

IMPROVING ACCESS TO SERVICES FOR INDIGENOUS CHILDBEARING WOMEN ON
A RURAL RESERVATION: QUALITY IMPROVEMENT PROJECT

by

Jamie Lee Cahoon

A scholarly project submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Nursing Practice

in

Family Nurse Practitioner

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2025

©COPYRIGHT

by

Jamie Lee Cahoon

2025

All Rights Reserved

ACKNOWLEDGEMENTS

I want to express my deepest gratitude to Dr. Stacy Stellflug for her unwavering support and motivation throughout both the DNP program and this project. Dr. Stellflug's dedication, investment of time and effort were instrumental in the success of this endeavor. I also extend heartfelt appreciation to the committed staff at the project site, whose invaluable assistance in implementing the project and dedication to improving postpartum Indigenous women's health in on the reservation community made a significant impact.

A special thank you goes to my husband, Bobby, for his constant encouragement and support throughout this journey. Finally, I am profoundly grateful to my family for their unwavering belief in me every step of the way. Their encouragement and support have been the foundation of everything I have accomplished.

TABLE OF CONTENTS

1. REVIEW OF THE LITERATURE	1
Introduction.....	1
Problem Background	1
Local Problem Significance.....	3
Evidence-Based Solutions	4
Summary.	4
Methods.....	5
Results.....	5
Optimizing Postpartum Care.....	6
Postpartum Discharge Transition.	7
Community-Based Resource Guide.....	7
Culturally Based Resource Guides.	9
Patient Navigators	10
Discussion and Conclusion	11
2. QUALITY IMPROVEMENT PROPOSAL	12
Introduction.....	12
Problem Statement.....	12
Microsystem Assessment	14
Local Healthcare Landscape.	14
Quality Improvement Model.....	15
Specific Aims and Purpose	18
Intervention and Implementation.....	21
Evaluation and Analysis.....	22
Safety and Confidentiality.....	22
Conclusion	23
3. QUALITY IMPROVEMENT MANUSCRIPT	25
Contribution of Authors and Co-Authors	25
Manuscript Information	26
Abstract	27
Clinical Problem	28
Review of the Literature	30
Conceptual Framework.....	31
Aim	32
Methods.....	32
Context.....	32
Intervention	33
.....	33

Results	34
Discussion	34
Limitations.	35
Recommendations.....	36
Conclusion	36
4. ADVANCED NURSING ESSENTIALS REFLECTION	38
Introduction.....	38
Essential I: Scientific Underpinnings for Practice	38
Essential II: Organizational and System Leadership for Quality Improvement and Systems Thinking	39
Essential III: Clinical Scholarship and Analytic	40
Methods for Evidence-Based Practice	40
Essential V: Health Care Policy and Advocacy in Health care.....	41
Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes.....	41
Conclusion	42
REFERENCES CITED.....	43
APPENDICES	48
APPENDIX A PRISMA DIAGRAM OF LITERATURE REVIEW	49
APPENDIX B JOHN HOPKINS EVIDENCE BASED PRACTICE	51

LIST OF TABLES

Table	Page
1. Table 1. SMART Goals	18
2. Table 2. Results.....	32

CHAPTER ONE

REVIEW OF THE LITERATURE

Introduction

Over the last 36 years, pregnancy-related deaths in the United States (U.S.) increased by over 300%, according to a recent report from the Centers for Disease Control (CDC); the increase is due to more accurate data. Maternal mortality rates rose for all populations, with a startling difference among the Indigenous population. In 2021, the non-Hispanic Indigenous population experienced 118.7 deaths per 100,000 live births compared to the non-Hispanic white population of 24.3 deaths per 100,000 (CDC, 2024). More specifically, the maternal mortality rate in Montana is 40.7 deaths per 100,000 births, the 6th highest in the U.S. (CDC Wonder, 2019). However, the non-Hispanic Indigenous population in Montana faces a significantly higher rate of 167.2 deaths per 100,000 compared to the non-Hispanic white population of 23.9 deaths per 100,000 (CDC Wonder, 2019). Underestimations likely have occurred related to the political affiliations of Indigenous women, and inaccuracies in recording race on death certificates skew the data (Woo & Glover, 2021). (Woo & Glover, 2021). Montana is taking steps to prioritize maternal health interventions through the state's health department strategic plan, Healthy People 2030. A key objective of the plan is to focus on pregnancy complications and maternal death prevention (Health People 2030, 2023). In the end, non-Hispanic Indigenous

Problem Background

Maternal mortality is an issue in the U.S., especially as one of the wealthiest countries in the world. Examining the causes of these high mortality rates reveals that most complications

were avoidable, with 92% of maternal deaths deemed preventable (Trost et al., 2024). In 2021, infection (48.4%), hemorrhage (8.8%), and other non-cardiovascular medical conditions (8.3%) were the top causes of maternal mortality in the U.S. (CDC, 2024). For Indigenous women, the leading causes of maternal mortality are hemorrhage, cardiomyopathies, and hypertensive disorders (Trost et al., 2020). In urban areas, these conditions occur less opposed to childbearing Indigenous women living on rural reservations have limited access to emergency healthcare and specialty services like obstetrics, often requiring them to travel long distances to receive care (AIMasarweh & Ward, 2016; CDC, 2024). The CDC's 2024 report highlights the significant impact of rural living on maternal mortality, revealing that in 2021, women residing in rural areas had the highest maternal mortality rates (CDC, 2024). Demonstrating childbearing Indigenous women residing in rural reservations increases their risk for pregnancy-related death.

In addition to residing in rural areas, childbearing Indigenous women encounter significant socioeconomic barriers. These barriers encompass educational attainment, income, economic challenges, and a lack of transportation, further complicating care access. Additionally, high rates of mental health issues and substance use disorders stemming from the impacts of historical trauma are critical considerations (Gone et al., 2019).

Effectively tailored interventions for childbearing Indigenous women are critical to reducing the current trajectory of high maternal mortality rates among this population. The challenges of limited access to healthcare, socioeconomic barriers, and the impacts of historical trauma must be addressed. Interventions focusing on these specific needs, such as culturally appropriate healthcare programs, improved access to prenatal and postpartum care, and community-based support systems, have been shown to significantly improve maternal outcomes

(AIM, 2021). By implementing these targeted strategies, the healthcare system can work towards better health outcomes and reduce the disparities in maternal mortality rates among Indigenous women.

Local Problem Significance. According to the American College of Obstetrics and Gynecology (ACOG) (2018), postpartum care should be ongoing, with services and support tailored to each woman's needs. In response to ACOG's recommendations, a tribe in Montana identified that childbearing Indigenous women residing on their reservation required intervention. This tribe established a culturally specific community-based program to address the social, emotional, mental, and physical barriers women often face during pregnancy and into postpartum. However, the tribe does not offer obstetric services. Childbearing Indigenous women must then seek obstetric care outside of the tribes' health department, leaving the options limited to one of two non-indigenous healthcare systems.

This lack of local tribal obstetric resources presents a significant challenge, as there is no formal process to transition childbearing Indigenous women from the non-Indigenous healthcare system back to the tribes' health department. Consequently, these women are often unaware of the culturally specific community-based program and its available services. Due to the absence of a mechanism to reconnect childbearing Indigenous women with the tribes' health department, they miss out on culturally relevant postpartum care, services, and support.

There are two primary reasons for the disconnect between the healthcare systems. The first is the non-indigenous system's postpartum discharge process. The second is the appropriate identification of eligible birthing women for the tribe's program services. Both of these reasons have resulted in the tribal program receiving minimal referrals.

Evidence-Based Solutions

The Health Resources & Services Administration (HRSA) launched the Alliance for Innovation on Maternal Health (AIM) program in partnership with the ACOG. This initiative is a nationwide, data-driven effort to enhance maternal safety and quality of care through established safety bundles. AIM has released several bundles, including obstetric hemorrhage, severe hypertension in pregnancy, and maternal mental health are among some of the bundles. The latest bundle introduced by AIM focuses on the Postpartum Discharge Transition, a set of best practices from a collection of evidence-based interventions structured with actionable steps. The Postpartum Discharge Transition bundle emphasizes providing culturally respectful care and establishing formal processes to smooth transitions from birthing centers or facilities to community-based care.

Summary. Maternal mortality in the U.S., especially among Indigenous women in rural areas, is worsened by preventable complications, limited healthcare access, social barriers, and historical trauma, highlighting the need for interventions. In Montana, a tribe established a culturally specific community-based program to support childbearing Indigenous women. However, due to the absence of a mechanism to transition these women from the non-Indigenous healthcare systems, they often miss out on culturally relevant postpartum care and services. The AIM program, launched by HRSA and ACOG, is a nationwide, data-driven initiative aimed at enhancing maternal safety and quality of care through various safety bundles, including the latest Postpartum Discharge Transition bundle, which emphasizes culturally respectful care and smooth transitions from birthing centers to community-based care. This Quality Improvement (QI) project will focus on supporting Indigenous mothers during the postpartum discharge

transition by developing a community resource guide to increase referrals to the tribes' culturally specific community-based program.

Methods

A focused literature review, including Web Science, Pub Med, government documents, and organization reports, was performed to identify articles targeted at improving the development of a referral resource of community-based care services to enhance the provision of care and support for postpartum Indigenous women. The research focused on community-based intervention strategies and their effect on the outcome of interest and postpartum follow-up. Key search terms included optimizing postpartum care, community-based resource guides, postpartum community resource guides, AND American Indian or Native American or Indigenous and Alaska Natives. The identified articles were independently screened and refined by title and abstract by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (See Appendix A). All duplicate articles were identified and removed. Review of additional articles from the reference lists to identify further articles for potential inclusion. Exclusion criteria included: (1) published before 01/01/2018, (2) published in languages other than English.

Results

The initial search yielded 269 articles. After removing duplicates, 197 articles remained. Further screening based on the discussed exclusion criteria led to the consideration of 11 articles, of which six met the criteria for inclusion. The literature review encompassed qualitative (Ruderman et al., 2021), mixed-methods (Yee et al., 2021), randomized controlled (Baggett et al., 2024), commentary pilot (Essien et al., 2019), committee opinions (ACOG, 2018; AIM,

2021), and developmental studies (Olson et al., 2019). The search for articles focused on maternal Indigenous women presented challenges, as only some articles were related to the chosen population. Even though there were limited articles targeting maternal Indigenous women, there were sufficient articles about the topic of linking this population of women to community-based resources as a way to mitigate pregnancy-related complications. The identified articles support the implementation of a community resource guide to connect maternal women during the postpartum transition to community-based care services.

Optimizing Postpartum Care. ACOG (2018) identified ways to optimize postpartum care in its committee review. The committee suggested five key components to improve perinatal outcomes: 1) expanding postpartum visits from a single visit to multiple visits, 2) addressing the needs of the mother and providing a full scope of support, 3) individualizing the plan of care to suit each mother's needs, 4) offering preventable health screenings, and 5) supporting collaboration between providers, community organizations, and support systems to provide holistic care to mothers. Among these five points, collaboration is essential to developing a community resource guide for postpartum Indigenous women on a rural reservation in Montana.

ACOG (2018) also emphasizes the importance of developing an effective referral system to connect new mothers with appropriate community resources and support services. One prime example of connecting women to resources is creating resource guides and directories of community resources necessary to support postpartum women. To increase the utilization of the resource guides, ACOG recommends training providers on how to use them effectively. Increasing accessibility to the guides fosters collaboration between community services and obstetric providers, thereby better supporting mothers. ACOG's (2018) recommendations can

potentially enhance access to community support and care, particularly in rural settings like the rural reservations in Montana. Given the rural nature of all of Montana's reservations, awareness and access to available community resources can be challenging for Indigenous women.

Postpartum Discharge Transition. ACOG (2018), in collaboration with the Health Resource and Services Administration (HRSA) and other organizations, formulated the Alliance for Innovation on Maternal Health (AIM) and developed recommendations to improve service to women during the postpartum period. As a data-driven maternal safety and quality initiative, the AIM team developed the Postpartum Discharge Transition bundle as an evidence-based resource to improve the transition of new mothers from the hospital to home after delivery. The bundle guides users on enhancing the transition, emphasizing early postpartum contact, initiating patient navigators, collaborating with community resources, providing culturally sensitive care, and developing resource guides (AIM, 2021). AIM emphasized the need to develop community resource guides to provide further support and recognized the positive impact of a culturally relevant community guide on Indigenous women in the postpartum period.

Community-Based Resource Guide. AIM (2021) elaborated more on the development of the community resource guide by including evidence-based key points to be included in the guide. The bundle emphasized that community resource guides should incorporate key information new mothers may need during the transition from the hospital to home with a newborn and expected postpartum recovery. Resource guides include information about warning signs or symptoms of physical complications, behavioral health symptoms, how to care for newborns, breastfeeding support, safe formula feeding, and recommended follow-up appointments for mothers and newborns. The guide should have contact information for all

community resources available to new mothers. A readily available resource guide has evidence supporting improved outcomes during postpartum, with pertinent information regarding potential postpartum complications, support groups, community programs, and phone numbers of places to contact for assistance. Another essential component of a resource guide is awareness of postpartum depression signs and symptoms (AIM, 2021).

According to Olson et al. (2019), population-specific tailored support and community-based resources are essential for postpartum transition, which supports ACOG and AIMs recommendations, as previously stated. The researchers (Olson et al., 2019) found an urgent need to implement community follow-up after discharge. Hence, mothers receive support, education, and resources in an easy-to-access environment with which they are familiar. The researchers highlighted the critical importance of postpartum women receiving education and resources to meet their needs within their communities. Through community-specific resource guides, postpartum women can quickly find services to meet their needs without looking beyond their communities or traveling great distances to access resources. Culturally specific resources are essential to supporting Indigenous women in the postpartum period, and the development of a community resource guide for women on the rural reservation is a critical need. The researchers also recommended seamless support for the new mothers from their healthcare providers to community organizations. A postpartum guide with culturally responsive postpartum education and contacts for community organizations would better support women during the transition from discharge to home.

Gathering all the information and services a new mother will need during the postpartum period in a single readily available resource allows mothers to access the resources quickly.

Instead of looking online or word of mouth, an evidence-based guide provides easily accessible, relevant information to guide new mothers in making an informed decision about their care.

Having a single guide with all the appropriate community resources and services empowers the mother to review what is available and make decisions regarding her postpartum recovery needs. Essien et al. (2019), like Olsen et al. (2019), discussed the importance of a smooth transition of care from the hospital to community-based support and services. Baggett et al. (2024) focused on identifying the barriers to recruiting women to an internet parenting intervention. Baggett et al. (2024) found that given the option to self-refer, women would, at a rate 3.5 times higher than the two other referral methods, staff- or researcher-directed. Baggett et al. provide evidence showing that women are more likely to access services that best meet their needs, and when fully informed, they will make the best decisions for themselves (2024).

Culturally Based Resource Guides.

The AIM bundle emphasizes a guide to being culturally sensitive (AIM, 2021). The significance of tailoring community resource guides to fit different diverse populations allows for the opportunity to increase access to culturally specific services. Indigenous women, who are historically an underserved population with well-established poor maternal morbidity and mortality rates during the postpartum period, indicate a need to have access to culturally tailored resources. A community resource guide with tribal resources services, written in the population's spoken language and cultural practices or images related to the population, would appeal to Indigenous new mothers.

Patient Navigators

The AIM bundle also discusses the role of a patient navigator during the postpartum period (2021). Even with the community resource guide providing relevant information, resources, and services, the postpartum transition to home can be stressful and overwhelming. A patient navigator can assist new mothers by connecting them with community resources and maintaining the resource guide with up-to-date information.

Ruderman et al. (2021) and Yee et al. (2021) recommended creating patient navigator programs as a practical way to assist new mothers postpartum. Positioned to facilitate, patient navigators can connect new mothers and the community-based resource guide. Educating patient navigators about postpartum community resources guides increase self-referrals to community-based services and care (Yee et al., 2021), improving outcomes for vulnerable populations like Indigenous women on rural reservations in Montana.

As explained, both ACOG and AIM guidelines support the practical implementation of creating and maintaining a reference guide for women during the postpartum period (AIM, 2021; Olson et al., 2019). The collaborative recommendations for creating a reference guide for postpartum women at discharge hold substantial weight. The guides enable women to make informed decisions about what is available in the community. The transition to services in the community is beneficial in the postpartum period, and having a reference guide can facilitate connecting women to the resources. However, it must be tailored to the population and responsive to cultural needs.

Discussion and Conclusion

The literature reviewed for this project supports developing and maintaining a resource guide with a directory of community-based care services for childbearing Indigenous women, which is a viable way to facilitate the transition of new moms from the hospital to home during the postpartum period—at the same time, utilizing patient navigators to support the postpartum women and keep the guides updated as changes occur in the community. The target population of Indigenous women on a rural reservation in Montana fits with the recommendations of AIM (2021). The resource guide would provide essential information childbearing Indigenous women need at home. The guide would have resources and information about complications, postpartum, mental health signs, newborn care, and a contact person for each resource. As stated, this QI project aims to increase access to culturally specific community-based postpartum resources for Indigenous moms. Creating and distributing a community-based service resource guide allows new mothers to make self-referral to services and is determined to increase postpartum women's access to appropriate care.

CHAPTER TWO

QUALITY IMPROVEMENT PROPOSAL

Introduction

Among the wealthiest countries in the world, the U.S. has the highest maternal mortality rate of 22 deaths per 100,000 as of 2022 for all populations (Gunja et al., 2024). Interventions that align with the standards of care outlined in ACOG and AIM safety bundles strive to enhance maternal outcomes, which is the goal of the tribes' health department. These initiatives seek to increase access to culturally focused maternal care and potentially reduce Indigenous maternal mortality rates.

Of the proposed interventions in ACOG and AIMS, and what the scope of the literature revealed, culturally specific interventions and community-based services and support positively impact maternal outcomes. The tribes' health department created a culturally relevant community-based program targeted at childbearing Indigenous women as a response to the ACOG and AIMS safety bundle, but it is receiving low referral numbers. The quality improvement project proposal focuses on how to increase referrals to the tribes' health department culturally specific community-based program.

Problem Statement

During the postpartum period, an essential component to improving maternal mortality rates, at-risk new mothers must have awareness and access to services, especially culturally appropriate services, and a way to connect to necessary resources. Currently, in a rural Montana tribal community, there is no single comprehensive community resource guide in place to

educate and link Indigenous postpartum women to culturally appropriate resources. The tribes' health department has a culturally relevant maternal program called the Indigenous Maternal Education Program for pregnant and postpartum women. The program consists of tailored education delivered in segments known as Better Bundles, care coordination, and specific resources based on the needs of the women. Furthermore, the program provides resources, including but not limited to transportation to appointments, infant feeding support, and other necessary resources. To date, the Indigenous Maternal Education Program has received few referrals, resulting in postpartum Indigenous women on the reservation not receiving culturally relevant postpartum education, care coordination, and access to resources to mitigate the effects of the negative social determinants of health and health inequality seen within Indigenous populations.

The lack of awareness of these available resources by non-Indigenous healthcare providers and systems leads to the underutilization of the Indigenous-focused community resources. Non-Indigenous healthcare providers must know how to refer to these services and who can access the resources. Insufficient advertising and a general lack of knowledge often prevent the community program from reaching its target population. In the case of maternal community resources, the delay in accessing community resources poses a significant barrier for women to access valuable resources that could mitigate postpartum complications or provide much-needed support. The QI project proposed aims to implement an Indigenous Maternal Community Resource Guide. The project targets a distribution plan encompassing available tribal and non-tribal postpartum resources, including culturally relevant postpartum education emphasizing postpartum behavioral health education. The project's goal is a 25% increase in

self-referrals to the tribes' health department's culturally relevant Indigenous Maternal Education Program.

Microsystem Assessment

During a stakeholder meeting, the discussion focused on resources available to pregnant and postpartum women on the reservation. Nurses in two non-tribal healthcare systems were not aware of services offered to Indigenous postpartum women within the tribes' health department or other departments within the tribe. The discussion identified a knowledge gap regarding community resources available to Indigenous postpartum women within the tribal system among the non-tribal systems. Each of the two non-Indigenous healthcare systems offers various services to postpartum women. However, no comprehensive resource guide exists for postpartum women or to help patient navigators identify available community resources.

A grant-funded project in 2018 created a comprehensive community resource guide but needed more funding. Over the years, the guide has become irrelevant. Even within the tribes' health department, staff were not fully aware of the services offered within it or those in the other tribal departments, as the system is extensive and includes multiple programs, grants, and divisions.

Local Healthcare Landscape. The tribes' health department is located within a reservation in western Montana. It comprises seven healthcare centers. Two centers offer a full range of direct care services, including medical, dental, pharmacy, vision, physical therapy, and adjunct services. Three of the seven are medical clinics that provide primary care. The remaining two support outreach and care coordination services.

Also, within the reservation boundaries are two non-tribal healthcare systems; for ease of identification, the two facilities will be denoted as Hospital A and Hospital B for the remainder of this document. Hospital A is located on the north side of the reservation and is a 22-bed critical access hospital that includes primary care clinics, visiting specialties, OB, and general surgery, among other supporting services. In the middle of the reservation, Hospital B is a 25-bed critical access hospital with primary care clinics, a birth center, visiting specialties, physical therapy, general surgery, and supporting services. Pertinent questions about these facilities are: How many births a year does each hospital support? In addition, what is the monthly birth rate during the project implementation period?

Stakeholders involved in the quality improvement project included four registered nurses (RNs). One RN is the nurse in charge of implementing the Indigenous Maternal Education Program in the tribes' Public Health Division. A second RN was from Hospital A and was the maternal care coordinator for high-risk patients. The other two RNs were care coordinators at Hospital B; both assisted with care coordination for high-risk patients. Additional stakeholders are the tribes' Health Department Head and Public Health Division Director. The tribes' Public Health Division Director supported the project and assured the RN in charge of the Indigenous Maternal Education Program assisted with the project's details. The tribes' health department Head was aware of the lack of resources and underservice to the maternal population and supported the QI project.

Quality Improvement Model

To guide the development, implementation, and evaluation of the practice change, the Johns Hopkins Evidence-Based Practice Model (Appendix B) supports evidence-based practice

and will serve as the overall framework for the project, aiming to promote excellence in healthcare. The Johns Hopkins Evidence-Based Practice Model begins with formulating the practice question and project planning. The initial step in the first phase was recruiting the inter-professional team, which included identifying stakeholders at the clinical sites. The stakeholder meetings identified the problem: the lack of referrals to the culturally relevant community-based maternal education program offered by the tribes' health department and the need to improve these numbers. Further discussion of the problem identified the lack of known community resources offered to Indigenous postpartum women. An identified factor contributing to the lack of knowledge is a mixture of three healthcare systems and the fact that Indigenous women must seek maternal care outside of the tribes' health department. Defining the issues guided the identification and refining of the problem statement. Indigenous postpartum women are missing out on culturally relevant community resources available to them, necessitating the need to create an Indigenous Maternal Community Resource Guide for the reservation. The guide will further assist in increasing referrals of Indigenous postpartum women to community resources, particularly to the tribes' health department's culturally relevant community-based Indigenous Maternal Education Program. The final step in this phase was assessing the project's needs, which is a current maternal community resources guide for Indigenous women. ACOG and AIM safety bundle for postpartum discharge supports the creation of the Indigenous Maternal Community Resource Guide, thus supporting the identified need of the project (2018; 2021).

The second phase of the Johns Hopkins Evidence-Based Practice Model is delineating the evidence. The project's supporting evidence was procured from research and non-research sources and assessed to determine whether it was suitable to address the question. Identified

evidence included clinical practice guidelines, literature reviews, expert opinions, and randomized controlled studies. The evidence was then summarized and synthesized to identify best practices and recommendations to guide the project.

The last phase in the Johns Hopkins Evidence-Based Practice Model is translation. Summarized evidence was translated into practice using clinical reasoning. Based on the Johns Hopkins Evidence-Based Practice Model, Translation Assessment, the action indicated the need for a practice change. Assessing the best evidence for feasibility, fit, and acceptability comes from using the Using Translation and Action Planning tool. Creating an Indigenous Maternal Community Resource Guide was determined to be feasible and low risk. However, it posed a few barriers to overcome, including related time, effort, and minimal resources. Leaders within the organizations supported the change. The change fits each site's priorities, matches end-user needs well, applies to the problem, and addresses the problem questions. Based on the assessment above, the acceptability of the Indigenous Maternal Community Resource Guide is aligned with the site's priorities and meets the approval of stakeholders and site leaders.

The next step in translation is creating and implementing an action plan. The Action Planning Tool identifies the objective, related tasks, completion dates, and pre- and post-measures for the practice change. The action plan tool also allows users to recognize the strengths of available resources, which will drive the workflow for those implementing the action plan. Stakeholders have agreed on the available resources and funding required for translation and implementation. After the QI project implementation, outcomes for improvements will be reviewed. Defining the project's goal helps guide the expected outcomes, which include clinical, perceptual, and process/intervention results. Breaking down each deliverable construct assists in

defining each task and subtask, tying them back to the project outcomes. The final steps in the translation are reporting results to stakeholders, identifying the follow-up steps, and disseminating the findings.

Specific Aims and Purpose

The quality improvement project aims to implement the Indigenous Maternal Community Resource Guide on the reservation to assist Indigenous pregnant women in finding community resources available. Implementing structured SMART goals to guide the project (See Table 1). The short-term goal for the project is the creation of an Indigenous Maternal Community Resource Guide, which stakeholders approved for disbursement to the public by January 14th, 2025. The intermediate goal for the project is to increase the self-referrals to the tribes' culturally relevant Indigenous Maternal Education Program with a 25% increase between January 14th and March 4th, 2025. The long-term goal of the project is to reduce maternal mortality within the indigenous population on the reservation. Further discussion related to goals is listed in Table 1. Further discussion related to goals is listed in Table 1.

Table 1. SMART Goals

Smart Goal #1: Create an Indigenous Maternal Community Resource Guide with approval from stakeholders for disbursement to the public by January 14th, 2025, and disperse it to the healthcare systems before the period to assess for an increase in self-referrals. • This goal was set to provide a resource to maternal Indigenous women
Description of strategies to be utilized to accomplish the goal, including any needed resources:

Table 1 Continued

• Key stakeholders meet and discuss what resources, education, and cultural information to include in the guide • Key stakeholders approve the resource guide • Disperse resource guide to the healthcare systems		
Data to be collected:	Method of Collection and who is responsible:	Planned data analysis:
Resource Guide	Number of resource guide disperse to each healthcare systems.	Number of resource guides disperse to each healthcare system versus number of resource guides disperse to patients.

Smart Goal #2: The tribes' health department culturally relevant Indigenous Maternal Education Program will see a 25% increase in self-referrals between January 14th and March 4th, 2025.		
Description of strategies to be utilized to accomplish the goal, including any needed resources: • The tribes' health department nurse will track self-referrals using an acceptable monitoring system.		
Data to be collected:	Method of Collection and who is responsible:	Planned data analysis:

Table 1 Continued

Self-referrals	Nurse implementing the culturally relevant Indigenous Maternal Education Program.	Calculate the number of new self-referrals to the program compared to the same timeframe before the disbursement of the resource guide.
Smart Goal 3#: From January 15 th , 2024, to March 15th, 2024, the nurse at the tribes' health department will keep track of: 1) how self-referrals are initiated (phone calls, fax, or walk-in), 2) who made the referral (patient, family member, or patient navigator)		
Description of strategies to be utilized to accomplish the goal, including any needed resources: The tribes' health department nurse will use the current tracking system to record how and by whom the referrals are made.		
Data to be collected:	Method of Collection and who is responsible:	Planned data analysis:
Self-referrals	The nurse will track how and who makes the referrals to the program.	Calculate the number of each type of referral and by whom, then compare to previous ways referrals were received.

Intervention and Implementation

The target population during implementation will be pregnant women in their third trimester and postpartum women up to 42 days who receive care at the three healthcare systems. They will receive the Indigenous Maternal Community Resource Guide. The resource guides will be available for distribution beginning January 14th, 2025, with the project period ending March 4th, 2025. After reviewing the data between March 15th, 2025, and April 5th, 2025, the process will either continue or change as determined by the results.

Incorporating the Indigenous Maternal Community Resource Guide into the women's discharge paperwork. If the postpartum nurse has time will review the guide with the women. While in Hospital B, the maternal nurse care manager and patient navigator will meet with women in their ^{third} trimester and postpartum women as they can see patients in the clinic setting. While in the clinic setting, the maternal nurse manager and patient navigator will review the resource guide with the patients. At the tribes' health department, the Tribal Women Infant and Children (WIC) manager and WIC assistant will give the resource guide to all pregnant and postpartum women. They will also review the guide with recipients. During each bi-weekly evaluation, each individual distributing the resource guides will keep track of the number of guides provided to women.

A set number of guides given to each site will assist in tracking how many each site distributes during the project period. If a site runs out, they will contact the tribes' health department to request more resource guides. At the end of the project period, each site will return the undistributed resource guides. The anticipated birth rate for the rural reservation in Montana is approximately eleven births during the implantation period, which should correlate with the number of guides distributed.

The nurse who manages the Indigenous Maternal Education Program at the tribes' health department will track the number of referrals made to the program during the project period. The nurse will track whether the referral came by fax, phone call, or walk-in and who made it: the mother, family member, or patient navigator. These referrals will be compared to the previous time frame, one year ago, to analyze the impact the resource guide had on referrals to the program.

Evaluation and Analysis. Data collection will occur at the end of the project period. Each site will record the number of resource guides dispersed to the designated population of pregnant or postpartum women. Subtracting the number handed out from each site's starting number of resource guides. This quantitative data provides a starting point on whether the resource guide is circulating in the community, providing an opportunity for Indigenous women to engage in the Indigenous Maternal Education Program.

The nurse who manages the Indigenous Maternal Education Program will use an Excel spreadsheet to track referrals. The nurse is the only person who has access to the Excel spreadsheet. During the project period, the nurse will utilize the spreadsheet to record the number of new referrals. The nurse will also document how the referrals were received, either by phone calls, faxes, or walk-ins, and the total for each type of referral. The nurse will also track who made the referral, the patient, family member, or patient navigator, with the total for each category. This quantitative data will help guide the success of the resource guide in the community and determine if the resource guide is reaching the targeted population.

Safety and Confidentiality. Data confidentiality is a priority of the project. No personal identifying data will be collected. The data collected by the nurse who manages the Indigenous

Maternal Education Program will only share the total number of types of referrals and the total number of each category. Before the projects implementation, support from the site stakeholders, the Tribal Institutional Review Board (IRB), Montana State University IRB, and project committee. Approval is necessary to protect the rights, welfare, and well-being of the patients involved in the study. It helps guarantee that the research design, methods, and protocols adhere to ethical standards, promoting the integrity and credibility of findings. Before implementation, copies of a site representative form and documentation required from the Tribal IRB and the Montana State University IRB will be submitted online to Montana State University's Office of Research and Compliance System for review and approval.

Conclusion

The proposed project will identify the potential effect of creating and distributing the Indigenous Maternal Community Resource Guide on the number of referrals to a tribal-based Indigenous Maternal Education Program. The goal is to improve access to culturally focused maternal care and potentially decrease Indigenous maternal mortality rates. Analyzing data from the project will help identify trends and patterns in ways to improve Indigenous women's access to health care and ultimately improve maternal outcomes.

Additionally, the proposed intervention aligns with standards of care found in the ACOG and AIM safety bundle on Postpartum discharge in connecting postpartum women to community resources. The proposed Indigenous Maternal Community Resource Guide intends to connect Indigenous women to maternal education programs that fit the population's unique needs and improve alignment with standards of care for this patient population. Based on the results of the project, The Indigenous Maternal Community Resource Guide may be dispensed in a more direct

approach or broader way to increase the number of referrals to the Indigenous Maternal Education Program and to ultimately improve the maternal outcomes for the Indigenous population on this reservation and potentially promote others in the state to adopt a similar program.

CHAPTER THREE

QUALITY IMPROVEMENT MANUSCRIPT

Contribution of Authors and Co-Authors

Manuscript in Chapters: 4

Author: Jamie L. Cahoon

Contributions: Study conceptualization, original draft, and visualization

Co-Author: Stacy M. Stellflug, PhD, APRN, FNP-BC

Contributions: Review, editing, and supervision

Co-Author: Carrie W Miller PhD, RN, CNE, CHSE-A, IBCLC, FAAN

Contributions: Review

Manuscript Information

Jamie L. Cahoon

American Journal of Nurse Practitioners

Status of Manuscript:

- ☒ Prepared for submission to a peer-reviewed journal
- ☐ Officially submitted to a peer-reviewed journal
- ☐ Accepted by a peer-reviewed journal
- ☐ Published in a peer-reviewed journal

Abstract

Background: Maternal mortality rates have increased across all populations, with the non-Hispanic Indigenous population disproportionately affected. In 2021, Indigenous women experienced 118.7 deaths per 100,000 live births, compared to 24.3 deaths among non-Hispanic white women (CDC, 2024). In Montana, the maternal mortality rate reached 40.7 deaths per 100,000, ranking 6th highest in the U.S. However, Indigenous women in Montana faced a drastically higher rate of 167.2 deaths, compared to 23.9 deaths among non-Hispanic white women (CDC Wonder, 2019).

Local Problem: Montana's maternal mortality rates rank among the highest in the U.S., disproportionately affecting non-Hispanic Indigenous women due to socioeconomic barriers and limited healthcare access in rural areas. Addressing these disparities requires tailored interventions encompass culturally appropriate healthcare, enhanced prenatal and postpartum care access, and community support systems.

Methods: The quality improvement project will follow the Johns Hopkins Evidence-Based Practice Model of evidence-based practice to promote excellence in healthcare.

Intervention: Existing programs, like the tribes' culturally relevant community-based initiative developed in response to the American College of Obstetricians and Gynecologists and Alliance for Innovation on Maternal Health guidelines, face challenges such as low referral rates. A proposed quality improvement project aims to deploy the Indigenous Maternal Community Resource Guide on reservations, connecting Indigenous pregnant women to essential resources.

Results: The Indigenous Maternal Community Resource Guide, approved and distributed on February 1, 2025, highlighted maternal resources, education, and cultural information. Of the

120 guides distributed to three healthcare systems, 32 were handed out, with 26% going directly to patients. Twenty-six guides were distributed at an annual event for expecting mothers, two through the tribe's WIC program, and four by the Hospital B nurse care manager. During the five-week implementation, the Maternal Education Program received one referral, compared to four referrals during the same period the previous year. The single referral came via a phone call from the Hospital B nurse care manager.

Conclusions: The project distributed the resource guide to the target population, but referrals to the Maternal Education Program did not increase as expected. This outcome underscores the need to assess guide implementation and effectiveness in driving referrals. Future efforts will identify referral barriers and develop strategies to strengthen connections between non-tribal healthcare systems and the Maternal Education Program, aiming to enhance maternal health outcomes for Indigenous women.

Key Words: *Postpartum care, quality improvement, intervention, postpartum resource guide, indigenous maternal population, and postpartum.*

Clinical Problem

The maternal mortality rate in the U.S. ranks among the highest in wealthy nations (Gunja et al., 2024). As a response to the accelerating mortality rates among childbearing women, interventions began following the enactment of the "Preventing Maternal Deaths Act of 2018," which stressed the importance of postpartum and follow-up care (Jones et al., 2019). Montana remains one of the top ten states with highest maternal mortality rates in the U.S., with approximately 40 deaths per 100,000 live births (CDC Wonder, 2019). The non-Hispanic Indigenous population in Montana experiences the highest mortality rates among all

demographic groups (CDC Wonder, 2019). All seven reservations in the state are classified as rural and cope with high poverty levels (Montana Office of Public Instruction Indian Education for All Unit, 2024). Indian reservations face significant challenges in providing postpartum care due to rural isolation and socioeconomic barriers, which heighten the maternal mortality risk for Indigenous childbearing women.

The American College of Obstetricians and Gynecologists (ACOG) emphasizes the importance of ongoing postpartum care, advocating for personalized services and support tailored to each woman's unique needs. Acting on ACOG's recommendations, a tribal community in Montana identified the need to support Indigenous women on their reservation. The tribe created a culturally specific, community-based program designed to address the social, emotional, mental, and physical obstacles that women encounter during pregnancy and postpartum.

Currently, healthcare providers lack a formal, consistent process to transition childbearing Indigenous women from the non-Indigenous healthcare system back to the tribes' health department. To address this gap, a resource guide was developed in alignment with recommendations from ACOG and the Alliance for Innovation on Maternal Health (AIM). The guide included information on available tribal and non-tribal postpartum resources, along with education about common complications. Designers ensured the guide was culturally relevant and highlighted community-based maternal and postpartum support programs specific to Indigenous women. The initiative aimed to increase referrals to the tribe's health department's Maternal Education program.

Review of the Literature

Evidence has demonstrated the effectiveness of postpartum care, which is ongoing with services and support tailored to each woman's needs. AIM provided best practices that emphasize providing culturally respectful care. Research supports the development of culturally relevant resource guides to increase referrals to the tribe's culturally specific community-based education program. (AIM, 2021) Articles reviewed for the quality improvement project include qualitative studies with measured outcomes, commentary pilot, committee opinions, randomized controlled trials, developmental studies, and mixed methods studies. Articles that met the inclusion criteria provide support for developing a culturally relevant resources guide to increase referrals to the culturally specific community-based maternal education program. Community resource guides provide population-specific support with education and resources in an easy-to-access environment with which they are familiar (Olson et al., 2019).

The literature review also assessed interventions with patient navigators and how they would know community resources (AIM, 2021). Patient navigation is a service that helps people access health care and other resources they need (Ruderman et al., 2021; Yee et al., 2021). ACOG and AIM guidelines support the practical implementation of creating and maintaining a reference guide for women postpartum (AIM, 2021; Olson et al., 2019). The collaborative recommendations for creating a reference guide for postpartum women at discharge hold substantial weight. The guide enables women to make informed decisions based on available resources in the community. The transition to services in the community is beneficial in the postpartum period, and having a reference guide can facilitate connecting women to resources like the tribes' maternal education program. With the gap in transitioning non-Hispanic Indigenous women back to the tribes' maternal education program, an evidence-based

intervention of developing community resource guides provides an opportunity to distribute culturally relevant education with both tribal and non-tribal community resources that apply no pressure to the postpartum women as they figure out what resources are the best to them.

Conceptual Framework

The Johns Hopkins Evidence-Based Practice Model was the guiding framework and provided the structure to develop a high-quality project. Each phase of the model is built on top of the others using a cyclic pattern to evaluate and then re-evaluate the practice question continually. During the first phase, stakeholders were identified, and a team within the tribes' health department met to discuss the practice problem: the lack of referrals to the culturally relevant community-based maternal education program offered and how to improve referrals. Through a connective conversation, the team identified barriers to why referrals were minimal and formulated a solution, including creating the Indigenous Maternal Community Resource Guide for the reservation.

The next phase of the model was delineating the evidence. The literature review identified sufficient evidence for processing, creating the resource guide, and moving to the next implementation phase. In the final phase of the model, translation is summarizing the evidence into practice using clinical reasoning. Creating the resource guide was a feasible intervention with low risk. Using the guidance from ACOG and AIMS and the identified most common postpartum complications for Indigenous women, the content of the resource guide was laid out. Then, over two weeks, the resource guide was created. The resource guide was distributed through four outlets: two within the non-tribal healthcare systems, one within the tribe's Women Infant Child (WIC) program, and finally, as a tribally sponsored community health fair. After

five weeks of distribution, data analysis occurred, and the team concluded that the practice change was an appropriate practice to continue to improve maternal outcomes.

Aim

The project sought to implement the Indigenous Maternal Community Resource Guide on the reservation to help Indigenous pregnant women access community resources more easily. The primary goal was to boost referrals to the culturally relevant Indigenous Maternal Education Program and ultimately reduce maternal mortality rates within the Indigenous population on the reservation.

Methods

Context. The clinical site is within the tribe's health department, which provides and pays for healthcare for the reservation's indigenous population. The tribe has three main healthcare sites, with four small healthcare centers. The three main sites provide clinics, pharmacies, dental, optometry, behavioral health, and community health services. The other four offer community health services, care coordination, immunizations, and communicable disease testing. The tribe's health department does not offer obstetric care. Indigenous pregnant women must seek obstetric care from one of the two contracted non-tribal healthcare systems on the reservation. Since the tribe contracts with these two non-tribal healthcare systems, Indigenous women can seek care from these healthcare systems and can continue to seek primary care services from these systems if they choose. While these women receive the care they need during pregnancy and postpartum, they are often unaware of the resources and services offered by the tribe's health department, as there is minimal communication between the two non-tribal healthcare systems and the tribe's

health department. Thus, these women are likely missing out on culturally relevant health services and education offered through community health programs.

Intervention. The project relied on evidence-based research to develop an Indigenous Maternal Community Resource Guide, which highlighted the Indigenous Maternal Education Program offered by the tribe's health department. The team distributed the guide to two non-tribal healthcare systems, integrating it into the discharge paperwork for newly delivered mothers. A nurse care manager at one of the non-tribal healthcare systems also handed out the guides to women in their third trimester and postpartum period during clinic visits. At the tribe's health department, the WIC manager and assistant manager distributed the guide to women in their third trimester and postpartum. When time allowed, the discharge nurse or nurse care manager from the non-tribal healthcare system and the WIC manager from the tribe's health department reviewed the guide with recipients.

Measures. A set number of resource guides were given to each site. The number of resource guides distributed was recorded bi-weekly. Simultaneously, the nurse who managed the Indigenous Maternal Education Program at the tribes' health department tracked the number of referrals made to the program and how the referrals were made. The data collected for this project was used to assess progress in pre-determined SMART Goals.

Analysis. The number of resource guides dispersed to the healthcare systems versus those dispersed to patients was compared. The second analysis looked at the number of referrals made to the Maternal Education Program during the project period and was then compared to the number of referrals received during the same period one year prior. The third analysis looked at the types of referrals and by whom compared to how the referrals were made previously.

Results

The Indigenous Maternal Community Resource Guide was approved and disbursed to the public starting February 1st, 2025. The guide highlighted maternal resources, education, and cultural information. The three healthcare systems received forty copies of the guide, for one hundred and twenty guides. Thirty-two resource guides were distributed; twenty-six percent were distributed to patients. Twenty-six guides were handed out during an annual event for expecting mothers, two guides through the tribe's WIC program, and four guides through the hospital B nurse care manager. (Table 2) In the five-week implementation period, one referral was made to the Maternal Education Program. In comparison to one year prior, during the same period, the Maternal Education Program received four referrals last year compared to one referral this year. The one referral received came from a phone call from the nurse care manager at Hospital B.

Table 2. Results

Health Care System	# of Copies given	# of Guides handed out
Tribes' Health Department	40	28
Hospital A	40	
Hospital B	40	4
Totals	120	32

Discussion

The results of the quality improvement project demonstrated that the Indigenous Maternal Community Resource Guide has the potential to be a useful way to disperse information to patients. Supporting AIMs recommendations of creating a resource guide as a way of getting local resources to postpartum women (2021). The project's short-term goal of creating an Indigenous Maternal Community Resource Guide was achieved. The intermediate goal of

increasing self-referrals to the tribes' culturally relevant Indigenous Maternal Education Program was not achieved. The goal of a 25% increase was short, with only 3.1%. The overall long-term goal of reducing mortality within the Indigenous population on the reservation is yet to be determined. Further focus groups with postpartum Indigenous women to discuss how to better improve the resource guide adapting to their recommendations holds potential in decreasing mortality rates on the reservation.

Limitations. Barriers to successful implementation included challenges in distributing the guides, a lack of discussion on using them, and the small population size available for data collection. At the outset, delays occurred in delivering the guides to maternity ward managers, who were responsible for including them in patients' discharge folders. During follow-up, stakeholders from hospitals A and B reported the need to remind maternity ward managers to attach the guides to the discharge paperwork. Conducting meetings with the stakeholders and the maternity ward managers and other staff responsible for distributing the guides could have minimized misunderstandings and potentially increased the number of guides provided to patients. Additionally, the small population size may have contributed to the low percentage of referrals and guides distributed. The implementation predicted a sample size of eleven individuals, and with only one referral to the program, the population size might have been too small for effective results.

From the start of the implementation, we recognized the challenge of reaching the eligible population of Indigenous women, as they had many options for receiving care. These women accessed services at the tribes' health department, obtained care from the two non-tribal healthcare systems, and sought care outside the reservation boundaries in the two larger cities

bordering the reservation. We also faced the challenge of targeting only Indigenous women because the open reservation included a large non-Indigenous population. To avoid discrimination, we provided resource guides to all women, regardless of race, while understanding that non-Indigenous women could not access the tribe's Maternal Education Program.

Recommendations. Based on the findings, I recommend meeting with the staff responsible for distributing the guides to ensure better engagement and buy-in. Additionally, stakeholders should collaborate to decide what content should be included in the guide. While the guide was created based on recommendations from ACOG and AIM, discussions with managers revealed differing ideas shaped by the resources requested during patient discharge and follow-up appointments. Although the project did not achieve its identified SMART goals, it successfully prompted further discussions among key stakeholders, leading to revisions that will improve the guide.

Quarterly meetings have been established continue communication and collaboration between the tribes' health departments and non-tribal healthcare systems. A May meeting will address ways to improve the postpartum resource guide for all women on the reservation. The project has also sparked broader collaborations, including creating a comprehensive resource guide for the general population to highlight all available services.

Conclusion

The project successfully distributed the resource guide to the target population through multiple channels, the anticipated increase in referrals to the Maternal Education Program did not materialized during the project period. The outcome highlights the need for further evaluation of

how the guides are implemented and their effectiveness in facilitating referrals. Future efforts will focus on identifying barriers to referral and exploring strategies to strengthen the connection between non-tribal healthcare systems and the Maternal Education Program. By addressing these challenges, the program's potential to improve maternal health outcomes for Indigenous women can be fully realized.

CHAPTER FOUR

ADVANCED NURSING ESSENTIALS REFLECTION

Introduction

Montana State University (MSU) has structured its Doctorate of Nurse Practitioner (DNP) program to equip students with leadership skills through quality improvement (QI) projects. These QI projects have the opportunity to drive change, improve care, and enhance services within healthcare systems. In MSU's DNP program, students assess, design, plan, and carry out QI projects based on the eight core essentials established by The American Academy of Colleges of Nursing (AACN). AACN created these essentials to ensure that nursing professionals practice at the highest level, acquire the doctoral knowledge necessary for safe nursing practice, and deliver high-quality patient care (AACN, 2006). The following chapter reflects these essentials and explores the experiences and growth opportunities I have encountered in MSU's DNP program.

Essential I: Scientific Underpinnings for Practice

Essential one, Scientific Underpinnings for Practice, discusses the complexity of practicing at the doctoral level, including the conceptual foundation of nursing. The first essential describes what a DNP program should include to prepare program graduates. Discussing the integration of nursing science with ethics and the biophysical, psychosocial, analytical, and organizational sciences form the basis of the nursing practice. Upon graduation, the expectation of DNP students is the ability to translate science-based theories and concepts into practice to determine the nature and significance of health and healthcare delivery, improve systems, and evaluate outcomes. During my experience in the DNP program at MSU, I met this essential

during the core classes, including Evidenced-Based Practice (EBP) I and II, Nursing Leadership, Ethics, Law and Policy, Statistical Applications, Design of Healthcare Systems, Healthcare Informatics, Program Planning & Evaluation, and the DNP Scholarly project. These courses were spread through the curriculum, building upon each other in preparation to allow me to implement and complete a Quality Improvement Scholarly Project. One exemplar of this essential is implementing a postpartum resource guide to increase awareness and referrals to a culturally relevant community-based maternal education program focusing on postpartum care. My project gave me hands-on knowledge of the implications of improving healthcare processes to help prevent complications and improve patient outcomes. The project's impact was evident during stakeholder meetings and with the positive feedback from patients and providers who came across the resource guide. In my future practice as a DNP, I will use what I have learned in my degree program to continue to use science-based knowledge to guide me as a provider in improving patient outcomes.

Essential II: Organizational and System Leadership for Quality Improvement and Systems Thinking

Essential II focuses on organizational and systems leadership to improve overall healthcare outcomes. The knowledge and skills gained include eliminating health disparities, promoting patient safety, excellence in practice, advanced communication, health policy, practice initiatives, financial initiatives, and managing ethical dilemmas. Throughout the program, I met this essential through the core classes of Program Planning and Evaluation, Outcomes and quality improvement, Nursing Leadership, and Financing and Budgeting of Healthcare systems. In Program Planning and Evaluation, students identified a process to improve using engineering tools to find ways to improve the process better and enhance patient care. The knowledge and

tools taught in the course laid the foundation to expand the use of these tools outside of school and implement them in the real world. I used a process workflow chart to assess the process of checking in patients to identify wait time gaps where patients were waiting unnecessarily. Mapping out the process allowed me to see the gaps in care and opportunities to improve the process for the clinic and, more importantly, the patient. The knowledge gained from these courses I translated into my DNP Quality Improvement project by mapping out the process of distributing the postpartum resource guides and how to increase referrals to the culturally appropriate maternal education program. Throughout my future DNP career, I will continue to use this knowledge to evaluate processes and use evidence-based practices to improve healthcare outcomes and patient care quality.

Essential III: Clinical Scholarship and Analytic Methods for Evidence-Based Practice

Scholarship and research are the foundation of doctoral education, as highlighted in Essential III—the third essential focuses on translating new science into evidence-based practice and its applications and evaluation. DNP new graduates will create evidence in their practice that will guide improvements and outcomes in care. In the MSU DNP program, Evidence-Based Research I and II class and Statistical analysis provided the knowledge to research literature and evaluate quality research successfully. I then applied the knowledge I learned in performing a scoping literature review of databases and identifying targeted articles that helped shape the methods and ways to help improve referrals to the culturally appropriate maternal education program by creating a resource guide geared toward the targeted population. In my future practice, my knowledge of identifying quality research will guide my clinical practice to ensure I provide the most up-to-date research and guidelines for patient care.

Essential V: Health Care Policy and Advocacy in Health care

Essential V encompasses healthcare policies and advocacy, which is the framework that either can have an engaging practice or the ability to impede the delivery of healthcare. The influences of policies affect every aspect of healthcare delivery, from patient care guidelines, organizations, healthcare systems, health disparities, cultural sensitivity, ethics, access, and quality to social justice and health equality. During the Ethics, Law & Policy course, I created a policy for medication delivery and administration for incarcerated tribal inmates. I then wrote a letter with the policy to the Chief of the Tribal police to advocate for the inmates who were going without medications while incarcerated. The course provided me with the knowledge and confidence to advocate for change. In my current role, the DNP program has given me the knowledge and skills to implement organizational change through policy development and the confidence to stand up for health equality for tribal people. I plan to take these skills into my practice as a Nurse Practitioner to advocate for cultural sensitivity and better patient care guidelines.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

Essential VI emphasizes interprofessional collaboration to improve team functioning and effective communication to help with patient and population outcomes in complex healthcare systems. Collaboration within and between teams is necessary for delivering efficient healthcare. During my QI project, I collaborated with three healthcare organizations to distribute a postpartum resource guide to the target population. Working across organizations took a high level of communication and leadership to organize the collaborations. During the implementation

of my QI project, I learned that being a good leader includes effective communication, identifying barriers, and collaborating to make changes in the standard of practice to promote better patient care. In my future practice, my experiences during the QI project will propel me toward being a better leader by working with interprofessional teams to make changes in healthcare systems.

Conclusion

Upon completing MSU's DNP program, I will have gained proficiency in each of the eight essentials outlined by the AACN, with a particular emphasis on five of them. My personal, academic, and clinical experiences have helped redefine my leadership abilities and enhance my evidence-based practice skills. This journey has deepened my appreciation for various healthcare systems and the significance of policies within them. The DNP curriculum at MSU has effectively prepared me for ongoing education and personal development in nursing. With these essentials as my foundation, I am excited to continue growing as a nurse practitioner and look forward to contributing to nursing.

REFERENCES CITED

- Alliance for Innovation on Maternal Health. (2022). Postpartum Discharge Transition Bundle. Retrieved from <https://saferbirth.org/psbs/postpartum-discharge-transition/>
- ACOG Committee Opinion No. 736: Optimizing Postpartum Care. (2018). *Obstetrics and Gynecology*, 131(5), e140–e150. <https://doi.org/10.1097/AOG.0000000000002633>
- AlMasarweh, L., & Ward, C. (2016). Barriers to Health Care Access and Utilization: A Study of Native American Women Veterans in Two Montana Reservations. *Special Social Groups, Social Factors and Disparities in Health and Health Care (Research in the Sociology of Health Care, Vol. 34)*, Emerald Group Publishing Limited, Leeds, pp. 33-60. <https://doi.org/10.1108/S0275-495920160000034003>
- Arias, E., Xu, J., Curtin, S., Bastian, B., & Tejada-Vera, B. (2021). Mortality Profile of the Non-Hispanic American Indian or Alaska Native Population, 2019. National Vital Statistics Reports, 70(12). <https://doi.org/10.15620/cdc:110370>
- Baggett, K. M., Davis, B., Sheeber, L. B., Ammerman, R. T., Mosley, E. A., Miller, K., & Feil, E. G. (2020). Minding the Gatekeepers: Referral and Recruitment of Postpartum Mothers with Depression into a Randomized Controlled Trial of a Mobile Internet Parenting Intervention to Improve Mood and Optimize Infant Social Communication Outcomes. *International Journal of Environmental Research and Public Health*, 17(23), 8978-. <https://doi.org/10.3390/ijerph17238978>
- Crear-Perry, J., Correa-de-Araujo, R., Johnson, T. L., McLemore, M. R., Neilson, E., & Wallace, M. (2021). Social and Structural Determinants of Health Inequities in Maternal Health. *Journal of Women's Health (Larchmont, N.Y. 2002)*, 30(2), 230–235. <https://doi.org/10.1089/jwh.2020.8882>
- CDC. (2024). Pregnancy Mortality Surveillance System. <http://www.cdc.gov/maternal-mortality/php/pregnancy-mortality-surveillance/index.html> Pregnancy Mortality Surveillance System | Maternal Mortality Prevention | CDC
- CDC. (2024). Provisional Maternal Mortality Rates. <https://www.cdc.gov/nchs/nvss/vsrr/provisional-maternal-deaths-rates.htm>

CDC Wonder, 2019 report of 5-year (2013-17) pregnancy-related death rate estimate; Rankings by America's Health Rankings, United Health Foundation

Dagher, R. K., & Linares, D. E. (2022). A Critical Review of the Complex Interplay between Social Determinants of Health and Maternal and Infant Mortality. *Children*, 9(3), 394. <https://doi.org/10.3390/children9030394>

Essien, U. R., Molina, R. L., & Lasser, K. E. (2019). Strengthening the postpartum transition of care to address racial disparities in maternal health. *Journal of the National Medical Association*, 111(4), 349–351. <https://doi.org/10.1016/j.jnma.2018.10.016>

Gone, J. P., Hartmann, W. E., Pomerville, A., Wendt, D. C., Klem, S. H., & Burrage, R. L. (2019). The Impact of Historical Trauma on Health Outcomes for Indigenous Populations in the USA and Canada: A Systematic Review. *American Psychologist*, 74(1), 20-35. <https://doi.org/10.1037/amp0000338>

Healthy People 2030. (2023). Pregnancy and childbirth. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth>

Dang, D., Dearholt, S., Bissett, K., Ascenzi, J., & Whalen, M. (2022). *Johns Hopkins evidence-based practice for nurses and healthcare professionals: Model and guidelines*. 4th ed. Sigma Theta Tau International

Khademi, K., Kaveh, M.H. Social support as a coping resource for psychosocial conditions in the postpartum period: a systematic review and logic framework. *BMC Psychol* 12, 301 (2024). <https://doi.org/10.1186/s40359-024-01814-6>

Kozhimannil KB, Interrante JD, Tofte AN, Admon LK. Severe Maternal Morbidity and Mortality Among Indigenous Women in the United States. *Obstet Gynecol*. 2020 Feb;135(2):294-300. doi: 10.1097/AOG.0000000000003647. PMID: 31923072; PMCID: PMC7012336.

Krakoff, S. (2013). Tribal Civil Judicial Jurisdiction Over Nonmembers: A Practical Guide for Judges. *University of Colorado Law Review*, 84(2), 445-484. https://lawreview.colorado.edu/wp-content/uploads/2013/11/13.-Krakoff-Final_s.pdf

- Jones, E. J., Hernandez, T. L., Edmonds, J. K., & Ferranti, E. P. (2019). Continued disparities in postpartum follow-up and screening among women with gestational diabetes and hypertensive disorders of pregnancy: A systematic review. *The Journal of Perinatal & Neonatal Nursing*, 33(2), 136–148. <https://doi.org/10.1097/JPN.0000000000000399>
- Miller, M. C. (2024). Assimilation and economic development: the case of federal Indian policy. *Public Choice*, 199, 387–404. <https://doi.org/10.1007/s11127-023-01049-w>
- Montana Office of Public Instruction Indian Education for All Unit. (2024). Essential understandings regarding Montana Indians. Retrieved from essentialunderstandings.pdf
- Olson, T., Bowen, A., Smith-Fehr, J., & Ghosh, S.. (2019). Going home with baby: innovative and comprehensive support for new mothers. *Primary Health Care Research & Development*, 20. <https://doi.org/10.1017/s1463423618000932>
- Petersen EE, Davis NL, Goodman D, et al. *Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017*. *MMWR Morb Mortal Wkly Rep* 2019;68:423–429. DOI: <http://dx.doi.org/10.15585/mmwr.mm6818e1>
- Pevar, S. L. (2024). Indian Treaties. In *The Rights of Indians and Tribes* (pp. 77-94). Oxford University Press. <https://doi.org/10.1093/oso/9780190077556.003.0004>
- Sundaram, V. L., Lamichhane, R., Cecchetti, A., Arthur, S., & Murughiyan, U. (2023). Maternal and Neonatal Outcomes in Women with Metabolic Syndrome and Substance Use Disorder. *Life [Basel]*, 13(9), NA. <http://dx.doi.org.proxybz.lib.montana.edu/10.3390/life13091933>
- Trost, S., Beauregard, J., Chandra, G., Njie, F., Harvey, A., Berry, J., & Goodman, D. A. (2020). Pregnancy-Related Deaths Among American Indian or Alaska Native Persons: Data from Maternal Mortality Review Committees in 36 U.S. States, 2017-2019. *Maternal Mortality Review Information Application (MMRIA)*. <https://doi.org/10.1089/jwh.2020.8890>
- Trost SL, Busacker A, Leonard M, et al. (2024). Pregnancy-Related Deaths Among American Indian or Alaska Native Persons: Data from Maternal Mortality Review Committees in 38 U.S. States, 2020. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. *Pregnancy-Related Deaths Among American Indian or*

Alaska Native Persons: Data From Maternal Mortality Review Committees in 38 U.S. States, 2020 | Maternal Mortality Prevention | CDC

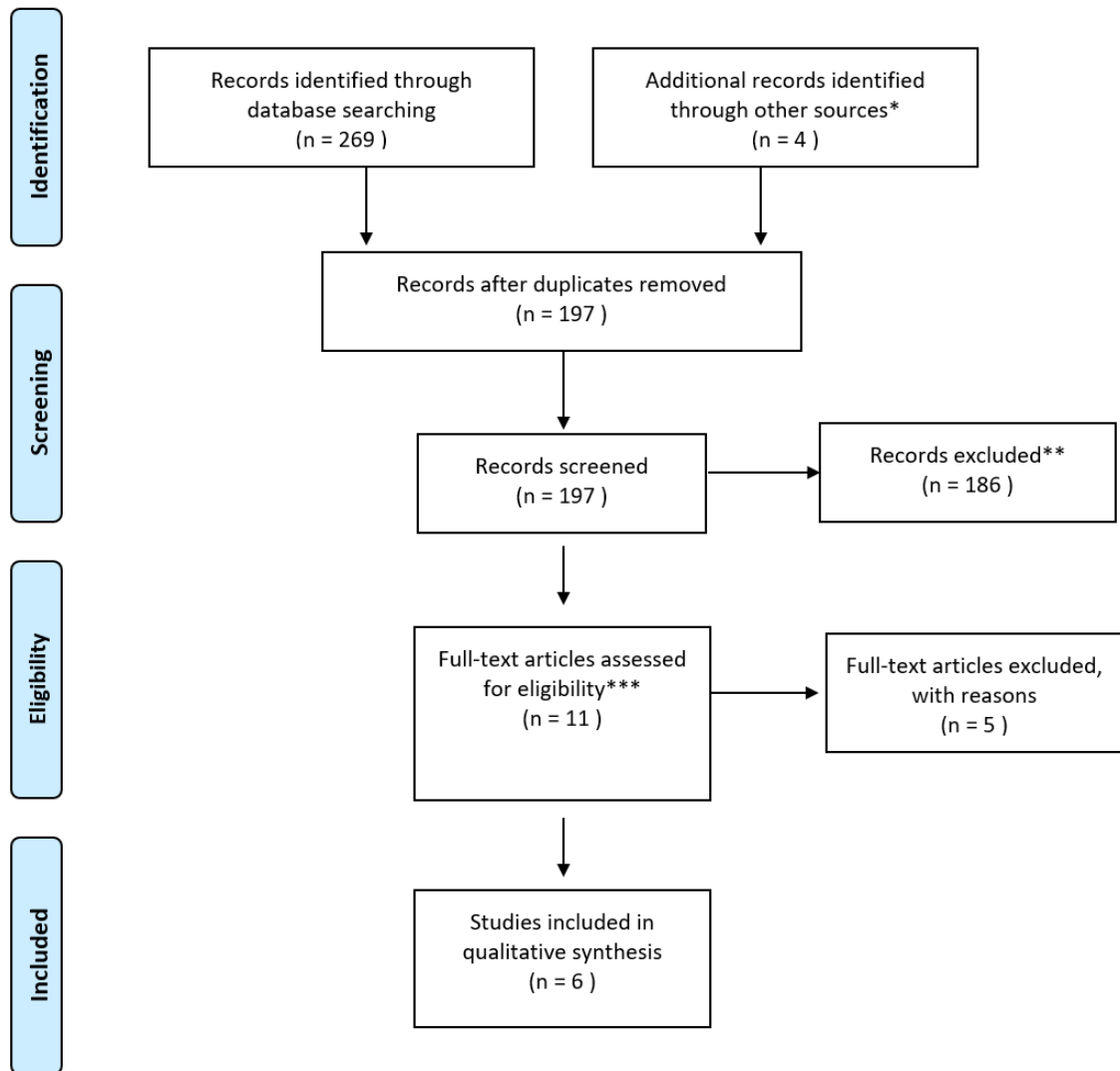
Woo & Glover. (2021). Severe maternal morbidity in Montana: Near-miss obstetric events in a rural state. Severe Maternal Morbidity in Montana (mtmoms.org)

Yee, L. M., Williams, B., Green, H. M., Carmona-Barrera, V., Diaz, L., Davis, K., Kominiarek, M. A., Feinglass, J., Zera, C. A., & Grobman, W. A. (2021). Bridging the postpartum gap: best practices for training of obstetrical patient navigators. *American Journal of Obstetrics and Gynecology*, 225(2), 138–152. <https://doi.org/10.1016/j.ajog.2021.03.038>

APPENDICES

APPENDIX A

APPENDIX A PRISMA DIAGRAM OF LITERATURE REVIEW



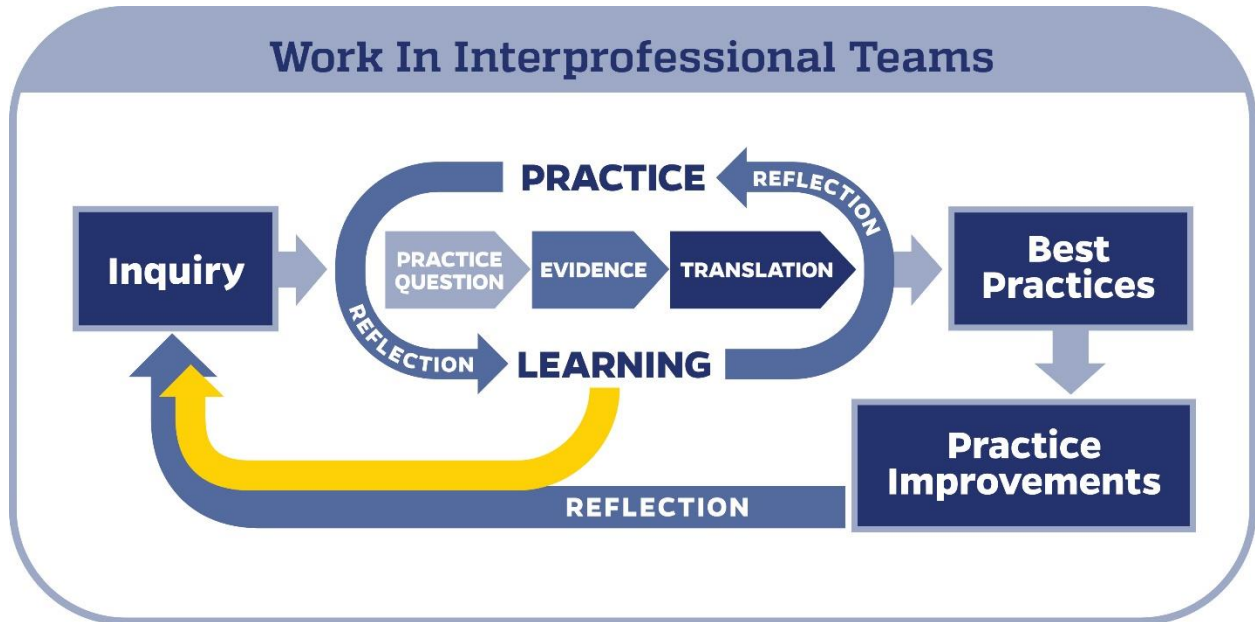
*Records identified from citation searching (n=2)

**Records excluded by primary examiner through title and abstract elimination screening

***Indicated exclusion due to publication before 01/01/2018, not published in English

APPENDIX B

APPENDIX B JOHN HOPKINS EVIDENCE BASED
PRACTICE



Dang, D., Dearholt, S., Bissett, K., Ascenzi, J., & Whalen, M. (2022). *Johns Hopkins evidence-based practice for nurses and healthcare professionals: Model and guidelines*. 4th ed. Sigma Theta Tau International