools, and how to access the tools in the electronic health record. The effect of the project has made nurses more aware of the need to assess and document pain on all patients regardless of the presenting complaint. Providing the nurses with insight as to the steps needed to streamline access to valuable pain assessment tools in the electronic health record was also an important component of this project.

The documentation of baseline pain assessment, which is initiated in triage, provides physicians and the rest of the health care team with knowledge of what interventions should be considered to establish an appropriate plan of care for the patient. Also, this would determine whether the patient needs to be medicated prior to the

treatment process or wait for a later evaluation. With the results of this information, it is suggested that a specific children's hospital pain policy be created to clearly define the expectation for nurses working in this specific area.

Nurse's knowledge of pain assessment and documentation has a positive impact on pain management in the pediatric population. The need for ongoing support of management and leaders of the ED was important in supporting nurses' efforts to complete the assessment and documentation of pain. Another suggestion would be to have an additional nurse assigned to greet patients upon coming into the ED. The nurse would be responsible for using an across the room assessment of patients in the waiting room area for any change or worsening symptoms of pain or distress. At the conclusion of the project, members of the ED nursing leadership were considering this option. In the end, this can result in better pain assessment for acute and chronically ill pediatric patients and positive outcome for patient's satisfaction.

Recommendations

With the implementation of this practice change, the recommendation for ongoing education and chart auditing remains an imperative. The local influence of the project is unit-based. The ED manager will implement two more computer-based education modules on the health system online learning system related to pain assessment and documentation. The ongoing monthly audits will continue and a revised pain evaluation tool was created to gain a closer look at evaluating nurses' pain assessment and documentation. Nurse's documentation of pain in triage showed major statistical significance, which demonstrated the project's positive impact on improving pain

documentation. Nurse's understanding of the importance of completing pain assessment documentation in triage was depicted from this analysis. The unit educator has created a laminated pain assessment scale and has made this available for the nurses to promote utilization and to increase availability for use. The DNP scholar suggested having an individually laminated pain assessment tools placed in the folder slots of each patient room so it is quickly accessible. It was encouraged that nurses increase their representation during the Anti-Pain campaign monthly meetings to voice any issues and provided suggestions, discuss barriers of pain assessment and documentation.

Contribution of the Doctoral team

The DNP scholar and a team facilitated the execution of the implementation process of the DNP project. The collaboration of the ED quality improvement team, ED nurse manager, nurse educator clinical resources nurse and the assistant nurse managers were imperative in fulfilling the steps of the practice change. The approval of the DNP project was made by the ED quality improvement team, which allowed the DNP scholar access to initiate the project. The nurse manager was responsible for informing the ED assistant nurse managers and nurses that the project was occurring. She encouraged involvement and provided the DNP scholar with de-identified patient chart audits to extract the data needed to assess the compliance rate of the nurse's documentation of pain assessment. The nurse educator role provided the DNP scholar with appropriate and accurate direction for initiation of the project. The educator assisted with writing questions for the pre and post assessment survey, encouragement of nurse involvement for completing education tool, helped convert the word document into the hospital's

online learning system, and providing ongoing motivation to the DNP scholar through the process. The clinical nurse resource assisted the DNP scholar with gaining nurse responses for pre and post survey and completion of the educational tool by spending time on the unit during and through shift changes. The clinical nurse resource also provided feedback on the verbiage for creating the questions for the pre and post assessment survey. The assistant nurse managers were helpful as they frequently announced during every unit huddle to complete the surveys and the educational tool.

The doctoral project team contributions influenced the success of the implementation phase. The team's recommendations are congruent with mine. We agreed to continue patient chart auditing to evaluate nursing pain assessment documentation and strategize additional interventions. These recommendations provided insight for future planning in the ongoing pain quality improvement initiative throughout the health system. The data collected can aid in creating new workflows, set new pain assessment guidelines and possible revisions on current pain policy. It was suggested that pediatric assessment tools be printed and laminated and kept in the triage area, in patient rooms and at the nurses' station to increase compliance of nurses utilizing and documenting use of the appropriate tool. Ongoing pain education will be necessary to keep the nurse informed of current evidence-based research and emerging standards influencing everyday practice.

Strength and Limitations of the Project

Education is an integral tool to improvement of practice change (Habich & Letizia, 2015). The nurses were made aware that despite the physical act of assessing a patient's pain was occurring, the actual documentation in the EHR was absent. The key

highlights of the DNP project included exploring the reasons why documentation was absent, what barriers and challenges the nurses were facing. From the survey feedback, it was noted that nurses were knowledgeable about assessing pain in the pediatric client, where to access the pain assessment flow sheet and the pediatric pain scales, however, there were challenges, which prohibited that. Though scores increased in a statistically significant way, the documentation was not 100%, which is the expectation. The barriers identified helps the nurse manager in planning for new workflow processes including increased staffing, more frequent pain assessment education, and having an open forum to gain a more in depth insight into what can do to better support the nursing staff. Another strength that was identified was that the nurses who were not aware of how to access the pain assessment flow sheet were able to learn how to do so.

Habich and Letizia (2015) state that significant improvement in nurse's pain knowledge can be achieved through a computer-based education program. This was the primary way to outreach nurses. Through the hospital's online learning system, the pain assessment educational tool was used to provide pain education on the definition of pain, the importance of documenting pain assessment, the affect on patient care and pain management, choosing the appropriate pain tool, and how to access tools in the EHR for initial and ongoing pain assessment.

Though we had initially hoped to have the educational modules completed over a two-week period of time, this stretched out to six weeks. The educational module was made available to all the nursing staff of the pediatric ED. Prior to the start of the DNP project, during daily shift briefings the assistant nurse manager, nurse educators and ED

manager discussed the issue of pain assessment and documentation. The initiation of the DNP project further enforced the issue. Though we had 78 nurses participate in completing the pain module , there were still about 22 nurses who never completed the educational module. This may have impacted the results.

Section 5: Dissemination Plan

Management of pain is an ongoing quality improvement initiative throughout the health system that houses the children's hospital. Continuous auditing of patient charts is an appropriate and effective tool used to assess the completion and evaluation of nurses' assessment of pain documentation. The findings from the DNP project will be disseminated as a poster board presentation for the ED leadership, the QI team, and the ED nurses, which will be displayed in the ED education department. The results from the project will delineate the continued importance of monitoring pain assessment in an effort to increase compliance. This information will be shared at the ED quality improvement department monthly meeting.

Research and interventions such as with the DNP project are influential to translation to practice for nurses improving documentation of pain assessment. I have plans to submit the DNP project to ProQuest for scholarly review. In addition to these submissions, I plan to submit it to other scholarly pediatric, emergency, and nursing education journals.

Analysis of Self

Healthcare is ever-changing. In preparation for change, nurses should be prepared to be at the forefront providing vital insights and advice on practice guidelines, standards, protocols, and healthcare improvements. The DNP project provided me an opportunity to begin my journey of translating evidence into practice. According to the American Association of Colleges of Nursing (2006), the DNP enhances knowledge to improve nursing practice, patient outcomes, and provision of an advanced educational credential

for those who require advanced practice knowledge but do not need or want a strong research focus. This position statement is congruent with my pursuit of the DNP. I wanted an opportunity to motivate myself to pursue something that was going to be challenging while providing scholarship and making changes to specific nursing practices at the project site. The project allowed me to be a leader for an improvement quality initiative, which affected the way nurses document the care they provide. In addition, accomplishing the DNP provided me the ability to study at the highest level of clinical nursing practice.

Assessment and documentation of pain are basic skills that nurses learn in the early stages of becoming a nurse. The evaluation of pain assessment and documentation are a part of the project site's pain protocol. The project helped me to assist nurses in understanding that pain assessment and documentation are important issues and that evidence-based research can be used to improve their practice and workflow. It was my opportunity to learn, explore, and validate the use of evidence-based research information to support a pain initiative. I was tenacious, which kept me humble, steadfast, and motivated throughout the process.

Throughout the process, I reflected on my journey and original mission. The title of DNP behind my name will not represent a degree but define determination and challenge. I am proud of the work that was done to achieve this professional milestone. I am grateful for the challenges I have faced, but I was able to work through them and know that I am a stronger and more prudent nurse than when I started.

In pursuit of the DNP, I began motivated and inspired to be a part of changes in learning and development in nursing. About two years ago, I was due to begin choosing a project topic; however, I birthed a son who was born with a rare genetic metabolic condition that was unforeseen and who became very ill and passed away. This was an extremely devastating experience for my family and me, so I decided to take a two-semester break. It was difficult to return to the DNP project. This notwithstanding, I have continued to remain focused on what I have accomplished thus far and reflect on why I started.

Another challenge was maintaining a cooperative staff. I was familiar with the staff as I previously worked per diem on the unit and formed many relationships with the nurses and unit leadership. However, the nurses struggled in completing the pre- and postsurveys. The educators and I constantly reminded and encouraged nurses to complete pre- and postsurveys during down time on their shift. The challenge of constructive criticism, relying solely on myself to create the project content, make corrections, research validity, and construct the framework for the project was an additional test. This helped me to become more passionate about my topic as I worked harder to show that the pediatric pain initiative needed more attention. The project's goal was to increase compliance and raise nurses' awareness about an improvement of their daily practice that could negatively impact patient outcomes. This goal represents the DNP mission and vision as a scholar.

Summary

Pain assessment and documentation are integral components in evaluating the management and treatment of patient care. Assessment of pain in the pediatric patient can be challenging. Nurses were identified as noncomplaint with pain assessment and documentation of the pediatric client in a pediatric children's hospital. Education played a major role in increasing compliance in documentation of pain in triage and elsewhere in the chart. The use of appropriate valid pediatric pain assessment tools is a work in progress; however, diagrams of the tools posted and kept in varied areas of unit will remind nurses to use the tools to document. Ongoing education and patient chart auditing will be major factors in maintaining compliance and assessment of continuous pain education.

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Appendix A: Literature Review Matrix

Full Reference	Theoretical/ Conceptual Framework	Research Question(s)/ Hypotheses	Research Methodology	Analysis & Results	Conclusions	Grading the Evidence
Drendel, A, Brousseau, D., & Gorelick, M. (2006). Pain assessment for Pediatric Patients in the emergency room. *Pediatric Nursing.* 117(50, 1511, 1518	Concept of pain assessment and documentation	Describe national practice of pain assessment documentation in the emergency room, determine patient characteristics and specific conditions are associated with pain documentation, evaluate the difference between pain documentation and analgeics in ED	A cross sectional analysis from ED pediatric patient visits from the National Ambulatory Medical Survey	Descriptive statistics were used summarize the data. Odds ratios with 95% confidence intervals were calculated. Multivariate was used to determine the indecent association between the predictor variable and pain score documentation	Only 44.5% of pediatric visits had pain scores. No association between pain scores and ethnicity, race geographic region, teaching hospital or metropolitan area. Pain documentation is low in Ed, less 50%. There is an association between pain score and use analgesics.	Medium
Habich, M & Letizia, M. (2015). Pediatric Pain Assessment in the Emergency Department: An Evidence Based Practice. *Journal of Pediatric*	Population -specific Pain protocols guide from The Illinois Emergency Medical Services For	To develop, implement, and evaluate a Pediatric pain education program and Pain assessment protocol to improve Nurses' knowledge and standardize in a	A quasi-experimental design was used to measure the effects of the education Program and assessment protocol. Test content validity was assessed	Eighty-two percent (n = 63) of main ED nurses and 100% (n = 15) of pediatric ED nurses completed the education module and	The importance of improving pediatric pain assessment has been well documented in the literature. Nurses' are primarily responsible for assessing pain and response to interventions	Strong

Nursing, 41(2), 198-201	Children	community ED.	using the scale content validity index average (S-CVI/Ave) Nonparametric descriptive statistics were used to analyze categorical Variables. Paired sample t-test was used to note differences between pre and post-test scores. Internal consistency of the test was evaluated using Cranach's alpha coefficient.	pre and post-test. Seventy-six nurses completed the nursing questionnaire and program evaluation. Eighty-eight percent (n = 58) of participants were less than 44 years of age, with the highest percentage (35%, n = 27) between the ages of 35 to 44. Internal consistency of the 20-item post-test was evaluated using Cronbach's alpha coefficient (0.95). The pre-test scores ranged from 15% to 85% (M = 56.8; SD = 13.7). The post-test scores ranged from 15% to 90% (M =	in the ED patient. Signi - significant improvements in nurses' pain knowledge can be achieved through a computer-based education program. Exploration of factors contributing to nurses' decisions to use new pediatric pain-related knowledge in practice must be explored and addressed. Further, ongoing quality measurement will provide a mechanism to sustain this project over time. Ap - appropriate identification and documentation of pain is the first step in successful pain management.	

				69.4; SD = 15.9). On average, post-test scores were found to have a statistically significant increase of 12.6% higher than the pretest (t = 6.63, df = 78, p = 0.000). Fifty-four percent (n = 41) felt confident in assessing pediatric pain after the program. The majority (88%, n = 67) reported that the computer-based		
Ramira, M. L., Instone, & S., Clark, M.J. (2016). Pediatric Pain Management: An Evidence Approach. Journal of Pediatric Nursing, 42(1), 39-49	The use of the Iowa model-Pediatric pain assessment tin emergency department	The first aim was to improve documentation of pain assessment using a standardized pediatric measure. The second aim was to decrease the time to pain medication administration for patients identified as having	In the pre data collection period, charts were reviewed for all pediatric patients 3 months to 6 years of age during the identified period; the first 200 charts for each month (August, September, and October 2010). The post-data	Data were summarized using descriptive statistics, frequencies for categorical variables, and means and standard deviation for continuous	In settings with no regularly scheduled pain education for ED nursing staff, annual pain education training may be important to maintain the practice change once established. Review and revision of the pain management	Strong

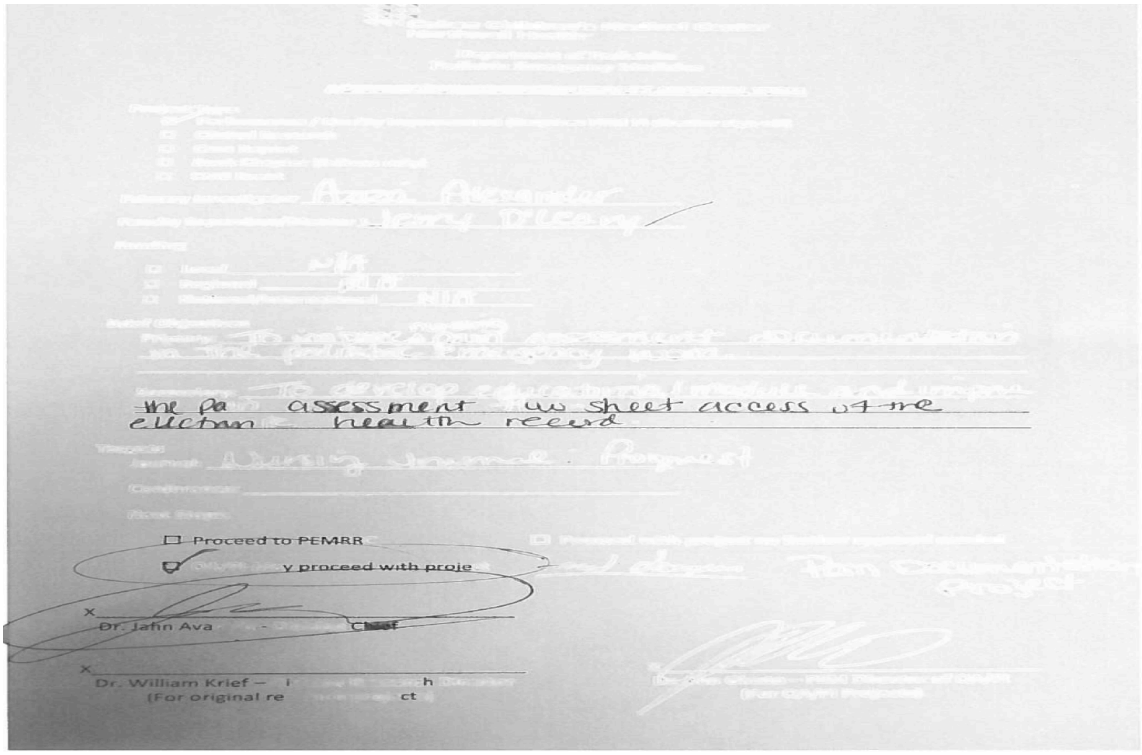
		pain. The third aim was to determine the effect of the intervention in reducing children's pain at discharge as evidenced by nurses documenting pain scale.	collection included the first 200 charts for each month. Then a one-time intervention consisting of a 30-minute PowerPoint TM presentation on pain management by the first author and other ED nurse leaders was provided to ED nurses over a one-month period. Data were coded, cleansed, and entered into the Statistical Package for the Social Sciences version 20 (SPSS) for analysis.	variables. For all data, statistical significance was established at $p < 0.01$. A 95% confidence interval was used for mean score comparisons. Group comparisons of documentation of triage pain scores and discharge pain scores before and after staff education were performed using one-way repeated measures analysis of variance (ANOVA). ANOVA was also used to examine differences in the mean	protocol is necessary to improve awareness among staff. Creativity and flexibility in ways of providing education to nurses is vital in the implementation of change in practice. Sustaining practice behavior change is challenging and time-consuming; thus, the implementation of innovative approaches to pediatric pain assessment and management will be essential.	

				time to pain medication administration and the time from ED arrival to first pain assessment. Chi square analysis was conducted to compare differences in achievement of pain scores less than 2 at or before discharge, before and after staff education. A total of 105 ED nurses were invited to participate, and 100 nurses participated in the educational program. The remaining five nurses were not able to attend		

				because they were on disability status, maternity leave, or worker's compensation leave. The mean age of patients whose EMRs were reviewed was 24 months in both the pre- and post-intervention phases of the project. The majority of the patients were male, 53% at pre-intervention and 57% after the intervention.		

Stanley, M. & Pollard, D. (2013). Relationship Between Knowledge, Attitudes, and Self-Efficacy of Nurses In the Management of Pediatric Pain. *Pediatric Nursing*. 39(4)	This study is the concept of self-efficacy as developed by Bandura's Social Cognitive Learning Theory.	To examine the level of knowledge of pediatric pain management, the attitudes of nurses, and the level of self efficacy of pediatric nurses in acute care.	A cross-sectional, correlational design was used in a convenience, non-probability sample of 25 pediatric nurses. Nurses volunteering to participate in the study were asked to complete two instruments: Pediatric Nurses' Knowledge and Attitudes Survey Regarding Pain (PNKAS-Shriners Revision) (Manworren, 2000, 2001) and Nurses' Self-Efficacy in Managing Children's Pain. All statistical data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 18. Descriptive and inferential statistics were used to describe and synthesize the data.	There was no statistically significant relationship between knowledge and self-efficacy ($r = 0.039$, $p = 0.853$) or knowledge and years of nursing experience ($r = 0.050$, $p = 0.822$). There was a statistically significant relationship between the level of knowledge and the years of pediatric experience ($r = 0.404$, $p = 0.05$) and knowledge and the membership in a professional nursing organization ($t = 4.050$, $p = 0.004$)	A range from 53.8 to 82% on the PNKAS may suggest a need for increased education for pediatric nurses. Patients have a right to receive adequate pain assessment and management, and it is important for hospitals to be aware of their nurses' abilities to perform these tasks.	Strong

Appendix B: Approval of Project by Site



Appendix C: Pre- and Postassessment Survey

Pre/ Post Assessment Survey

Demographic information

How many years of experience working as a registered nurse have you completed?
0 - 2, 3 - 5, 6 -15, 16 - 19, 20 or more

During which shift do you currently work?
Day Mid-shift Night Other

Assessment Questions
1.How often are you assigned to triage?
Daily Weekly Monthly Other

2.How would you rate your expertise as a triage nurse?

Novice Experienced Very Experienced Expert

3. Is there a pain assessment tool available for use in your institution's electronic health record?

Yes No

If "yes", please list the names of the pain assessment tools that are available. Maximum of three.

_____

_____

_____

4. How often do you utilize a valid pain assessment tool when assessing a patient's pain?
Always Sometimes Never

5. Do you document the use of a valid pain assessment tool for every patient?

Yes No

If "no", please explain why.

_____

6. List three barriers to documentation of pain assessment that you have encountered.

_____

_____

_____

7. What is the name of the action tab used to access valid pediatric pain assessment scales on the pain assessment flowsheet in the electronic health record?

_____

Case Scenarios

Identify the pain scale that you would choose when completing a pain assessment for the patient in each of the following scenarios.

8. A 15-year-old male who has a history of mental retardation cerebral palsy and requires total care presents to an emergency department (for what reason?). The patient is alert and awake, arousable.

_____

9. A 41-day-old female presents to the emergency department after falling off a bed and sustaining bruising to the face. Which pain assessment tool would you choose for this patient?

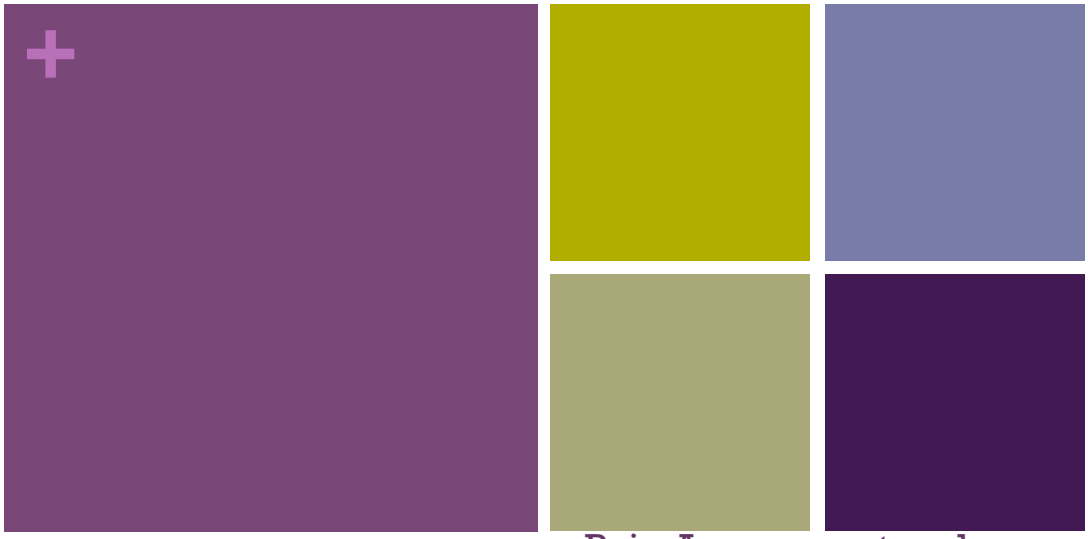
_____

10. A 12-month-old infant presents to the emergency department carried by his mother. The infant is crying, restless, grimacing, and flailing his legs and arms. What would be the patient's pain score? _____

Which pain assessment tool did you use to determine this score?

11. After the learning activity, I understand the definition of pain? I understand the importance of assessing pain?, I understand how to access the available tools?

Appendix D: Pain Assessment and Documentation of the Pediatric Client



Pain Assessment and Documentation of the Pediatric Client

Created by: Aziza Alexander, MSN, RN

Objectives

At the end of the module, learners will be able to:

- Identify the purpose of pain assessment
- Utilize valid pediatric pain assessment tools in documenting pain assessment
- Recognize the importance of pain documentation
- Demonstrate use of pediatric pain assessment tools in pediatric case scenarios

What is pain?

Definition of Pain

- As defined by the International Association for the Study of Pain (IASP), pain is "an unpleasant sensory and emotional experience associated with actual or potential damage, or described in terms of such damage."
- Physiology: physical
- Psychological: cognition/mental

Pain in the Pediatric Client

Behavioral indicators of acute pain

- ✓ Restless, agitated, hyper- alert.
- ✓ Child is difficult to distract.
- ✓ Irritability, difficult to comfort.
- ✓ Posturing, remaining immobile, protecting painful areas.
- ✓ Drawing up knees.
- ✓ Anorexia.
- ✓ Lethargy, withdrawal, being quiet.
- ✓ Sleep disturbances.

Purpose of pain assessment in the pediatric client

- Identify factors affecting pain assessment.
- To manage acute and chronic pain.
- To choose appropriate diagnostic and treatment options for patients.
- To utilize valid pediatric assessment tools
- To determine an effective way to adequately treat pain.

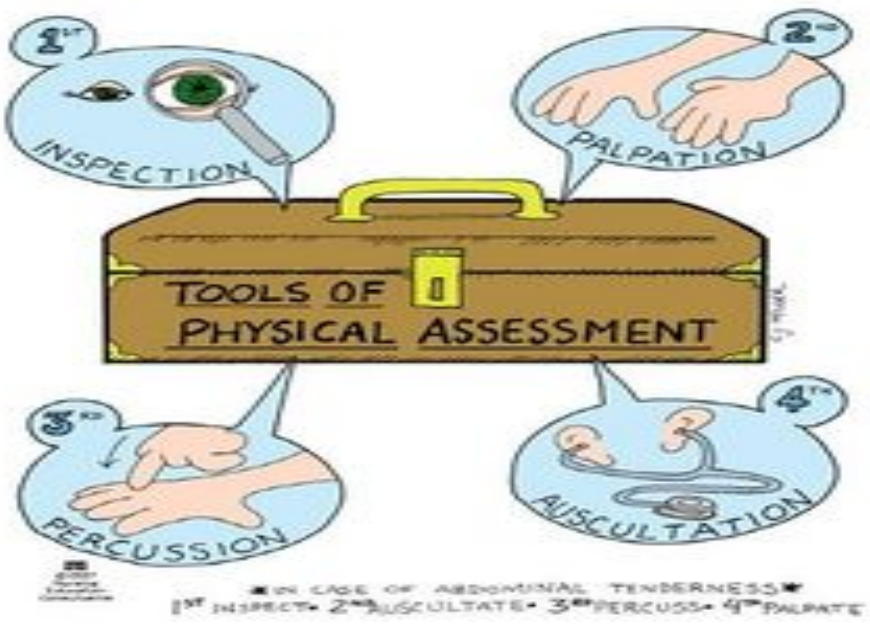
Guidelines for pain

- According to Pain Management Policy: Assessment and Reassessment:

Pain is assessed in all patients, individual are assessed based upon their clinical presentation, services sough and in accordance with the care, treatment, and services provided. The hospital uses methods to assess pain that are consistent with the patient's age, condition, and ability to understand (North-Shore-Long Island Jewish Health System, 2011).

- On encounter with the Health System, all patients will be screened by a Health Care Provider for the presence of absence of pain, including if pain was three months ago (North-Shore-Long Island Jewish Health System, 2011)

Assessment of Pain


1ST
INSPECTION
2ND
PALPATION
TOOLS OF
PHYSICAL ASSESSMENT
3RD
PERCUSSION
4TH
AUSCULTATION
IN CASE OF ABDOMINAL TENDERNESS
1ST INSPECT 2ND AUSCULTATE 3RD PERCUSS 4TH PALPATE

Pain Assessment

Initial Encounter

Determine presence of pain

Pain Assessment Scale

Details of Pain Assessment

- P-Location, "Where does it hurt?"
- Q- Type of pain, "What does it feel like?"
- R- Radiation/location, Where is the pain and does it move?"
- S-Severity, How would you rate you pain?"
- T- How long have you had the pain?
- Associated symptoms

Ongoing Assessment

Pain Assessment Scales

Behavioral Observational Scales

Self-Reporting

Types of Pediatric Pain Assessment Scales

Neonate(birth to 45 week): Neonatal Infant Pain Scale

Pediatric, less than 3 years old/unable to communicate: Faces, Legs, Activity, Cry and Consolability

Pediatric, 3 years and older: Wong-Baker FACES Pain Rating Scale

Pediatric, over age 6 years and understand concepts and rank/order: Numeric Pain Rating Scale

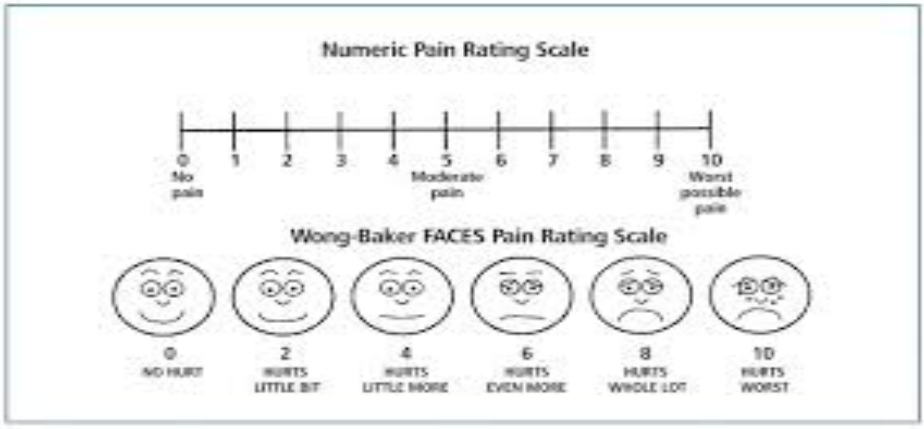
Neonatal Infant Pain Scale

Table II – Neonatal Infant Pain Scale

NIPS	0 point	1 point	2 points
Facial expression	Relaxed	Contracted	–
Cry	Absent	Mumbling	Vigorous
Breathing	Relaxed	Different than basal	–
Arms	Relaxed	Flexed/stretched	–
Legs	Relaxed	Flexed/stretched	–
Alertness	Sleeping/calm	Uncomfortable	–

Maximal score of seven points, considering pain ≥ 4.

TODDLER/ SCHOOL AGE /TEEN ASSESSMENT



FLACC

FLACC SCALE			
CRITERIA	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid, or jerking
Cry	No cry (awake or asleep)	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging, or being talked to, distractible	Difficult to console or comfort

Documentation of Pain

How will I document efficiently?

- Assess patient for pain
- Open pain assessment template
- Click Modify template at the top of the page
- Choose apply to personal pain profile
- Click all the boxes next to the pain scales- allows access all pain scales to be made available for every patient you care for.

- Upon completion of this scenario, you will be required to complete a post education survey.

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