2020

Clinical Practice Patient Education Guideline for Elective Induction of Labor

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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,
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Walden University
2020

Abstract

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MS, Walden University, 2012

BS, St. Petersburg College, 2009

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2020

Abstract

In 2018, the state of Florida had a cesarean section birth rate of 38.3% which was the 3rd highest in the nation with the national average being 31.9%. Elective induction of labor (EIOL) involves the initiation of labor for convenience and not because of medical necessity. EIOL carries risks for the mother and fetus, including an unplanned cesarean section. The problem identified in this project was the lack of informed decision-making by pregnant women related to risks, benefits, and management of EIOL. Using the Informed Decision-Making through Engagement Model, the purpose of the project was to develop an evidence-based clinical practice patient education guideline (CPPEG) on informed decision-making for EIOL. The practice-focused questions guiding the CPPEG were what evidence from the literature supports the need for patient education related to EIOL and what evidence from the literature is available for the development of the CPPEG. After development of the CPPEG, a panel of content experts scored the guideline using the Appraisal of Guidelines Research and Evaluation II (AGREEII) instrument which included 23 questions in 6 different domains. Using descriptive statistics to analyze the results, the overall score from the panel was 83%, which indicated a high-quality guideline with the threshold being 70% according to the AGREE II model. The panel recommended that the guideline be made available to hospitals and provider offices. There may be positive social change as women receive education on the risks and benefits of EIOL in order to make informed decisions which may lead to better outcomes for mothers and newborns thus improving the human condition.

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Dedication

This project is dedicated to all of the mothers considering an elective induction of labor. I hope this provides you with accurate evidence-based education so you may make an informed decision knowing the benefits, risks, and management of an elective induction not only for yourself but also for your new baby.

Acknowledgments

I would like to acknowledge my family for their patience. I would not have been able to complete this if it weren't for their encouragement, support and understanding. I would also like to thank my panel of experts who evaluated this project on their own time and provided me with valuable feedback. Last but not least I owe my gratitude to the members of my DNP committee without their insight, guidance, time and knowledge I would not have been able to produce such a high-quality project of which I am proud, so thank you Dr. Moon, Dr. Hayden, Dr. McGinnis and Dr. Hahn.

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Section 1: Nature of the Project

Informed decision-making involves engagement between clinicians and patients where they communicate awareness, knowledge, intentions, concerns, and expectations (Moore, Titler, Kane Low, Dalton, & Sampselle, 2015). The American College of Obstetrics and Gynecology (ACOG) stated that informed consent protects the patient and is a process where information is mutually shared to assist patient autonomy in terms of decision-making free from coercion or influence (Women's Health Care Physicians, 2009). Providing evidence-based information to the pregnant patient and allowing an open dialogue will allow the patient to make an informed decision before providing consent. The focus of this Doctor of Nursing Practice (DNP) project is related to informed consent when entering into decision-making regarding elective induction of labor (EIOL). An EIOL is the initiation of labor for convenience with no medical indication (Kriebs, 2015; Mayo Clinic, 2017). Convenience factors can include relief of discomforts of late pregnancy, provider availability, and date selecting. EIOL carries risks to both mothers and fetuses. Elective deliveries before 39 weeks gestation carry significant risks for neonatal morbidity (Clark et al., 2009).

Kriebs (2015) noted that there needs to be clear information for patients and their families in order to make informed decisions when discussing an EIOL. The risks and benefits need to be disclosed to the pregnant patient if the patient is expected to provide informed consent. Final EIOL decisions are made by providers. There is minimal education provided to patients on EIOL. Current practice for nurses involves following physician orders for EIOL. Nurses might not question why a physician ordered an EIOL.

EIOL is not an uncommon procedure and nurses are the providers who usually start the induction process following the physician order. Literature was searched and there were no guidelines found to assist in educating patients before obtaining informed consent for EIOL.

Professional organizations developed standards to optimize patient outcomes and evolve best practice (Heilbrun et al., 2016). The standards published by professional organizations need to be explained to pregnant patients by healthcare professionals to help educate them before they provide informed consent for this type of elective procedure (Heilbrun et al., 2016). The recommendation from these professional organizations is that pregnant women are educated about induction indications, medications, methods, and risks.

This project supports social change by providing practitioners with a guideline for educating patients on EIOL with the intention of decreasing the number of elective inductions and adverse outcomes. There may be positive social change as women receive education on the risks and benefits of EIOL in order to make informed decisions which may lead to better outcomes for mothers and newborns thus improving the human condition.

Problem Statement

The problem identified for this DNP project was the lack of informed decision making by pregnant women related to risks, benefits, and management of EIOL. With a clinical practice guideline providing patient education on EIOL, antepartum patients would be better prepared for informed decision-making. I have observed firsthand

women who were exhausted because they chose to have labor induced and the process took them 2 days. EIOL from time of induction to delivery varies with each individual patient. The process that I am familiar with is 24 hours after the induction starts the OB provider will rupture the amniotic sac. The patient will be delivered within 24 hours of this intervention. A successful induction will result in a vaginal delivery. When a vaginal delivery is not imminent 24 hours after rupturing the amniotic sac, a cesarean section will be performed. EIOL have affected babies causing them to be born in distress or experience distress in labor to the point where surgical interventions were required. A local hospital that I spent time at had an approximate 30% induction rate. This percentage includes medically indicated inductions as well as elective inductions.

According to the National Center for Health Statistics (2019), Florida has the third highest cesarean section birth rate in the nation with a 38.3% cesarean section delivery rate in 2018. The national average at that time was 31.9%. The national average decreased by 0.1% from 2015 and Florida increased by 0.1% during that same time period. This increase is an issue for Florida because the state goal is to lower the cesarean section rate. A current statewide project, Promoting Primary Vaginal Deliveries (PROVIDE), focuses on enhancing positive maternal and newborn outcomes in order to decrease the cesarean section rate in Florida (FPQC Labor Induction Algorithm, 2014). This statewide project is led by the Florida Perinatal Quality Collaborative (FPQC) which is a partnership of professionals that collaborate through the University of South Florida with the purpose of improving health and well-being of mothers and their infants in

Florida. This project focused on one aspect, EIOL, of labor and delivery that possibly increases the rate of avoidable cesarean sections.

Oshiro et al. (2013) described a multistate collaboration to decrease elective deliveries before 39 weeks gestation the FPQC and its affiliated hospitals were involved in. The participating hospitals were provided a tool kit and training to create consistent scheduling forms, apply hard stop policies, and collect and input data accurately into a national web data portal. The hard stop policy involved implementing a policy to defer any inductions before 39 weeks gestation, without a medical indication, to a board of appointed physicians for review.

At the bedside, nurses have the most up to date information about their patients considering they have to analyze contractions, assess dilation, and monitor fetal heart rates as well as ensure laboring mothers have coping mechanisms and pain control and do not become fatigued (Tillett, 2011). Patient education is a large portion of nursing care delivered to patients, and nurses need to have educational guidelines to follow so that patients understand the process of inducing labor. Providing a patient education guideline for EIOL to help assist nurses in covering all critical information is extremely significant to nursing practice.

DeSisto, McDonald, Rochat, Diaz-Apodaca, and Declercq (2016) interviewed women in U.S.-Mexico border communities who stated they were not involved in the decision to induce. This same study discussed one doctor admitting a patient to induce labor due to going out of town and another doctor stated they wanted to induce because there was an uncommon risk of stillbirths between 38 and 40 weeks. Jay, Thomas, and

Brooks (2018) interviewed women regarding where they received education about inductions and their answers were mainly from their family and friends. This study recommended that midwives in the United Kingdom should allot more time during appointments to discuss the options, risks, and benefits of induction with their patients to encourage informed consent.

The American College of Obstetricians and Gynecologists (ACOG) acknowledged a study that found 38.5% of women reviewed had a primary cesarean delivery after induction of labor (Boyle et al., 2013). Zhang et al. (2010) and Lee et al. (2015) reported that there is an increased rate of cesarean deliveries in nulliparous women undergoing induction of labor than those who go into spontaneous labor. Induction of labor also carries a 20% higher risk of postpartum hemorrhage than spontaneous labor (Khireddine et al., 2013). Clinical factors that correlate with the rise in maternal morbidity include increased use of labor induction and augmentation as well as previous and primary cesarean deliveries (Curtin, Gregory, Korst, & Uddin, 2015). The FPQC initiative to promote vaginal deliveries would be supported if an educational guideline was developed for providers to follow that will allow for conversations about these risks with patients who are looking into EIOL.

Purpose Statement

Using the Informed Decision-Making through Engagement Model, the purpose of this project was to develop an evidence-based clinical practice patient education guideline (CPPEG) to guide OB practitioners when educating pregnant women on the benefits, risks, and management of EIOL to facilitate informed decision-making. The gap

in practice for this project was the lack of informed decision-making on the process and results of EIOL while the literature showed that education can help patients make informed decisions (Moore et al., 2015). After a comprehensive literature review, no published patient education guidelines for EIOL were found, thus the reason for this project. The guideline will direct practitioners when educating women regarding EIOL procedures to facilitate informed decision-making. This information includes education on fetal development, term delivery, what induction of labor is, types of inductions of labor, medical reasons for inductions of labor, medications used for inductions, and risks and benefits of inductions of labor. A clinical practice guideline was defined by Field and Lohr (1990) seminal work as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances" (p. 17). The National Academics of Science Engineering and Medicine: Health and Medicine Division [NASEM] (2011) defined a clinical practice guideline as "statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of benefits and harms of alternative care options" (para. 1). The CPPEG meets both definitions of a clinical practice guideline.

The practice-focused questions were:

1: What evidence from the literature supports the need for patient education related to EIOL?

2: What evidence from the literature is available for the development of the CPPEG?

With these questions guiding the project, a guideline was developed to address the gap in practice and provide education to patients regarding processes and results of EIOL to better inform their decision-making.

Nature of the Doctoral Project

Sources of Evidence

A CPPEG was developed to assist OB providers in educating pregnant patients to make informed decisions about EIOL. Information was gathered from several professional organizations as well as professional journals via Internet searches and CINAHL, OVID, PubMed and MEDLINE. Data were reviewed for current practice recommendations that showed improved patient results following evidence-based practice (EBP). This information was used to provide a solid foundation for the proposed patient education.

Approach

The project followed Walden University's *Clinical Practice Guideline Manual*. A literature review matrix was used to organize literature (see Appendix A). The matrix included evidence grading criteria with the permission of Johns Hopkins to use their *Johns Hopkins Nursing Evidence Level and Quality Guide* (see Appendix D). Once the CPPEG was created, a panel of experts used the Appraisal of Guidelines Research and Evaluation (AGREE) II scoring instrument for evaluation of the CPPEG's quality. There are six domains with 23 items that were used to rate the educational practice guideline's quality. Revisions were made based on the results of the AGREE II tool. A score of 50% was considered acceptable, but scores less than 75% were also reviewed. The revised and

approved guideline was presented to the expert panel. Using the Informed Decision-Making through Engagement Model, the purpose of this project was to develop a CPPEG to guide OB practitioners when educating pregnant women on the benefits, risks, and management of EIOL to facilitate informed decision-making.

Significance

This CPPEG will impact several stakeholders. The stakeholders include patients, nurses, providers, and hospitals. The CPPEG will influence patients by providing opportunities to make informed decisions before giving consent for EIOL. Nurses will have the ability to follow a guideline when educating patients about processes, risks, and benefits of EIOL. Providers will have patients who have been educated regarding EIOL when they discuss options with patients. Patients will be better equipped to ask questions and understand answers when engaging in conversations with their providers. Hospitals might see a reduction in EIOL with better outcomes for mothers and neonates.

This CPPEG is available for providers wishing to educate regarding EIOL in office settings, birthing centers, and prenatal classes. Reaching multiple settings will help the spread of educated decision-making among pregnant patients. This project applied instructional strategies to promote educational growth amongst the population of pregnant women considering inductions of labor. This education will inform women of the risks involved with inductions of labor and they may reconsider their options and choose to wait for natural labor to occur instead of thinking that inductions are a quick and easy way to go into labor.

Summary

This section defined the problem as a lack of informed decision-making by pregnant women related to the risks, benefits, and management of EIOL. There is a need for antepartum patients considering EIOL to receive patient education related to EIOL. The gap in practice for this project was the lack of informed decision-making on the process and results of EIOL while the literature showed that education can help patients make informed decisions (Moore et al., 2015). The nature of the project involved outlining sources of evidence and intended approaches. This project will positively impact stakeholders by changing what educational guidelines are available for practitioners to follow when educating about EIOL. In Section 2, I discuss the history and context of EIOL and lack of patient education. The model chosen to guide the proposed project is presented. Relevance to nursing practice is discussed as well as the role I played.

Section 2: Background and Context

Introduction

The problem identified for this DNP project was the lack of informed decision making by pregnant women related to the risks, benefits, and management of EIOL. The practice-focused questions for this project are:

1: What evidence from the literature supports the need for patient education related to EIOL?

2: What evidence from the literature is available for the development of the CPPEG?

Using the Informed Decision-Making through Engagement Model, the purpose of this project was to develop a CPPEG to guide OB practitioners when educating pregnant women on the benefits, risks, and management of EIOL to facilitate informed decision-making. This section describes the models chosen to guide the proposed project. Relevance to nursing practice is discussed as well as the role I played in the development of the project.

Models

The evidence informed decision-making through engagement model promotes engagement between clinicians and patients regarding concerns, expectations, and possible outcomes (Moore et al., 2015). This model will help guide clinicians when sharing evidence involving EIOL with patients, and then a conversation between the patient and practitioner will ensue regarding risks, benefits, and the process of inducing labor. This model is aimed at integrating women in decision-making regarding EIOL to

improve outcomes. This model provided a patient-centered strategy to help reduce EIOL by creating a new framework to be used by maternity care providers and influence other areas of care. The model focused on the benefits of encouraging patient engagement in decision-making when it comes to EIOL (Moore et el., 2015).

The AGREE II instrument was used which focuses on advancing practice guidelines by helping to ensure that quality guidelines are put into practice. There are six domains encompassing 23 items that helped to guide the project team and me. The domains were scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence (AGREE Enterprise, n.d.).

Relevance to Nursing Practice

Induction of Labor

Sinkey et al. (2018) researched the use of inductions versus elective management and found inductions completed after 39 weeks but before 41 weeks resulted in fewer cesarean section deliveries than following elective management. Maternal and neonatal morbidity and mortality were found to be lower in the elective management group. There is a push by OB professionals for births to be as free from intervention as possible. Labor and delivery are natural processes and should be left to happen spontaneously as often as possible.

Bailit et al. (2015) researched outcomes from nonmedically indicated inductions of labor on nulliparous women and concluded that risks for cesarean sections were higher if performed at 38 or 40 weeks of gestation as compared to 39 weeks gestation. Risks

associated with inductions at 38 and 40 weeks of gestation included cesarean section birth, infection, meconium aspiration, and perinatal death.

Ruhl and Cockey (2014) discussed the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) ‘go the full 40’ campaign which recommends allowing labor to begin spontaneously. The overuse of labor interventions by OB providers has increased the cesarean section rate 50% since 1994. These questionable interventions put women and their infants unnecessarily at risk for hemorrhage, neonatal intensive care unit admissions, infection, cesarean deliveries, and lower incidence of breastfeeding. The campaign aims at supporting AWHONN’s nursing care quality measures.

A study of low-risk women between 39- and 41-weeks gestation with singleton pregnancies who were vertex in position was conducted analyzing the delivery outcome and time from induction to delivery and delivery to discharge in a community teaching hospital (Tam, Conte, Schuler, Malang, & Roque, 2013). The authors Tam et al. (2013) showed that the most common reasons for EIOL are logistical and convenience based. EIOL carries risks to both mothers and fetuses, while the risk for cesarean section delivery is elevated when a nulliparous woman has an unfavorable Bishop score (Tam et al., 2013). Prolonged labor, risk for infections, and fetal intolerance to labor is increased depending on different methods of induction, such as a cervical ripening balloon, amniotomy, or pharmacology agents, mainly oxytocin and prostaglandins (Tam et al., 2013). Nulliparous women were more likely to have a cesarean section when oxytocin was used in combination with an unfavorable cervix (Tam et al., 2013). The odds for a

cesarean section also increased 4% with every year of age of the mother and 44% for each additional week of gestation (Tam et al., 2013). EIOL successfully ended in vaginal deliveries when examinations revealed a favorable cervix and a higher parity. Tam et al. (2013) recommended elective induction criteria of at least 39 weeks gestation, favorable cervix, and multiparity for successful vaginal delivery.

Clark et al. (2009) stated that 71% of 17,794 deliveries in 27 hospitals were elective and 8% of newborns born between 37 and 38 weeks of gestation were admitted to a higher level of care as compared with 4.6% of newborns born at 39 weeks and after. Cesarean deliveries were not influenced by gestation; however, they were greatly influenced by cervical dilation and maternal parity (Clark et al., 2009). Clark et al. (2009) concluded that elective deliveries before 39 weeks gestation carry significant risks for neonatal morbidity. Cesarean sections had a significant correlation with cervical dilation in both parous and nulliparous women. Counseling regarding the risk factors of EIOL should be provided to women.

Informed Decision-Making and Consent

Informed consent is required when opting to have an EIOL. According to Zürcher, Elger, and Trachsel (2019), explaining proposed treatments including risks, benefits, expected course, duration, and alternative options enhances trust between providers and patients to support successful outcomes. Providing information to patients so the patient can think about their options and use their free will to decide on their care is important (Zürcher et al., 2019).

Serpico et al. (2016) claimed the video they created for breast cancer patients helped engage the patients and involve them in decision-making when the time for surgery came. Oncology radiation decision aids were made in another study to assist patients in finding right treatment options that correlated with their beliefs and lifestyles, showing a decrease in decisional conflict for patients and an increase in knowledge regarding their options for treatment (Woodhouse et al., 2017).

AGREE II Model

The AGREE II instrument for assessing quality has been used in several published studies. Shallwani et al. (2019) used the AGREE II instrument to assess the quality of physical activity recommendations for people diagnosed with cancer. Wang et al. (2019) focused on assessing the quality of guidelines for non-variceal upper gastrointestinal bleeding. This study recommended the use of the AGREE II tool when guidelines were being renewed to strengthen the guidelines and make improvements for increased quality (Wang et al., 2019).

Professional Organizations and Florida State Initiative Reviews

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). AWHONN (2019) said that labor is a multifarious natural event that should not be initiated unless medically indicated. The benefits of spontaneous labor are numerous and only spontaneous labor can initiate a natural cascade of hormones that assist with labor, delivery and neonatal wellbeing. AWHONN stated that inductions of labor increase the risk for multiple complications for mother and baby. Evidence shows that women who are induced have a higher percentage of postpartum hemorrhages,

hysterectomy, lengthened hospital stays, surgical births, and more frequent hospital readmissions than women who go into labor spontaneously. The infant is also at risk for complications including increased fetal stress, respiratory illnesses, prolonged separation from their mother and interrupted bonding and breastfeeding (AWHONN, 2019).

March of Dimes. The March of Dimes promotes the campaign Go the Full 40. This campaign is a grassroots public health movement that encouraged and educated women about going full term. AWHONN now sponsors this campaign and supports the basis that labor should only be induced if there is a medical reason and not for the convenience of the mother or the provider. This campaign explores 40 reasons for mothers to consider going to at least 40 weeks. They discuss recovering faster, infant thermoregulation benefits, infant growth and brain development, reducing risks associated with inductions, and more that are geared towards mothers that are not medical in nature (Ruhl & Cockey, 2014).

The Florida Perinatal Quality Collaborative (FPQC). The FPQC focuses on improving the quality of healthcare in Florida for mothers and their babies. One of their current projects, PROVIDE, focuses on enhancing maternal and newborn outcomes by evaluating and adjusting current practice and recommending evidence-based interventions to decrease the cesarean section rate in Florida while promoting vaginal deliveries. The FPQC provides an algorithm for labor inductions which explains the criteria for inductions of labor before 41 weeks gestation. When an induction is desired before 41 weeks the next step is to determine if there is a favorable cervix with a Bishop's score (FPQC Labor Induction Algorithm, 2014). This algorithm extends and

can end with a failed induction of labor which would suggest a surgical birth is needed. The path from an unfavorable cervix is longer than a favorable cervix but can still end with a failed induction leading to a cesarean section. The length of time and stress this process takes is evident when following the algorithm and seeing all the steps and repeated attempts at ripening the cervix.

The CPPEG is based on the March of Dimes 40-week campaign (March of Dimes, n.d.). Current evidence from literature regarding EIOL support the CPPEG. Recommendations from ACOG to go the full 40 weeks were reflected as well.

Local Background and Context

There are currently no published educational guidelines to assist patients in terms of making informed decisions regarding EIOL. The relevance of applying this education to nursing practice will be evident in the new education provided to patients so they can understand the consequences that come with EIOL. The outcomes of this project provide a CPPEG that is aligned with evidence-based research and is aimed at promoting better patient outcomes for nurses to follow. The new change in patient education will be applied by the nurses and providers because they are the team of professionals that meet with patients when an EIOL is being considered. The CPPEG will have a direct effect on staffing, cesarean deliveries, and the length of stay (LOS) in labor and delivery units. The focus is on patient outcomes, but there will also be an impact on staffing ratios and patient cost. The CPPEG has the potential to decrease EIOL frequency in turn decreasing LOS and nursing needs.

Although no identified institution is being used, Florida is the target site. The FPQC has a quality initiative PROVIDE that is headed by the University of South Florida, College of Public Health. This initiative focuses on the cesarean section rates for nulliparous, term, singleton, vertex (NTSV) women. The FPQC provides an algorithm for labor inductions which explains the criteria for inductions of labor before 41 weeks gestation. This algorithm was used to help create the patient education guideline.

Definitions of Terms

Bishop Score: Numerical score estimating the prediction of induction of labor (Bishop, 1964).

Cesarean Birth: Birth through an abdominal incision (ACOG, n.d.).

Elective induction of labor (EIOL): Initiation of labor for convenience with no medical necessity (Mayo Clinic, 2017).

Failed induction of labor: Induction of labor that does not end with a vaginal delivery (Mayo Clinic, 2017).

Gestational age: calculation of fetal age using estimated due date (ACOG, n.d.).

Gravidity: Number of pregnancies past and current (ACOG, n.d.).

Induction of labor: Use of pharmaceutical or mechanical methods to start labor (ACOG, n.d.).

Informed Consent: consent to surgery by a patient or to participation in a medical experiment by a subject after achieving an understanding of what is involved (Merriam-Webster, 2019a).

Informed decision-making: A decision based on facts or information (Merriam-Webster, 2019b).

Labor: Uterine contraction with notable cervical changes (ACOG, n.d.).

Nulliparous: A woman with no previous pregnancies that reached 20 weeks gestation (ACOG, n.d.).

Parity: The number of pregnancies a woman has that have reached at least 20 weeks gestation (ACOG, n.d.).

Primary cesarean birth: Birth through an abdominal incision in a woman without a previous cesarean birth (ACOG, n.d.).

Shared decision-making: An approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences (Elwyn et al., 2012).

Spontaneous labor: Labor initiation without the use of pharmaceutical or mechanical interventions (ACOG, n.d.).

Term: Greater than or equal to 37 weeks gestation (ACOG, n.d.).

Vaginal delivery: Birth of the fetus through the vagina (ACOG, n.d.).

Vertex presentation: A fetal presentation where the head is the presenting part in the birth canal (ACOG, n.d.).

Role of the DNP Student

Following the steps in the Walden University's Clinical Practice Guideline Manual, members of the expert panel were identified and are discussed in the Role of the Project Team section. My role was as the nonevaluative leader of that panel. All materials

were developed by me including a literature matrix (see Appendix D), analysis and synthesis of the literature, development of the CPPEG, guideline revisions according to expert panel recommendations, and development of a summary of findings from answers provided by the panel. I prepared a packet of information for the expert panel including an introduction letter, AGREE scoring instrument, and CPPEG.

The motivation for this project came from the experience of seeing the outcomes mentioned in the literature. The bias that was present is the agreement that labor should start naturally, and EIOL do not always benefit the mother and infant. This bias was eliminated by focusing on the evidence collected by reviewing current literature.

Role of the Project Team

Team collaboration was needed for this project; the input of an expert panel was necessary to complete the CPPEG. This expert panel consisted of a labor and delivery educator with her BSN, a CNM who has a Masters, a labor nurse with her MSN, and a neonatal nurse practitioner with her MSN. These content experts utilized the AGREE II scoring tool instrument to evaluate the educational materials to assess six domains of the guideline: scope and purpose, stakeholder involvement, the rigor of development, clarity of presentation, applicability and editorial independence (AGREE Enterprise, n.d.). The expert panel reviewed each domain within a 2-week time frame, and revisions were made based on their recommendations.

Summary

Changing the way nurses practice to educate patients regarding current evidence-based practice will hopefully close the gap in practice related to EIOL. Section 2

reiterated the identified problem and introduced the evidence informed decision-making through engagement model and AGREE II instrument. Relevance to nursing practice was explained with support from literature. Project background and context were presented as well as definitions of terms used in the project. The DNP student and project team were introduced, and their respective roles were explained. Section 3 focuses on the collection and analysis of evidence for this project. This section connects the described gap in practice and proposed solution.

Section 3: Collection and Analysis of Evidence

Introduction

The problem identified for this DNP project was the lack of informed decision-making by pregnant women related to the risks, benefits, and management of EIOL. I constructed a CPPEG to educate pregnant women regarding benefits, risks, and process of EIOL since there were no educational guidelines found in the literature. This CPPEG will help women make informed decisions. The educational guideline will directly affect staffing, cesarean section rates, and the LOS for patients in labor and delivery units. The main focus of the CPPEG was on informed decision-making which in turn can improve patient outcomes. Patients who are educated will hopefully make informed decisions to wait until labor happens naturally, and that is when the impact on staffing ratios and patient costs will be seen.

Section 3 clarifies the practice-focused questions and how they were approached. Sources of evidence were identified and relationships between sources of evidence and the purpose of the study are explained. Collection and analysis of evidence shows relevance of the practice problem.

Practice-Focused Questions

The current issue is that there are no published educational guidelines for patients regarding EIOL. Lack of education leads to concerns because patients are electively opting for EIOL without fully understanding what is involved and how inductions can affect them and their babies. The gap in practice for this project was the lack of informed decision-making on the process and results of EIOL while the literature showed that

education can help patients make informed decisions (Moore et al., 2015). The practice-focused questions that guided this project were:

1: What evidence from the literature supports the need for patient education related to EIOL?

2: What evidence from the literature is available for the development of the CPPEG?

Using the Informed Decision-Making through Engagement Model, the purpose of this project was to develop a CPPEG to guide OB practitioners when educating pregnant women on the benefits, risks, and management of EIOL to facilitate informed decision-making. The end result is a patient education guideline about EIOL using evidence from literature. Patient understanding of risks, benefits, and the process is important before choosing to have this elective procedure. This procedure is not a medically indicated intervention and carries risks that need to be understood.

Sources of Evidence

The CPPEG is based on evidence from published research from which a literature matrix was created (see Appendix A). Johns Hopkins provided permission to use their Nursing Evidence Level and Quality Guide (see Appendix D). Search engines in the Walden Library were used and included CINAHL, MEDLINE, and OVID Nursing Journals. ACOG and FPQC websites were also used. Search terms were: *elective inductions*, *early inductions*, *inductions of labor*, *EBP inductions of labor*, *policy for inductions of labor*, *inductions before 40 weeks gestation*, *complications in inductions of labor*, *outcomes of inductions of labor*, *lengthy inductions of labor*, *inductions of labor*

the newborn, *ACOG inductions of labor*, *Joint Commission inductions of labor*, *informed consent*, *informed decision making*, *shared decision making AND patient education*. Articles published between 2009 and 2019 were searched first. Then a search was also completed with no dates to include any relevant evidence published outside of this time frame. Peer-reviewed articles were the main types of literature. Articles that were selected and reviewed were about inductions, and those that were not elective or medically indicated were excluded. Guidelines from professional organizations and Florida state initiatives were also reviewed in Section 2.

A clinical patient education guideline was developed using current evidence-based recommendations along with recommendations from professional organizations obtained from the literature review. Evidence from literature and recommendations from professional organizations were included in the CPPEG to guide providers in terms of educating patients regarding recommendations available to OB professionals along with an explanation of those recommendations so they can make informed decisions. Clinicians providing education will include patient specifics information from their exams and prenatal records to individualize parts of teaching.

Evidence Generated for the Doctoral Project

Participants

An expert panel was identified and consists of a labor and delivery educator with her BSN, a CNM who has a Masters, a labor nurse with her MSN, and a neonatal nurse practitioner with her MSN. This panel was selected for their expertise, ability to speak to the practice-focused questions, knowledge of the research literature, and the fact that they

have direct interactions with patients and labor inductions. The AGREE II tool was provided to them to evaluate the education guideline.

Procedures

A packet of information was provided to the expert panel. This packet included an introductory letter, the AGREE II tool, AGREE II scoring instrument, and CPPEG. Participants were asked to review the guideline, provide honest guided feedback, and return the packet to me by the end of two weeks. The AGREE II tool has six domains: scope and purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability, editorial independence, and overall guideline assessment (see Appendix B). This tool was used to assess the quality of the guideline and determine whether the guideline is recommended for use. After completion of the project evaluation by participants, they were given a copy of the summary evaluation of the project, process, and my leadership to complete.

Protections

Form A of the Walden Institutional Review Board (IRB) was submitted once the project had been sent to the URR before the proposal defense. The Walden IRB examined the proposed project to ensure that the project followed their ethical guidelines. Protecting the anonymity of the participants was very important. The expert panel packet recommended by Walden University's Clinical Practice Guideline Manual was used (see Appendix C). The panel completed the scoring tool anonymously and returned the tool for analysis. If a panel member did not complete the tool, another person in the same specialty and of the same education level was asked to join the panel.

Analysis and Synthesis

The scores provided by the panel were analyzed and synthesized into a report. The scoring tool assisted with calculating and interpreting domain scores as well as providing an overall assessment guideline. The AGREE website was used for the appraisal of the panel's contributions. I had the ability through the website to create an overall assessment of the domain tools and data were viewed to keep the anonymity of the panel. This assessment created percentages for each domain and identified any limitations. Experts were asked to complete all sections in full. Once all tools were collected, answers were assessed and synthesized. The completed AGREE tools are saved in the AGREE II website.

Summary

This section reviewed the practice-focused questions which guided the literature review strategies for evidence-based literature. Evidence generated for the project was obtained through participants and procedures with protections for these entities. An explanation of how information was analyzed and synthesized was included in this section to assure project integrity. Section 4 discusses findings and implications of the analyzed data.

Section 4: Findings and Recommendations

Introduction

The local problem that was addressed in this project was lack of informed decision-making by pregnant women related to the risks, benefits, and management of EIOL. The gap in practice was identified as lack of informed decision-making regarding processes and results of EIOL while the literature showed that education can help patients make informed decisions (Moore et al., 2015). The practice-focused questions were:

1: What evidence from the literature supports the need for patient education related to EIOL?

2: What evidence from the literature is available for the development of the CPPEG?

Using the Informed Decision-Making through Engagement Model, the purpose of this project was to develop a CPPEG to guide OB practitioners when educating pregnant women on the benefits, risks, and management of EIOL to facilitate informed decision-making (see Appendix E).

Sources of evidence that were used were found in the Walden library and professional journals. The AGREE II appraisal instrument was used for analysis of results obtained from expert panelists. The instrument was accessed by the panel via the AGREE website and data were scored for each domain and reported using appraiser numbers instead of names or other identifying characteristics such as email addresses. Results were analyzed using descriptive statistics.

Findings and Implications

Four expert panelists provided evaluations of the CPPEG. The results show data from 23 items as well as each of the six domains (see Appendix B). A percentage was calculated and resulted for each domain. Acceptable scores for each domain were considered 50% and above; however, any domain that scored under 75% was reviewed. Domain one scored 100%, domain two scored 94%, domain three scored 84%, domain four scored 92%, domain five scored 72%, domain six scored 73%, and the overall appraisal score was 83% (see Appendix B). Looking into domains five and six, the scores revealed a need to review the CPPEG for applicability and editorial independence. The AGREE II instrument allowed the expert panel to leave comments for each section as well as overall assessment comments. I addressed comments left in the sections, changing items in the CPPEG to match the recommendations (see Appendix B). There were a few outliers in the results. After reviewing the sections and questions the outliers were related to the appraiser identified as appraiser 7. This panel member stated they did not see specific components to be evaluated in the CPPEG and therefore gave the items not seen a rating of one; the other panelists provided scores from four to seven for these same items. I reviewed the CPPEG to determine the existence of these items, and once I identified that they were included, I deduced that appraiser 7 may not have seen the items since the other three and I did.

The comments left for the overall assessment (see Appendix B) supported that the CPPEG was well-written and will be a useful education piece. Implementation of the CPPEG will impact patients seeking elective inductions by providing thorough education

regarding management, risks, and benefits for EIOL. The CPPEG is an educational tool that will ensure education regarding EIOL is complete and beneficial to help patients make informed decisions. There may be positive social change as women receive education on the risks and benefits of EIOL in order to make informed decisions which may lead to better outcomes for mothers and newborns thus improving the human condition.

Recommendations

The gap in practice was addressed by providing information regarding the process and results of EIOL to help patients make informed decisions through the education they will receive when using the CPPEG (see Appendix E). The plan for implementation is to complete the DNP project with Walden and then present the guideline to the organization for whom I currently work, because Walden's IRB was used for the project and the organization's IRB was not. There is no site for the project as a student but there is a site in mind for dissemination after graduation.

Contribution of the Doctoral Project Team

The panel of experts were contacted via email and through Facebook. They all agreed to be part of the expert panel. The panel received the expert panel packet via email and then an invitation was sent through the AGREE II site for registration (see Appendix C). Panel members needed numerous reminders to complete the appraisal. There were questions regarding how to register in the AGREE II site, as well as delays when attempting to register due to logon name and password issues. The panel collaboratively took about a month to complete all appraisals. The AGREE II site assigned the panelists

random numbers for anonymity. The numbers assigned to the panelists were 2, 4, 5, and 7. When reviewing feedback from panelists, their identifying information was removed, and random numbers were used to view the results. Once the appraisal instruments were completed and results were calculated, recommendations that were made were considered and changes were made accordingly. Changes were sent to panel members for information purposes. The panel recommended that the project could be used in the offices of obstetricians as well as by the hospital with preadmission nurse. The CPPEG will be offered to offices after it has been presented to the organization for whom I work.

Strengths and Limitations of the Project

Strengths of the project directly relates to positive feedback and willingness to implement by the expert panel members who expressed that the guideline would be beneficial for patient decision-making. Recommendation for use by a multidisciplinary panel supports the CPPEG as a beneficial tool. The CPPEG encourages patient engagement in decision-making and provides evidence-based information to strengthen patient knowledge. The CPPEG can be used in multiple settings: hospitals, private offices, community centers. Transferability is a strength.

Limitations were seen when panel members scored the CPPEG. They identified that the cost of implementation was not addressed. The cost of implementation was not addressed since implementation will be completed after graduation and the intent is to incorporate the guideline when patients considering EIOL see the admission nurse. Recommendations for future projects that use the AGREE II website will allow for plenty of time for appraisers to register and complete the appraisal instrument.

Summary

The findings and implications for this project were centered around the anonymous use and analysis of the AGREE II appraisal instrument by an expert panel. The panel favored the use of the CPPEG and provided recommendations in the available comment section. A gap in practice was addressed and dissemination plans set for after graduation. Contributions were made by expert panelists using the AGREE II appraisal instrument and issues were resolved during the process of attempting to use the AGREE II site for appraisal submission. In Section 5, I provide a self-analysis and summary of the project including challenges, solutions, and insights.

Section 5: Dissemination

The completion of this project will extend after graduation, where I will have the ability to present the CPPEG to my organization as a practicing nurse. There are many steps involved when presenting a new guideline for implementation within my organization. The organization has 15 hospitals and of those, there are seven that have obstetrical (OB) units. The organization focuses on congruent care practices, which means all units uniformly use the same policies, procedures, and practice guidelines. There is a collaborative within the health care system called OB Collab. This collaborative consists of physicians, midwives, neonatologists, neonatal nurse practitioners, directors, managers, assistant managers, unit educators, and charge nurses from seven different hospitals with OB units who all have to work together when deciding to implement a new guideline in the health care system. This lengthy but thorough process does not include using the organization's IRB since the guideline is not being presented by a student; this process is the main reason why implementation needs to be completed after graduation. The organization's IRB is not the final say in guideline acceptance and implementation. The IRB for the organization only reviews student projects. Presenting this project as a staff member will result in working directly with the OB collaborative group. My plan is to work with the director of my hospital's OB unit to bring the CPPEG to this OB collaborative group once I have graduated. The CPPEG will be an educational tool for use by the preadmissions nurse or any nurse explaining EIOL to patients. Another plan is to offer the guideline to private OB practices in the area for use during patient consultations and visits.

Analysis of Self

My nursing career started after being a patient care technician on a mother-baby unit. I found a passion for educating and helping new mothers after birth. As their care provider during this lifechanging time, I felt an obligation to be as educated as possible in order to provide the best care. This sense of duty led to my BSN, becoming a certified maternal newborn, then an MSN, and now a DNP. Providing my patients with the best care by knowing how to make changes that are centered around them at a level beyond a bedside nurse is very important. Rules and guidelines that help to provide evidence-based patient centered care uniformly are appreciated by practitioners and patients, which is why I chose to make this CPPEG.

Practitioner

As a practitioner in the OB field, I was able to identify the problem that the project is focused on. My drive to remain a bedside nurse has helped me understand a lot of the issues that need attention in my field of practice. After going through the experience of completing this project, it is apparent how important it is to have nurses at all levels of education, especially those with higher levels of education. When looking for my panel of experts, I needed to consider their education levels and ability to use and understand the appraisal instrument adequately. Personally, I do not know many nurses in my field of nursing who have a DNP and still provide care at the bedside. I love what I do and cannot imagine not knowing firsthand what is happening. The end goal is to find a full-time faculty position teaching online and work as needed at my current hospital so I can stay involved in direct patient care.

Scholar

The road to my DNP has been one filled with great experiences. As a scholar, I have been focused on my courses and learning everything possible. Through this journey, I have learned to look at the work I do in a different light. I am able to identify problems, research current literature regarding the problem, devise a plan, and implement and evaluate changes. The education I received has helped me to see a way to help change nursing to align with current recommendations and evidence-based research.

Project Manager

As the project manager, I was able to manage the project and panel members. I researched literature that helped support my project and completed a literature review matrix (see Appendix A). I was then able to identify professionals who would be able to perform an appraisal of the project using the selected instrument. I found that in my search for panel members, I considered their education level, position, and involvement with patients considering EIOL. I found that panelists were eager to help but were busy and took longer than expected to complete the appraisal. I found that being a project manager was stressful but gratifying, as the end result will be beneficial to practitioners and patients.

Challenges, Solutions, and Insights Gained

The challenges faced during the process of completing this project were both personal and academic. Managing my time with the requirements of the program and my responsibilities with work and family was challenging. Working on my project, tending

to my family, and both of my jobs were priority. The biggest academic challenge was completing the revisions that were needed to ensure that my project was well-written. Another challenge involved using the AGREE II website for the first time. My expert panelists were asking questions about the use of the website. Coordinating the group email for panelists to share their experiences completing the appraisal instrument was a task I needed to accomplish. I have learned so much through this experience. I now understand how invested one needs to be when proposing a change in practice.

Summary

Searching through the literature was a tedious task, especially since there are no published guidelines for practitioners to use when educating patients on EIOL. As a scholar, I identified the need for this particular guideline. Working through challenges involving writing a guideline and having an appraisal completed by a diverse panel of experts was a task like no other. Through creating this CPPEG, I can help other fields in nursing provide CPPEGs that are specific to their needs. Patient-centered care is imperative, and our duty as professionals is to assist patients in making the best decisions for their care by providing evidence-based education before they provide consent for treatment.

References

American College of Obstetricians and Gynecologists (ACOG). (2018). Induction of labor at 39 weeks. Retrieved from https://www.acog.org/patient-resources/faqs/labor-delivery-and-postpartum-care/induction-of-labor-at-39-weeks

American College of Obstetricians and Gynecologists. (n.d.). Women's health care physicians. Retrieved from https://www.acog.org/About-ACOG/ACOG-Departments/Patient-Safety-and-Quality-Improvement/reVITALize-Obstetric-Data-Definitions

Association of Women's Health, Obstetric and Neonatal Nurses. (2019). Elective induction of labor. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *48*(2), 227- 229. doi:10.1016/j.jogn.2019.01.004

AGREE Enterprise. (n.d.). Appraisal of guidelines for research & evaluation. Retrieved from https://www.agreetrust.org/resource-centre/agree-ii/

AGREE Research Trust. (2018). About the AGREE enterprise. Retrieved from https://www.agreetrust.org/about-the-agree-enterprise/

Bailit, J. L., Grobman, W., Zhao, Y., Wapner, R. J., Reddy, U. M., Varner, M. W., … VanDorsten, J. P. (2015). Nonmedically indicated induction vs expectant treatment in term nulliparous women. *American Journal of Obstetrics and Gynecology, 212*(1), 103. doi:10.1016/j.ajog.2014.06.054

Bishop, E. H. (1964). Pelvic scoring for elective induction. *Obstetrics & Gynecology*, *24*(2), 266–268.

Boyle, A., Reddy, U. M., Landy, H. J., Huang, C. C., Driggers, R. W., & Laughon, S. K. (2013). Primary cesarean delivery in the United States. *Obstetrics and Gynecology, 122*(1), 33-40. doi:AOG.0b013e3182952242

Clark, S. L., Miller, D. D., Belfort, M. A., Dildy, G. A., Frye, D. K., & Meyers, J. A. (2009). Neonatal and maternal outcomes associated with elective term delivery. *American Journal of Obstetrics and Gynecology, 200*(2), 156. doi:10.1016/j.ajog.2008.08.068

Curtin, S. C., Gregory, K. D., Korst, L. M., & Uddin, S. F. (2015). Maternal morbidity for vaginal and cesarean deliveries, according to previous cesarean history: New data from the birth certificate, 2013. *National Vital Statistics Reports: From the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, 64*(4), 1. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=26046963&site=ehost-live&scope=site

Dang, D., & Dearholt, S. (2017). *Johns Hopkins nursing evidence-based practice: Model and guidelines* (3rd ed.). Indianapolis, IN: Sigma Theta Tau International.

DeSisto, C. L., McDonald, J. A., Rochat, R., Diaz-Apodaca, B. A., & Declercq, E. (2016). Decision making about method of delivery on the U.S.-Mexico border. *Health Care for Women International, 37*(4), 426-443. doi:10.1080/07399332.2014.971951

Elwyn, G., Frosch, D., Thomson, R., Joseph-Williams, N., Lloyd, A., Kinnersley, P. …

Barry, M. (2012). Shared decision making: A model for clinical practice. *Journal of General Internal Medicine, 27*(10), 1361-1367. doi:10.1007/s11606-012-2077-6

Field, M. J., & Lohr, K. N. (Eds.). (1990). *Clinical practice guidelines: Directions for a new program*. Washington, DC: National Academy Press.

FPQC Induction of Labor Algorithm. (2014). USF Health. Retrieved from https://health.usf.edu/~/media/Files/Public%20Health/Chiles%20Center/FPQC/New%20Induction%20Algorithm%2011x14.ashx?la=en

Gibson, K. S., & Waters, T. P. (2015). Measures of success: Prediction of successful labor induction. *Seminars in Perinatology, 39*(6), 475-482. doi:10.1053/j.semperi.2015.07.012

Gill, S.D., Fuscaldo, G., & Page, R. S. (2019). Patient-centred care through a broader lens: Supporting patient autonomy alongside moral deliberation. *Emergency Medicine Australas, 31*(4), 680-682. doi:10.1111/1742-6723.13287

Heilbrun, K., Phillips, S., & Thornewill, A. (2016). Professional standards' citations in law and the behavioral sciences: Implications for policy and practice. *Professional Psychology: Research and Practice, 47*(4), 287-294. doi:10.1037/pro0000080

Jay, A., Thomas, H., & Brooks, F. (2018). Induction of labour: How do women get information and make decisions? Findings of a qualitative study. *British Journal of Midwifery, 26*(1), 22–29. doi:10.12968/bjom.2018.26.1.22

Khireddine, I., Le Ray, C., Dupont, C., Rudigoz, R., Bouvier-Colle, M., & Deneux-

Tharaux, C. (2013). Induction of labor and risk of postpartum hemorrhage in low risk parturients. *Plos One, 8*(1). doi:10.1371/journal.pone.0054858

Kriebs, J.M. (2015). Patient safety during induction of labor. *The Journal of Perinatal & Neonatal Nursing. 29*(2). 130-137. doi:10.1097?JPN.0000000000000099

Lee, H. R., Kim, M., You, J. Y., Choi, S., Oh, S., Roh, C., & Kim, J. (2015). Risk of cesarean section after induced versus spontaneous labor at term gestation. *Obstetrics & Gynecology Science, 58*(5), 346-352. doi:10.5468/ogs.2015.58.5.346

March of Dimes. (n.d.). 40 weeks of pregnancy. Retrieved from http://www.health4mom.org/zones/go-the-full-40

Mayo Clinic. (2017). Labor induction. Retrieved from https://www.mayoclinic.org/tests-procedures/labor-induction/about/pac-20385141

Miriam-Webster. (2019a). Informed consent. Retrieved from https://www.merriam-webster.com/dictionary/informed consent.

Miriam-Webster. (2019b). Informed decision making. Retrieved from https://www.merriam-webster.com/dictionary/informed%20decision

Moore, J. E. (2016). Women's voices in maternity care: The triad of shared decision making, informed consent, and evidence-based practices. *The Journal of Perinatal & Neonatal Nursing, 30*(3), 218–223. doi:10.1097/JPN.0000000000000182

Moore, J. E., Titler, M. G., Kane Low, L., Dalton, V. K., & Sampselle, C. M. (2015).

Transforming patient-centered care: Development of the evidence informed decision making through engagement model. *Women's Health Issues: Official Publication of The Jacobs Institute of Women's Health, 25*(3), 276–282. doi:10.1016/j.whi.2015.02.002

National Center for Health Statistics. (2019). Cesarean delivery rate by state. Retrieved from https://www.cdc.gov/nchs/pressroom/sosmap/cesarean_births/cesareans.htm

Oshiro, B. T., Kowalewski, L., Sappenfield, W., Alter, C. C., Bettegowda, V. R., Russell, R., … Berns, S. D. (2013). A multistate quality improvement program to decrease elective deliveries before 39 weeks of gestation. *Obstetrics & Gynecology, 121*(5), 1025–1031. doi:10.1097/aog.0b013e31828ca096

Ruhl, C., & Cockey, C. D. (2014). "Don't rush me . . . go the full 40" as a public health strategy to promote spontaneous labor and normal birth. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 43*(Supp 1), S24–S25. doi:10.1111/1552-6909.12397

Serpico, V., Liepert, A. E., Boucher, K., Fouts, D. L., Anderson, L., Pell, J., & Neumayer, L. (2016). The effect of previsit education in breast cancer patients: A study of a shared-decision-making tool. *The American Surgeon, 82*(3), 259–265. Retrieved from https://search-ebscohost- com.ezp.waldenulibrary.org/login.aspx?direct=true&db=mnh&AN=27099063&site=ehost-live&scope=site

Shallwani, S. M., King, J., Thomas, R., Thevenot, O., De Angelis, G., Aburub, A. S., & Brosseau, L. (2019). Methodological quality of clinical practice guidelines with physical activity recommendations for people diagnosed with cancer: A

systematic critical appraisal using the AGREE II tool. *PLoS ONE, 14*(4), 1–16. doi:10.1371/journal.pone.0214846

Simpson K.R., Newman G., & Chirino O.R. (2010). Patient education to reduce elective labor inductions. *MCN: The American Journal of Maternal Child Nursing, 35*(4), 188–196. doi:10.1097/NMC.0b013e3181d9c6d6

Sinkey, R. G., Lacevic, J., Reljic, T., Hozo, I., Gibson, K. S., Odibo, A. O., & ... Lockwood, C. J. (2018). Elective induction of labor at 39 weeks among nulliparous women: The impact on maternal and neonatal risk. *Plos One, 13*(4). doi:10.1371/journal.pone.0193169

Tam, T., Conte, M., Schuler, H., Malang, S., & Roque, M. (2013). Delivery outcomes in women undergoing elective labor induction at term. *Archives of Gynecology and Obstetrics, 287*(3), 407–411. doi:10.1007/s00404-012-2582-1

The National Academies of Science Engineering and Medicine: Health and Medicine Division. (2011). Clinical practice guidelines we can trust. Retrieved from http://www.nationalacademies.org/hmd/Reports/2011/Clinical-Practice-Guidelines-We-Can-Trust.aspx

Tillett, J. (2011). “Pit to distress”: Is this an evidence-based strategy? *The Journal of Perinatal & Neonatal Nursing, 25*(4), 302–304. doi:10.1097/JPN.0b013e318234c411

University of South Florida (USF), College of Public Health (n.d.). Florida perinatal quality collaborative. Retrieved from https://health.usf.edu/publichealth/chiles/fpqc/provide

Walden University. (2019). *Walden University clinical practice guideline manual*. Retrieved from https://academicguides.waldenu.edu/researchcenter/osra/dnp

Wang, Y., Guo, J., Rao, Y., Xiao, G. R., & Zhao, X. (2019). Quality evaluation of the non-variceal upper gastrointestinal bleeding guidelines/consensuses via AGREE II tools. *Journal of The College of Physicians and Surgeons-Pakistan: JCPSP, 29*(10), 977–985. doi:10.29271/jcpsp.2019.10.977

Women's Health Care Physicians. (2009). ACOG committee on ethics. ACOG committee opinion no. 439: Informed consent. *Obstetrics and Gynecology*. Retrieved from https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Ethics/Informed-Consent?IsMobileSet=false.

Woodhouse, K. D., Tremont, K., Vachani, A., Schapira, M. M., Vapiwala, N., Simone, C. B., 2nd, & Berman, A. T. (2017). A review of shared decision-making and patient decision aids in radiation oncology. *Journal of Cancer Education: The Official Journal of The American Association for Cancer Education, 32*(2), *238–245*. doi:10.1007/s13187-017-1169-8

Ya-Ling, L., Chich-Hsiu, H., Stocker, J., Te-Fu, C., & Yi, L. (2015). Postpartum fatigue, baby-care activities, and maternal-infant attachment of vaginal and cesarean births following rooming-in. *Applied Nursing Research, 28*(2), 116-120. doi:10.1016/j.apnr.2014.08.002

Zhang, J., Troendle, J., Reddy, U. M., Laughon, S. K., Branch, D. W., Burkman, R., & ...

van Veldhuisen, P. (2010). Contemporary cesarean delivery practice in the United States. *American Journal of Obstetrics and Gynecology, 203*(4), 326. doi:10.1016/j.ajog.2010.06.058

Zürcher, T., Elger, B., & Trachsel, M. (2019). The notion of free will and its ethical relevance for decision-making capacity. *BMC Medical Ethics, 20*(1), 31. doi:10.1186/s12910-019-0371-0

Appendix A: Literature Review Matrix

Full Reference	Topic / Focus	Purpose of Overview	Research Question(s)/ Hypotheses	Methodology	Conclusions	Implications For practice	Grading the Evidence (see Appendix D)
Bailit, J. L., Grobman, W., Zhao, Y., Wapner, R. J., Reddy, U. M., Varner, M. W., … VanDorsten, J. P. (2015). Nonmedically indicated induction vs expectant treatment in term nulliparous women. *American Journal of Obstetrics and Gynecology*, *212*(1), 103. doi:10.1016/j.ajog.2014.06.054	Induction of Labor	A comparison of maternal and neonatal outcomes in initial deliveries between women who underwent non-medically indicated inductions of labor and those who were expectantly managed.	Are women undergoing non-medically indicated inductions of labor at a higher risk for cesarean delivery than those who wait for labor to begin naturally?	Retrospective secondary cohort analysis involving 25 hospitals with previous data collected during the APEX study.	Non-medically indicated inductions of labor had a significantly higher frequency of cesarean delivery at 38- and 40-weeks gestation. There was no increase at 39 weeks gestation. The time from admission to delivery was 3-4 hours longer in the induction group.	Non-medically indicated inductions of labor have a lower frequency of cesarean delivery when compared with inductions at 38- and 40-weeks gestation. Further research is recommended through a randomized trial.	III
Boyle, A., Reddy, U. M., Landy, H. J., Huang, C.-C., Driggers, R. W., & Laughon, S. K. (2013). Primary cesarean delivery in the United States. *Obstetrics and Gynecology*, *122*(1), 33–40. doi:10.1097/AOG.0b013e3182952242	Cesarean section rates	Identify indications for primary cesarean section rates and identify opportunities to reduce the cesarean section rate in the U.S.	Primary cesarean section rates are an influential contributor to overall cesarean section rates. To reduce overall cesarean section rates, it is essential to understand the factors that lead to the initial cesarean delivery.	Retrospective cohort study	The most common reasons noted for primary cesarean sections were failure to progress, fetal malpresentation, non-reassuring fetal heart rate, and elective.	Recommendation provided to decrease primary cesarean section rates to use 6 cm as cut off for active labor when considering the patient is failing to progress and allow adequate time during the second stage of labor while considering operative vaginal deliveries.	III

(continued)

Bailit, J. L., Grobman, W., Zhao, Y., Wapner, R. J., Reddy, U. M., Varner, M. W., … VanDorsten, J. P. (2015). Nonmedically indicated induction vs expectant treatment in term nulliparous women. *American Journal of Obstetrics and Gynecology*, *212*(1), 103. doi:10.1016/j.ajog.2014.06.054	Induction of Labor	A comparison of maternal and neonatal outcomes in initial deliveries between women who underwent non-medically indicated inductions of labor and those who were expectantly managed.	Are women undergoing non-medically indicated inductions of labor at a higher risk for cesarean delivery than those who wait for labor to begin naturally?	Retrospective secondary cohort analysis involving 25 hospitals with previous data collected during the APEX study.	Non-medically indicated inductions of labor had a significantly higher frequency of cesarean delivery at 38- and 40-weeks gestation. There was no increase at 39 weeks gestation. The time from admission to delivery was 3-4 hours longer in the induction group.	Non-medically indicated inductions of labor have a lower frequency of cesarean delivery when compared with inductions at 38- and 40-weeks gestation. Further research is recommended through a randomized trial.	III
Boyle, A., Reddy, U. M., Landy, H. J., Huang, C.-C., Driggers, R. W., & Laughon, S. K. (2013). Primary cesarean delivery in the United States. *Obstetrics and Gynecology*, *122*(1), 33–40. doi:10.1097/AOG.0b013e3182952242	Cesarean section rates	Identify indications for primary cesarean section rates and identify opportunities to reduce the cesarean section rate in the U.S.	Primary cesarean section rates are an influential contributor to overall cesarean section rates. To reduce overall cesarean section rates, it is essential to understand the factors that lead to the initial cesarean delivery.	Retrospective cohort study	The most common reasons noted for primary cesarean sections were failure to progress, fetal malpresentation, non-reassuring fetal heart rate, and elective.	Recommendation provided to decrease primary cesarean section rates are to use 6cm as cut off for active labor when considering the patient is failing to progress and allowing adequate time during the second stage of labor while considering operative vaginal deliveries.	III

(continued)

Clark, S. L., Miller, D. D., Belfort, M. A., Dildy, G. A., Frye, D. K., & Meyers, J. A. (2009). Neonatal and maternal outcomes associated with elective term delivery. *American Journal of Obstetrics and Gynecology, 200*(2), 156. doi:10.1016/j.ajog.2008.08.068	Planned term deliveries	Analysis of adverse maternal and neonatal outcomes associated with elective term deliveries before 39 weeks gestation.	What factors affect maternal and neonatal outcomes in planned term deliveries.	Prospective observational study in 27 hospitals.	Cesarean rates were not influenced by gestation but were highly influenced by cervical dilation and parity. Elective deliveries prior to 39 weeks were associated with significant neonatal morbidity. Cervical dilation directly correlated with cesarean delivery in the population of women electing to have an induction of labor.	Validated risks and appropriate management approaches should be defined in terms of gestation to which they are associated.	III
Gibson, K. S., & Waters, T. P. (2015). Measures of success: Prediction of successful labor induction. *Seminars in Perinatology*, *39*(6), 475-482. doi:10.1053/j.semperi.2015.07.012	Induction of labor	Decision to induce labor or expectant management as important variables in safe and successful vaginal deliveries.	Induction of labor versus expectant management.	Systematic development of recommendations based on research.	Evaluating the most appropriate time to deliver patients to enhance chances of successful inductions and deliveries.	Management and timing of labor for individual patients by clinicians guided by understanding the role of possible predictors for successful inductions of labor.	IV

(continued)

Gill, S. D., Fuscaldo, G., & Page, R. S. (2019). Patient□ centred care through a broader lens: Supporting patient autonomy alongside moral deliberation. *Emergency Medicine Australasia*, *31*(4), 680–682.	Patient Centered Care Shared Decision-Making	Assessment of use of Emmanuel et al.'s deliberative model as a framework for Patient Centered Care and Shared Decision-Making.	Utilization of the deliberative model will assist in decision-making by facilitating dialogue without compromising ethical obligations.	Systematic Assessment	Emmanuel et al.'s model encourages decision-making along with critical reflection. The model recognizes differences and individuality but focuses on sharing resources and refining knowledge, values and preferences.	Emmanuel et al.'s deliberative model recognizes the intricacy of decision-making in healthcare and offers support to clinicians and patients when deliberating moral decisions.	III
Heilbrun, K., Phillips, S., & Thornewill, A. (2016). Professional standards' citations in law and the behavioral sciences: Implications for policy and practice. *Professional Psychology: Research and Practice*, *47*(4), 287-294. doi:10.1037/pro0000080	Professional Standards	Discuss knowledge and usage of professional standards	Professional standard use can be quantified in the frequency in which they are cited as sources.	Literature Review	Creating guidelines and standards involve a rigorous process. Considering the influence, they have on research, scholarship, and legal practice is paramount in establishing their credibility.	Judging the impact, a policy or guideline has on practice may entail more than estimating a reference count. There are limitations to solely using citation rate to assume impact. It may be beneficial to include professionals who are involved in the field in question and survey them to help appraise use, influence and understanding of the policy or guideline.	V

(continued)

Khireddine, I., Le Ray, C., Dupont, C., Rudigoz, R., Bouvier-Colle, M., & Deneux-Tharaux, C. (2013). Induction of labor and risk of postpartum hemorrhage in low risk parturients. *Plos One*, *8*(1). doi:10.1371/journal.pone.0054858	Labor induction and PPH in low risk patients	Assess the relationship between induction of labor and postpartum hemorrhage.	Analyze the association between labor inductions and postpartum hemorrhage with respect to the method of induction.	Population based cohort case control study.	Elevated risk of postpartum hemorrhage and severe postpartum hemorrhage is related to inductions of labor, as compared with spontaneous labor, especially when induced for standard indications regardless of the method used to induce labor.	Women undergoing induction of labor for standard indications require closer monitoring for postpartum hemorrhage. Support is given to further studies focused on elective inductions, cervical status and unfavorable situations to assess risk of postpartum hemorrhage.	III
Kriebs, J. M. (2015). Patient safety during induction of labor. *The Journal of Perinatal & Neonatal Nursing*, *29*(2), 130–137.	Patient Education and informed decisions regarding plan for labor.	Consider how to maintain patient safety and minimize risk involving patient decision to induce labor.	Communication between providers and patients while following evidence- based guidelines will affect patient satisfaction and improve clinical practice.	Integrative Review	The labor process needs to follow current evidence- based practice. Policies and protocols used by institutions can reduce variations in practice and improve patient safety. Patients need to be involved in the process and equipped to make informed decisions.	Many factors that influence the timing and safety of labor can be improved when clinicians follow evidence-based clinical guidelines and assist women in making informed decisions about labor.	V

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Lee, H. R., Kim, M., You, J. Y., Choi, S., Oh, S., Roh, C., & Kim, J. (2015). Risk of cesarean section after induced versus spontaneous labor at term gestation. *Obstetrics & Gynecology Science*, *58*(5), 346-352. doi:10.5468/ogs.2015.58.5.346	C/S risk after induction vs spontaneous labor	Examine the cesarean section rate between women who had an elective induction of labor compared to women who went into spontaneous labor with a term pregnancy.	The question is whether elective inductions of labor increase patient risk for delivering via cesarean section.	Retrospective study.	This analysis concludes that labor induction does not affect cesarean section rates. However, failed inductions and failure to progress do have a direct correlation with increased cesarean section rates.	The findings of this study are important when communicating risks of cesarean section for women considering induction of labor.	III
Moore, J. E. (2016). Women's voices in maternity care: The triad of shared decision making, informed consent, and evidence-based practices. *The Journal of Perinatal & Neonatal Nursing, 30*(3), 218–223. doi:10.1097/JPN.0000000000000182	Shared decision-making, informed consent, Evidence-based practices and induction of labor.	Presentation of concepts found in a secondary analysis of data from a study on induction of labor focusing on effective models of maternal care, shared decision making, informed consent and patient's use of evidence.	Incorporating patients in the decision-making process as an equal partner is crucial. Presenting concepts in shared decision-making, informed consent, and women's use of evidence-based practices that demonstrate the challenges and value in each.	Report on a secondary analysis study of induction of labor	Understanding how women are integrated into the decision-making process for childbirth is important for improved care and outcomes.	Women should be included as part of the informed, shared decision-making models for maternity care.	IV

(continued)

Moore, J. E., Titler, M. G., Kane Low, L., Dalton, V. K., & Sampselle, C. M. (2015). Transforming patient-centered care: Development of the evidence informed decision making through engagement model. *Women's Health Issues: Official Publication of The Jacobs Institute of Women's Health, 25*(3), 276–282. doi:10.1016/j.whi.2015.02.002	Patient centered care Elective induction of labor	Create a patient-centered model guided by Moore et al.'s qualitative study on women's decisions, perceptions, and experiences with elective inductions of labor.	New implementation model that focuses on the multifaceted role of patient-centered concepts as they relate to evidence informed decision-making.	Qualitative Study Analysis	This study provides a patient centered strategy to help reduce elective inductions of labor and maintain providing high quality evidenced-based care to women.	A new framework presented as the Evidence Informed Decision-Making through Engagement Model. To be used by maternity care providers and influence other areas of care.	III
Ruhl, C., & Cockey, C. D. (2014). "Don't rush me . . . go the full 40" as a public health strategy to promote spontaneous labor and normal birth. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 43*(Supp 1), S24–S25. doi:10.1111/1552-6909.12397	Induction of labor, cesarean delivery, and pregnancies going to 40 weeks gestation.	To reduce the number of women who receive unnecessary labor medical interventions. To allow for spontaneous labor and normal delivery when appropriate.	Go the Full 40 campaign is improving maternal care and outcomes.	Continuing education module	An unpublished survey aimed at nurses and maternity care providers promoting the campaign responded that the campaign was useful and motivating in educating women about carting their pregnancy to term.	Appropriately informing women of the risks of non-medically indicated labor interventions and encouraging them to allow spontaneous labor to occur.	V

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Serpico, V., Liepert, A. E., Boucher, K., Fouts, D. L., Anderson, L., Pell, J., & Neumayer, L. (2016). The effect of previsit education in breast cancer patients: A study of a shared-decision-making tool. *The American Surgeon, 82*(3), 259–265. Retrieved from https://search-ebscohost-com.ezp.waldenulibrary.org/login.aspx?direct=true&db=mnh&AN=27099063&site=ehost-live&scope=site	Shared decision-making and breast cancer.	Improve patient knowledge of surgical treatment options for patients with breast cancer.	Providing information about breast cancer to patients prior to their initial consult will decrease self-reported levels of distress and increase self-reported knowledge in patients.	Prospective observational study completed by survey.	Patients reported that the breast cancer video was beneficial to their basic understanding of the disease and a decrease in distress after viewing the video.	Advancement in understanding how to develop and incorporate decision aids into surgical practice and facilitating shared decision-making for breast cancer patients faced with surgical options.	III
Shallwani, S. M., King, J., Thomas, R., Thevenot, O., De Angelis, G., Aburub, A. S., & Brosseau, L. (2019). Methodological quality of clinical practice guidelines with physical activity recommendations for people diagnosed with cancer: A systematic critical appraisal using the AGREE II tool. *PLoS ONE, 14*(4), 1–16. doi:10.1371/journal.pone.021484	Physical activity guideline for cancer patients using AGREE II tool	Identify and appraise recent physical activity clinical practice guidelines for their methodological quality.	Physical activity can relieve certain cancer and cancer treatment side effects.	Meta-analysis of controlled studies and a systematic review of literature.	Using the AGREE II tool the scope, purpose, and clarity were identified. Limitations were noted and improvement in the guidelines were recommended.	Healthcare providers can support people with cancer by accessing well-developed appropriate guidelines and interpret them for their patients.	V

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Simpson K.R., Newman G., & Chirino O.R. (2010). Patient education to reduce elective labor inductions. *MCN: The American Journal of Maternal Child Nursing, 35*(4), 188–196. doi:10.1097/NMC.0b013e3181d9c6d6	Elective induction f labor education.	To reduce the frequency of elective inductions of labor by providing standardized education regarding the risks and benefits of inductions to women attending prepared childbirth classes.	Will adding standardized education in a prepared childbirth class decrease the frequency of elective inductions of labor?	Comparison study utilizing a power analysis	Evidence-based information presented on elective induction of labor during a prepared childbirth class was beneficial in discouraging some women from choosing this option. After the content was added to the class 63% percent of patients reported information presented was influential in their decision to not undergo an elective induction of labor.	Patient education may be beneficial in reducing the rates of elective inductions of labor.	III
Sinkey, R. G., Lacevic, J., Reljic, T., Hozo, I., Gibson, K. S., Odibo, A. O., & ... Lockwood, C. J. (2018). Elective induction of labor at 39 weeks among nulliparous women: The impact on maternal and neonatal risk. *Plos One, 13*(4). doi:10.1371/journal.pone.0193169	Elective inductions of labor.	Provide an analysis of elective inductions of labor at 39 weeks gestation as compared to expectant management with induction of labor at 41 weeks or for medical or obstetrical indications.	What option provides the least maternal and neonatal morbidity between elective inductions of labor at 39 weeks gestation and expectant management with induction of labor at 41 weeks.	Comparative effectiveness analysis	Elective inductions of labor completed at 39 weeks resulted in fewer cesarean deliveries, lower rates of maternal morbidities and decreased stillbirths and neonatal deaths as compared with induction of labor at 41 weeks.	Elective inductions of labor at 39 weeks reduced cesarean delivery rates and maternal and neonatal morbidity.	III

(continued)

Tam, T., Conte, M., Schuler, H., Malang, S., & Roque, M. (2013). Delivery outcomes in women undergoing elective labor induction at term. *Archives of Gynecology and Obstetrics*, *287*(3), 407–411. doi:10.1007/s00404-012-2582-1	Elective inductions of labor	Determine the variables involved in a successful elective induction of labor resulting in a normal vaginal delivery.	Outcomes of elective inductions of labor in low risk women between 39 and 40 weeks of gestation.	Retrospective cohort study	Patients with a favorable cervix dilated greater than two cm and multiparous women were more likely to have a shorter length of inductions and a vaginal delivery.	To improve patient outcomes and reduce cost it is recommended that favorable cervix exams and multiparity be included with a gestational age requirement when deciding to electively induce labor.	III
Tillett, J. (2011). "Pit to distress": Is this an evidence-based strategy? *The Journal of Perinatal & Neonatal Nursing, 25* , 302–304. doi:0.1097/JPN.0b013e318234c411	Augmentation of labor with oxytocin.	Examination of the use of oxytocin for augmentation of labor.	Practitioner understanding that labor may not progress according to a chart or predetermined curve may decrease the practice of augmentation.	Expert opinion	Increasing oxytocin in laboring women every 20 minutes without the full picture of the woman's response may result in uterine hyperstimulation.	Inadvisable use of oxytocin for induction or augmentation does not lead to improved birth outcomes and can be harmful for the fetus and woman.	V
Wang, Y., Guo, J., Rao, Y., Xiao, G. R., & Zhao, X. (2019). Quality evaluation of the non-variceal upper gastrointestinal bleeding guidelines/consensuses via AGREE II tools. *Journal of The College of Physicians and Surgeons-Pakistan: JCPSP , 29*(10), 977–985. doi:10.29271/jcpsp.2019.10.977	AGREE II assessment of non-variceal upper gastrointestinal bleeding guidelines.	Evaluation of non-variceal upper gastrointestinal bleeding diagnosis and treatment guidelines using the AGREE II tool.	What guidelines for non-variceal upper gastrointestinal bleeding have been published and how do they measure up using the AGREE II tool.	Literature search systematic evaluation using AGREE II tool	4 published guidelines, 3 consensus, and 1 statement were evaluated using the AGREE II tool; all fell into moderate range for each domain; 100% agreed that PPI administration was beneficial before or after endoscopic therapy.	There is room for improvement in the currently published guidelines, consensus and statements regarding non-variceal upper gastrointestinal bleeding diagnosis and treatment. Improvement is recommended for methodological quality to be more widely recognized and accepted.	V

Woodhouse, K. D., Tremont, K., Vachani, A., Schapira, M. M., Vapiwala, N., Simone, C. B., 2nd, & Berman, A. T. (2017). A review of shared decision-making and patient decision aids in radiation oncology. *Journal of Cancer Education: The Official Journal of The American Association for Cancer Education, 32*(2), *238–245*. Doi:10.1007/s13187-017-1169-8	Shared decision-making and patient decision-making aids	Review of findings from decision-making aid studies in radiation oncology.	Do decision aids regarding treatment options provide information to support a more collaborative process in shared decision-making?	Review of randomized controlled trials	Communication should be individualized and meet the patient's preferred decision-making style. Decision aids can assist with treatment decisions, improve patient knowledge, decrease decision related conflict, and improve patient decision satisfaction.	Future research and effort should be completed on understanding how to effectively implement the tools needed to achieve meaningful benefits for patients and high-quality cancer care.	V
Ya-Ling, L., Chich-Hsiu, H., Stocker, J., Te-Fu, C., & Yi, L. (2015). Postpartum fatigue, baby-care activities, and maternal-infant attachment of vaginal and cesarean births following rooming-in. *Applied Nursing Research, 28*(2), 116-120. Doi:10.1016/j.apnr.2014.08.002	Postpartum Fatigue	Determination of possible negative influences from rooming-in settings after vaginal and cesarean section deliveries.	What affect does rooming-in have on postpartum fatigue, baby-care activities, and maternal-newborn attachment after vaginal and cesarean section deliveries.	Descriptive Cross-sectional Study	Postpartum fatigue is common in women after delivery from vaginal and cesarean births and greater for women with a cesarean section. Patients report more difficulty with infant care rooming in setting regardless of the type of delivery when fatigue was immense.	Hospitals are encouraged to develop and implement strategies to address postpartum fatigue, especially in women who had cesarean deliveries. Facilities who are Baby-Friendly are encouraged to modify steps seven and eight to support the needs of postpartum patients.	III

(continued)

Zhang, J., Troendle, J., Reddy, U. M., Laughon, S. K., Branch, D. W., Burkman, R., & ... van Veldhuisen, P. (2010). Contemporary cesarean delivery practice in the United States. *American Journal of Obstetrics and Gynecology, 203*(4), 326. doi:10.1016/j.ajog.2010.06.058	C/S practices in the U.S.	Provide a description of cesarean delivery practices in the United Sates.	Collect and analyze current labor and delivery practice across multiple institutions in the U.S.	Retrospective observational study.	Reducing the frequency of primary cesarean deliveries is fundamental to reduce cesarean deliveries. Increasing the rate of vaginal deliveries after cesarean deliveries is crucial to decrease repeat cesarean deliveries.	To make an impact of the cesarean sections rates in the U.S. there needs to be a decrease in primary cesarean deliveries associated with inductions of labor and labor dystocia. Clinical indications for cesarean sections need to an acceptable indicator. Increasing access to patient education on a trial of labor after previous cesarean section.	III
Zürcher, T., Elger, B., & Trachsel, M. (2019). The notion of free will and its ethical relevance for decision-making capacity. *BMC Medical Ethics, 20*(1), 31. doi:10.1186/s12910-019-0371-0	Decision-making and informed consent	Examination of the notion of free will when evaluating the decision-making capacity.	Introduction of a philosophically crucial element for the justification of actions into the debate on autonomy, informed consent, and decision-making capacity.	Scholarly discussion	If the patient's decision-making capacity has no identified broad and unsolvable conflicts between wishes related to actions and those related to wishes it can be concluded that the patient's will is free.	Analyzing the process that lead to the forming of will and examining whether and why patients might have difficulties forming and expressing an authentic will is appropriate in acute situations.	V

Appendix B: AGREE II Instrument and Panelists Results

Domain 1. Scope and Purpose

1. The overall objective(s) of the guideline is (are) specifically described.
2. The health question(s) covered by the guideline is (are) specifically described.
3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.

Domain 2. Stakeholder Involvement

4. The guideline development group includes individuals from all the relevant professional groups.
5. The views and preferences of the target population (patients, public, etc.) have been sought.
6. The target users of the guideline are clearly defined.

Domain 3. Rigor of Development

7. Systematic methods were used to search for evidence.
8. The criteria for selecting the evidence are clearly described.
9. The strengths and limitations of the body of evidence are clearly described.
10. The methods for formulating the recommendations are clearly described.
11. The health benefits, side effects, and risks have been considered in formulating the recommendations.
12. There is an explicit link between the recommendations and the supporting evidence.

13. The guideline has been externally reviewed by experts prior to its publication.
14. A procedure for updating the guideline is provided.

Domain 4. Clarity of Presentation

15. The recommendations are specific and unambiguous.
16. The different options for management of the condition or health issue are clearly presented.
17. Key recommendations are easily identifiable.

Domain 5. Applicability

18. The guideline describes facilitators and barriers to its application.
19. The guideline provides advice or tools on how the recommendations can be put into practice.
20. The potential resource implications of applying the recommendations have been considered.
21. The guideline presents monitoring or auditing criteria.

Domain 6. Editorial Independence

22. The views of the funding body have not influenced the content of the guideline.
23. Competing interests of guideline development group members have been recorded and addressed.

A critical group appraisal of: Clinical Practice Patient Education Guideline for Elective Induction of Labor using the AGREE II Instrument

Created with the AGREE II Online Guideline Appraisal Tool.

No endorsement of the content of this document by the AGREE Research Trust should be implied.

Co-ordinator: Allison Keleske

Date: 25 February 2020

URL of this appraisal: http://www.agreetrust.org/group-appraisal/12053

Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	OA 1	OA 2
100%	94%	84%	92%	72%	73%	83%	Yes - 3, Yes with modifications - 1, No - 0

Domain 1. Scope and Purpose				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
Item 1	7	7	7	7
Item 2	7	7	7	7
Item 3	7	7	7	7
Domain 2. Stakeholder Involvement				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
Item 4	7	7	7	7
Item 5	7	7	7	3
Item 6	7	7	7	7
Domain 3. Rigour of Development				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
Item 7	7	7	7	4
Item 8	7	7	7	4
Item 9	7	7	7	4
Item 10	7	7	7	2
Item 11	7	7	6	7
Item 12	7	7	7	7
Item 13	7	7	7	1
Item 14	6	7	4	1
Domain 4. Clarity of Presentation				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
Item 15	7	6	7	7
Item 16	7	6	4	7
Item 17	7	6	7	7
Domain 5. Applicability				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7

Item 18	7	6	4	1
Item 19	7	7	7	6
Item 20	7	7	6	1
Item 21	7	7	4	1
Domain 6. Editorial Independence				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
Item 22	7	6	4	4
Item 23	7	7	4	4
Overall Assessment				
	Appraiser 2	Appraiser 5	Appraiser 4	Appraiser 7
OA1	7	6	6	5

Domain 1. Scope and Purpose

Item 1

- Appraiser 2: Stated cleanly

Item 2

- Appraiser 2: Yes with adequate and accurate evidence to support

Item 3

- Appraiser 2: Yes, 39 weeks
- Appraiser 7: States that \"education will start when the patient is at least 36 weeks\". Is there evidence to support not beginning until 36 weeks? or should the education have been started by the time she is 36 weeks?

Domain 2. Stakeholder Involvement

Item 5

- Appraiser 2: Yes, exams were given and thorough
- Appraiser 7: It could be helpful to speak with some people in the target population to see what they know, want to know, or even wish they had known.

Item 6

- Appraiser 7: It is very clear that this is to help providers with educating pts. on elective IOL.

Domain 3. Rigour of Development

Item 7

- Appraiser 2: Yes, it was broken down by common interventions done and further explainations
- Appraiser 7: This isn\'t stated in the guideline.

Item 8

- Appraiser 2: Yes with adequate supporting articles and evidence
- Appraiser 7: This isn\'t stated in the guideline.

Item 9

- Appraiser 7: This isn\'t stated in the guideline.

Item 10

- Appraiser 2: Yes, described in a manner for all patients to understand

Item 11

- Appraiser 2: Perfectly explained

Item 13

- Appraiser 7: Not yet published- isn\'t what I\'m doing part of that? It isn\'t stated in the guideline though.

Domain 4. Clarity of Presentation

Item 15

- Appraiser 2: Yes, evidence based and written easily for the patients to understand
- Appraiser 4: AWHONN consider term after 37 weeks and not 39 weeks, is the recommendation to be induced from 39 weeks on?

Item 16

- Appraiser 2: Great job explaining the various methods and providing an appropriate length ofvtime
- Appraiser 4: I did not see an alternative, just induction of labor, with a great description of what was going to be done

Item 17

- Appraiser 2: Excellent

Domain 5. Applicability

Item 18

- Appraiser 2: Yes
- Appraiser 4: I did not see barriers described

Item 19

- Appraiser 2: A very thorough explanation of all possible methods as well as risks and benefits

Item 20

- Appraiser 2: Would be an excellent tool to use
- Appraiser 7: I doubt the cost to implement this guideline would be a barrier, but it isn\'t stated.

Item 21

- Appraiser 4: Dis not see a great description on auditing patients

Domain 6. Editorial Independence

Item 22

- Appraiser 4: unable to respond
- Appraiser 7: Not explicitly stated

Item 23

- Appraiser 7: Not stated

Overall Assessment

- Appraiser 2: It is very well written with supporting evidence to support 39 week inductions
- Appraiser 7: I think the patient education piece is great and would be a useful tool for MDs, CNMs, and RNs when answering questions about elective IOL. Based on the appraisal tool, the background information and evidence may need a little more.

Appendix C: Expert Panel Packet

Disclosure to Expert Panelist Form for Anonymous Questionnaires

To be given to an expert panelist prior to collecting questionnaire responses—note that obtaining a "consent signature" is not appropriate for this type of questionnaire and providing respondents with anonymity is required.

Disclosure to Expert Panelist

You are invited to take part in an expert panelist questionnaire for the doctoral project that I am conducting.

Questionnaire Procedures

If you agree to take part, I will be asking you to provide your responses anonymously, to help reduce bias and any sort of pressure to respond a certain way. Panelists' questionnaire responses will be analyzed as part of my doctoral project, along with any archival data, reports, and documents that the organization's leadership deems fit to share. If the revisions from the panelists' feedback are extensive, I might repeat the anonymous questionnaire process with the panel of experts again.

Voluntary Nature of the Project

This project is voluntary. If you decide to join the project now, you can still change your mind later.

Risks and Benefits of Being in the Project

Being in this project would not pose any risks beyond those of typical daily professional activities. This project's aim is to provide data and insights to support the organization's success.

Privacy

I might know that you completed a questionnaire, but I will not know who provided which responses. Any reports, presentations, or publications related to this study will share general patterns from the data, without sharing the identities of individual respondents or partner organization(s). The questionnaire data will be kept for a period of

at least 5 years, as required by my university.

Contacts and Questions:

If you want to talk privately about your rights in relation to this project, you can call my university's Advocate via the phone number 612-312-1210. Walden University's ethics approval number for this study is (Student will need to complete Form A in order to obtain an ethics approval number).

Before you start the questionnaire, please share any questions or concerns you might have.

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Appendix D: Johns Hopkins Nursing Evidence Level and Quality Guide

Thank you for your submission. We are happy to give you permission to use the JHNEBP model and tools in adherence of our legal terms noted below:

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

If interested in commercial use or discussing changes to the tool, please email ijhn@jhmi.edu.

Downloads:

JHNEBP Tools-Printable Version

JHNEBP Tools-Electronic Version

Would you like to use the JHNEBP Model and Tools for your EBP project?

Complete our Copyright Permission Form for access to either the new e-Tools or the paper version. A zipped file will be made available for download and use.

Citation for tools: Dang, D., & Dearholt, S. (2017). *Johns Hopkins nursing evidence-based practice: model and guidelines*. 3rd ed. Indianapolis, IN: Sigma Theta Tau International

Evidence Levels	Quality Ratings
Level I Experimental study, randomized controlled trial (RCT) Explanatory mixed method design that includes only a level I quaNtitative study Systematic review of RCTs, with or without meta-analysis **Level II** Quasi-experimental study Explanatory mixed method design that includes only a level II quaNtitative study Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis **Level III** Nonexperimental study Systematic review of a combination of RCTs, quasi-experimental and nonexperimental studies, or nonexperimental studies only, with or without meta-analysis Exploratory, convergent, or multiphasic mixed methods studies Explanatory mixed method design that includes only a level III quaNtitative study QuaLitative study Meta-synthesis	**QuaNtitative Studies** **A High quality**: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence. **B Good quality**: Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence. **C Low quality or major flaws**: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn. **QuaLitative Studies** No commonly agreed-on principles exist for judging the quality of quaLitative studies. It is a subjective process based on the extent to which study data contributes to synthesis and how much information is known about the researchers' efforts to meet the appraisal criteria. *For meta-synthesis, there is preliminary agreement that quality assessments of individual studies should be made before synthesis to screen out poor-quality studies*[1]. **A/B High/Good quality** is used for single studies and meta-syntheses[2]. The report discusses efforts to enhance or evaluate the quality of the data and the overall inquiry in sufficient detail; and it describes the specific techniques used to enhance the quality of the inquiry. Evidence of some or all of the following is found in the report: • Transparency: Describes how information was documented to justify decisions, how data were reviewed by others, and how themes and categories were formulated. • Diligence: Reads and rereads data to check interpretations; seeks opportunity to find multiple sources to corroborate evidence. • Verification: The process of checking, confirming, and ensuring methodologic coherence. • Self-reflection and scrutiny: Being continuously aware of how a researcher's experiences, background, or prejudices might shape and bias analysis and interpretations. • Participant-driven inquiry: Participants shape the scope and breadth of questions; analysis and interpretation give voice to those who participated. • Insightful interpretation: Data and knowledge are linked in meaningful ways to relevant literature. **C Low quality** studies contribute little to the overall review of findings and have few, if any, of the features listed for high/good quality.

Evidence Levels	Quality Ratings
Level IV Opinion of respected authorities and/or nationally recognized expert committees or consensus panels based on scientific evidence Includes: • Clinical practice guidelines • Consensus panels/position statements	**A High quality:** Material officially sponsored by a professional, public, or private organization or a government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise clearly evident; developed or revised within the past five years **B Good quality:** Material officially sponsored by a professional, public, or private organization or a government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise clearly evident; developed or revised within the past five years **C Low quality or major flaws:** Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the past five years
Level V Based on experiential and nonresearch evidence Includes: • Integrative reviews • Literature reviews • Quality improvement, program, or financial evaluation • Case reports • Opinion of nationally recognized expert(s) based on experiential evidence	**Organizational Experience (quality improvement, program or financial evaluation)** **A High quality**: Clear aims and objectives; consistent results across multiple settings; formal quality improvement, financial, or program evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence **B Good quality**: Clear aims and objectives; consistent results in a single setting; formal quality improvement, financial, or program evaluation methods used; reasonably consistent recommendations with some reference to scientific evidence **C Low quality or major flaws**: Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement, financial, or program evaluation methods; recommendations cannot be made **Integrative Review, Literature Review, Expert Opinion, Case Report, Community Standard, Clinician Experience, Consumer Preference** **A High quality**: Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader(s) in the field **B Good quality**: Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions **C Low quality or major flaws**: Expertise is not discernable or is dubious; conclusions cannot be drawn

Appendix E: Clinical Practice Patient Education Guideline on Elective Induction of Labor (CPPEG)

Procedure

- Education will start when the patient is at least 36 weeks gestation or when the patient expresses interest in an elective induction.
- Education will be completed by the pre-admissions nurse during the pre-registration visit
- The nurse will:
    - Provide the elective induction education
    - Allow for discussion of education
    - Answer questions and clarify information as needed
    - have the patient sign the form and provide a copy to the patient for further reference

Question

What information do women need to know in order to make an informed decision and provide informed consent on elective inductions of labor (EIOL)?

Target Population

Antepartum women who are considering having an elective induction of labor or antepartum women whose provider has recommended an elective induction of labor.

Recommendations

There is a lack of informed decision-making on the process and results of EIOL while the literature shows that education can help patients make informed decisions (Moore et al., 2015).

- The American College of Obstetrics and Gynecology (ACOG) states that informed consent protects the patient and is a process where information is mutually shared to assist patient autonomy in decision-making free from coercion or influence (Women's Health Care Physicians, 2009).
- Kriebs (2015) stated that there needs to be clear information for patients and their families in order to make an informed decision when discussing an EIOL

- The guideline will lead practitioners when educating women on the EIOL procedure to facilitate informed decision-making
- To provide accurate, evidence-based information to women on the benefits, risks, and management of electing an induction of labor in order to facilitate informed decision-making.

Key Evidence

- An EIOL is the initiation of labor for convenience with no medical necessity or are perceived as an easy remedy to the discomforts of late pregnancy (Kriebs, 2015, Mayo Clinic, 2017).
- Elective deliveries before 39 weeks gestation carry a significant risk for neonatal morbidity (Clark et al., 2009).
- Professional organizations have developed standards to optimize patient outcomes and evolve best practice. These standards need to be explained to patients to help educate the patient before they provide informed consent for this type of elective procedure (Heilbrun, Phillips, & Thornewill, 2016).
- Studies by Zhang, et al. (2010) and Lee et al. (2015) both reported that there is a higher rate of cesarean deliveries in nulliparous women undergoing induction of labor than those who go into spontaneous labor.
- Induction of labor also carries a 20% higher risk of postpartum hemorrhage than spontaneous labor (Khireddine et al., 2013).
- Clinical factors that correlate with the rise in maternal morbidity are increased use of labor induction and augmentation as well as previous and primary cesarean deliveries (Curtin, Gregory, Korst, & Uddin, 2015).

Guideline Monitoring

- The guideline should be reevaluated every three years or when new recommendations for induction of labor are published.
- Barriers to the application of this guideline should be addressed as they arise by the practitioner and before implementation.

Informed Decision-Making about Elective Induction of Labor

This guide is intended for patients to be educated about elective induction of labor in a non-bias manner so that they can make an informed decision in consultation with their care provider.

- What is Induction of Labor?
  - Labor that is started by stimulating the uterus to contract. This intervention starts labor artificially and does not wait for labor to start naturally. The goal of inducing labor is to have a successful vaginal delivery.
  - Inductions help to get the process of labor started. Delivery time depends on your body's response. You may give birth within a day or in a few days.
  - Once an induction of labor is started, you and your baby will be monitored and will remain in the hospital until you deliver.

- Medically indicated inductions vs. Elective Inductions
  - Medically indicated inductions of labor are recommended for the safety of you and/or your baby due to underlying concerns. These can be done before 39 weeks gestation if your provider identifies that delivery will be beneficial to you and/or your baby.
  - Elective inductions of labor are for convenience. Examples of convenience are relief of discomforts of late pregnancy, provider availability, date selecting. This type of induction can be performed at or after 39 weeks gestation.

- Methods of Inductions
  - Cervical Ripening (this may take hours to days)
    - Medicine - Prostaglandins
      - Administered as a pill, capsule, or vaginal suppository
      - Softens, thins, and dilates your cervix and might start contractions
    - Mechanical - Balloon catheter or Foley bulb catheter
      - Mechanically dilates cervix
      - Helps to release natural prostaglandins

    - Stripping the membranes
        - Once your cervix is dilated your provider can sweep their finger and disconnect your amniotic sac from the wall of your uterus thus causing your body to release natural prostaglandins.
    - Amniotomy (breaking your amniotic fluid or “bag of water”)
        - Done after your cervix has dilated
        - Most likely you will go into labor within hours after this procedure is done
        - Once this procedure is done you will not be sent home
    - Intravenous Medications
        - Pitocin (Oxytocin)
            - Helps regulate and coordinate contractions
            - Intensifies contractions and speeds up labor
            - Contractions generally start 30 minutes after Pitocin is started.
- Benefits of inducing labor at 39 weeks
    - Ability to choose induction date
    - Have desired provider for delivery
    - Physician preference for scheduling
    - Relief of discomforts of late pregnancy
    - Reduces the risk of preeclampsia and gestational hypertension
    - Reduces risk of cesarean section in first time term pregnancies
    - Waiting until 39 weeks increases a healthy outcome for your baby.

- Risks of inductions
    - Failed induction possibly resulting in a cesarean section
    - Decrease in fetal heart rate
    - Infections (you and your baby)
    - Postpartum hemorrhage (Excessive vaginal bleeding after delivery)

- Fetal Development at 39 weeks
    - Term delivery is considered between 39 and 40 weeks
    - Your baby’s brain develops fastest at the end of your pregnancy
    - Lungs and liver have had time to develop
    - Has gained weight and staying warm will be easier
    - Your baby will be awake enough to suck and swallow which is important for feedings (Best start for breastfeeding)

Patient Signature _____Date_____

Witness signature _____Date_____

Sources:

American College of Obstetricians and Gynecologists (ACOG). (2018). Induction of labor at 39 weeks. Retrieved from https://www.acog.org/patient-resources/faqs/labor-delivery-and-postpartum-care/induction-of-labor-at-39-weeks

Clark, S. L., Miller, D. D., Belfort, M. A., Dildy, G. A., Frye, D. K., & Meyers, J. A. (2009). Neonatal and maternal outcomes associated with elective term delivery. *American Journal of Obstetrics and Gynecology, 200*(2), 156. doi:10.1016/j.ajog.2008.08.068

Curtin, S. C., Gregory, K. D., Korst, L. M., & Uddin, S. F. (2015). Maternal morbidity for vaginal and cesarean deliveries, according to previous cesarean history: New data from the birth certificate, 2013. *National Vital Statistics Reports: From the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, 64*(4), 1. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=26046963&site=ehost-live&scope=site

Khireddine, I., Le Ray, C., Dupont, C., Rudigoz, R., Bouvier-Colle, M., & Deneux-Tharaux, C. (2013). Induction of labor and risk of postpartum hemorrhage in low risk parturients. *Plos One, 8*(1). doi:10.1371/journal.pone.0054858

Kriebs, J.M. (2015). Patient safety during induction of labor. *The Journal of Perinatal & Neonatal Nursing. 29*(2). 130-137. doi:10.1097?JPN.0000000000000099

Lee, H. R., Kim, M., You, J. Y., Choi, S., Oh, S., Roh, C., & Kim, J. (2015). Risk of cesarean section after induced versus spontaneous labor at term gestation. *Obstetrics & Gynecology Science, 58*(5), 346-352. doi:10.5468/ogs.2015.58.5.346

Mayo Clinic. (2017). Labor induction. Retrieved from https://www.mayoclinic.org/tests-procedures/labor-induction/about/pac-20385141

Zhang, J., Troendle, J., Reddy, U. M., Laughon, S. K., Branch, D. W., Burkman, R., & ... van Veldhuisen, P. (2010). Contemporary cesarean delivery practice in the United States. *American Journal of Obstetrics and Gynecology, 203*(4), 326. doi:10.1016/j.ajog.2010.06.058